

A horizontal band with a green, textured background, possibly representing a fabric or fiber, spans across the middle of the slide. The texture is a complex, interlocking pattern of fibers.

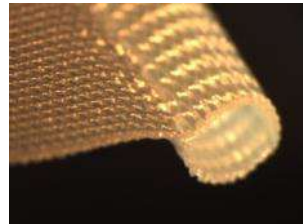
Innovative B2B2C Business Models in the Fashion Domain – New Strategies for Local design, Production and Marketing

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German Institutes of Textile and Fiber Research



- Europe's largest textile research center
- Founded in 1921, foundation under public law
- 3 research centers, 1 production company (ITVP)
- Application oriented research from molecule to product on 25,000 m²
- Research with industrial pilot facilities, focus on technical textiles and life science



Agenda

- Situation of Textile and Clothing Industries
- The Value Creation (Production) Scenarios and Archetypes
- Business Cases and Applications
- Covid 19 Scenarios and Archetypes
- The Archetype Digital Textile Micro Factory (DTMF)
- Summary

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Situation of Textile and Clothing Industries

- Textile and clothing value creation and their supply networks are often organised anew.
- The industries are mainly SMEs and organised in a local up to a global structure.
- Especially the fashion industry must follow the rules of being very adaptive, very fast by undergoing a constant change.
- Main challenges are changing consumer demands, the need for individualisation, transformation to Industrial Internet of Things (IIoT) and the ongoing digitisation across the value chains up to the Point of Sale.



Source: <https://www.spiegel.de/fotostrecke/escada-aufstieg-und-fall-eines-modehauses-fotostrecke-170753-2.html>



Source : <https://www.stuttgarter-zeitung.de/inhalt.einkaufen-in-stuttgart-die-hysterie-um-primark-ist-vorbei.a1772f6a-7d79-4842-a1f8-e6e4aa44657f.html>

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Proceeding in FBD_BModel

- Deriving Business Models (CANVAS) – current and future ones - for all Business Cases, spider web diagrams and identify their orientation (market or infrastructure based)
- Defining archetypes for the value creation scenarios.
- Determine the gap between the future Business Model and the fitting archetype of the Business Case.
- Closing the gap by implementation of Services for Design and Supply Chain (IDS and SCPMS).



Textile Value Creation Scenarios

Scenario 1: Interconnected Local Value Chains

Scenario 2: Global Networked Value Creation

Scenario 3: Hybrid Products and Service Provider

Scenario 4: Sustainable Open Manufacturing and
Open Innovation Value Chains

Scenario 5: Made to Measure – Consumer Driven
Value Creation



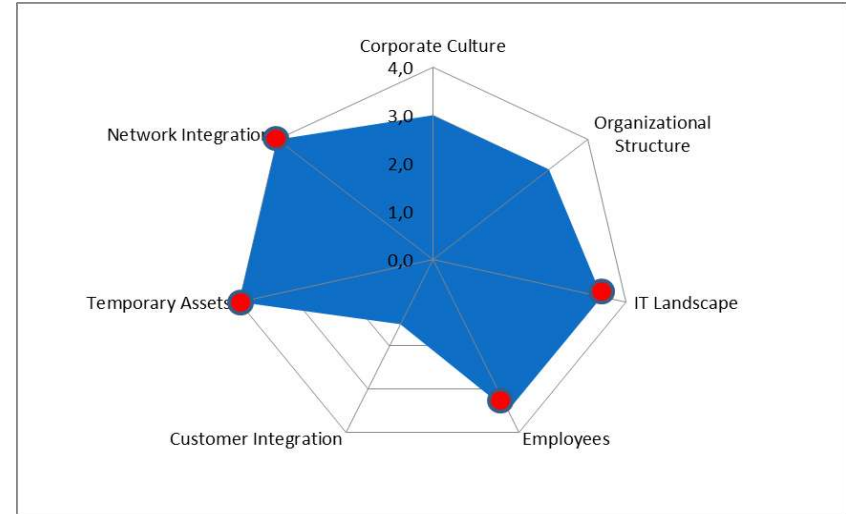
Scenario 1: Interconnected Local Value Chains ('Nearshoring')

Preconditions are:

- A deeply integrated network and the possibility of having access to a big pool of resources in a fast and reliable manner.
- The possibility to process data in a fast and seamless way and have the employees with the competences in using it and work together.

Archetypes of Scenario 1:

- Archetype 1:
Local Textile Cluster (Network/Assets)
- Archetype 2:
Micro Factory (Small Series)



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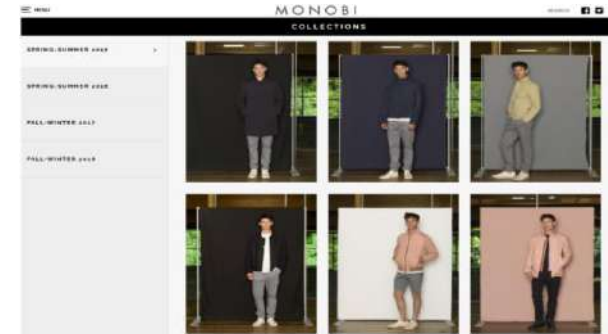
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Applications in FBD_BModel

- Business Case 1 (Bivolino):
Fashion Shirts Made-to-Measure
- Business Case 2 (Azadora):
Technical Sportswear and Outerwear
- Business Case 3 (Kuvera):
Technical Performing Underwear
- Business Case 4 (Beste):
Men's Fashion Urban Wear and
Performing Clothing
- Business Case 5 (Kuvera):
Customized Performing and Fashion
Accessories



CARPISA MISSION



First mapping of the Business Cases to production scenarios / archetypes and assignment of services

Business Case	Production Scenario	Archetype(s)
1	Made to Measure – Consumer Driven Value Creation	Tailor Made Production (B2B2C)
2	Interconnected Local Value Chains	Local Textile Cluster
3	Interconnected Local Value Chains	Local Textile Cluster
4	Global Networked Value Creation	Partial Nearshoring or hybrid sourcing
5	Interconnected Local Value Chains	Local Textile Cluster

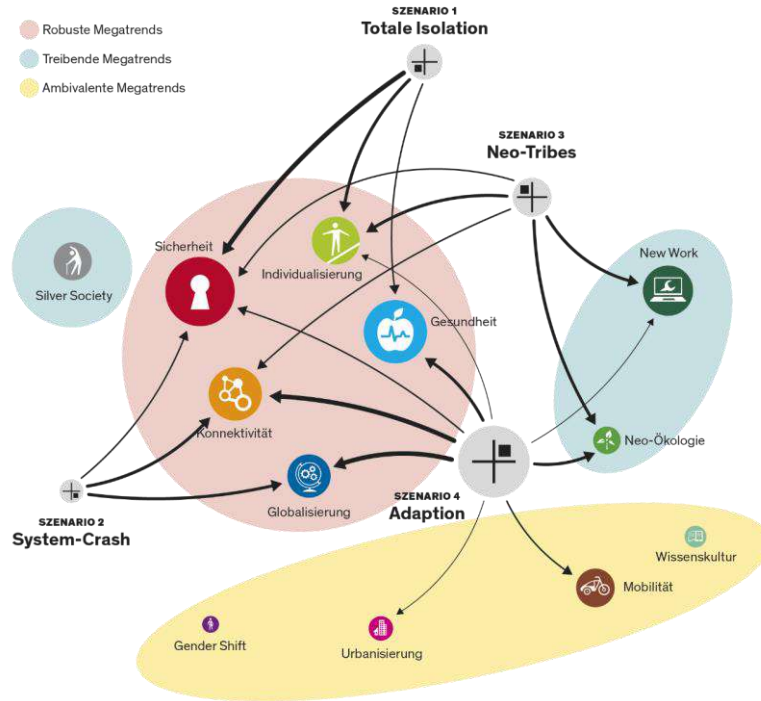
Name	Design Services (IDS)	Supply Chain Services (SCPMS)
Scenario 1 – Archetype 1: Local Textile Cluster	<ul style="list-style-type: none"> - IDS1: - - IDS2: helpful - IDS3: helpful - IDS4: helpful - IDS5: helpful - IDS6: helpful 	<ul style="list-style-type: none"> - SCPMS1: helpful - SCPMS2: helpful - SCPMS3: helpful - SCPMS4: important - SCPMS5: important - SCPMS6: helpful - SCPMS7: helpful - SCPMS8: important

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Covid 19 and Impact on Business Models

IMPACT MAP FÜR SZENARIEN UND MEGATRENDS



		Scenario 1	Scenario 2	Scenario 3:	Scenario 4:
FBD_BModel Scenario 1: Archetyp 1: Local Textile Cluster	ST	--	-	++	+
	EC	-	+	+	+/-
FBD_BModel Scenario 1: Archetyp 2: Micro Factory	ST	--	-	+/-	++
	EC	+/-	+	++	+

- In contradiction to “Zukunftsinstitut” the scenarios 1 and 2 are seen here as temporarily ones that will endure 1 to 2 Years. The scenarios 3 and 4 will follow them with a much longer duration.
- There is a distinction between a more stationary kind of distribution (stationary trade: ST) and a more E-shop/E-Commerce kind of distribution (E-Shop/E-Commerce: EC) for each archetype.
- Scenario 4 will be for some regional archetypes worse than Scenario 3 as (partial) global positioned competitors will show up.

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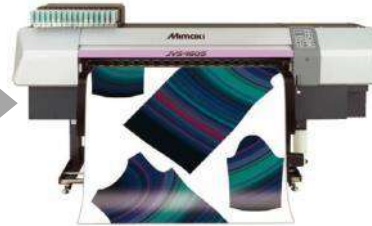
Principle



3D CAD



Colour & RIP



Printing



Cutting

DITF Digital Textile Micro Factory

DITF

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Body Scan



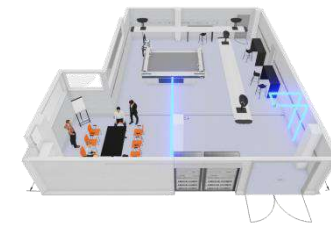
3DCAD/Design



Colour & RIP



AR/VR



Mittelstand-Digital



future**TEX**

IT Backoffice



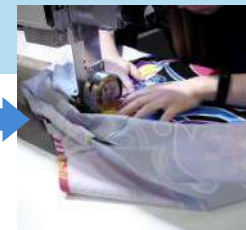
Printing



Cutting



Handling



Assembling



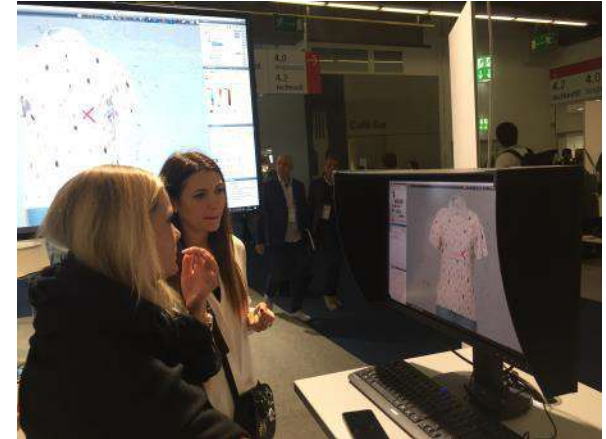
DTMF at DITF

- Digital seamless, configurable and scaleable
- Enabling local value creation, on-demand production, made-to-measure and sustainability



Technical Application Scenarios

- Factory-in-Shop:
 - A micro factory in a retail and marketing environment focusing to customer & consumer interaction
- (Stand alone) Factory with upscaled capacities
 - Using the principles of integration, digitisation and sustainability for flexible on-demand production with high(er) production capacities, e.g. high-speed printing and/or multiple printers
- Factory-in-Factory
 - A micro factory as a work shop in a textile or garment factory (site) for dedicated production jobs
- Technological Centre / Lab
 - A micro factory as part of a technological centre or a lab (following the fab lab concept) for design, experimenting, co-creation, training&education (or just for demonstration) of textiles and clothing

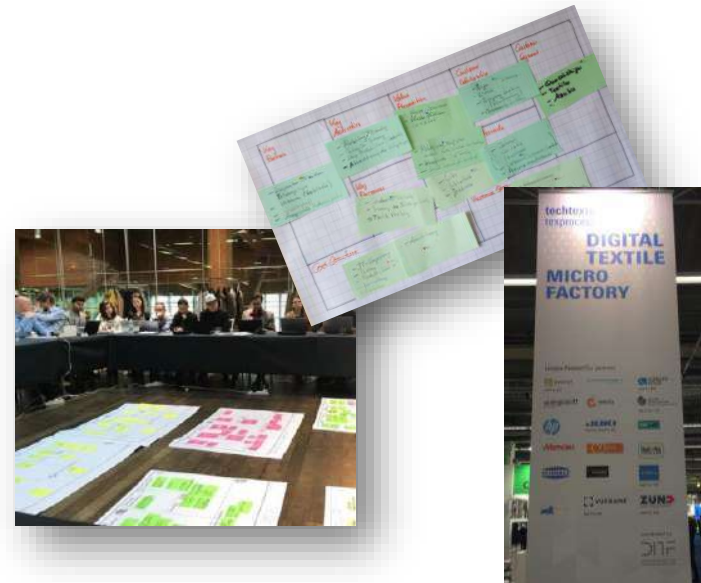


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Summary - what can we do for you

- Development of innovative production and business models
- Configuration of a Digital Textile Micro Factory
- Data analytics (AI, Big Data)
- Material Flow Cost Accounting (according DIN ISO 14051) for investigating and optimising material&energy efficiency





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The Future is Textile