



Success Factors for Data Sharing in Industrial Ecosystems

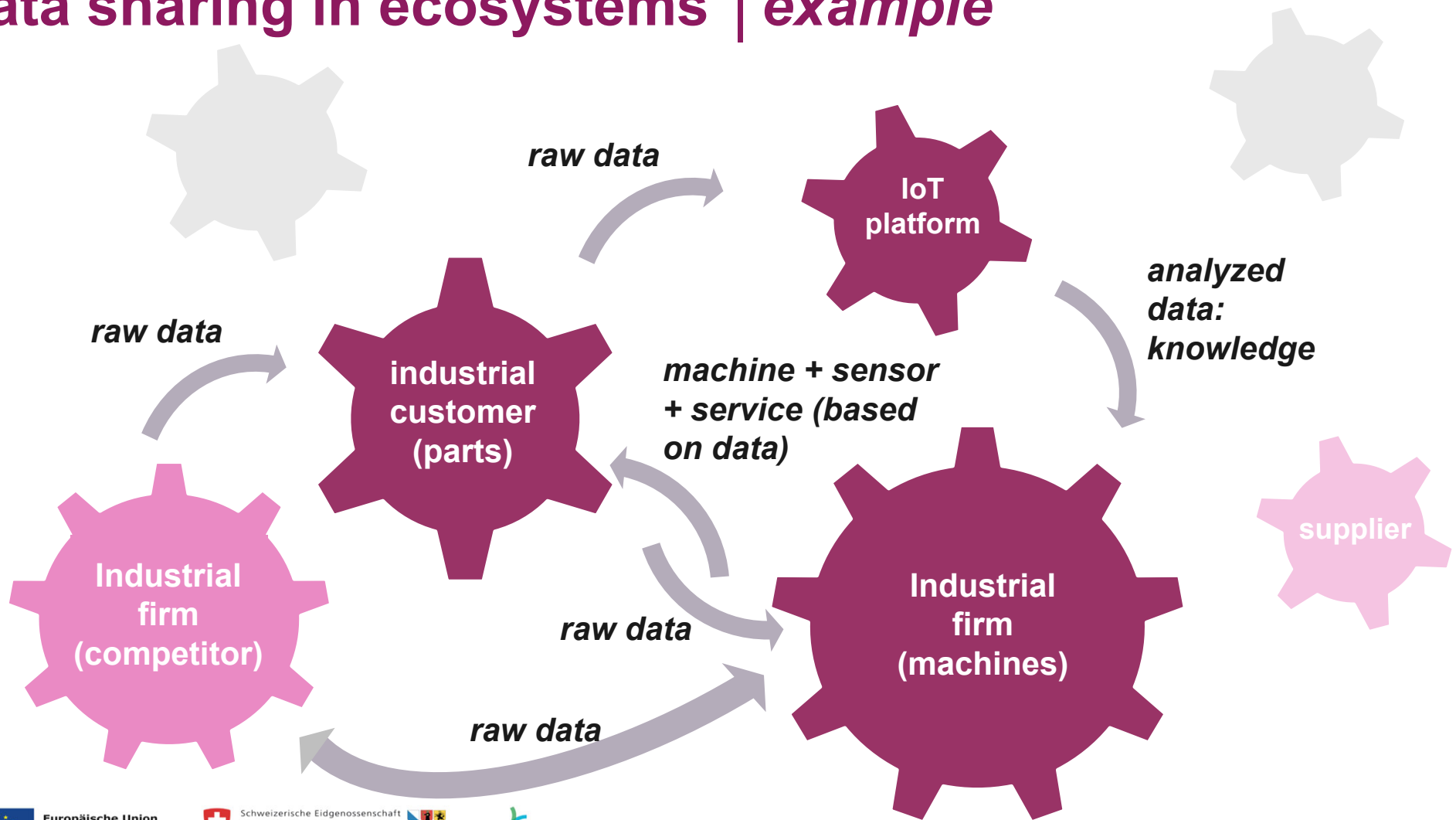
Industrie 4.0 Konferenz |
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Data sharing in ecosystems | *example*



Data sharing in ecosystems | *project*

Research gap: Firms' propensity for sharing data in industrial ecosystems is more than a technical issue, it takes a multi-perspective approach

Research questions: *How do data trust, security, law, culture and value influence firms' propensity for sharing data in an ecosystem?*

Which measures enable / support the sharing of data? (Framework)

Method: Mixed-method approach (qualitative, quantitative, simulation)

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Schweizerische Eidgenossenschaft
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Industrial Partners: Firms (CH, D, AT) in manufacturing ecosystems:
industrial, data-sharing facilitators (software, hardware, platforms)

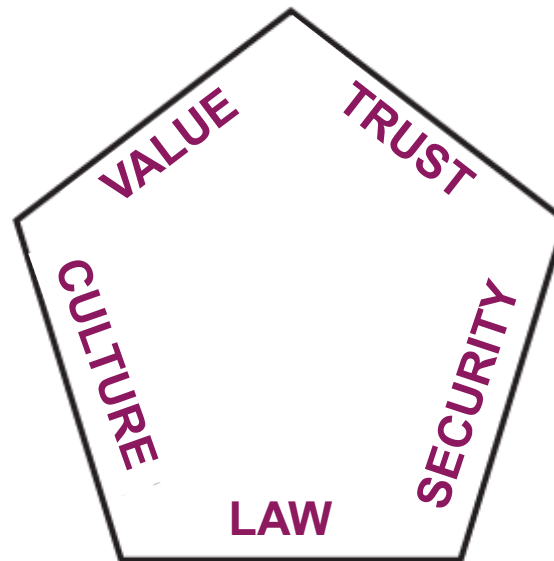
Universities:



Data sharing in ecosystems | *potential hurdles*

Data Value

How can the data's value be determined?



Data Trust

How does trust influence the agents' propensity for data sharing?



Data Culture

Which mindset, culture and organization enables data sharing?



Data Security

What security measures does it take for enabling a safe exchange of data



Data Law & Governance

How can contracts (external) and governance (internal) specifications be designed for sharing data?

Data sharing in ecosystems | *preliminary findings*

Data Culture	Data Value	Data Trust	Data Law	Data Security
<p>recognize value of sharing data</p> <p>understand characteristics of data as a resource</p> <p>go beyond internal & external boundaries</p> <p>move data to more central position in value creation process</p>	<p>trust in key actors (sales managers)</p> <p>trustworthy design of data exchange (direct, third party)</p> <p>Identify typical use cases</p> <p>engage customers at an early stage</p>	<p>clear benefit / value is key for willingness to share</p> <p>quantify value</p> <p>make value transparent</p> <p>be aware of value in the ecosystem</p>	<p>suitable contract and data governance models</p> <p>contractual clauses for different data sharing contexts</p> <p>compliance with regulatory requirements</p> <p>industry standards</p>	<p>methods for minimizing IT security risks</p> <p>security radar to push data security</p>

-> Perspectives are interlinked: Data sharing requires changes across the entire organization

Preliminary findings | *value & benefit*

Data Culture	Data Value	Data Trust	Data Law	Data Security
recognize <i>value</i> of sharing data	<i>clear benefit / value is key</i> for willingness to share	<i>trust in key actors</i> (sales managers)	<i>suitable contract</i> and data governance models	methods for minimizing <i>IT security risks</i>
understand characteristics of <i>data as a resource</i>	<i>quantify value</i>	<i>trustworthy design</i> of data exchange (direct, third party)	<i>contractual clauses</i> for different data sharing contexts	<i>security radar</i> to push data security
go beyond internal & external <i>boundaries</i>	make value <i>transparent</i>	Identify <i>typical use cases</i>	compliance with <i>regulatory requirements</i>	
move <i>data</i> to more <i>central position</i> in value creation process	be aware of <i>value in the ecosystem</i>	<i>engage customers</i> at an early stage	<i>industry standards</i>	

-> Perspectives are interlinked: Data sharing requires changes across the entire organization

Data sharing in ecosystems | *Preliminary measures*

Data Culture	sensitize am- bassadors & compet. center	deepen data competences & knowledge	modify processes, organization, ecosystem	scale use cases within the firm
Data Value	rough quantifi- cation of value (simulation)	prototype for data collection techn. feasibility	start data collection & analysis	scale data & analysis
Data Trust	customer workshop: define initial use case	communicate value (firm, ecosystem)	train key indivi- duals, e.g., sales managers	establish tech- nical settings for data sharing
Data Law	firm-internal governance	«starter» legal agreement (ecosystem)	full legal agreement partners	adaptation of legal agreements
Data Security	identify key partner concerns	set up monitoring system	modify monitoring system	

time →

Team | *contact*



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