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LOGIC AND METHODOLOGY OF PROBLEM ANALYSIS IN PUBLIC ADMINISTRATION

Abstract. In the article conceptual bases of logic and methodology of political-analytical research are formulated. On their basis the universal technology of the political analysis in the government which allows providing quickly and qualitatively enough analytical support of processes of development and realization of political and public-administrative decisions is stated. Unification of the processes of scientific and information-analytical support of public administration processes requires the development and application in the work of all state analytical structures of a single logic and methodology of political-analytical research. Unification of research methodology does not mean the use of a single technology by all researchers or research and analytical groups. On the contrary, analytical data, in our opinion, should be verified, including through the use of various analytical technologies. However, the feasibility of developing and implementing a universal analytical technology that will speed up and simplify analytical research is also relevant.

Keywords: public administration, state policy, political analytics, analytical technologies.

Introduction. Analytics is an extensive and complex system of knowledge, which includes logic as a science of patterns and operations of correct thinking, methodology as a system of principles and techniques of cognitive activity, heuristics – a discipline aimed at studying the process of discovering new in science, technology and other areas of society life, as well as computer science – the science of information, ways to obtain, accumulate, process and transmit.

Each of these components is subject to solving problems that are caused by certain problems that arise in human activities, and have their own structure. Thus, heuristics includes the psychology of creativity, which explains the psychological processes in the activities of the individual; sociology of creativity, which explains collective creativity, its dependence on social conditions and creative technology, which integrates the techniques of creative activity. In general, heuristics provides
the use of creative mechanisms in solving research problems.

The methodology consists of general scientific, specialized scientific and system methodology. Its purpose is to apply scientific methods to solve research problems. It provides a systematic and consistent mental activity. As for computer science, without the application of its principles, the processing of large arrays of information is not possible. Informatics includes hardware and software, as well as the principles of collecting, processing and transmitting information.

Note that the concept of "analytical technology" has not yet become entrenched in science. Thus, the authors of the dictionary "Social Technologies" distinguish within the sociological research own analytical research, which differs in complexity and depth of knowledge of the phenomena under study, give a description of individual analytical technologies, based on general scientific principles rather than the specifics of analytical activities.

Understanding the content of analytical activities goes in several directions. The first direction is the methodology and logic of scientific research, where analytical activity is identified with the logic of scientific knowledge. The second direction is management consulting, in which analytical activities are considered as the most important means of preparing a diagnosis of a problem situation. The third area is the work of policy analysis, where analytical procedures are a means of obtaining information on policy making. The fourth area – numerous studies on certain types of analysis. The greatest interest, in our opinion, are works on system and situational analysis.

The topic of introducing analytical technologies into modern public administration systems is not completely new for world science. Well-known in this direction are the developments of leading scientists: W. Dunn [1], S. Hansen [2], L. Pal [3], W. Thissen & W. Walker [4], E. Vedung [5], C. Weiss [6] and other.

However, a common shortcoming of existing approaches to understanding analytical activity in public administration is the lack of systematic and complete ideas about the specifics of its various forms. In addition, there is a clear lack of technologies, there is a lack of specific characteristics of methods and procedures used in analytical practice.

**Results and Discussion.** The purpose of the study, the results of which are presented in this paper, is to formulate the conceptual foundations of the logic and methodology of political analysis and on their basis to develop and offer the scientific and analytical community to test universal technology of political analysis in public administration. It is enough to provide high-quality analytical support of the processes of development and implementation of political and public administration decisions. As the results of a study of the history of political analysis have shown, the technology of analytical activity has been known since ancient times. On European soil, their founder is considered to be Socrates, who proposed his method of reasoning. However immersion in older philosophical systems allows them to detect attempts to algorithm analysis. Throughout history, the scope of these technologies has been narrow. They were purely individual in nature and sometimes disappeared with their creators. Only in the twentieth century, the application of
analytical activities led to a rapid process of its technologization. Schematically, the universal analysis technology can be represented as follows (Figure 1).

In our opinion, analytical activity begins with the definition of the object, subject and problem, the formation of which is characteristic of any research activity, including political analytics.

The next step is aimed at forming an ideal model of the object and subject, which provides a regulatory framework for further research. Once this regulatory framework is in place, various hypotheses can be put forward to understand the problem. The next step is to determine the type of analysis.

This procedure determines the subsequent choice of specific methods of analytical activities, that is involves recourse to their appropriate classification.

This is followed by the application of methods to the subject of research in terms of testing hypotheses. The analytical activity ends with the formulation of analytical conclusions and their presentation in the form of advice.

As a methodological basis for modern political analysis, in our opinion, the systemic paradigm is best manifested. It allows you to build a logical sequence of processes of analytical research, which should be followed in practice (Figure 2).

**Figure 2. The logical sequence of the deployment of political-analytical research**

It is important to emphasize that the main issue of political analysis in general, including political analysis in public administration, is the issue of "power". That is, the only problem for political analysis in public administration is the obstacles or
new challenges that arise in maintaining and increasing public power. Thus, the starting point of political analysis is singled out – it is always a problem of state power.

In order for political analysis not to turn into endless considerations, it is advisable to set limits to the problem. The first of these limitations is space and time. The problem for political analysis exists only today: "here and now". In the past – it becomes a cause, in the future – a consequence. Anticipation of problems is the subject of another component of political analysis – political forecasting. Another limitation for political analysis in public administration is the competence of public authorities.

Note that there is no such restriction for political analysis in the political system. The limits of state influence in a democratic society are usually clearly defined, politics on the contrary – seeks to penetrate into all spheres of social relations, where it can manifest itself in the most unexpected way.

In addition, one of the most important criteria for political analysis in public administration is the social paradigm. Because, as a rule, the greatest risk for public authorities is the temptation to cross the social paradigm.

Then the algorithm for assessing the problem becomes clearer: the mission of the state and the values of the social paradigm will affect the vision of the problem and the description of the goal → mission and values will determine methods and strategy → strategy will set requirements for the structure → structure will turn to resources (competences) of the state → assessment of relevance will close the cycle and give an opinion on the problem.

Defining the problem is the most difficult and important step in the implementation of the analytical project. Although the criteria and limitations of the problem for political analysis are clearly defined, it is not always easy to identify the problem. The vision of the problem is subjective, because the problem exists for the government in general, and it has to be determined by a specific person. Therefore, a situation that may seem like a problem to an individual manager will not always be the case in the eyes of his colleagues. Much depends on the view of the situation, as well as on subjective expectations. Therefore, it is very useful to organize the process of reconciling expectations. Given that the problem for political analysis is always relevant, that exists today and now, the most effective method of its definition, in our opinion, is "brainstorming".

Quality and approval (if possible – consensual) – the main factors in evaluating the formulated project. If those who hypothetically can become an active agent in overcoming the problem have not been consulted, in the process of solving the problem it may turn out that there is no political will to do so. Note that in some cases, it is the lack of political will of the ruling entity that can cause or deepen the problem. It should be emphasized once again that the political problem is related to the process of acquisition and retention of state power by its subjects. The problem for political analysis in public administration is related to obstacles in the functioning (preservation and increase) of state power.

One of the best ways we've tried to make sure an analyst is really working on a
problem, not symptoms or consequences, is a methodical a tool that can be called "talking to a problem". Having formulated the problem, it is necessary to ask it a few questions that will help to distinguish a purely problem from the number of accompanying events:

Does this problem hinder (or contribute to) the functioning of state power?
Is this problem within the competence of the government?
Does this problem have a different cause than itself?
Does this cause still exist (is it the source of the problem)?

The analyst should thus establish as complete a list of events as possible, which in his opinion may be the causes (if they have already occurred) and sources (if they are still occurring) of the problem, by answering the following questions:

What events can confirm the existence of the formulated problem?
Aren't they the cause or effect of the problem?
Are the events that take place around the problem in themselves problems for the government (perhaps they only exacerbate or reduce the severity of the problem – the circumstances)?
What happens if the problem is not resolved?

As a result of clarifying the problem by "interviewing" the researcher, it may seem that he has already made a political analysis. It does not. By analogy with medicine, he only prepared a "drug" for analysis. Graphically, this "drug" will look like a "problem field" (Figure 3). It should be noted that cognition tends to universality, analysis – to depth. If the researcher undertakes to analyze the entire "field" around a particular problem, even with modern cybernetic devices, he quickly becomes entangled in a network of connections and determinants.
Therefore, when starting the analysis, it is advisable to set additional restrictions related to the specifics of the subject of the problem. The source of the problem, its causes, circumstances and consequences should not be beyond the competence of the subject. After all, he still will not be able to influence them.

It is necessary to establish the direction of research. The direction of research is a vector of ascent from one of the causes of the problem to one of its consequences which has already come. There may be several such vectors. Each of them
determines the direction of research. If a group of analysts is working on the problem, these vectors can be worked out in parallel. After the application of additional restrictions, the "problem field" narrows and becomes the direction of research (Figure 4).

Note that from the consequences should be chosen one that expresses qualitative changes in the state of state power. The last stage before the analysis is to determine the content of the study. The diagram "outlines" several three-member blocks of the study, which will determine its content:

<table>
<thead>
<tr>
<th>cause → source → problem</th>
<th>source → problem → consequence</th>
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<tr>
<td>reason → circumstance → source</td>
<td>circumstance → problem → consequence</td>
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After identifying, formulating and posing the problem, you can begin the analysis.

It should be noted that political analysis is not only designed to identify the problem, its source, causes and consequences; outline the circumstances under which the problem exists and develops (problem field); describe the general political situation (problem background), but also predict its further development and, most importantly, suggest ways to solve the problem. The formulation of hypotheses is of stage importance for the continuation of the analysis. Hypothesis – a plausible assumption about the properties, patterns, relations of variables, the results of actions.

In determining the directions of the study, blocks were formed, which can be presented in the form of hypotheses. If we turn to the classical paradigm of scientific
knowledge, each of the hypotheses can be presented (usually simplified) in the form of a mathematical formula (Table 1).

### Table 1.

**Hypotheses of political analysis**

| Hypothesis 1. | The combination of causes and circumstances created the source of the problem. | \[ \sum \eta (A\gamma + B\rho + \ldots + C\pi) = D \] |
| Hypothesis 2. | The action of the source led (leads) to a problem. | \( \int D = P \) |
| Hypothesis 3. | The development of the problem under certain circumstances has led (will lead) to consequences. | \( \int\alpha P \rightarrow \sum (a + b + \ldots + c) \) |
| Hypothesis 4. | In the current situation, certain actions of the subject will solve the problem. | \( (\int D + \int\alpha P) + \int\epsilon S \rightarrow 0 \) |
| General hypothesis for the direction of research | The problem, the existence of which is supported by the current source, under certain circumstances (several circumstances or without circumstances) in the conditions of the consequence (consequences) caused by the problem, will be solved by a certain method under certain circumstances (several circumstances or without circumstances). | \( D + P + (N\ldots) + S = 0 \) |

Where: \( \sum \) is the sum or result function; \( \eta \) - circumstance of causes; \( \int \); \( \int\alpha \); \( \int\epsilon \) - functions (actions); AND; IN; C - reasons; D - source; P - the problem; \( \gamma \); \( \rho \); \( \pi \) - weight coefficients of causes (0 \( < \rho \leq 1 \)); \( \alpha \) - circumstance of the problem; S - way to solve the problem; \( \epsilon \) is the circumstance of the method; N is a consequence of the problem.

From the general hypothesis of the research it follows that the problem of state power can be solved if the actions of the subject of power (public policy, management decision) will be adequate to the source of the problem and the problem itself, if there are no circumstances that strengthen or weaken the problem (if such circumstances exist – the actions of the subject must also be adequate to the circumstances). Eliminating the source of the problem does not guarantee the elimination of the problem itself. If the source of the problem is beyond the
competence of the state authorities – it cannot be eliminated – it is only possible to compensate for its action. If the analysis does not prove that the elimination of the consequence (consequences) of the problem is a condition for solving the problem, it should be considered as a separate problem in another study.

Thus, the main result of political analysis is advice – the way in which a public entity can solve a problem.

It may seem that political analysis has interfered with another scientific method – the analysis of public policy. This is partly true. When it comes to political analysis in public administration, its essential component is the analysis of public policy in the part that relates to a particular problem. But the subject remains excellent. In this case, it is a political analysis of public policy. Political analysis of public policy should answer a few additional questions:

Is it necessary to solve the problem at all (the existing problem today may appear as a latent possibility in the future)?

Is there a political will of the ruling entity to solve the problem (the vision of the problem is always subjective)?

To what extent will the subject’s problem solving activity be justified in terms of social paradigm and resource costs (problem assessment)?

Having formed hypotheses, we can proceed to the choice of types of analysis.

At the same time, one of the most pressing needs of today is to address the issues that arise in the introduction of analytical technologies in public administration. In turn, the introduction of analytical technologies in the public administration of Ukraine will help solve the following problems: First: civil servants and officials of local governments, who have to engage in information and analytical activities, need knowledge of analytical technology and skills of their application. They need well-designed information and methodological support for analytics, which they do not have now. After all, the existing ideas about what should be the information-methodical, technical and technological support of analytical work in public authorities and local governments in Ukraine today are very vague and vague.

Secondly, in our opinion, the systematic development of state analysis should be considered as a sign of reaching the maturity of Ukrainian statehood. On the agenda is the task of introducing a clear specialization in the work of civil servants, determining the content and algorithms of information and analytical units in public authorities.

Third: Ukraine entered the era of radical reforms in the late twentieth century, when humanity has accumulated a significant number of variations of models of democratic development. Ukraine faces an important task: how to build an effective system of social and state system that could integrate the specifics of Ukrainian society with the experience and achievements of other countries. The problem is to work out the best version of the Ukrainian historical path, to make as few mistakes as possible in the historical positioning of Ukrainian society. It is fundamentally impossible to solve this problem without the use of socio–philosophical and political–historical analysis.
Conclusions. The above allows us to draw the following conclusions:

1. Unification of the processes of scientific and information-analytical support of public administration processes requires the development and application in the work of all state analytical structures of a single logic and methodology of political-analytical research.

2. Unification of research methodology does not mean the use of a single technology by all researchers or research and analytical groups. On the contrary, analytical data, in our opinion, should be verified, including through the use of various analytical technologies. However, the feasibility of developing and implementing a universal analytical technology that will speed up and simplify analytical research is also relevant. One of such possible political-analytical technologies is offered in this work.

3. This technology is based on the interpretation of a political problem that may arise in the process of public administration as a problem of the existence of threats to the functioning of state power.

References: