Integration, Homogenisation and Extension of the Scope of Anthropometric Data Stored in Large EU Pools

EUROFIT

Project Vision

EUROFIT vision is to unleash the huge potential contained in the increasing number of databases of 3D body scans for the European consumer goods' industries.

Key Innovation

New 3D scanning technologies for the acquisition of anthropometric data have boosted the availability of digital anthropometric resources. Since 1999, over 16 large-scale national body scanning surveys have been conducted around the world (six in Europe) gathering shape data from over 120.000 subjects. The availability of these data pools has created the opportunity to **exploit 3D shape information**.

However, these 3D data pools are dispersed, heterogeneous and, above all, its exploitation at industry level requires knowledge, skills and resources beyond the means of most consumer goods' manufacturers, especially SMEs.

Our overall aim is thus to develop, implement and deliver the **EUROFIT online platform** and an open framework that enables:

- **Designers and industrialists** to draw useful shape information and use it in their product development processes in an easy and direct way;
- **Database owners** to pool the data they already hold and obtain revenues from its exploitation; and
- **Third party IT companies** to develop new services to reuse pooled data in new and unforeseen ways.

Technical Approach

R&D work will be conjointly conducted by the *Institute of Biomechanics of Valencia*, *Human Solutions* and *Hypercliq*.

It will focus the systematisation of proven methods for 3D shape data aggregation and analysis in a reliable but economically sustainable way, as well as on the implementation of the portal and the development of sector-specific applications and user-friendly interfaces.

Call Identifier
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SME Initiative on Digital Content and Languages

Contract Number
296116

Project Coordinator
Instituto de Biomecánica de Valencia

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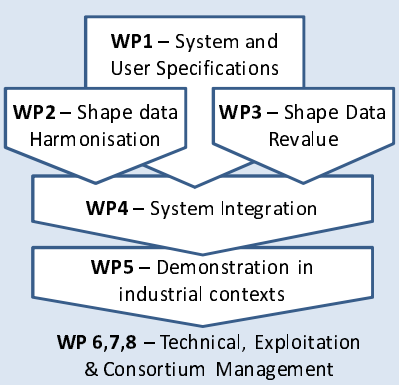
Project website
http://www.eurofit-project.eu

Project budget (EC grant)
2.3 Million EUR (1.7 Million EUR)

Project start date
1st June 2012

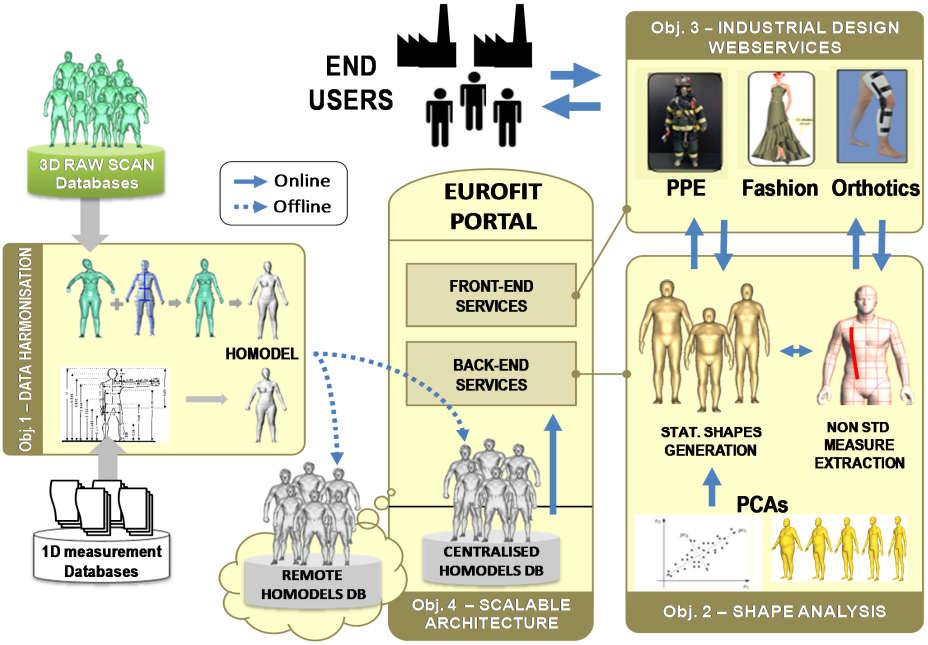
Duration
24 months



ICT - Challenge 4: Technologies for Digital Content and Languages

Demonstration and use

Project work will include the aggregation of four national databases and the running of a four-month demonstration of the new EUROFIT portal in **three industry application cases**: Ossür (orthotics and prosthetics), Iturri (personal protective equipment), and Rieder Moden (fashion apparel).



Scientific, Economical and Societal Impact

EUROFIT concept, novel at global scale, will consolidate and put Europe largely forward in the knowledge transfer to industry in the Digital Anthropometric Data exploitation area, in particular to sectors dominated by SMEs. It will enable a dramatic increase in the quantity and value of the Digital Anthropometric Data on offer to European industry.

The access to reliable international 3D data provide industrial end-users with a better knowledge of their customers in new markets and will enable IT companies to offer this information to other sectors and markets, beyond the ones already addressed.

EUROFIT portal will stimulate innovations based on the development of better ergonomically performing products to citizens. Moreover, it will significantly reduce time and cost to industry end-users in the integration of anthropometric data into product design, especially if compared to the outsourcing of equivalent services.

EUROFIT architecture will enable the scalability (to other industry sectors) and the upgrade (to new types of 3D data) in a fast and profitable way. This will foster the progressive enlargement of the initial IT partnership to wider communities of contributors.

SEVENTH FRAMEWORK PROGRAMME

Project Partners	Country
Instituto de Biomecánica de Valencia	Spain
Human Solutions GmbH	Germany
Hypercliq Florendia Fourli &Co	Greece
Össur hf	Iceland
Iturri S.A.	Spain
Schrittenloher GmbH (Rieder)	Germany