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PECULIARITY OF ENGINEERING SYSTEM: COMPARISON IF SYSTEM PRODUCTS

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Abstract
Exploring system products and systems perspectives involves understanding tangible outputs like software and hardware, contrasting them with broader views focused on interactions, relationships, and emerging properties within complex systems. This comparison sheds light on how these aspects shape our understanding and development of products.

Key words: *advantages, warnings, harassment, reward, disadvantages, funds, flexibility.*

1. Introduction

As his research delves into the contemporary landscape of engineering system, exploring the paradoxical challenges it faces. Despite the effective methods offered by systems engineering technologies for managing complex systems, the rapid evolution of technology introduces hurdles to their sustainable and efficient implementation [1].

Problem of study: in modern system engineering is a violation of the emergence property, which entails difficulties in predicting and managing sudden and unexpected results that arise during the development and operation of complex systems [2].

2. Needs and Comparison

Object of the study is a feature of system engineering at the present time, with an emphasis on the impact of pressures from users and management [3]. This includes analyzing how these pressures affect the processes of system development and management, as well as considering how the

application of Agile approaches in systems engineering can provide a solution to effectively manage these pressures and ensure flexibility and adaptability in system development [4].

In accordance with the objective, the following tasks have been set:

- Current analysis of system engineering tools.
- Options for improving system engineering tools.
- Scenarios for 3 to 5 years for system engineering tools.
- Long-term instructions for updating system engineering tools [5].

The analysis of the aims to provide a comprehensive understanding of the current state of systems engineering, the challenges it faces, and potential solutions for ensuring sustainable and efficient implementation in the face of rapid technological evolution and external pressures [6].

The challenge lies in accurately identifying and defining the genuine operational requirements for a new system or upgrade, ensuring a viable approach that aligns with acceptable costs and manageable risks.

3. Results

The results delved 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. Furthermore, it explored the struggle to preserve product uniqueness in the absence of precise high-level specifications. Ultimately, it underscored the importance of balancing fixed requirements with flexibility for long-term product relevance and user satisfaction [3].

The conclusion provides a brief summary of the main findings or outcomes of the discussion or analysis, offering a concise overview of the key points addressed without introducing new information.

The novelty of the research lies in the development of an integrated approach that contains actions to support well-functioning management products when implementing **Engineering System** schemes.

The results of the study were reported at the international scientific and practical conferences [7–12].

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