DOI https://doi.org/10.30525/978-9934-26-459-7-78

EVALUATION OF UNIVERSITY POSITION: ENGINEERING SYSTEM APPROACH

Djakons Romans

Latvia, ISMA e-pass: romāns.djakons@jsma.lv

Abstract

The study connects with needs for a full-scale assessment tools that identifies the weak links found within the universityl. The high level value is examined within the framework of a prepared programme. This programme allows to ensure the organization's potential discovery in conditions where traditional means do not work.

Key words: methodology, endowment, assets, contribution, requirements, value, product/

1. Introduction

The study includes three parts. The first part analyses methodologies of the endowment of the university in unusual conditions [1]. The second part deals with calculation of the share of intangible assets contributed by the students and alumni of the higher education institution employed in business would [2]. The third part presents the results of diagnostic tools makes it possible to unlock the growth potential of an organization in a new environment [3–4].

2. New Requirements: Engineering System Evolution

Despite the need for Engineering System in value-based development, in some cases, rapid changes and may pose challenges in determining and sustaining the education's value. The flexibility and speed required for value-based product development, at times contrary to Engineering System methods, can complicate the process of delivering value in alignment with long-term strategic goals. The fundamental premise behind "Engineering System" revolves around integrating principles and methodologies with a focus on delivering tangible value to end-users. Besides it, Systems Engineering focuses only on technical system design, whereas Engineering Systems encompasses technical, social, and managerial systems. So the problem of the study was expressed in the following wording. "It is

impossible to effectively measure the change in the potential of an educational organization with a loss of trust on the part of all its participants [4]". The definitions underscore the critical role of requirement analysis and need analysis in understanding system scope and establishing a genuine need for a value based education product (VBEP). Additionally, the emphasis on assessing the technical feasibility of a system meeting operational objectives highlights the importance of early visualization and abstract reasoning in system development. The object of the Engineering System making is the management tool used in the stability reconstruction entire VBEP lifecycle. Aim of the research is to design program, which finding informed the ways of the VBEP improving. In accordance with the aim the following tasks were formulated:

- 1. To define the current analysis features of VBEP.
- 2. To formulate the requirements for a programme VBEP maintenance.
- 3. To make a choice of an effective tools. These frameworks enable teams to work in a more organized and efficient way.
- 4. To interact and transparence between teams supports the successful completion of projects.

The program provides an overview of the system approach in engineering, focusing on the classification grounds, system model, requirement analysis, need analysis, and translation of operational objectives into system functions. It emphasizes the hierarchical structure of complex systems and the importance of understanding the scope of a system. The need analysis phase is highlighted as crucial for establishing a genuine need for a product, and the translation of operational objectives into system functions is discussed in detail.

4. Conclusions

The use of new system tools makes it possible to find the loss potential of an organization in a new environment. This delves into contrasting system products and systems perspectives, emphasizing their unique aspects. It addressed the challenge of aligning unchanging product demands with the need for adaptability and forward-thinking. The novelty of this study consists in the fundamental approach to identification of the reasons leading to the growth of performance, taking into account the application of new projects to its activities. Such reasons are revealed on the basis of the

References

- 1. Djakons R., Kopitov R. (2020). Assessment methodology of the contribution of the university branch in the development of the region. The 18th International Scientific Conference Information Technologies and Management, 2020, April 23–24, ISMA, Riga, Latvia.
- 2. Djakons R., Kelsina D., Kopitov R. (2021). Research of a Regional University Branch Contribution to the Development of the Region. The 19th International Scientific Conference Information Technologies and Management, 2021, April 22–23, ISMA, Riga, Latvia.
- 3. Djakons R. (2022). A Approach to Measuring University Branch Efficiency. The 20th International Scientific Conference Information Technologies and Management, 2022, April 21–22, ISMA, Riga, Latvia.
- 4. Djakons R. (2023). Evaluation of University Position in New Conditions. *The 21th International Scientific Conference Information Technologies and Management*, 2023, April 21–22, ISMA, Riga, Latvia.