From Event-driven modeling to Process monitoring

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Parallel session
Workflow (BPM)

ARIS
Controlling Platform
IDS Scheer & ARIS Platform

- Founded 1984 by Prof. August-Wilhelm Scheer
- Listed in German TecDAX, IPO 1999
- Consulting and software for Business Process Management
- 2,500+ employees worldwide
- Subsidiaries in 23 countries, with partners and subsidiaries in over 50 countries
- Revenues increase in 2005 to € 318 million (55% outside Germany) and profitable since founding
- EBITA in 2005 € 33,6 Million
Process Orientation

Business Process Transparency

Critical Success Factors

Functional Organization

Customer Requests

Customer Solutions

Costs

Times

Quality

Risks
Service-Oriented Business Process Modeling

Company BPM Model

Company Processes Overview

Company Service-Oriented Process
Event-Driven Process Chain

Through customer contact development, the contact between company employees with customer is built up and fostered. The goal is the initiation of orders. Customer contacts can be made in person or with other means (e-mail, fax, telephone, etc).

Goal is the preparation of an offer. The customer request processing should clarify in advance whether or not true need exists for an offer.

Events

Activities
Process-2-Applications

ARIS Repository

Business oriented processes

Common Object Model

BSM
CMDB
Topology Discovery
SLM System

UML Diagrams

BPEL processes

Service Repository

Business Rules

Software Engineering
Eclipse
Rational
Borland
Case tools

Process Execution
Fujitsu Interstage
IBM WebSphere
Microsoft BizTalk
Oracle Process Manager

Rules Engine
ILOG JRules
Corticon
10 Steps To Process Execution

From Business Process Definition To Process Execution

1. Service Oriented Business Process Modeling
2. Importing And Scoping Existing Services & Data
3. Completing Business Processes by Services & Data
4. Business Process To IT Process Transformation
5. Completing IT Process Design
6. Exporting & Adapting IT Process
7. Importing IT Process
8. Implementing IT Process Details
9. Implementing New Services
10. Testing, Deploying, Debugging and Executing Process
Step 1-3: Develop business process model in ARIS

- ARIS Process Modeling
  - Pretension for workflow implementation, otherwise further refinement step required
  - Identify activities and entities relevant to implementation
  - Customer specific modeling conventions, e.g. cost
  - Apply best practices for nested levels of decomposition in various diagrams
Solution – Process Execution/Software Engineering

ARIS Repository
- Business oriented processes
- BPEL processes
- UML Diagrams
- Service Repository
- Deployed Services
- Process Engine / Workflow Application Server
- Available Services
- Self developed Services
- Business Application

Software Engineering
- Eclipse
- Rational
- Borland
- CASE Tools
Mapping between Business Objects and IT Data Structures

Service-supported Business Function

Business Function as System Function

IT Data Structure as Class

Service

Business Object as Technical Term
4. Transforming Business Process To IT Process

Execution of Customizable Conversion
Step 4a. Transformation to ARIS BPEL

- EPC2BPEL transformation
  - Adaptation due to customer-specific modeling conventions
  - Filter irrelevant information for workflow automation

- Organizational means to keep master and derived/refined processes in sync due to uni-directional transformation
5. Completing IT Process Design

ARIS BPEL
Process Flow

BPEL Activity Details
Closed loop

Corporate Performance Management
Strategy, Objectives, Business Processes, KPIs

Business Activity Monitoring
KPIs, Events, Alerts

Process Improvements

Counter-measures

Ad-hoc Alerts

Reporting and Analysis

Enterprise Process Architecture
Purchasing → Manufacturing → Sales
Finance, Marketing, Human Resources, IT

Source: Gartner, January 2004
Main steps of the process „Billing“

1. Create Order
   • Billing order
   • metering order

2. Read Counter

3. Create meter reading document

4. Check Plausibility
   Correction in case of implausible meter reading result

5. Accomplish Billing

6. Invoice processing
   • create invoice
   • print bill
Graphical Process Model from Runtime Events

Flow of events

Event Interface

Process sequence

Time

CRM

ERP

FI/CO
Interface Summary

My SAP

System A
System B
System X
System Y

My SAP adapter

XML interface
Event format

XML interface
Graph format

Process merge

Process typification + KPI calculation

System A
System B

My SAP

XML interface

Process typification + KPI calculation

System X
System Y

Business Process Excellence
Find process fragments

- Cut process into single fragments

- A fragment consists of
  - a start event,
  - at least one function and
  - at least one end event.

- A fragment can contain rules.

- Events that connect different fragments are called coupling events.

- Org. units are assigned to the functions
Analysis of As-is processes

- Tendency conclusion based on warehouse-data
- Drag’n’Drop Input of filters and dimensions
- AUTO-generated process-display
- „line width“ announces frequency of activity
- Direct access - favorites

“line width” announces frequency of activity.
• Comparison of to-be processes with as-is processes
• Simulation/activity-based cost calculation with real data
ARIS PPM allows „real“ Root Cause Analysis

„What?“ „How?“

„Who?“ „Why?“

Organisational Background

Indicator

Trend analysis

Influence Coefficients

Allocation

IncidentChains

All graphics are take out of ARIS PPM 4.0
Vision: Measurement of the **whole** Enterprise

↑ *extending the corporate performance analysis with process and organisation related information sources to get the „Big Picture.“*
Communication Analysis

OrgUnit with internal Communication over threshold (red)

Thickness displays amount of internal Communication
Combining process and material flow

>> Combined analysis of Process und Material flow

Product Supply Chain

Information Supply Chain
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