Introduction to FITMAN - Open Source technologies for Manufacturing

June Sola
(Innovalia Association)
FITMAN - Use Case in Manufacturing

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<tr>
<th>Leader</th>
<th>Core Consortium</th>
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<th>Original Equipment Manufacturers</th>
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FITMAN Assets

FIWARE

Generic Enablers (GEs)
FITMAN Assets

Generic Enablers (GEs) → Manufacturing sector → Specific Enablers (SEs)

Specific Components
FITMAN Assets

FITMAN Platforms

Generic Enablers (GEs) → Manufacturing sector → Specific Enablers (SEs)

Reference Platforms

Domain Specific Platforms
FITMAN Specific Enablers

Smart SEs
- SE1: Shopfloor Data Collection
- SE2: Secure Event Management
- SE3: Dynamic CEP
- SE4: Dynamic Visualization & Interaction

Virtual SEs
- SE1: Collaborative Asset Management
- SE2: Collaborative Business Process Management
- SE3: Supply Chain & Business Ecosystem Apps
- SE4: Data Interoperability Platform Services
- SE5: Metadata and Ontologies
- SE6: Management of Virtualized Assets
- SE7: Generation and Transformation of Virtualized Assets

Digital SEs
- SE1: Unstructured & Social Data Analytics
- SE2: Collaborative PLM Platform Open API
- SE3: Semantic Mediator front-end & back-end
- SE4: 3D Scanning Storage and Visualisation
- SE5: Collaborative 3D Web Viewer

Open Source Components for Manufacturing

http://catalogue.fitman.atosresearch.eu/
FITMAN Specific Enablers

Specific Enablers

Home / Specific Enablers

Browse by Factory Domain
- Any -

3DScan
Tool for 3D image analysis, visualisation and management
DIGITAL FACTORY

Advanced Management of Virtualized Assets (MoVA)
Easy to use interface for advanced Management of Virtualized Assets
VIRTUAL FACTORY

Collaborative 3D Web Viewer
Collaborative editing of 3D virtual scenes
DIGITAL FACTORY

Collaborative Asset Management
Collaborative, ontology-based management of virtualized Tangible and Intangible Manufacturing Assets
VIRTUAL FACTORY
Real-time data collection & processing for Shop-floor operations
FITMAN Reference Platforms

FITMAN Digital Platform

- **GE1**: Data.PubSub
- **GE2**: Apps.ApplicationMashup
- **GE3**: Data.UnstructuredDataAnalysis
- **GE4**: iLike

- **SE1**: Unstructured & Social Data Analytics
  - Anlzer by NTUA
- **SE2**: Semantic Mediator front-end & back-end
  - SEMed by BIBA
- **SE3**: 3D Scanning Storage and Visualisation
  - 3DScan by DATAPIXEL
- **SE4**: Collaborative 3D Web Viewer
  - c3DWV by DFKI

**Virtual Obeya PC (HOLONIX)**

**Front-End**

- 3D Scanning Storage and Visualisation
  - 3DScan (DATAPIXEL)
- Apps.ApplicationMashup
  - Wirecloud (UPM)
- Collaborative 3D Web Viewer
  - c3DWV (DFKI)

**Back-End**

- iLike
  - PC (HOLONIX)
- Semantic Mediator front & back-end
  - SEMed (BIBA)
- Data.PubSub
  - Context Awareness Platf. (Telecom Italia)
- Unstructured and Social Data Analytics
  - Anlzer (NTUA)
- Data.UnstructuredDataAnalysis
  - UDA (Atos)
- 3D Point Cloud Analysis
  - PC (DATAPIXEL)
Connecting people to information, advanced data visualization
FITMAN Reference Platforms

**FITMAN Virtual Platform**

- **GE1**
  - Apps. Marketplace
  - Reference Impl. by SAP

- **GE2**
  - Apps. Repository
  - Reference Impl. by SAP

- **GE3**
  - Apps. Mediator
  - Reference Impl. by Telecom Italia / Thales

- **GE4**
  - Apps. Registry
  - Reference Impl. by SAP

- **GE5**
  - Apps. Light Semantic Composition
  - COMPEL by ATOS

- **GE6**
  - Data Semantic Support
  - Semantic Application Support by ATOS

**SE1**
- Collaborative Asset Management
  - CAM by ENG

**SE2**
- Collaborative Business Process Management
  - BPM by ENG

**SE3**
- Supply Chain & Business Ecosystem Apps
  - SCApp by TXT

**SE4**
- Data Interoperability Platform Services
  - DIPS by TXT

**SE5**
- Metadata and Ontologies Semantic Matching
  - SeMa by NTUA

**SE6**
- Management of Virtualized Assets
  - MoVA by DITF

**SE7**
- Generation and Transformation of Virtualized Assets
  - GeToVA by UIBK

**Virtual Factories**

- Supply Chain & Business Ecosystem Apps
  - SCApp (TXT)

- Apps. Light Semantic Composition
  - COMPEL (ATOS)

- Collaborative Business Process Management
  - CBPM (ENG)

- Collaborative Asset Management
  - CAM (ENG)

- Management of Virtualized Assets
  - MoVA (DITF)

- Generation and Transformation of Virtualized Assets - GeToVA (UIBK)

**Data Interoperability Platform Services**
- DIPS (TXT)

**Metadata and Ontologies Semantic Matching**
- SeMa (NTUA)

**Data Semantic Support**
- Semantic Application Support (ATOS)

**Apps. Mediator**
- Reference impl. (Telecom Italia / Thales)

**Apps. Repository**
- Reference impl. (SAP)

**Apps. Registry**
- Reference impl. (SAP)
Cross-enterprise collaboration, tangible/intangible asset management
Thanks!

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