

Collaborative Development of Intelligent Wearable Meta-Products in the Cloud "EASY-IMP"

EASY-IMP is a research project under the 7th Framework Programme of the European Commission. It aims to develop methodologies, tools and platforms for the design and production of personalised Meta-Products (product / services), combining wearable sensors embedded into garment with mobile and cloud computing.

The Easy infrastructure will enable collaborative design, production planning and supply chain management for this new range of combined product-service offers based on intelligent wearables.

The Easy business model will introduce immense business scalability by offering to all interested third parties the tools to develop new services for mobile device users, thus evolving into an open platform of literally infinite applications in various target markets. More specifically Easy will focus on the following pilot applications: rehabilitation and developmental games, personal training and cardiac rehabilitation.

The selected application scenarios will include a large variety of sensors and sensor networks including miniature motion sensors (angular velocity and acceleration), medical sensors (e.g. heart rate, ECG, skin-conductivity), etc. The project will build upon existing and new game, sport and medical applications for testing and demonstrating purposes, while focusing on the development of the Meta-Product methodology and framework. It will develop guidelines and standards, methodologies and reference-architectures for the design and production of personalized smart garments and associated services.

The presentation will also cover the project scientific and technical objectives:

- Definition of Meta-Product Development Methodology
- Definition and Development of Meta-Product Cloud Services
- Development of Innovative Front-End Services (MP Configuration, Capturing of Functional and Usage Feedback data)
- VR based Product-Service Simulators for Prototyping and Testing
- Sensorial Networks and their Integration