What difference will it make in the short- and long-term?

IMPACT

HE institutions	SMEs, Research Institutes, Associations	Long term benefits for Consumers and Society
Links between HEIs and industrial actors in the EU footwear sector. Collaboration to jointly develop new learning and teaching methods.		Production of fashionable, yet health-conscious and scientifically-led footwear Sustainability related benefits, through material selection conforming to modern technical and legal guidelines, reduced product development wastes, reduced consumer rejection due to lack of comfort and increased product lifetime.
New skills development for the footwear industry Modernisation of curricula for the professions of Footwear Designer and Product Manager High-level graduates for the footwear industry.	Increased understanding of comfort, sustainability, performance and fashion concepts Extended knowledge base in industry. Manufacturing of quality footwear according to developed guides Designers and Production professionals are capable of exploiting new scientific and technological advances Quality assurance audit or evaluation results establishing content and collaboration for companies involved.	

Partners

UNIVERSITAS Miguel Hernández

UNIVERSITY OF THE AEGEAN — SCHOOL OF ENGINEERING — DEPARTMENT OF PRODUCT AND SYSTEMS DESIGN ENGINEERING

ctcp centro tecnológico do calçado de portugal

cre thi dev

Confédération Européenne de la Chaussure — European Footwear Confederation

Vibram

Activ Ortopedic — Activ și Independent

POLITECNICO MILANO 1863 — DIPARTIMENTO DI DESIGN

CREATIVE INDUSTRIES LAB

KLAVENESS

INESCOP — REDIT INNOVATION NETWORK

ΕΛΣΕΒΒΥΕ

EVATHINK

virtualcampus

4 universities | **2** research institutes | **2** associations | **6** companies

SciLED ALLIANCE - 6 Countries: RO, ES, PT, IT, BE, GR

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SciLED

Footwear in the 21st Century

New Skills for the Design of Drastically Improved Comfort, Sustainable, Fashion-oriented and Scientifically-led Footwear Products

Co-funded by the Erasmus+ Programme of the European Union

Footwear in the 21st century: New skills for the design of drastically improved comfort, sustainable, fashion-oriented and scientifically-led footwear products

Challenges and Opportunities. Problems

Globalisation, Low-cost workforce, Lifestyle changes, Environmental concerns. EU footwear industry points towards **high manufacturing standards, sustainability and consumer wellbeing**. It has to keep investing on technological and non-technological innovations and promote high-added value.

Lack of dedicated schools and training infrastructure across the EU. **The qualification profiles in the footwear industry have to adapt** to the introduction of advanced technologies (such as 3D CAD – CAM – CAE, 3D scanning and rapid prototyping), and environmental, legal and quality concerns, ethical and sustainability guidelines.

The entire **product life-cycle** in terms of **performance** and **functionality** has to be re-considered to include footwear **comfort** to prevent consumers' health problems in view of a longer life-expectancy. Also, consumers demand **personalised** and differentiated products that are **safe** and **sustainable**.

Objectives

- Analysis of the product life cycle and the parameters that affect footwear quality with respect to sustainability, comfort and performance.
- Introducing technologies and innovative computer-based tools such as human bio-models and simulation scenarios.
- Collaboration of higher education and research institutes with companies
- Smart Knowledge Delivery seminars/workshops in partner countries
- Learning Mobility action
- Refining and improving the curricula for Footwear Designer and Product Manager.
- Provision of the produced accredited educational package to the allied Universities

What is new?

SCALED Knowledge Alliance

Improve the workforce's creativity

Increase the competitiveness of the footwear companies

Render the sector more attractive to young people

Develop new professional footwear paths.

Up skilling on 3D CAD/CAM/CAE, 3D scanning and rapid prototyping tools.

Revise the footwear life-cycle, and incorporate new knowledge into the design process in order to provide a scientific basis for drastically improved sustainable and comfortable products.

Work plan

Preparation, management and coordination

Analysis of footwear comfort and sustainability

Analysis of current qualifications

Footwear designer and Product manager EQF definition

Educational package

Piloting package

Evaluation and Quality management

Dissemination and Exploitation of results

The footwear industry in Europe is a traditional manufacturing industry that produces a high-added value consumer product, part of the Creative Industries and European Culture and Heritage.

Driven by creativity and innovation, footwear products manufactured in EU can be considered as scientifically-led technical items with distinct high quality.

In order to maintain this key advantage, the EU industry has to keep investing on technological and non-technological innovation, and promote high-added value.

The entire product life-cycle is reconsidered in terms of performance and functionality, which is commonly perceived as footwear comfort.

Longer life expectancy requires special attention for preventing and alleviating body damage. In addition, retailing practices and consumer behaviour are shifting towards sustainability.

Moreover, consumers increasingly demand personalised and differentiated shoes, which open opportunities for more creativity while ensuring that comfort and sustainability' concerns are satisfied.

New sustainable materials, eco-design and marketing models are powerful tools to increase product differentiation. It is therefore a priority to equip designers with creative and innovative skills and a deeper understanding of the mechanics that determine footwear comfort and sustainability.

In this Knowledge Alliance, the footwear life-cycle will be revised and new knowledge will be incorporated into the design process in order to provide a scientific basis for drastically improved fashion, comfort and sustainable oriented products.

New skills and professional footwear paths will be developed (according to EQF) and will improve the workforce's creativity and competitiveness, rendering the sector more attractive to young people.