The main challenges for manufacturing companies in implementing and utilizing configurators - DTU Orbit (19/10/2019)

The main challenges for manufacturing companies in implementing and utilizing configurators

Companies providing customized products increasingly apply configurators in supporting sales and design activities, thus improving lead-times, quality, cost, benefits perceived by customers, and customer satisfaction. While configurator advantages have been substantially investigated, the challenges of implementing and utilizing configurators have less often been considered. By reviewing relevant literature, the present study first categorizes the main challenges faced by manufacturing companies when implementing and utilizing configurators. Six main categories of challenges are identified: (1) IT-related, (2) product modeling, (3) organizational, (4) resource constraints, (5) product-related, and (6) knowledge acquisition. Second, through a survey, the importance of those categories of challenges is assessed, and the specific challenges within each of those categories are highlighted. Finally, it is investigated whether the importance of the main categories of challenges varies according to a number of potential context variables. The results of the survey, which studies manufacturing companies that use configurators in providing customized products, offer new insights into the importance of these categories of challenges. The findings contribute to the research on manufacturing companies’ utilization of configurators and will raise awareness of the main challenges associated with their implementation and use.

General information
Publication status: Published
Organisations: Department of Management Engineering, Management Science, Operations Management, Department of Mechanical Engineering, Engineering Design and Product Development, University of Padova
Corresponding author: Kristjansdottir, K.
Contributors: Kristjansdottir, K., Shafiee, S., Hvam, L., Forza, C., Mortensen, N. H.
Pages: 196-211
Publication date: 2018
Peer-reviewed: Yes

Publication information
Journal: Computers in Industry
Volume: 100
ISSN (Print): 0166-3615
Ratings:
BFI (2018): BFI-level 2
Scopus rating (2018): CiteScore 6.05 SJR 1.242 SNIP 2.395
Web of Science (2018): Impact factor 4.769
Web of Science (2018): Indexed yes
Original language: English
Keywords: Challenges, Configurators, Explorative survey, Information technology, Mass customization
DOIs:
10.1016/j.compind.2018.05.001
Source: Scopus
Source ID: 85046738844
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review