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ARTIFICIAL INTELLIGENCE AS A CATALYST FOR INNOVATION: THE ROLE OF ORGANIZATIONAL CULTURE AND LEARNING IN TECHNOLOGY-BASED FIRMS

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Introduction

In fast-changing technological environments, knowledge-intensive business services (t-KIBS) play a central role in innovation. However, little is known about how innovation culture (IC), artificial intelligence (AI), and organizational learning capability (OLC) interact, particularly in emerging economies. This study investigates how these elements influence product and service innovation (PSI) in Brazilian t-KIBS.

Research Problem and Objective

How do IC, AI, and OLC interact and influence PSI in t-KIBS? The study aims to empirically examine these relationships using the Resource-Based View (RBV) as the theoretical foundation.

Theoretical Framework

Grounded in the RBV, the study explores how intangible (IC, OLC) and technological (AI) resources jointly contribute to innovation. When aligned, these resources form complex capabilities that are valuable, rare, inimitable, and non-substitutable, which can drive sustainable competitive advantage.

Methodology

Quantitative research was conducted through a survey with 323 executives from t-KIBS affiliated with the ACATE network. Data were analyzed using variance-based structural equation modeling (PLS-SEM) in SmartPLS 4, with measurement scales adapted from validated sources in the literature.

Analysis of Results

Five out of six hypotheses were supported. IC positively influenced AI and OLC. AI and OLC both showed positive effects on PSI. Two significant mediations were identified: IC → AI → PSI and IC → OLC → PSI, highlighting the role of AI and OLC as mediators of innovation outcomes.

Conclusion

Innovation in t-KIBS results from the interaction between culture, learning, and technology. While IC alone did not directly impact PSI, it created favorable conditions for AI and OLC to foster innovation. Strategic alignment between these resources is key to achieving sustained innovation.

Contribution / Impact

The study offers theoretical contributions by integrating IC, AI, and OLC under the RBV in the t-KIBS context. It provides practical insights for managers on aligning cultural, cognitive, and technological dimensions to drive innovation and long-term competitiveness.

References

Barney, J. B. (1986). Organizational culture: Can it be a source of sustained competitive advantage? Academy of Management Review, 11(3), 656–665.
Costa, D. de L. C., Gomes, G., Borini, F., & Alegre, J. (2023). Innovative technology services: The human side of knowledge. Management Decision, 61(10), 2973-2993.
Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. Information & Management, 58(3), 103434.