

INFORMATION PROVISION OF THE ASSESSMENT SYSTEM IN THE ECONOMIC SECURITY STUDIES:

FUNDAMENTALS

Viktoria Vakhlakova

PhD in Economics, Department of Accounting, Auditing and Business analysis
Donbass State Technical University

Anastasiia Belousova

PhD in Economics, Department of Tourism and Administration
Poltava National Technical University named after Yurii Kondratiuk
Ukraine

Annotation. The issue of assessment is extremely important in any science including the economic security. Within the system approach the assessment system composition in the economic security studies has been defined: the assessment system model (subject, object and assessment logic); principles of assessment; principles of assessment identification; approaches to the assessment of economic security of an enterprise and the criteria for their correct use; information provision of the assessment of economic security of an enterprise and rules of interpretation of economic security assessment. Information provision is an essential element of the assessment system. The content of "the concept of information provision of the assessment of economic security of an enterprise" has been defined. The peculiarities of information provision system in economic security studies assessment system have been displayed. The factors of formation of assessment information provision of the economic security of an enterprise, a set of which is determined by the peculiarities of the assessment system in the economic security studies have been listed. The characteristics of information security provision in the assessment system in the economic security studies have been analyzed, the basis of its organization have been considered. The appropriateness of DSS-systems using in information provision formation for the assessment of economic security of an enterprise have been reviewed.

Keywords: enterprise, economic security, assessment, information provision, characteristics, peculiarities.

1. Introduction. The issue of assessment is extremely important in any science. Estimations used in the research of the surrounding reality are the basis for decision-making in management, political science, psychology, sociology, economics etc. Economic security studies is no exception, it is a branch of security studies and management, which examines economic security by the vertical "state - region (area) - business activity subject (enterprise)".

Various elements with different state have been developed in the economic security assessment research: some of the elements have already been developed, while study of others is only beginning. Integration of the economic security assessment elements of an enterprise requires the assessment system.

The topicality of assessment issues was clearly grounded in the scientific works of V. Sutuzhko [1-5], who formulated principle foundations of the assessment system using the general scientific approach. Taking into account V. Sutuzhko's developments regarding the assessment issues [4] the composition of the assessment system in the economic security studies is defined as follows:

assessment system model (subject, object and assessment logic);

principles of assessment;

principles of assessment identification;

approaches to the assessment of economic security and the criteria for their correct use;

information provision assessment of economic security assessment of an enterprise and rules of interpretation of economic security assessment.

It is possible for a certain period of time to consider some particular undeveloped elements, but it does not apply to such element as information assessment provision. The value of information provision for the assessment system in the economic security studies is corroborated by the fact that the economic security assessment along with the estimations of an enterprise competitiveness are crucial in determining the directions of the activities and development of an enterprise, and quality information provision entails a decisive influence on the quality of the economic security assessment.

Therefore, the assessment system in the economic security studies will be incapacitated by poor quality of information provision assessment of economic security of an enterprise. The value of information provision for assessment system in economic security studies necessitates the development of guidelines that define its fundamental basis to be assigned for the purpose of the information provision formation as a part of the assessment system.

2. Materials and methods. In the context of research, while determining the meaning of "information", the attention is paid to economic-based approach, leaving aside the philosophical and social understanding of information as a particular phenomenon.

The existing cognitive conflict in research methodology regarding the perception of the concepts of "information", "data" and "knowledge", which takes place due to the ambiguity of perception of the concept "data" (narrow and broad understanding), in order to remove terminological uncertainty was resolved as follows. Data in the broadest sense - is any message as for the external or internal environment of the company, certain information signals, particular facts. Generalized data form information, which is a narrower concept. Processed in a certain way

and realized, understood information is knowledge. As a part of knowledge (which, incidentally, can be formal and informal) there have been allocated a separate element - structured data, representing a generalized, structured and ready-to-use formalized information. This research methodology derives from the ratio J. Harris (from the broadest to the most concrete) [6]: data → information → knowledge → structured data (ordered information).

As a result of generalizing the meaning of "data", "information", "knowledge", "information provision", "information support" [7-11] information provision assessment of economic security of the enterprise is considered as a set of permanently completable codified (documented and computer knowledge) and uncoded (various know-hows, secret skills, experience, direct knowledge, which is a product of intuition) procedural, theoretical and empirical knowledge of an enterprise, which is approvable and credible, some of which is transformed into structured data. It is clear, that the used definition of "information provision assessment of economic security of an enterprise" is not perfect (the definition of "information" is characterized by some ambiguity). However, it gives certain idea of the content of the researched concept: all the information on the changes taking place in the domestic and foreign activity of an enterprise, about the nature of their impact on an enterprise (positive or negative).

Today, thanks to the development of computer technology and its widespread use in enterprise management the concept of "information provision" has become synonymous with computer information systems. Such identification cannot be considered as valid. The computer system is only a tool for implementing information provision (creation of databases and data banks, data processing, etc.), although an important and productive tool. Information provision is performed using specialized programs, but essentially these programs only simplify and accelerate data processing. Thus the very essence of information provision - the formation of the necessary information for specific purposes - remains unchanged.

3. Results. According to V. Sutuzhko, assessment system formation should be accomplished by activity, logical and algorithmic aspects [1].

In terms of activity aspect it regards functioning of the assessment system in economic security studies: the selection of assessment object and dominant aspects are justified, as well as the time horizon (retrospective, current and predictable assessment), the operations and sequence of assessment of economic security of the selected object are formed (state, region, enterprise). Speaking about the algorithmic aspect, it defines the sequence of assessment operations, actions and techniques performed (in particular, it is about the normalization of indicators and their convolution). The logical aspect reveals the logic of economic security assessment by choosing the grounds for assessment, developing the rules of identification and interpretation of the estimations, the creation of the axiomatic assessment grounds (set of rules and principles of assessment, forms of their expression and estimations requirements, conditions for obtaining reliable estimations).

The functioning of the assessment system in the economic security studies in any aspect is based on information provision. Information provision is an essential element of the assessment system, because it can detect changes in the external and internal environment of an enterprise, the nature of these changes and their impact on the activity of an enterprise (in case of the negative impact such changes are considered as threats to the activity of an enterprise). The efficiency of the assessment system in the economic security studies crucially depends on the completeness and timeliness of the information, which could be received and processed, quality of the results processing and utilization promptitude.

The consequences of the use in the assessment of economic security of an enterprise of low quality information would adversely affect the security activity of the company. However, the quality of assessment of economic security depends not only on the quality of information, but also on its correct interpretation, defined by the assessment technology used, compliance with these technologies, defined by the qualification and competence of the personnel, their motivation and attitude to their duties.

Information provision in the assessment system in economic security studies possesses quite distinct characteristics. If they are not taken into account, there is a risk of low quality information provision forming which will be used for the evaluation of economic security of an enterprise. These features are as follows:

assessment of economic security of an enterprise within the assessment system, which is based not on the real processes, events, situations, but on their information images (models). For real processes, events, situations can be very significant for the understanding and awareness, complex, spatially and chronologically dissipated, remote in time. Therefore, the quality of information provision in the assessment system depends on how much these information images (models) are adequate to the real processes, events, situations. In turn, the adequacy of information images (models) crucially depends on their interpretation, which is largely perceptive-cognitive. Perception interpretation of real processes, events, situations when building information images (models), the combination of which, in fact, forms the information provision of the assessment system in the economic security studies caused by the each official's own attitude to these processes, events, situations, perceptions of their value, their importance, prioritization, possibility of threatening the economic security of an enterprise. The perception of real processes, events, situations, underlying their interpretation may, according to J. Bruner, be distorted under the influence of motives, goals, objectives or protective mechanisms of an official [12, p. 65];

the information in the assessment of information security of economic security of an enterprise is "tied" to a particular type of enterprise activity – security provision, its alternatives, describes reasons for taking measures to strengthen the basis of economic security of an enterprise and the possible consequences of their implementation;

the value of information provision in assessment of the economic security of an enterprise leads to deepening the nature of information, increasing its complexity and difficulty to understanding. Following the information

conversion, by H. Heilman, into the factor of an enterprise competitiveness [13], information becomes both an important resource in the system of economic security of an enterprise and the product of the system functioning;

in assessing economic security of an enterprise there is no "general information" and, therefore, universal tools and algorithms of its processing. As in each subsystem of the management system there emerge "information specialization", and despite the unity of information products and technologies used there are specific features of the information use in assessing the economic security of an enterprise;

information that comes to an enterprise, have to be processed in a very short time. If we neglect the time limits of use and processing of the information, the company loses the opportunity to promptly and adequately respond to the threat of its activities.

Formation, structuring and constant updating of information provision of any process or operation of any objects depend on several factors, the set of which is determined by the characteristics of processes and objects. Information provision as a part of the assessment system in the economic security studies is formed and structured depending on:

the object of assessment (economic security of an enterprise, the system of economic security of the enterprise, quality or effectiveness of security oriented enterprise management, security provision of an enterprise or activity of the economic security structural division of an enterprise);

the approach to interpretation of economic security of an enterprise (safety, activity, resource, harmonization, specificity);

time aspect of assessment (retrospective, current, perspective);

assessment type (express-assessment, diagnostics);

assignment of estimations (theoretical researches, applied developments, analytical work, drawing up forecasts of the economic security of an enterprise and effectiveness of the methods used, summarizing security provision activity and assessing its effectiveness);

the number of the performed functions of an enterprise economic security system (monitoring, analytical function, control, auditing, forecasting, etc.) and their level of performance.

Due to the shown dependency of information provision in the assessment system in the economic security studies there is a conclusion that information is a phenomenon in the sphere of the company's security provision, in security provision management, which enable to perform a large number of operations: create, format, combine, store, receive, transmit, process, search, accept, formalize, measure, use, distribute, simplify, collect, etc. [14,15]. Implementation of information into the assessment system of security studies will necessitate involving of specially trained staff - analysts and economic security professionals to deal with the information processing, consolidation of information flows, handling certain facts and creating new information.

The information which comprises the basis of information provision in the assessment system in the economic security studies possesses certain characteristics. Some of them are general and some reflect the features of the assessment object. These characteristics are as follows:

using the information available in any form (text, numerical, graphical, recorded in electronic documents, oral);

using information coming from any source considering peculiarities of each of them: open publications, official reports, official records and reporting, professional reviews, informal communication, the results of intelligence activity, participation in public events, etc.;

the information used, given its purpose, is divided into general, special and confidential, target-oriented or multi-purpose;

the amount of information should be sufficient, but not excessive: it is impossible to create information provision assessment of economic security of an enterprise with the complete absence of information (although in this case the assessment can be based on intuition, experience and feelings), but in the assessment of economic security there is a paradoxical margin dependency between information completeness and quality assessment - the new information becomes less useful and sometimes increases the uncertainty of the enterprise economic security assessment;

information should be of a high quality (relevant, accurate, complete, useful and timely) and adequate (syntactic, semantic and pragmatic adequacy);

the nature of the information may be commercial, statistical, legal, official, unofficial.

Information provision in the assessment system of the economic security studies must be organized in a certain way.

Information provision organization provides:

formation of information flows by the information sources with preliminary assessment of accuracy, relevance and timeliness of the information according to one of the schemes (chain, wheel, all-channel);

filtering information by the protection objects (if the economic security system is built by the object-subject approach), by the functional control subsystems (if the economic security system is built by the functional approach) or by other characteristics, which make it possible to streamline the upcoming information;

distribution of the arranged information by the access levels: general, for official use, confidential, secret etc.

A distinctive feature of the information flows formation for economic security assessment is the inability to clearly distinguish information that is of interest, as it can be done to evaluate other objects. As it is difficult to predict in advance which events or processes can pose a threat to an enterprise activity. Thus, at the time of

mechanical watches manufacturers lost market share because they did not pay attention to the rapid development of electronics and, consequently, the emergence of electronic watches.

Conclusions. It seems reasonable to consider using DSS-systems (from English - decision provision systems) for the information provision formation to assess the economic security of an enterprise. The fact is that the amount of information needed to create the information provision assessment of economic security of an enterprise steadily grows every year and begins to exceed human capabilities. This is especially true for the large enterprises. DSS-up systems are complex software systems that combine features of management information systems, expert systems and database management systems to ensure a full and objective analysis of the subject. The DSS-systems have the following advantages and distinctive features: high flexibility, using a large number of methods for data processing (intellectual data analysis, information search, search in databases, precedents based analysis, simulation, genetic algorithms, neural networks, situational analysis, etc.) [16], ability to work with different information. Due to their capabilities the DSS-systems are extremely diverse, covering various areas of activity, such as the management of complex projects in medicine, biology etc. However, one cannot ignore that DSS-systems can be afforded only by large firms, although such systems may be used in assessment of information provision formation of not only economic security, but also of an enterprise competitiveness.

However, we should not overestimate the DSS-systems capabilities (considerable processing power of modern computers, sophisticated prediction methods and integrated data processing methods). Even modern DSS-system are not able to "make a decision" without human intervention and often cannot prevent adverse events, and even clearly define their advance.

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Information about authors:

Viktoria Vakhlakova, PhD in Economics, associate professor of the Department of Accounting, Auditing and Business analysis, Donbass State Technical University, pr. Peremogy, 84, Lysychansk, 93100 Ukraine. Email for correspondence: vaxlakova@mail.ru.

Anastasiia Bilousova, PhD in Economics, associate professor of the Department of Tourism and Administration, Poltava National Technical University named after Yurii Kondratiuk, Pershotravnevy pr., 24, Poltava, 36011, Ukraine. Email for correspondence: bilousovaay@gmail.com.