ENABLING SMART SERVICES
FOR MANUFACTURING SMEs
BY DATA-DRIVEN VALUE CREATION

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RESEARCH MOTIVATION

• The use and sharing of data within an ecosystem have the potential to generate innovative services or products
• However, firms within a network are increasingly reluctant to share their data with their partners
• Technology implementation is a necessary but not sufficient condition in this process

METHOD

• Literature review
• Interviews with manufacturing and IoT consulting companies and a quantitative survey
• Integration and further development into a data sharing framework suitable for SMEs

PRELIMINARY OR EXPECTED FINDINGS / CONTRIBUTION

This study’s contribution will provide insights in the factors enabling data sharing among SMEs in the following dimensions: service value creation in ecosystems, willingness to share data/trust, organisational cultural and mindset, data security and legal aspects

VALUE

• Key for willingness to share
• Quantify value
• Make it transparent
• Value in Ecosystems

TRUST

• drivers and hurdles to share data
• scoring index to evaluate willingness to share
• guidelines to increase trust in an ecosystem

SECURITY

• methods for minimizing IT security risks
• security radar to push data security

CULTURE

• informal mechanisms
• implicit assumptions
• interrelatedness of organization and ecosystem

LAW

• suitable contract and data governance models
• contractual clauses for different data sharing contexts
• solutions for compliance with regulatory requirements

KEY DISCUSSION POINTS

• Data are the basis for developing innovative service and products (creation of value)
• This requires data sharing in ecosystems
• Hurdles include lack of information on the value of data, missing trust, and an appropriate data culture
• SMEs require specifically tailored tools to overcome these hurdles and leverage potential of data

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