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State of the object and state's indicators. Problems of personnel management

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Abstract

The article substantiates the thesis that in personnel management it is necessary to distinguish between the object state and the object state indicators. The study of employee behavior from the standpoint of a system-transdisciplinary approach allowed us to conclude that any employee strives for stability and self-preservation. The condition for maintaining the stability and development of the employee is to achieve the indicators that the manager gives him. However, this doesn't always change the object state. The main problem of personnel management is the development of a set of indicators, in which, working on indicators, employees would change the state of the organization in the right direction. The interpretation of economic relations as a system allows us to designate their basic element as a household. Then the objective function of economic relations is to meet the needs of all households. It is shown that the existing system of monetary indicators at the state level cannot provide an increase in the well-being of all households. The necessity of developing evaluation indicators of the activities of decision-makers and managers based on the designated system goal of the development of the national economy is justified. The problems of developing indicators and ways to solve them are also outlined.

Keywords: problems of personnel management, system of indicators in management, system-transdisciplinary approach, socio-economic development, cobra effect

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Состояние объекта и индикаторы состояния. Проблемы управления персоналом

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Аннотация

В статье обосновывается тезис о том, что в управлении персоналом необходимо различать состояние объекта и показатели состояния объекта. Изучение поведения сотрудников с позиций системно-трансдисциплинарного подхода позволило нам сделать вывод, что любой сотрудник стремится к стабильности и самосохранению. Условием поддержания стабильности и развития сотрудника является достижение тех показателей, которые ставит перед ним руководитель. Но это не всегда изменяет состояние объекта. Основной проблемой управления персоналом является разработка набора показателей, при котором, работая над показателями, сотрудники меняли бы состояние организации в нужном направлении. Трактовка экономических отношений как системы позволяет нам обозначить их базовый элемент как домашнее хозяйство. Тогда целевая функция экономических отношений заключается в удовлетворении потребностей всех домашних хозяйств. Показано, что существующая система денежных показателей на государственном уровне не может обеспечить повышение благосостояния всех домохозяйств. Обоснована необходимость разработки оценочных показателей деятельности лиц, принимающих решения, и менеджеров на основе обозначенной системной цели развития национальной экономики. Обоснована необходимость разработки оценочных показателей деятельности лиц, принимающих решения, и менеджеров на основе обозначенной системной цели развития национальной экономики. Также обозначены проблемы разработки показателей и пути их решения.

Ключевые слова: проблемы управления персоналом, система показателей в управлении, системно-трансдисциплинарный подход, социально-экономическое развитие, эффект кобры

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Introduction

The control algorithm well described and studies in all universities around the world. Social management is always about influencing people. The need to influence people has led to the emergence of such branches of science as the theory of motivation in management and behavioral economics. These sciences study the patterns of human behavior to answer the question of how to achieve success and how to avoid the failure of management decisions.

Behavioral economics explains economic decision-making and human behavior through the prism of the psychological characteristics of human behavior as an economic agent. In works on behavioral economics, starting with D. Kahneman [1973] and, of course, R. Thaler [2015]. Human behavior is explained by the fact that when making economic decisions, people are guided by either rational rules and goals, or deviate from them. From the point of view of behavioral economics, failures in management can be explained by the fact that managers and decision makers (DM). It is not enough to take into account the psychological characteristics of subordinates.

In theories of motivation, human behavior interpreted through the prism of the desire to satisfy human needs. At the same time, meaningful theories based on the definition of human needs. Since A. Maslow [1943] first proposed the hierarchy of needs, scientists working in this field have been studying human behavior through the prism of satisfaction of needs. These are the two-factor theory of F. Herzberg [1959], the XY-theory of D. McGregor [1966], the *Z*-theory of W.G. Ouchi [1981], etc. From the point of view of meaningful theories of motivation, failures in management explained by the fact that the manager incorrectly takes into account the needs of subordinates.

Procedural theories explain the behavior of people by the fact that people always compare the results of their work with the costs. The relationship of employee behavior depending on such a comparison considered in the theory of labor motivation by D. Atkinson [1957], the theory of justice by S. Adams [1965], the theory of motivation by W.H. Vroom [1970], et al. From the point of view of procedural theories of motivation, failures in management can be explained by the fact that the manager incorrectly builds a system of assessments of both material and moral remuneration of subordinates.

In some cases, management failures may be caused by a lack of competence of decision makers (DM) in the field of management procedures. In other cases, these failures can be explained by a lack of understanding of the laws of object development or so-called economic voluntarism. In this case, unjustified goals are set, incorrect measures developed, inadequate deadlines for their implementation are determined, and so on.

However, failures in management, like successes, are sometimes difficult to explain. Despite the worthy goals and scientific validity of the plans, as well as knowledge of management theory, the laws of behavioral economics and the theory of motivation, the results are not what they were intended.

H. Siebert [2005] called this situation the “Cobra effect”. The cobra effect observed at all levels of management. Less often at the level of organizations, but most often at the level of state and municipal administration. This problem became especially acute in the 21 century, when the need to manage the economy at the state level became obvious. The pandemic has once again demonstrated the need to regulate the activities of organizations, firms and individual manufacturers.

Thus, in order to avoid the “cobra effect” at all levels of management, it is necessary to identify the objective causes of its occurrence.

Methodology

A. Einstein’s statement is well known that it is impossible to solve a problem at the same level at which it arose and it is necessary to rise above this problem by rising to the next level. In our case, such a higher level can provide a systematic approach. In theory, a systematic approach should ensure the universality of research techniques and finding a new interpretation of facts and relationships between them with its help. Various national and international communities, such as the International Society of Systems Sciences, the Association of System Economics, etc., conduct research on the problems of the methodology of the system approach and its application in management.

However, an intersubjective understanding of the term “system” has not already been. In our concept of the system approach, we define the system as the order of occurrence and existence of elements and the relationships between them, which determines the unity and integrity of the object [Mokiy, 2018].

The main laws of the existence and development of the system as an idealized object are the following:
• the main function of the system is the transformation of matter and energy;
• the parameters of the main function of the system are mandatory for all elements of the system;
• the fulfillment of the main function requires the fulfillment of the functions of self-preservation and development.

Striving for self-preservation, the system must maintain a certain stationary state. At the same time, the system of mobile equilibrium tends to change in such a way as to minimize the effect of external influence, while maintaining its qualitative certainty.

Performing the function of development, the system, developing according to a certain standard, reacts to changes in the internal and external state and adapts to the changed conditions. In this case, the system tends to the lowest energy state available. This is the so-called Hamilton's principle of least action or the principle of minimum energy.

Functions of self-preservation necessitate the emergence of a mechanism for evaluating both the resources consumed (matter and energy) and the result obtained. This is done by comparing the normative and achieved indicators and identifying the ability or inability of the elements or their relationships to ensure the safety and development of the system. Any deviation of the system state parameters from the stable one is "evaluated" by it as dysfunctional. The evaluation determines the vector of actions that force the system to return to a given state and triggers the mechanism for neutralizing dysfunctions. As a result, the system changes the relationships between the elements or new elements appear.

These patterns are universal and immanent for any object that we want to study as a system.

Our hypothesis was to consider such objects as employees, individual organizations, and economic relations as systems. Then we can assume that the patterns described above appear in each of these objects.

If we consider an organization as a system, then its creator or the head of the organization set the parameters of the main function. These parameters converted into a set of quantitative or qualitative indicators that each employee must achieve. These indicators, as a preplanned result of each employee's activity, are a manifestation of external influence on him.

Of course, a professional manager must take into account the individual motives of the subordinates, their psychological, physiological, and other characteristics. However, regardless of psychological, gender, and other characteristics, the need for such indicators and the obligation to achieve them by all employees is a systemic need for the organization as a system.

However, each employee can also to consider as a system. In this sense, the stability and development of the employee as a system manifested in the form of remuneration for work, career prospects, etc. That is the "stability" and "development" of the system called "employee" directly depend on the performance of indicators that determined by higher managers. The mechanism of neutralization of dysfunctions mentioned by us for the employee looks like a threat of punishment or even a threat of dismissal. Therefore, the achievement of indicators is a systemic need of the employee for stability and self-preservation. This implies the law of system management – the employee always works for the indicator.

But, in an effort to minimize the effect of the external influence that the indicator represents, the employee, as a system, will achieve these indicators in the most effective way. Moreover, this is not always associated with a change in the state of the object.

Results

Here it is necessary to emphasize the difference between the term "indicator" and the term "state". The term "state" in this case used in the sense of "the position in which someone or something is located". An indicator is a reflection of the state of something.

Thus, the "cobra effect" occurs because the employee, implementing the system principles, works to achieve the indicators, that is, works on reflection, and the manager needs to change the state. Therefore, the main problem of personnel management is to develop such a set of indicators that working on the indicator, employees change the state in the direction desired by the manager.

We must say that in cases where decision-makers understood (or intuitively felt) the mentioned systemic patterns, this led to brilliant results.

A classic example of understanding such patterns in management is G. Ford's linking the salaries of conveyor repairmen and the continuity of his work. They got paid only when they were in the break room. As soon as the assembly line breakdown red lamp turned on, the counter stops charging them wages. Therefore, firstly, they always promptly made repairs quickly to return to the break room; secondly, they made repairs always with high quality, so that they would not have to leave, the room in the near future due to the same malfunction.

For example, in ancient China, a doctor received a salary only when his patients were healthy. As soon as someone fell ill, the income of the Chinese doctor fell. Therefore, the doctors of the Chinese Empire were financially interested in making a diagnosis as accurately as possible and treating the patient as quickly and efficiently as possible. That is, the main indicator that Chinese doctors sought was the patient's health. There are many examples of successful communication of the interests of individual employees with the goals of the organization in personnel management.

In the 21st century, at the national and global level, the "cobra effect" now manifested in a classic form. Despite the proclamation of democratic values and noble goals, these goals cannot achieve in many countries. This is also due to the manifestation of systemic patterns.

In the practice of management and in the economic policy of most developed countries, the goal of economic policy formulated as improving the well-being of people. Declaring this goal most often leads to the victory of candidates in elections to government bodies of various levels. In the minds of most people, increasing wealth means increasing the amount of money. Therefore, monetary indicators most often used as parameters of the target function for assessing well-being. This approach is the dominant direction both in the management of organizations and in the regulation of the economic development of the state. Monetary indicators used as the main parameters for personnel management at all levels of management. At the level of the national economy, these are mainly indicators of the system of national accounts – Gross Domestic Product (GDP), Gross National Product (GNP), Net Domestic Product (NDP), Net National Product (NNP), and other monetary indicators of income and costs. The effectiveness of management assessed by the positive dynamics of their changes. Of course, the money is necessary to fulfill the social obligations of the state in the field of education, medicine, defense, public order, etc. The source of this money is the revenue part of the budget. However, budget revenues formed from taxes and fees, while most of them are taxes on profits and other income of legal entities and individuals. Therefore, the growth of profit and revenue is ultimately the main indicator used to regulate the activities of organizations from the position of government agencies.

In a number of States, these indicators reflected in the legislation, according to which profit is the purpose of creating commercial organizations. Yes, indeed, commercial organizations must bring their creators' income; otherwise, such activities will be charitable. Investors purchase stocks and bonds in order to generate income. Therefore, the main indicators for evaluating the performance of managers of all commercial organizations are financial indicators, namely, revenue, profit, and all its derivatives. Based on profit indicators, their dynamics, the activity of managers evaluated. Therefore, the main task that management should most often solve is to increase revenue and profit. The well-being of the manager depends on how much he has increased profits, and the stability and preservation of subordinates-on how accurately and on time they fulfill the decisions of the manager, that is, they achieve the planned indicators.

The main purpose of the activity of non-profit organizations should be the number of goods created. However, despite attempts to describe the activities of organizations in natural indicators, the main attention of the heads of these organizations focused on monetary indicators of the volume of goods created and the volume of financing of activities. This amount of money depends on the wages of employees and the development opportunities of these organizations.

Thus, the target indicator that determines the behavior of people in economic relations is money

However, if we consider the country's economy as a system, then the target function of the "economic relations" system should be to meet the needs of all households and increase their well-being. The fact is that a change in the state of a system is a change in the state of its basic elements. In this sense, a change in the state of the country's economy as a whole is a change in the well-being of all households [Mokiy, 2020].

However, an increase in well-being is achieved only by increasing the number of goods and the availability of these goods to all households. Let us look at how monetary indicators affect the increase and availability of benefits for all households.

The fact is that money is not food. You can't eat money, you can eat bread. An increase in money does not mean an increase in bread. Gross domestic product is a monetary indicator, that is, the monetary expression of the goods created. The introduction of a car-parking fee will increase GDP by this amount, but will not increase the number of parking spaces (the effect of paid parking). Profit growth does not always reflect an increase in the number of goods created. This is a monetary indicator of performance. Therefore, an increase in GDP and profits does not always increase the number of benefits or increase access to them. Gross domestic product's growth, budget balance, revenue, profit and other financial indicators very indirectly reflect the growth in the well-being of all households.

Let us show this with the example of companies in Russia and Spain. Gazprom and Aeroflot chosen as examples in Russia, since they are state-owned companies. This means that the main purpose of such organizations should be to meet the needs of households. However, the "profit" as the goal indicator does not allow them to do this.

"Gazprom" PJSC is a world-famous Russian company. The state's share (that is, the country's households) is 50.23 %. "Gazprom" PJSC – this is 11 % of the world and 66 % of Russian gas production. Revenue increased from 3,933 trillion rubles in 2012 to 6.5 trillion rubles in 2017. Of course, a twofold increase in revenue had a positive effect on dividends. However, at the same time, about 35 % of the country's territory is not gasified. Presently, Russia is the largest gas-producing country in the world, the level of residential premises gasification in at least 9 regions of the country ranges from 0 to 8 %. That is, households' access to this type of goods even if it increases, it is not proportional to the growth of profit of the company profit and its shareholders.

Another example is "Aeroflot" PJSC. The state share is 51.20 %. "Aeroflot" PJSC accounts for 42.3 % of the

Russian air transportation market. Over the past 6 years, the "Aeroflot" PJSC revenue has doubled, from 253 billion rubles in 2012 to 504.7 billion rubles in 2018, due to the dynamics of the exchange rate and the international traffic increase. In accordance with the statutory goal – making a profit, it is unprofitable to develop the domestic air transportation market. Therefore, citizens of the Russian Federation can only travel through the capital cities: three-quarters of all domestic flights relate to the Moscow Aviation Hub. According to the Federal Air Transport Agency information, over the period 1991–2016, the share of regional airlines in the structure of domestic Russian flights decreased by three times, and the local ones – by almost nine times. Moreover, the average cost of a flight ticket, according to our estimates, exceeds 80 % of the average monthly income of a Russian. For comparison, in the United States, the cost of a ticket is 5–10 % of the average monthly earnings [Borzenko, 2018]

Iberia express is an air navigation Manager in Spain and Western Sahara certified to provide the route, approach, and airfield management services. This company serves 73 % of the domestic air transport market in Spain. Iberia Express increased operating profit from 44.2 million (in 2017) to 65 million (47 %), and net profit – from 31.2 million to 42.6 million (36 %).

However, while Iberia Express, as a subsidiary of the Iberia Group, is considered its low-cost carrier, passengers do not feel the same about other low-cost carriers. This is what passengers are talking about on forums like TripAdvisor (even talking about fraud) and others. Interestingly, a company that values efficiency, simplicity, and quality has the opposite effect.[1]

These examples show that regardless of whether a company is private or public, the desire of company managers for profit does not lead to the availability of benefits for households. However, the techniques of increasing profits are well known to all managers and officials. It is necessary to increase sales and reduce costs.

If government agencies are not developing restrictive measures, then, according to the principle of minimum energy, the main ways to increase revenue are rising prices, changing the range of products and services towards more expensive items, reducing the service life of products, etc.

At the end of the XIX century, the durability of products was a priority for business. Later it became clear that in order to make a profit, it is more profitable to reduce the useful life of products, then companies can sell more and make a profit repeatedly. For example, in the 20s of the last century, the Phoebus cartel (Phoebus Cartel) emerged, which included the leading manufacturers of light bulbs. They limited the period of use of light bulbs to 1,000 hours, despite the fact that at that time there were technologies that could increase this period many times. Another example of deliberate aging of things is the invention by DuPont of nylon, from which heavy-duty women's stockings created. Such a quality would undoubtedly increase the well-being of households. Modern women know this very well. However, the management of DuPont invested a lot of money to change the nylon formula in the direction of decreasing strength, since such strength significantly reduced the amount of revenue.

Of course, the problems of planned obsolescence, price increases, etc. are not so simple and do not always lead to a deterioration in the well-being of households. Therefore, for example, few people today need a high-quality carriage or a high-quality computer of the IBM System/360 (S/360) series. They are obsolete and, of course, the production of such goods must be abandoned. However, without the restrictive influence of the state on business, the management of enterprises will always act in the above-mentioned ways to increase revenue and profit.

If, for example, for the owners and managers of pharmaceutical enterprises, the goal is profit, and for medical institutions is the volume of services in monetary terms, then these organizations simply forced to act in this direction. Compare, for example, the price of the drug paracetamol and paracetamol with additives of powdered sugar and flavors similar to natural ones. Obviously, the prices differ significantly. The needs to work for a monetary indicator forces doctors to prescribe unnecessary procedures, delay treatment, etc. Moreover, the promotion of a healthy lifestyle and the prevention of diseases threatens the sustainability and self-preservation of both the individual doctor and these organizations.

In fairness, it should be noted, that state leaders create restrictions on such ways to increase profits and revenue. For example, antitrust legislation, prohibition of cartel agreements, legislative restriction of wages, progressive scale of taxation, etc. However, monetary indicators as targets force people to find new ways to circumvent these restrictions.

Discussion

However, the big problem is to determine what meant by the"welfare" of the household and its improvement, what quantitative and qualitative indicators should describe it.

The problem of developing state indicators for economic objects of different levels currently being actively

[1] *Hispaviation* (2012), Iberia express, a very high low-cost concept [Iberia express, un concepto muy high del low-cost], available at: http://www.hispaviacion.es/iberia-express-un-concepto-muy-high-del-low-cost (accessed 12.03.2022).

investigated by economic science. There are works on the calculation of The Happy Planet Index[2] [Vroom and Deci, 1970], and others, an attempt was made to create a Systematic Index of Human Development [Parra-Luna, 2018], etc. However, the work is far from complete.

From the point of view of the system approach, to describe the state of the object, it is necessary to determine the quantitative and qualitative parameters of the well-being of all households and the criteria for determining the degree of accessibility to goods.

From a theoretical point of view, it is necessary to develop qualitative concepts that can used to classify objects. Therefore, for example, qualitative concepts include "wealth", "effect", "poverty", etc. After that, we can establish some relations between classes of homogeneous objects using comparative concepts. With the help of comparative concepts, objects ordered according to the degrees of intensity of some inherent property. For example, "richer", "more efficient", etc. However, this is not enough. For example, you will certainly be pleased with the message from your employer that you will receive more. However, most likely, you will ask to express the concept of "more" by a number, that is, by a quantitative concept. To characterize the qualitative state, it is necessary to express the properties by a number. Only then can the action be evaluated. It is possible only in comparison with the state taken as normal (or with the previous state). However, the description of the "norm" is possible only with stable concepts of what you are measuring.

Of course, the creation of a new system of indicators requires a number of fundamental research works. It is necessary to justify qualitatively and quantitatively the needs of households. Such justification should be based on the study of needs from the perspective of understanding the role and place of man and humanity as fragments of the planetary system, as well as understanding the systemic determinism of the quantity and quality of goods consumed. The problem of creating indicators complicated by the fact that it is necessary:

- interpret the essence and purpose for each group of organizations, taking into account their role in the system of "economic relations";
- identify indicators of the quality status of objects;
- quantify the qualitative indicators.

Another aspect of the successful solution of management problems at the level of the country's economy is the creation of legal conditions for the created system of indicators to become mandatory for all participants in economic relations.

Conclusion

We have shown that from the point of view of the system approach, the main problem of management is the indicators that set by the creators of the system. Employees, acting as systems, will always strive to achieve these indicators. We have shown that monetary indicators and profits are at odds with the goal of developing the national and global economy.

The fact is that the world economy cannot operate at a profit. The development of the world economy is an increase in the number of goods. Of course, the development of any system necessarily involves the evaluation of efficiency as a correlation of cost-benefit indicators. Without this, it is impossible to ensure actions to preserve sustainability. However, as a motivating indicator for people's activities, the amount of profit and its distribution should correspond to the main goal of economic relations – to increase the number of goods and access to them for all households. Many people, including businesspersons, now realize this. For example, the mission of the Matsushita Company formulated as follows: "The mission of an industrial enterprise should be to overcome poverty, to get rid of the suffering of society as a whole, to make people rich" [Cotter, 2011, p. 100]. However, this is a manifestation of the goodwill of an individual entrepreneur, and not the target setting of the economic system as a whole.

If monetary indicators of the development of economic relations and profit remain "de facto" deterministic indicators for managers and decision-makers, then the "cobra effect" in the management of the country's economy is inevitable. Therefore, the desire of participants in economic relations to increase profits is dysfunctional from the point of view of the goal of economic relations of the planetary system that we have outlined. In this case, the preservation as the dominant monetary indicators of management will lead to the activation of the mechanism for eliminating dysfunctions in the planetary system. Humanity has already begun to feel the effect of this mechanism. Nevertheless, the replacement of humanity is also possible.

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[2] Human Development Index. Chapter-4, available at: https://www.fundacionbancaja.es/archivos/publicaciones/04_Capitulo-4.pdf (accessed 12.03.2022).

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