Data Exposure & Analytics

Henrik Weimer

AIRBUS
Biography

Henrik Weimer

Senior Manager, AIRBUS
PLM Strategy, Architecture, and Business Plan

International IT executive with more than 20 years of program and project management experience in the aerospace & defense, automotive, petrochemical, medical, and technology industries.

Change leader with expertise in large PLM transformation programs. Experience in worldwide & regional operations, both off-shore and on-shore outsourcing.

Creative and innovative strategic thinker. At ease in a complex international context spanning borders and cultures. Focus on human relationships with strong leadership and people skills.
We are part of Airbus Group

136,000+ Total workforce

€1,006 billion Order book

€64.4 billion Annual revenue

© AIRBUS S.A.S. All rights reserved. Confidential and Proprietary document.
The most global aerospace player – close to our customers worldwide

The numbers

- 11 Production sites
- 4 Assembly line locations
- 5 Training centres
- 4 Engineering centres
- 3 Customer support centres
- 10 Materials & logistics centres*

*Satair Group

© AIRBUS S.A.S. All rights reserved. Confidential and Proprietary document.
Delivering value for airlines and enabling people to connect
OEM Context

Global Product Data Interoperability Summit | 2016

Catalog Options
Engineering Changes
Assemblies
Design Solutions
Specific Parts

+1,4K
+11K
+26K
+180K
+450K
DATA is the new OIL
Data assets spread across various specific process areas

- **Disconnected Silos**

- SCM (Supply Chain Management)
- PLM (Product Lifecycle Management)
- MES (Manufacturing Execution System)
- ERP (Enterprise Resource Planning)
- Supplier BOM
- CRM (Customer Relationship Management)
- Quality
- Customers
Challenges to Reach End-to-End Data Exposure

Data assets locked into proprietary solutions & Data Formats

RESTRICTED AREA
Challenges to Reach End-to-End Data Exposure

Data Sources

Authoring tools

End to End Data Analytics

TIME

SCM

PLM

MES

ERP
Significant waste of time

**Allocating data** in various locations
- Disconnected Silos

**Normalize data** formats
- Proprietary formats

**Clean** the data **content**

- Out-of-date reports & KPI’s
- Low speed of Innovation
End-to-End Data Exposure Architecture

Global Product Data Interoperability Summit | 2016

Multi Source Apps GUI
- Data Analysis
- Advanced Analytics
- Mash Up
- Rich User Interface

Integration Layer
- Data Mart
- Data Mash Up
- Multi Domain Ontologies
- Service API

Data Cores

Data Sources

Authoring tools

SCM
PLM
MES
ERP
End-to-End Data Exposure Architecture

Multi Source
 Apps GUI

Integration
 Layer

Data Cores

Data Sources

Authoring tools

SCM

PLM

MES

ERP

Multi Source

Apps GUI

Integration
 Layer

Data Cores

Data Sources

Authoring tools

SCM

PLM

MES

ERP

Microsoft .NET Framework

Java

React

Spotfire

ThingWorx

HTML 5
E2E Supply Status

Prediction of upcoming manufacturing challenges:

- Enabling people to have the same view and act together
End 2 end reporting enables to follow the supply status of each parts thanks to charts and tables.

Possibility to enhance the Digital Mockup with status information.
Data Exposure Enables Powerful Applications

Multi Source Apps GUI

Integration Layer

Data Lakes

Data Sources

Authoring tools

Business activity monitoring & business intelligence

Visual management in 3D

Advanced analytics

Mobile Enabled

Data Analytics

Mash Up

Advanced Analytics

Rich User Interface

SCM

PLM

MES

ERP
Benefits for Tools & Technology

- Cross program platform for smart solutions
- Unlocking the power of existing assets
- Single source of truth
- Scaling and re-use: Building block technologies easy to replicate the benefit in other areas
- Enhanced DMU content enabler
  Information visualization on context
Benefits for People

Global Product Data Interoperability Summit | 2016

- Data democratization
  Everyone has access to the data, not only the experts

- Focus on progress instead of discussion on data quality

- Collective intelligence as people have the same information.