### Motivation for Business Process Operations Projects

#### Benefits & Challenges

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Challenge</th>
</tr>
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<tbody>
<tr>
<td>Transparency</td>
<td><strong>Global transparency across organizational units &amp; process variants</strong></td>
<td>…increase process compliance and standardization by reduction of process diversification and template adherence.</td>
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<tr>
<td>Efficiency</td>
<td><strong>Reduced process costs</strong></td>
<td>… automate business processes and reduce manual process inefficiencies and human errors. Avoid systematic process exceptions.</td>
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<tr>
<td>Effectiveness</td>
<td><strong>Higher customer satisfaction &amp; faster revenue stream</strong></td>
<td>…avoid delayed business documents (e.g. deliveries or shipments) and financial losses (e.g. delayed invoices or payments).</td>
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<tr>
<td>Clean-up</td>
<td><strong>Better planning results &amp; more accurate business reporting</strong></td>
<td>…avoid business documents remaining in unfinished status. Close all documents within the SAP system that are closed from a business perspective.</td>
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</table>
What customers want to achieve?
Business Process Stabilization & Improvement

- **Output**

- **Time**

- **Exception**

- **Improvement: Increased output in the future**

- **Stabilization:**
  Faster reaction on exceptions to bring output back to expected level
Business Process Monitoring
Functional Scope – High-level Overview

Application specific monitoring for
- SAP ERP (SD, MM, PP, LE, WM, PM/CS, QM, FI) & SAP EWM
- SAP CRM (Sales, Services, Customer Interaction Center; Marketing)
- SAP APO (planning runs in DP, SNP, PP/DS, gATP/BOP)
- SAP SRM (Self-service Procurement, Sourcing Cockpit)

Background Job monitoring for
- Single background jobs or SAP BW Process Chains

Interface monitoring for
- IDoc, BDoc, tRFC, qRFC, bgRFC, Batch Input, flat files, SAP PI

Cross-Application monitoring for
- ABAP dumps, Update errors, number range fill-level, Application Log entries
- Performance monitoring for transactions and RFC processing

Industry specific monitor enhancements for
- SAP Apparel and Footwear, SAP for Automotive, SAP for Banking, SAP for Retail, SAP for Utilities

Data Consistency monitoring for
- SAP ERP, SAP CRM, SAP APO

Business Process Operations
Architecture & Information Flow – High-level Overview

Application

BP Analytics  ➔  BP Op Dashboards  ➔  BP Monitoring  ➔  BPMon Trend Analysis

Data Storage

Collect SAP data for Analytics ➔ InfoCube 0SM_BPMRH ➔ Monitoring on Analytics data ➔ Table DSWP_BPM_ALERTS ➔ Collect SAP & non-SAP data for Monitoring ➔ InfoCube 0SM_BPM

Data Source

Collect SAP data for Analytics
Problem occurs somewhere in the system landscape

Key message: The technical configuration is dependent on the number of business processes in combination with the number of monitoring objects and respective key figures. The configuration and implementation is usually achieved within a couple of days or weeks as most Business Process Monitoring functionality comes pre-configured and out-of-the-box.
Key message: The organizational change management is dependent on the organizational complexity and the scope of Business Process Monitoring roll-out. It can take up to several weeks or even months.
Model business processes in SAP Solution Manager (Solution Directory)
- Modeling from scratch
- Copying from Solution Manager project or Business Process Repository
- Importing a template solution

Configure Business Process Monitoring in SAP Solution Manager
- Select processes and steps you want to configure
- Select monitoring objects and respective key figures per selected process step
- Define threshold values and select options (e.g. organizational units) per key figure
Several standard business processes in the logistics area are included in the solution template and come already pre-configured with selected Business Process Monitoring key figures.

- The file *BPM Template Solution - ST-SER XXX.zip* and the corresponding documentation *Template Solution for BPMon - Detailed Description.ppt* can be downloaded from the SAP Service Marketplace [http://service.sap.com/bpm](http://service.sap.com/bpm) » Media Library » Technical Information.
- More information can be also found in the following [SDN Blog](http://www.sdni.de).
Business Process Monitoring
Example: Order to Cash

Process Details: Order to Cash — Current Status

- **CRM - C50**
  - Create Sales Order

- **SAP ECC - M50**
  - Create Sales Order
  - Create Outbound Delivery
  - Send Delivery to Warehouse
  - Receive Picking Info + Update Delivery
  - Post Goods Issue
  - Create Billing Document
  - Incoming Payment (FI-AR)

- **Backlog of open ERP Sales Orders**
- **Backlog of open Outbound Deliveries**

- **LEGACY_WAREHOUSE - LEGACY**
  - Receive Delivery
  - Perform Picking
  - Send Picking Info to ERP

- **Invoices not transferred to Accounting**

- **qRFC Monitoring of critical queues**

- **Backlog of CRM Orders in Status ‘Error in Distribution’**

- **No. of Inbound SHPCON IDOCs in Error Status**
Business Process Stabilization
Information Flow with Business Process Monitoring

1. Receive notification (e.g. email)
2. Access Alert Inbox (e.g. via URL in email)
3. Access backend system from Alert Inbox
4. Perform Detail Analysis
5. Identify Root Causes (RC)
6. Define Action Plan
7. Control Achievements via BW Trend Analysis
Business Process Stabilization Methodology
Five phases of typical Six Sigma project (DMAIC)

Define

Measure

Analyze

Implement

Control

BP Analysis by SAP

BP Monitoring
No yellow or red alerts should show up

Create Action Plan
Execute Action Items

Root Cause Analysis

Process Design

Master Data

Skills

System

Monitor interfaces (e.g. Idoc, qRFC, tRFC), background jobs etc.
Use notification mechanism to manage by exception

Decide on Business Processes to start with
Business Process Monitoring
Integration with other SAP tools

System Monitoring

CCMS

Monitoring

SAP BW

Job Management

SAP CPS by Redwood

Job Documentation

Service Level Reporting

Reporting

Business Process Monitoring

Service Desk
Further Information
SAP Service Offerings
SAP Enterprise Support

**SAP Solution Manager Enterprise Edition**
Business Process Monitoring functionality
Business Process Analytics functionality

**Expert Guided Implementation**
Expert Guided Implementation for Business Process Monitoring
Self Service - 'Business Process Analysis'

**SAP Services**
SAP CQC Business Process Analysis and Monitoring
SAP Business Process Analysis*
SAP Business Process Operations*

**SAP Classroom Trainings**
(E2E300) Business Process Integration & Automation Management
(SM300) Business Process Monitoring

* Only for SAP MaxAttention / SAP Safeguarding customers
Further Information – SAP Notes

1320940 - Prerequisites for CQC service: BPA and BPM Describes the necessary (minimum) prerequisites in order to execute an CQC Business Process Analysis and Business Process Monitoring services respectively

784752 - BPMon in SAP Solution Manager - Prerequisites Describes the more detailed and recommended technical prerequisites in order to implement Business Process Monitoring with a wide scope

521820 - Availability of Business Process Monitoring Describes the latest Support Packages or single SAP notes available in order to possibly rule-out known malfunctions of Business Process Monitoring
Further Information – Links

**Business Process Monitoring on SAP Service Marketplace**
https://service.sap.com/bpm

**Business Process Monitoring on SDN**
https://www.sdn.sap.com/irj/sdn/nw-processmonitoring

**White Paper “Exception Handling and Business Process & Interface Monitoring”**
Link to Business Process Monitoring
Further Information – SDN Blogs & Wiki

Functional Scope of Business Process Monitoring in SAP Solution Manager

FAQ about Business Process Monitoring

Typical Use Cases for Business Process Monitoring

Business Process Monitoring - Template configuration available for download