Industry 4.0 Competencies Model for the Digital Transformation of Manufacturing SMEs

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Summary

Industry 4.0 is one of the major technological trends of recent years, its importance and application in the industry are increasing by incorporating digital technologies and intelligent information to ensure that all elements of the value chain are automated, interconnected, and optimized to improve their efficiency and productive capacity. The appropriation of competencies and new technologies of Industry 4.0 in the industrial sector is its digital transformation, which must be supported by a framework that allows them to carry it out successfully.

This research proposes a new competency model with a specific purpose for SMEs with Industry 4.0 approach for Digital Transformation. A simple model, agile to implement, that provides them with guidance on how to achieve a higher level of maturity in their specific domain. The Industry 4.0 Competency Model for the Digital Transformation of Manufacturing SMEs is a multidimensional structure formed by quadrants that represent a general area of activity within an organization such as strategy, talent, technology, and culture and organization; from which the resources and capabilities available in the organization are examined and that in their case should be developed through a methodological procedure of induction, analysis, and assessment that channel them to be smart and connected industries.

Key words

Industry 4.0, Digital Transformation, Skills and competences, Model, SMEs.