

MEXICO IN THE RACE TOWARDS THE NEW INDUSTRIAL REVOLUTION

PRO MÉXICO
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The beginning of the new decade has marked a turning point in what we now call the digital era. Breakthroughs like the Internet of Things, the analysis of big and thick data, the digitalization of services, and real-time digital collaboration, have started to influence the different production systems, giving way to the Fourth Industrial Revolution, also known as Industry 4.0. These advances hold out the great promise of continuous and exponential economic development, which will, in turn, translate into greater wellbeing, contributing with more than 15 billion dollars to the world economy within the next 15 years.

It is the outset of a new industrial era; a milestone that enables the evolution of different value chain levels, the creation of bridges between embedded and cyber-physical systems, and a greater reach of information technologies applied to the entire commercial process, including the design, production, and distribution of goods. This new technological archetype that brings together the mechanical, the biological, and the digital is changing the entire productive ecosystem: worldwide, companies that are utilising i4.0 solutions are increasing their revenues by 3% every year. In fact, these advances present the industry with a positive outlook, as it is expected to generate over 907 billion dollars in investment by 2020, creating new large-scale business opportunities in the medium term.

Mexico is ready to incorporate these innovations to many of its industries, especially in advanced manufacturing, as they are mature enough to implement them. Should they manage to adopt these new trends, businesses could benefit from the new productive ecosystem and increase the value offering of their activities. Currently, several Mexican productive sectors have the necessary capabilities to transition into this new ecosystem and there are many mature niches that have already incorporated i4.0 practices, thanks to Mexico's human talent and the foreign investment in industries such as automotive, aerospace, and electronics.

Our country's strengths have allowed us to bet hard on innovation: we added more than 1,300 players to information technology clusters, more than 90 advanced manufacturing research and development centre, and more than 30 competitiveness hubs working in industrial innovation matters. Likewise, our human talent specialized in subjects related to Industry 4.0 is comprised of almost 500,000 graduates from areas such as computing sciences, mechanical engineering and mechatronics, automation, physics, mathematical statistics, and data analytics.

In this context, ProMéxico, the Mexican government promotion agency, has published a series of studies to better understand our country's capacities in terms of implementing the Industry 4.0 trends, as well as the main areas for opportunity across the other sectors mentioned above while exploring technologies and enablers such as cyber-security, the drone ecosystem, and machine learning.

In order to develop these competitive advantages in our country and to better align them with the global industrial innovation and production chains, different public and private efforts reflecting the vision of an innovative Mexico in harmony with enabling technologies have been put in place. Several working groups with government, academia, and industrial representatives have set the goal for Mexico to be among the top ten countries in both Harvard's and MIT's Economic Complexity Indexes by 2030. As part of these efforts, Mexico seeks to create two hyper-flexible manufacturing clusters by 2019 and 2021. Thus, not only will Mexico continue to position itself as a global benchmark for manufacturing, but it will also fulfil its desire to become a strategic ally for the world leaders in industrial innovation.

