

## **Tool For Assessing Drivers and Barriers In The Dimensions of Industry 4.0.\***

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### **Abstract**

Subject literature addresses the driving forces and barriers in Industry 4.0 implementation depending on specific factors: economic conditions, enterprises sectors, or enterprises size. The research gap that the authors fill concerns a combination of all mentioned factors: location of the enterprises, sector of activity, and size of the enterprise. The aim of this article is to develop a research tool which will be used in planned assessment of drivers and barriers in the dimensions of Industry 4.0 specifically in SMEs operating in the automotive sector in Poland. This future study will verify the hypothesis: "It is possible to rank the identified barriers and drivers of Industry 4.0 implementation in terms of the strength of interaction on the different dimensions of Industry 4.0 implementation in small and medium-sized enterprises." Main methodologies used in presented article are review and analysis of the literature on the dimensions of the implementation of Industry 4.0 solutions, maturity models and readiness assessment. Using the developed research questionnaire and proposed model to visualize the results of the analysis in individual functional areas will show the current and the target state of the organization. This in turn, will give measurable utilitarian benefits. The limitation of this research is the subjectivity of choice of the functional areas and the number of dimensions of the implementation. Pilot studies will bring additional value with the guidelines and possible corrections and improvements.

**Keywords:** Industry 4.0, Research tool, Small and Medium Enterprise (SME), Drivers, Barriers