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Mexico is a leader and a referent in advanced manufacturing. It is also Latin America's main exporter of medium and high technology manufactures. Its favourable investment environment has been key to strengthen Mexican industry productive capacities. However, amidst revolutionary and rapid technological changes, Mexico is facing bigger challenges to remain a competitive player in global production chains. One of the features that has helped Mexico to stay ahead are its competitive clusters, which follow the Industry 4.0 (i4.0) productive model.

In Mexico, there are clusters of players from the triple helix (academia, government and private sector) that work collaboratively to develop and implement the next generation of manufacturing technologies with an i4.0 approach - a concept developed in Hannover Messe 2011. A group of 35 clusters, described in ProMéxico's study titled "Mexico's competitiveness clusters in industrial innovation" make up Mexico's innovation ecosystem geared towards advanced manufacturing.

These competitiveness clusters engage in at least one out of five topics that cover, to a greater or lesser extent, key aspects related to i4.0 productive processes. The first topic deals with technology research, development, and transference and is present in 30 of the clusters, which aggregate the ideas of researchers and visionary developers to offer solutions to industry problems. The second topic, digital factories, takes place in 29 of the clusters, which seek information technology (IT) solutions to analyse data from value chain processes. Third, automation integration, movement, and control, is present in 28 of the clusters, which implement technologies from robotics, mechatronics, and artificial intelligence. The fourth topic, industrial supply, is the focus of 25 of the clusters that sell materials, components, individual systems, and develop innovative solutions in hardware and software to supply both domestic and international productive chains. The fifth and final type of cluster deals with energy efficiency. Seven out of the 35 clusters have industrial processes dependant on flexible and smart electricity networks.

Geographically, there is a higher concentration of competitiveness clusters in the norther, central, and central-western regions of the country. The states with a higher number of clusters are Nuevo León (6), Querétaro (4), Baja California (4), Chihuahua (4), Jalisco (3), Aguascalientes (2), and Puebla (2). This fact matches the historical specialisation of these areas in manufacturing activities.

It is also notable the presence of high-tech sectors driven by foreign investment and international trade; such as Information Technology (18 clusters), automotive (11), metal-mechanic (10), aerospace (9), and electronics (4). These sectors have been deemed as strategic by several state governments given their economic significance and their scientific-technological potential; therefore, they are actively bolstered through public policies that foster R&D&i, technological transfer, specialised talent training, and attraction of investment.

It should be noted that these competitiveness clusters are a relatively recent phenomenon in Mexico, as about 91% only started to operate during the 21<sup>st</sup> century. Besides that, they are an important source of employment as each one of them is comprised of, on average, more than 100 players from the private and public sectors and academia that employ around 26,000 people.

Finally, the 35 clusters are the main evidence that Mexico has a developing i4.0 productive ecosystem, which not only is favourable for advanced manufacturing but also promotes the design, development, and implementation of innovative technologies.

