

FINANCES AND ECONOMIC ANALYSIS

Natalia Krasnokutska, ScD in Economics

National Technical University «Kharkiv Polytechnic Institute», Ukraine

Hanna Koptieva, PhD in Economics

National Technical University «Kharkiv Polytechnic Institute», Ukraine

PROCESS APPROACH TO STUDY ECONOMIC SECURITY COMPONENTS OF TRADE ENTERPRISES

The article is based on generalization of modern approaches to the classification of business processes, additional classification features of their division are formulated, systematization of types of business processes of a trade enterprise is carried out, the authors' reference model of business processes for trade enterprises as a basis for ensuring economic security of a business entity is proposed. Since any and all actions of a trade enterprise are accompanied by both the cost of resources and the creation of a certain result, their disbalance disorders economic security. Given that business processes are an effective tool for business management and a prerequisite for economic security of the business entity, we have identified the relationship between the business processes of the enterprise and the components of economic security.

Keywords: business process, economic security of the enterprise, components of economic security, value.

Introduction. The economic security of the enterprise is contingent on properly established and well-organized business processes. It is their structured sequence that provides the use of necessary and sufficient resources at the point of entry and creation of a product (service) valuable to the consumer at the output. For example, one may significantly reduce the risks of warehousing, logistics, and financial losses by means of ensuring a balanced ratio of resources. On the other hand, by offering consumers the right products in a convenient place and in a convenient way, one may increase loyalty and reduce the risk of the customer base drop. Since any and all actions of a trade enterprise are accompanied by both the cost of resources and the creation of a certain result, their disbalance disorders economic security. For these reasons, the description and study of the business processes of trade enterprises as specific zones of occurrence of specific risks or security increase are the issues of highest-priority.

Brief Literature Review. Analysis of the published works evidences considerable developments made by scholars on classification of business processes, theoretical and methodological foundations of building a management system based on the process approach. The scientific results of the studies made by foreign scholars are essential in this area of research: for instance, the content of the concept “business process”, basic principles and management thereof were defined in the works of E. Deming¹, M. Imai², V.G. Yelifеров³, A. Lindsay, D. Downs, K. Lunn⁴, and others. The approaches to classification of business processes of the enterprises are shown in the works of L.I. Chornobai (2015)⁵, H. Sytnyk (2012)⁶,

¹ Deming, E. (2000). *Out of the crisis. Edwards Deming*. The MIT Press; Reprint edition.

² Masaaki, I. (1986) *Kaizen: The key to Japan's competitive success*. New York, Ltd: McGraw-Hill.

³ Елиферов, В. Г., Репин, В. В. (2009). *Бизнес-процессы: Регламентация и управление*. Москва: ИНФРА-М.

⁴ Lindsay, A., Lunn, K. (2003). Business processes – attempts to find a definition. *Information and Software Technology*, 45, 15, 1015-1019. doi: [https://doi.org/10.1016/S0950-5849\(03\)00129-0](https://doi.org/10.1016/S0950-5849(03)00129-0).

⁵ Чорнобай, Л. І. (2015). Бізнес-процеси підприємства: класифікація та структурно-ієрархічна модель. *Економічний аналіз : зб. наук. праць THEV*, 22, 2, 171-182.

⁶ Ситник, Г. (2012). Класифікація бізнес-процесів підприємства торгівлі на основі процесного підходу. *Економіка*, 5 (119), 54-60.

A. L. Ryzhko¹, L. O. Denysenko, and S. Ye. Shatska (2012)². Security of the processes was investigated in the works of P. Swuste, J. Theunissen, P. Schmitz, G. Reniers, P. Blokland (2016)³, P.R. Amyotte, C.S. Lupien (2017)⁴, K T. Shital, A. T James, H. Lambert, (2012)⁵, N. G. Leveson, G. Stephanopoulos (2013)⁶.

V. Batova, A. Pavlov (2013)⁷, T. I. Samatov⁸, A. C. Caputo, M. Palumbo⁹, N. Avanesova, Y. Chuprin, (2017)¹⁰, S. Tappura, M. Sievänen, J. Heikkilä, A. Jussila, N. Nenonen, (2015)¹¹ studied the issues of ensuring of economic security of business processes; approaches to quantitative estimation of economic security were covered in the study of C. Munteanu, R. Tamošiūnienė (2015)¹²; and economic security management was considered in the works of I. D'yakonova, A. Nikitina, N. Gurvits, (2018)¹³, J. Sinay, (2014)¹⁴, and others.

The results of academic pursuits on value creation are presented in the works of M. Porter¹⁵, F. Asche, T. Aven, (2004)¹⁶, C. Fombrun, (2015)¹⁷, and others.

Notwithstanding the development and popularity of the process approach in management, recent studies on the said issues do not suggest a comprehensive approach to the classification of business processes in terms of their impact on the functional components of economic security of the enterprise.

Purpose. The purpose of the research is to summarize and develop the available approaches to the study of business processes of a trade enterprise, and provide systematization thereof as a necessary prerequisite to ensure economic security.

¹ Ryzhko, A. L. (2018). Causal Classification of Enterprise Business. *Management Science*, 8 (1), 90-99.

<https://doi.org/10.26794/2304-022X-2018-8-1-90-99>.

² Денисенко, Л. О., Шацька, С. Є. (2012). Концептуальні засади класифікації бізнес-процесів, як основи формування бізнес-системи організації. *Ефективна економіка*, 11. <economy.nayka.com.ua/?op=1&z=1558> (2019, липень, 22).

³ Swuste, P., Theunissen, J., Schmitz, P., Reniers, G., Blokland, P. (2016). Process safety indicators, a review of literature. *Journal of Loss Prevention in the Process Industries*, 40, 162-173.

doi:<https://doi.org/10.1016/j.jlp.2015.12.020>.

⁴ Amyotte, P. R., Lupien, C. S. (2017). *Elements of Process Safety Management, Methods in Chemical Process Safety*, 1, 87-148. doi: <https://doi.org/10.1016/bs.mcps.2017.01.004>.

⁵ Shital, K. T., James, A. T, Lambert, H. (2012). Identification and evaluation of priorities in the business process of a risk or safety organization. *Reliability Engineering & System Safety*. 99, 74-86. doi: <https://doi.org/10.1016/j.ress.2011.10.006>.

⁶ Leveson, N. G., Stephanopoulos, G. (2013). A system-theoretic, control-inspired view and approach to process safety. *Journal AIChE*, 60, 1,2-14doi: <https://doi.org/10.1002/aic.14278>.

⁷ Batova, V., Pavlov, A. (2013). Providing Economic Safety of Business Processes in the Conditions of Implementing the Concept of Stable Development. *World Applied Sciences Journal* 27 (4), 538-542, doi: 10.5829/idosi.wasj.2013.27.04.13675.

⁸ Саматов, Т. И. (2018). Методы и показатели обеспеченности экономической безопасности промышленного комплекса региона. *Вестник российского университета дружбы народов. Серия: Экономика*, 261, 89-100. doi: 10.22363/2313-2329-2018-26-1-89-100.

⁹ Caputo, A. C., Palumbo, M. (2011). Economic optimization of industrial safety measures using genetic algorithms. *Journal of Loss Prevention in the Process Industries*, 24, 5, 541-551. doi:10.1016/j.jlp.2011.01.001.

¹⁰ Avanesova, N., Chuprin, Y. (2017). Enterprise economic security: essential characteristics of the concept. *Innovative technologies and scientific solutions for industries*, 1 (1), 98-102. doi:<https://doi.org/10.30837/2522-9818.2017.1.098>.

¹¹ Tappura, S., Sievänen, M., Heikkilä, J., Jussila, A., Nenonen, N. (2015). A management accounting perspective on safety. *Safety Science*, 71, Part B, 151-159. doi:<https://doi.org/10.1016/j.ssci.2014.01.011>.

¹² Munteanu, C., Tamošiūnienė, R. (2015). Modern approaches in quantifying economic security. Case study of Estonia, Latvia, Lithuania and republic of Moldova. *Journal of security and sustainability issues*. 4, 4 (S), 596-610. doi:[https://dx.doi.org/10.9770/jssi.2015.4.4\(2\)S](https://dx.doi.org/10.9770/jssi.2015.4.4(2)S).

¹³ Dyakonova, I., Nikitina, A., Gurvits, N. (2018). Improvement of the enterprise economic security management in global environment. *Geopolitics under Globalization*, 2 (1), 19-26. doi:[https://doi.org/10.21511/gg.02\(1\).2018.03](https://doi.org/10.21511/gg.02(1).2018.03).

¹⁴ Sinay, J. (2014) *Safety management in a competitive. Business Environment. Edition 1st Edition*, 204. doi:<https://doi.org/10.1201/b16692>.

¹⁵ Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press, New York.

¹⁶ Asche, F., Aven, T. (2004). *On the economic value of safety*, 9:3, 253-267, doi: 10.1080 / 14664530490505602.

¹⁷ Fombrun, C. (2015). *Reputation, 11. Organizational Behavior*.

doi: <https://doi.org/10.1002/9781118785317.weom110233>.

Results. For achieving defined goals, we have made two hypotheses:

- 1) the business process features are explained by the nature of value created in trade services;
- 2) the various inputs and outputs of the business processes of trade enterprises determine the presence of various economic security components.

To prove or disprove the hypothesis about the dependence of business processes on the nature of value created in trade services, we studied the existing approaches to the business processes classification.

The arrangement of business processes depending on participation in value creation was originally proposed by M. Porter, who noted that the enterprise creates value the consumers are ready to pay for¹. Therefore, to ensure economic security, it is necessary to examine the sequence of the value creation process. M. Porter's value chain includes five primary (inbound and outbound logistics, operations, sales and marketing, and after sales service) and three support business processes (research and technology development, human resource management, and firm infrastructure).

Primary business processes are directly involved in the formation of the added value, accompany the flow of products (services), and correspond to the principal stages of its life cycle: from creation to realization. Support (service) processes ensure the implementation of the primary ones and center around the provision of document flow, information support of the operation of business, labor protection, equipment maintenance, security, etc.².

Expounding M. Porter's value model of business processes, modern researchers³⁴⁵ suggest different extension of primary and support processes, and sometimes distinguish managerial business processes or cooperation processes.

For instance, the author of the monograph⁶ suggests transforming the composition of the primary business processes, taking into account the specifics of the activity of trade enterprises, related to:

- 1) an inconsiderable contribution to the value formation of production processes as defined classically: the processing of raw materials into finished products, which are common to large enterprises, as a rule, and are almost absent in the small ones;
- 2) a considerable contribution of the purchase and storage of goods in value creation through the formation of opportunities for assortment offer and pricing, which directly affects the final results;
- 3) the function of preparation of goods for sale, which increases the value of the offer of the trade enterprise in the minds of the consumer;
- 4) the importance of the service process, the quality of which directly affects the ability to reproduce the activities of a trade enterprise.

Therefore, taking into consideration the above circumstances, the author suggests the following primary business processes: procurement, delivery, storage, pre-sales preparation, sales and after-sale service, as well as the standard support ones (enterprise infrastructure, personnel management, research and technology development).

In addition to the primary and support processes, determined by M. Porter, modern scholars⁷⁸⁹ suggest distinguishing management processes, which we consider correct in view of their specific results and important impact on ensuring economic security and achieving the strategic goals of the enterprise.

¹ Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press, New York.

² Ситник, Г. (2012). Класифікація бізнес-процесів підприємства торгівлі на основі процесного підходу. *Економіка*, 5 (119), 54-60.

³ Елиферов, В. Г., Репин, В. В. (2009). *Бизнес-процессы: Регламентация и управление*. Москва: ИНФРА-М.

⁴ Betec (2019). *Информационно-методические материалы по построению систем управления* <www.betec.ru/secure/index.php?id=2&sid=10&tid=17> (2019, липень, 22).

⁵ Хлебников, Д. (2019). *Матричная модель предприятия*. <www.management.com.ua/ct/ct043.html> (2019, липень, 22).

⁶ Краснокутська, Н.С. (2012). *Управління потенціалом торговельного підприємства: монографія*. Харків: Харк. держ. ун-т харчування та торгівлі.

⁷ Чернобай, Л. І. (2015). Бізнес-процеси підприємства: класифікація та структурно-ієрархічна модель. *Економічний аналіз : зб. наук. праць ТНЕУ*, 22, 2, 171-182.

⁸ Ситник, Г. (2012). Класифікація бізнес-процесів підприємства торгівлі на основі процесного підходу, *Економіка*, 5 (119), 54-60.

⁹ Ryzhko, A. L. (2018). Causal Classification of Enterprise Business. *Management Science*, 8 (1), 90-99. <https://doi.org/10.26794/2304-022X-2018-8-1-90-99>.

Managerial processes are not directly involved in added value creation and are not directly related to the core business of the enterprise. On the one hand, they ensure the primary processes, and on the other hand, they are aimed at satisfying the interests of the main stakeholder groups (stakeholders: owners, suppliers, consumers, personnel, state, creditors) and related to personnel management, financial management, etc.

H. Sytnyk suggested a quite effective original model of business processes for trade enterprises, with the following primary business processes¹: market and consumer needs research, purchase of goods, transportation of goods, storage of goods, and realization of goods. Support (service) business processes include administrative and economic support, information support, and provision of security. Management business processes consist of strategic management, financial management, personnel management, and development project management.

An approach common to the contemporary literature is the classification of business processes by level of detail^{2 3 4}, according to which the authors distinguish top-level processes, subprocesses, and operations. Top-level processes are a quite complex set of interconnected works, performed in a certain order that can be subdivided into sub-processes: lower-level processes, which further consist of separate interconnected operations not subject to further detail.

The hierarchy of business processes is not limited to two levels and can be expanded to the level of a single operation, but with every successive level the universality of the scheme recedes and specialization for a particular industry or activity strengthens. Based on the study⁵, this paper suggests a decomposition of an enterprise management system based on business processes within the universal management spheres. In prospect, the suggested model can be expanded directly by managers of enterprises that have information on the specifics of activities and further elements of the hierarchy (Fig. 1).

Based on critical and constructive analysis and generalization of available approaches to enterprise business process modelling, along with specifics of activity of trade enterprises, we propose original classification of business processes of trade enterprise consisting of primary, support, and managerial processes (management business processes and development business processes) (Table 1).

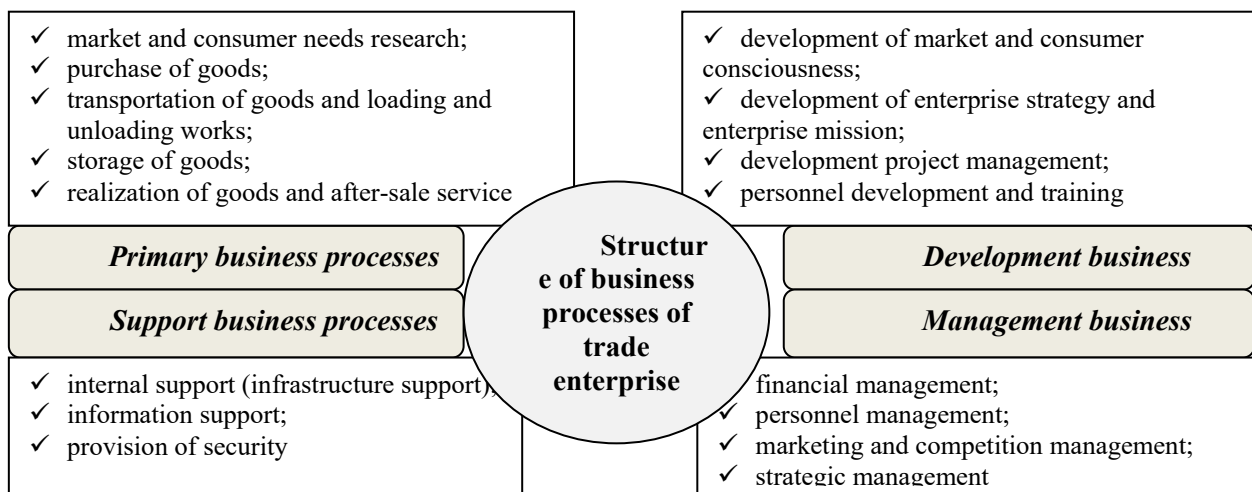


Fig. 1. Structural and hierarchical model of business processes of a trade enterprise

Source: Compiled by the authors

¹ Ситник, Г. (2012). Класифікація бізнес-процесів підприємства торгівлі на основі процесного підходу. *Економіка*, 5 (119), 54-60.

² Елиферов, В. Г., Репин, В. В. (2009). *Бизнес-процессы: Регламентация и управление*. Москва: ИНФРА-М.

³ Betec (2019). *Информационно-методические материалы по построению систем управления* <www.betec.ru/secure/index.php?id=2&sid=10&tid=17> (2019, липень, 22).

⁴ Хлебников, Д. (2019). *Матричная модель предприятия*. <www.management.com.ua/ct/ct043.html>

⁵ Чернобай, Л. І. (2015) Бізнес-процеси підприємства: класифікація та структурно-ієрархічна модель. *Економічний аналіз : зб. наук. праць THEU*, 22, 2, 171-182.

Reference model of business processes of a trade enterprise

Top-level processes	Subprocesses (Subprocesses, operations)
<i>Primary processes</i>	
1. Market and consumer needs research	monitoring of changes in the consumer market; studying the consumers' needs and level of satisfaction; analysis of competitors; assortment policy formation; pricing policy formation; formation of the goods sales plan.
2. Purchase of goods	formation of the goods purchase plan; search for suppliers; conclusion of contracts for the supply of goods; control over execution of contracts; placement of orders for the supply of goods.
3. Transportation of goods <i>and loading and unloading works (added by authors)</i>	car rental agreements; goods transportation contracts; supporting transport (equipment, appliances) at the proper technical level
4. Storage of goods	organization of storage of goods; ensuring the conditions of the goods storage; control over the condition of warehouses; personnel responsibility
5. Realization of goods and after-sale service	pre-sales processing of goods; placement of goods in the retail space; settlement service; providing information on realization for real-time records management; analysis of receivables from buyers; receipt and reconciliation of claims with the buyers; after-sales service (repair, replacement)
<i>Support (service) business processes</i>	
1. Internal support (infrastructure support) <i>(added by authors)</i>	procurement and maintenance of work of equipment, machines, transport; routine maintenance of equipment, machines, transport; maintenance of commercial and service premises and structures; providing processes with the necessary resources
2. Information support	development and implementation of enterprise support information systems; providing data retrieval and storage; providing exchange of information; providing access to information and communications; documents / records management; information resources management; managing online and other publications, information security; assessment and audit of information quality.
3. Provision of security	ensuring the physical security of personnel; ensuring information security; ensuring economic security (in terms of components)
<i>Managerial business processes</i>	
<i>Management business processes</i>	
1. Financial management	financial analysis, financial planning and management of financial resources; accounting and financial transactions; reporting (financial, management, tax); tax management; internal financial control and audit
2. Personnel management	recruitment and personnel records; conducting staff records management; staff analysis and evaluation; staff stimulation and motivation; development of corporate culture
3. Marketing and competition management	direct and indirect price competition; commodity competition; competition strategy determination
4. Strategic management	strategic analysis, control and correction of results; crisis management
<i>Development business processes</i>	
1. Development of market and consumer consciousness	client base development; distribution of information about new goods and services of the enterprise

Continuation of the table 1

Top-level processes	Subprocesses (Subprocesses, operations)
2. Development of enterprise strategy and enterprise mission	working-out the enterprise development strategy; ensuring the implementation of the strategy;
3. Development project management	project activity forecasting and planning; organization of work; coordination and regulation of project development and implementation processes; activating and stimulating the work of contractors; accounting, control and analysis of the project development and implementation; innovative technologies.
4. Personnel development and training	training and upgrade qualifications of the personnel; work placement of the personnel

Source: Digest by authors based on ^{1,2,3,4}

This approach to the arrangement of business processes may be treated by practitioners as a reference model of business processes for trade enterprises.

The authors⁵ believe that the understanding of the nature of value which generates the process, as well as the consumer of it is crucial for business processes optimization. For instance, they propose to distinguish processes that generate value directly for the customer (processes that correspond to the life cycle and stages of the product (service) flow) and processes that generate value for the enterprise itself (as a rule, these are supporting and managerial processes). For example, the processes of enterprise infrastructure, its information support, and security formation do not directly create value for the customer, but they are necessary for the functioning of the enterprise itself, i.e., they create value for it. F. Asche and T. Aven stress the importance of considering security in terms of economic value formation⁶.

Since one of the value-based results for a trade enterprise is to ensure a certain level of its economic security, our further attention will be given to functional areas of the enterprise activity (components of economic security: financial, intellectual and personnel, technical, technological, legal, marketing, product, information, power, and others). This approach allows for investigation of the most important factors influencing the state of the functional component of the economic security of the enterprise. For this purpose, it is necessary to distinguish primary business processes that influence its provision, to analyze the distribution and use of enterprise resources in them, to develop measures to achieve a high level of economic security in response to uncertainty and risk.

Given that business processes are the object of management, on the one hand, and a source of risk, on the other, we have identified the interrelation between the business processes of the enterprise and the components of its economic security.

The next stage of our research, according to the hypotheses formulated, was the study of business processes as managerial objects and sources of risk.

For instance, based on the proposed classification (Table 1), we will consider business processes in the area of market and consumer needs research, covering the study of needs and levels of consumer satisfaction, analysis of competitors, monitoring of changes in the consumer market, the formation

¹ Чорнобай, Л. І. (2015) Бізнес-процеси підприємства: класифікація та структурно-ієрархічна модель. *Економічний аналіз: зб. наук. праць ТНЕУ*, 22, 2, 171-182.

² Ситник, Г. (2012) Класифікація бізнес-процесів підприємства торгівлі на основі процесного підходу. *Економіка*, 5 (119), 54-60.

³ Ryzhko, A. L. (2018). Causal Classification of Enterprise Business. *Management Science*, 8 (1), 90-99. DOI: <https://doi.org/10.26794/2304-022X-2018-8-1-90-99>.

⁴ Денисенко, Л. О., Шацька, С. Є. (2012). Концептуальні засади класифікації бізнес-процесів, як основи формування бізнес-системи організації. *Ефективна економіка*, 11. <economy.nauka.com.ua/?op=1&z=1558> (2019, липень, 22).

⁵ Betec (2019). *Информационно-методические материалы по построению систем управления* <www.betec.ru/secure/index.php?id=2&sid=10&tid=17> (2019, липень, 22).

⁶ Asche, F., Aven, T. (2004). *On the economic value of safety*, 9: 3, 253-267. DOI: 10.1080 / 14664530490505602.

of product and pricing policies, the formation of the goods sales plan, etc. From this perspective, it is necessary to substantiate the appropriate measures to support the economic security of the enterprise in terms of its components, such as: informational, personnel, marketing, social, market (Fig. 2).

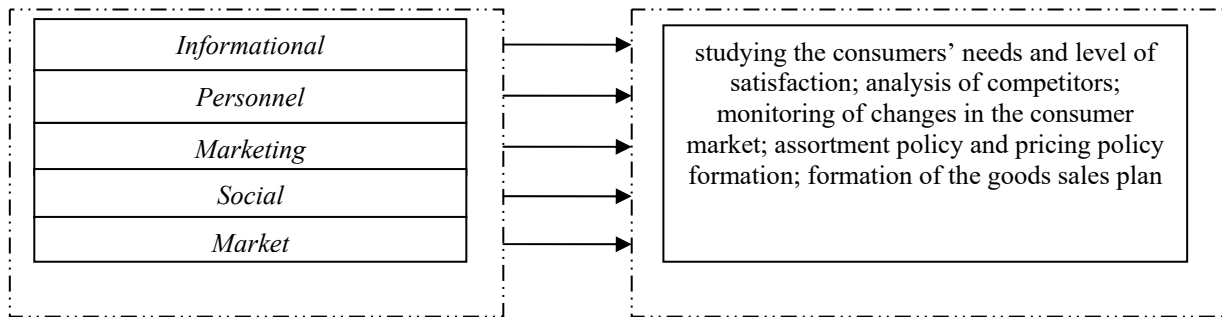


Fig. 2. Interrelation between components of economic security and business processes in the area of market and consumer needs research

Source: Compiled by the authors

Information is an important and valuable resource. It is the information on changes in the socio-economic situation, in the consumer market, on innovative products, new methods of business organization and management that enable a trade enterprise to respond adequately to any changes in the external environment of business and danger, to plan and carry out its business activities effectively.

Personnel security depends on the integrity and professionalism of the staff. For example, information leak made by staff about potential demand will lead to a loss of income and competitive positions; poor awareness of marketing research methods will lead to misunderstandings of the market, purchases of non-demanded goods, or shortages of “top-selling items”, pricing policy miscalculations, etc. (i.e., marketing component research).

The social component depends on social processes and trends, current traditions, values, habits, ethical norms, lifestyle, taste and psychology of consumers.

Market security is influenced by: unfair practice of competitors, level of purchasing power of buyers, disorganized work of marketing experts, untimely response to changing market conditions, inefficient sales network, low level of enterprise culture, etc.

Value creation in the process of purchasing goods includes actions related to the formation of the goods purchase plan, search for suppliers; conclusion of contracts for the supply of goods; control over execution of contracts; placement of orders for the supply of goods, and more. From this perspective, it is necessary to substantiate the appropriate measures to support the economic security of the enterprise in terms of its following components: financial, informational, personnel, legal, reputational, marketing (Fig. 3).

Procurement is the basis of commercial activity in trade. Successful commercial operations for the purchase of goods may be ensured, if trade enterprises continuously conduct identification and study of sources of procurement and suppliers of goods. At this stage, financial resources are raised (own and loaned).

Unreliability of suppliers, partners, and banks can lead to a loss of financial resources of a trade enterprise and reduce its equity.

Managerial staff increases the value of procurement in the case of the creation of a team of qualified managers who are able to cooperate efficiently with suppliers, to identify timely the threats peculiar to this area. Threats to information resources include unauthorized access and disclosure of confidential information of the company, etc.

The importance of the legal component of economic security of a trade enterprise involves efficient legal support of its activity, and strict observance by employees of all legal norms of the current legislation. Violations of the law, poor substantiation of activity by internal regulatory documents have a negative impact on the performance of trade enterprises.

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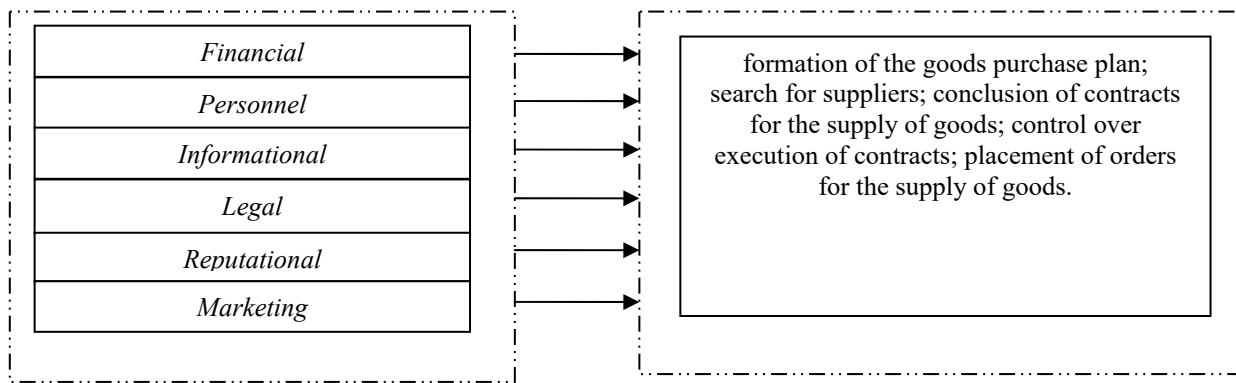


Fig. 3. Interrelation between components of economic security and business processes in the area of purchase of goods

Source: Compiled by the authors

Reputational threats lead to the formation of a negative opinion about a trade enterprise in the minds of external counterparties. They arise outside the enterprise, but are conditioned by its actions, condition, and results and may bring about economic losses, reduction of the market value of the enterprise, and loss of business.

In the process of transportation of goods and loading and unloading works, value creation is ensured by the attraction of financial, material, labor, and informational resources, which are integrated in this business process by means of implementation of logistical competences and operational capabilities. Therefore, from this perspective, it is important to maintain the economic security of the enterprise in terms of its following components: financial, informational, personnel, technical and technological, and logistic (Fig. 4).

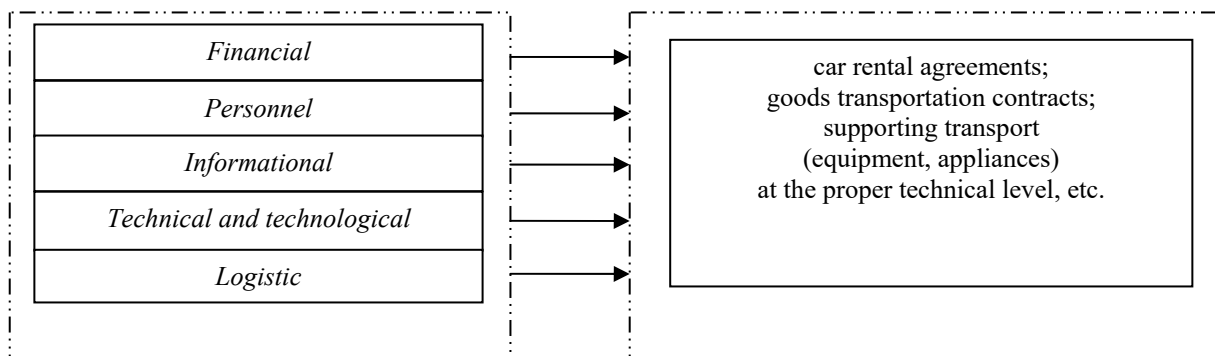


Fig. 4. Interrelation between components of economic security and business processes in the area of transportation of goods and loading and unloading works

Source: Compiled by the authors

The level of inventory and logistics management affects the volume and cost of transporting goods, increasing or decreasing financial resources to cover the cost of transportation and loading and unloading works.

In this context, human resourcing is determined by the level of professionalism and personal qualities of the service personnel, as well as the qualification of managers regarding decision-making for route and delivery schedules planning, lot optimality, and cost of delivery.

Informational support is shaped by means of information systems and technologies for drawing up effective schedules of product supply, planning of transport routes, volume of delivery lots, load capacity of vehicles and loading and unloading equipment (devices), etc.

Logistization is considered as a basis for reducing costs throughout goods flow process from producer to consumer, the basis of optimization of trading activities, the condition of competitiveness of the enterprise, and the way to achieve economic security.

When the goods are stored, value creation at the enterprise is provided by bringing the goods on charge, determining the volumes of warehouse stock, provision of proper storage conditions, establishment of liability of accountable officers, etc. Within this business process, the attraction of material, informational, personnel, and technical resources takes place. Thus, the combination of these resources leads to the provision of such components of economic security as: financial, informational, personnel, technical and technological, product, and property (Fig. 5).

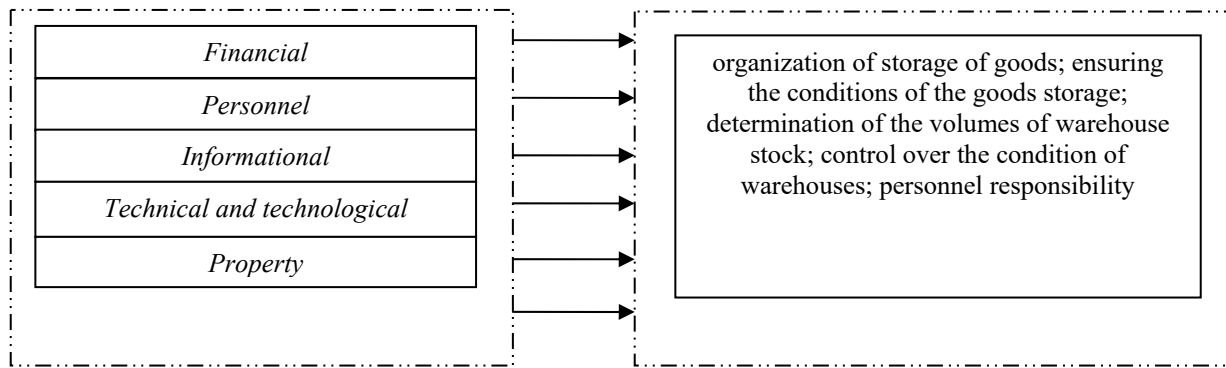


Fig. 5. Interrelation between components of economic security and business processes in the area of storage of goods

Source: Compiled by the authors

When the goods are stored, the financial security is conditioned by the availability of appropriate loading and unloading equipment, warehouses (their size), and their location.

In this context, human resourcing is determined by the qualifications of managers who are able to manage inventory, ensure the storage of goods in warehouses, and take responsibility for the improper compliance with the goods storage requirements.

Informational support is shaped by means of information systems and technologies for warehouse accounting. When storing goods in warehouses, special attention should be given to placement technology. Compliance with established storage regimes and factors affecting storage is closely linked to commodity costs reduction. Property security means the state of protection of property interests and property, preservation / enhancement of property status of a trade enterprise.

Realization of goods and after-sale service as a business process cover a number of specific activities depending on the nature of trade (wholesale, retail, online trade). As part of this process pre-sales processing of goods, placement of goods in the retail space, cash and settlement services, and service (including after-sales service) take place. For this purpose, value creation is a combination of personnel, informational, financial, technical and technological, power, marketing, product, interface components of the economic security (Fig. 6).

The value created as a result of the implementation of this business process is related to the performance of the trade enterprise of its primary operational function and manifests itself through the return of experience between the managerial staff of the enterprise and the customers. On the one hand, this connection ensures benefits in the form of an increase in consumer satisfaction, and on the other hand, an increase in staff motivation and increase in the market potential of the enterprise.

The peculiarities of human resourcing, which is implemented in this business process, are determined by professional competences (in product display, sales promotion, consulting the buyer at the stage of purchase decision, cash and after-sales service). Customers' perception of the quality of service (show of amiability, courtesy, competence of relevant employees) influences greatly the consumer potential of the store and the reputational component of economic security of the trade enterprise¹.

¹ Краснокутська, Н. С. (2012). *Управління потенціалом торговельного підприємства: монографія*. Харків: Харк. держ. ун-т харчування та торгівлі.

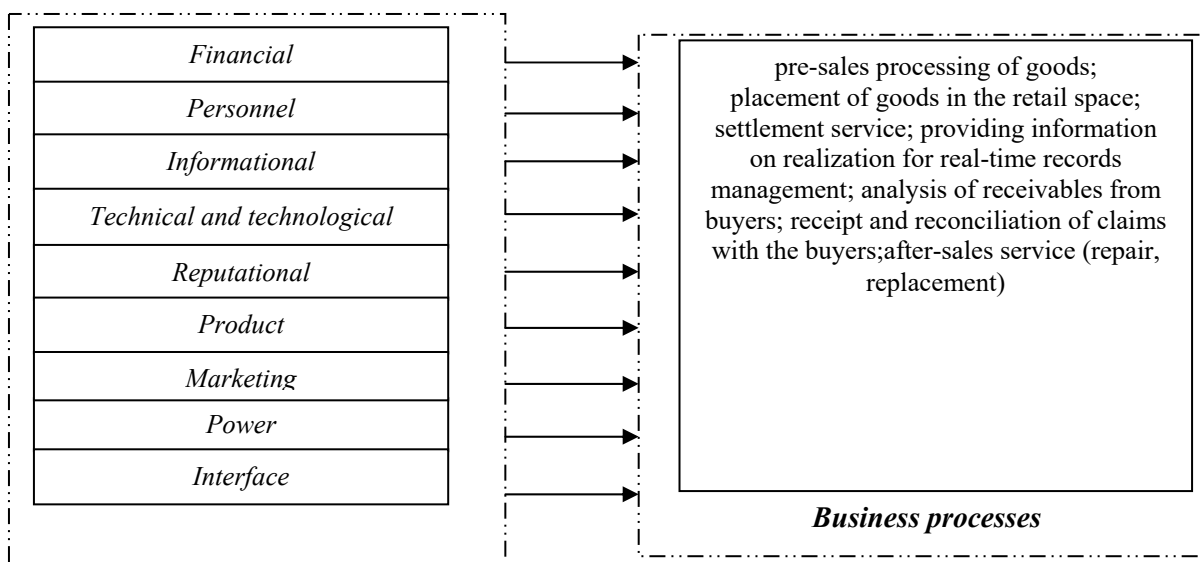


Fig. 6. Interrelation between components of economic security and business processes in the area of realization of goods and after-sale service

Source: Compiled by the authors

The value associated with the implementation of a reputational component of economic security during the “realization of goods and after-sale service” business process is created by means of formation of customer loyalty by increasing the level of brand awareness of the trade enterprise, and its own brands among the clients. At the same stage, the formation of informational security occurs, the level of which is constantly increasing due to the use of modern information systems, which provide the possibility of detailed analysis of sales and profits for each product item of the range, and accordingly enhances the marketing component of economic security of a trade enterprise. The interface component of economic security characterizes the reliability of interaction with economic counterparties: suppliers, resellers, agents, investors, and consumers.

Unlike the primary business processes, support (service) and managerial ones aim not to create directly, but to increase value. For instance, the business process related to organizational support (infrastructure support) requires the attraction of additional financial, personnel, technical and technological resources. Their lack or ineffective application disorders the level of relevant components of economic security.

For example, the increasing relevance of the following measures is observed: measures aimed at improving the methodological support of personnel monitoring and external factors to ensure early recognition of a potential threat, determination of its scale, investigation of the main factors causing it; creation and implementation of prevention and anticipating measures; control over implementation of economic security measures and evaluating the results obtained through the use of the adequate tools.

Thus, the established system of connections between the components of economic security with the processes of value creation in trade is shown in Fig. 7 and may be recommended as a basis for developing management decisions to identify areas of potential resource losses and minimize them at both strategic and operational levels.

Conclusions. Based on the available approaches to business process modelling and features of trading activities, the content of the primary, support (service), and managerial business processes of a trade enterprise has been determined. Based on the developed reference model of business processes, their relations with the components of economic security of a trade enterprise have been defined. The elaborated system of relations describes the areas of possible resource losses (financial, material, informational, reputation, organizational) at the point of entry and at the output of the primary, support, and managerial processes and enables preventive management decisions. Further research in this area may be focused on the improvement of methodological approaches and methodological tools for modelling and evaluation of economic security of business processes of trade enterprises.

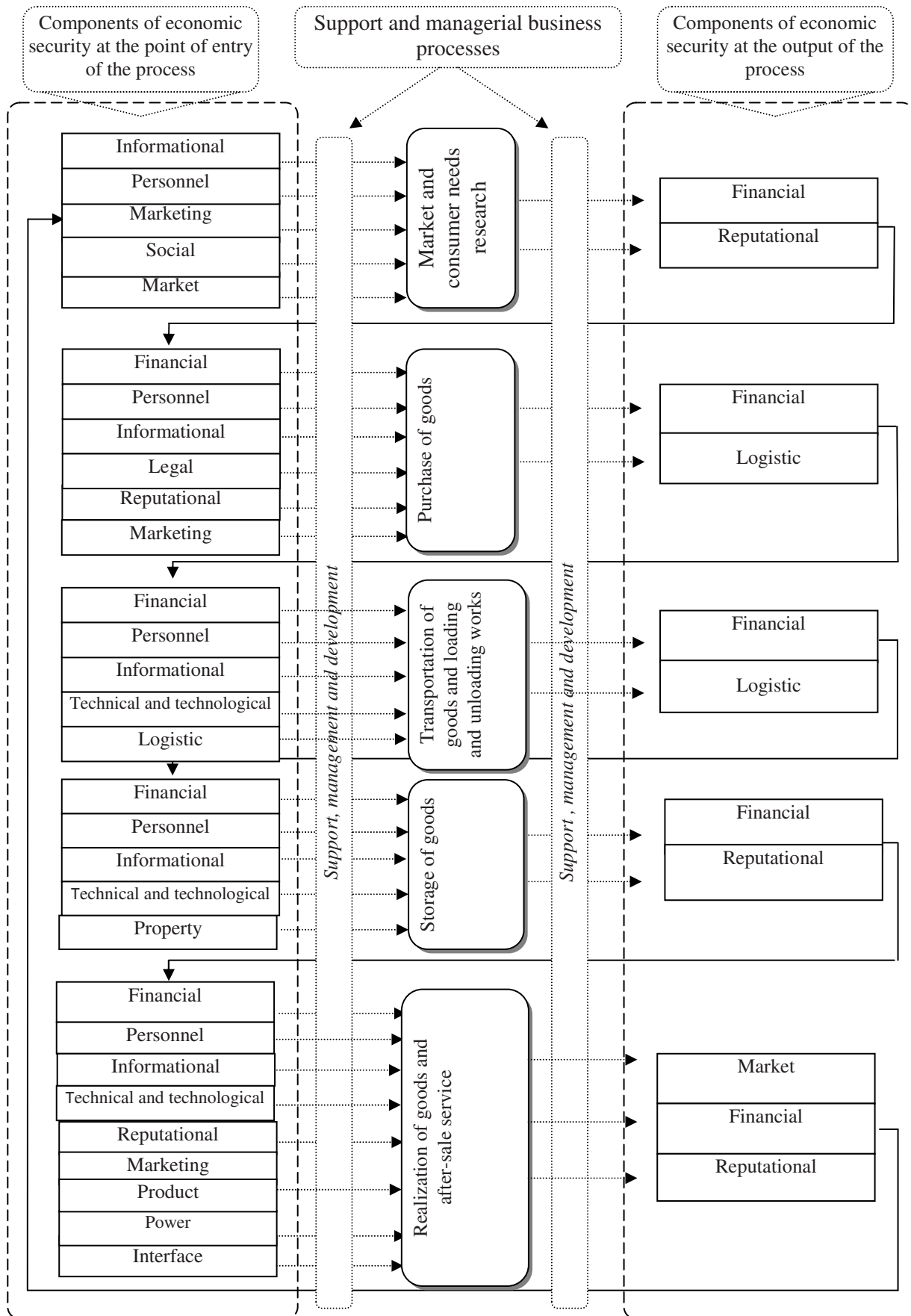


Fig. 7. Integrated model of relations between components of economic security of trade enterprise and value creation processes

Source: Compiled by the authors

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