



Workplace 4.0

David Schmelzeisen | TCBL Talk | 30.5.2018

Intuition vs. facts



Frankfurter Allgemeine Gesellschaft

RUBRIKEN MENSCHEN KRIMINALITÄT UNGLÜCKE GESUNDHEIT TIERE QUARTERLY JUGEND SCHREIBT

NOTLANDUNG IM HUDSON RIVER

Heldenhaft ins Wasser gesetzt



Chesley „Sully“
Sullenberger

Industrial revolutions

1st

- Steam powered machines
- Power loom by Edmund Cartwright

 productivity

1775

1800

1825

1850

1875

1900

1925

1950

1975

2000

2025

2050

2nd

- Electric drives and assembly lines
- Slaughter house Cincinnati, USA

 efficiency

3rd

- First computers (Z3)
- Programmable logic controller

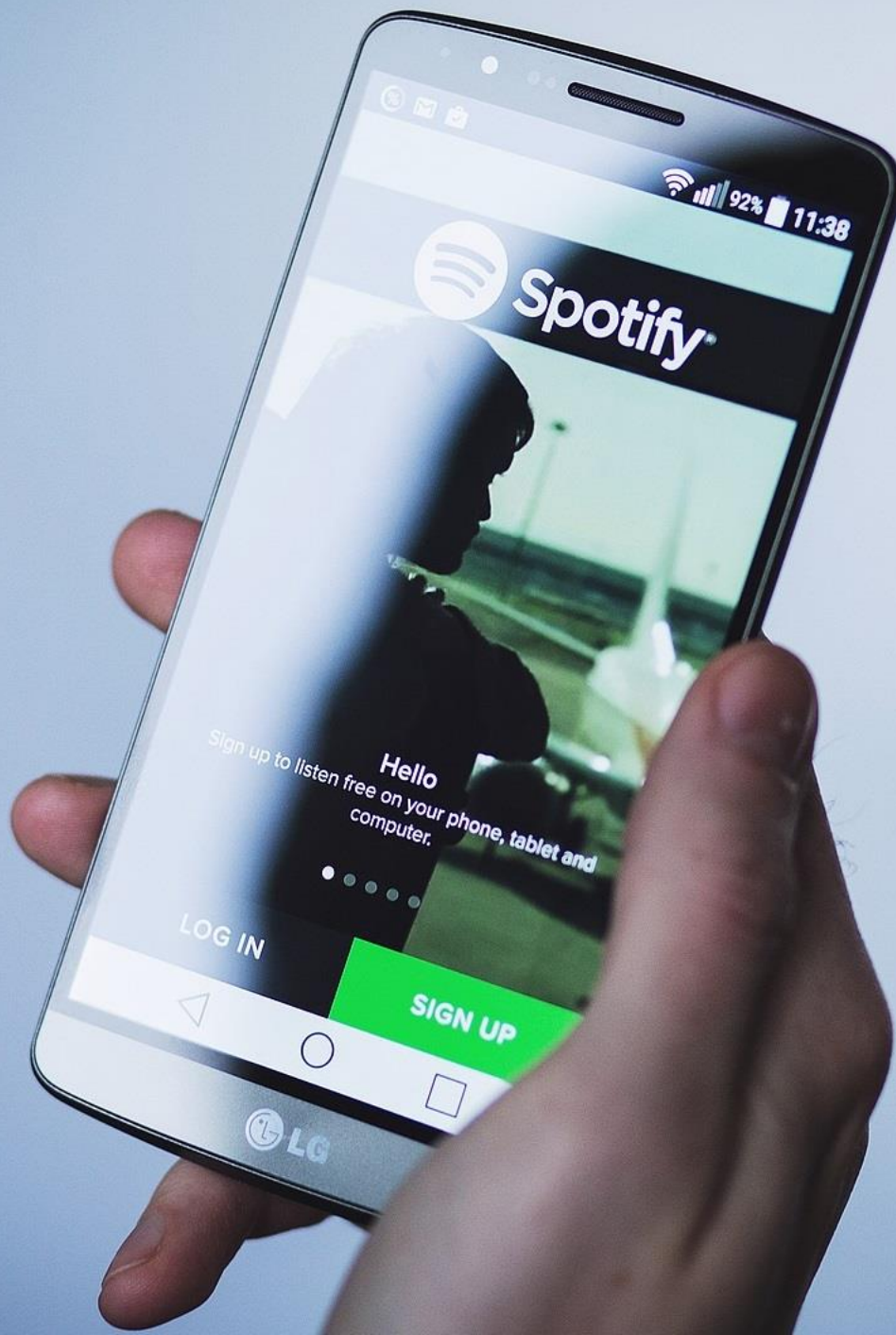
 automation

4th





Before...



... Today



Before ...



NETFLIX



... Today



Before ...



... Today

Industrial revolutions

1st

- Steam powered machines
- Power loom by Edmund Cartwright



2nd

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3rd

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Industry 4.0

- Digital applications in production
- Integration of artificial intelligence



1775

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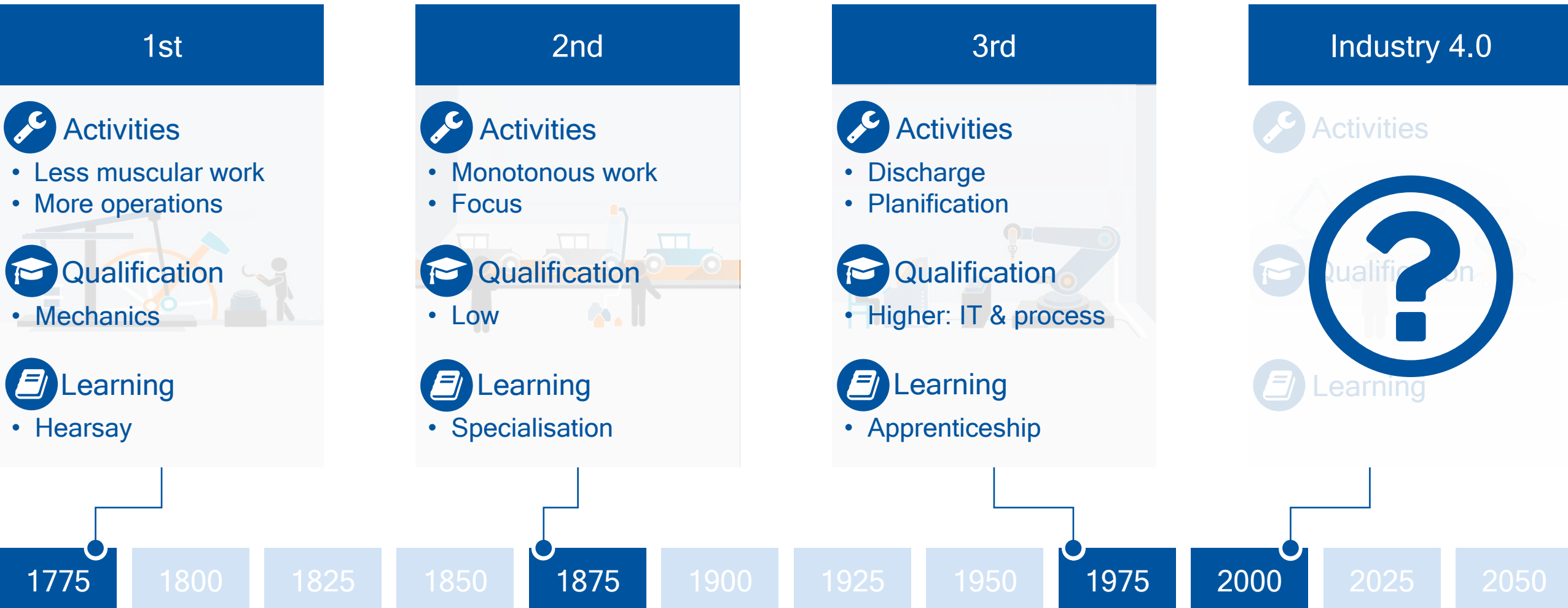
1975

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Change of the workplace

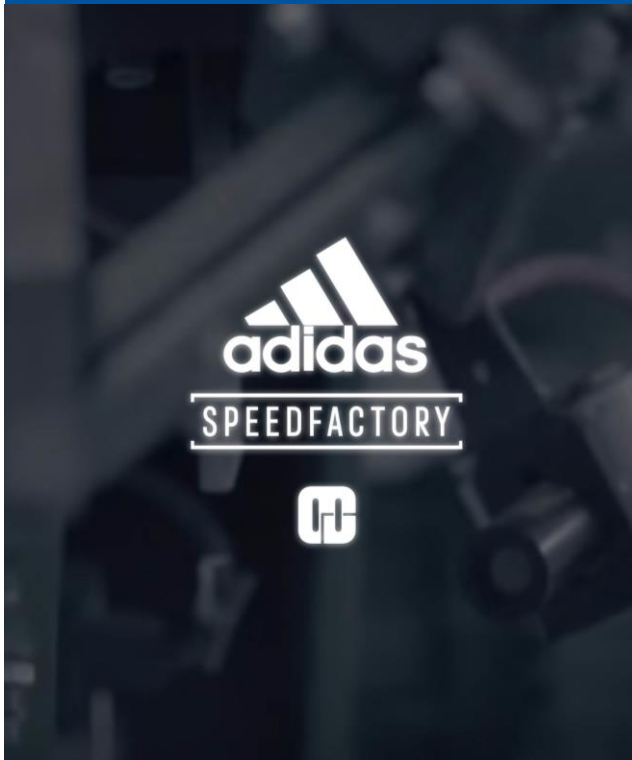




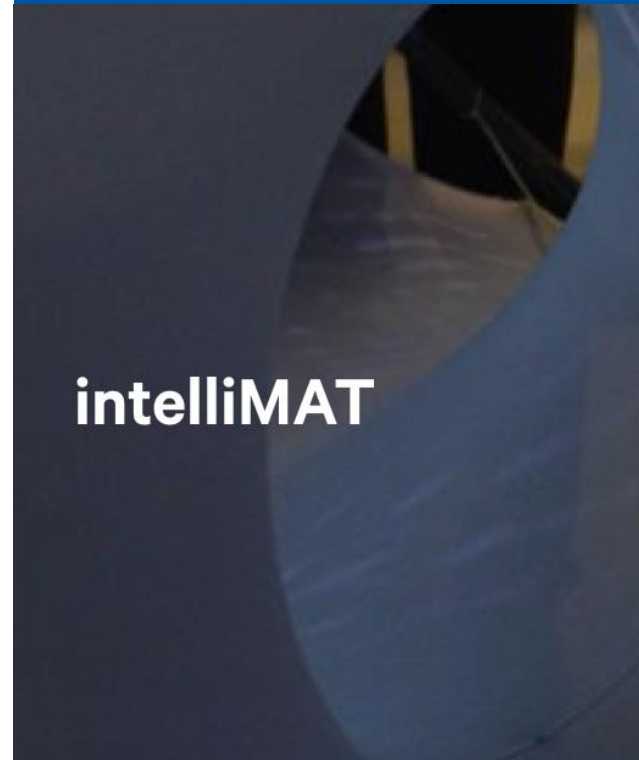
How does the workplace change
in the digital age?

The digital age in textile industry

Production



Products

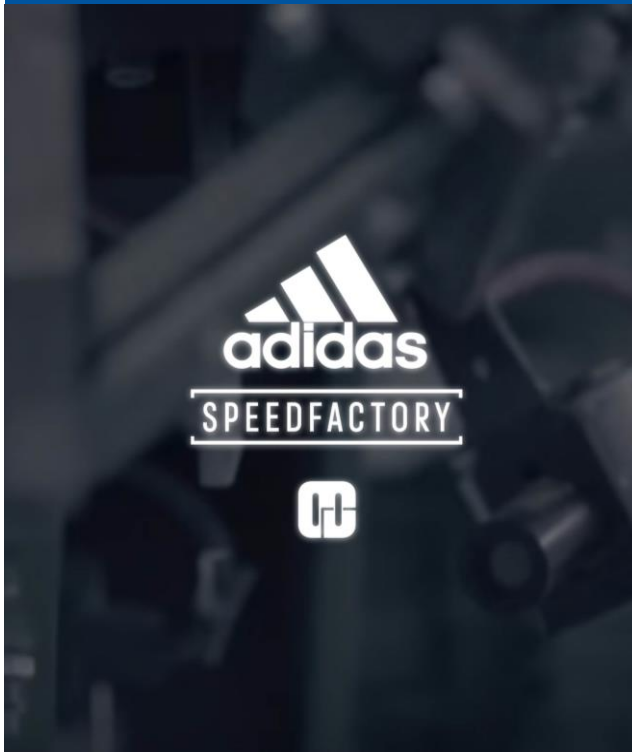


Services

STOREFACTORY

The digital age in textile industry

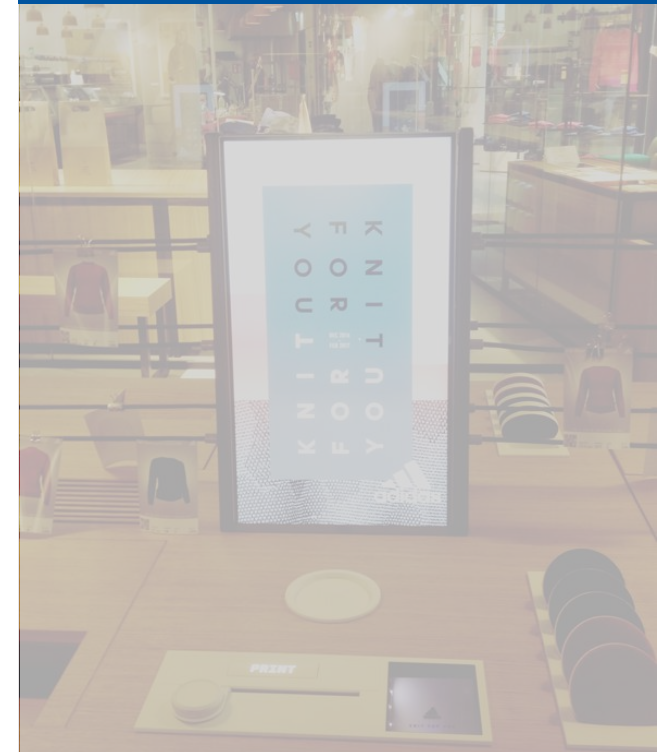
Production



Products

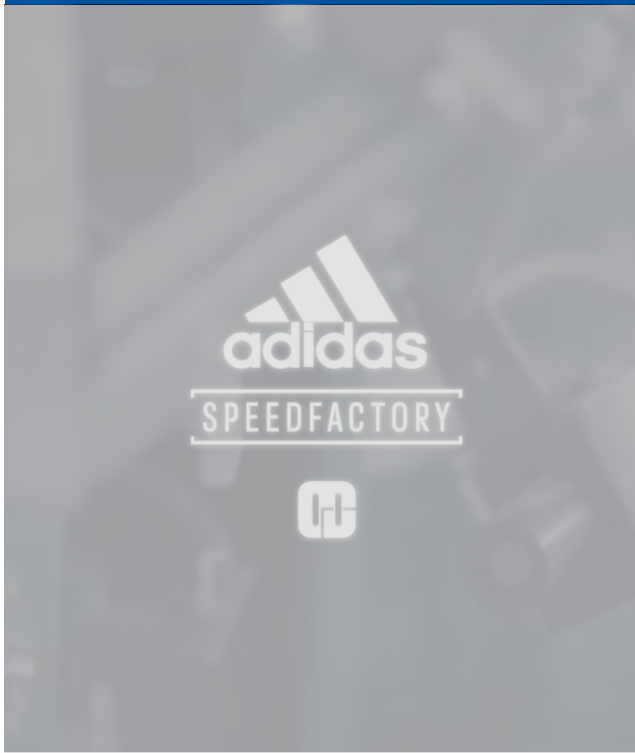


Services

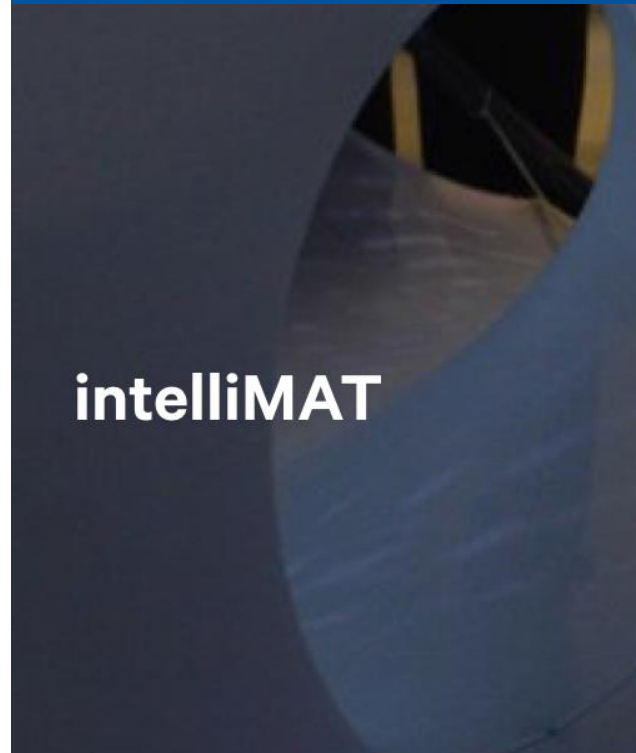


The digital age in textile industry

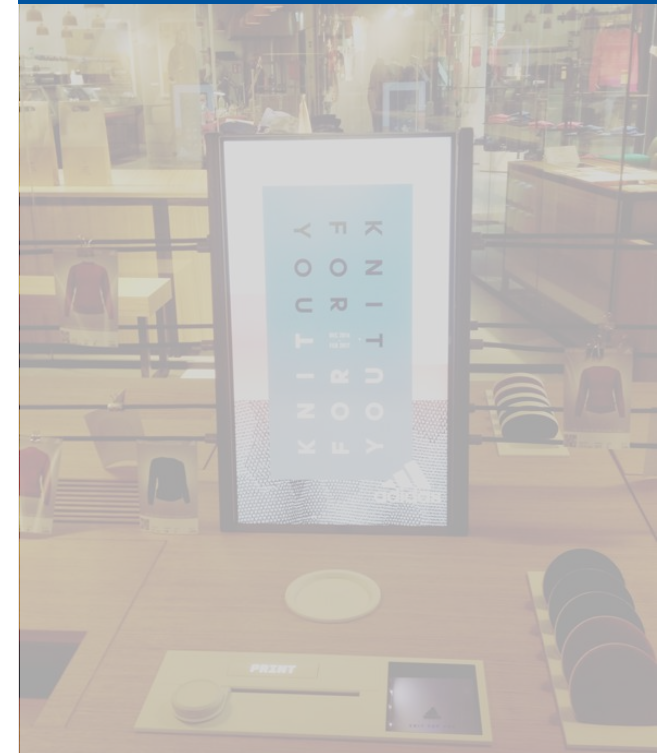
Production



Products



Services





intelliMAT

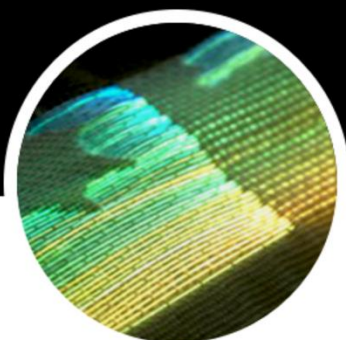
Smart Ergonomics

OUR GOAL

Use technology to revolutionize product development

Data-driven

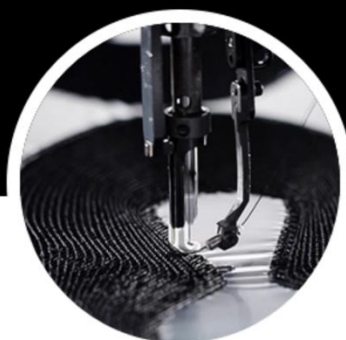
Gathering biometric data is difficult and expensive



The world's largest ergonomics database using a newly developed tracking device

Smartly manufactured

Development of sleep products is standardised and based on subjective criteria



Individually manufactured products based on biometric data

Sustainable

Conventional mattress materials are not re-usable, thus create enormous waste

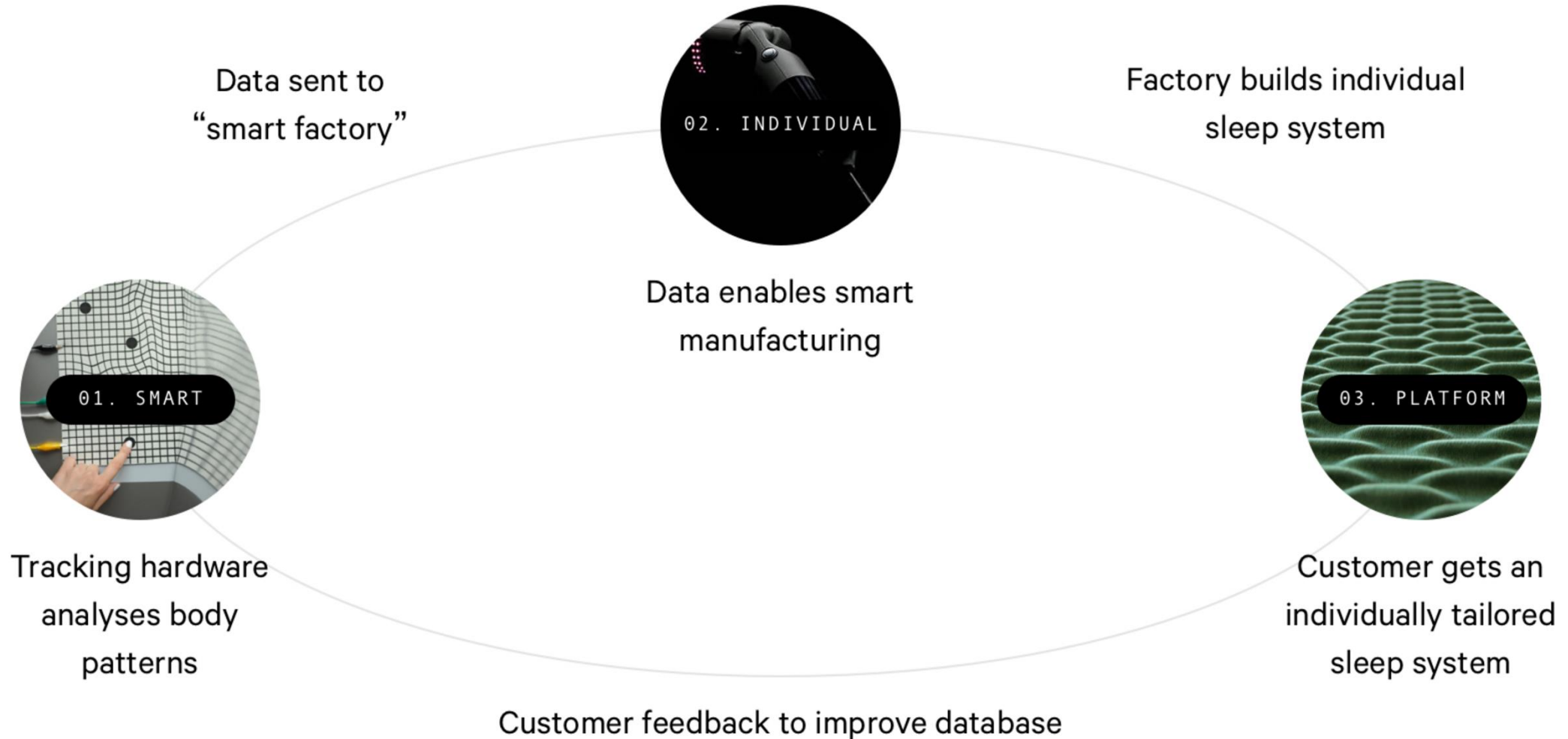


Alternative materials to revolutionise sleep hardware

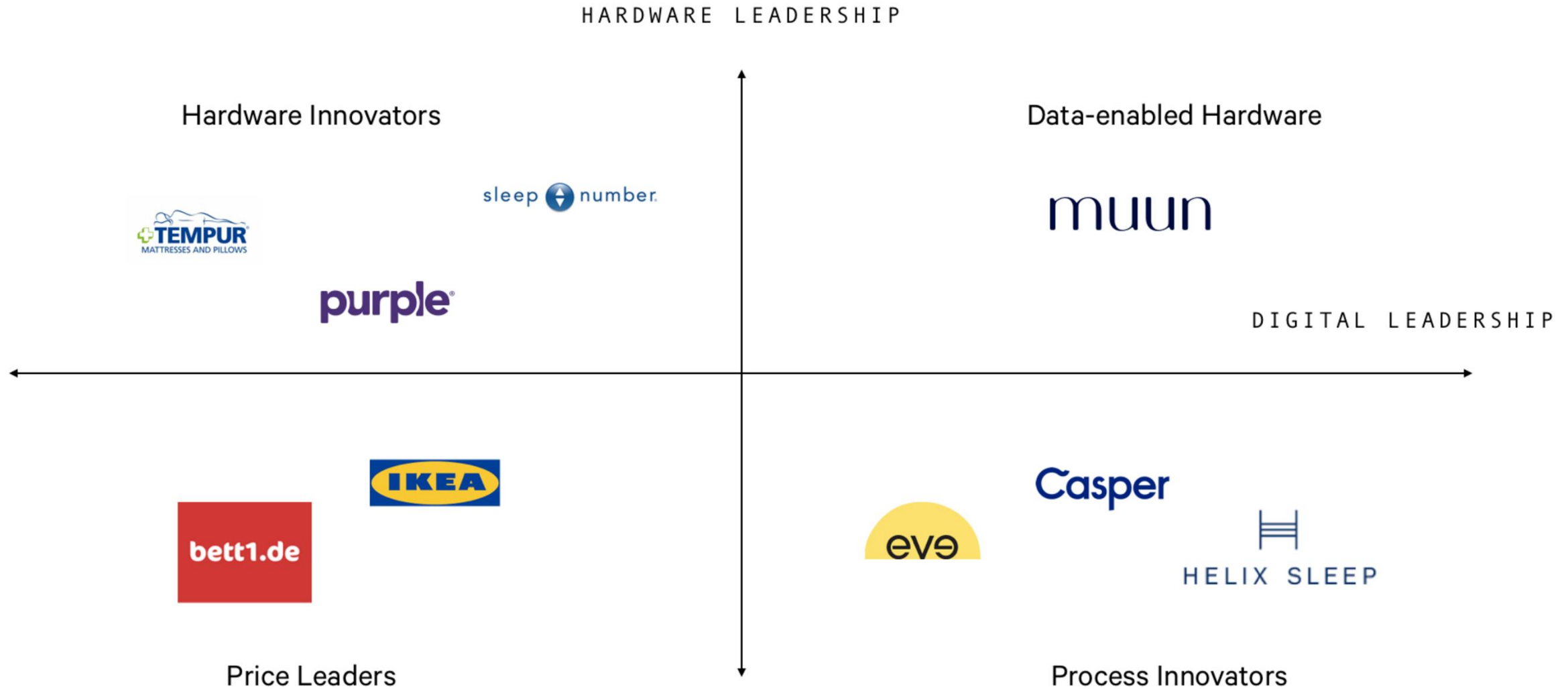
PROBLEM

SOLUTION

A smart sleep platform tailored to individual needs

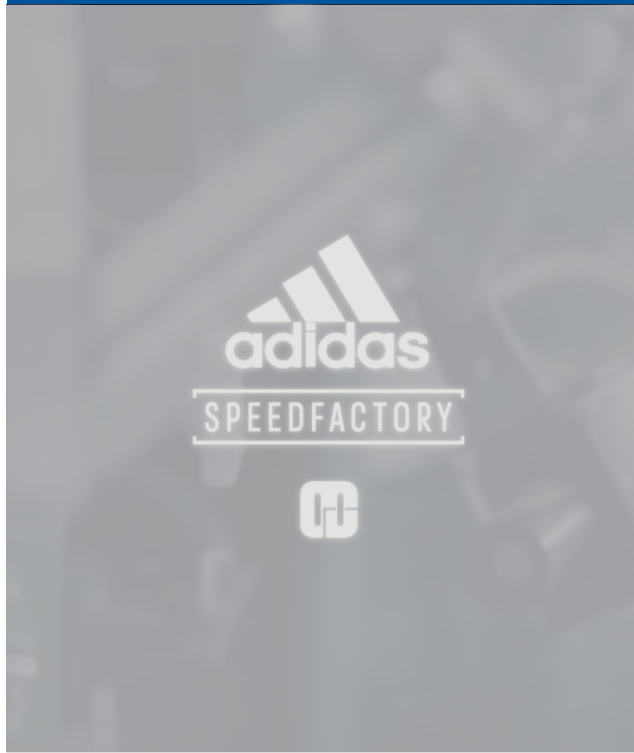


... to merge hardware and digital innovation and create **a new type of sleep brand**



The digital age in textile industry

Production



Products



Services



Digital services changed daily used products



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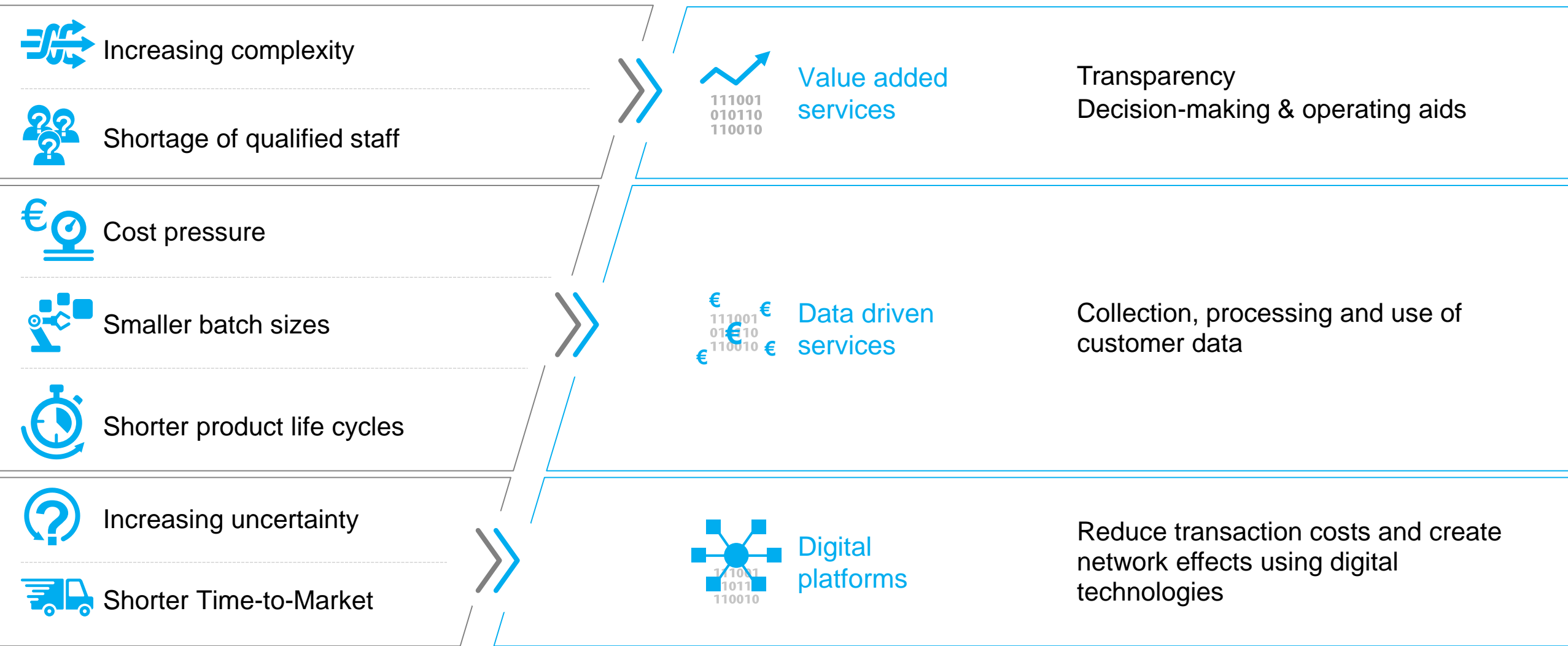
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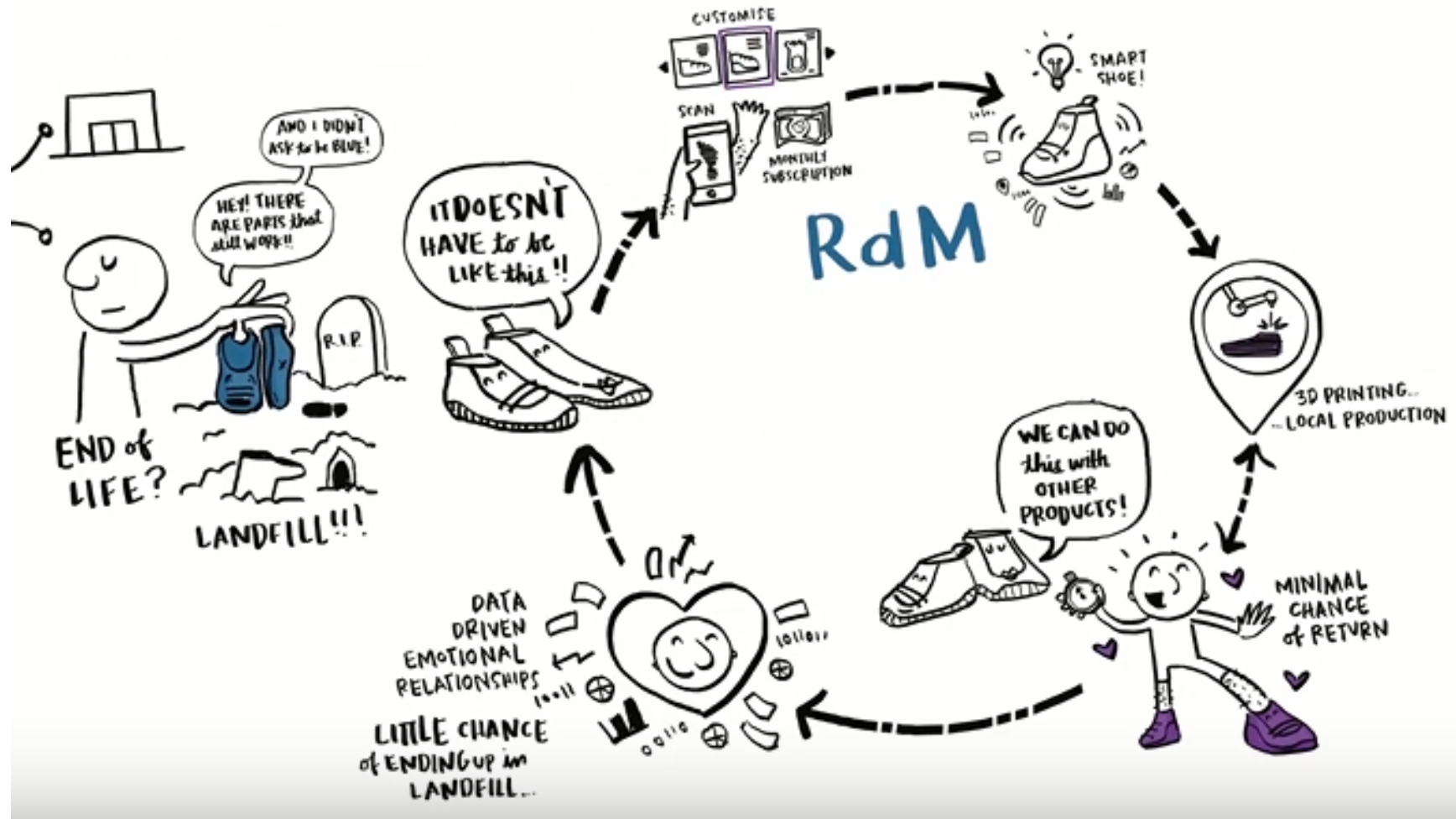
ebay



Three product and service offerings can be derived

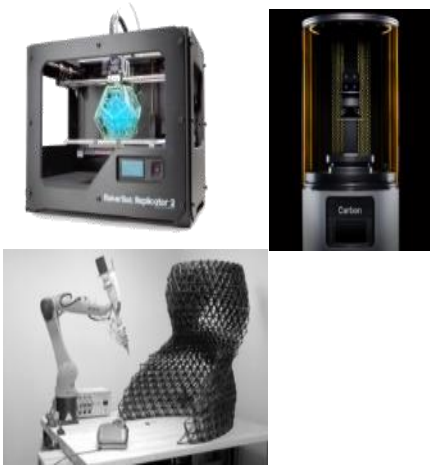


Re-distributed manufacturing in fashion industry



HUMAN CENTERed Innovation Factory

3D printing



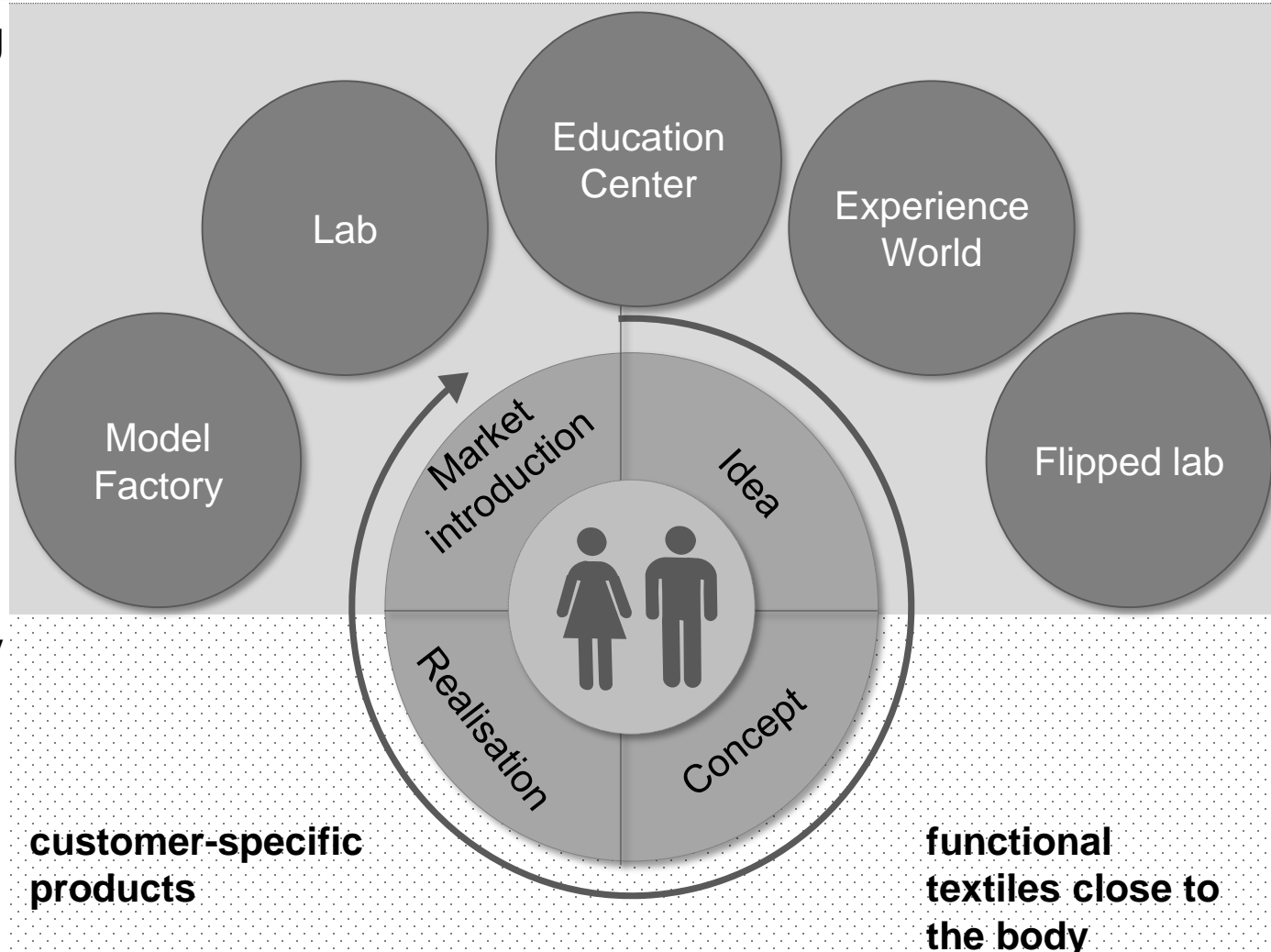
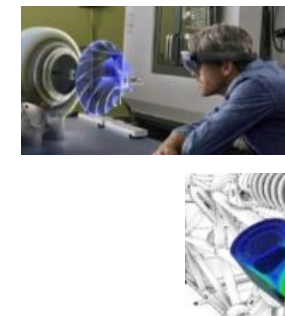
Assembly



Textile

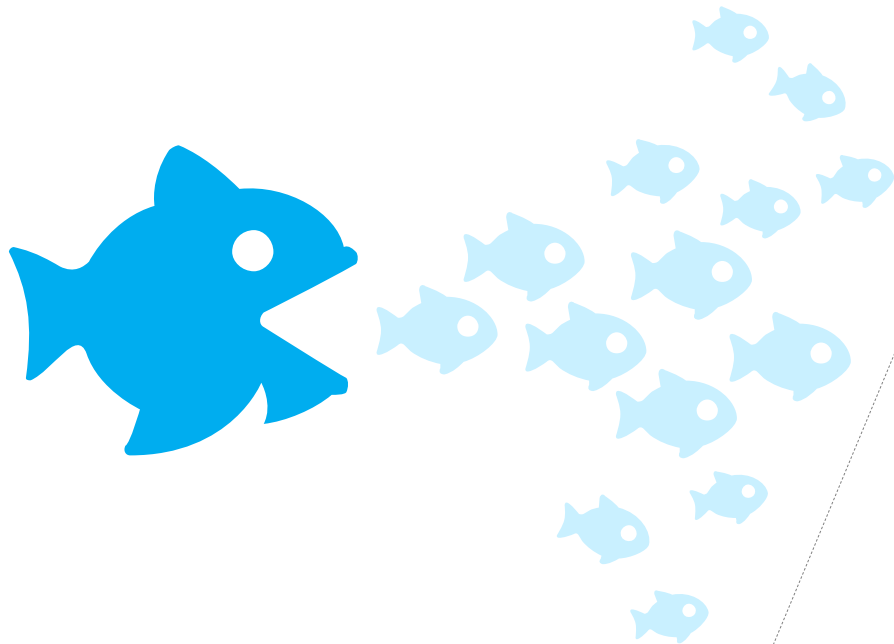


Digital

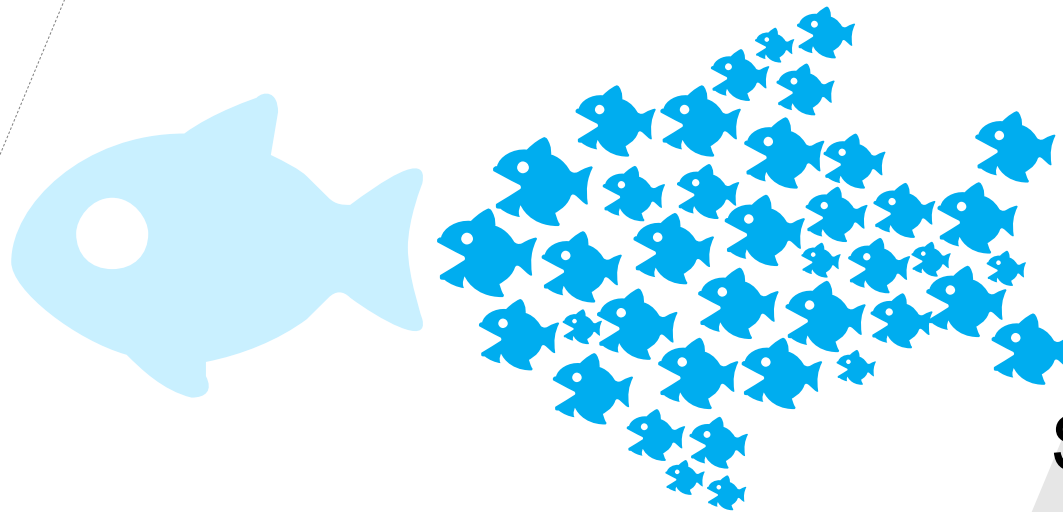


Closing statement

"In the new world, it is not the big fish which eats the small fish, ...



... it's the fast fish which eats the slow fish"



Still talking or
already doing
it?

KLAUS SCHWAB

Founder and Executive Chairman World Economic Forum