## ECONOMY AND MANAGEMENT

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## COMPANY BUSINESS PROCESS OPTIMIZATION AS AN IMPERATIVE OF ITS ECONOMIC SECURITY

**Purpose.** To work out an algorithm of an entrepreneur business process optimization in order to systemize and ensure the quality of implementation of key business processes of an insurer as the condition of increasing his/her level of economic security in a turbulent business environment.

**Methodology.** In the study there were used general scientific and specific methods of cognition, in particular: logical colligation, analysis, dialectic synthesis and grouping, induction and deduction, process approach, factor analysis, graphical visualization, economic-mathematical modelling.

**Findings.** The necessity of business process optimization for an insurer was established as a strategically important subject of market relationship development. A logical-structural scheme of interconnection of the main business processes of an insurer is formed; the processes are gradually implemented by stages of insurance services progress, risks underwriting, reinsurance, effecting of an insurance agreement, forming and placing insurance funds and settlement of losses. The main structural elements of the insurer's business process optimization were systemized. The methodical approach to the insurer's business processes reengineering was proposed on the basis of the games theory just to form a new model of business processes and to increase its optimization process effectiveness.

**Originality.** An algorithm of the insurer's business process optimization was worked out, which includes the process of their planning, diagnostics, implementation of changes and monitoring just to increase the quality of key business process realization as the condition for ensuring economically safe functioning of the business entity.

**Practical value.** The practical value is in the possibility to use them in insurance companies' activities, which will ensure their sustainable functioning and development in the strategic perspective.

**Keywords:** insurer's business processes, client-oriented activities, processability of business processes, planning, reengineering, monitoring

Introduction. In the terms of current economic dynamics, the effective functioning of any business entity requires formation of qualitative new management philosophy aimed at ensuring the equivalence of interests of all participants in economic relations by optimizing key business processes. Considering this, one of prioritized requirements of effective functioning and development of national insurers is a focus on current tendencies and search for organizational technical opportunities of their adaptation in their own activities, because the main function of insurance is to protect property interests of individuals and legal entities from probable losses in case of insured events, which is especially necessary in the context of economic depression and financial crisis.

The analysis of national insurers' activities shows a number of factors that restrain insurance market development, in particular, the significant part of insurers has obvious problems with solvency and liquidity, lack of a clear business mod-

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el, unsatisfactory level of corporate management and risk optimization. This is confirmed by official statistics of the National Commission, which carries out state regulation in the field of financial services markets. Thus, as of March 30, 2020 there were 225 insurance companies registered in the State Register of Financial Institutions and that is 18 % less than in the first quarter of 2019 [1]. At the same time there is a positive dynamics of gross insurance premiums according to which the level of insurance payments remains in the range of 24–27 % and is an unsatisfactory indicator that has an impact on trust level of potential clients to the insurance entities and accordingly stunts development of the national insurance market. In this regard, the insurance market in Ukraine is insignificant in terms of assets volume and insurance services intake level that is proved by the Insurance penetration ratio, which was 1.4 % in 2019 and was really low in comparison with worldwide indicators, which vary from 2 up to 8%. As a proof of negative dynamics, the Insurance Density Ratio can be also taken into consideration, the amount of insurance premium for one person was on a quite low level in 2019 and was about 34 dollars US (in comparison in different countries of the world this indicator in average is from 500 to 3000 dollars US).

The mentioned above tendencies of insurance market functioning allow identifying the fact that insurance companies as any other business entities come under the potential negative influence of risks that impede their solvency and may have negative consequences for consumers of insurance services. After all, it is consumer confidence in the reliability of the insurance company that is the key to the successful development of the insurance business. As a result, insurers' economic security level does not correspond to target values that is a precondition for business efficiency decrease and failure to achieve target functioning parameters. Considering all above said, the prioritized task of economically secured development of modern insurers is timely optimization of their systemforming business-processes, the balancing of which will allow increasing quantitative and qualitative indicators of insurance services, improving level of insurance coverage and at the same time providing favorable conditions for insurance business.

**Literature review.** A number of scientific research studies written by national and foreign scientists deal with a study on theoretical, methodological and methodical aspects of the insurer's business-process optimization. The issues of reengineering as a key stage in optimizing the insurer's business processes are widely covered in the modern scientific literature. There are interesting research studies in the field of reengineering methodology that can be differentiated by aim, concept, stages and methods of implementation, which has been covered in the works by distinguished scientists.

The fundamental ideas of theory and practice of the modern reengineering have been covered in the research studies by A. Sujová, Ľ. Simanová, and K. Marcineková where the authors proposed the qualitatively new concept of internal firm management, which is a fundamental rethink of traditional basics of company foundation, their organizational structures, a radical restructuring of existing business-processes to improve such modern business resultativeness indicators as expenses, quality, level of service and efficiency [2].

Thorough understanding of the reengineering concept as a rapid restructuring of firm organization and management basics is presented in the work by O. H. Melnyk, O. V. Mukan, and M. L. Zlotnik [3].

The research studies by such authors as V.M. Furman, O.V. Filonuyk, M.P. Nikolenko, O.J. Baranovsky are also noteworthy. They consider the key aspects of strategic management of an insurance company [4], among them there are cost reduction, quality improvement of insurance services provided to the customers, ensuring transparency of insurance relations, rationalizing of management system, achieving maximum business flexibility, the insurer's organizational structure improvement, and others.

In the works by K. Andriushchenko, et al. [5], B. Kastrup [6] and E. Novikov [7] it has been stressed that the balancing of interests between the subjects of the insurance process necessitates insurers to use modern managerial tools aimed at reengineering of business processes.

The significant achievements in modern insurance management are the results of N. Mekonnen's research that deals with the necessity of the insurer's business process optimization by determining aims of business processes and their classification, mastering technological foundation of business processes formation, studying factors of functioning and development of insurance environment, features of formation of organizational structures and revealing of specificity of insurance underwriting [8].

Economic security issue of business entities in the conditions of an uncertain business environment is covered in the research of the following scientists: V. V. Dergachova – development of crisis management measures as a condition of economic security [9], M.O. Zhytar – financial architectonics determinants construction [10] and improvement of financial

sub-system of enterprise economic security [11], A. G. Raišienė, et al. – formation of enterprise economic security system mechanism [12], H. V. Kozachenko – research on methodological aspects of economic security of an enterprise [13], N. Popkova – development of comprehensive economic security of enterprises [14], O. M. Lyashenko – formation of an enterprise's economic security management conceptualization [15], Y. I. Ovcharenko - development of theoretical and methodological aspects of forming the system of economic security of the enterprise [16], O.A. Sorokivska – development of innovative approaches to managing the economic security of the business entity [17], and others. However, it should be noted that some questions about the theoretical and methodological principles of optimizing the business processes of the insurer as a business entity to achieve its economic security remain controversial and require further research.

Unsolved aspects of the problem. The works by the above mentioned authors are undoubtedly of quite big scientific and applied value, but modern integrational processes, unsystematic changes in internal and external business environment, instability of legislative framework and unpredictable dynamics of financial relations development have significant influence on insurance business development and require insurer business process optimization, which brings to a new level of relevance the research of the essence and the necessity of this process, determination of successive and interrelated stages of its implementation and efficiency criteria taking into consideration insurance business specifics.

The purpose of the article is to develop an algorithm for optimizing the business processes of the business entity on the example of the insurance company to systematize them and ensure the quality of implementation of key business processes of the insurer as a condition for improving its economic security in a turbulent business environment.

**Methods.** Theoretical and methodological basis for the study were formed by scientific research of national and foreign scientists, fundamental theoretical provisions of economical science in the field of insurance management and economic security. The following general scientific and special methods for obtaining knowledge were used in the research, namely:

- logical generalizations to substantiate the need to optimize the business processes of the insurer;
- analysis, dialectical synthesis and grouping to systematize the business processes of the insurer;
- induction and deduction to highlight the structural elements of optimization of business processes of the insurer;
- process approach to develop an algorithm for optimizing the business processes of the insurer;
- factor analysis to determine the factors of negative impact on the process of reengineering the business processes of the insurer:
- graphical visualization to visualize the results of the study;
- economic and mathematical modeling to select a methodological approach to reengineering the business processes of the insurer.

Results. The need to optimize the business processes of the insurer as a strategically important subject of market relations is due to the following aspects. First of all, the central element of the modern insurer's activities is a focus on the consumer (client) who has their own demands and expectations for insurance service proposals over a defined period of time. Individualization of consumption leads to the fact that each product (service) must meet the specific needs of the client to protect their property interests. Besides, the requirements not only for the insurance product itself, but also for its service system are growing significantly. Secondly, the dynamics of insurance business growth does not correspond to the number of potential clients (no more than 30 % of risks are insured in Ukraine). As a result, competition between companies is in-

tensifying, which is accompanied by dumping of prices for insurance services and intensification of the struggle for the client by means of improving the service sector and increasing the quality of insurance products. Thirdly, the modern development of domestic insurers takes place in a dynamic economic environment with its intrinsic systematic changes that require prompt and reasonable managerial decisions. The main object of management is the individual integrated business processes – from the beginning of their implementation to the final result. For example, marketing specialists, underwriters, sellers, actuaries, all of them are involved in creating an insurance product; however, each of them seeks to solve specific tasks and satisfy their own interests, which in the case of proper organization of activities should contribute to the achievement of a common target outcome. Fourthly, activation in Ukrainian insurance market of foreign investors who have experience in insurance activities and possess innovative methods of work requires improving the quality of national insurers as a condition for the integration of global and national insurance space [18, 19].

Thus, the optimization of the insurer's business processes is an extremely complicated, comprehensive and long-term process that requires the definition of priority business processes, analysis and estimation of their optimality by such parameters as: expenses, quality, speed, information, decision making, determination of quality criteria for final and intermediate results and performance standards. The main purpose of optimizing the business processes of modern insurers is to focus on creating a business process organizational structure that operates on the basis of information technology and improves the quality of customer service [20].

An important condition for the effectiveness of optimization of business processes of the insurer is the identification of key structural elements of this process, which should consider the specifics of insurance activities and peculiarities of the business processes of the insurer. In order to further develop the algorithm for optimizing the business processes of the insurer, let us consider in more detail the purpose and main objectives of key business processes, which are shown in Fig. 1.

The business process of promoting the insurance service is carried out in order to form and expand the customer base of the insurer through the sale of competitive insurance products and increase sales channels to achieve the planned results of the activity. The main tasks of the business process include marketing research on the insurance market, determining the range of insurance services and planning assortment policy, choosing an effective marketing system for insurance products, developing strategies and tactics for developing insurance rates, stimulating the sale of insurance products.

The business process of risk underwriting is carried out in order to obtain reliable information about the qualitative characteristics of risk and to establish the most adequate risk insurance rate.

The main tasks of business processes are establishing correct classification of risks types, using its factor analysis, transferring qualitative risk characteristics to quantitative indicators, such as: the price of insurance service, formalization of a collection process and bringing risk information to the underwriter, selection of risks on the basis of objective data on a specific risk, determining the terms and conditions of insurance coverage, coordination of underwriting decisions with the possibility of risk reinsurance. The business process of reinsurance is performed in order to protect the insurance company from possible financial losses according to its own insurance portfolio. The main tasks of the business process should include defining the principles of reinsurance, preparing information for the analysis of the reinsurance proposal and the contract creation, conducting organizational work and the reinsurance process control.

The business process of concluding an insurance contract is performed for the purpose of legal registration of the relationship between the insurer and the insured, as well as obtain-

ing an insurance premium. The main tasks of the business process are stipulation of the insurance contract conditions, control over the process of acquainting the client with the rules of the insurance contract, registration and signing of insurance policy, preparation of documents for insurance premium payment, control over timeliness and completeness of insurance premiums.

The business process of formation and placement of insurance reserves is performed in order to ensure insurance protection of clients by paying insurance indemnities and obtaining additional investment income.

The main tasks of the business process include determining the optimal size of insurance reserves, assessing investment risks for the placement of insurance reserves, choosing a rational investment policy, maintaining the optimal structure of the investment portfolio, as well as control over the placement of insurance reserves in financial instruments with optimal risk and return.

The business process of settlement of losses is performed in order to make a positive or negative decision on the payment of insurance indemnity on the basis of the necessary information about the circumstances of the insured event. The main tasks of the business process include systematization of document circulation at the stage of collecting and coordinating information about the insured event, unification of a set of standard documents, optimization of the distribution of paid cases between specialists, limiting the time of examining documents by specialists, delimitation of access rights of specialists to paid cases, improvement of the system of notification of specialists about all circumstances of the insured event, introduction of the system of automated control of settlement of losses, development of rules of consideration of the declared losses and their accounting.

Taking into account the above-mentioned characteristics of the main business processes of the insurer, it is possible to summarize the main structural elements of optimization of business processes of the insurer: customer-oriented approach, processability of business processes (underwriting, loss settlement, management of insurance reserves, information technologies, effective organizational structure).

As it was previously mentioned, a key aspect of the insurer's successful operation is a customer-oriented approach. Statistics show that the vast majority of insurance companies lose 50 % of customers every 5 years. As it is known, attracting a new customer is 5–10 times more expensive than maintaining an existing customer base. Also, an increase in the retention of profitable customers up to 5 % increases the profitability of insurance operations by at least 25 %. Meanwhile, it should be noted that nowadays traditional business processes of the insurer have weaknesses including lack of unity in customer service, incomplete satisfaction of customers and company interests, narrow specialization of insurance service sellers, insufficient level of customer service quality due to overload of sales managers with non-core activities. Under such circumstances, a modern insurance company should strive to business process optimization, which involves the transition from product-oriented to customer-oriented model of functioning - improving the marketing of insurance services, development of new programs and products, development and adoption of non-typical contracts, and others.

It should be noted that implementation of a customeroriented approach to insurance business allows increasing the satisfaction level of clients and percentage of their retention, increasing complex sales of insurance products per one insurer, which will ultimately increase sales volume and the value of the insurance company's assets. In addition, in the long-term perspective the customer-oriented approach will encourage insurance products consumers' portfolio stabilization and increase the value of intangible assets and, as a result, increase the market value of the insurance company as a priority indicator of success.

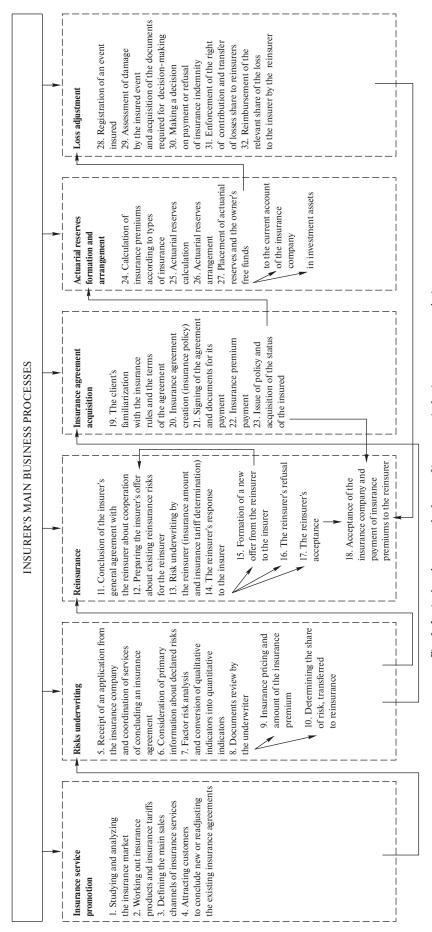


Fig. 1. Logical and structural scheme of insurer main business processes relations

The next structural element of optimization of business processes of the insurer is the formation of an organizational structure that would allow implementing all existing business processes effectively and achieving the main goal, which is maximum customer satisfaction. In most modern companies, the organizational structure is vertical, centralized, which means that before making any decision, a long and complicated process of coordination with the top management of the company precedes. On the one hand, it allows tracking all business processes and preventing fatal decisions for the company (this is especially important in conditions of limited funds, often unbalanced insurance portfolio and unformed customer base of companies). However, on the other hand, the development of the company contributes to the increase in the business processes and the need for management decisions on the implementation of a particular business process by professionals. In such a case, a need arises to create an absolutely new approach to the organization of the insurer's work that should be based on horizontal structure of interaction on the basis of cooperation, rather than subordination. Besides, the new structure should minimize duplication of functions by different departments or employees.

Processability of key business processes such as underwriting, settlement of the insurer's loss and management of reserves should be also emphasized among the structural elements of the optimization process. As it is known, the experience of the underwriter in the process of selecting risks, assessing them and establishing an adequate insurance rate significantly affects the financial stability of the insurer. The practicability and economic efficiency of all subsequent insurance business processes depend on the underwriting quality.

An important parameter for measuring the effectiveness of the business process optimization implementation is a stage of loss settlement, which is one of the most complex business processes which requires the provision of high-quality information technology systems. The main principles of the business process of settlement of losses should be the legality of claims for damages, adequate compensation, prompt implementation of financial calculations, timely payment of insurance compensation, and others. Under such conditions, claims department's activities must be highly organized, technically equipped, intellectually and psychologically prepared. After all, the main problem in the activities of such a department is a need to combine the opposite goals such as minimization of insurance company losses and maximum satisfaction of legal claims of subscribers for damages.

Herewith, a necessary element of optimizing the business processes of the insurer is a process of actuarial reserves management, the effectiveness of which depends on the solvency and competitiveness of national insurers. Actuarial reserves management is one of effective instruments that allows forming a balanced insurance portfolio, receive significant investment income, minimize the negative effects of crisis phenomena both nationally and globally. An important aspect of actuarial reserves management is to ensure the balance of interests of insurance participants.

It should be noted that there is also use of modern information technology among the urgent tasks of optimizing the business processes of the insurer, which is certainly an important impulse for activation of insurance interest and insurance market development. Meanwhile, ensuring high quality of services provided to subscribers is among top priority issues. According to experts' forecasts, in the next 10 years a strategy of universal sales channels will be developed and implemented in the sphere of insurance business, where a client will be able to choose an insurance agent, a bank, a communication channel to purchase insurance services. Insurers will focus on a thorough analysis and effective management of all customer relationships that will allow them to use cross-selling opportunities, as well as to identify information leaks and other losses in the customer service process. Constant efficiency analysis will

allow controlling the process of organizing the work of all sales channels, and the possibility of technical interaction between channels will be the most important channel that will ensure the client's interests in insurance protection. Besides, information technologies are an innovative resource to ensure the transparency of the insurance process, its convenience, mobility and flexibility in concluding and executing insurance agreements, as well as the adaptation of the national insurance market to the international insurance space.

In consideration of the foregoing, it can be stated that the insurer's business process optimization is one of the aspects of organizational development, the implementation of which involves reasoned managerial decision making as to identifying, analysis and improvement of existing business processes according to goals and tasks for increasing the insurer's potential and its effectiveness in the current and strategic perspectives. At the same time, the main goals of the insurer's business process optimization are to improve coordination of operations within one business process, which is used by different structural sub departments of a company; to improve insurance service quality and reduce operational costs; to form effective system of communication; to significantly increase the customer satisfaction level; and also to focus on their current and strategic needs; to implement information technologies for prompt response to the dynamics of the insurance space.

It should be emphasized that the optimization of business processes is essentially a global process that affects the life of the insurer and radically changes the business model of their operation. Considering this, it should be fulfilled on the basis of exact rules — the principles of optimization of business processes of the insurer, among which the priority ones are: integrity principles, jurisdiction separation, natural order, performance practicability, variability of processes, well-organized communication and team work.

The analysis of literature resources on the researched problem allows making a conclusion that the classical stages of optimization of business processes of the insurer are planning, diagnostics, introduction of changes and monitoring. The detailed description of them can be found below in Fig. 2.

At the planning stage, the analysis of the impacts of the business environment factors on the activities of the insurer and the identification of the resource opportunities required for effective optimization of its business processes and mission are performed.

The diagnostic stage involves a quantitative evaluation of the economic security level of the insurer based on the selection of a number of indicators, which allows identifying the problem of organizing business processes and determining possible options for optimization, considering existing needs and resource opportunities. It should be stressed that the estimation of the current state of business processes of the insurer is based on a methodological approach that involves a systematic evaluation of separate processes according to the indicators of importance, quality and cost-effectiveness. It gives an opportunity to identify the most problematic business processes, determine disadvantages in the functioning of each business process and establish possible directions for their correction to improve the quality of a particular business process — cost reduction and duration of execution.

The identified disadvantages of the insurer's business processes are the basis for next stage — implementation of changes by choosing areas of reengineering in order to increase the economic efficiency of the insurer and improve the quality characteristics of the insurance product. At this stage actual realization of fundamental changes takes place, and they are as follows: change in business processes, key effectiveness indicators, organizational structure of sub-departments, improvement of processability of separate business processes, and so on, which leads to the transformation of established relationships between sub-systems and their structural elements.

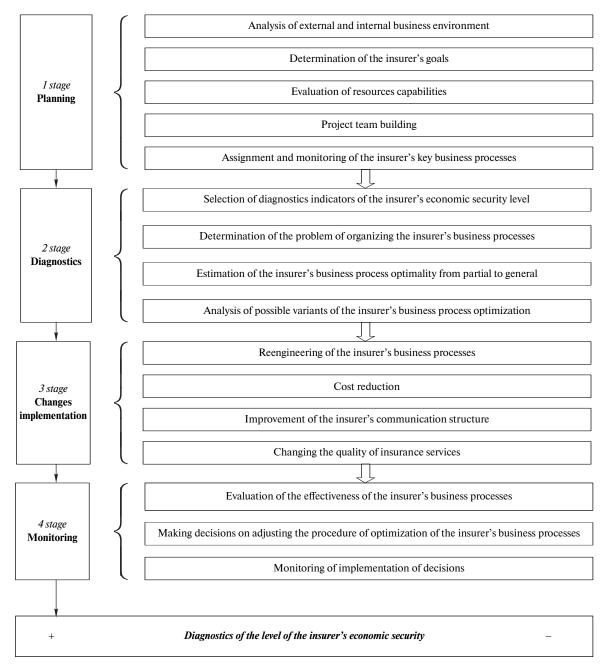


Fig. 2. Algorithm of the insurer's business process optimization

The main directions of reengineering of business processes of the insurer are horizontal or vertical rationalization of business processes, transition from functional distribution of authority to team work, elimination of duplication of management functions, etc. Each of the reengineering directions is characterized by certain expected benefits from their implementation, required implementation costs and efficiency. In this regard, the urgent task is to compare alternative reengineering directions and the feasibility of their application.

One of the approaches of choosing the direction of reengineering business processes of the insurer is the method of games theory; its implementation involves identifying factors  $F_1$ ,  $F_2$ , ...,  $F_n$ , that negatively influence the realization of reengineering of business processes and the effect of them is manifested in the occurrence of adverse events. These actions are independent and form the simplest Poisson processes with intensities where  $\beta = (\beta_1, b_2, ..., \beta_n)$ .

To identify factors  $F_1$ ,  $F_2$ , ...,  $F_n$  it is necessary to model a reengineering process by forming a context diagram and establishing the main causes of adverse events in its implementation (Fig. 3). Thus, occurrence of every separate event as a result of

influence of each of mentioned above factors  $f_i \in F_i$  is a cause for certain loss  $t_i$ . If  $\beta_i$  is an average number of events determined in a certain period of time, and the actual number of events during this period with a certain probability  $P(\beta_i, l)$  is within the limits  $(\beta_i - l, \beta_i + l)$ , then total loss amount of an insurer will be

$$T_i = t_i \cdot P(\beta_i, l),$$

where  $T_i$  is the total loss amount;  $t_i$  is certain loss amount;  $\beta_i$  is the average number of events;  $P(\beta_i, l)$  is probability of event occurrence.

Probability ratio  $P(\beta, l)$  should be calculated by the formula

$$P(\beta_i, l) \sum_{j=\beta_i-l}^{\beta_s+l} \frac{\beta_s^l}{j^l} e^{-\beta},$$

where  $(\beta_i - l, \beta_i + l)$  is the range of the actual number of events over a period of time.

It should be noted that the realization of every reengineering direction  $R_1, R_2, ..., R_n$  requires expenses  $z_1, z_2, ..., z_n$ . Un-

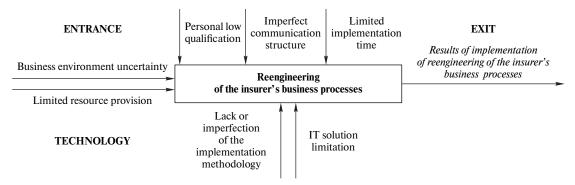


Fig. 3. Factors of negative impact on the reengineering of the insurer's business processes

der such conditions, if the direction  $R_j$  is realised when certain events  $f_i \in F_i$  occur, then the total loss from the implementation of reengineering will be

$$W_{ij} = z_i + T_{ij},$$

where  $W_{ij}$  is a total loss from reengineering implementation;  $z_i$  is the amount of the insurer's costs;  $T_{ij}$  is the loss amount from the occurrence of events  $\beta_i$ .

Information about the amount of total losses is the basis for the formation of a matrix of alternative costs. The formed matrix will allow choosing those reengineering directions that will grant the minimal possible losses in every specific case of its implementation. To do that the matrix of alternative costs should be transferred into the matrix of conditional gains, namely

$$X_{ij} = C - W_{ij},$$

where C is the constant that meets the condition  $C > W_{ii}$ .

Therefore, the most optimal is a management decision that provides the maximum value of the minimum gain, as it is shown below

$$Q = \max_{i} \min_{j} V_{ij}.$$

After determining the main reengineering directions, a new model of the insurer's business processes is formed that requires solution of such tasks as technology developing for new processes and systems, making decisions to minimize costs, developing recommendations for implementing new business processes. Also, the implementation of the project of reengineering the insurer's business processes is to develop support subsystems that allow providing the successful operation of the company in the new environment. An important term for reengineering project implementation is a complex testing of the developed project components and gradual implementation of optimized business processes.

The final stage is the monitoring of optimization of insurer's business processes, which involves determination of positive and negative consequences of reengineering business processes and making corrective management decisions. The effectiveness of business process reengineering is determined by evaluating new business processes.

As the reengineering of the insurer's business processes is mostly aimed at cost reduction of business processes and at their quality improvement, monitoring of optimized business processes is done on the basis of comparing the costs of separate business processes and the quality of their implementation before and after optimization. In some cases, the study on the working time use is performed depending on the characteristics of the insurer's business processes to evaluate their optimization process effectiveness. It is done in order to establish changes in the duration of the business process. If the effectiveness of the insurer's business process optimization is proven, a new model of business processes is implemented and further control of their implementation is carried out through systematic risk management in order to make preventive man-

agement decisions. Otherwise, new directions of optimization are chosen and another variant of insurer business processes model is formed.

It should be emphasized that the criterion for the effectiveness of the optimization process of the insurer's business processes is to determine the level of its economic security at a certain period of time at different stages of economic development. The target level of economic security of the insurer can be determined by such effective indicators as protection from threats of internal and external environment, coordination of interests of subjects of insurance relations, availability of required resource allocation to maintain safe activity of the insurer. Meanwhile, preventing digression of the planned (minimum required) level of economic security and keeping it within the target regulatory values as a result of flexible reaction to dynamic external and internal business environment impact at different stages will help to preserve the achieved results and sustainable operation of the insurer in terms of uncertain economic environment.

Conclusion. Thus, in terms of the modern business environment formation, the main task of successful business is to respond quickly to economic dynamics and timely implementation of strategically necessary changes in the activities of the insurer. Timely implementation of a comprehensive system of business process optimization in the company will encourage solving management problems of current and strategic character by increasing information transparency, compliance with current trends in economic development to ensure the competitiveness and investment attractiveness of the insurer.

Considering all above said, the main scientific results of the conducted research are:

- substantiation of the need to optimize the business processes of the insurer as a strategically important subject of market relations, which is caused by the needs of modern consumers in the quality of insurance services, ensuring the competitive position of the insurer, making reasonable management decisions in a turbulent economic environment and intensifying foreign investment;
- construction of logical structural scheme of relations of the insurer's key business processes that are interconnected and are gradually implemented by the following stages: insurance service promotion, risk underwriting, reinsurance, effecting of an insurance contract, forming and allocation of actuarial reserves and loss adjustment;
- development of an algorithm for optimizing the business processes of the insurer, which includes the process of their planning, diagnosis, implementation of changes and monitoring to improve the quality of implementation of key business processes;
- selection of a methodical approach to the reengineering of business processes of the insurer based on game theory to form a new model of business processes and increase the efficiency of the process of their optimization.

The obtained research results have a possibility of practical use in the activities of insurance companies to optimize the main business processes in order to improve the quality of their implementation and ensure sustainable parameters of operation and development of insurers in the strategic perspective. The prioritized areas of future scientific studies on this issue are the development of alternative methodical approaches to improving the stages of planning, diagnostics, implementation of changes and monitoring of business processes of the insurer.

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### Оптимізація бізнес-процесів суб'єкта підприємництва як імператива його економічної безпеки

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Мета. Розробити алгоритм оптимізації бізнес-процесів суб'єкта підприємництва для їх систематизації й забезпечення якості реалізації ключових бізнес-процесів страховика як умови підвищення рівня його економічної безпеки в турбулентному бізнес-середовищі.

Методика. У дослідженні використані загальнонаукові та спеціальні методи пізнання, а саме: логічного узагальнення; аналізу; діалектичного синтезу та групування; індукції й дедукції; процесного підходу; факторного аналізу; графічної візуалізації; економіко-математичного моделювання.

Результати. Обгрунтована необхідність оптимізації бізнес-процесів страховика як стратегічно важливого суб'єкта розвитку ринкових відносин. Побудована логі-ко-структурна схема взаємозв'язку основних бізнес-процесів страховика, що послідовно реалізуються за етапами просування страхової послуги, андерайтингу ризику, перестрахування, укладення договору страхування, формування й розміщення страхових резервів і врегулювання збитків. Систематизовані основні структурні елементи оптимізації бізнес-процесів страховика. Запропоновано методичний підхід до реінжинірингу бізнес-процесів страховика на основі теорії ігор для формування нової моделі бізнес-процесів і підвищення ефективності процесу їх оптимізації.

Наукова новизна. Розроблено алгоритм оптимізації бізнес-процесів страховика, що включає процес їх планування, діагностики, упровадження змін і моніторингу для підвищення якості реалізації ключових бізнес-процесів як умови забезпечення економічно безпечного функціонування суб'єкта підприємництва.

**Практична значимість.** Полягає у можливості їх використання у діяльності страхових компаній, що буде сприяти забезпеченню їх стійкого функціонування й розвитку у стратегічній перспективі.

**Ключові слова:** бізнес-процеси страховика, клієнтоорієнтована діяльність, технологічність бізнес-процесів, планування, реінжиніринг, моніторинг

# Оптимизация бизнес-процессов субъекта предпринимательства как императива его экономической безопасности

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**Цель.** Разработать алгоритм оптимизации бизнеспроцессов субъекта предпринимательства для их систематизации и обеспечения качества реализации ключевых бизнес-процессов страховщика как условия повышения уровня экономической безопасности в турбулентной бизнес-среде.

Методика. В исследовании использованы общенаучные и специальные методы познания, а именно: логического обобщения; анализа; диалектического синтеза и группировки; индукции и дедукции; процессного подхода; факторного анализа; графической визуализации; экономико-математического моделирования.

Результаты. Обоснована необходимость оптимизации бизнес-процессов страховщика как стратегически важного субъекта развития рыночных отношений. Построена логико-структурная схема взаимосвязи основных бизнес-процессов страховщика, которые последовательно реализуются по этапам продвижения страховой услуги, андеррайтинга риска, перестрахования, заключения договора страхования, формирования и размещения страховых резервов и урегулирования убытков. Систематизированы основные структурные элементы оптимизации бизнес-процессов страховщика. Предложен методический подход к реинжинирингу бизнес-процессов страховщика на основе теории игр для формирования новой модели бизнес-процессов и повышения эффективности процесса их оптимизации.

Научная новизна. Разработан алгоритм оптимизации бизнес-процессов страховщика, включая процесс их планирования, диагностики, внедрения изменений и мониторинга для повышения качества реализации ключевых бизнес-процессов как условия обеспечения экономически безопасного функционирования субъекта предпринимательства.

Практическая значимость. Заключается в возможности их использования в деятельности страховых компаний, что будет способствовать обеспечению их устойчивого функционирования и развития в стратегической перспективе.

**Ключевые слова:** бизнес-процессы страховщика, клиентоориентированная деятельность, технологичность бизнес-процессов, планирование, реинжиниринг, мониторинг

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