

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 its predecessor, Industry 4.0, emphasizing humanity, the long-term progress of society, and the conservation and rational use of the planet's resources.



Key Changes

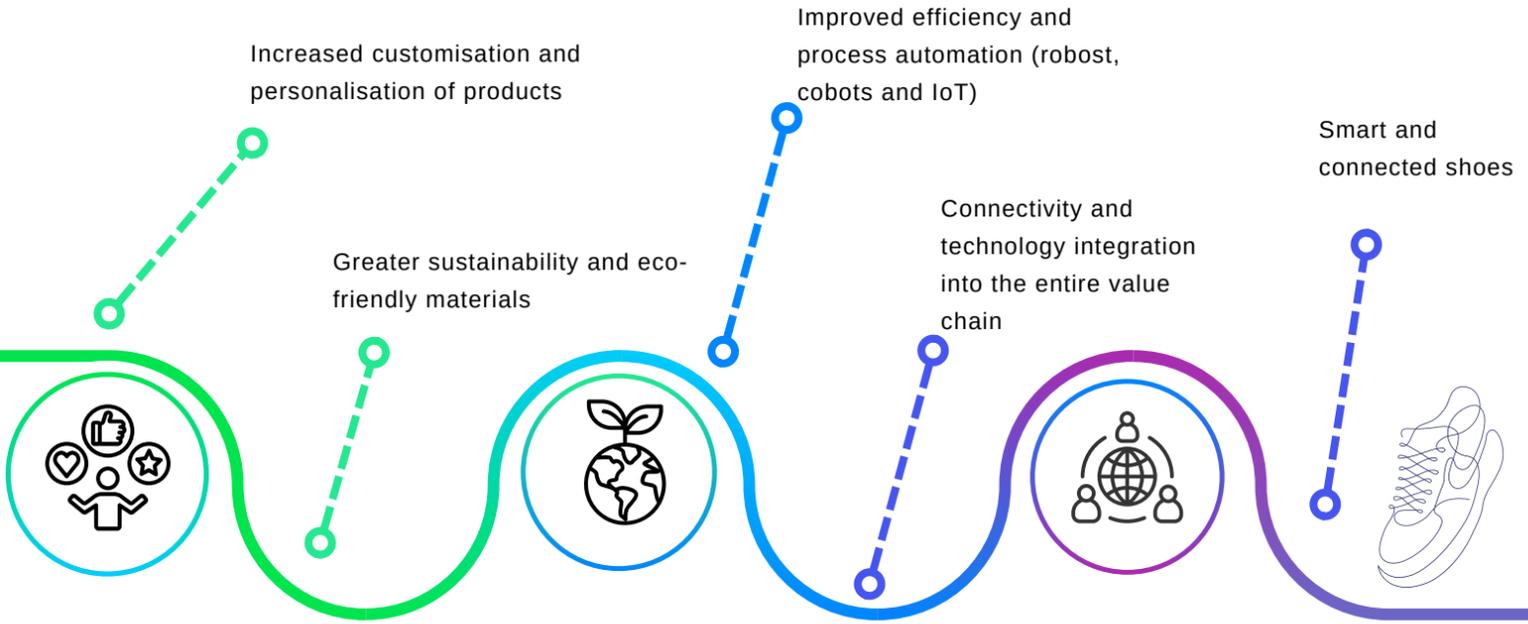
- Centralisation in the Human Being
 - Changing the Role of the Employee
 - Link Worker-Technology
 - Re-skilling, Up-skilling and Skills
 - Safe and inclusive work environments
 - The new generations "Y" and "Z"
- Sustainability
- Resilience

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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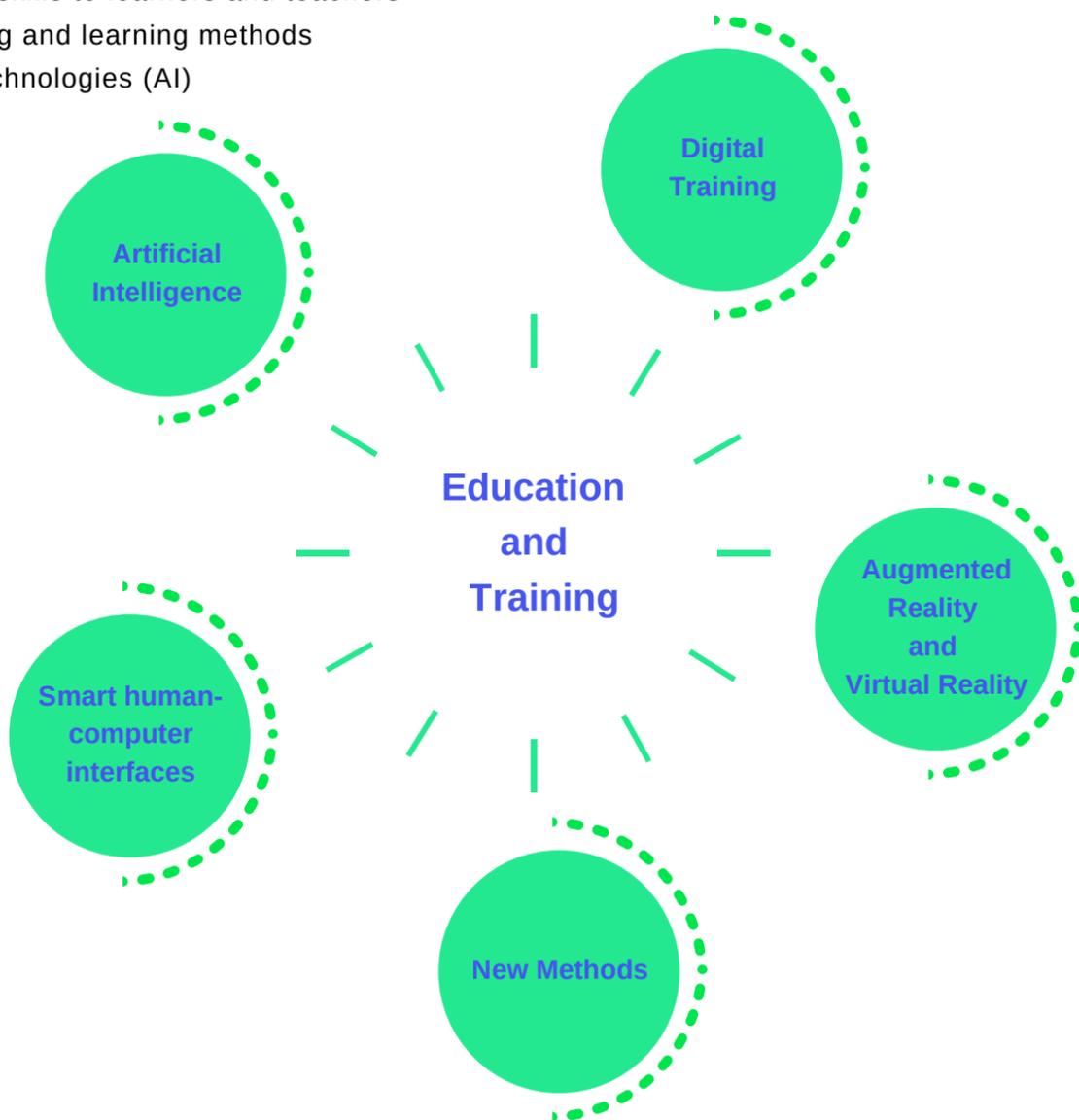
Education and Training

The use of the latest technologies and digital systems in Industry 5.0 will require workers to count with specific soft and digital skills:

- 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 do not exist
- Providing digital skills to learners and teachers
- Adapting teaching and learning methods
- Ethical use of technologies (AI)



Preparing for SHOE 5.0.



80 QUESTIONNAIRES
36 EXPERTS in FOCUS GROUPS



+ 7 COUNTRIES

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