

# **Key Factors of Industry 5.0 that Impact the Perception of Its Implementation in Companies in the Metropolitan Area of Nuevo León**

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## **Abstract**

This research aimed to identify the factors that influence the perception of Industry 5.0 implementation in companies in the metropolitan area of Monterrey, Nuevo León, Mexico. It also sought to identify opportunities and obstacles in the collaboration between humans and machines. The study used an exploratory and descriptive methodological approach, using surveys and focus groups as a data collection technique to gather detailed information from participants. The results indicated a high level of awareness about industrial evolution, highlighting that 96% of respondents were aware of Industry 4.0 and 77% were familiar with Industry 5.0. Despite this familiarity, significant challenges were identified, particularly the need for specialized training (34%) and the costs associated with implementation (28%). However, the results also showed a positive attitude toward the adoption of advanced techniques and sustainable practices. This perspective highlights the importance of investing in human capital development and financial resource management to achieve a more successful transition to Industry 5.0.

## **Keywords**

Industry 4.0, Industry 5.0, Efficiency, Sustainability, Resilience

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