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«ХАЛЫҚ» ЖҚ

# Х А Б А Р Ш Ы С Ы

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**ВЕСТНИК**

РОО «НАЦИОНАЛЬНОЙ  
АКАДЕМИИ НАУК  
РЕСПУБЛИКИ КАЗАХСТАН»  
ЧФ «Халық»

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В 2016 году для развития и улучшения качества жизни казахстанцев был создан частный Благотворительный фонд «Халык». За годы своей деятельности на реализацию благотворительных проектов в областях образования и науки, социальной защиты, культуры, здравоохранения и спорта, Фонд выделил более 45 миллиардов тенге.

Особое внимание Благотворительный фонд «Халык» уделяет образовательным программам, считая это направление одним из ключевых в своей деятельности. Оказывая поддержку отечественному образованию, Фонд вносит свой посильный вклад в развитие качественного образования в Казахстане. Тем самым способствуя росту числа людей, способных менять жизнь в стране к лучшему – профессионалов в различных сферах, потенциальных лидеров и «великих умов». Одной из значимых инициатив фонда «Халык» в образовательной сфере стал проект *Ozgeris powered by Halyk Fund* – первый в стране бизнес-инкубатор для учащихся 9-11 классов, который помогает развивать необходимые в современном мире предпринимательские навыки. Так, на содействие малому бизнесу школьников было выделено более 200 грантов. Для поддержки талантливых и мотивированных детей Фонд неоднократно выделял гранты на обучение в Международной школе «Мирас» и в *Astana IT University*, а также помог казахстанским школьникам принять участие в престижном конкурсе «*USTEM Robotics*» в США. Авторские работы в рамках проекта «Тәлімгер», которому Фонд оказал поддержку, легли в основу учебной программы, учебников и учебно-методических книг по предмету «Основы предпринимательства и бизнеса», преподаваемого в 10-11 классах казахстанских школ и колледжей.

Помимо помощи школьникам, учащимся колледжей и студентам Фонд считает важным внести свой вклад в повышение квалификации педагогов, совершенствование их знаний и навыков, поскольку именно они являются проводниками знаний будущих поколений казахстанцев. При поддержке Фонда «Халык» в южной столице был организован ежегодный городской конкурс педагогов «*Almaty Digital Ustaz*».

Важной инициативой стал реализуемый проект по обучению основам финансовой грамотности преподавателей из восьми областей Казахстана, что должно оказать существенное влияние на воспитание финансовой

грамотности и предпринимательского мышления у нового поколения граждан страны.

Необходимую помощь Фонд «Халык» оказывает и тем, кто особенно остро в ней нуждается. В рамках социальной защиты населения активно проводится работа по поддержке детей, оставшихся без родителей, детей и взрослых из социально уязвимых слоев населения, людей с ограниченными возможностями, а также обеспечению нуждающихся социальным жильем, строительству социально важных объектов, таких как детские сады, детские площадки и физкультурно-оздоровительные комплексы.

В копилку добрых дел Фонда «Халык» можно добавить оказание помощи детскому спорту, куда относится поддержка в развитии детского футбола и карате в нашей стране. Жизненно важную помощь Благотворительный фонд «Халык» оказал нашим соотечественникам во время недавней пандемии COVID-19. Тогда, в разгар тяжелой борьбы с коронавирусной инфекцией Фонд выделил свыше 11 миллиардов тенге на приобретение необходимого медицинского оборудования и дорогостоящих медицинских препаратов, автомобилей скорой медицинской помощи и средств защиты, адресную материальную помощь социально уязвимым слоям населения и денежные выплаты медицинским работникам.

В 2023 году наряду с другими проектами, нацеленными на повышение благосостояния казахстанских граждан Фонд решил уделить особое внимание науке, поскольку она является частью общественной культуры, а уровень ее развития определяет уровень развития государства.

Поддержка Фондом выпуска журналов Национальной Академии наук Республики Казахстан, которые входят в международные фонды Scopus и WoS и в которых публикуются статьи отечественных ученых, докторантов и магистрантов, а также научных сотрудников высших учебных заведений и научно-исследовательских институтов нашей страны является не менее значимым вкладом Фонда в развитие казахстанского общества.

С уважением, Благотворительный Фонд «Халык»!

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## THE ABILITY TO USE BPM IN THE ANALYSIS AND OPTIMIZATION OF BUSINESS PROCESSES IN THE PUBLIC ADMINISTRATION SYSTEM

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**Abstract.** The purpose of the study is to assess the possibility of using the BPM system in the analysis and optimization of business processes of state bodies within the framework of the "listening to the people" state in the public administration system. Methodology. In the process of developing the main materials, such traditional scientific methods as logical, scientific generalization, comparative analysis were used. Comparison methods, expert assessment were used as a research tool. Uniqueness and value of the study — the study carried out a theoretical analysis of the essence and significance of the analysis, optimization of business processes, considered the possibility of optimizing business processes in public administration. The teaching staff of the Academy of Public Administration under the president of the Republic of Kazakhstan was trained and certified on the basics of formalization, analysis and optimization of business processes. From 2022, the Academy and its branches will conduct training in this direction, analyze and optimize the business

processes of government agencies. The results of the study show that the main advantage of managing an organization through business processes is that the picture of all processes taking place in this organization, about all problems and difficulties, is observed and optimized through appropriate management systems.

**Keywords:** business process, types of business process, optimization of business processes, criteria for optimizing business processes

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## **МЕМЛЕКЕТТІК БАСҚАРУ ЖҮЙЕСİNДЕ БИЗНЕС-ПРОЦЕСТЕРДІ ТАЛДАУ ЖӘНЕ ОҢТАЙЛАНДЫРУДА ВРМ ҚОЛДАНУ МҮМКІНДІГІ**

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**Аннотация.** Зерттеу мақсаты — мемлекеттік басқару жүйесінде «халық үніне құлақ асатын» мемлекет аясында мемлекеттік органдардың бизнес-процестерін талдау және оңтайландыруда ВРМ жүйесін қолдану мүмкіндігін қарастыру болып табылады. Әдіснамасы. Негізгі материалдарды әзірлеу барысында логикалық, ғылыми жалпылау, салыстырмалы талдау сияқты дәстүрлі ғылыми әдістер қолданылды. Зерттеу құралы ретінде салыстыру әдістері, сараптамалық бағалау пайдаланылды. Зерттеудің бірегейлігі / құндылығы — зерттеуде бизнес-процестерді талдау, оңтайландыру мәні мен маңыздылығына теориялық талдау жасалды, мемлекеттік басқару бизнес-процестерді оңтайландыру мүмкіндігі қарастырылды. Қазақстан Республикасы Президентінің жанындағы Мемлекеттік басқару академиясы ПОҚ бизнес-процестерді формалдау, талдау және оңтайландыру негіздері бойынша оқытып, сертификациядан өткізді. 2022 жылдан бастап Академия және оның филиалдарында осы бағытта оқыту



жүргізіліп, мемлекеттік органдарды бизнес-процестерге талдау жасалып, оңтайландыру жүргізілетін болады. Зерттеу нәтижелері – бизнес-процестер арқылы ұйымды басқарудың негізгі артықшылығы бұл ұйымда болып жатқан барлық процестер туралы, барлық проблемалар мен қиыншылықтар туралы көрініс байқалады және сәйкес басқару жүйелері арқылы оңтайландырылады.

**Түйін сөздер:** бизнес-процесс, бизнес-процесс типтері, бизнес-процестерді оңтайландыру, бизнес-процестерді оңтайландыру критерийлері

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## ВОЗМОЖНОСТЬ ИСПОЛЬЗОВАНИЯ BPM В АНАЛИЗЕ И ОПТИМИЗАЦИИ БИЗНЕС-ПРОЦЕССОВ В СИСТЕМЕ ГОСУДАРСТВЕННОГО УПРАВЛЕНИЯ

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**Аннотация.** Цель исследования – рассмотреть возможность применения системы BPM в системе государственного управления при анализе и оптимизации бизнес-процессов государственных органов в рамках концепции «слышащего» государства. При разработке основного материала использовались такие традиционные научные методы, как логическое, научное обобщение, сравнительный анализ. В качестве инструмента исследования применялись методы сравнения и экспертной оценки. Ценность исследования заключается в том, что в нем проведен анализ бизнес-процессов, теоретический анализ сущности и значимости оптимизации и рассмотрена возможность

оптимизации бизнес-процессов государственного управления. ППС Академии государственного управления при Президенте Республики Казахстан прошли обучение и сертификацию по основам формализации, анализа и оптимизации бизнес-процессов. С 2022 года в Академии и ее филиалах будет проведено обучение в данном направлении, проведен анализ и оптимизация бизнес-процессов в государственных органах. Результаты исследования показали, что основное преимущество управления бизнес-процессами в организациях заключается в том, что в них имеется представление обо всех процессах, проблемах и трудностях, что оптимизируется через соответствующие системы управления.

**Ключевые слова:** бизнес-процесс, типы бизнес-процессов, оптимизация бизнес-процессов, критерии оптимизации бизнес-процессов

### **Introduction**

VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) conditions in the world, increased competition, increased consumer preferences push any organization to develop and improve its activities. One of such effective ways to achieve success in changing conditions is managerial activities related to the organization's business processes, known as business process management. In the ISO 9000–2001 standard, a process is understood as a set of interconnected or interacting activities that convert input into output. A business process is a set of sequential, purposefully oriented and clearly regulated actions in which the input resources of the process, which are of particular value to the consumer, change to the output results of the process. After the introduction of process management, managers should manage processes and improve them constantly.

Through the management and development of business processes, a managerial impact is carried out for the medium and long term. Attempts to increase the value of the service provided or the product offered require the need to form, manage and improve business processes.

As part of the creation of a service and "people-oriented" state in the Republic of Kazakhstan, it is relevant to optimize business processes for public services by identifying and analyzing them through Business Process Model Notation (BPMN).

### **Materials and methods**

Automated methods for matching business processes are currently very extensive and affect several areas of the researcher's knowledge for analytical work in this area. First of all, it is necessary to study various approaches to the analysis and identification of business processes, including the concepts of the essence of the process approach. The most important aspect of the study of automated process matching methods is focused on modern trends in the field of business analysis, a general overview of methodologies and their practical application is given. And, of course, in the third, but most important block of literature for conducting research, it is worth noting the special literature on the methods of automated process analysis, publications by Wil Van der Alst and other research scientists on possible algorithms

and software tools, articles and descriptions published on the websites of research groups that regularly publish news and on the progress.

M. Hammer and J. Champi's work in 1997 on the "reengineering of the Corporation: Manifesto of the revolution in business" describes the methodology of reengineering and it helps companies in organizational restructuring of their business. M. Hammer (Hammer, 1997) and L. Hershman offer a set of tools that guarantee significant savings in production and time, creating a new type of company aimed at achieving high competitive positions Hershman (Hershman, 2012). Detailed information on the construction of business process models with specific examples is given in the works of V.G. Eliferov and V.V. Repin (2013).

Functions in an organization are key elements in business processes, so each of them has events at the input and output, that is, the so-called parameters that characterize the beginning and end of the process (Maull et al., 2003). It was developed in 1990 by Professor Saar August Wilhelm Scheer as part of a comprehensive methodology for modeling the Architecture of Integrated Information Systems (ARIS) process (Repin, 2014). And the methods and approaches of public management of business processes are reflected in the work of A.V. Novikova (Novikova, 2021).

During the writing of the article, special approaches to modeling business processes were used. They are structuring, systematizing, embedding. The introduction of such processes was used in the study of the article on the example of the Aktobe region.

The business process modeling methodology includes: modeling method, procedure, notation.

The modeling method is a way of representing a real object using model objects. A procedure is a sequence of steps for collecting and processing information. Notation is a modeling language. Each language has its own syntax — symbols of elements and rules for combining them, as well as semantics-rules for interpreting models and their elements.

In public administration, the business process can be based on three approaches to this modeling methodology:

The structural approach considers the system as a set of elements, subsystems and relationships between them. It is used for the organizational development of enterprises and firms: looks for ways to optimize, develops work rules and job descriptions. Methodologies: SADT, DFD, WFD as mentioned, the object-oriented approach considers the system as a set of interacting objects. Objects are converted during the execution of processes. In the object-oriented approach, first objects are distinguished, and then the actions in which they are involved. This approach is used for visualization, design, and documentation. Methodology: BAAM.

The integrated approach combines structural and object-oriented approaches. Gives a complete and comprehensive idea of the simulated object.

### **Results and their discussion**

At the end of the twentieth century, business analysts began to pay more attention to the issues of improving the organization's activities by reengineering business processes and improving them. As a result, the Aris methodology has become widely

used. Questions arose about the possibility of distributing the created process model, in connection with which the universal modeling language UML appeared. In the first decade of the XXI, Workflow technology, focused on automating document processing and task execution, began to actively develop. The organization of automated support for the management of flexible or often changing business processes becomes relevant (Ko, Lee and Wah Lee, 2009). Methodological and technological restrictions between modeling and automation of business processes at that time did not allow us to promptly respond to changing business requirements, make timely changes to the rules of operation of the Information System (Novikova, 2021).

The International Organization BPMI (Business Process Management Initiative) has developed a new approach to business model management BPM (Business Process Management).

BPM is a management concept that combines the goals of the organization with the expectations and needs of customers by ensuring the effective implementation of business processes (Macedo et al., 2014).

Based on the basic provisions of the BPM common Body of Knowledge (BPM Common Body of Knowledge), it combines the established rules of internal and external interaction, as well as the regulation of relations in the field of Process Management in order to implement and continuously improve the strategy, goal, analysis, design, management of processes.

BPM is aimed at improving operational activities or is based on large-scale changes, transformations.



Figure 1 - Business process management cycle.

Note: developed by the authors on the basis of materials

BPM as a methodology can be used to solve various problems related to Business Process Management. Three approaches to the use of this concept can be distinguished:

- 1) improving business processes;
- 2) Enterprise process management;
- 3) continuous optimization.

Improvement of business processes is the implementation of a specific project, its optimization and improvement of indicators. Within the framework of this process,

work is carried out to identify, describe, analyze and optimize the business process (Gromov, 2016).

Enterprise process management implies the use of the BPM concept for direct management of business processes by ensuring that the business process system complies with the company's strategy and Development Goals (Reijers, 2006).

A business process is a set of controlled interconnected cyclical actions and operations based on the use and processing of primary resources into the final product or measurable result in order to achieve the goals of the enterprise and ensure the efficiency of its activities (Zairi, 1997).

Or a business process is understood as a sequence of actions that turn input materials into some kind of result that has value for the consumer.

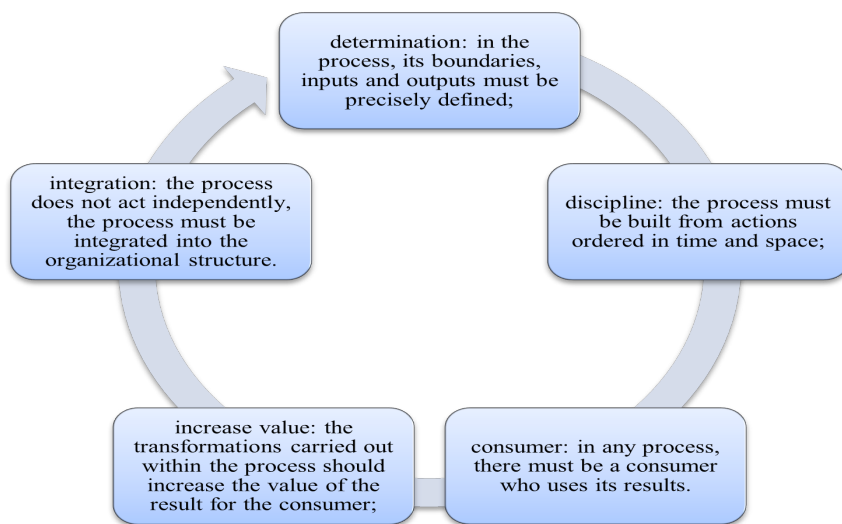


Figure 2 - Basic properties of business processes.

Note: developed by the authors on the basis of materials

Business processes can be divided into three types: managerial, operational and supportive.

Managerial business processes provide control over the functioning of the system as a whole. Operational business processes form the main business of the organization and ensure the flow of basic income. Supporting business processes serve the core business.

Business Process Management is the art of achieving high commercial results, efficiency. The art of management, based on the results obtained in the course of Business Process Analysis, contributes to the effectiveness of the functioning of the organization's business processes (Zairi and Sinclair, 1995).

The purpose of the analysis is to increase the efficiency of business processes and make managerial decisions aimed at ensuring their Sustainable Development (Domanova, 2016).

To successfully implement the goal of analyzing business processes, it is necessary to solve the following tasks:

- i. to determine the economic efficiency of the use of business process resources;
- ii. Assessment of the implementation of plans, forecasts, management decisions on the effective use of the economic potential of the organization's business processes;
- iii. study of the influence of internal and external, objective and subjective factors on the results of business processes of the organization;
- iv. development and justification of measures aimed at optimizing business processes and making effective management decisions.

A necessary condition for conducting a qualitative analysis of business processes is its information support. Information support for analysis is a set of information resources necessary to achieve the goals of analysis. As information resources, the information acting in the management system is considered and serves as the basis for managerial decisions. The information support of the analysis can be divided into 3 main blocks:

- 1) normative-reference — legislative acts, regulations, norms, limits, provisions, etc.;
- 2) planned information-Organization Development Plan;
- 3) factographic information – a set of data on processes in the organization.

The business process should begin with consumer demand and end with its satisfaction. For this purpose, business processes should be valuable to the consumer.

To describe the business process of the organization, you need to be guided by the step-by-step instructions as follows:

1. Clear and accurate description of the process name;
2. determining the "input" and "output" points in the process;
3. determining the purpose of the process;
4. it is important to assign a process manager to each stage of the process, who performs process management functions and manages the process;
5. mandatory determination of the "output" from the process, which can be in material or non-material form;
6. if there is an "output" from the process, there must also be an "input", that is, incoming documents or material assets necessary for the process to work.

In practice, different approaches to describing processes are used. Regardless of the selected approaches, it is important to determine the following:

- How is the process included in the process chain?
- What is in the "input" of the process and what is in the "output"?
- What are the boundaries of the process?
- What operations and procedures does the process consist of?
- How are the works in the process distributed?
- What will be the result of the process?

Continuous optimization provides for long-term work to improve the efficiency and productivity of the business process by monitoring the effectiveness of Changes (Telnov, 2015).

Management of organization processes usually manifests itself in the form of the Deming-Schuhart cycle (RDCA) and consists of four stages:

- 1) planning (design);
- 2) implementation (documentation);
- 3) Control (analysis);
- 4) correction (improvement) (Marmontova, 2020).

In the planning phase, issues are identified and analyzed, as well as opportunities are evaluated and changes that are necessary for business processes are projected.

Performs and documents previous planned changes during the implementation period. At the control stage, the results of the implementation of business processes are analyzed and evaluated, conclusions and recommendations are drawn up that make it possible to carry out changes aimed at improving the efficiency of management and implementation of business processes (Zucchi and Edwards, 1999).

This approach allows you to build a model for continuous improvement of business processes as a process management life cycle. After the last fourth step, the organization must restart the first step in order to continuously improve its activities (Keong Choong, 2013).

The BPM methodology can be effectively applied in the context of research, optimization, design, implementation, support and execution of the following processes:

- \* cross-functional processes;
- \* processes carried out by employees of various structural divisions;
- \* processes of external entities in relation to the organization, etc.

Depending on the structure of operations carried out by employees of the organization, all activities of the organization can be divided into three types:

- \* project activities;
- \* process Service;
- \* functional activity.

Project activity is a temporary enterprise in a changing environment, aimed at obtaining a unique result.

In a predefined, stable environment, process activity is a predefined activity with all decisions clear in advance.

Functional activity is understood as activity related to the performance of their functional duties within the framework of the job descriptions of employees, but not part of any process or project.

The process approach is the systematic identification and management of business processes of the organization, the management of the interaction of these processes.

Process management is a systematic activity on the formation of purposeful behavior of the organization by highlighting, characterizing and managing the system of interrelated and mutually complementary processes of the organization.

One of the first stages of the analysis of business processes and functions is the application of the Pareto 80/20 principle, according to which it is necessary to choose priorities among all business processes, deal with their analysis and optimization in the first place, for which it is necessary to determine priority criteria:

- 1) the importance of the business process;
- 2) the problem of the business process;
- 3) the ability to make changes to the business process in terms of the cost side of improvement.

Business processes of the organization are characterized using various methods (notations) and software products that reflect their main aspects. There are notations such as IDEF0, BPMN, eEPC that describe business processes.

BPMN (Business Process Model and Notation – business process notation and notation) is a system of symbols for modeling business processes. BPMN was developed in 2004 by BPMI (Object Management Group after reorganization).

BPMN 2.0 is a business process modeling concept that describes the format of notation, metamodel, and sample exchange.

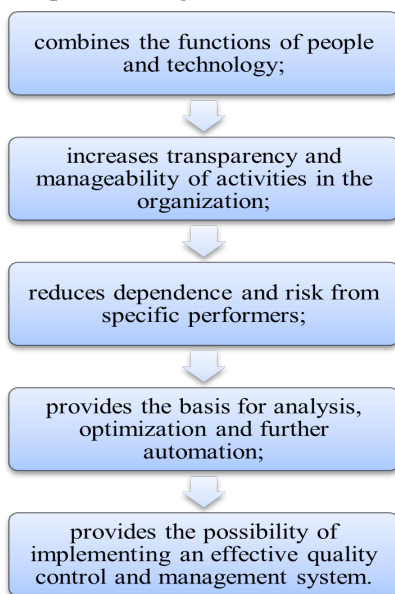


Figure 3 - The importance of business processes.

Note: developed by the authors on the basis of materials

The main purpose of the BPMN standard is to provide an understandable note to describe the business processes of all business users. Thus, from business analysts who develop technological schemes and developers responsible for implementing business process execution technologies, to managers and ordinary users who manage these business processes and monitor their implementation (Ravesteyn and Batenburg, 2010).

The advantage of this notation is that it reflects the internal logic of the business process and is broadly functional. And the disadvantages include the difficulty of adopting graphic drawings and the fact that the description of the organizational structure is not provided.

Business Process Modeling has benefits for all stakeholders. From a business point



of view, modeling allows you to save money, improve quality, reduce production time, increase productivity, identify problems and eliminate them, collect knowledge about the process, and standardize the work of employees (Olhovich, 2008).

For those who professionally manage business processes, modeling is relevant for the fact that it allows you to solve business problems by clearly and in detail describing the processes; clearly explaining the process to the target audience; choosing a detailed level depending on what is expected from the project and what business problem can be solved.

Business modeling can be used to create an abstract reference model for the implementation of the process, which reflects all the necessary information – documents, performers, etc. This model can be attached to the job description so that the performer can be guided by it in the performance of his duties (Elzinga et al., 1995). In addition, the model can be used to optimize existing processes and design new processes, also called Process Reengineering, when executing which processes are described in the current as-is state and the desired to-be.

Thus, the BPMN standard aims to bridge the gap between business process models and their implementation.

BPMN notation is designed to model business processes using a special set of elements that are understandable to many business users and information system developers (Gulledge Jr and Sommer, 2002). Business users here are business analysts, managers, process managers, and process executors.

The BPMN 2.0 approach is based on the following principles:

- 1) the business process is described as "AS IS" (AS IS) using BPMN notation and is immediately subject to automation;
- 2) to manage processes, a system must be used in which the process graph model changes to the program code of the business application.
- 3) if the improvement of the progress of the process carried out with the support of the relevant information system for managing business processes on the instructions of the business user, it can be carried out in a short time without significant costs, since the BPMN 2.0 approach allows you to easily re-configure the business application according to the user's requirements.

The BPMN methodology defines the principle of building a process diagram.

The main task of BPMN is to provide the ability to describe and model business processes in a way that is understandable to analysts, program developers and business users (Alpatova, 2017).

Therefore, samples created using BPMN can be used as part of the following work:  
analysis and improvement of business processes;  
execution of business processes;  
control over the execution of business processes;  
to improve business processes.

The use of BPMN to describe the organization's business processes with their subsequent regulation ensures the transition of the organization's business processes to the third level in terms of maturity (Llewellyn and Armistead, 2000).

The "Business Process Management Maturity Model" developed by the company (Gartner Incl.) represents the six stages of maturity of the company in terms of Business Process Management. The use of this model allows the company to understand its level of maturity and form a corporate strategy for managing business processes.

It should be noted here that the state bodies of the Republic of Kazakhstan are at the zero and first level of development in accordance with this classification.

During the training of civil servants in Aktobe region at seminars on Business Process Optimization, it was noted that they act in accordance with the signs of the initial stage of Business Process Management Development (Lee and Dale, 1998). In the process of formalization and analysis of business processes in the field of land relations, education and health care in the region and the city, the advantages of BPMN notation were clearly manifested (Hammer and Stanton, 1999). In particular, the performers of business processes for these types of activities have identified ways to optimize their services, which are depicted using the BPMN diagram. For example, it considered the presence of excess business roles in the business process of granting land in the district. That is, the main question in this notation is the answer to whether the work performed by the business role has value for the final consumer – the population. As a result of the analysis, it was found that the deputy akim of the district as a business role is redundant in the business process related to the provision of land, which contributes to the delay in the time of the same business process.

Table 1. Contribution of the maturity model of Business Process Management

Stage name	Character
Level 0 "recognition of operational inefficiency".	the initial stage of the development of Business Process Management. At this stage, it is understood that improvement in business cannot be achieved with the help of traditional methods.
Level 1 "interest in processes".	at this stage, the organization is in search of methods for improving activities, begins to focus on the organization and management of business processes, that is, builds a process management system and determines indicators of the effectiveness of its implementation.
Level 2 "Local process control and automation".	At this stage, the organization is seriously interested in managing business processes, organizing their regulation and control over execution, automating some of them.
Level 3 "Control and automation of interprocess interaction".	the boundaries of managed processes are expanded, integration is carried out between them and with the processes of partners and clients.
Level 4 "value added chain management".	at a given level, organizations that carry out customization of business processes in accordance with the strategic, tactical and operational goals of the organization find a place.
Level 5 "dynamic business structure".	this is the highest level of development of Business Process Management. At the same time, the company is able to quickly flex the existing processes and create new processes in accordance with the changing conditions of the external and internal environment of the business.
Source: compiled by the authors on the basis of the studied materials	

In order to optimize the services of government agencies, the formalization of business processes through BPMN elements is becoming more effective and convenient. And decision-making on the analysis and optimization of the formalized business process will be justified and systematic.

According to the standard for assessing the level of maturity of processes, the third level includes an organization in which processes and their interaction are fully defined and regulated, the goals and objectives of the processes are based on the needs of the business, work on process management is organized.

The BPMN 2.0 notation formed the basis of the international standard for Business Process Modeling ISO/IEC 19510:2013. Thus, the given notation of modeling is the modern notation of modeling standards in the world. The essence of work on optimizing business processes is to transfer from the "How is" situation (as is) to the "how to be" situation (to be). The "How is" (as is) method in the analysis of current activities is developed based on specific processes. At the same time, errors in the organization and execution of processes can be detected. It can be a large or small number of process participants, repetition of operations, an undefined boundary of sequential processes, a mismatch between output and input, etc (Chistova, 2021).

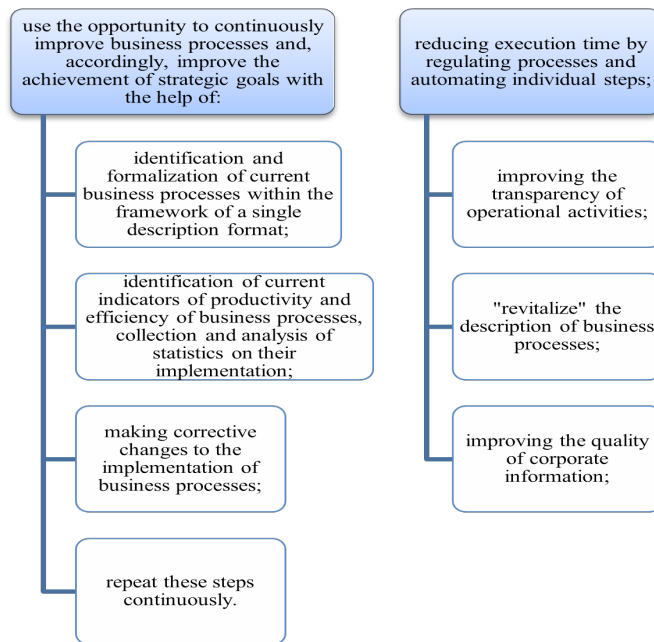


Figure 4 - efficiency of the BRM system.

Note: developed by the authors on the basis of materials

Then the business process model is subjected to critical analysis or processed using special software. Based on the results of the analysis, a model of business processes "how to be" (to be) is formed and, in accordance with it, an action plan is developed to make the necessary changes.

□ A number of advantages will be provided from the definition and optimization of business processes of state bodies:

- to understand the quality of public authority services;
- standardization of business processes;
- improving the quality and management of services;
- the ability to consciously improve the activities of the institution;
- reduce dependence on the human factor, reduce the requirements for the competence of employees, the ability to attract cheaper, contract personnel;
- increasing the level of satisfaction of the population with the quality of public services, reducing costs.

Assessment of the effectiveness of business processes in the provision of Public Services allows you to timely identify problematic aspects, develop appropriate prevention measures, and make effective management decisions (Tancjura, 2020).

□ Optimization of business processes in the public administration system consists of the following stages:

- to search for solutions to optimize the process and develop a "how to be" business process model;
- registration of a model of the "how to be" process in regulatory and instructional documents, that is, the creation of the corresponding regulation of business processes or instructions for its implementation;
- implementation of optimized business processes in the activities of the institution.
- In practice, various criteria for the effectiveness of optimizing the processes of providing public services are used. Among them, the basic criteria are the following:
  - efficiency of business processes-shows how the result of the implementation of processes corresponds to the goals and objectives;
  - cost of business processes;
  - time for the implementation of business processes;
  - business process execution time;
  - quality of execution of business processes.
- **Conclusion**

The state is a service organization. The main characteristics of the state are served, firstly, by the state; secondly, the state has a divisional, linear functional structure; a high degree of regulation and duplication of activities characterizes the predominance of business processes in its activities. Therefore, the analysis of business processes of state bodies by formalizing them with elements of BPMN is understandable and convenient for any performer (Muehlen and Ho, 2006).

According to the decree of the president of the Republic of Kazakhstan dated February 26, 2021 No. 522" on approval of the concept for the development of Public Administration in the Republic of Kazakhstan until 2030", one of the most pressing issues in public administration is the functions of the state apparatus, not focused on the needs of the population and business. To date, the functions of the state apparatus in Kazakhstan, the number of which, according to various sources, ranges from 7.5

thousand to 15 thousand, are reflected in more than one thousand regulatory legal acts ([adilet.zan.kz/kaz/docs/U2100000522](http://adilet.zan.kz/kaz/docs/U2100000522) In Kazakh).

In Kazakhstan, the processes of rendering public services are being optimized, with the exception of repeated procedures and their complete conversion to electronic format, reducing the deadlines and list of documents.

Optimization of the business processes of a state body is understood as a radical rethinking and redesigning of business processes to achieve a systematic improvement in the performance indicators (KPIs) of a state body for the provision of public services, such as cost, quality, availability, terms of provision and labor costs. The economic efficiency of a business process consists of three indicators-process efficiency by cost, process efficiency by time, and process efficiency by quality. In this regard, Aktobe civil servants, during the analysis of the business processes of their institution, were convinced that optimizing the provision of public services at cost and time contributes to improving its quality.

In some cases, one function can be distributed between several state bodies, which leads to difficulties in interdepartmental interaction and, as a result, the inability to achieve the result and duplication of functionality between different levels of Public Administration («Kazakstan Respublikasynda memlekettik baskarudy damytudyn 2030 zhylyga deyingi tuzhyrymdamasyñ bekitu turaly» Kazakstan Respublikasy Prezidentinin 2021 zhylygy 26 akpandagy № 522 Zharlygy). A study of this situation is planned in the future. To do this, first, civil servants need to learn how to formalize their business processes according to the elements of BPMN. The optimization of interdepartmental business processes is being considered through a pool of civil servants who have mastered a certain BPM notation.

The activities of state authorities are of an integrated nature, associated with the development and implementation of state policy and regulatory and legal regulation in various areas, as well as the implementation of the functions and powers of the management power and are based on the implementation of both complex internal tasks and everyday work focused on external consumers. At the same time, to increase the efficiency of performing these functions and tasks, an up-to-date, complete, and high-quality flow of information is required, characterized by a large amount of information and a large number of indicators that require generalization, analytical processing and preparation for further decision-making in real time.

The goals of optimizing and automating public services are to simplify and speed up the process of providing public services provided by state bodies. Elimination of excessive administrative procedures in the provision of public services and the number of conciliation divisions of state bodies; reduction of the number of paper documents provided by service recipients or their transfer to electronic form; ensuring interdepartmental interaction of information systems of state bodies; implementation by providing several public services on the principle of "one application; provision of public services in a proactive form; exclusion of the human factor in the provision of public services; reduction of terms for the provision of public services, etc.

As part of the further streamlining of the functions of state bodies, it is necessary

to move to the next stage – to change business processes in the state apparatus to create functions focused not on intra-departmental interests, but on the needs of the population and business, on the creation and fair distribution of public goods, considering effective interdepartmental interaction.

The reform for this purpose covers only part of the processes, while maintaining most public services (processes of interdepartmental coordination, coordination of the activities of state bodies), which require full automation of business processes («Kazakstan Respublikasynda memlekettik baskarudy damytudyn 2030 zhyлга dejingi tuzhyrymdamasyn bekitu turaly» Kazakstan Respublikasy Prezidentinin 2021 zhylygy 26 akpandagy № 522 Zharlygy).

In this regard, the agency for Civil Service Affairs conducts an analysis of the regulations of public services selected by state bodies on social significance and demand in terms of compliance with standards and other relevant regulatory legal acts, optimization of business processes for their provision, as well as optimization of deadlines for the provision of public services and reduction of documents.

In the address of K.K. Tokayev (2022) to the people of Kazakhstan "New Kazakhstan: the path of renewal and modernization", he paid special attention to the issue of removing the activities of the state apparatus from bureaucracy. In this regard, a radical revision of internal procedures in state bodies and optimization of legislative and budget processes will be carried out.

The overall result of optimizing the business processes of state bodies is to reduce the time spent by citizens on obtaining public services, the number of documents provided and cash costs, which is of social importance on the scale of the country.

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