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## ENGINEERING SYSTEM-BASED APPROACH TO PERFORMANCE DESIGN

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### **Abstracts**

By a research object was managerial process by performance on the basis of research of non-standard situations. An approach explores new means of fundamental diagnostics that are aimed at identifying non-standard situations and eliminating organizational pathologies. These means serve as the Engineering System Algorithms (ESA). Some influences have been determined in the course of the disruption of the functioning of the dynamic control complex.

**Key words:** *elements, quantity, uncertainty, insight, procedure development, security.*

### **1. Introduction**

There are many methods for calculating the integral performance indicator. Besides it, the proposals for the system improvements conflict with the reluctance of the implementation. The contradiction is in evidence that each calculation method uses a slightly different approach to how to value the success or failure of an activity. It takes several months only to implement a performance technology in an enterprise. However, each technology with the variability in results, it becomes clear that success is not guaranteed, and outcomes can vary based on multiple factors. Strategic planning, adaptability, and a commitment to addressing challenges are critical elements in ensuring a positive return on investment in technology implementations. This integration of disciplines underscores the importance of understanding and applying financial metrics, particularly performance indicator. In according to the done definition an approach of Engineering Systems is having been set [1]. This approach describes both a real object and new ways of analyzing and designing systems [2]. Hence, Engineering Systems users design the new tools and algorithms, which ensuring that

systems are not only technically efficient but also financially viable, aligning with the broader financial goals of an organization.

## 2. Problem State

An approach explores to the early and reasonable implementation of system changes. The extensive use of numerous performance indicators (NPI) can lead to information overload for decision-makers. Problem of study: “NPI represent a set of measures focusing on those aspects of organizational effectiveness that are the most critical for the current and future success of the organization”. So the object of study combines data and analysis to make sense and deeper understanding of a situation. But a subject broadly refers to the measures and practices implemented to safeguard various aspects from potential risks, threats, or harm. The purpose of the study is to develop a procedure of the structured and systematic process aimed at creating documented steps or guidelines to achieve specific tasks or objectives within an organization. For achievement of the purpose of research it is necessary to solve following tasks:

- To define communication between the strategic, operational and financial purposes.
- To investigate pathologies of the organization, organizational relations, administrative decisions.
- Taking into account requirements to develop ESA [3].
- Within the limits of algorithm to estimate measures of increase of predictability of results [4].
- On the basis of measures to design strategic cards and cards of indicators.

Besides it, ESA are used as an emerging field of research and education. ESA will help set the advance understanding of performance indicators. It is an engineering systems problem that must be seen as sociotechnical and that demands solutions rooted not only in technology but also in the social sciences and management.

## 3. Results

The analysis of the results reveals a critical challenge in the form of an overwhelming quantity of NPI. The extensive use of diverse NPI elements can lead to information overload, decision fatigue, and concerns about data quality. The developed AES algorithms have allowed not only to raise management efficiency, but also to transform strategy into business of each employee.

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