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## ANALYSIS OF THE ORGANIZATION OF INFORMATION AND ANALYTICAL SUPPORT OF POLICE ACTIVITIES

**Abstract.** In this article, the authors analyze the current state of information and analytical support for police activities at the current stage of its reform.

The analysis of scientific research on the investigated problem allows the authors of the article to claim that this topic is increasingly attracting the attention of scientists and law enforcement practitioners. All this, according to the authors, is very important for the improvement and study of the current state of the subject under study. Information and analytical support is proposed to be understood as a process of collecting information, storing it, processing it for the purpose of further analysis and practical application by means of reproduction in the appropriate solution. In turn, information analytics is interpreted as a complex activity that is based on both natural intelligence and computer technologies for operating information arrays, methods of mathematical modeling of processes. Instead, police analytics is seen as an analytics model focused on supporting decision-making by law enforcement officials based on the process of information analysis and data dissemination.

At the same time, the authors developed a key discursive apparatus and offer their own definition of information and analytical support for police activity as a functionally and structurally separated police activity aimed at collecting, accumulating, and processing data; search, analysis and generalization, storage and disposal of information obtained as a result of professional performance of official duties.





In particular, statistical analysis is characterized as the basis of information and analytical support, the task of which is to study and compare statistical indicators characterizing the studied phenomenon, both among themselves and with indicators of other fields of statistics in order to identify statistical relationships.

**Keywords:** information analytics, information and analytical support, information and analytical activity, National Police of Ukraine, statistical analysis.

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## АНАЛІЗ ОРГАНІЗАЦІЇ ІНФОРМАЦІЙНО-АНАЛІТИЧНОГО ЗАБЕЗПЕЧЕННЯ ДІЯЛЬНОСТІ ПОЛІЦІЇ

**Анотація.** У даній статті автори здійснюють аналіз сучасного стану інформаційно-аналітичного забезпечення діяльності поліції на нинішньому етапі її реформування.

Аналіз наукових розвідок щодо досліджуваної проблеми дає змогу авторам статті стверджувати, що ця тема все більше привертає увагу вчених та практиків правоохоронної сфери. Усе це, на думку авторів, є дуже важливим для вдосконалення та вивчення сучасного стану досліджуваної тематики. Інформаційно-аналітичне забезпечення пропонується розуміти як процес збору інформації, її зберігання, обробки з метою подальшого аналізу та практичного застосування шляхом відтворення у відповідному рішенні. В свою чергу, інформаційна аналітика трактується як комплексна діяльність, яка базується як на природному інтелекті, так і на комп'ютерних технологіях оперування інформаційними масивами, методах математичного моделювання процесів. Натомість, поліцейська аналітика розглядається як модель аналітики, орієнтована на підтримку прийняття рішень посадовими особами правоохоронних органів на основі процесу аналізу інформації та поширення даних.

Разом із тим, автори опрацьовано ключовий дискурсивний апарат та пропонують власну дифеніцію інформаційно-аналітичного забезпечення





діяльності поліції як функціонально та структурно виділена діяльність поліції, яка спрямована на збирання, накопичення, обробку даних; пошук аналіз і узагальнення, зберігання та розпорядження отриманою інформацією внаслідок професійного виконання службових обов'язків.

Зокрема, охарактеризовано статистичний аналіз як основу інформаційно-аналітичного забезпечення, завданням якого є вивчення, зіставлення статистичних показників, що характеризують досліджуване явище, як між собою, так і з показниками інших галузей статистики з метою виявлення статистичних взаємозв'язків.

**Ключові слова:** інформаційна аналітика, інформаційно-аналітичне забезпечення, інформаційно-аналітична діяльність, Національна поліція України, статистичний аналіз.

**Statement of the problem.** Information and analytical work is an integral component of management activities at all levels of their functioning, being one of the areas of increasing the effectiveness of the units of the National Police of Ukraine. At the same time, information is valuable not by itself, but as a basis for its analysis, on which the planning of the work of all interconnected police units, whose activities are aimed at performing law enforcement functions, depends. Carrying out work on obtaining reference and analytical information and information and analytical forecasting within the framework of a voluminous and complex system of law enforcement agencies requires a significant amount of initial systematized and checked and confirmed data, as well as careful, painstaking work on the analysis of this data. Thus, the organization of information and analytical support for the activities of the National Police of Ukraine is an important component of the general process of collection, systematization and use by units of special information for the purpose of countering crime and other illegal manifestations.

**Analysis of recent research and publications.** Among domestic and foreign scientists who studied this problem, we can name K. Antonov, O. Bandurka, B. Baranenko, S. Bolvinov, M. Gutsalyuk, E. Didorenko, O. Dolzhenkova, V. Zakharova, M. Lyubavina, A. Movchan, D. Nikyforchuk, Yu. Orlov, S. Penkov, M. Stashchak, V. Shendryk, G. Shorokhova, V. Svitlychnya and others. Undoubtedly, the research and works of the named scientists have considerable theoretical significance and have been found its reflection in practical activity, However, in view of the reforms and the transition to European standards of law enforcement activities as a result of external and internal threats facing Ukrainian society, these issues require modernization and an increase in the level of measures regarding information and analytical support as a whole.

At the same time, some aspects of the mentioned problem remain undeveloped or debatable today, not all controversial issues have been resolved, especially taking into account the current situation in the field of police reform and crime prevention.

**The aim of the article.** Study of the main concepts and analysis of the organization of information and analytical support of police activities at the current stage of its reformation.





**An example of the basic material.** Information and its possession is a serious factor in the system of combating and preventing crime, since its availability and reliability are directly related to achieving a positive result. In turn, in the conditions of global information, there is a need to carry out analytical operations, since the information provided may not be reliable or objective, and precisely because of this, it needs to be compared with other facts, other sources, etc.

Information analytics, as a specific support of police activity, is designed not only to evaluate, control and highlight the results of such activity, but also to help forecast and plan it, which allows for the optimal use of available forces and means and to make an adequate and effective administrative or procedural decision in the process of combating crimes and their investigation.

Therefore, information analytics is a complex activity based on both natural intelligence and computer technologies for operating information arrays, methods of mathematical modeling of processes.

Based on the previous statement, we can agree with the opinion of scientists [1] that information-analytical activity is a kind of intellectual, mental activity of a person, in the process of which, as a result of a certain algorithm of sequential actions from search, accumulation, storage, processing, analysis of primary information, new, secondary analytical information is formed in the form of an analytical reference, report, forecast, etc. As a result of this process, the current state and development trends of both the subject and the object of management, as well as the environment in which they interact, are revealed. In addition, this process makes it possible to predict system changes.

The basic ideas of information and analytical activity are:

- relevance (compliance with the needs of practice, timeliness of receiving and issuing the results of analytical activities in a form and form convenient for the addressee);
- purposefulness (orientation towards achieving specific goals while solving constructive tasks);
- systematicity (comprehensive analysis of solved problems taking into account their place, role and interrelationships in the structure);
- activity (conducting analytical activities and issuing its results regardless of user requests);
- continuity (constant monitoring of the content of the subject or phenomenon, action, event, etc.);
- reliability (accounting of the true initial data of the analysis, accuracy of quantitative data and calculations, degree of objectivity and reasonableness of conclusions, assessments and proposals);
- objectivity (analyst's unbiased attitude towards research and its results).

The purpose of such information and analytical support is to:

- increase the efficiency of operational management;
- systematize, structure and analyze the obtained results;





- ensure immediate transfer of received or analyzed information to subjects of interaction;
- receive reporting information of an analytical nature;
- to organize an effective system of document circulation both within a separate body and its structural subdivisions, and externally, among the subjects of interaction;
- promptly interact with external structures;
- maintain unified centralized information bases, maintain electronic archives.

As for the theoretical definition of the term information and analytical support of the National Police of Ukraine, in our opinion, it is worth paying attention to the definition given by V. Svitlychnya, the scientist considers it as “a complex of legal, technological, organizational means that ensure the process of collecting, receiving, processing, dissemination, analysis and use of information resources, which are necessary for the implementation of the legally defined tasks and functions of these bodies” [2].

A. Movchan notes that the information and analytical support of the units of the National Police of Ukraine has three interrelated components:

- information systems, within which information necessary for the consumer is collected, accumulated, systematically processed, stored and distributed;
- analytical work, which consists in the implementation of a complex of organizational measures and methodical techniques and processing and synthesis of available operational and other information;
- management activities that ensure the adoption of necessary decisions regarding the strategy and tactics of combating crime [3]. It should be noted that information and analytical support is by its nature a much broader concept than information support, since the former also includes management processes necessary to ensure the fulfillment of tasks and functions of the National Police.

G. Shorokhova attaches great importance to the information and analytical support of the National Police, in this regard the author notes that the construction of the information and analytical support structure is conditioned by the need to increase the effective level of the Ukrainian police. It allows: promptly providing information to units; contribute to shortening the technological cycle; to determine through analysis and assessment the possibility of changes in the scale of police work; make an analysis of the past in order to focus the main efforts on certain areas of work; find out how to most rationally model the distribution of police resources and forces, what adjustments must be made to the methods and forms of their activity. The results of information and analytical support are especially important for employees. The involvement of such information technologies ensures the automation of decision-making processes, especially when a person's life depends on the efficiency and speed of management decision-making [4].

So, information and analytical support is a process of collecting information, storing it, processing it for the purpose of further analysis and practical application by reproduction in the appropriate solution.



Statistical analysis is the basis of information and analytical support, the task of which is the study, comparison, comparison of statistical indicators, which characterize the studied phenomenon, both among themselves and with indicators of other industries of statistics, in order to identify statistical interrelationships and regularities.

Analysis in the broadest sense is a scientific method of the imaginary or real decomposition, dismemberment of an object, phenomenon, process into certain elements, signs, properties, relationships, which are then explored separately and in relation to dismembered whole for the purpose of obtaining new knowledge or systematization already available knowledge. When studying any social phenomenon, we perceive it as something whole, the only thing, first of all, receiving information about the scope of this phenomenon. However, integral characteristic does not allow to understand the essence of the studied phenomenon, to reveal regularities, the mechanism of its change in space and time.

Statistical analysis is the most important and responsible stage of the study criminal offenses, because this is where the characteristics are determined studied phenomena, trends and regularities of their changes are established space and time, practical conclusions are made.

The main method of statistical analysis is the comparison of statistical indicators,

which characterize criminal offenses. A comparison in time is a comparison indicators of the studied region for the current period with previous indicators periods Spatial comparison is a comparison of indicators of the studied region with similar indicators of another homogeneous region (or regions) or indicators region of a higher level (comparing the indicators of the district with the indicators of the region, state).

A comparative assessment of operational situation indicators provides an opportunity follow its change in a negative or positive direction and, as a result, accept it measures to eliminate deficiencies or to disseminate best practices.

To determine effective measures to strengthen law and order, it is necessary first of all have reliable and complete data on the state of criminal offenses, their structure and dynamics, about the general and immediate causes and conditions of committing offenses. It is important to consider the territorial and sectoral breakdown of criminal offenses, determine their differences in different regions, industries and objects of the national economy locations of the largest number of criminal manifestations and in relation to this analysis to clarify conditions that contribute to these manifestations. Finally, it should be critically analyzed that applied until now, the organization, means and methods of combating criminal offenses, their effectiveness and adequacy in the system of countermeasures crime.

Availability of objective and complete analytical information is the main condition making the necessary management decisions to ensure effective management of forces and means, allows to identify shortcomings, “bottlenecks” in



work law enforcement agencies in order to take the necessary measures to eliminate them. Except moreover, this information is used for popularization and distribution of advanced experience of law enforcement work, which is of great importance in tense conditions socio-economic life of society.

The main task facing information and analytical today by units of law enforcement agencies, this is the provision of provision at all levels management of information about the real state of the operational situation, possible directions of its development, and on this basis the development of specific proposals for crime prevention and prompt response to changes in criminogenic situation, objective assessment of the results of law enforcement agencies.

The purpose of information and analytical support is to determine quantitative characteristics of criminal offenses and the activities of law enforcement agencies, identification of statistical links between offenses and the factors that determine them, establishment of trends and regularities in the development of offenses, compilation statistical forecast, identification of positive and negative sides in the characteristic offenses, in the work of law enforcement agencies, so that on the basis of this data in a timely manner make the necessary management decisions.

Quantitative characteristics of criminal offenses include: characteristics of their condition and dynamics. The state of offenses is their indicators for a certain period of time. To these indicators include: the total amount of criminal offenses, their composition, intensity, structure. Knowledge of the intensity and structure of criminal offenses allows to compare their criminogenic characteristics in different territories. As a result comparisons are made between more and less criminogenically affected territories in their own country the queue leads to the adoption of the necessary measures to combat crimes.

One of the important tasks of information and analytical work is the analysis of dynamics offenses the dynamics of criminal offenses is a change over time in indicators that characterize the state of offenses. Studying the dynamics of offenses allows analyze the change in their quantitative characteristics month by month, quarter by quarter, year after year. Knowing these changes allows you to establish the development trend state of criminal offenses. Knowing the negative trend allows you to ensure taking the necessary measures for its change for the better, and for a positive change dissemination of best practices in other territories.

Analysis of the dynamics of criminal offenses is directly related to forecasting their condition for the future. Statistical analysis is performed on the data past and present. Even with the most truthful description and explanation of it real features, it should always be remembered that criminological reality extremely changeable and dynamic. Therefore, making managerial decisions in the field combating offenses and ensuring law and order, as a rule, should precede the forecast of their condition for the future. Only then solutions become effective, such as to prevent negative trends. Condition forecasting of criminal offenses is the process of determining the probability of criminal acts, which is based on the study of empirical data and the accounting of development trends.



In turn, police analytics is a model of analytics focused on decision-making support for law enforcement officials based on the process of information analysis and data dissemination. By providing analysts with the ability to process crime data, law enforcement officers are able to use a ready-made operational-analytical product, rather than primary information. At the same time, they receive the following advantages: firstly, the product specifically outlines crime trends not only geographically, but also in time frames; secondly, due to the fact that the product makes it possible to have more information about places where crimes are likely to be committed, more time and effort can be spent on preventing crimes; third, because time is spent more productively, employees are more able to provide assistance to their colleagues when needed.

An example of information and analytical police activity is such well-known information systems as “Intellectual system of criminal analysis in real time mode” (R.I.C.A.S.), the system “ORION”, which contains all information with restricted access (a griff) from agency messages and operative search cases. But for a long time ago the system “ARMOR” contains all data and information collected by all subsystems of departments: reports of the offense, summary results of the examination of the place of the event, information about persons who are in search, minor incidents, accidents, etc.

At the same time it is necessary to pay attention not to the fact that in the system of the National Police of Ukraine there is a management of human rights, whose activity is to ensure protection of human rights and freedoms during the performance of tasks assigned to the police. The said body promotes democratization and humanization of the standards of police work during the fulfillment of the tasks assigned to it, and also provides effective control over observance of the law during the stay of persons in places of rest.

**Conclusions.** Thus, on the basis of the conducted analysis, it can be noted that the information and analytical support of police activity is a functionally and structurally separated activity of the police, which is aimed at collecting, accumulating, and processing data; search, analysis and generalization, storage and disposal of information obtained as a result of professional performance of official duties.

We also believe that in the system of information and analytical support for the activities of the National Police of Ukraine today it is extremely necessary to have a unified methodology and information collection and accounting systems that will be used by police officers depending on the assigned tasks.

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