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# Supply Chain Production Management:

Multidata services supporting small-series  
fashion production in EU



FASHION BIG DATA  
TECHNOLOGY PLATFORM:  
New digital business models for  
fashion and textile supply chains

19 February 2021

# SPEAKER PRESENTATION

Rudrajeet Pal is a practitioner, consultant, advisor, researcher and educator within the field of textile and fashion for over 15 years. He is Professor in Textile Value Chain Management at Swedish School of Textiles | University of Borås, Sweden, and holds a doctoral degree in engineering, specifically on resilience and risk management of textile and clothing supply chains during crises periods.

He has also worked as an expert for many organizations, such as United Nations Economic Commission for Europe, Swedish National Platform for Sustainable Textile and Fashion, and consultant to IFC (World Bank) and FCDO for different textile programs.

He has participated in many EU projects.



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## Top 3 words to describe the fashion industry

- What are the 5 adjectives you would use to describe how you feel about the fashion industry
- N = 274 (International fashion executives and experts)
- «changing» «digital», «fast»

	2016	2017	2018
First	<b>Uncertain</b> 54	<b>Uncertain</b> 53	<b>Changing</b> 34
Second	<b>Changing</b> 31	<b>Challenging</b> 32	<b>Digital</b> 26
Third	<b>Challenging</b> 29	<b>Optimistic</b> 21	<b>Fast</b> 25

 New

Source: BOF – McKinsey State of Fashion Survey (2019)



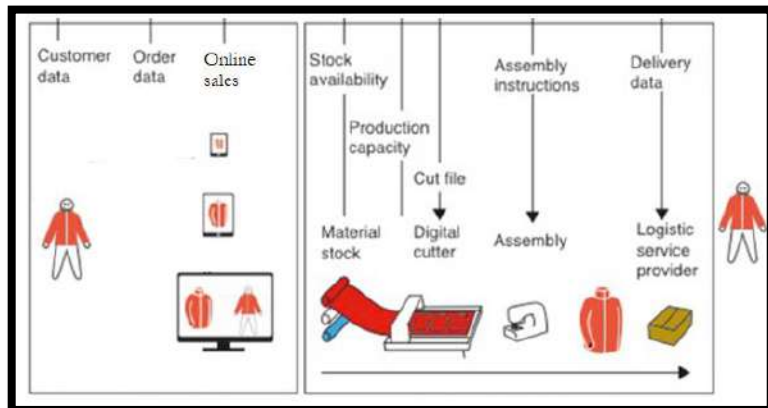
This project has received funding from the European Union's Horizon2020 research and innovation programme under grant agreement n. 761122



# «Digital» + «Fast» textile-fashion supply chain – The Success Factors

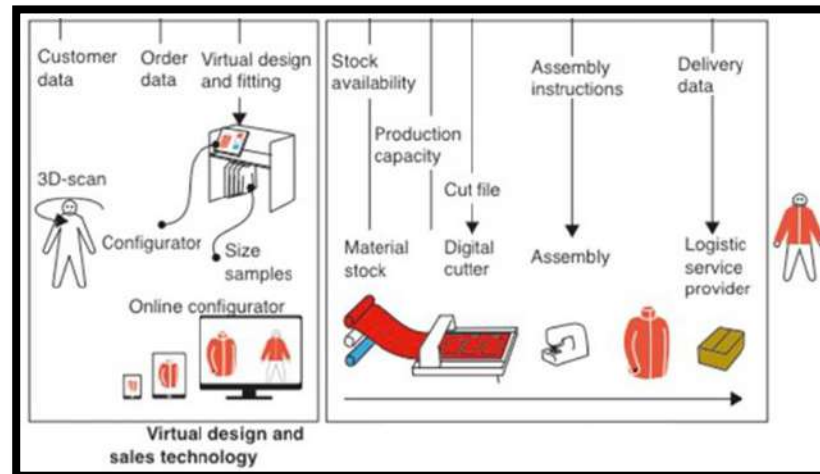
## FBD\_Bmodel's interactive & integrated fashion network

### Traditional on-line fashion chain

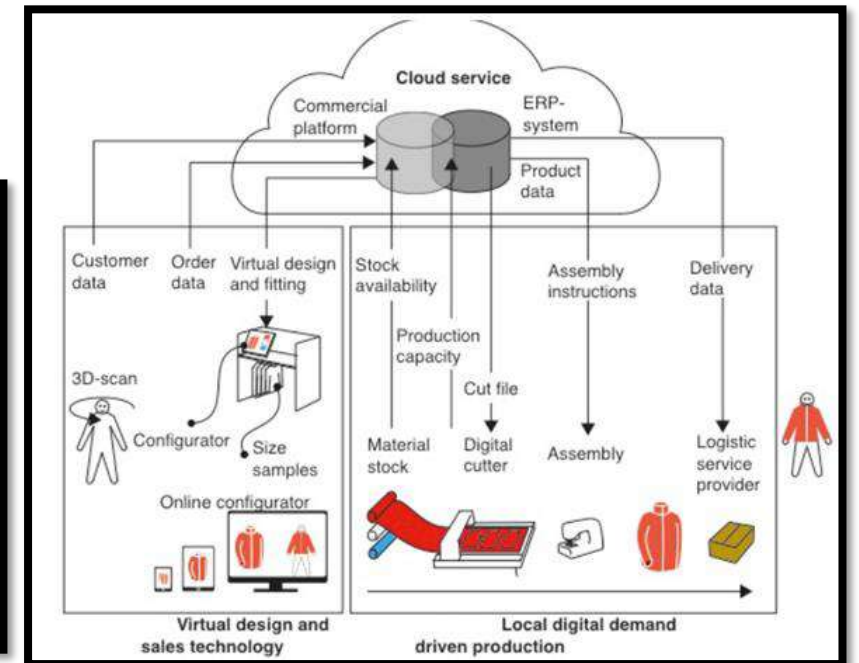


- B2B/B2C: Based on economies of scale to stock
- Low demand-drivenness
- Long (6-8 months)
- High inventory and High unsold stock

### Customized on-line fashion chain



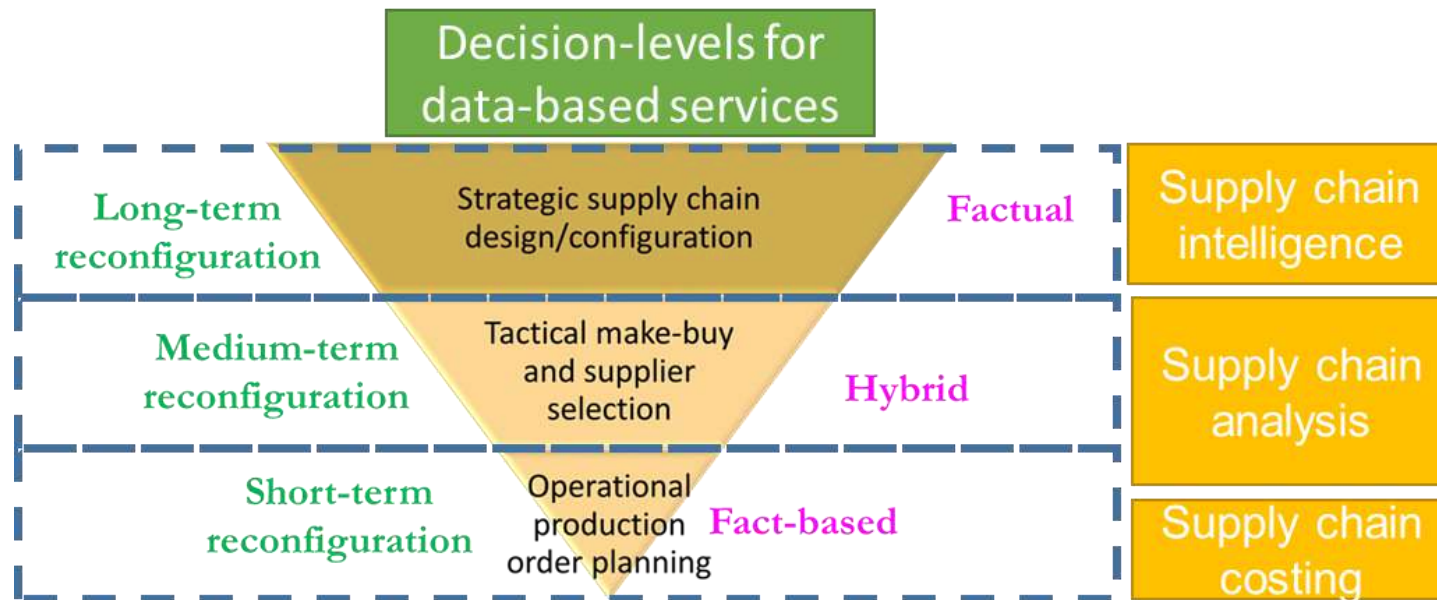
- B2C: Made-to-measure/one-piece fashion
- B2B: Upstream is still stock based
- Higher (But on consumer side mainly)
- Short (7-14 days)
- High fabrics inventory and Unsold fabrics



- B2B2C: Demand-driven, Engineer-to-order
- B2C: Made-to-measure/one-piece fashion
- B2B: Small-series
- Higher (End-to-End)
- Short (2-3 days)



# Need for decision-support for enabling «Digital» + «Fast» - Textile-fashion supply chain – **Our Offer**



Supply chain as service (SCaS)

Internalization of knowledge intensity

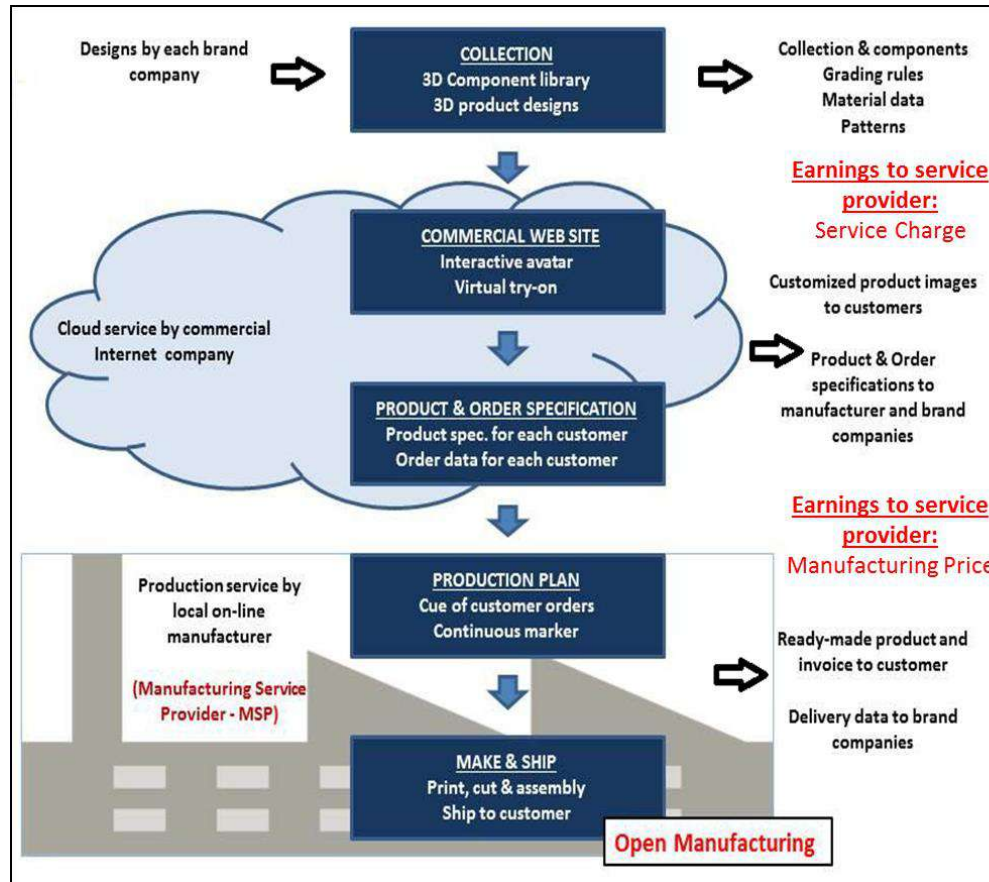
ONE STOP FOR  
MULTI  
DATASERVICES FOR  
SUPPLY CHAIN

<https://tvcm.ths.hb.se/>



# Data-driven Supply chain Intelligence: AT STRATEGIC LEVEL

- Product architecture
- Process Integration
- Value chain structure
- Collaborative relationships



<https://tvcm.ths.hb.se/fbd/>

## Supply Network Design & Reconfiguration

Managing Supply Chain in small series Fashion Industry

### Offer

An application for offering the logics for designing & reconfiguring supply chain suited to/required for small-series, EU-based production.

### Utility

- ❑ Crucial to design future sustainable supply chains based on small-series, EU-based production.
- ❑ Understand how the different supply chain aspects influence each-other.
- ❑ Make long-term supply chain design decisions, when operations data is not applicable or available.



# Data-driven Supply chain analysis: AT TACTICAL LEVEL

## Supplier Selection

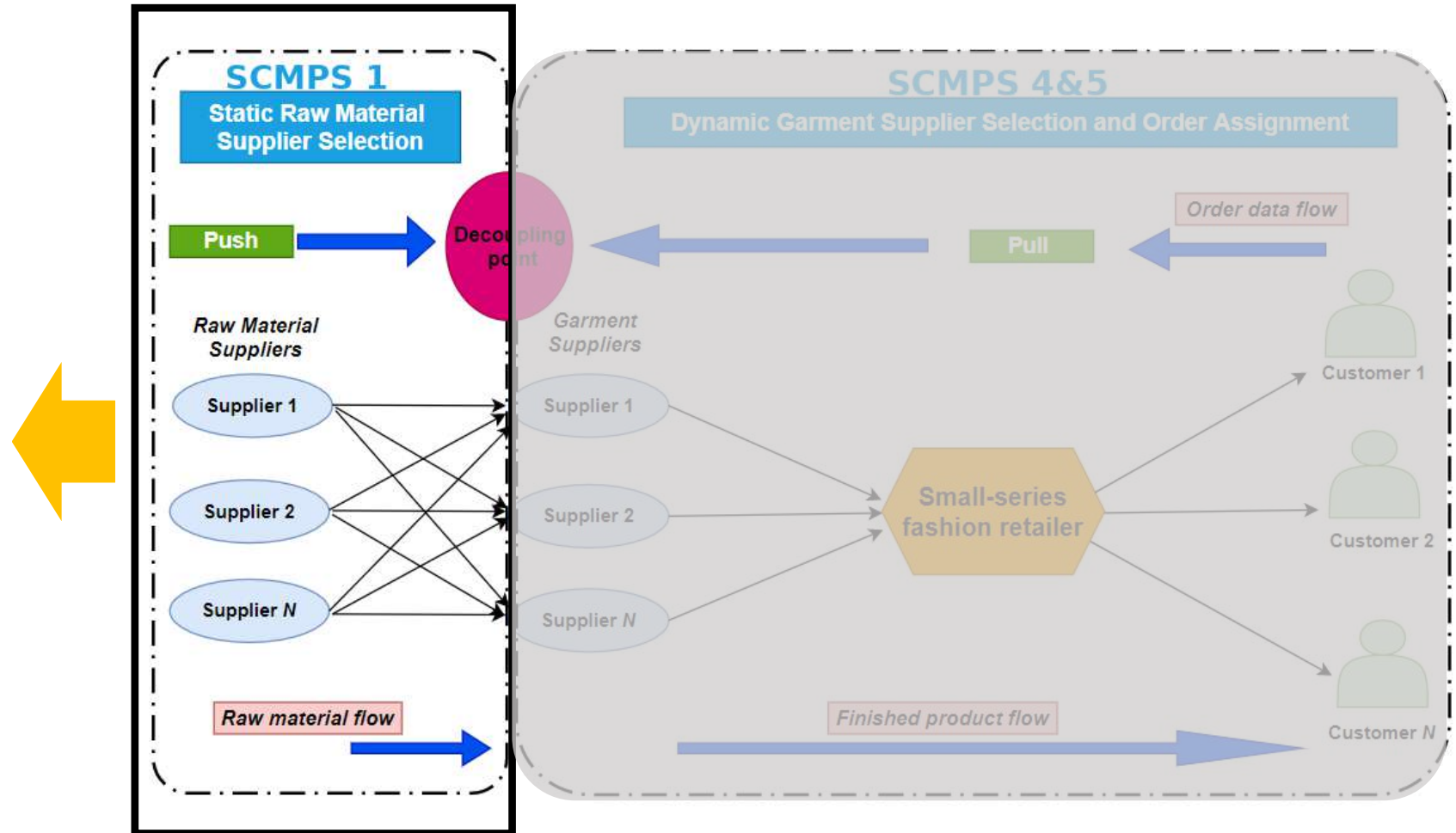
Managing Supply Chain in small series Fashion Industry

### Offer

Application for evaluating the relevance of suppliers following the importance of criteria and the level of the suppliers in these criteria

### Utility

- ❑ Crucial to determine a set of most important criteria for supplier evaluation
- ❑ Crucial to evaluate and select best supplier based on multicriteria

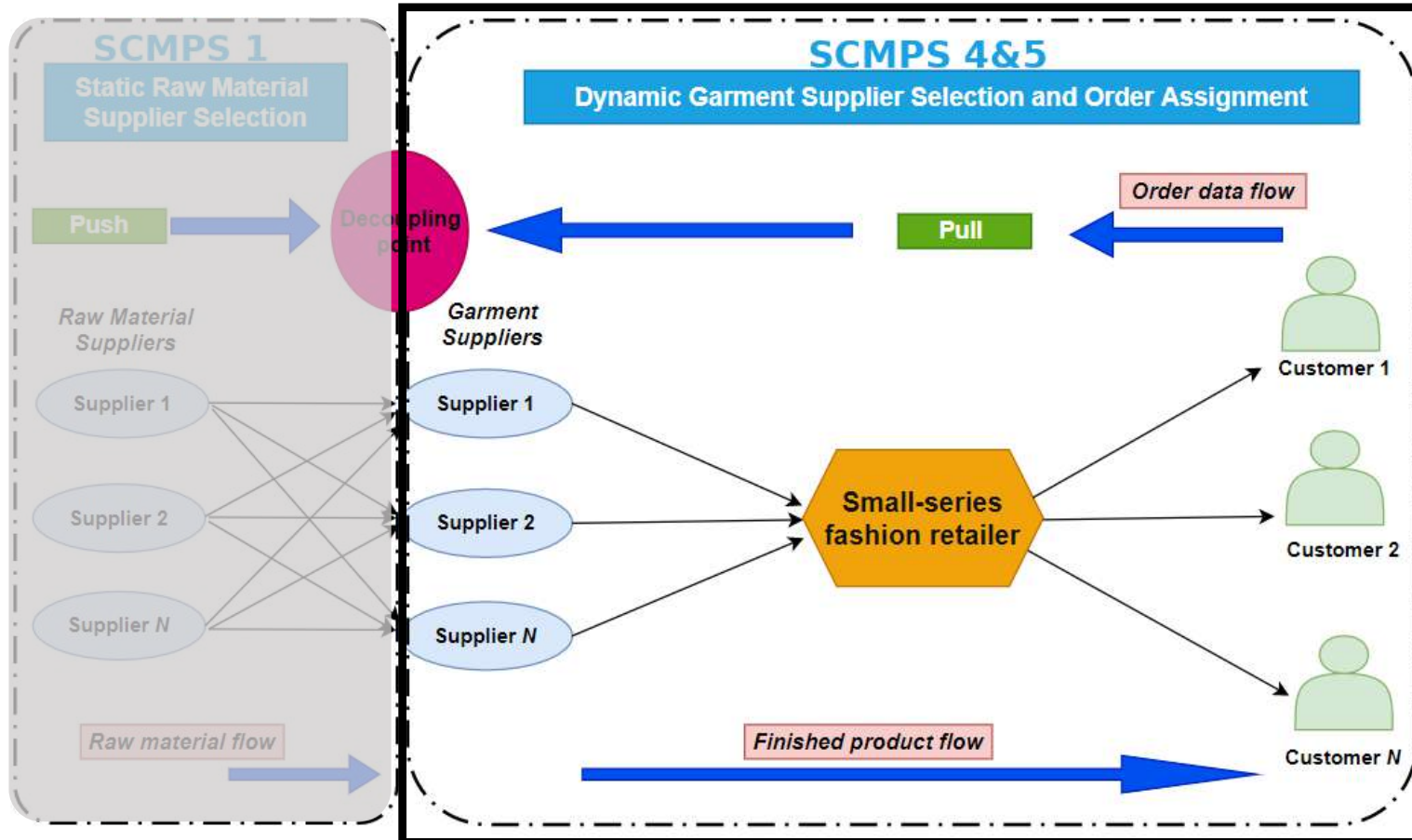


<http://scpms.ensait.fr/SCPMS1>



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# Data-driven Supply chain analysis: AT OPERATIONAL LEVEL



**Order Assignment & Scheduling**  
 Managing Supply Chain in small series Fashion Industry



**Offer**  
 An application for attributing orders between different suppliers.

**Utility**

- ❑ Crucial to assign a set of orders to the suppliers and evaluate the related KPIs (Key Performance Indicator)
- ❑ Crucial to develop graphical simulation results to optimization performance.

<http://scpms.ensait.fr/SCPMS4/displaychoice>  
<http://scpms.ensait.fr/SCPMS5/displaychoice>



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# Thanks for your attention



[www.fbd-bmodel.eu](http://www.fbd-bmodel.eu)



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