

SIMILAR NEEDS, SIMILAR CHALLENGES: IS THERE A SILVER BULLET FOR SMEs FROM THE MANUFACTURING SECTOR ON THE ROAD TO DIGITAL TRANSFORMATION?

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ABSTRACT

When it comes to implementing the digital transformation, there are sometimes considerable differences between small and medium-sized enterprises (SMEs) and large companies (Endrődi-Kovács & Stukovszky, 2022; Schildt et al., 2023). SMEs are still relatively at the beginning of what can be a very arduous journey. (Rusly et al., 2021). However, due to their generally very high economic and national significance, it is extremely important for SMEs in particular to successfully master the digital transformation in order to be able to create a competitive basis for themselves in the future as well. (Łabędzka, 2021). Digital transformation can offer SMEs in particular considerable advantages, but it can also present them with enormous hurdles (Ranka & Vasudevan, 2022). Since this transformation process has particular significance for SMEs from the manufacturing industry due to the enormous potential for increasing and improving production activities (Abdallah et al., 2021), these companies are the focus of this work. From previous work on this topic, the impression is that the use of digital technologies by SMEs in the manufacturing sector is still predominantly in its infancy (Alqoud et al., 2022). The aim of this work is to examine what the greatest challenges are for SMEs from the manufacturing sector. In recent years in particular, this topic has increasingly become the focus of science (Valdez-Juárez et al., 2023). This has given rise to numerous different scientific contributions that have examined the challenges SMEs face in the context of digitization, in some cases in different directions. Furthermore, this work has set itself the task of bringing together the relevant challenges of SMEs with regard to digital transformation from the various research studies in order to be able to provide a preliminary overall picture. The focus of the work will be predominantly on SMEs from the manufacturing sector. This preliminary overall overview is intended to reflect the current state of research and thereby inspire and enable further research works. The applied research method consisted of a literature review, carried out with the help of the Scopus database, focusing primarily on the literature of recent years on SMEs from the manufacturing sector in this very current and dynamic research topic. Within the framework of the analysis carried out, it became clear above all that the importance of the challenges was assessed differently depending on the national circumstances. In addition, it was also found that many research papers have focused their research on the adoption of Industry 4.0 in relation to SMEs in the manufacturing sector. However, it became very obvious in the course of the analysis that the digital transformation and thus also Industry 4.0 as part of this digital change affect the entire company and therefore all

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relevant internal and external factors must be taken into account for successful implementation (Abdallah et al., 2021). In this context, it should also be explicitly mentioned that the historically grown corporate values should also be included, which can also form an essential criterion for the successful implementation of digitalization technologies. (Martinelli et al., 2021). Therefore, according to the author, it is reasonable to assume that the digital transformation of a company is similar to a living organism that learns something new. Therefore, it seems to be insufficient to focus only on one sub-area. Analogously, in the author's opinion, there is no pure centralization on the footwork when learning to ride a bicycle, for example, which would probably also not be sufficient in most cases to master riding a bicycle. Therefore, the assumption is made that the inclusion of all elements and facets of a company, such as past experience of successful business practices, must be taken into account, as well as the planned corporate strategy and all other relevant internal and external factors. In addition, the author makes another assumption, which lies in the presumption that there are conducive and less conducive periods in the life cycle of companies that are more or less suitable for a transformation process of this magnitude. Therefore, the assumptions made in advance lead to the final assumption that only by recognizing this overall context and exploring and taking into account additional company-relevant components (internal as well as external) and interrelationships can appropriate conclusions and consequences regarding digital transformation be derived. Ultimately, according to the author, this also requires overcoming these challenges themselves. Therefore, the scientific value of this work is to create impulses conducive to further research on the challenges to the digital transformation of SMEs. Likewise, through its preliminary overall view of the digital challenges, this work is also intended to provide practical support in managing the transformation. In conclusion, this work is subject to several limitations. Thus, this research is based solely on a literature review conducted, which examined only a certain number of scientific sources. Therefore, it is quite likely that important research has not been included in this work. Furthermore, the articles examined are based only on a certain number of countries or regions and therefore cannot have a universal character.

Keywords: Digital Transformation, SMEs, Manufacturing Industry, Challenges

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