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## Business Model Engineering for Smart Product-Service Systems

Mario Boßlau<sup>a,\*</sup><sup>a</sup>*IU International University of Applied Sciences, Kaiserplatz 1, 83435 Bad Reichenhall, Germany*\* Corresponding author. Tel.: +49 172 231 80 70; E-mail address: [mario.bosslau@iu.org](mailto:mario.bosslau@iu.org)

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### Abstract

Smart product-service systems offer new opportunities for the innovation of digital business models by integrating digitized product and service components. A key aspect of these industrial solutions is the life cycle accompanying fulfilment of customer value. Consequently, the corresponding digital business models must dynamically adapt to changing customer demands. To date, there is a lack of comprehensive research to develop the digital business models that accompany them, resulting in a lack of holistic methodologies that integrate modeling and simulation techniques that map their architecture and dynamic behavior. This paper presents an iterative business model engineering approach for the design and analysis of dynamic business models for smart product-service systems (SPSS).

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This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)Peer-review under responsibility of the scientific committee of the 54<sup>th</sup> CIRP Conference on Manufacturing System*Keywords:* smart product-service systems, business model engineering, digital transformation, digital business models, industry 4.0