



2018

Data, Fashion System and Systemic Design approach: An information flow strategy to enhance sustainability

Tamborrini, Paolo, Remondino, Chiara and Marino, Cristina

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DATA, FASHION SYSTEM AND SYSTEMIC DESIGN APPROACH

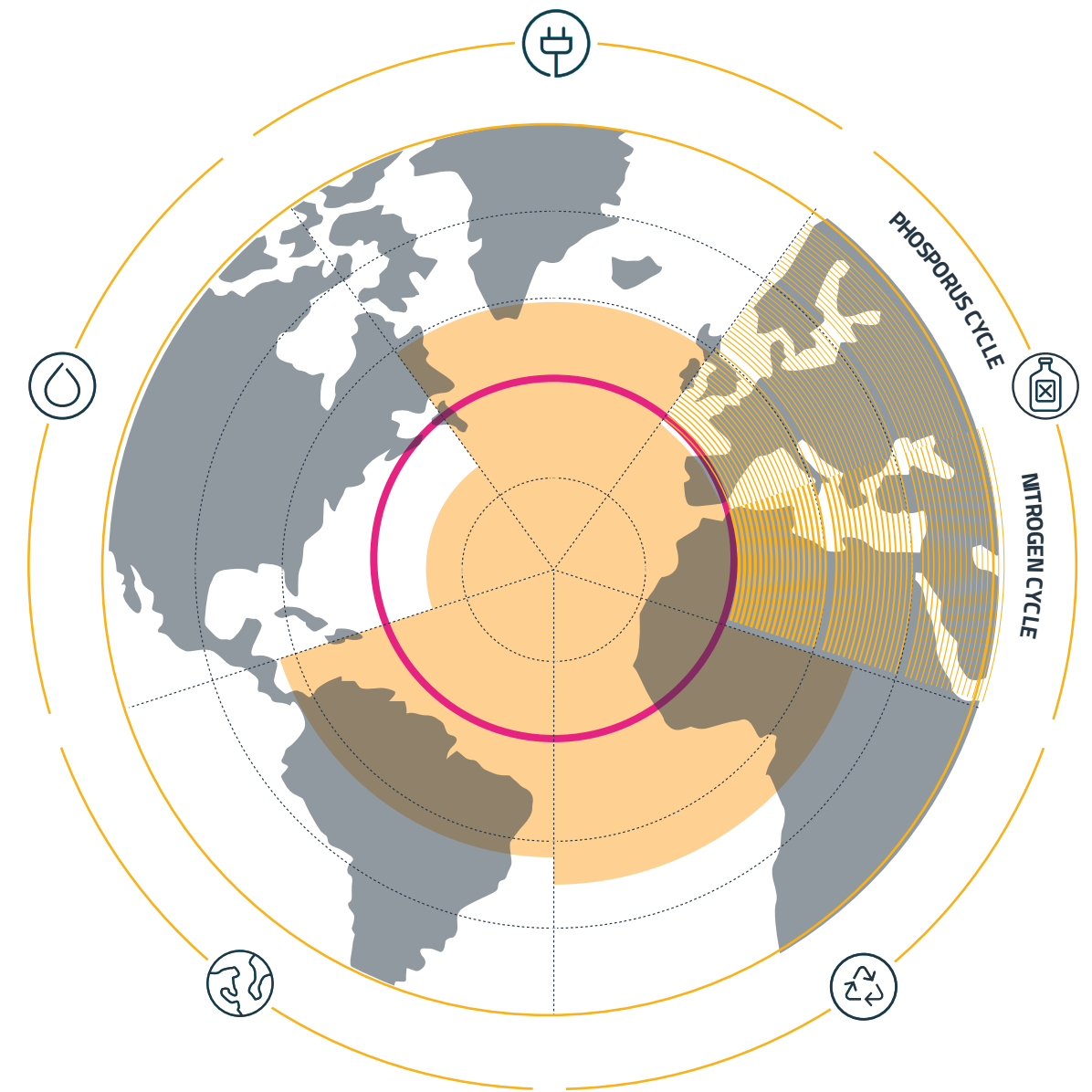
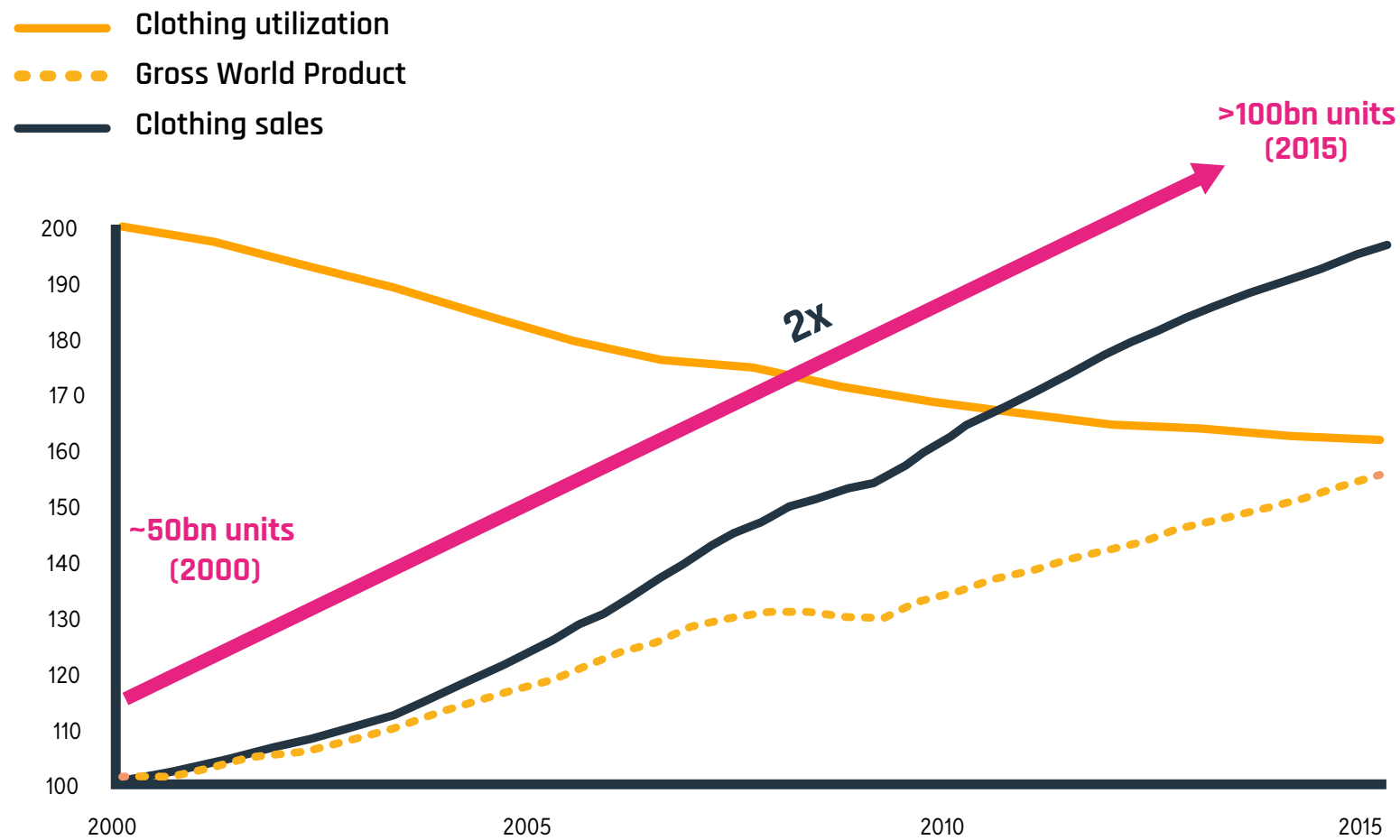
An information flow strategy to enhance sustainability

Tamborrini Paolo Marco
Remondino Chiara Lorenza
Marino Cristina

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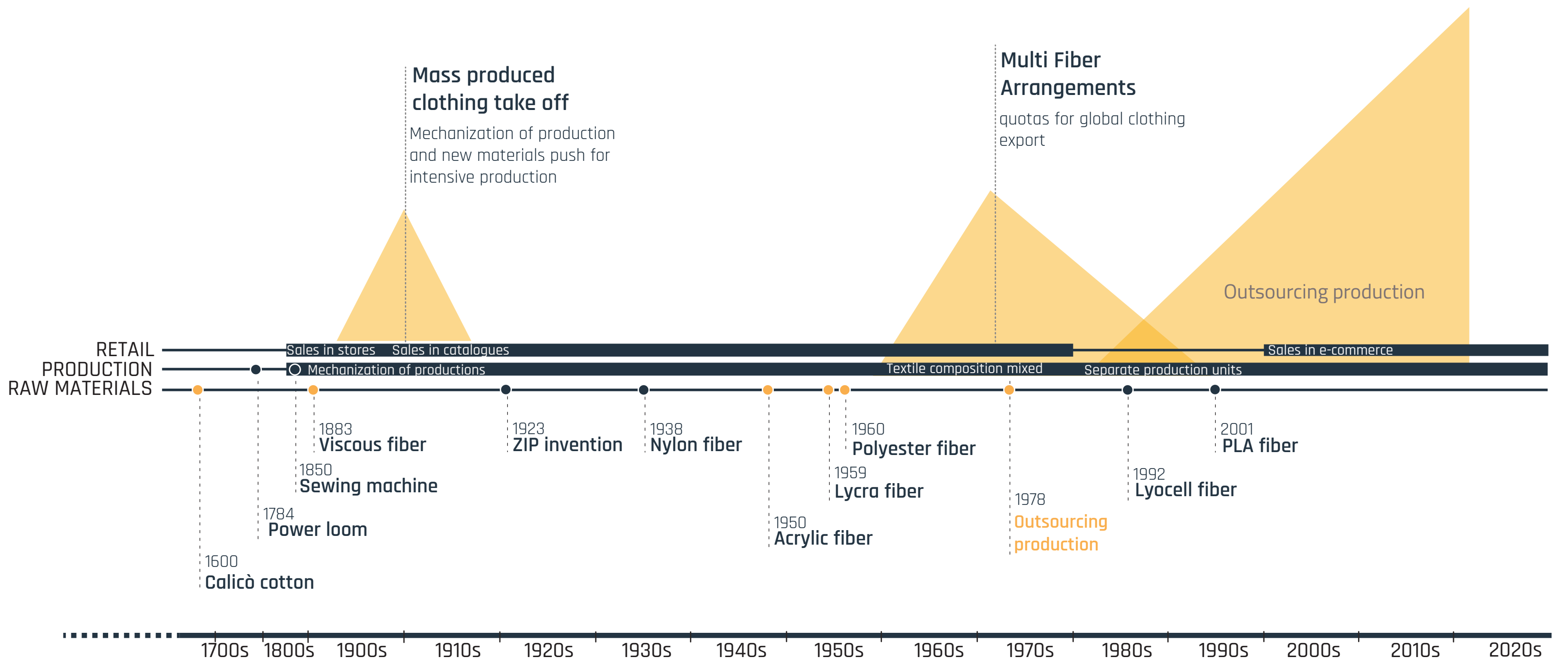
Fashion System and Planetary Boundaries

The Planetary Boundaries have already been breached

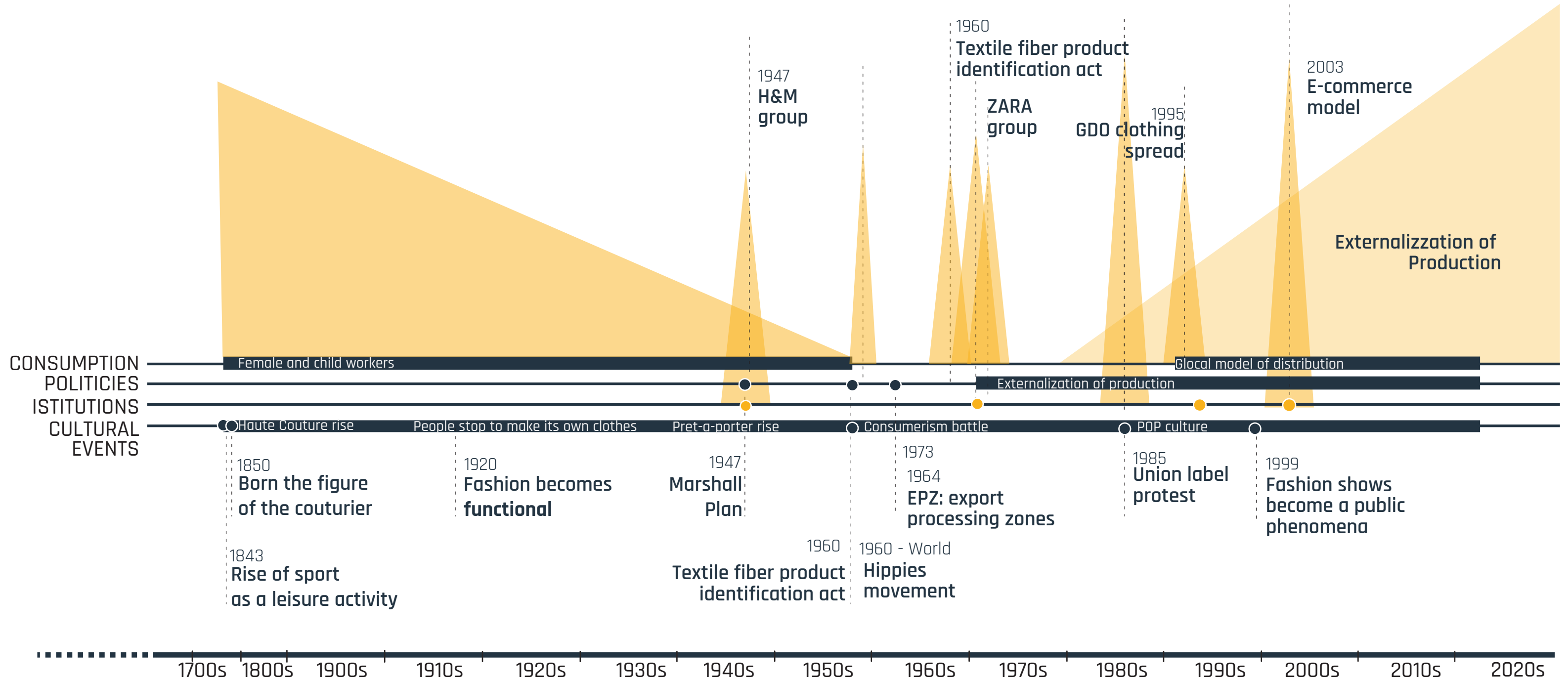


The Planetary Boundaries have already been breached

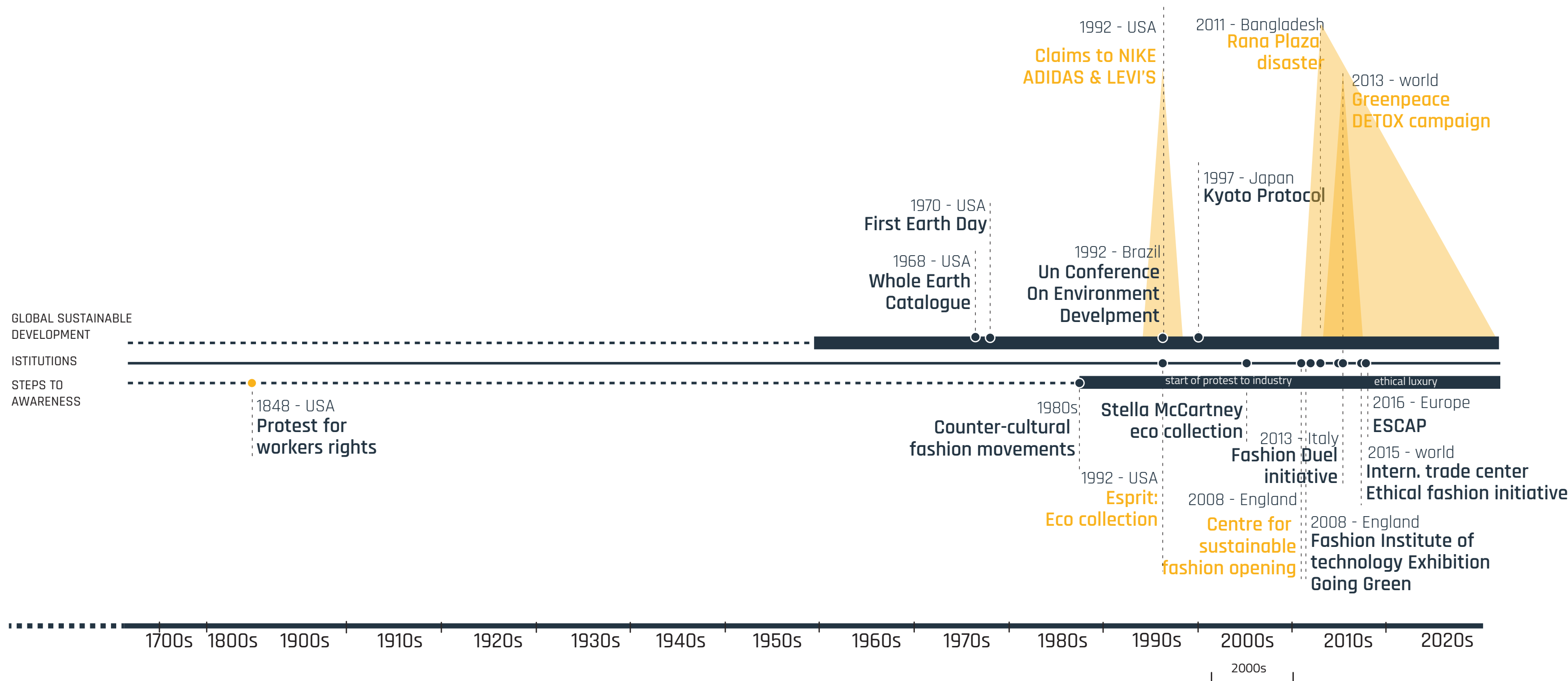
Historical analysis



Historical analysis



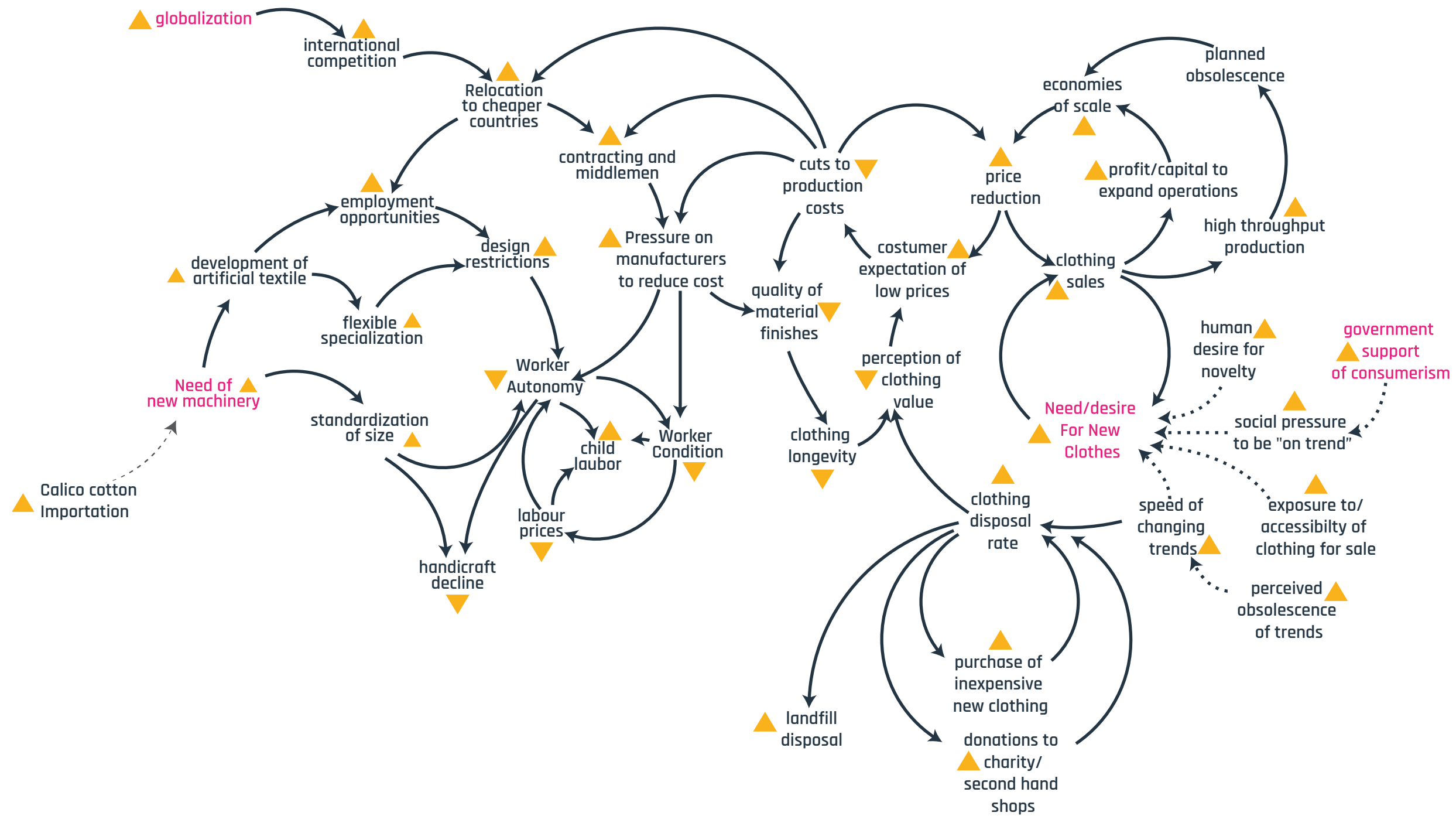
Historical analysis



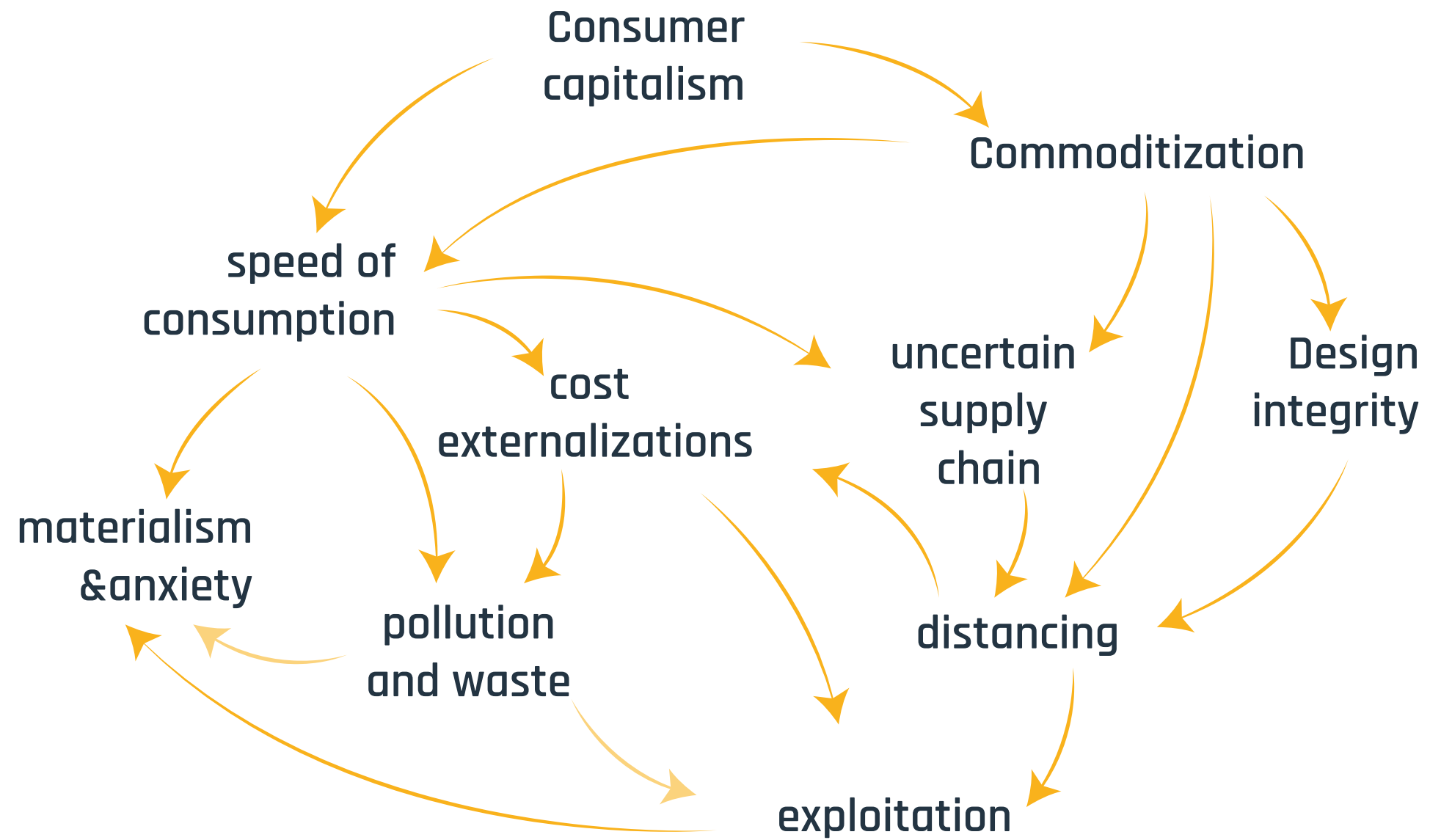
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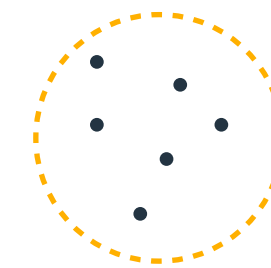
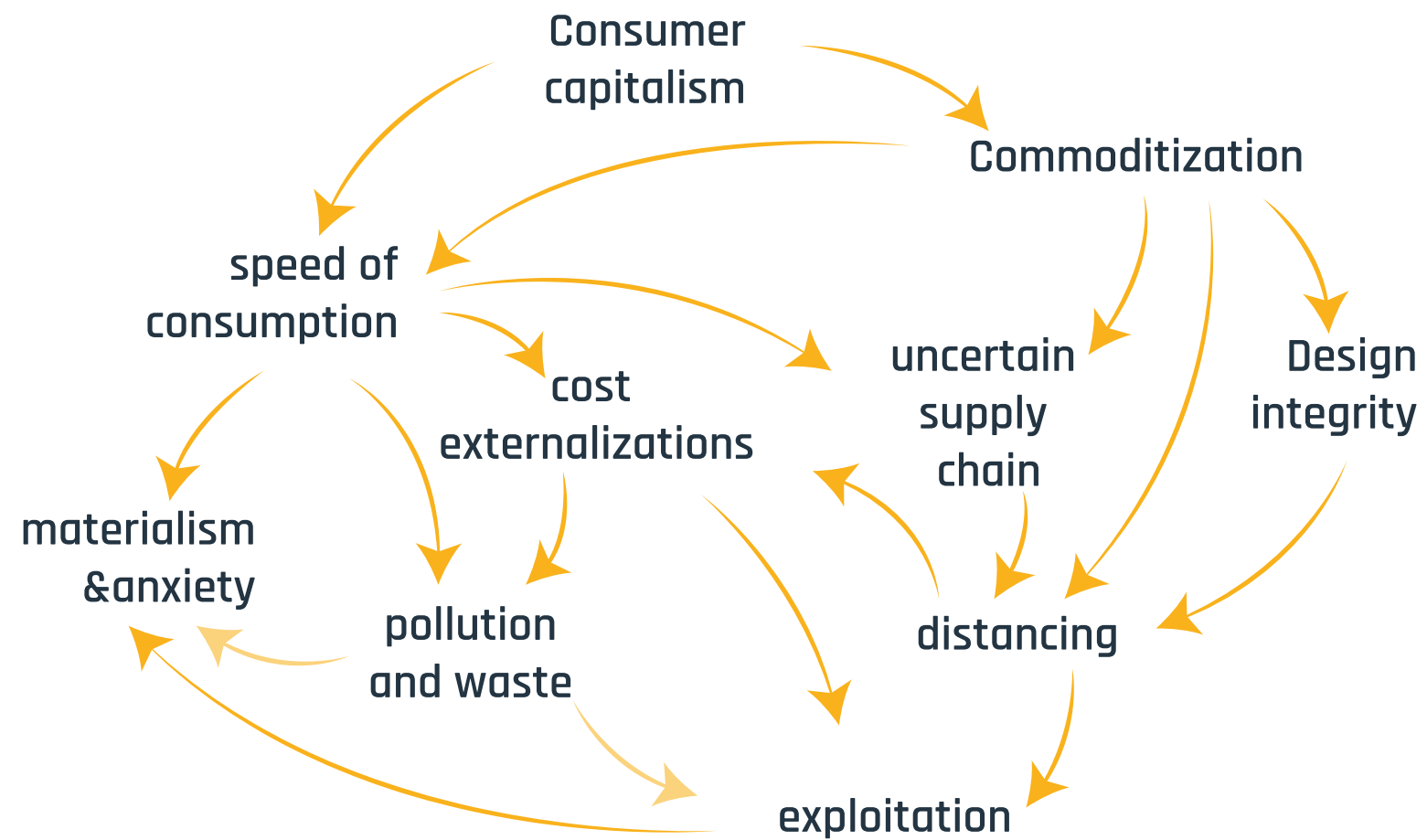
Influence analysis



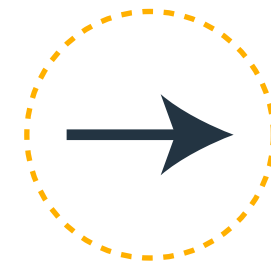
Influence analysis



Influence analysis



Disconnected



Linear

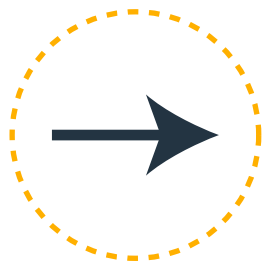


Profit oriented

Current Strategies



Disconnected



Linear



Profit oriented

lack of regulation able to protect the environment and workers

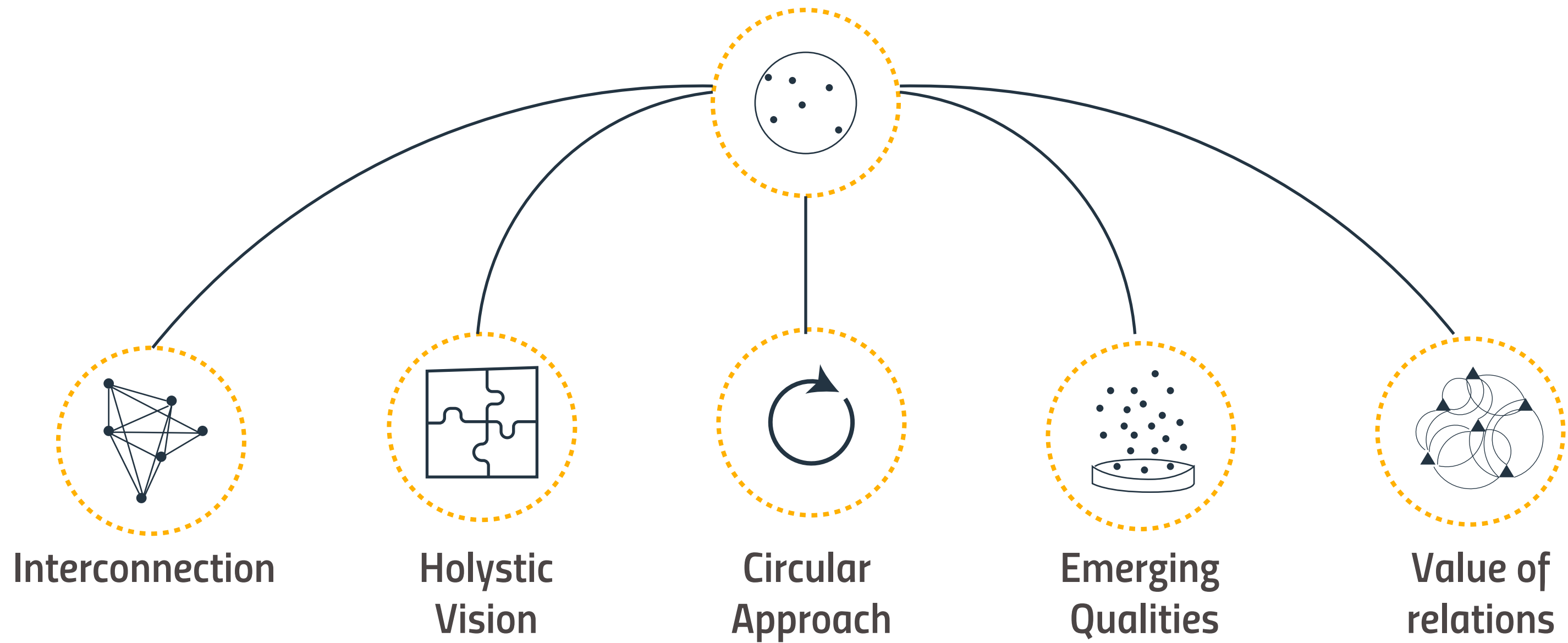
delay in undertaking systemic sustainability strategies



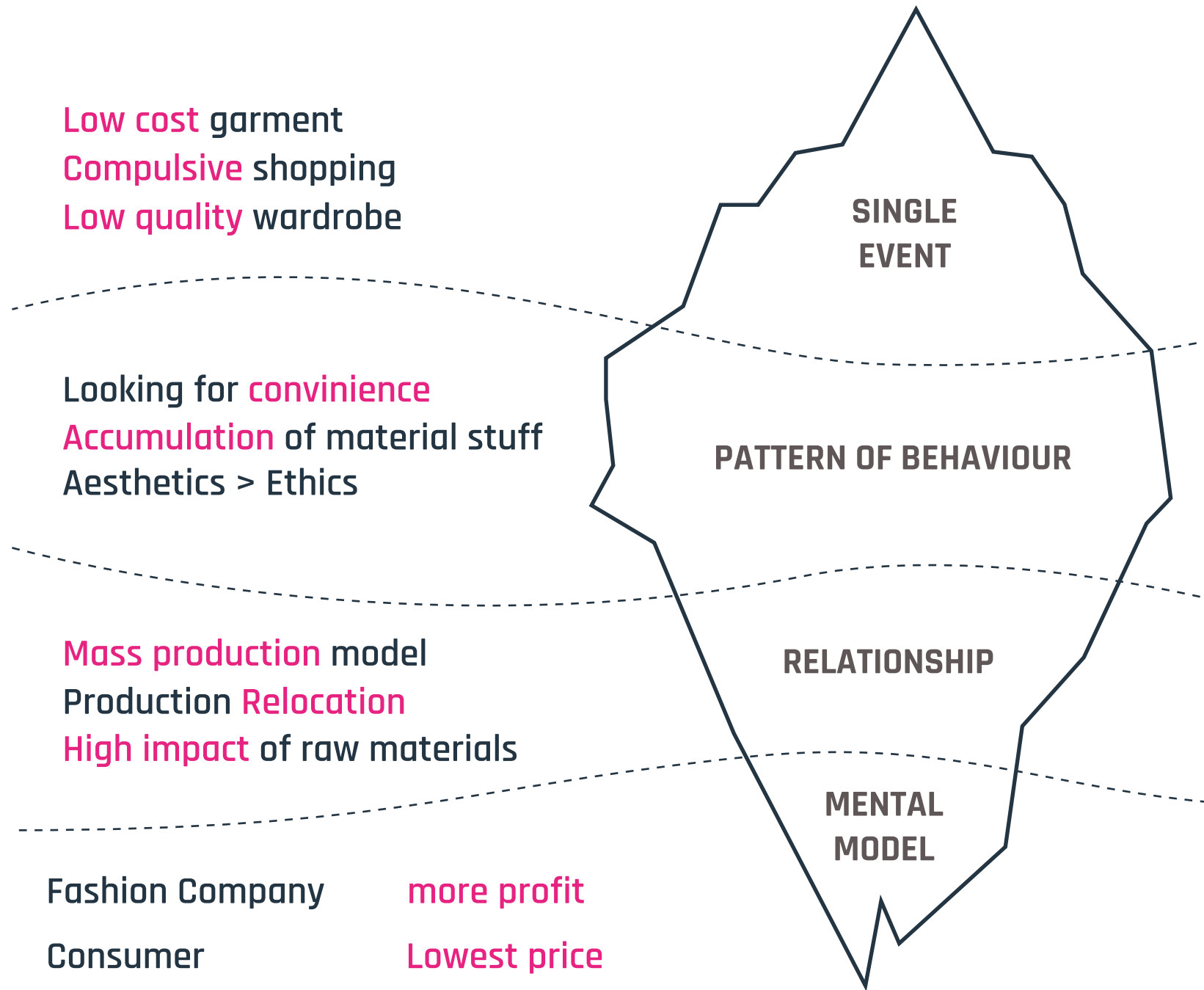
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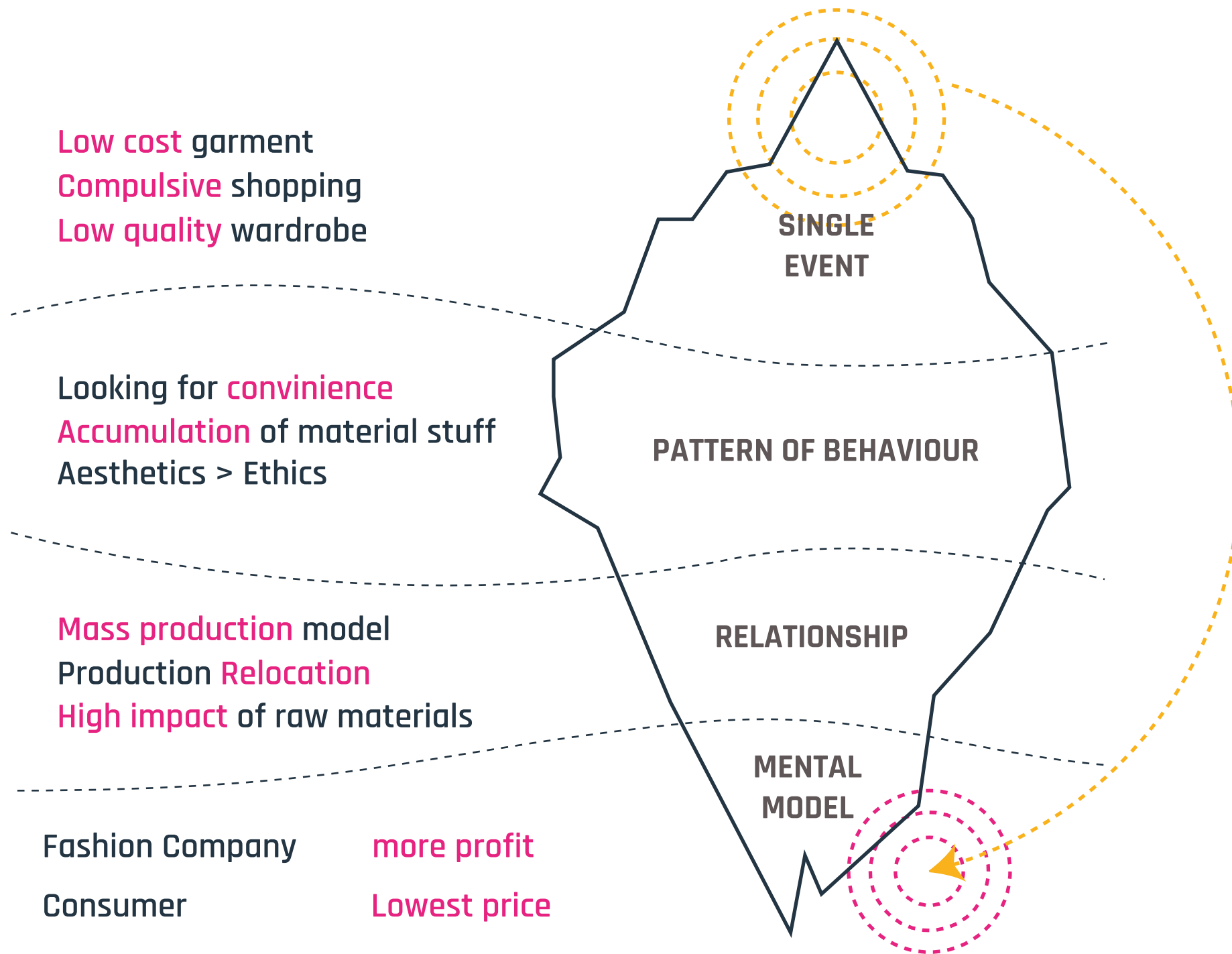
FASHION AS A SYSTEM



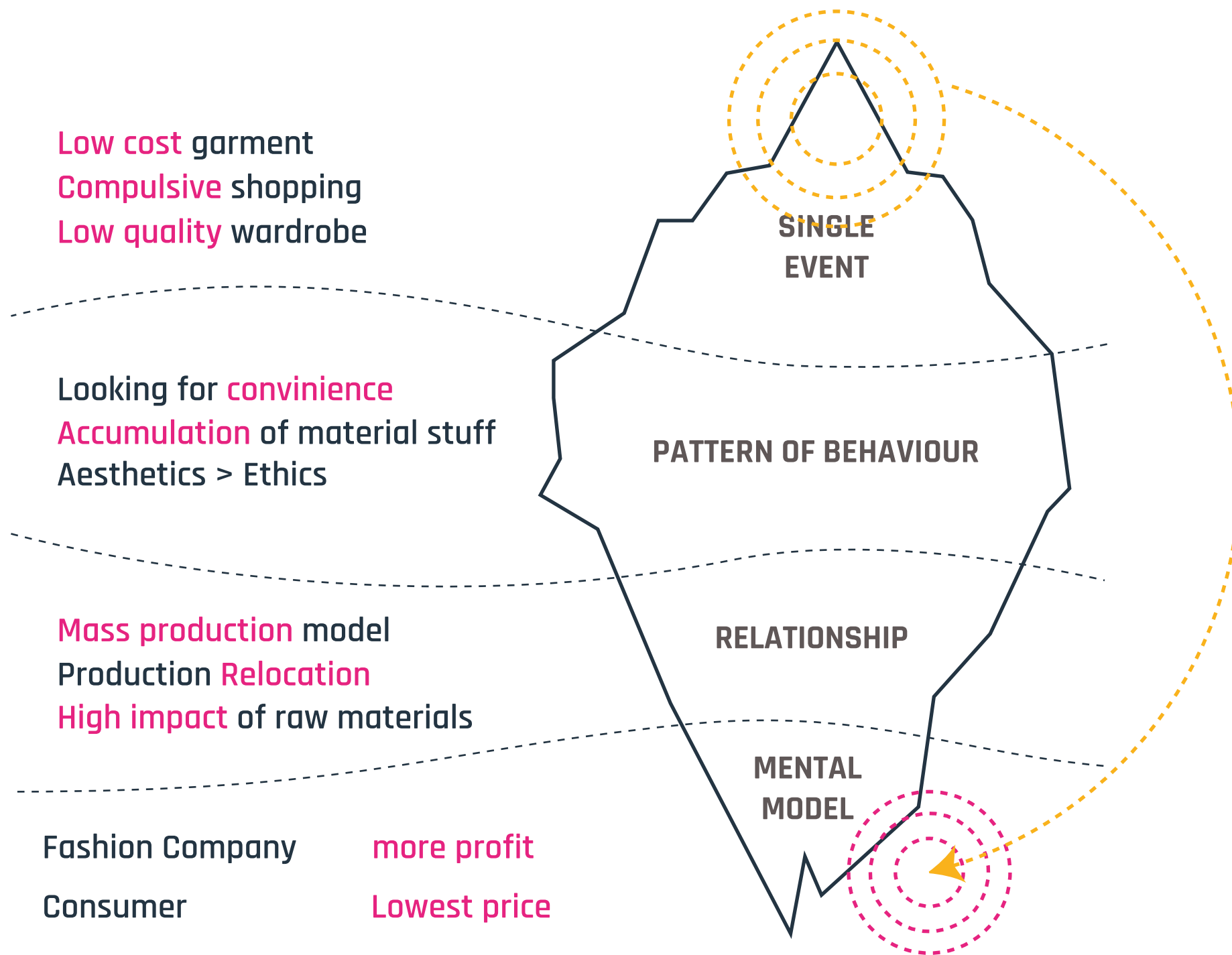
Leverage Points



Leverage Points



Leverage Points



Places to Intervene in a System

- 9 Numbers (subsidies, taxes, standards)
- 8 Material stock and flows
- 7 Regulating negative feedback loop
- 6 Driving positive feedback loop
- 5 Information flows**
- 4 The rules of the system (incentives, constraints)
- 3 The power of self-organization
- 2 The goals of the system
- 1 The mindset paradigm out of which the goals, rules, and feedback structure arise



Systemic management of information flows in fashion system



Mapping of information
flows inside the system



Generating new information
flows able to spread:

- ✓ sustainable information
- ✓ awareness about processes
- ✓ slow approach benefits



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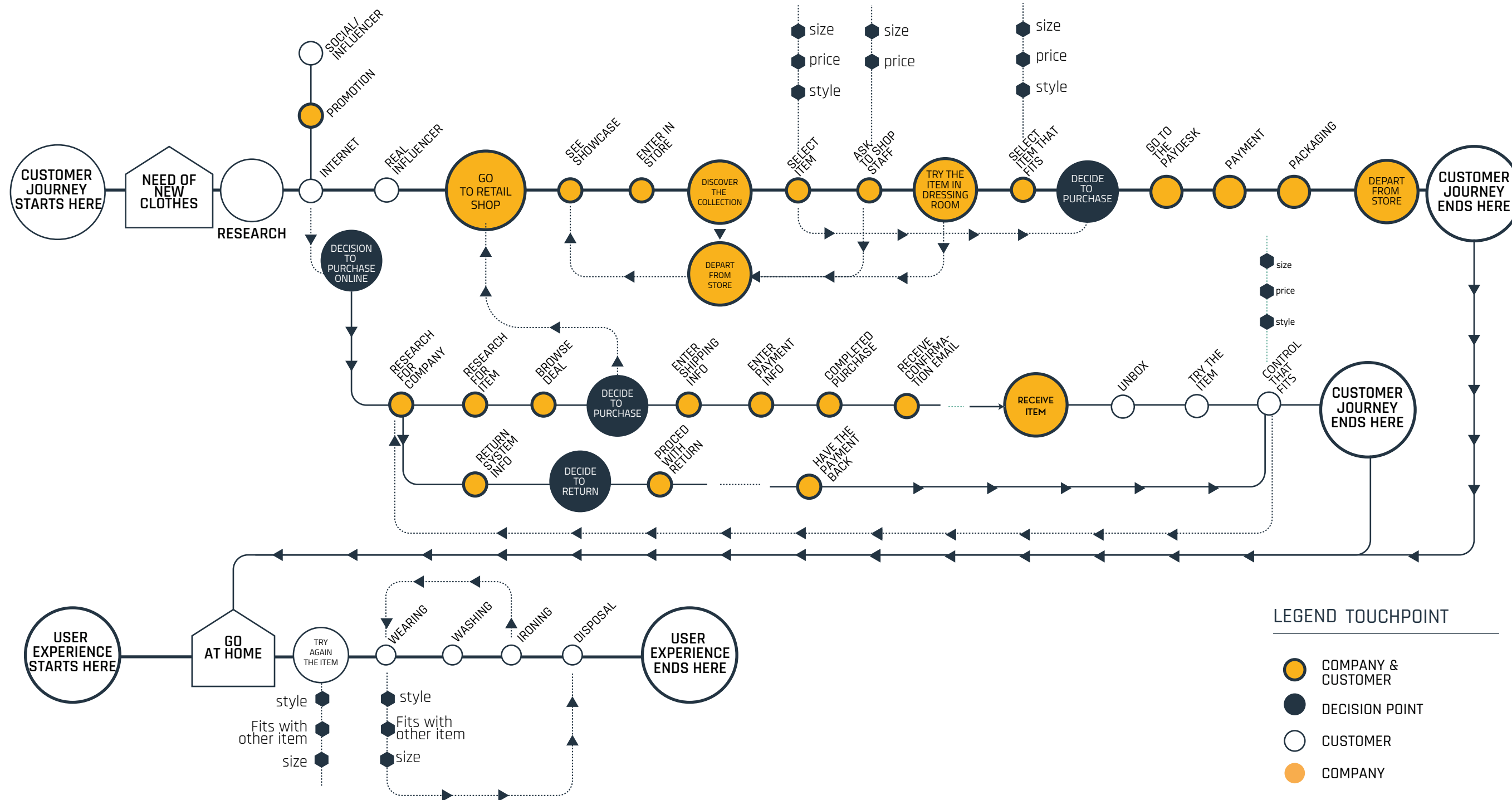
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The structure of information flow can be a **useful leverage point** in the fashion system if :

- the information is delivered where it was not before, causing **people to change behavior**.
- the new flows are **supported by incentives**
- adding to or changing the flow of information** between companies in a supply chain or between retailers, designers and consumers can **create significant changes for little effort**

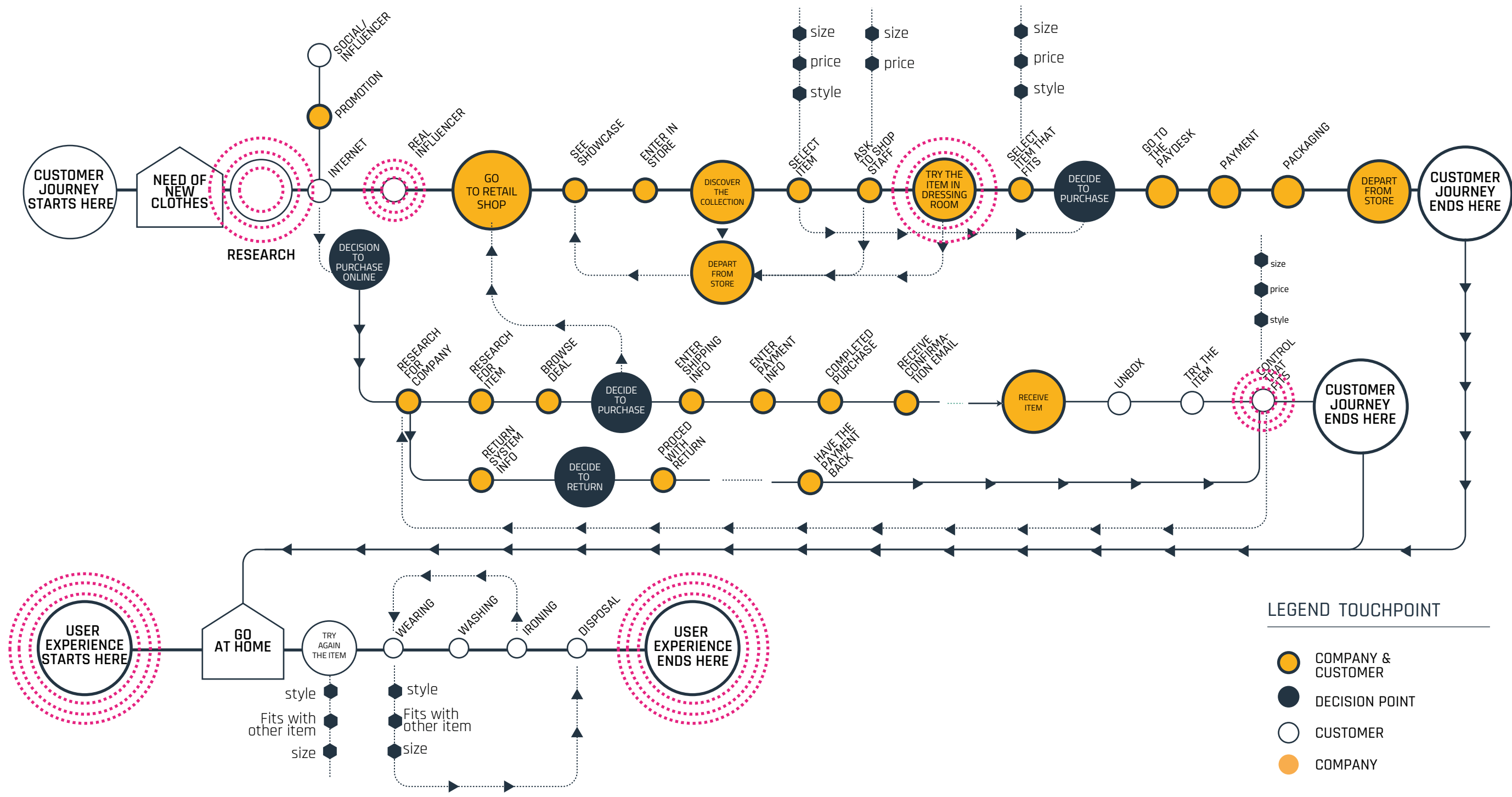
1. Meadows, D. (2008) *Thinking in Systems. A Primer*.
The Sustainability Institute: Chelsea Green Publishing Company

2. Fletcher, K. (2008) *Sustainable Fashion and Textiles: Design Journeys*. London: Earth Scan.



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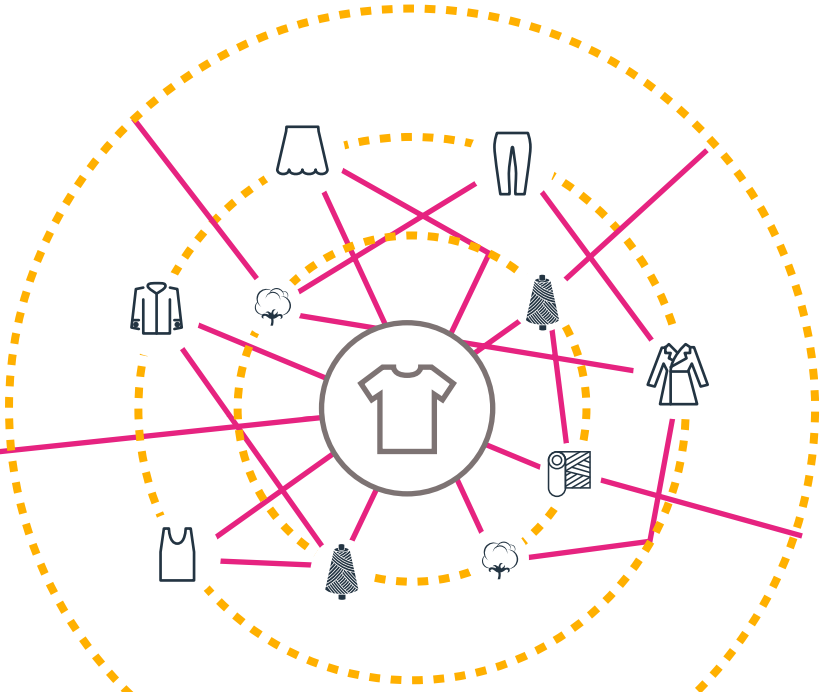
Data-set



Consumer

wardrobe

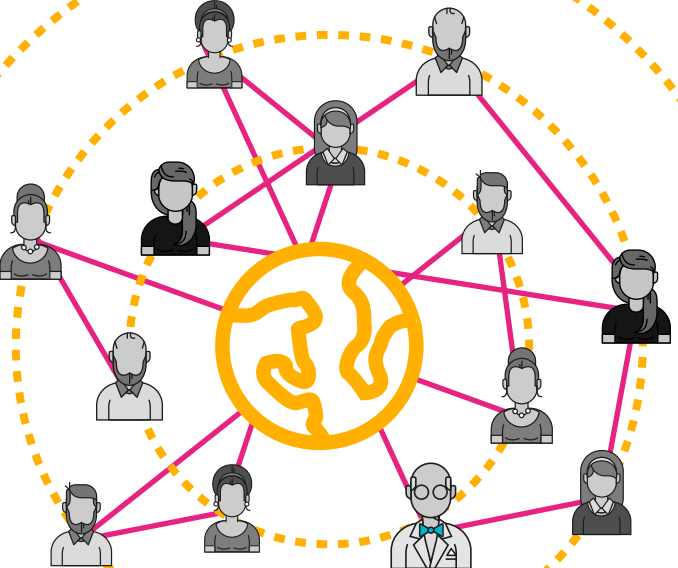
experience



Product

raw material

production

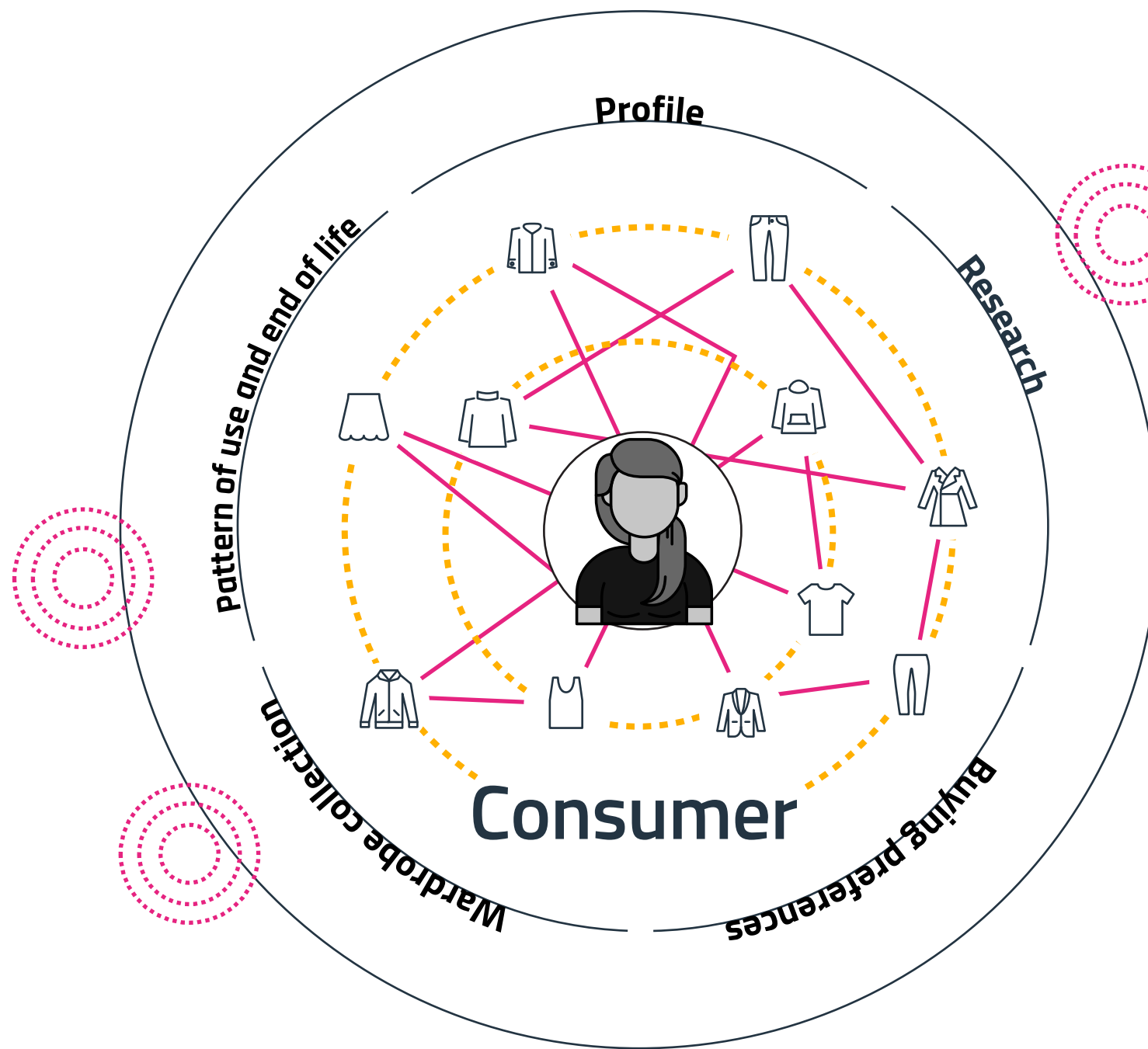


Territory

producer

pattern of behaviour

good practices
encourage

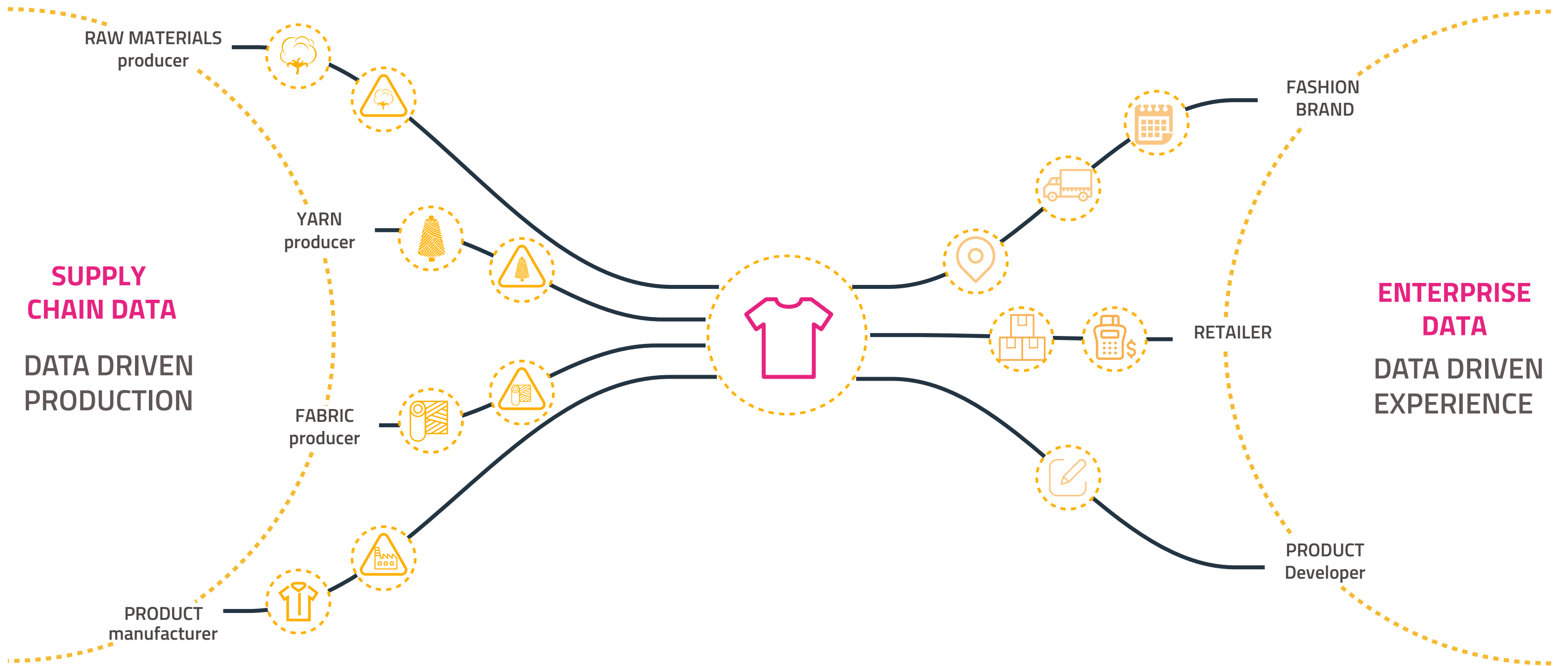


Predictive trend
analysis



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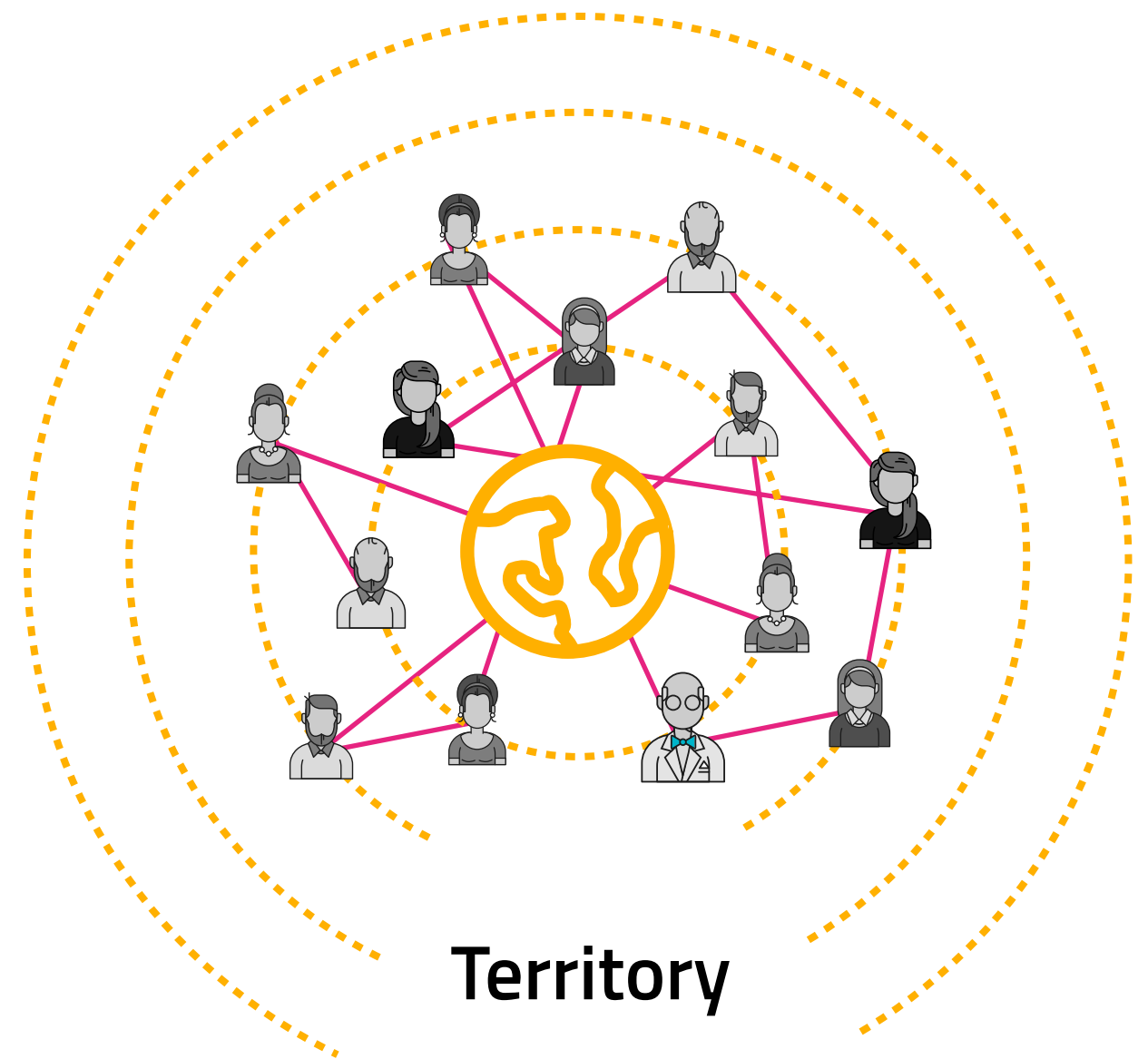
Local resources



Local production



Pattern of behaviour
in a specific territory



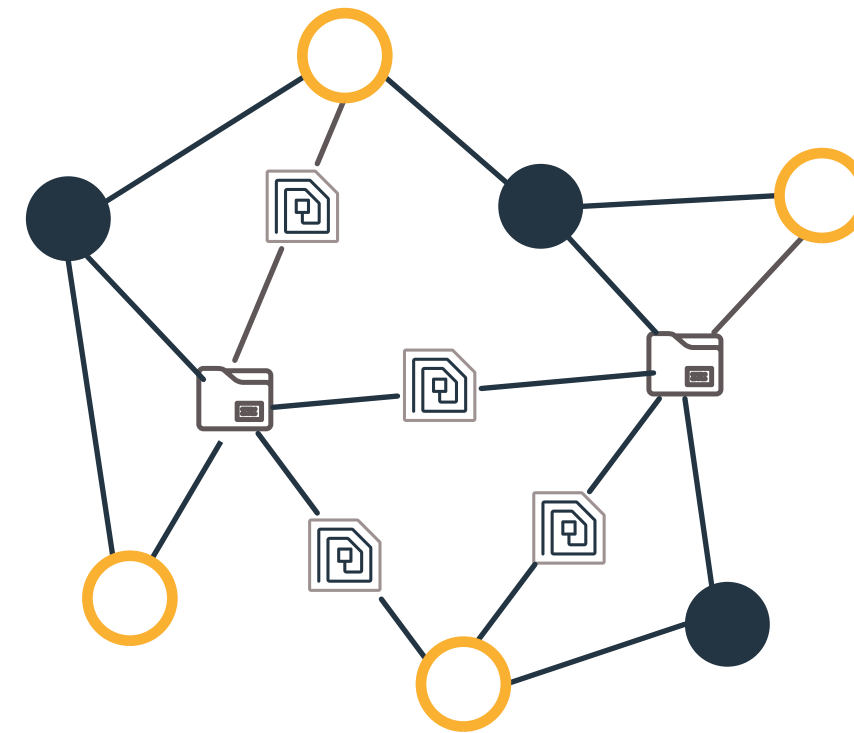
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RFID

NFC TECHNOLOGY



BLOCKCHAIN

Possible outcomes

Consumer

Track of consumer habits

Decision making support during shopping

Good practice post use encourage

Product/Service

Data Driven production

New service for enhance sustainable practice

Sustainable management of end of use

Production stakeholder

Decision Making toolkit

Mapping local production

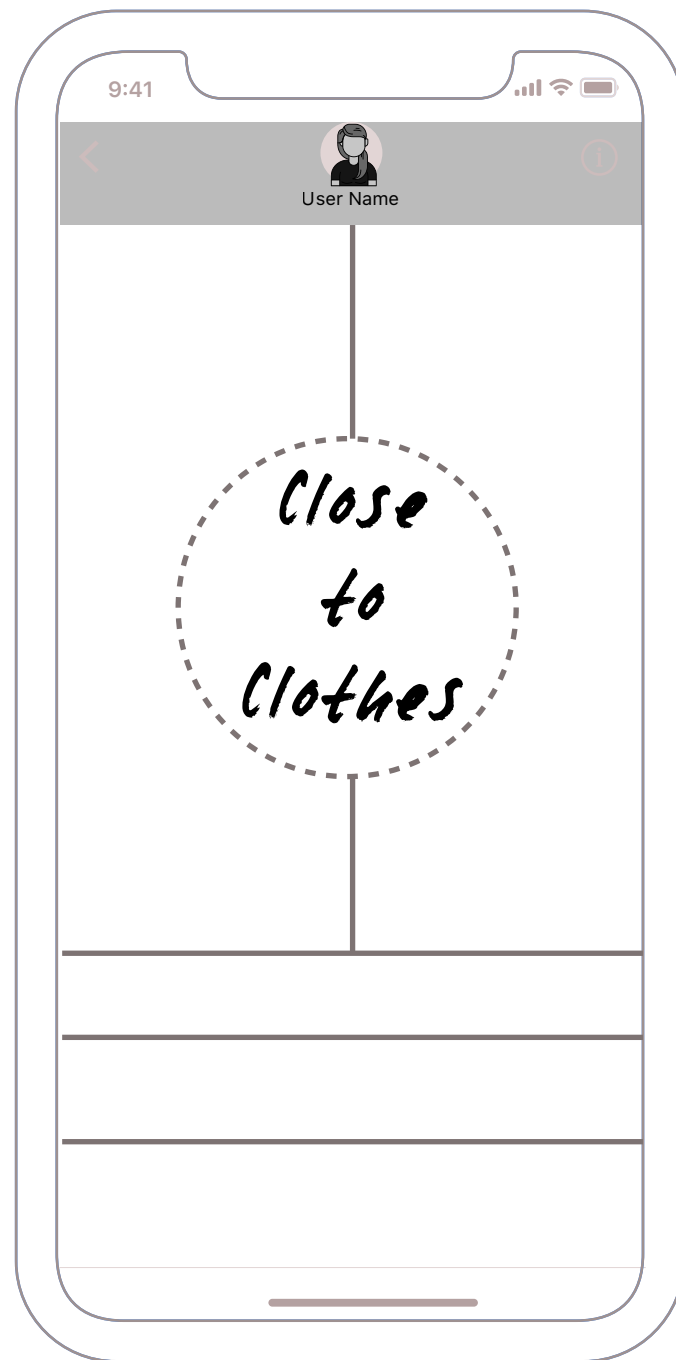
Pattern of behaviour in a specific territory



Wardrobe
impact

Pattern of use
between garments
categories

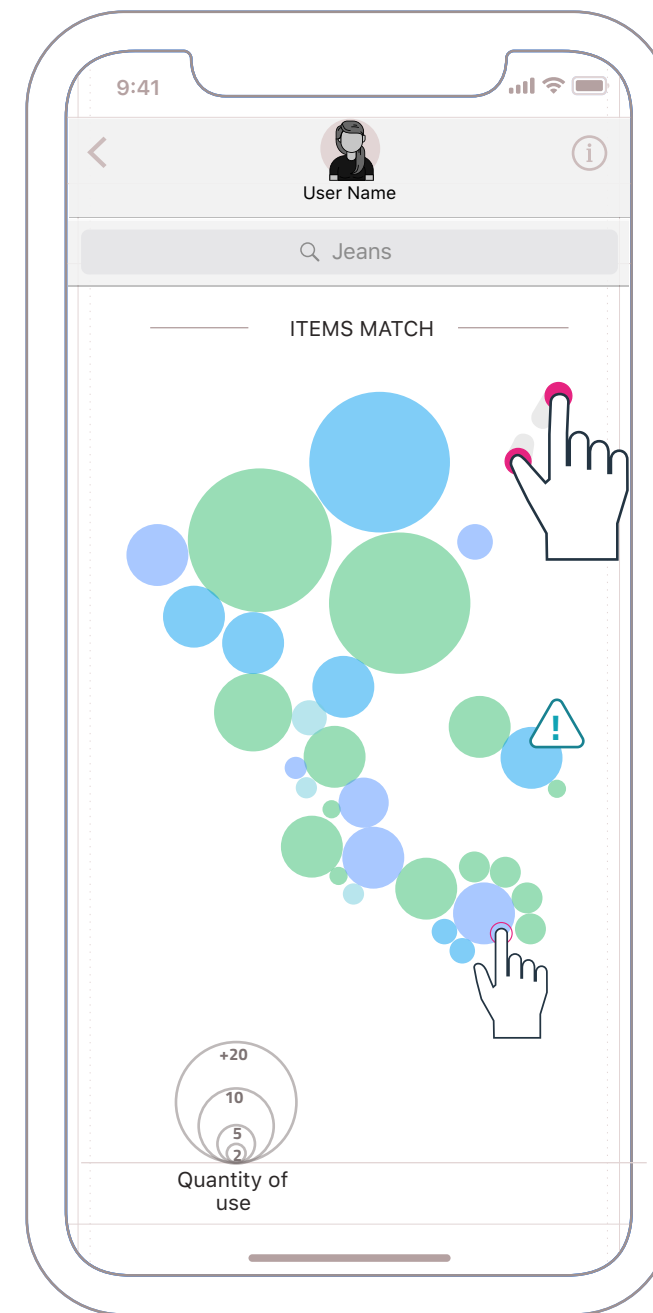
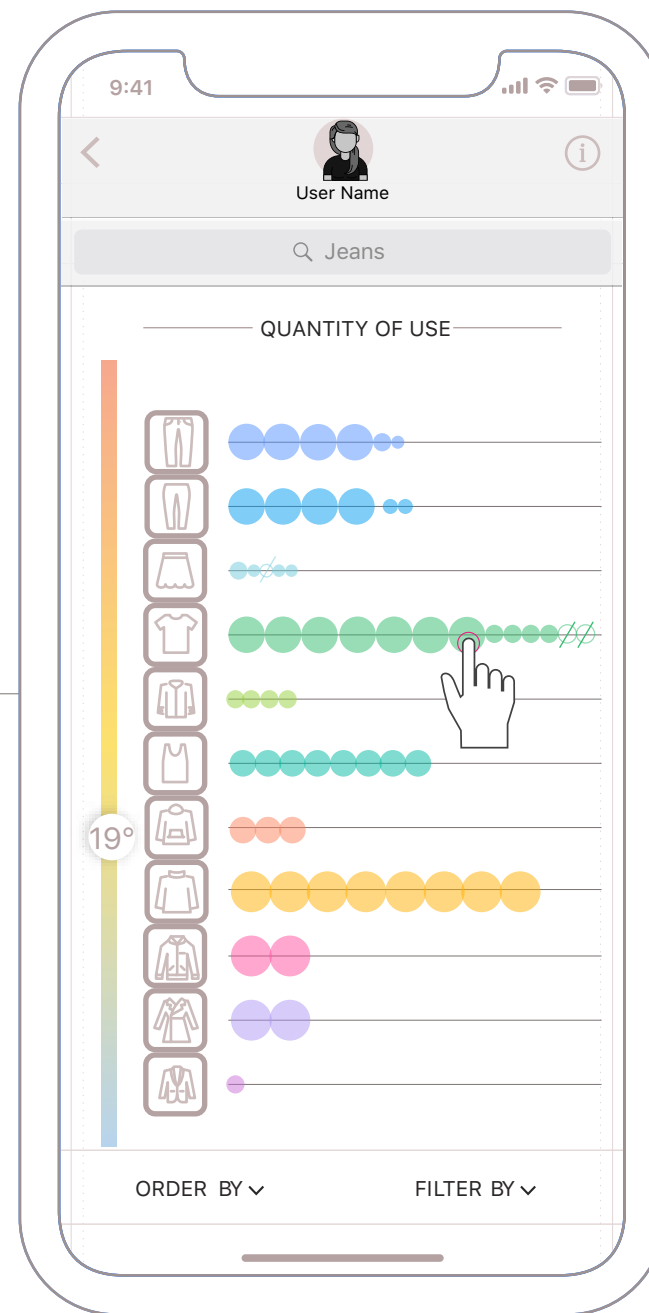
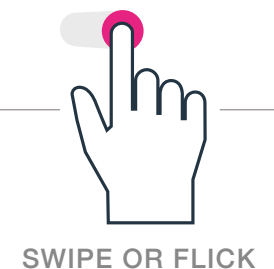
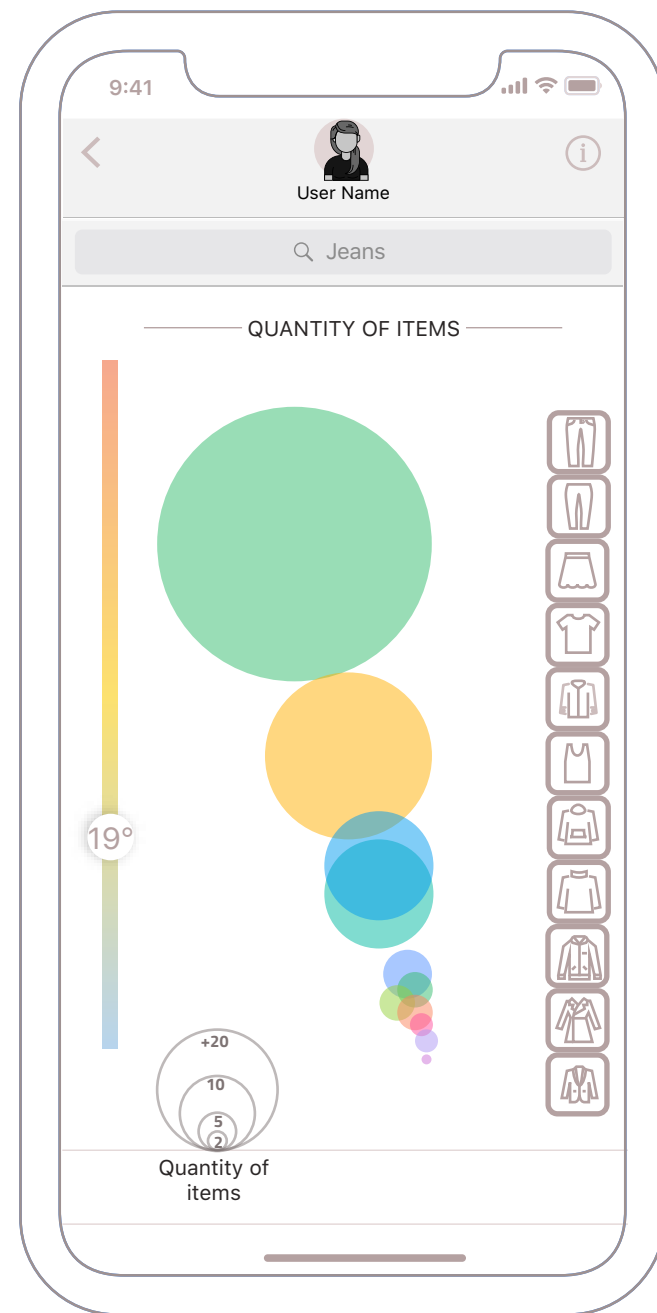
Quantity of use
of single item



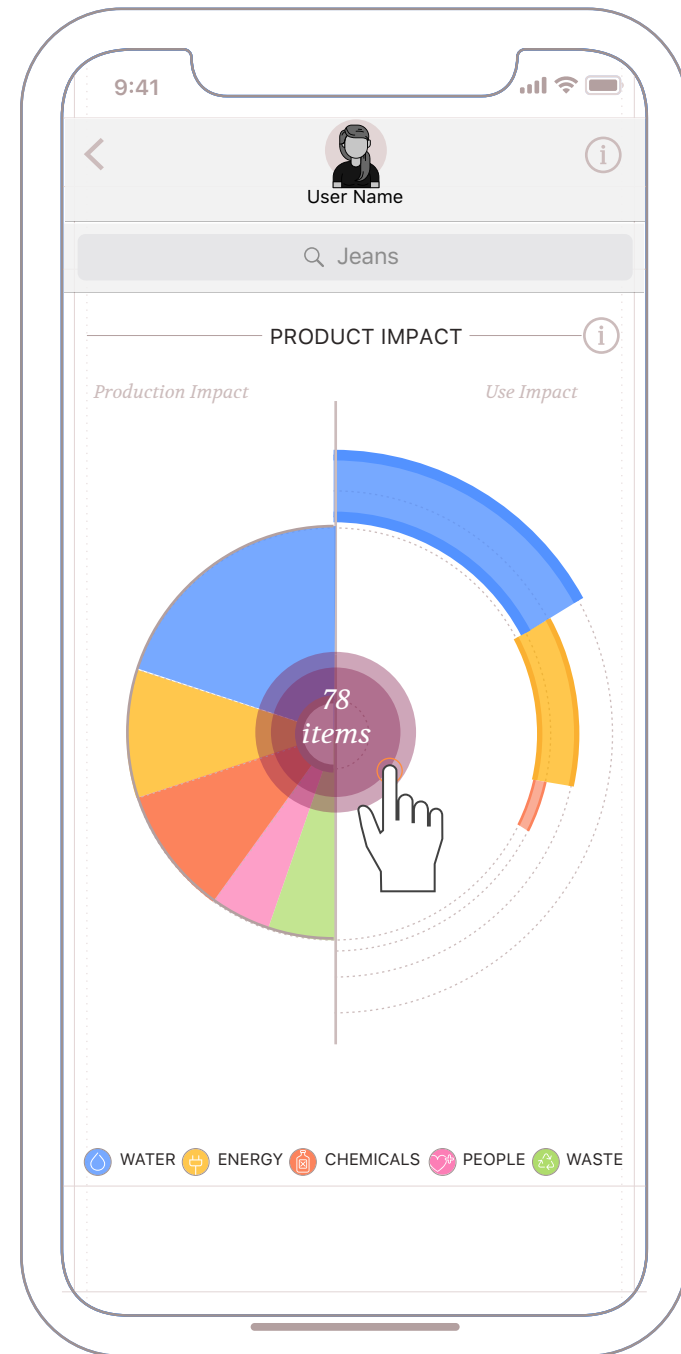
Impact of single item

Pattern of use
between single
item

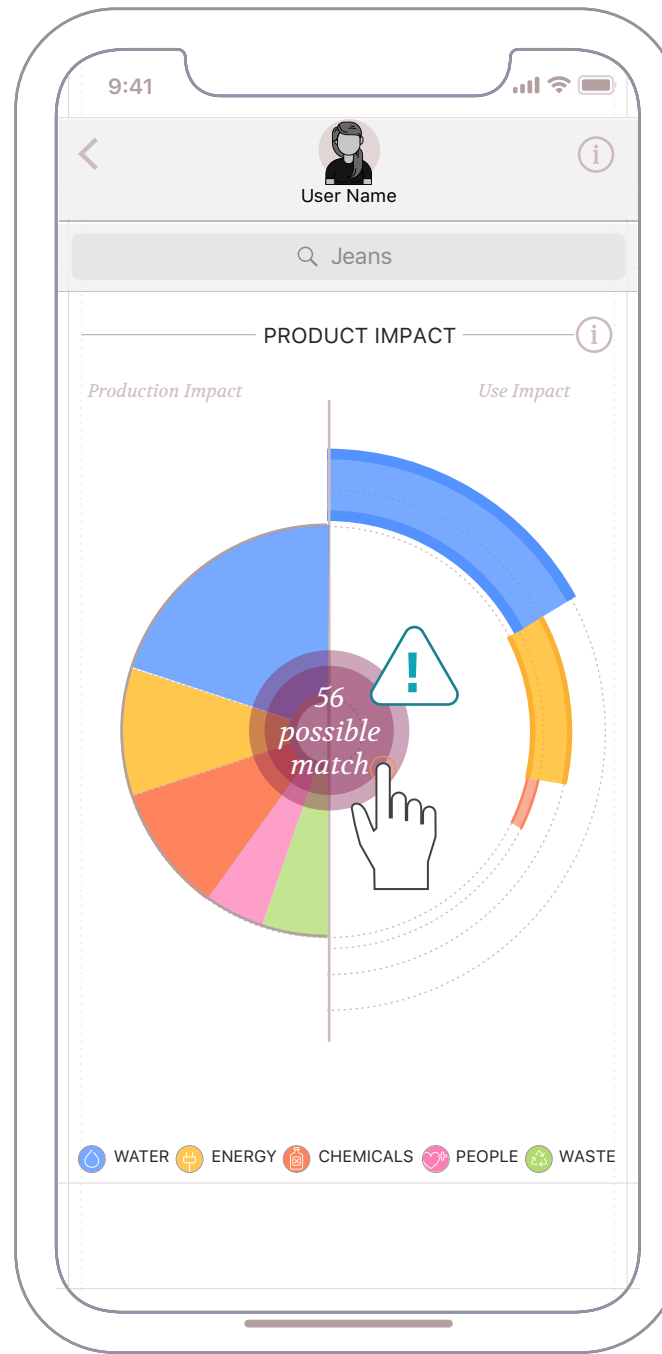
Impact of pattern
of use



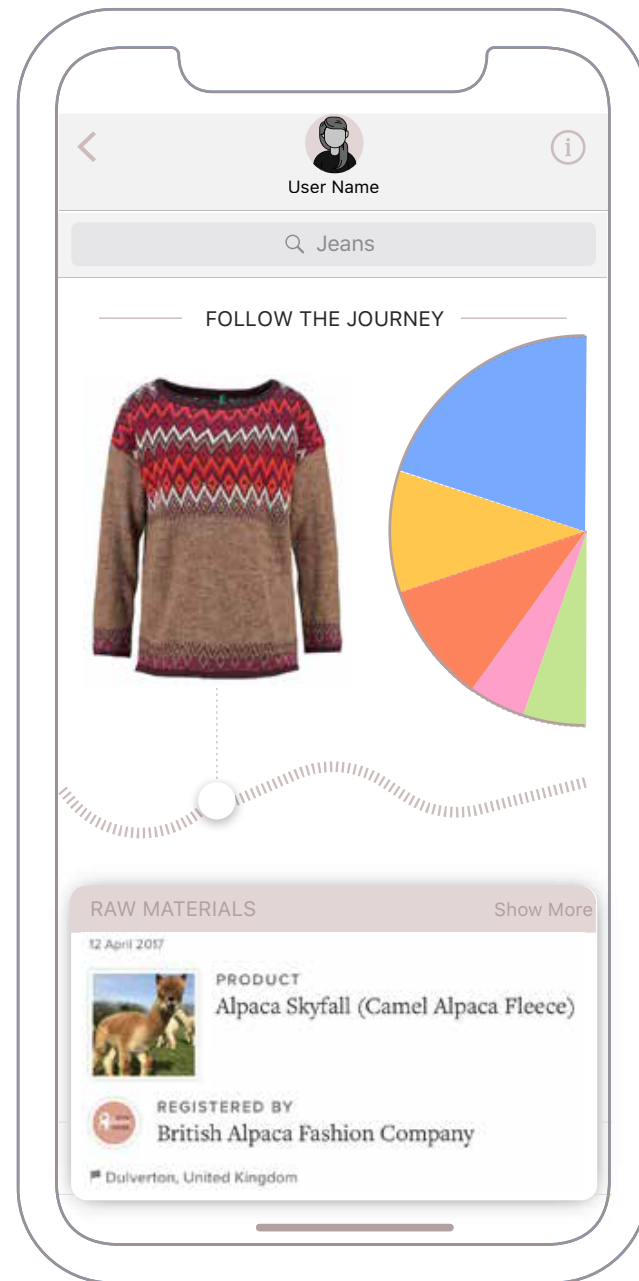
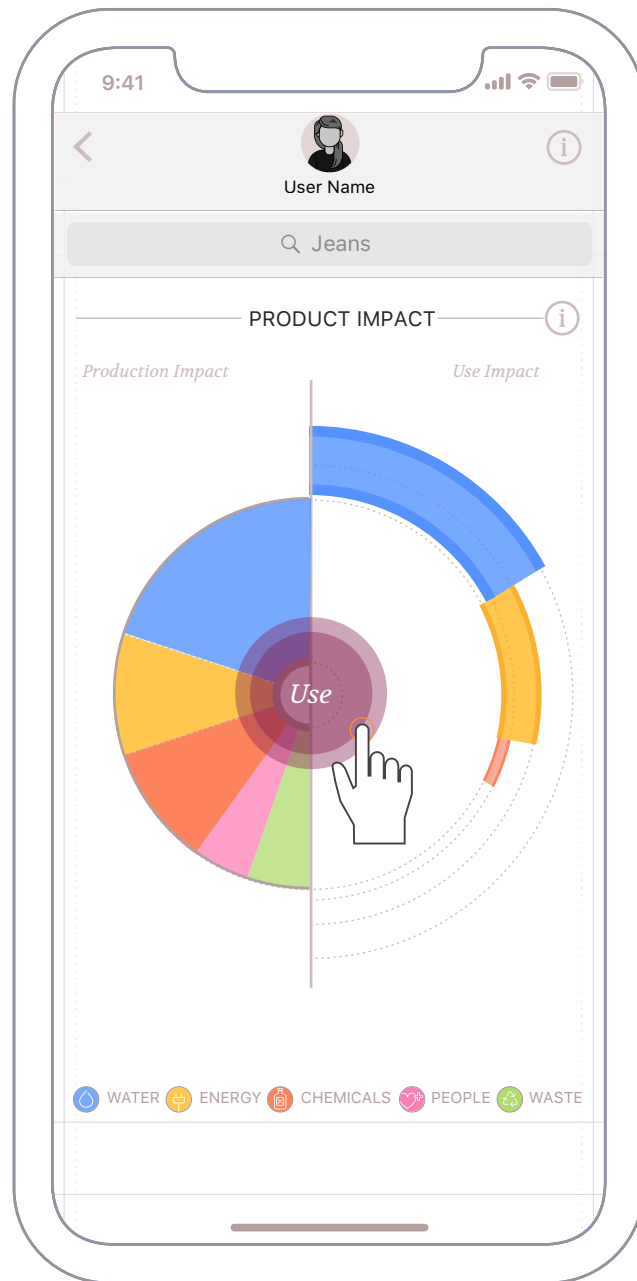
Supply chain impact

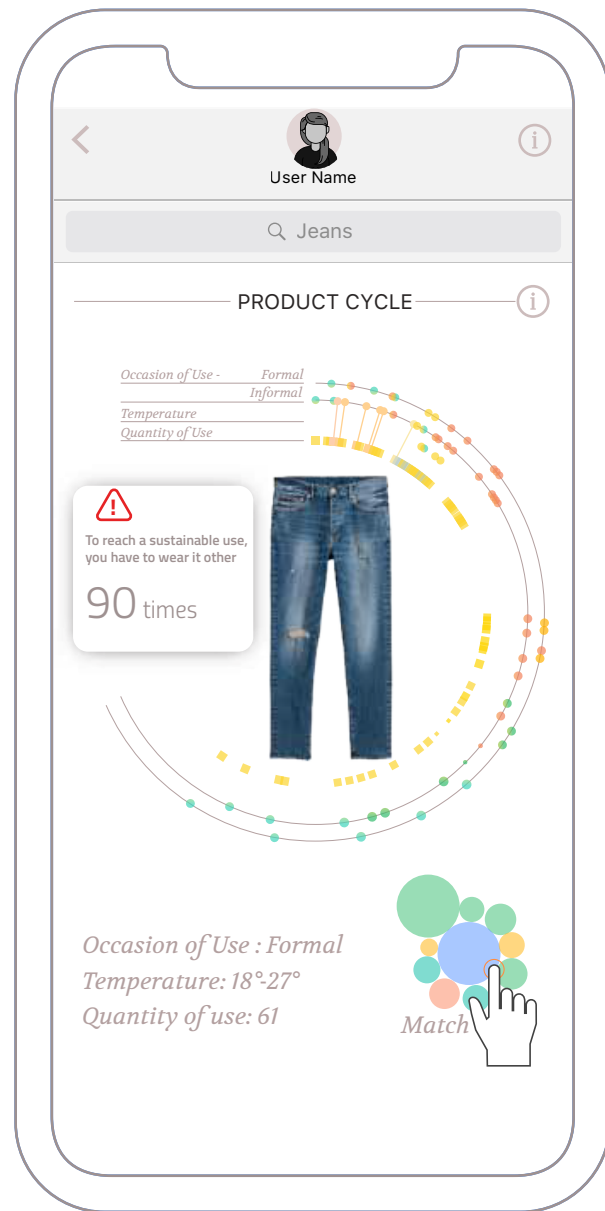


Impact during the use










PRODUCT CYCLE

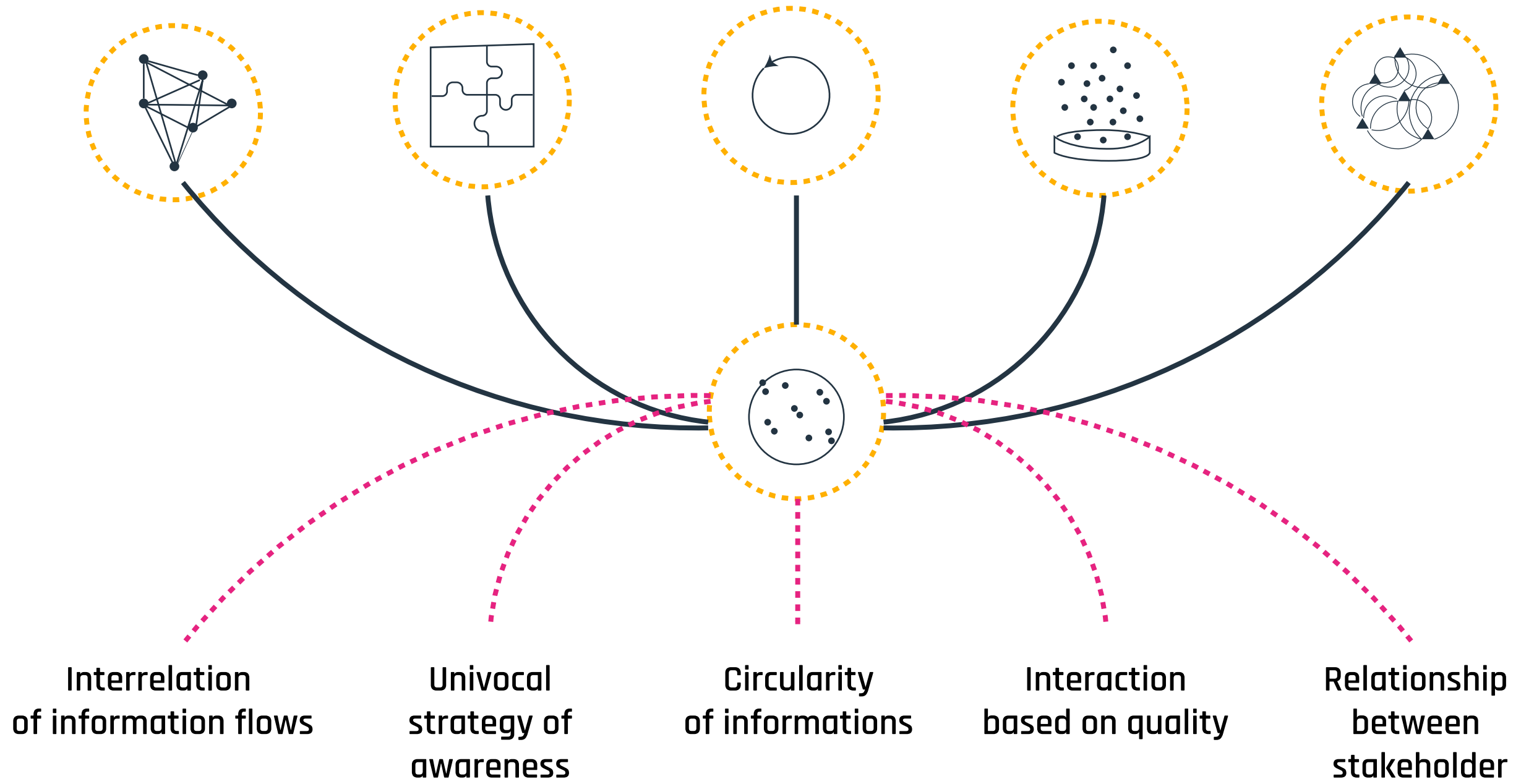
Occasion of Use - Formal
 Informal
 Temperature
 Quantity of Use


 To reach a sustainable use,
 you have to wear it other
90 times



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Tamborrini Paolo Marco
paolo.tamborrini@polito.it

Remondino Chiara Lorenza
chiara.remondino@polito.it

Marino Cristina
cristina.marino@polito.it



Helper
in transition



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