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POTENTIAL VALUE LEVEL — TEST OF A VALUE SCALE PROPOSAL APPLIED IN RD&I PROJECTS IN SAFETY INNOVATION WITH MULTIPLE DECISION MAKERS.

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Introdução

Research, Development and Innovation (RD&I) projects are essential for sustainability and value creation in any technology-based company such as oil companies. However, evaluating and managing a portfolio of RD&I projects from a value perspective is a considerable challenge as there is a lot of uncertainty and a lot of embedded intangible and strategic value.

Problema de Pesquisa e Objetivo

The objective of this work, therefore, is to test the PVL indicator in a context closer to reality, allowing different managers and decision makers to choose RD&I projects, as well as evaluating the strengths, weaknesses, weaknesses and threats with the existing literature. For this purpose, the indicator was developed using a hierarchical multi-criteria model with two layers that considers criteria associated with the theories of real options and the valuation of intangibles. In order to illustrate the application of the model, some safety innovation RD&I projects were used.

Fundamentação Teórica

Project selection is the process of evaluating and choosing projects that match an organization's objectives. Given the vast scope and complexity of projects, as well as resource constraints such as time and budget, finding the optimal mix of projects that will produce the best results is a significant challenge for the project management industry. (Lee et al., 2024).

Metodologia

The methodology, criteria and sub-criteria developed in this work used the AHP model in two layers, that is, with criteria and sub-criteria. However, like the original authors, we do not want to select projects but rather obtain a scale based on the weights given to the criteria and sub-criteria through the combination of different decision makers. Research can then be defined as a methodological and applied investigation.

Análise dos Resultados

In short, it was possible to add at least one impact of the PVL indicator on the four elements of the SOWT matrix. The strength of the indicator is its simplicity in the way it synthesizes ideas, emerging as a strategic support tool. Opportunities are identified in its application and maturation in the academic and professional environment. As for its weakness, do not use the indicator as an absolute tool of choice. The threats arise from the eventual choice of criteria with low calibration, which in turn compromises the accuracy of the indicator results.

Conclusão

The present research used the hierarchical multi-criteria analysis model – AHP with two layers (criterion and sub-criteria) to develop a value potential scale – PVL, developed by Gomes et al. (2024), similar to widely used scales such as TRL and CRL, for three specific RD&I projects in the area of safety innovation in a context closer to reality, allowing different managers and decision makers to choose RD&I projects as well as evaluate strengths , weaknesses, weaknesses and threats with the existing literature .

Referências Bibliográficas

Lee, H. Y., Heng, Y. P., Selvanathan, K., Chandrahasan, P., & Chemmangattuvalappil, N. G. (2024).

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Multi-Criteria Decision-Making Tools for Project Selection by International Conglomerates. Saaty, Thomas. L. (1994). How to Make a Decision: The Analytic Hierarchy Process. Interfaces, 24(6), 19–43. https://doi.org/10.1287/inte.24.6.19 Gomes, L. L., Carlos De Lamare, |, Pinto, B., & Henrique De Castro, J. (2024). A Value Scale Applied to R&D Projects: Use Cases in Safety Innovation Projects. https://doi.org/10.48072/2525-7579.rog.2024