

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

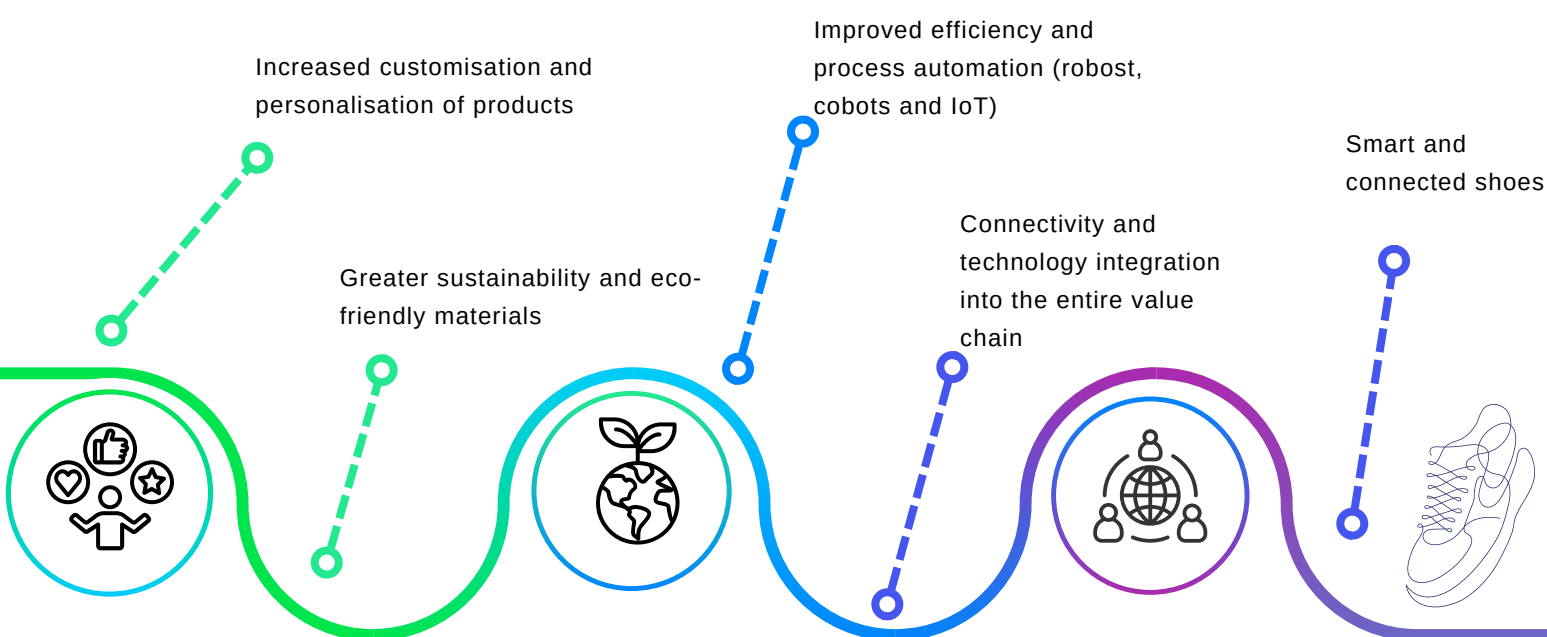
- Centralization in the Human Being
 - Changing the Role of the Employee
 - Link Worker-Technology
 - Re-skilling, Up-skilling and Skills
 - Safe and inclusive work environments
 - The new generations "Y" and "Z"
- Sustainability
- Resilience

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



Potencial Impacts in footwear industry



Market and manufacturing opportunities in i5.0



1 CUSTOMERS EXPERIENCE

CUSTOMISATION AND PERSONALISATION

2



3 CUSTOMER RELATIONSHIPS AND CUSTOMER RETENTION

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

4



5 ULTRA-CUSTOMISATION OF PRODUCTS

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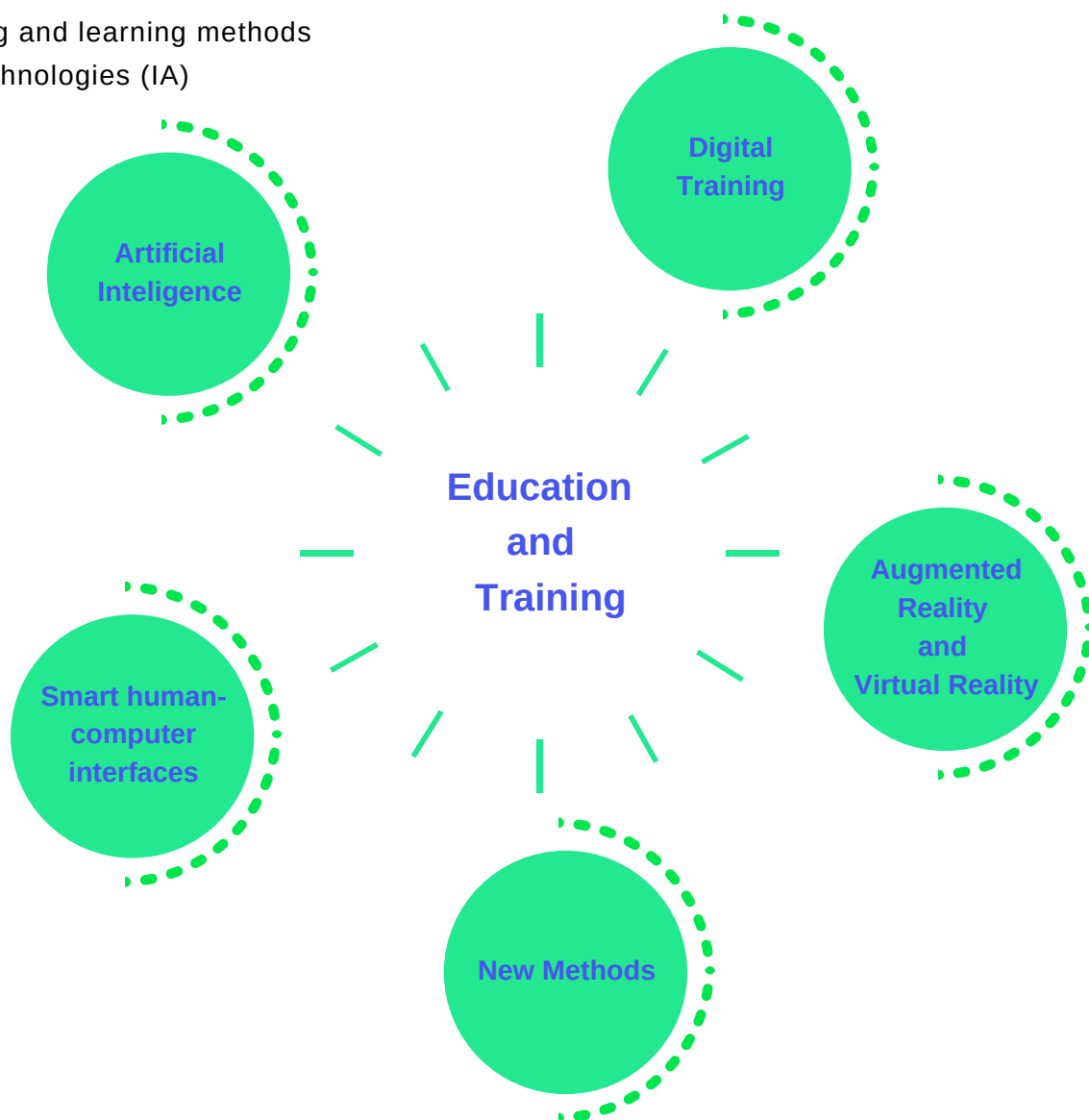
Education and Training

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 (IA)



i5.0 in the footwear research



80 QUESTIONNAIRES
36 FACILITORS in FOCUS GROUP



+ 7 COUNTRIES

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