# An Up-to-Date Guide to SAP Business Workflow and Its Role Within Your SAP Infrastructure

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#### In This Session ...



This session is intended for business process experts and technologists who are interested in a high-level understanding of SAP Business Workflow, including how it fits in with SAP's overall business process management strategy and where it resides in your business and technical architecture.

- You will understand the key reasons for implementing SAP Business Workflow, including examples of when to use and when not to use SAP Business Workflow
- You will gain insight into the skills required and who in your organization should be involved in SAP Business Workflow
- You will see a comparison of SAP Business Workflow with other SAP technologies

# Agenda



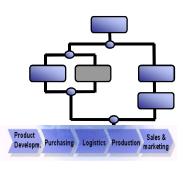
- 1. Understanding SAP Business Workflow what it is, how it works, when to use it
- 2. Explaining resources required to implement SAP Business Workflow
- 3. Describing SAP's overall business process management strategy and where SAP Business Workflow fits into that strategy
- 4. Comparing SAP Business Workflow with other key SAP technologies
- 5. Wrap-up

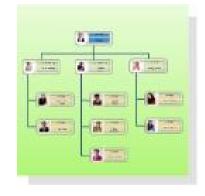
#### **Definition of SAP Business Workflow**



SAP Business Workflow is a tool included with SAP NetWeaver® that can be used to define new processes and automate processes using existing transactions and functions within SAP. SAP Business Workflow:

- Automates and monitors business processes
- Provides appropriate business knowledge of how to perform business processes
- Enables active flow of information
  - Bringing the right information at the right time to the right people
  - Distributing work according to business rules
  - Supplying exception handling and deadline monitoring
- Provides metrics on business processes
  - Benchmarking, continuous improvement, and KPI alerting







# Examples of When to Use SAP Business Workflow



- Process is human-centric
  - Workflow is people-oriented and enables team collaboration
  - Example: Hiring a new employee includes the employee, manager, payroll, IT, HR benefits and/or insurance teams
- Process is repeatable
  - Process is iterative, may happen occasionally to hundreds of times a day
  - Process happens in the same way, following business rules and corporate policy
  - Example: Approvals for financial documents must follow specific rules



# Examples of When to Use SAP Business Workflow (cont.)



- Process needs improvement and/or accountability
  - You need to do something faster, cheaper, or with higher quality
  - Example: A service repair notification needs to be addressed within 24 hours
- Cost of <u>not</u> automating the process is higher than implementing an automated process
  - Example: Cost to recall a car because engineering change request delivered a wrong result, causing a defect



#### What SAP Business Workflow Is Not



- A tool for system-centric processes
  - Example: Sending messages between SAP and non-SAP systems (e.g., sending information for an item stocked in an external warehouse system to an SAP ERP system)
  - Example: Sending messages to external companies (e.g., sending purchase order information to suppliers for financial data and then sending the information to banks)
- SAP Business Workflow does not add new functionality
  - Workflow automates capabilities that already exist in your SAP system
  - Example: SAP Business Workflow cannot automate approval of invoices if invoices are not already in your SAP system
- A tool for orchestrating a process across multiple systems, SAP or non-SAP systems
  - Example: When creating a new business partner, the process includes an ERP, a CRM, and a master data management system. Workflow is not used to orchestrate the process across the three systems. Workflow is used to automate the business partner creation inside the ERP and/or CRM systems.

#### Reasons to Use SAP Business Workflow



- Standardize business processes
  - Example: Purchase document approval should happen the same way in all business units
  - Example: Rush orders should be managed in a standard way, currently each sales representative does something slightly different
- Automate work
  - Example: When a purchase order requires approval, the approver should be automatically informed
  - Example: When a vendor has a new bank account number, conditions should be checked to see who needs to approve the updated bank account number, or if it can be immediately updated
- Create a trail of processes for auditing
  - Example: When a customer requests a repair, you need to audit the call until the repair is completed
  - Example: Document approval processes are subject to internal audit



# Reasons to Use SAP Business Workflow (cont.)



- Support initiatives for process improvement and to enhance user productivity
  - Example: When there is a quality issue on the shop floor, the issue needs to be resolved quickly because it impacts production
  - Example: Currently a purchase requisition can take up to two days to move to a purchase order, that process should be reduced by 60%
  - Example: A customer going live creates a workflow for material creation that routes to 20+ people. Over time, the process is changed to automatically populate values and route to only 3+ people for required approvals.
- SAP Business Workflow offers the ability to manage a shared queue of work resulting in better customer service
  - Example: When purchasing documents require changes, they can be routed to a purchasing group and multiple people receive the work, enabling users to assign themselves to tasks and provide accountability on what has and has not been assigned and executed

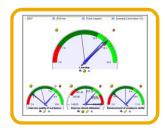


### How SAP Business Workflow Works

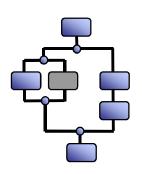




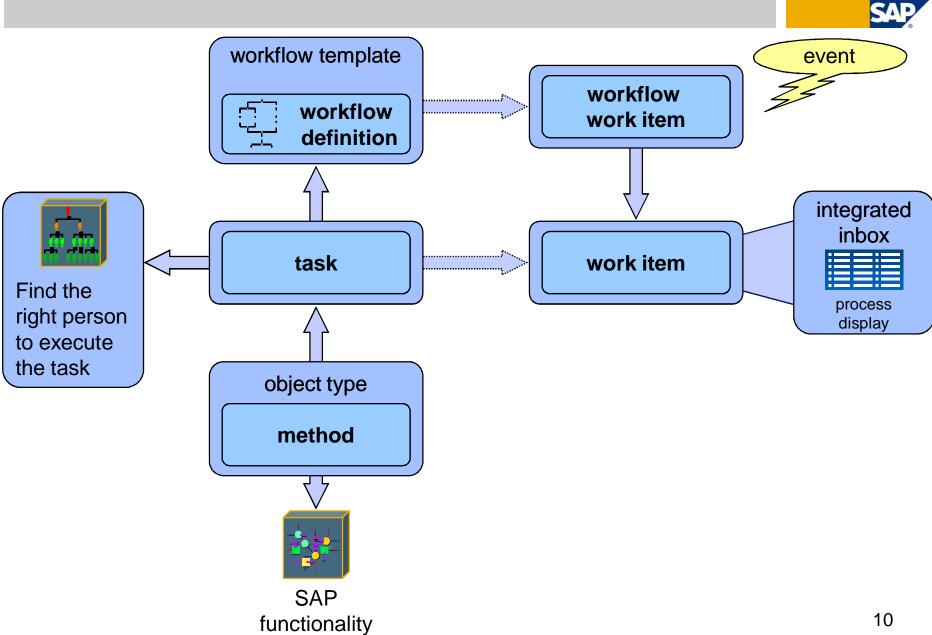
- 1. User enters a new sales order.
- 2. Announces to system: "Sales Order 123 was created."
- 3. If a workflow is listening for a "Sales Order Created" announcement, the workflow will start executing for Sales Order 123.
- 4. Each step executes, routing the work to a user or group of users.
- 5. Users execute their tasks and the workflow progresses.
- 6. The status of the process can be tracked and monitored.





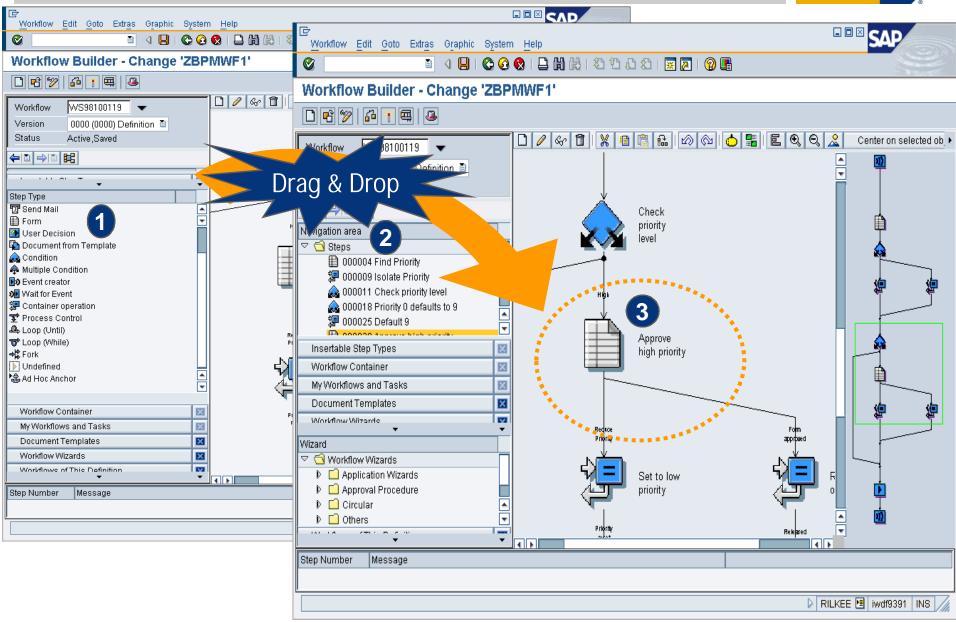


# Major Components of SAP Business Workflow



### View of SAP Business Workflow Design Tool





#### SAP Business Workflow in Your Architecture



SAP ERP (Financials, Human Capital Management, Operations, Corporate Services)

SAP NetWeaver Application Server ABAP (Basis)

- → SAP Business Workflow
- → ABAP development tools
- → Security framework
- → Utility services such as email, printing
- → Administration services

#### **Technical considerations:**

- SAP Business Workflow is included in every SAP system as part of the ABAP application server
- Workflow definitions are development objects, meaning they go through normal transports from development to production

#### **Business considerations:**

- Workflow should be treated like another application, such as Sales and Distribution,
   Materials Management, or Financial Accounting
  - Business owner should be determined and requirements gathered
  - Full test plan should be created
  - Inclusion of business users in process design and testing is a must

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# Skills Needed to Implement SAP Business Workflow



- Business knowledge with technical knowledge
  - Workflow experts emerge from both the functional and technical backgrounds
  - SAP has workflow consultants who started from the business side and learned the technical parts, and others who started as ABAP developers and were interested in gaining business process knowledge
- As your workflow becomes more complex, you will need a developer
- Users must be willing to change how they work
  - Processes will be different
  - Use of an inbox

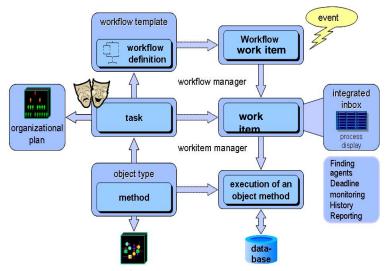


Workflow requires dedicated resources. You will need at least one person dedicated to the workflow project.

### Skills Required in Major Workflow Components



- Someone who understands the business well needs to work on the process design
  - If the process involves multiple groups, someone from each group should be involved



- For the specific functionality that should happen within the workflow, you need someone who knows what specific transactions, screens, and functions are executed
- For deciding who should get what task, you need someone who knows who is responsible for what, and how the responsibility is determined
- You need someone who can take ownership of the process after it goes into production, in particular, to ensure the right people are involved in the process execution

#### Resources You Will Need



- Users willing to accept a new way to work
- Resources willing to invest time to learn SAP Business Workflow (for an ABAP developer, two weeks of training to get the core technical skills required)
- Resource to keep routing assignments maintained after a workflow goes to production (could be minimal to full-time job depending on number of workflows, complexity of routing rules, and how often users change responsibilities)
- Implementation team willing to work closely with the process owners and end users



Ensure you have the support of the business before starting a workflow project.

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### Definition of Business Process Management



- Business process management (BPM), as a management discipline, is a systematic approach that helps companies standardize and optimize operational processes to reduce costs, improve quality, and increase agility.
- BPM is an approach to integrate a "change capability" to an organization both human and technological.
- As a technology, business process management provides IT organizations with a framework of tools to design, model, implement, run, monitor, operate, and improve business processes flexibly throughout their lifecycle.
- Business process management includes process design, modeling, execution, monitoring, and optimization of business processes.



Source: SAP Software Community Network and Wikipedia.

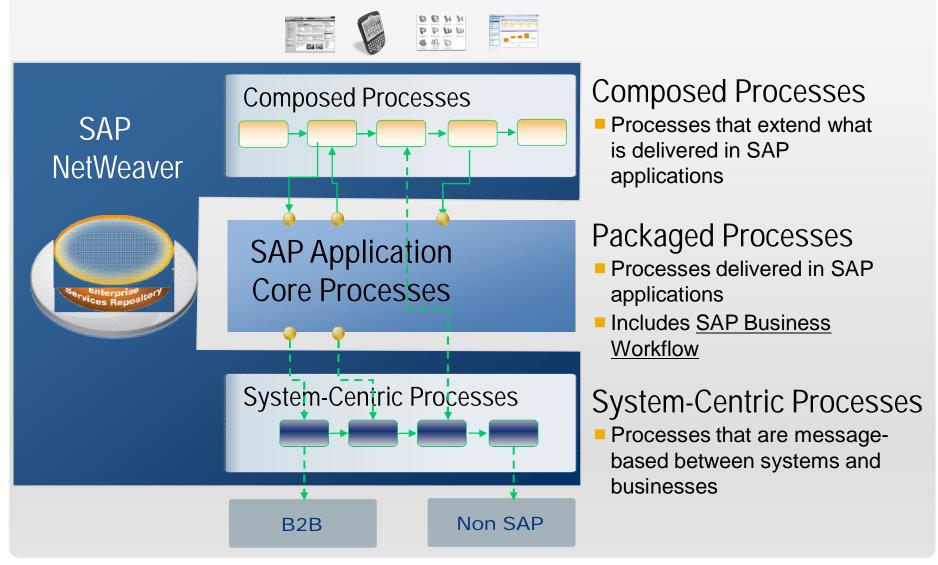
### **Business Process Management at SAP**



- Business process management as a discipline
  - Internally SAP uses business process management as a discipline to focus on improving processes, such as procurement and development cycles
    - SAP supports business process management at the executive level with a team devoted to ensuring key areas of SAP are fully process-based
  - SAP has a Business Process Consulting team that deals with the organizational and business impact of business process management
    - This team works on internal projects as well as customer engagements
- Business process management technologies
  - SAP has many tools to support business process management. SAP Business Workflow is the recommended tool for process automation within a single SAP application system.

# SAP Business Workflow in SAP's Business Process Management Strategy





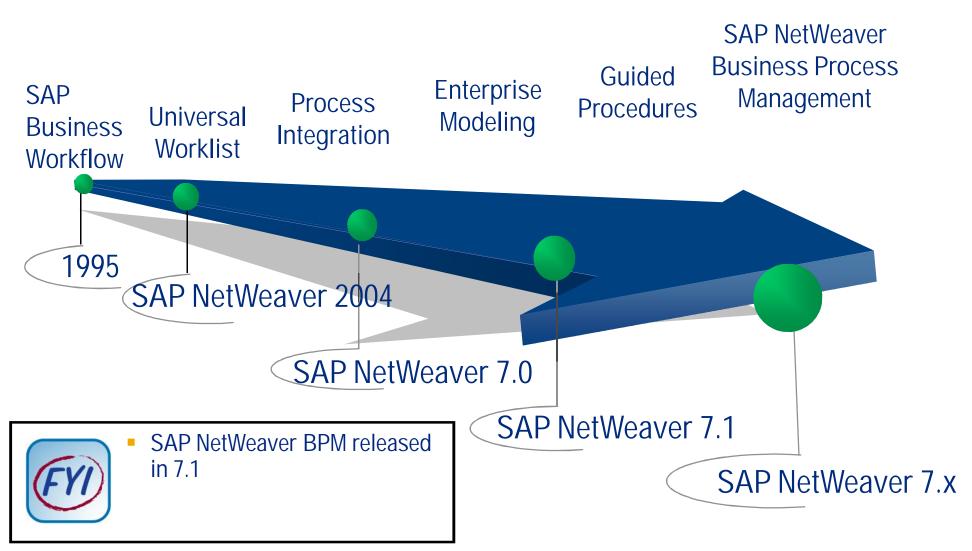
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### **Evolution of SAP Workflow Tools**





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### Other Workflow-Related Technologies at SAP



- Universal Worklist (UWL)
  - Central inbox for runtime execution of workflow tasks
- SAP NetWeaver Process Integration (SAP NetWeaver PI)
  - System-centric integration tool for processes focused on application-to-application and business-to-business scenarios
  - More of a messaging tool rather than a workflow tool (sends XML messages between systems)
- SAP enterprise modeling applications by IDS Scheer
  - Suite of tools for high-level process modeling, architecture modeling, and business simulation
- Guided procedures
  - Workflow tool for human-centric process between and beyond SAP systems
  - Predecessor to SAP NetWeaver Business Process Management (SAP NetWeaver BPM)

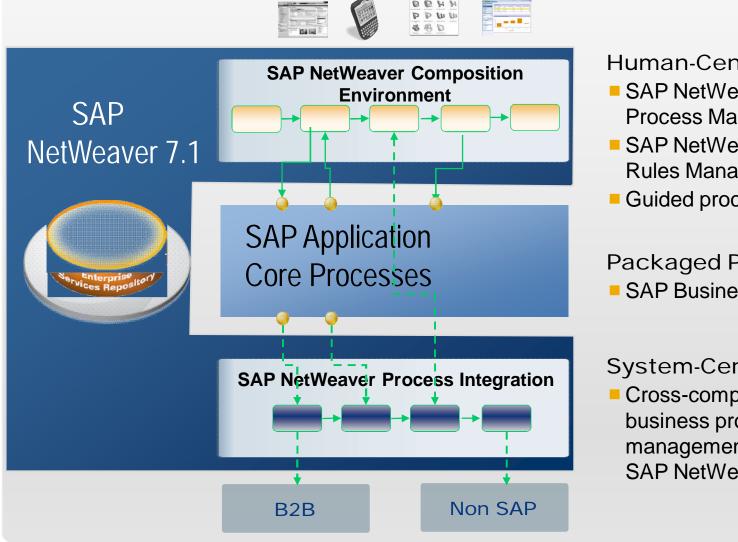
# Other Workflow-Related Technologies at SAP (cont.)



- SAP NetWeaver BPM
  - Workflow tool for human-centric processes between and beyond SAP systems
- SAP NetWeaver Business Rules Management (SAP NetWeaver BRM) and Business Rules Framework + (BRF+)
  - Not workflow tools, but rule engines that workflow can use to determine process path
- SAP Solution Manager
  - Includes a Business Process Repository with definitions of provided SAP business processes
  - The process definitions are used during the Blueprint and Realization stages of an SAP implementation

### Where SAP Business Workflow Fits with the Tools





#### **Human-Centric**

- SAP NetWeaver Business **Process Management**
- SAP NetWeaver Business Rules Management
- Guided procedures

#### Packaged Processes

SAP Business Workflow

#### System-Centric

Cross-component business process management with SAP NetWeaver PI

# Chart on When to Use What SAP Process Technology



	Workflow in one SAP application system	Workflow in multiple systems, including non-SAP
SAP Business Workflow	Great for a process in one SAP system	May integrate with the cross-system process
Universal Worklist	Use when SAP NetWeaver Portal is entry point for users	Central access to tasks from multiple systems
SAP NetWeaver PI	Intended for cross-system processes	System-centric A2A and B2B scenarios
Guided Procedures	Not used for single system workflow	Simple scenarios only, follow "Usage Guide" on SDN
SAP NetWeaver BPM and SAP NetWeaver BRM	Normally not used for processes in a single SAP system	Designed to compose new processes that add functionality
SAP Solution Manager and SAP enterprise modeling applications	Modeling tools apply to many process levels	Modeling tools apply to many process levels

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#### Resources



- Gatling, G; Rickayzen, A; Dart, J; Dick, E; Hilss, O; Kapoor, S; Kempf, S; Keohan, S;
   Kosog, T; Medaille, P; Pokraka, M; Sabnani, S; Sedlmayr, J; Sohn, T, Practical Workflow for SAP 2nd Edition (SAP PRESS, June 2009)
  - Book on implementing SAP Business Workflow
- Jim Hagemann Snabe, Ann Rosenberg, Charles Møller and Mark Scavillo, *Business Process Management: The SAP Roadmap* (SAP PRESS, December 2008)
  - Book on SAP's overall business process management strategy
- Workflow on SDN
  - www.sdn.sap.com/irj/sdn/nw-bpm
- List of resources to implement, run, and maintain SAP Business Workflow



### 7 Key Points to Take Home



- SAP Business Workflow has a strong history with SAP; it is an integral part of every SAP application system
- SAP Business Workflow is a proven tool to automate processes, getting the right information to the right people, at the right time, and ensuring accountability
- SAP Business Workflow has an important role in SAP's overall business process management strategy
- SAP Business Workflow is intended for processes within an SAP application system, such as SAP ERP
- SAP Business Workflow is most suitable for repeatable business processes that require a high degree of coordination
- SAP Business Workflow can be used to enforce service level agreements and company policies for specific business processes
- For your workflow projects to be successful, you will need to invest time and effort to ensure the workflow team and business stakeholders are adequately trained

# Thank you!

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