

## Critical Success Factors for the Implementation of Industry 4.0 in the Ecuadorian Industry

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**Abstract:** The Industrial Internet of the Industrial Internet Consortium (IIC) in the USA and the Industrie 4.0 of Plattform in Germany promote the use of information technology in production processes to improve their efficiency, reduce costs, increase their competitiveness and focus on the current client. There are companies that have already adopted this new discipline, confirming that this is the way to go and has become the present of the productive sector. Industry 4.0 and its Standard DIN 91345 focuses mainly on the manufacturing industry on the basis that this sector is one of the main sources of growth of the world economy and generator of employment.

In Ecuador, public policies are aimed to promote the development of the productive sector, recognizing industrialization as a generator of sustainable economic growth and a fundamental pillar of the Ecuadorian economy. The public policies are oriented towards productive diversification through technological innovation.

This article presents the investigation's results of the advances of theory and practice of Industry 4.0 and the Industrial Internet with the objective of determining the critical success factors for the implementation of Industry 4.0 in the Ecuadorian manufacturing industry based on the study of the frameworks: Industrial Internet Reference Architecture (IIRA) which is US sponsored by the Industrial Internet Consortium (IIC) and Reference Architecture Management Industrial 4.0 (RAMI 4.0) of the Plattform Industrie 4.0 of Germany.

The elements to the continuous improvement of the productive processes are considered to promote innovation, improve productivity indexes, determine productive chains of high potential, change in the productive structure, the skills and abilities to be an active part of the digital revolution, strategies for productive transformation and achieve the economy based on digitalization and knowledge.

*Keywords:* Industrial Internet, Industry 4.0, IIRA, RAMI 4.0, Ecuadorian industry