

Study On Industry 5.0 Applied To The Footwear Industry In Europe

Summary



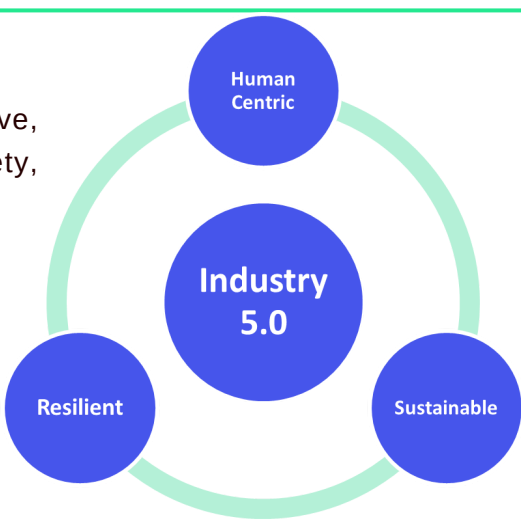
What is i5.0?

Industry 5.0 adds social equity and sustainability to the above, emphasising humanity, the long-term progress of society, conservation and rational exploitation of the planet's resources.



Key Changes

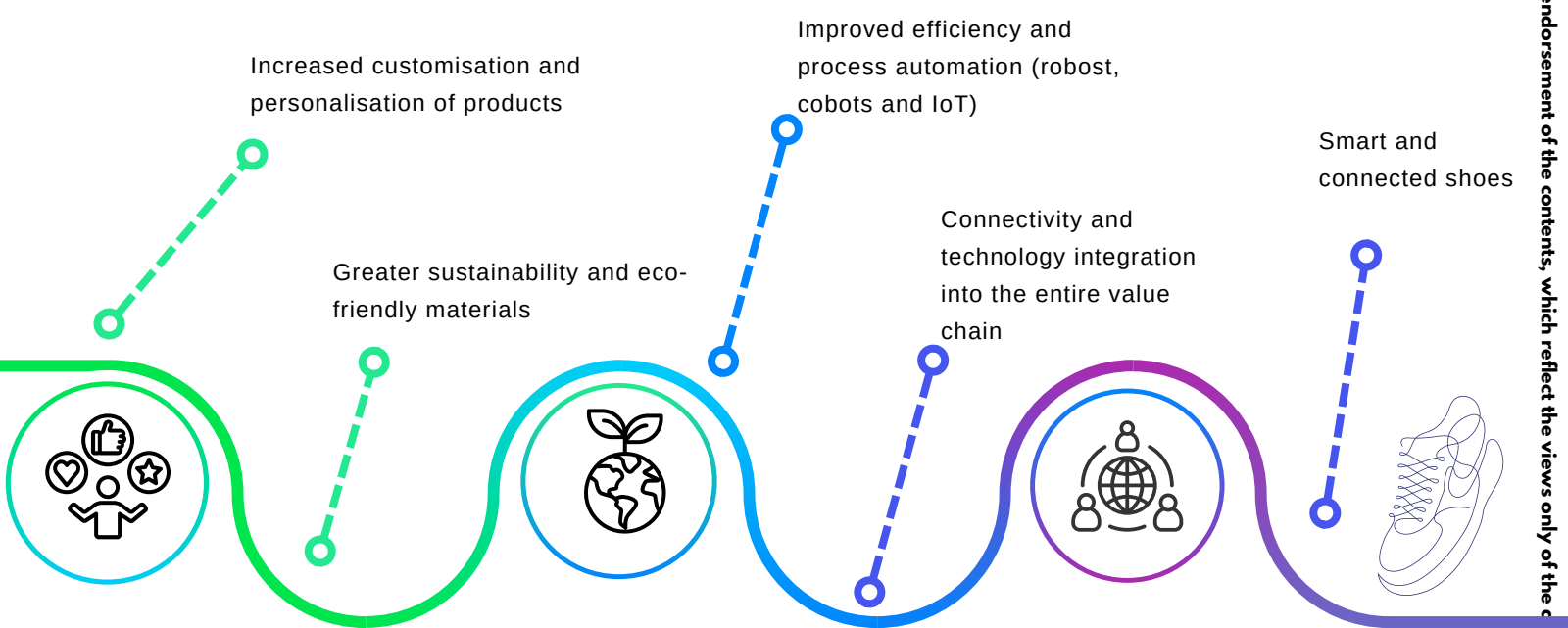
- Centralisation in the Human Being
 - Changing the Role of the Employee
 - Link Worker-Technology
 - Re-skilling, Up-skilling and Skills
 - Safe and inclusive work environments
 - The new generations “Y” and “Z”
- Sustainability
- Resilience



Industry 5.0 enabling technologies

- Human-centric solutions and human-machine-interaction technologies machines
- Bio-inspired technologies and smart materials
- Real time-based digital twins and simulation
- Cyber safe data transmission, storage, and analysis
- Artificial Intelligence
- Technologies for energy efficiency and trustworthy autonomy

Potential Impacts in footwear industry



Market and manufacturing opportunities in i5.0



1 CUSTOMER EXPERIENCE

CUSTOMISATION AND PERSONALISATION

2



3 CUSTOMER RELATIONSHIPS AND CUSTOMER RETENTION

NEW TRENDS IN INDUSTRIAL MASS PRODUCTION (TRANSITION FROM 4.0 TO 5.0)

4



5 ULTRA-CUSTOMISATION OF PRODUCTS

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Education and Training

The World Manufacturing Forum has identified a top-10 of skills that will be needed in future manufacturing.

1

Digital literacy as a holistic skill to interact with, understand, enable, and even develop new digital manufacturing systems, technologies, applications, and tools

2

Ability to use and design new AI and data analytics solutions while critically interpreting results

3

Creative problem solving in times of abundant data and technological opportunities in smart manufacturing systems

4

A strong entrepreneurial mindset including proactiveness and the ability to think outside the box

5

Ability to work physically and psychologically safely and effectively with new technologies

6

Inter-cultural and -disciplinary, inclusive, and diversity-oriented mindset to address new challenges arising from a more diverse manufacturing workforce

7

Cybersecurity, privacy, and data/information mindfulness to reflect the rapidly increasing digital footprint of the manufacturing value chain

8

Ability to handle increasing complexity of multiple requirements and simultaneous tasks

9

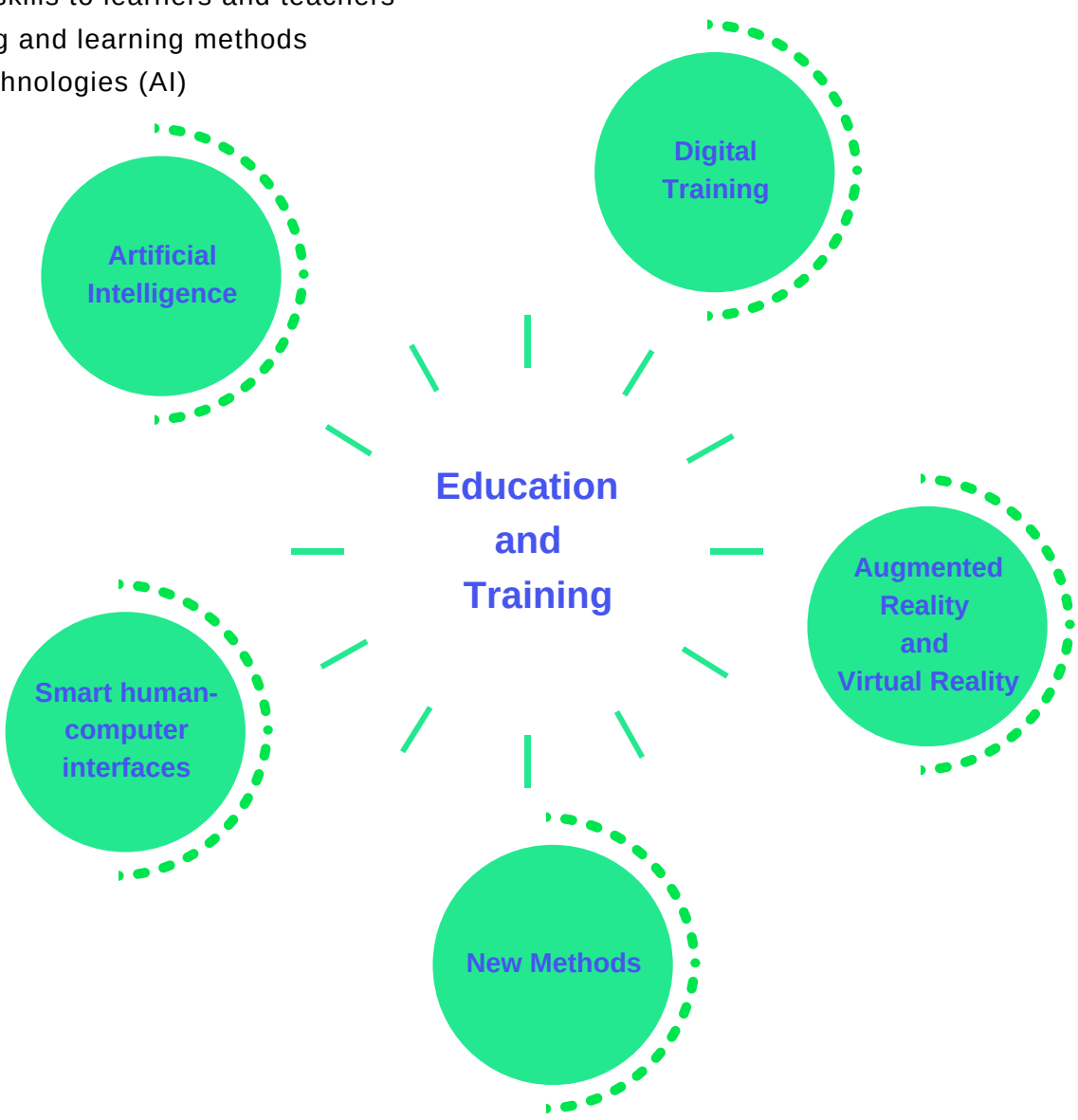
Effective communication skills with humans, IT, and AI systems through different platforms and technologies

10

Open-mindedness towards constant change, and transformation skills that constantly question the status quo and initiate knowledge transfer from other domains

Challenges for the education sector

- Preparing students for jobs that don't exist
- Providing digital skills to learners and teachers
- Adapting teaching and learning methods
- Ethical use of technologies (AI)





i5.0 in the footwear research



80 QUESTIONNAIRES
36 EXPERTS in FOCUS GROUPS



+ 7 COUNTRIES

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