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## **KNOWLEDGE AND INNOVATION (K&I) MEASUREMENT IN MINING AND LIFE SCIENCES SECTOR. STUDY IN CHILE, ARGENTINA, PERÚ AND COLOMBIA**

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### **Abstract**

This study includes the application and validation of a Balanced Scorecard for measuring Innovation and Knowledge. It also includes the development of a simulator with key drivers for every sector that show the causal relationship between these indicators and the improvement of innovation levels.

The research questions were: How does the organization benefit from applying a Balanced Scorecard of Knowledge and Innovation (K&I) to measure the tangible and intangible aspects in achieving these strategies? How can organizations grow and create value through the measurement of knowledge and innovation generated?

The methodology was qualitative, quantitative, and explanatory, using both a sample of 24 emblematic cases and country studies. The results show that Chile is the leader in the Mining sector; Argentina is more developed in the Life Sciences sector; Colombia performs better in human resources and Peru is professionalizing the mining enterprises.

**Keywords:** Innovation, Knowledge, Intangible Assets Measurement, Balanced Scorecard, Mining business, Life Science business, Biotechnology, Simulator

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