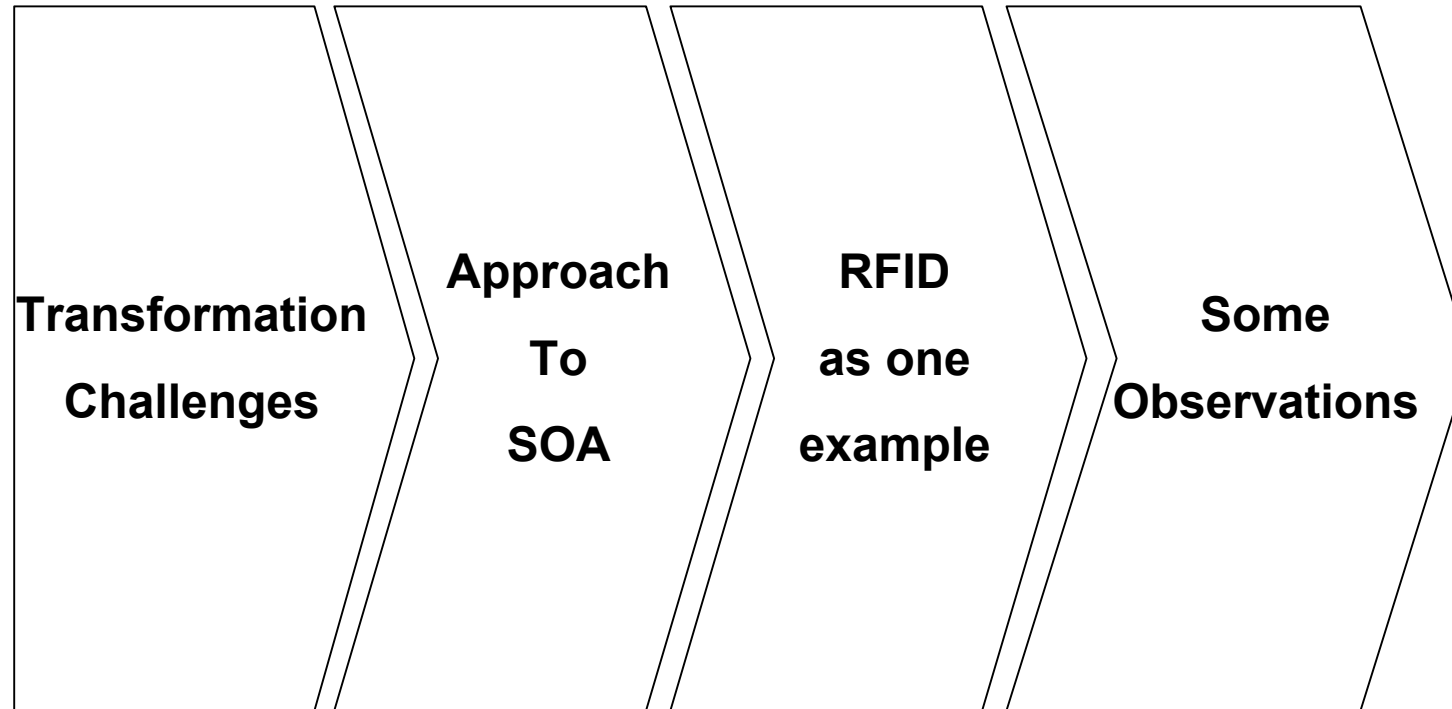




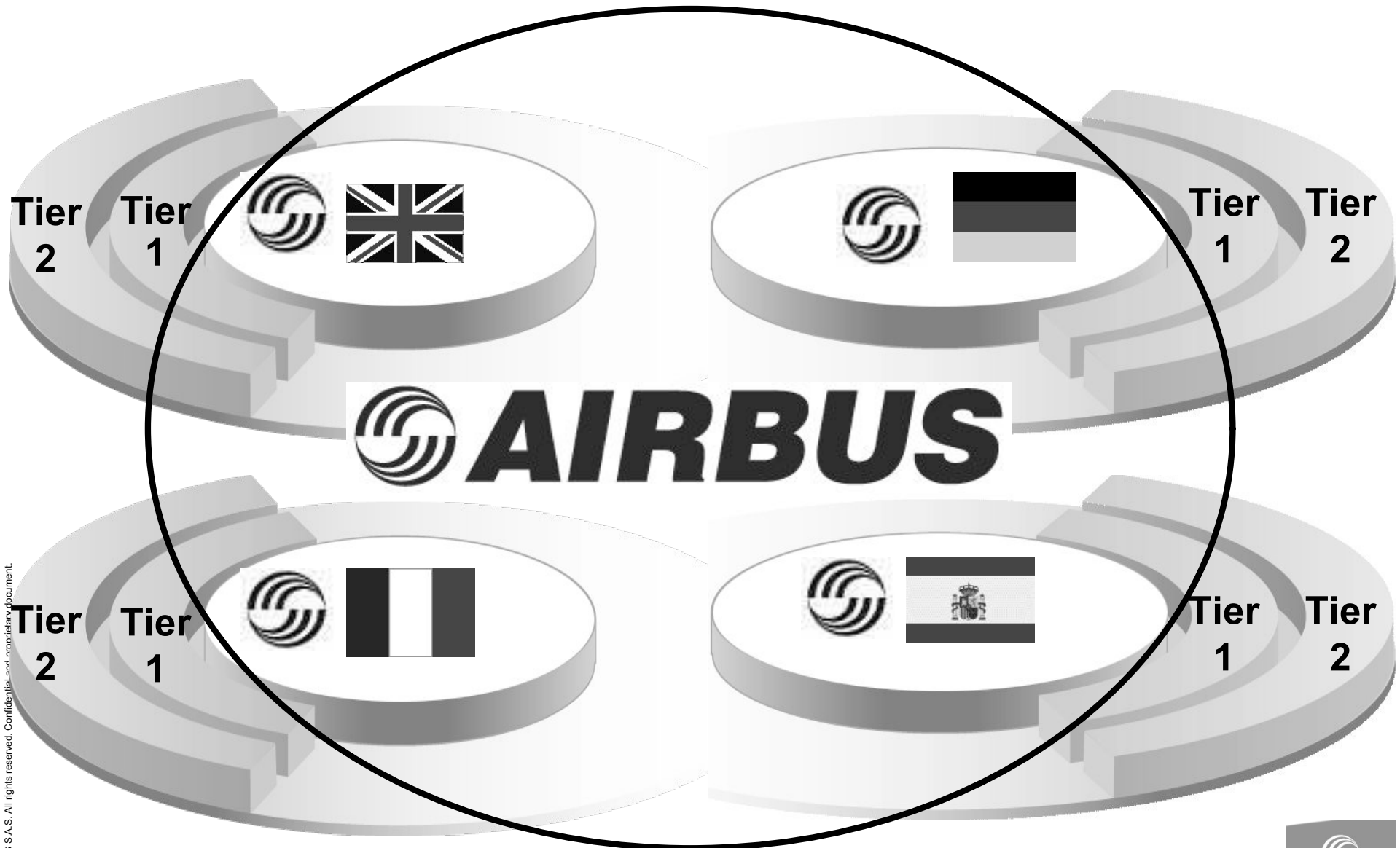
**Cornelius Bronder**  
**Vice President Airbus Resource Planning**

# Agenda



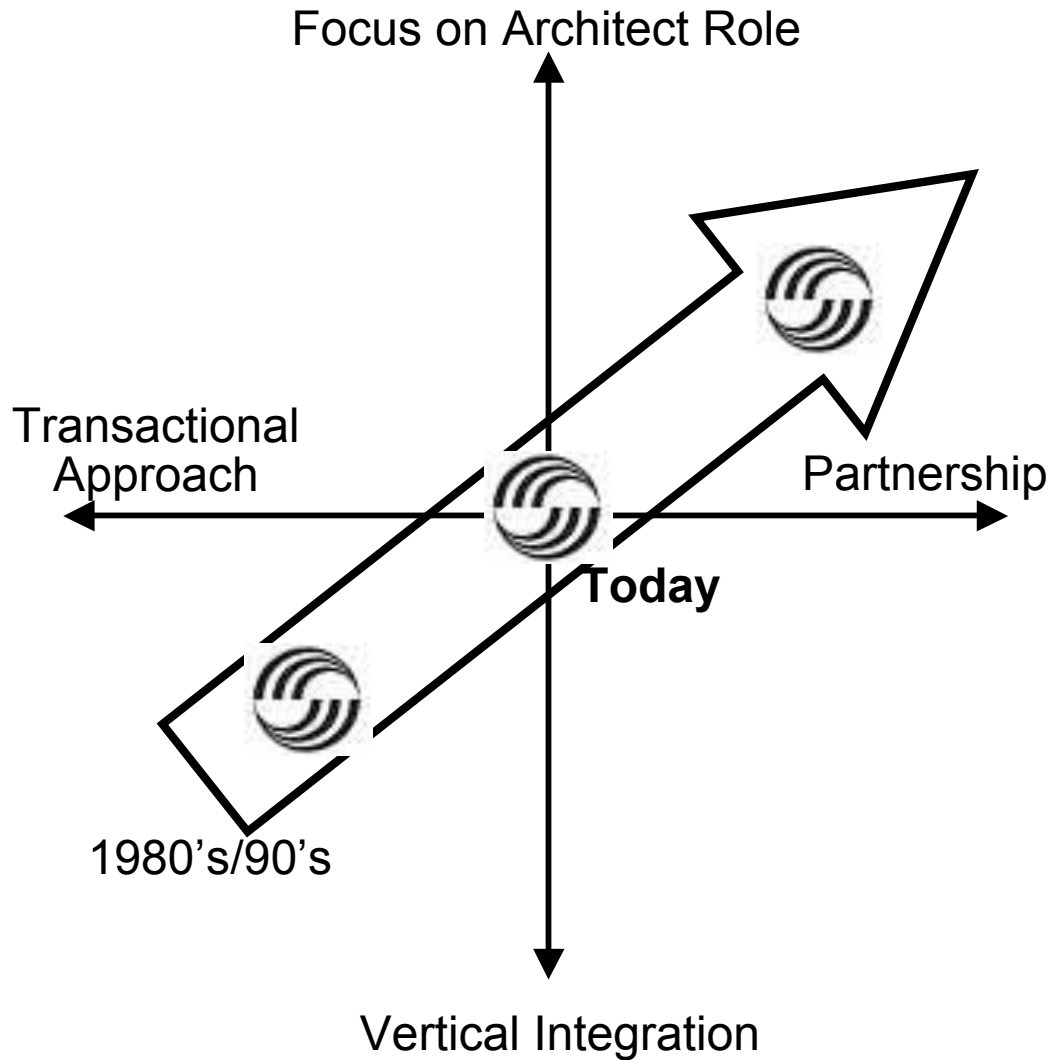
# Transformation Challenges

## Integrate Core Business



# Transformation Challenges

## Evolve toward Multi-Enterprise Eco-System

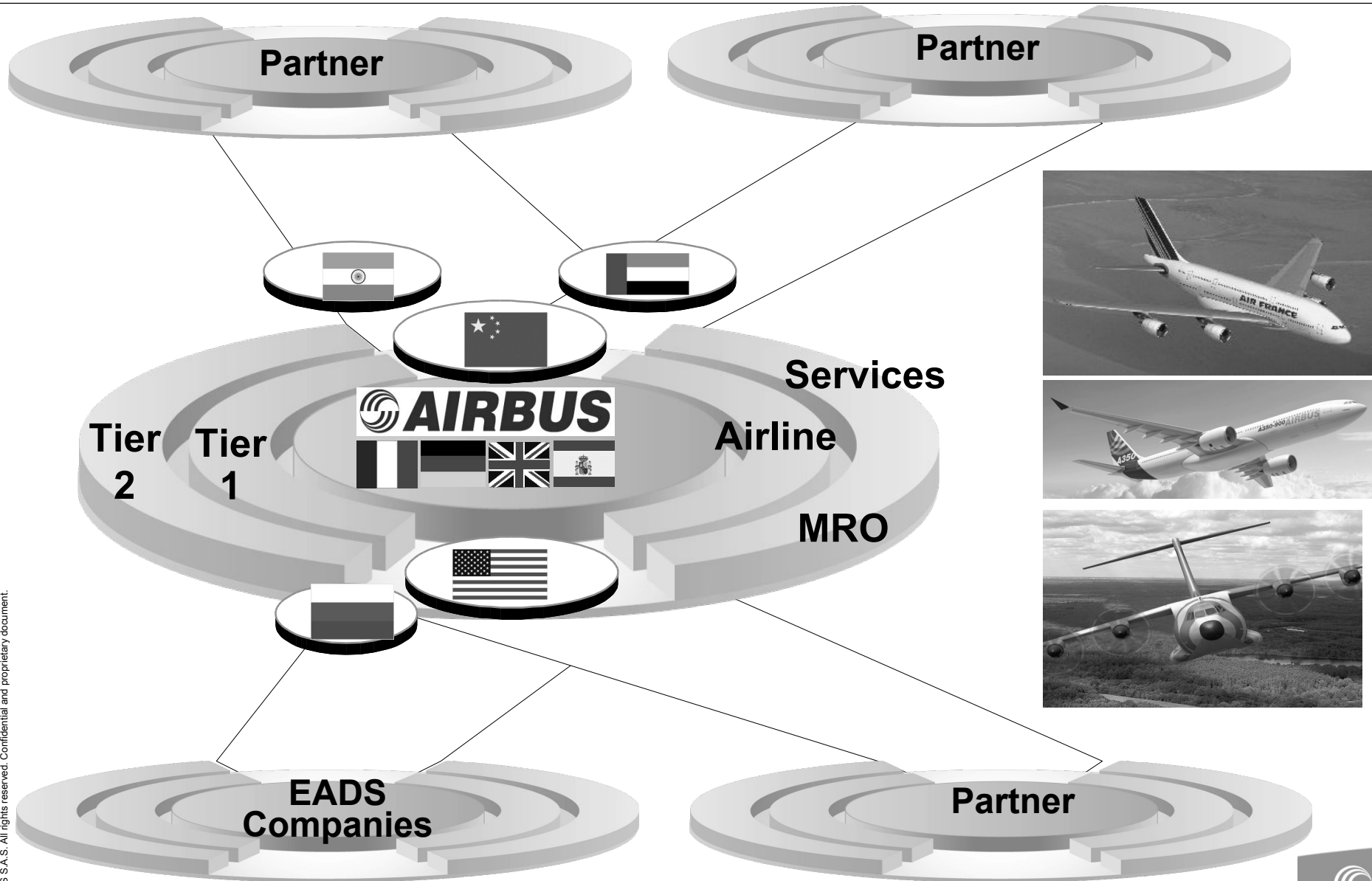


### Drivers

- \* more global
- \* more programs
- \* more investment
- \* more specialization
- \* more technology
- \* more speed

# Transformation Challenges

## Evolve toward Multi-Enterprise Eco-System



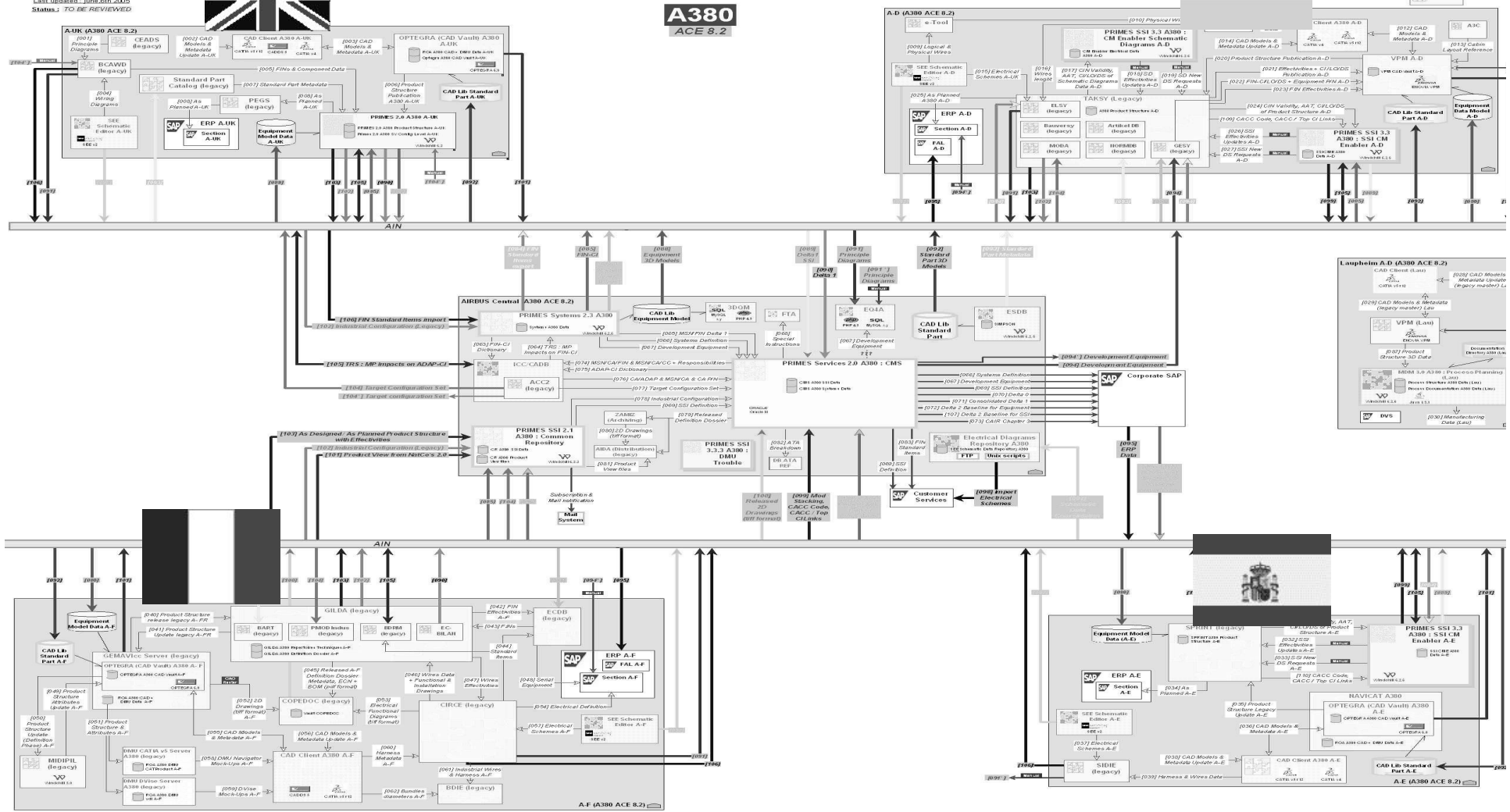
# Transformation Challenges Simplify Information Systems



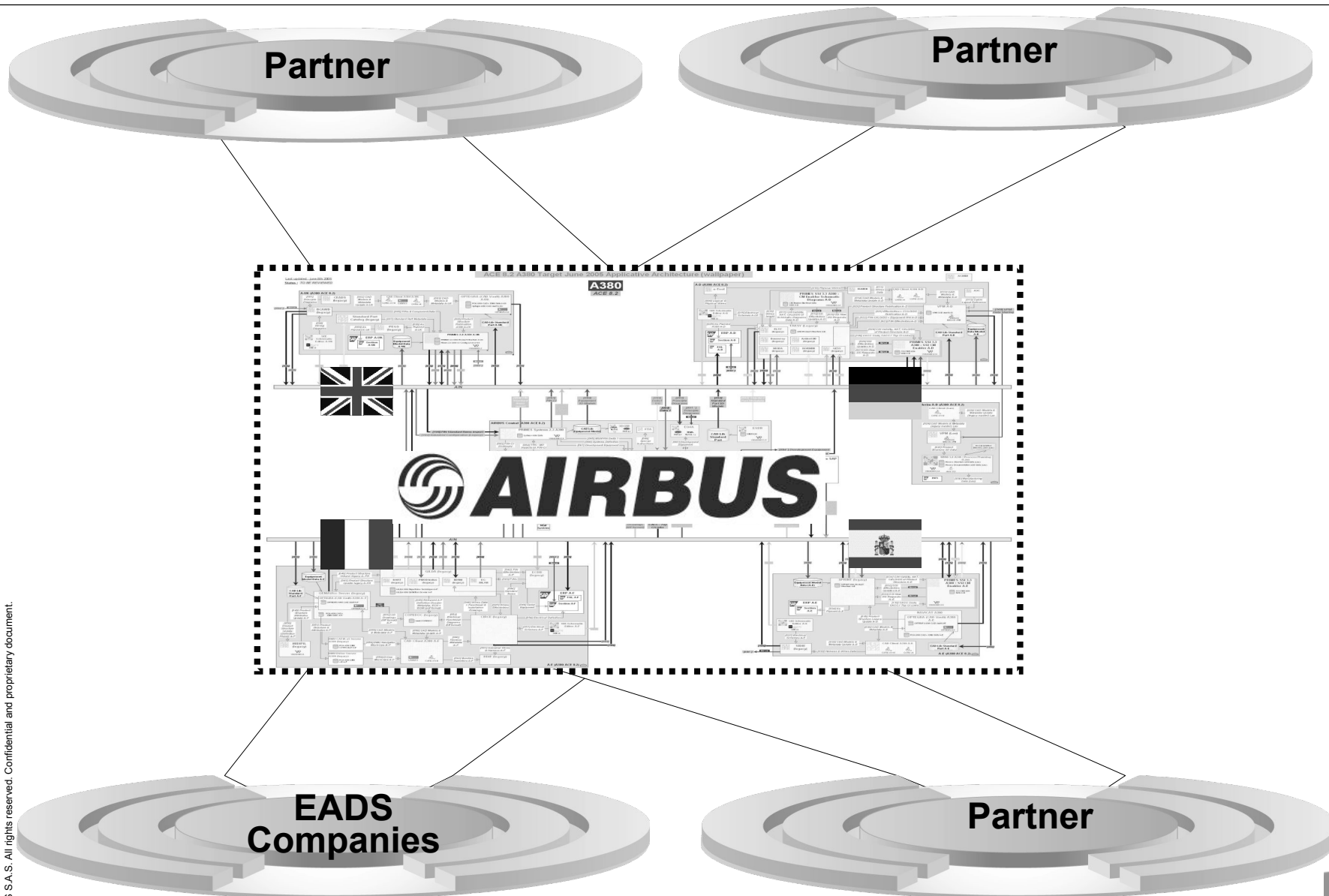
Last updated: June 6th 2005  
Status: TO BE REVIEWED

ACE 8.2 A380 Target June 2005 Applicative Architecture (wallpaper)

**A380**  
ACE 8.2



# Transformation Challenges Enable Business Networks



# What we expect from SOA in this environment

## Business-Driven View

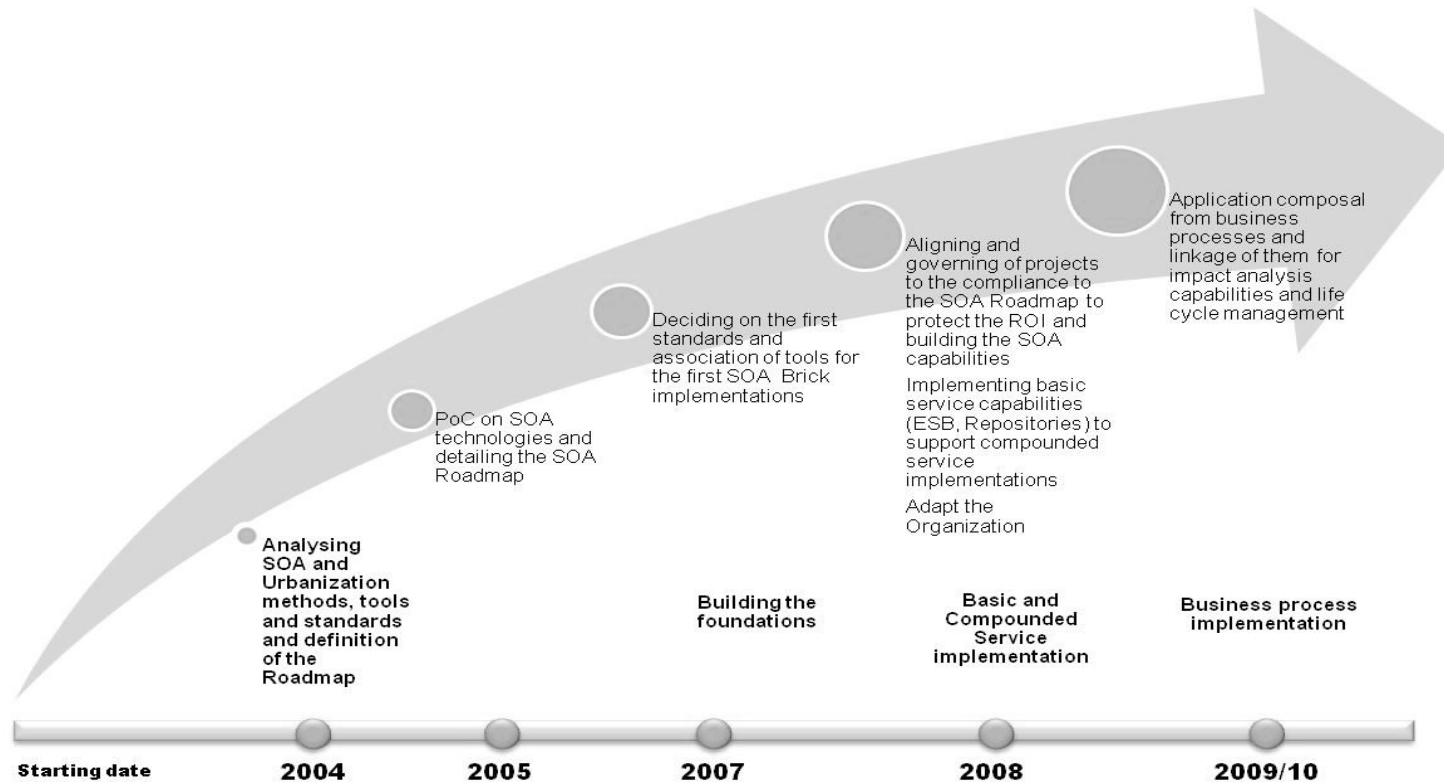
- \* Business-Process Orientation
- \* Cross-Enterprise Processes
- \* Re-Configurable
- \* Credible & Industrial Strength
- \* Leverage existing assets
- \* Ease & Speed
- \* Secure

- \* Standardization
- \* Modeling, not Coding
- \* Modularization & Re-Use
- \* Service Life-Cycle
- \* Virtualisation in all layers
- \* Repository

## Technology-Driven View



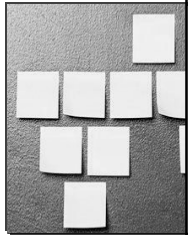
# Airbus Approach to SOA



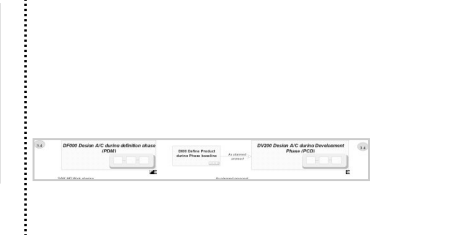
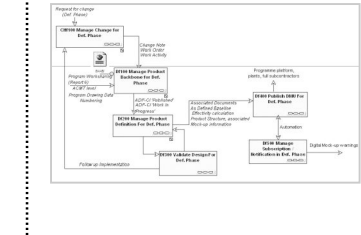
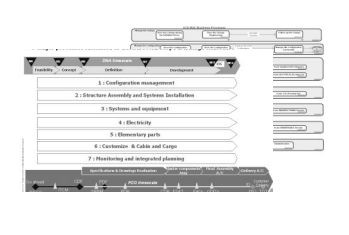
- \* Move from Hype to Reality
  - \* Demonstrate business value
  - \* Demonstrate 'Industrial Strength'
  - \* Establish Repeatable Process, Copy & Paste

- \* In the process, build up our SOA and Architecture competences

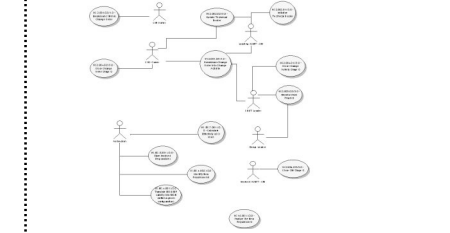
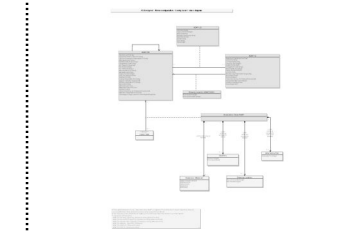
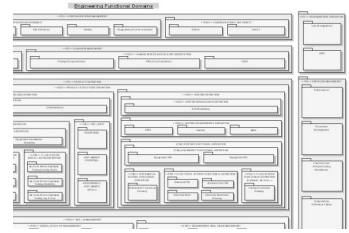
# Backbone to respond to Challenges (SOA or not) Link & Integrate Process & Information Systems



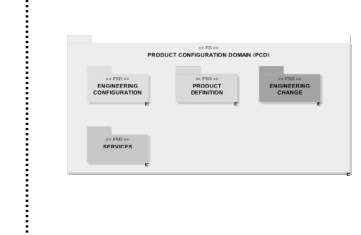
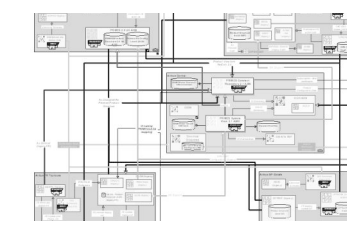
**Process**



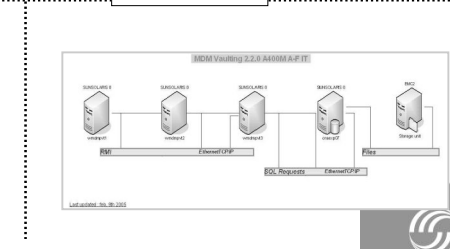
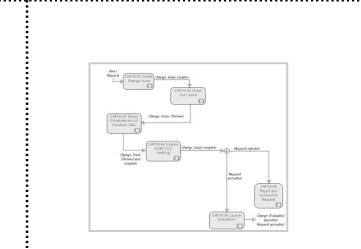
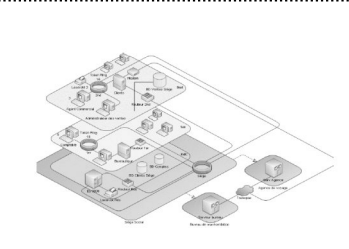
**Information**



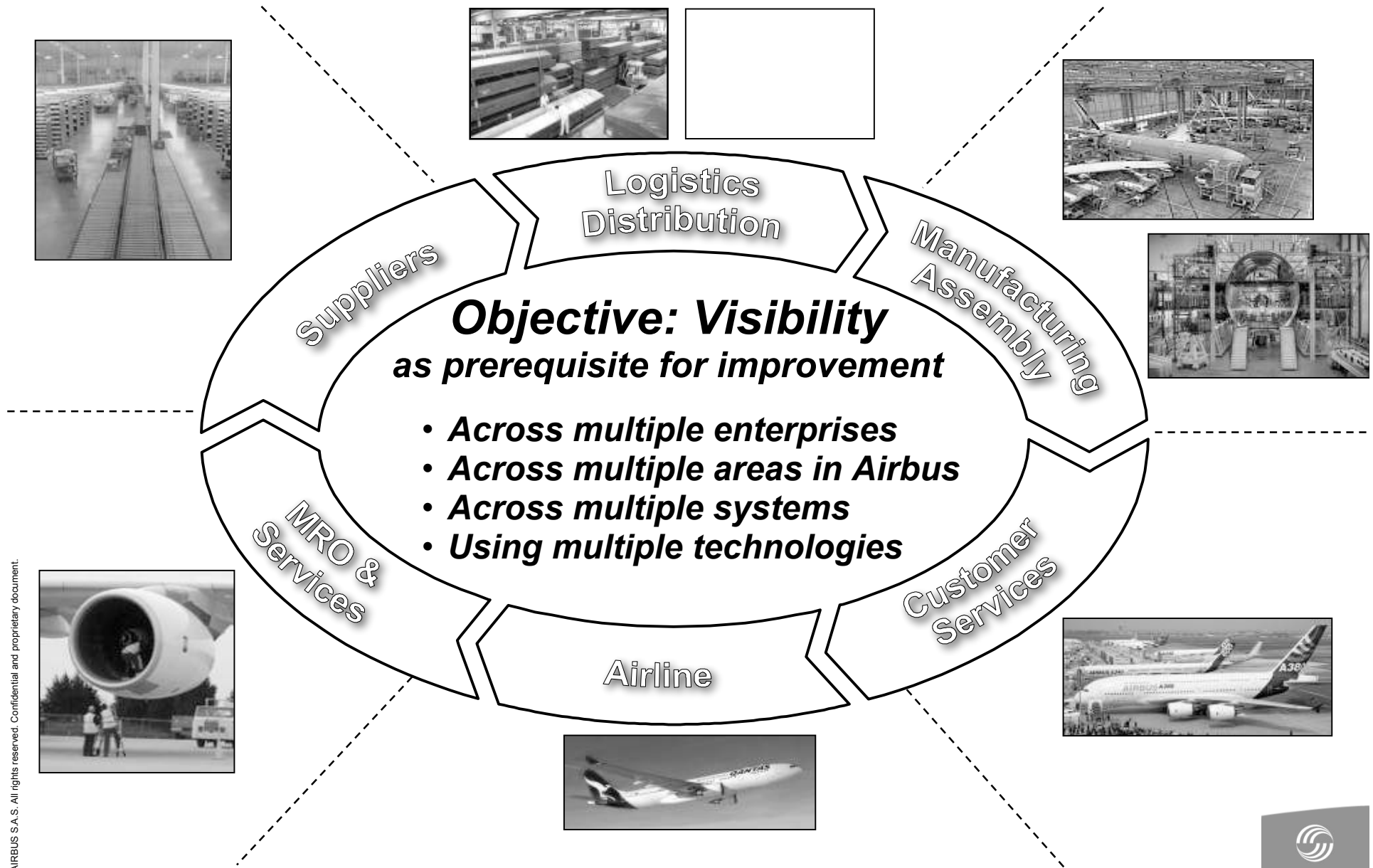
**Application**



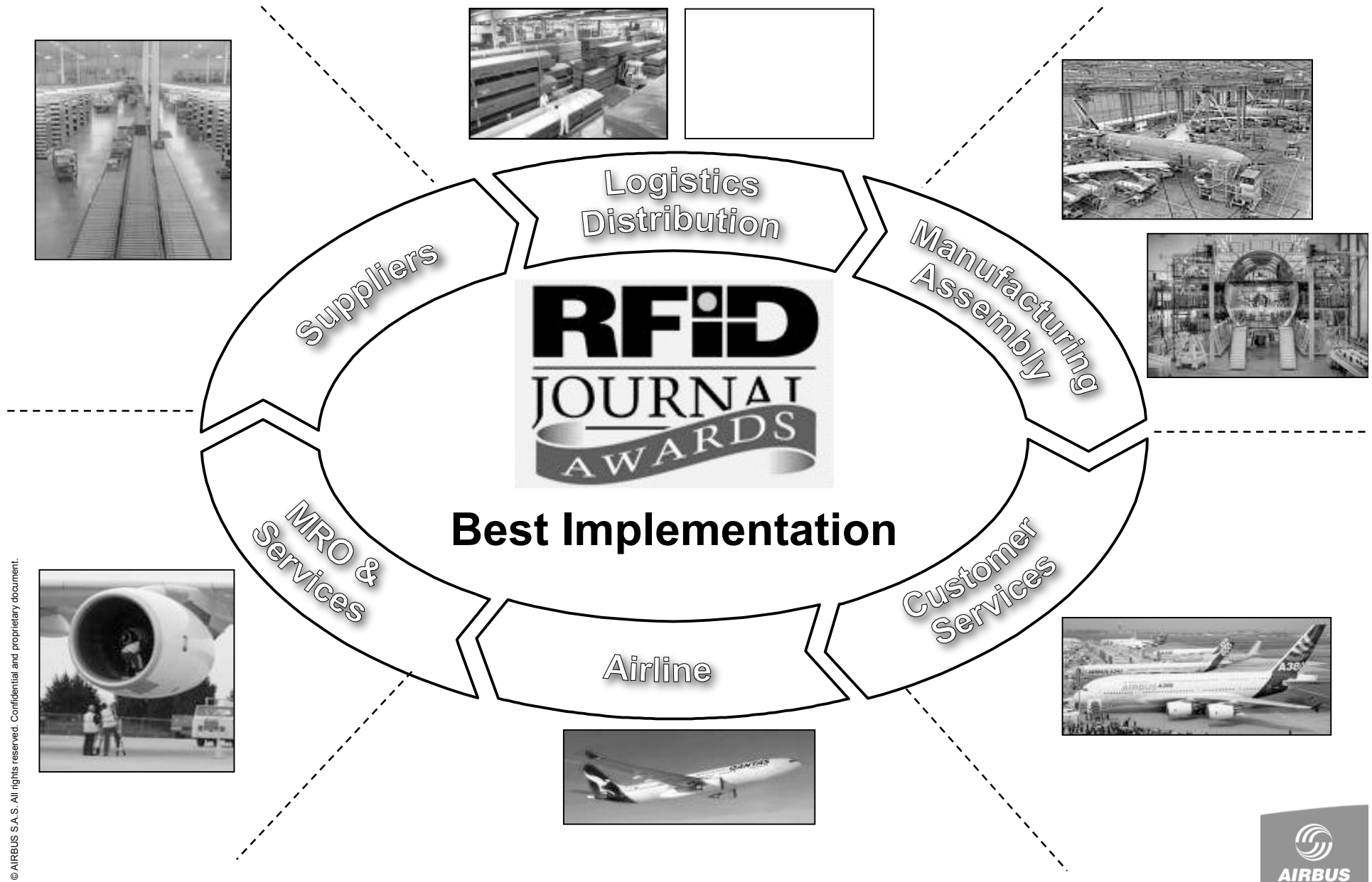
**Infrastructure**



# One Example for SOA addressing Transformation: Overall Value Chain Visibility

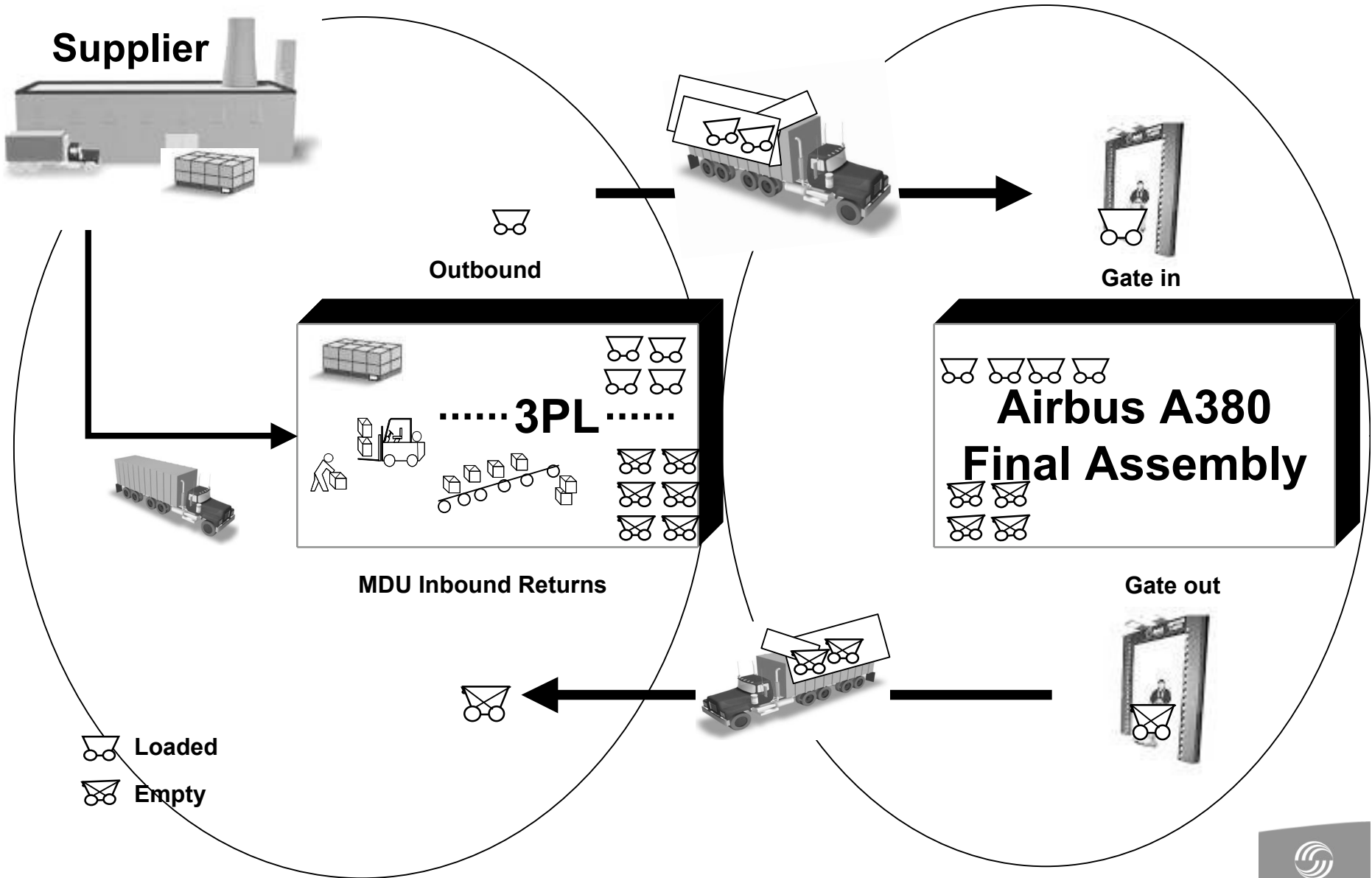


# One Example for SOA addressing Transformation: Overall Value Chain Visibility

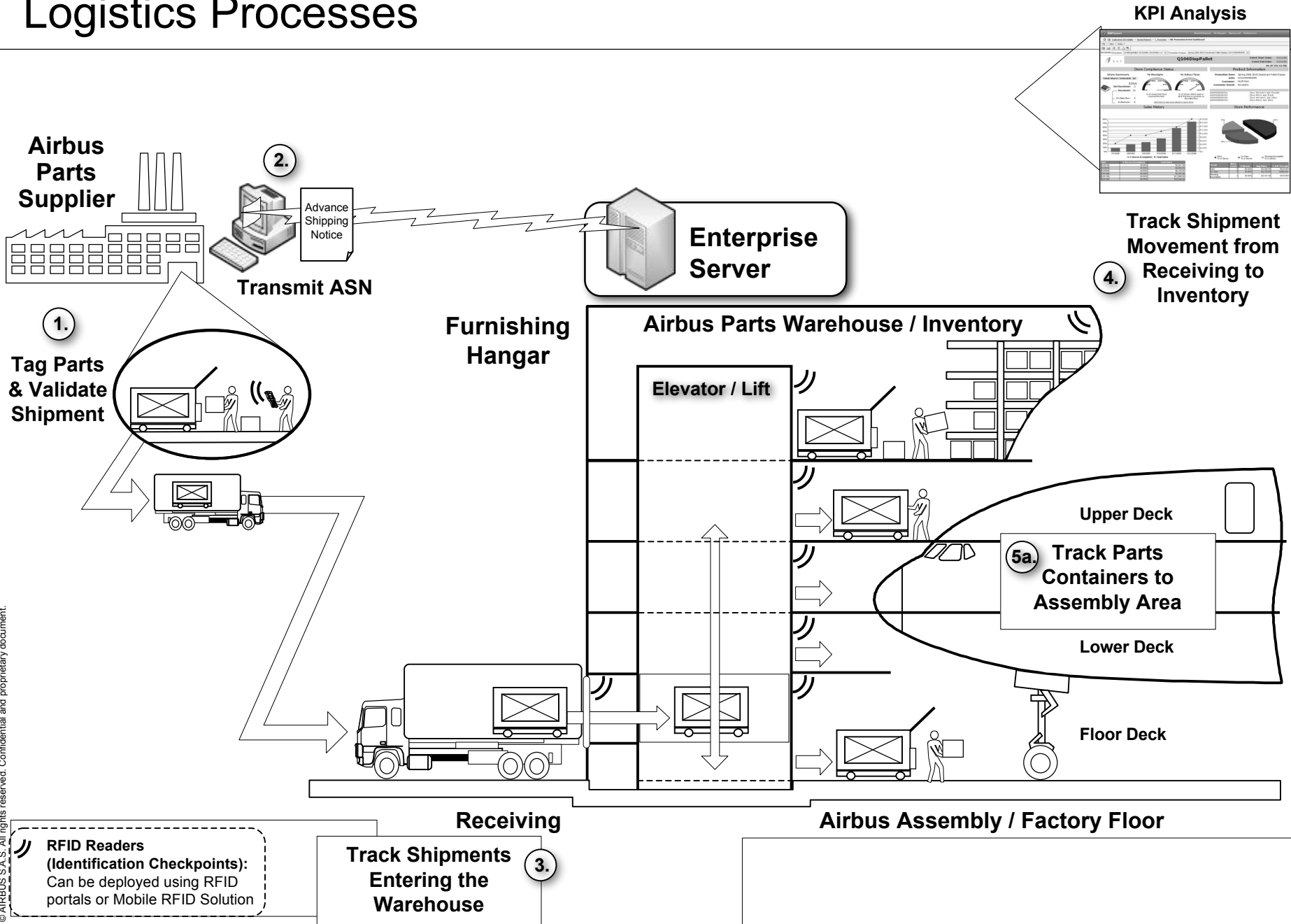


# Example

## Logistics Processes

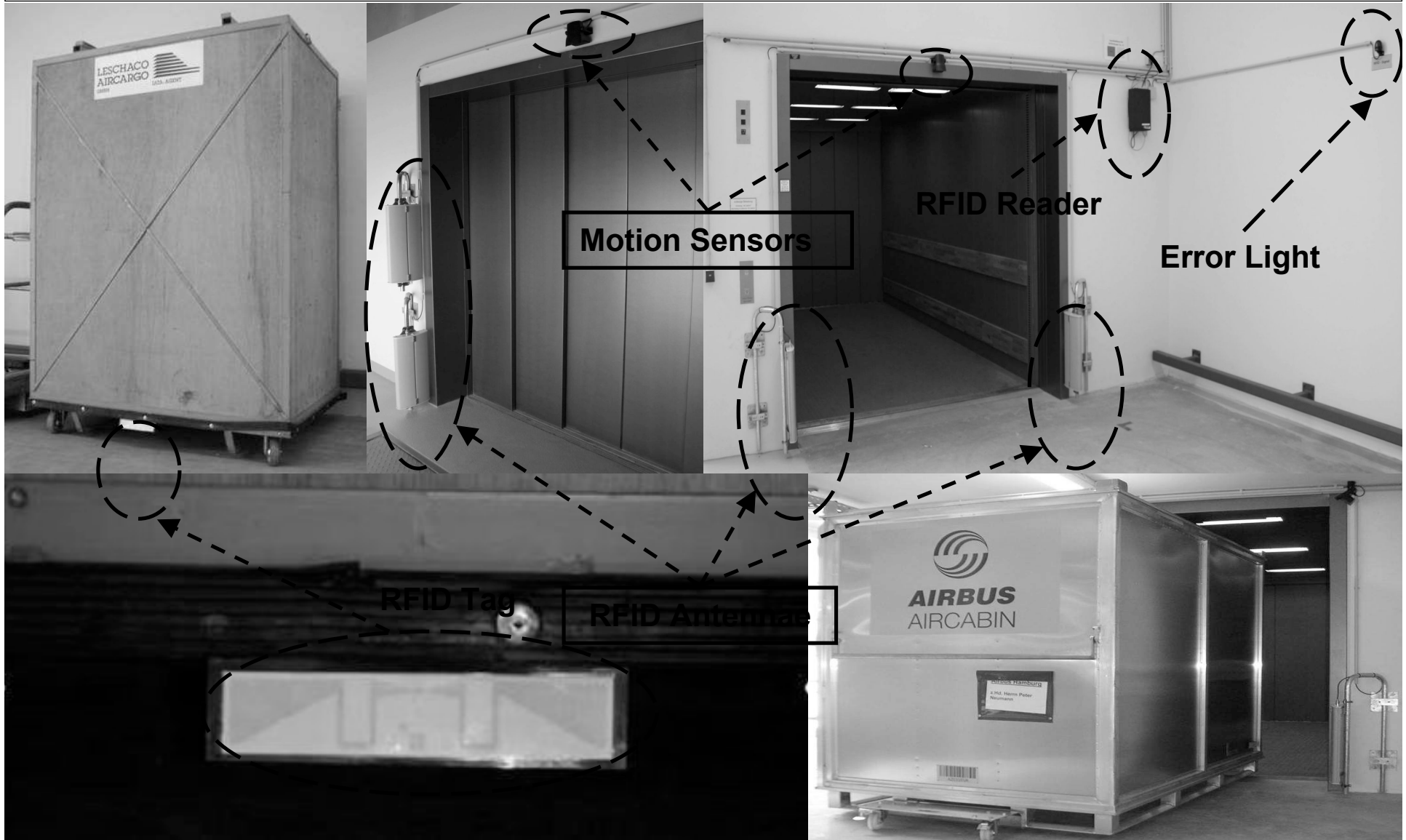


# Example Logistics Processes



# Example

## Logistics Processes



# Example

## Global Transportation



# Example

## Global Transportation



# Other examples

## Internal Transport (eg BELUGA)

Automatic tracking and tracing  
Streamlined planning and operations

## Ground Test Tool Handling



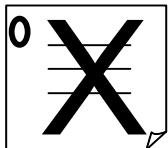
Automatic tracking and tracing  
Streamlined logistics operations

## Manufacture Tracking (eg Sheet Metal)



Automatic work order confirmation  
Automatic localisation

## AS BUILT Configuration Management



Yellow Label



RFID tags on parts

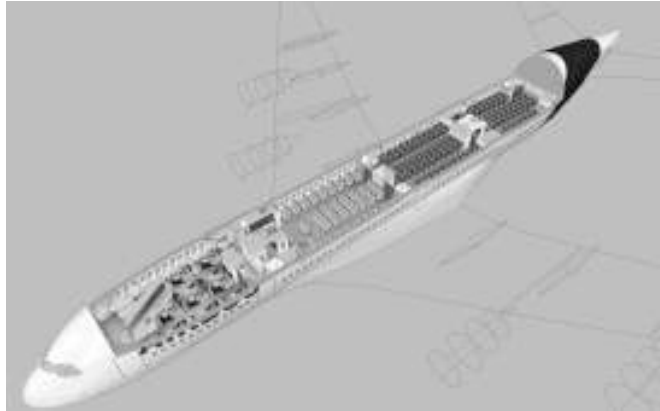
RFID on parts to replace yellow labels  
Streamlined and efficient AIR process

## Production Tool Handling



Automatic localisation  
Lower cost maintenance/calibration

# Customer Service / Airline Examples

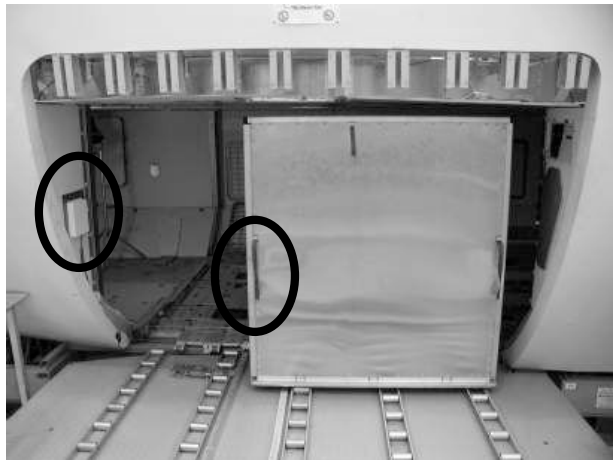


## Joint Customer Focus

- \* Airline RFID Customer Focus Group
- \* 34 airline participants

## Targeted customer processes

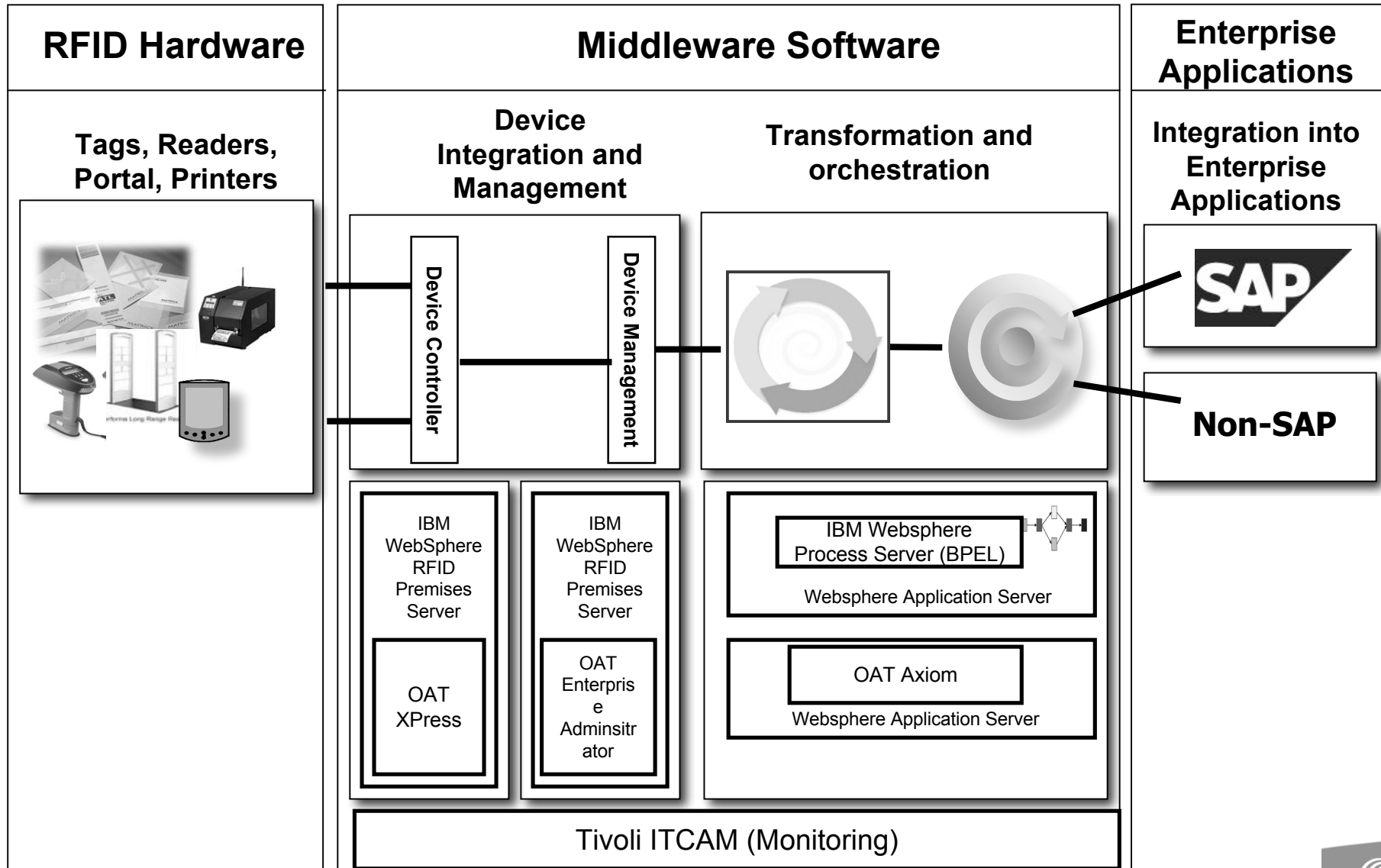
- \* Configuration management
- \* Line maintenance
- \* Repair shop optimization, warehouse logistics
- \* Payload tracking
- \* Life limited part monitoring



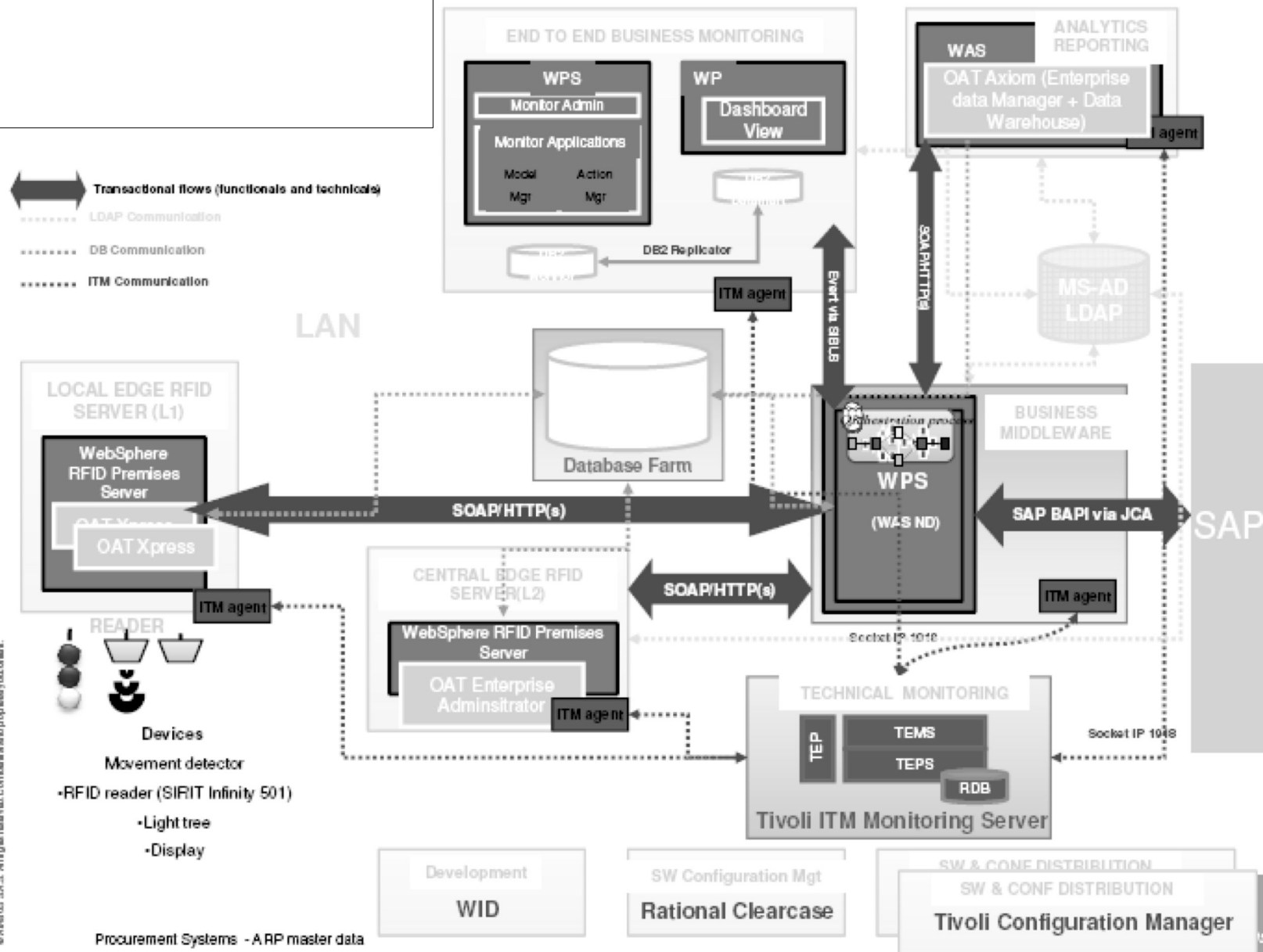
Airbus is actively working with its customers & industry partners to develop a coherent and complete set of modular solutions

# Corporate Auto ID Solution Framework

## Main Functions and S/W Components

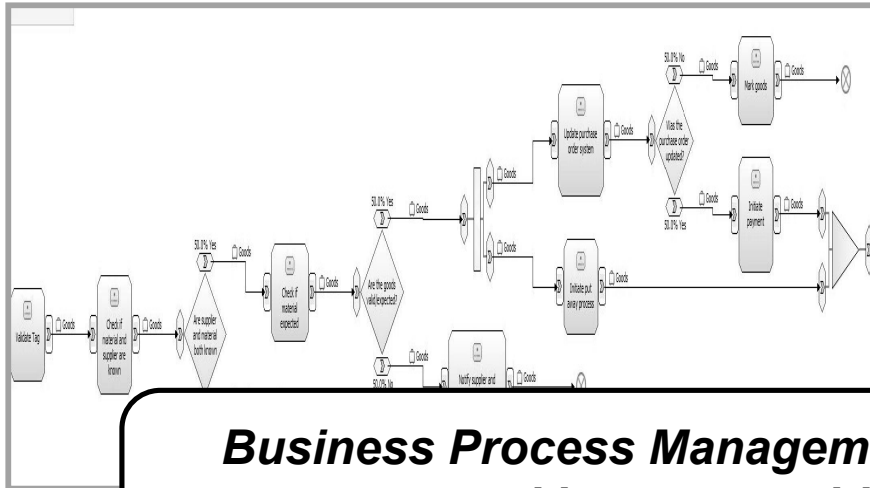


# Architecture

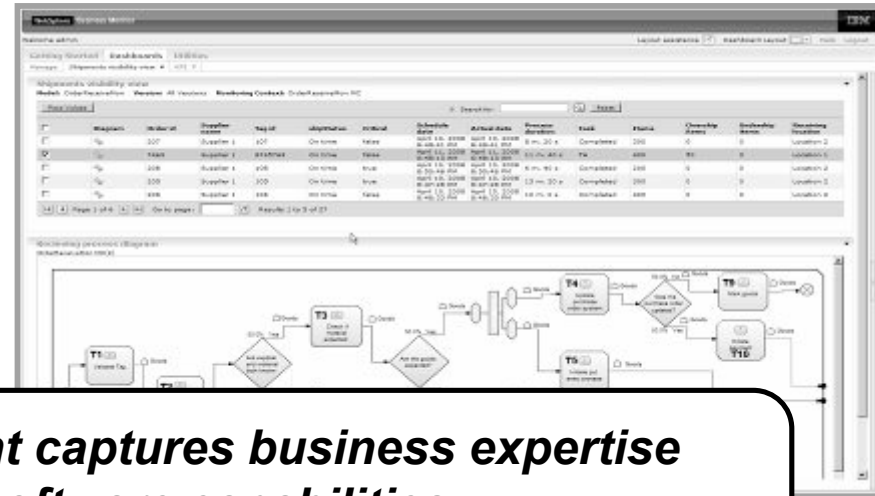


# Business Process Management in RFID example

## Process design & modeling

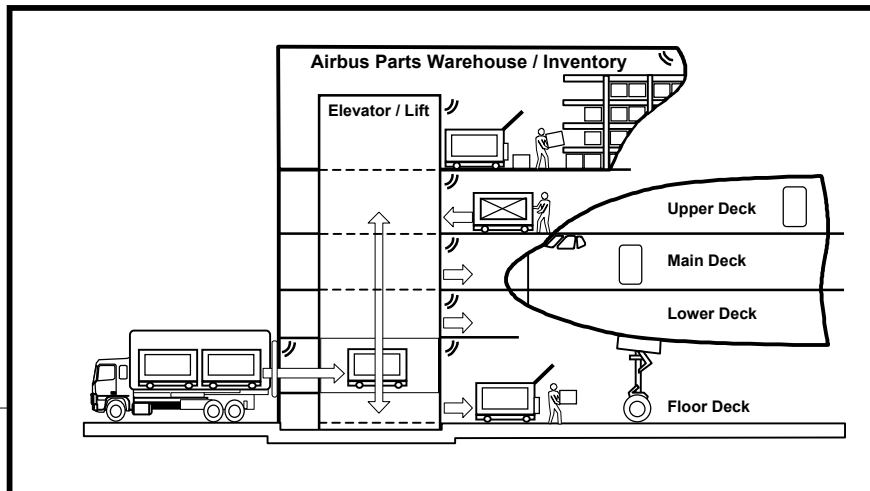


## Process & event monitoring



***Business Process Management captures business expertise and leverages with software capabilities to accelerate process transformation***

is reserved. Confidential and proprietary document.



**Visibility to operational events**



**Business performance indicators**

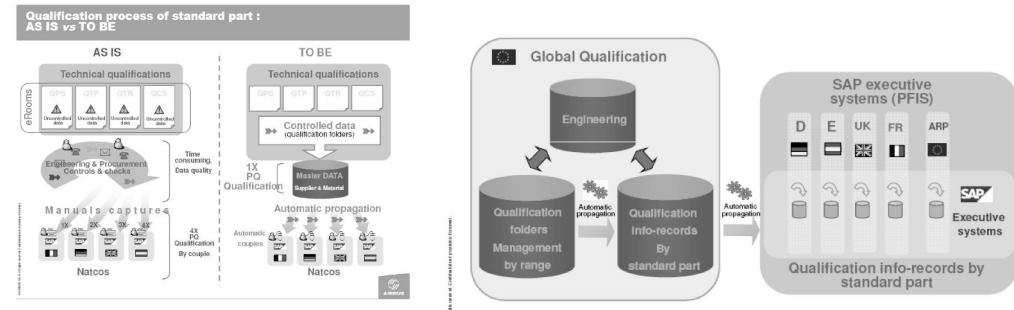


# Some Other SOA Cases at Airbus

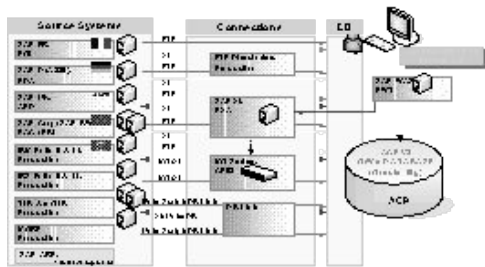


## Best RFID Implementation

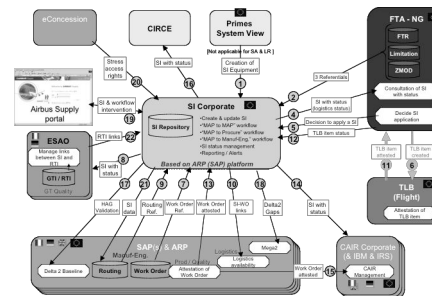
## Procurement / Engineering Standard Parts Qualification



## Outstanding Works Management



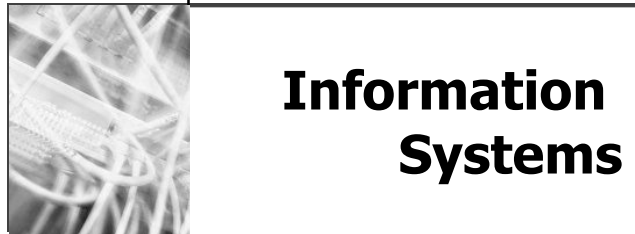
## Temporary Aircraft Modifications



# Benefit from SOA



- \* True end-to-end view allowing to monitor & measure = improve
- \* Rapid modeling = critical questions earlier
- \* Breaking up silos



- \* Re-Use
- \* Configurable
- \* Closer to 'customer'
- \* Reduction of development effort
- \* Standard as a reference
- \* Interoperable / Interchangeable



# Some Observations Approach to Transformation & SOA

- \* Stay Real and Realistic**
- \* CIO / Management attention and sponsorship**
- \* Integrate & link targeted improvements with global process improvement as entry point**
- \* Invest in establishing the 'big picture'; define objective**
  - \* Demonstrate Business Value – with & by the business!**
  - \* Demonstrate 'Industrial Strength'**
    - \* Develop repeatable process, method, tool**
    - \* Copy & Paste; stay flexible**
- \* Combine Business Process & Technology Expertise**
- \* Strengthen internal governance & Organisation**

Thank You

