

ECCO PARTNERS WITH DASSAULT SYSTEMES TO PROVIDE A DATA-DRIVEN CUSTOMIZED FOOTWEAR EXPERIENCE

A unique step into the future of footwear.



The desire for perfect fit, perfect comfort and ultimate performance has been at the heart of footwear design for centuries. ECCO, a world-leading brand of footwear and leather goods, and its Innovation Lab (ILE) have collaborated with Dassault Systèmes FashionLab to industrialise their footwear customization project QUANT-U (Quantified You).

For the first time, individual bio-mechanical data is combined with in-store additive manufacturing to create customized silicone midsoles, quantified by the wearer. The unique service takes place within only a few hours.

QUANT-U is an intuitive three-step process based on real-time analysis, data-driven design and in-store 3D printing.

REAL-TIME ANALYSIS

A combination of anatomical scan and wearable sensor data builds a unique digital footprint. In only 30 seconds, 3D scanners determine the individual orthotic fit. ECCO's proprietary connected footwear builds an accurate representation of an individual's unique walking pattern through inbuilt wearable sensors..

DATA-DRIVEN DESIGN

Bio-mechanical data is interpreted to create a custom midsole, which is the functional heart of the shoe. It plays a key role in the performance and comfort of footwear. The digital configuration for the midsole is generated using machine learning and structural simulations. The result is an augmented pattern, quantified by the wearer.

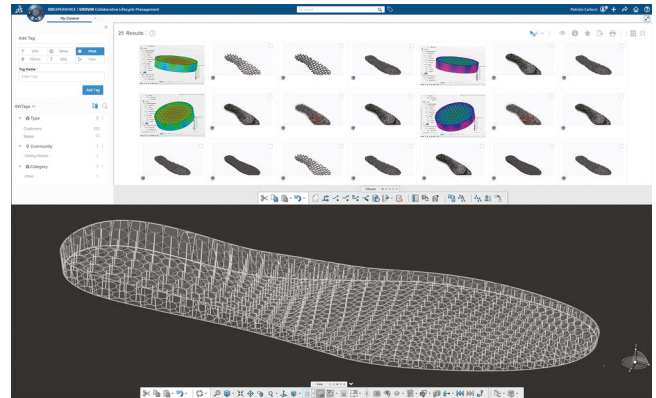
ILE joined forces with Dassault Systèmes to industrialise its powerful and innovative self-learning system based on unique algorithms. The cloud-based 3DEXPERIENCE® platform with CATIA® applications interprets biomechanic data into geometries for 3D printing. Generative designs are validated through advanced simulations to ensure superior functionality for personalized consumer experiences.

IN-STORE 3D PRINTING

Within a few hours, the customised midsoles will be materialised for selected ECCO shoes. Two years of research has proven that replacing the standard Polyurethane midsoles with 3D-printed silicone can tune its inherent properties: visco-elasticity, durability and temperature stability.

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Patrizio Carlucci, Head of Innovation Lab
ECCO



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This 3D print footwear project is disrupting the consumer goods industry as it is pushing the boundaries of product customization and the consumer experience. It demonstrates the potential for 3D-based technologies and additive manufacturing solutions for fashion businesses of all sizes. Success is possible by putting customers at the very center of the innovation process.

To find out more, please visit:

<https://quant-u.com>
<https://global.ecco.com>

Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

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