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AN ACTUAL OBJECT MAINTENANCE

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Abstract

This study is based on the idea that the element that provides the greatest contribution to the result can simultaneously be a weak link in the system, hindering its development. Such a paradox is revealed when analysing not only the classical models of Pareto, Deming and the one percent rule, but also when considering the phenomena of commoditisation and violation of emergent properties. The combination of these approaches allowed us to form a diagnostic method, in which a weak link is not eliminated, but transformed into an active resource for growth. The proposed model uses ROI as an evaluation system and the superposition method to implement improvements that do not violate the stability of the system. This allows not only to maintain the integrity of the object, but also to manage its development on the basis of internal contradictions and hidden reserves.

Keywords: challenges, property, misalignment, recovery, methodology, superposition, synergy

1 Introduction

The need to maintain an object has arisen due to anticipatory calls sent from the external environment. In well-organised objects configured to support a system property, control failures have become more frequent. The dwell time in an unstable state has increased. More effort is spent on restoring activities. At the same time, individual members of the organisation cease to comply with established norms. A latent misalignment is revealed, in which the established norms contradict the consumed measures. In other words, the characteristics of the object supporting the emergent property cannot withstand the avalanche influence of the external environment.

There arises the need for a fundamentally new organisationally separate complex of systems, on the basis of which it is possible to isolate from the environment such a methodology, on the basis of which the functioning of the organisation throughout its life cycle is ensured. Such a complex, which has a synergetic property, is aimed at strengthening the position of the organisation

by improving interactions between the participants of the organisation, including those who violate the norms. As a result of the changes, functionality and sustainability are ensured. Engineering Systems methodology [1–3] is used as such a complex. Based on it, a specific impact on the subject of Sensemaking [4–6] is implemented. After finding the weak link and its transformation on the part of the subject, System Engineering actions are provided to create a new property.

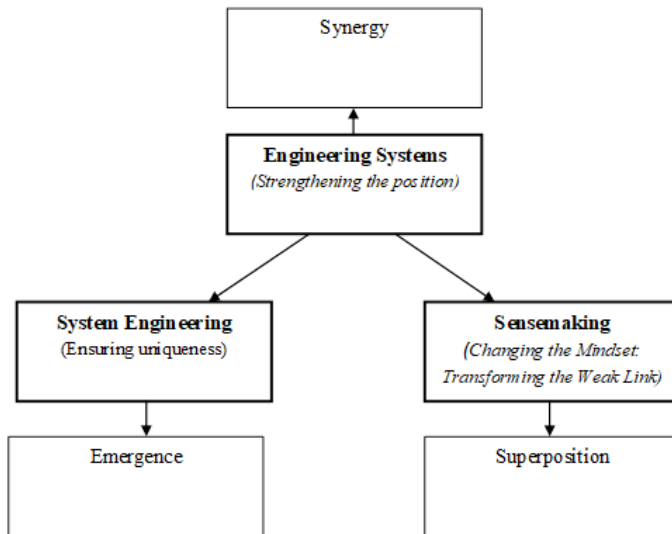


Figure 1. Conceptual scheme of object maintenance

The use of Engineering Systems provides synergetic strengthening of the organisation's position through the inclusion of a new link in the system. The debugging of the system is reduced to the achievement of the emergent property. In this way, it is possible to hold the whole while introducing new projects. The term "Superposition" is used in a special sense and implies a special thinking device for the people applying the new methodology.

2 Methodology

The proposed methodology is applied taking into account the organisation of clear interaction. Its essence is manifested in the search for a weak link. The technology of strategic management "Modernisation in reverse" is used. A weak link is an element of the system that makes the highest contribution

to the final result. Such a statement comes across as contradictory, but in fact the organisation starts to build around this element, and soon it will stop growing. In most cases, this link is the chief system designer.

Strengthening the position of the organisation happens by unlocking potential from within. For example, the problem of how to improve the image of the organisation by capitalising the reputation of a few units is solved. In addition, a unique transition from rule 5/95 to rule 4/96 is possible. In this way, synergies are created by overlaying new scenarios on the model of the existing organisation. It is uniqueness from within that strengthens the organisation's position outside, not the other way round.

The result is an increase in performance by connecting, integrating, merging the individual parts into a single system. Organisational actions that are uncomplicated are at odds with the means of measurement. The fact is that the ranges of changes in key parameters affecting the final value of the integral indicator are not harmonised with each other.

"It is impossible to establish norms of change in key attributes in the absence of state analysis tools in the main phases of organisation assessment." The purpose of this study is to develop a procedure that provides performance measurement in the context of identifying the weakness of an organisation. The ROI approach is used as a means of measurement. In accordance with the formulated objective, four objectives have been set, summarised into the following functions:

1. Developing a vision model for finding the maintenance object
2. Analysing the best option for setting the capital turnover rate
3. Diagnostics of the effectiveness of the medium-term scenario, carrying out the choice of the optimal capital structure
4. Adjustment of the methodology of formation of growth potential in the long term

As all tasks are solved, the head of the system has at his disposal a methodology that includes instructions for the formation of a system of norms. The key parameters of the ROI indicator are used as such a system.

3 Conclusion

System developers make a significant contribution to the development of an organisation. It is from their side that solutions are offered that do not cause surprises during implementation and subsequent decommissioning of obsolete links. In this regard, special tools are used to identify weak elements of the organisation. The ROI approach is proposed as a measuring tool. On its basis, the place of stability loss is determined, and reasonable proposals for getting out of the crisis state are formed.

In this case, combining the means of strategic goal-setting and financial management, the manageability of the organisation is ensured. It is important to note that algorithms fine-tuned at the level of new solutions represent unique elements that cannot be repeated. However, as the system is maintained and such tools become standard, new projects are introduced. In this way, it is possible to protect the organisation from outside interference. The reliability of innovations, despite their increasing complexity, grows year by year due to the outstripping growth of requirements, especially security requirements.

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