EUROFIT

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

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EUROFIT VISION: EXPLOIT HUMAN 3D DATABASES

• Over the last decades, human body metrics have been used to improve human-product interaction.
• The use of 1D-measurements has been extended to consumer goods industries.
• New technologies for gathering anthropometric data (3D scanners) have increase the availability of digital anthropometric resources.
• Since 2000, over 16 large-scale national 3D body scanning surveys have been conducted.
“EUROFIT vision is to exploit the huge potential contained in the increasing number of databases of 3D body scans for the European consumer goods’ industries”
**EUROFIT VISION: EXPLOIT HUMAN 3D DATABASES**

However, these 3D data pools are dispersed and heterogeneous. Furthermore, only 1D information is used because exploiting shape information is complex for SMEs.

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**LIMITATIONS**
- **Information losses.** The 500,000-point meshes are being compressed to less than 100 measures.
- **Limited reliability** when linked to product design tools (e.g. 2D/3D CAD, CAM).
- **Pre-defined sets** which are only useful for the applications they were developed for, e.g. apparel.
- **Limited cross-data analysis** of heterogeneous sources since only similar measurements can be comparable.
Our overall aim is to implement the EUROFIT online platform enabling:

- Single point access to international body shape information.
- 3D shape data analysis tools.
- Sector-specific tools to introduce shape information into product design.
- **Open framework** allowing the development of new applications, promoting the extension and upgrade of the portal services by IT SMEs.
SPECIFIC PROJECT OBJECTIVES

1. DATA HARMONISATION
2. SHAPE ANALYSIS
3. INDUSTRIAL DESIGN
4. SCALABLE ARCHITECTURE

END USERS

3D RAW SCAN Databases

REMOTE HOMODELS DB

FRONT-END SERVICES

CENTRALISED HOMODELS DB

BACK-END SERVICES

EUROFIT PORTAL

PPE

Fashion

Orthotics

Online

Offline

PCAs

STAT. SHAPES GENERATION

NON STD MEASURE EXTRACTION
## CONSORTIUM

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EUROFIT EXPLOITATION

SELF-SUSTAINABILITY

• Four-month demonstration activity by industrial end-users
• Aggregation of four national databases before the end of the project

SOLID BUSINESS MODEL

• Exploitation will be based on the Business Model of iSize
• EUROFIT is conceived from a wider, more scalable and cross-sector approach

SME-DRIVEN

• New forms of partnership involving the whole value chain: end-users, data owners and IT providers
• Reduce time, cost and complexity of 3D data integration into industry
THANKS FOR YOUR ATTENTION

MORE INFORMATION:

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