

Fujitsu Interstage Business Operations Platform: Business Process Management Suite



Realizing ROI for enterprise BPM initiatives



The Fujitsu Interstage[®] Business Operations Platform (BOP) is a next-generation business solution and integration platform. Based on the leading Business Operations Platform from Cordys[™] Software, it is designed to truly support the way businesses operate, finally bringing the worlds of business and IT together.

Executive overview

Today's economic reality is one of extreme competition, very demanding customers, commoditization of products and services and pressure to cut costs. There is increasing pressure on every organization to do more with less. In such a demanding and competitive environment, an organization's success depends on the ability to achieve efficiency through effective management of its business processes. The market share and competitive leadership of the organization depends on the continuous improvements and optimization of its processes. Businesses today need agility and operational performance.

Business Process Management (BPM) makes it possible for organizations to address the challenges of today's dynamic business environment head-on, by offering significant opportunity for visibility, automation, efficiency gains and return-on-investment across a wide range of business needs and functions. BPM enables organizations to embark upon a continuous cycle of business process optimization.

This paper examines the drivers for adopting a Business Process Management Suite (BPMS), the components to look for in a BPMS and some of the business benefits that can be derived from implementing a BPM solution. It also highlights the capabilities of the Interstage BOP Business Operations Platform (BOP) in the context of BPM.

Introduction

Gartner defines BPM as "a management practice that provides for governance of a business' process environment toward the goal of improving agility and operational performance. BPM is a structured approach employing methods, policies, metrics, management practices and software tools to manage and continuously optimize an organization's activities and processes."¹

Examples of business processes include:

- Purchase order management
- Expense approval cycle
- Incident and claim management
- Supplier certification
- Loan management

BPMS are a collection of tools to support implementation of BPM initiatives and enable continuous improvement of the processes. BPMS enable modeling, execution, control and management of business processes. Gartner recommends that the selection of a BPMS should be made based on the following criteria:²

- Support the modeling and analysis of business processes, including all aspects of workflow: tasks, roles, decisions, approvals, reviews, escalations, collaborations, flows, rules, policies, forms and other documents, events, goals, objectives and scenarios
- Support process change in the design and the execution of transactions, with auditing
- Coordinate any type of interaction pattern among users, system tasks and information resources, regardless of the location of these resources. Interaction patterns include human-to-human, system-to-system, human-to-content and content interdependencies
- Enable participants to manipulate and manage structured and unstructured information within the process, not just as referenced attachments to their tasks
- Support the definition, manipulation and management of business rules by business and IT users
- Support user and group collaboration on work items in the process (in real time and offline). They should enable business and IT professionals to work together on process design, development, execution and enhancement

- Support the monitoring, reporting, analysis and notification of activities and events that affect work, using data about completed and in-progress transactions (in real time and offline)
- Interoperate with external software assets, especially SOA Web services, and include these in the end-to-end process orchestration
- Enable management of all process artifacts (models, process definitions, rule definitions, service definitions, executables and more) throughout the entire process life cycle (discover, define, model, simulate, deploy, execute, monitor, analyze and optimize) to facilitate reuse and change management

Interstage BOP BPMS

The Interstage BOP is a next-generation BPM solution in one single platform, which allows organizations to design, execute, monitor, change and continuously optimize their critical business processes and operations. The next sections detail the capabilities of the Interstage BOP BPMS, a key component of the BOP.

Collaborative working for business and IT

Interstage BOP provides an integrated solution development environment through the Interstage BOP Collaborative Workspace where both business and IT users can collaborate to design executable (execute what you design) process models. Interstage BOP Collaborative Workspace also enables "assemble and compose" capabilities through its model-driven programming style, enabling rapid and iterative modeling of business processes.

Interstage BOP Collaborative Workspace, with its unified metamodel, allows for immediate validation and correction of models (including processes) based on the changes in other models, such as business Web forms, business rules, organizational models, business calendars, etc.

Single workspace and configurable views of models allow the business and IT teams to collaborate during process design, development, execution and enhancement.

Web services-based platform

Interstage BOP is designed and built from the ground up using Web services. The platform complies with WSI BP (Basic Profile), enabling seamless integration with any WSI BP-compliant platform. Interstage BOP comes with many out-of-box adapters for popular enterprise platforms and technologies like J2EE, EJB, COM, Microsoft .Net and enterprise applications such as SAP® applications.

An extensible adapter architecture allows for other legacy applications that are not covered by the builtin and partner adapters to be easily integrated into the platform too.

Support for all process patterns

Interstage BOP supports all process patterns including human-to-human, system-to-system and humanto-system interactions. Interstage BOP Case Manager caters to the processes that require high decision flexibility for knowledge workers.³ The process designer supports BPM standards like Business Process Modeling Notation (BPMN), import and export features for eXtensible Process Definition Language (XPDL) and Business Process Execution Language (BPEL).

Using transactional short-lived processes, the Interstage BOP BPMS allows for definition and execution of high-performing straight-through processing (STP) types of processes. With "assemble and compose" ready sub-processes, the Interstage BOP BPMS allows for in-flight changes of processes, in addition to modularizing and easy maintenance of business processes.

Process execution over SOA Grid

Interstage BOP business processes are deployed on the Interstage BOP SOA Grid, a virtual infrastructure federating multiple ESBs. The robust SOA Grid guarantees high performance and high availability to run your business virtually non-stop (up to 99.999% availability). It also provides linear scalability, both vertically and horizontally.

Business rules managed by business users

Interstage BOP Business Rules allow for externalizing the process rules for easy maintenance and agility for changes. Multiple editors – the Rule Editor and the Decision Table Editor – cater to flexibility and ease of use for business users, and provide power and control for IT. Business users can directly maintain and manage business rules using customizable business vocabularies to suit a variety of market sectors, including banking, insurance, utilities, etc.



Process monitoring

All actions performed by all the participants in a process are audited for compliance and regulatory requirements. The Interstage BOP Business Activity Monitor (BAM) allows near real-time business activity monitoring with customizable dashboards and round-tripping.⁴



Escalation management

The prerequisite for optimal allocation of resources and escalation management is the definition of organizational models and the corresponding organizational units. Interstage BOP BPMS supports standards–based modeling (Organizational Structure Metamodel) to define the organizational models as needed to work on the business operations. The escalations use the information from the defined organization models.





Business SLA management

For any business, it is imperative to work to clearly defined Service Level Agreements (SLA). This sets proper expectations throughout the organization and ensures that obligations to customers, partners, and suppliers are all met within agreed timescales. But many organizations do not work 24X7 and the concept of business calendars define the workable days and times for an enterprise. Therefore, deadlines for activities are calculated based on these definitions.

The business calendar functionality in the Interstage BOP BPMS supports the definition of working weeks and holidays as applicable. The holiday information can be imported from any .ics formatted input source. Business calendars can be used for escalations based on the due dates.

		•	×					
			Day	Start T	ïme	End Time		
			Monday	09:00	1	7:00	Vuse Business Calendar for Start and Due Time calculation Specific to Activity	~
			Tuesday	09:00	1	7:00	Start Time	
			Wednesday	09:00	1	7:00	Static Value in Business Days 🛛 💌 Days 🛛	
			Thursday	09:00	13	7:00	Due Time	
			Friday	09:00	13	7:00	Static Value in Business Days 🛛 🔻 Days 1	
•	× 💽						Set Reminder for Due Time	
	Date		Non Workin	g Day	Start Time	End Time	Description	
	1/26/2009		10				Republic Day	
	3/25/2009		10				Ugadi	
	5/1/2009		10				Labour Day	
	8/15/2009		10				Independence Day	
	2/16/2009		10		14:00	17:00	Team outing	

Diagram 4: Business calendars and SLAs

Capacity and workload management

Worklists are the containers for work items. Based on the work load in the worklists, more resources can be allocated or removed. All the members of the teams allocated to a worklist have access to the work items in the worklist. A worklist is managed by a Worklist Manager who is responsible for execution of the work in the worklist. Interstage BOP Inbox provides a detailed overview of the load in each worklist, enabling drill down into the work load of individual teams and individual members within each team.

Responsibilities of the Worklist Manager include:

- Assigning and revoking work items from individual members
- Allocation of teams to worklists
- Controlling the order of execution of work items
- Handling escalations

Units And Access Policy Information					
C Organization Units	Associat	ed Units	Work List	Manager	
E 🛃 Acme Org Model	× Loans (Ac	me Inc)			
E-Za Acme Inc	Loan Clerk				
i 🗄 🚡 Customer Care	Loan Officer				
● 品 Savings ● 品 Loans		Inherit from Swimlane			
		Assignee Type	Worklist Worklist Team	Static Value	~
			Role User		

Work management

Interstage BOP Inbox provides a single view of all the work available from all applications. A fully configurable Inbox provides details of the number of work items, the status of each item, and the member working on the item. It also provides the capability to pull work items, giving complete visibility of all business data.



For efficient work management, users can set reminders to proactively alert them of impending deadlines. This allows efficient tracking of all deadlines and ensures that all SLAs are met.

Activity planning

To enhance productivity, it is essential to plan the execution of work items. Activity planning helps by enabling the calendaring of work items on specific dates when the user plans to work on specific activities. A calendared work item is removed from the inbox for the user and put back into the inbox on the specified date. In case a calendared work item needs to be worked on before the scheduled date, the user can pull the item back into the inbox and complete the task.



Aodify sta	rt date for the selected tasks.
Activities	Loan Details Verification(3)
Exis	sting Start Date Multiple tasks have been selected.
New	/ Start Date 2009-04-01 14:05:36
(Start date	e should be earlier than : 01 Feb 2009 13:42)

Exception management

In the planned absence of a user, the lead for the team can configure a delegate to work on specific tasks on behalf of the user. All the work items assigned to the user are automatically assigned to the delegate. The team lead and worklist manager control the delegation list.

ask Delegation		¥	
Sender Information			
Information sent by the user requesting for the	e delegation of the tasks.		
Sender nkumar			
From Monday, February 02, 2009			
To Friday, February 06, 2009			
Message Can not be in office becau	se of an urgent personal work		
	Auto Delegation		R
	Auto Delegation		
Auto Delegation	Set the information for the period you are out of	office.	
Information about the delegate who will hen			
	Starts On	Ends On	
Delegate To Jane	2009-02-02	2009-02-06	10
	Message		
	Can not be in office because of an urgent	personal work	

Controlled work scheduling

Sometimes, it is necessary to ensure that a task should NOT be worked on by a user who has already executed another activity within the same process or case instance.

For example, if a user has created an invoice, he or she should not then be allowed to authorize the same invoice, the intention being that someone else should verify it. It is possible to configure behavior within the Interstage BOP BPMS by modeling the activities in a '4 eyes' relationship with each other.

On the converse side, there are some instances in which a task should be handled by a user who has already worked on another activity within the same process or case instance. For example, a doctor who has examined a patient should also be empowered to issue the correct prescription. It is possible to configure this behavior within the Interstage BOP BPMS by modeling the activities in a 'rendezvous' relationship with each other.

Custom dispatching based on skills

Interstage BOP BPMS supports multiple work assignment options. Any activity in a process or case can be assigned to the appropriate user, role, team or worklist. In addition, for those cases where such static assignment does not suffice, it is possible to define custom dispatch algorithms that can work with other systems to source the information and dispatch the activity accordingly.

For example, a high value order should be dispatched to a sales manager with a strong track record. The information driving this decision could be drawn from the employee database that captures sales records of all the sales managers.

Diagram 8: Configure for planned and un-planned absence of work staff

Tags for collaborative categorization

Interstage BOP Inbox supports advanced powerful search options to filter work items based on both system and business fields. In addition, tags are introduced to leverage the knowledge of the users in categorizing work items. For example, based on previous experience, a customer is tagged as a high value customer. The work items relating to this customer can be tagged and filtered to ensure a more rapid response.





Audit all the actions for compliance and legislative requirements

All the actions undertaken by users on activities are audited and available for review by other users and administrators (according to permissions). The information can be used for governance and compliance purposes.

Loan Detai	ils Verification						
Current St	ate: In Progres	ss		Process: Loan A	pproval		
Assignee: nkumar			rted On: 31 Jan 2009 1	Due On: 01 Feb 2009 13:44			
Old State	Hew State	Action	Performed By	Performed On			
		Create	nkumar	31 Jan 2009 13:44			
					Jan 2009 13:45		
		Claim	nkumar	31 Jan 2009 13:45			

Process administration

Interstage BOP BPMS provides extensive administration and governance features, including control on deployment of processes and real-time visibility into the process state. Through the Process Instance Manager, process owners have full control and flexibility to handle exceptions, control the suspension and resumption of processes and schedule work items.

Diagram 10: Audit all the actions for compliance and regulation requirements

		Process Instance Manager Monitor and manage process instances				• .				
	8.000					(+ (+ M	4			
	Fo Fo	lder	Process Name	Total	Aborted	Waiting	C			
	3.Business P	rocess Models/	YenomClaimModel	4	1	3	0			
	3.Business P	rocess Models/	UpdateFinalizedAmount	3	2	0	1			
Activities			_ 6 ×	2	0	1	1			
				2	0	0	2			
Processes Summary > YenomClaimModel > A Main Process: YenomClaimModel	cuvities			3	0	0	3			
Process Instance: e74c1292-cfdc-4c84	-9027-748ad5bae468									
0 🗐 🔾 🔜 💷 📝				4	0	1	3			
C Activity Name	Activity Type	Statu		4	0	0	4			
T Start	Start Event	Complete	3/5/2009 16:30							
Get Policy Details	Sub Process	Complete	3/5/2009 16:30							
Check For Policy Expiry	Sub Process	Complete	3/5/2009 16:30							
Acknowledge & Arrange For Inspection		Complete	3/5/2009 16:30							
Check Coverage Details	Sub Process	Complete	3/5/2009 16:31							
Vvorkshop Estimation Of Damages	Sub Process	Complete	3/5/2009 16:31							
Estimate > 2000\$	Decision	Complete	3/5/2009 16:32							
Investigate the Damages Onsite	Sub Process	Complete	3/5/2009 16:32							
Approve Workshop Estimates	Sub Process	Walting	3/5/2009 16:33							
4			•							
			.1							

Conclusion

Interstage BOP BPMS enables organizations to address today's key business challenges by providing full support for the design and execution of all types of processes with different interactions. Based on a single environment, business and IT users can collaborate to create "executable models". Interstage BOP BPMS allows for faster ROI on your BPM initiatives by enabling:

- Process visibility The processes are designed and modeled in a single environment, enabling total visibility and transparency of processes throughout the organization. After the processes are implemented, the management dashboard provides critical information, allowing for the continuous improvement and refinement of processes. During execution, the Interstage BOP BPMS provides visibility into the bottlenecks and exceptions for improved control and efficiency of the processes.
- Agility and flexibility In respect to business processes, agility and flexibility applies to making changes to a business process quickly and easily, whether it is steps, routing, rules or the assignment of work to other people in the organization. Interstage BOP BPMS provides a flexible environment in which business users can rapidly change the processes to respond to changing business dynamics. It supports the creation of new business rules, alternative (one-off) routing of work, escalations, reassignment of tasks between employees and so on.
- Performance Business users are empowered to define and change the processes in close collaboration with IT. Changes can be implemented very rapidly, thereby reducing the time to market. The processes are deployed and executed on a robust high performance platform for near-zero downtime of business operations.
- Collaboration Using the Collaborative Workspace, business and IT users can collaborate together to design, create and implement executable business processes, significantly reducing the time-to-market. Collaboration features like memos, tags and reassignment options allow business users to work with other team members, thereby reducing the cost and lead times for the development of new business processes.
- Real-time management enablement Information relating to every transaction is logged and can be retrieved as and when required, enabling the accurate analysis of all activities. This data is presented via customizable dashboards with drill-down capabilities, allowing for more detailed analysis into the information.
- Compliance Interstage BOP BPMS supports audit and logging for all actions from the process
 owners to work staff members to ensure that service level agreements are met and compliance with
 regulatory stipulations.

References

1. Michael James Melenovsky, Jim Sinur, Janelle B. Hill, David W. McCoy, "Business Process Management: Preparing for the Process-Managed Organization", Gartner, 30 June 2005

2. Janelle B. Hill, Michele Cantara, Marc Kerremans, Daryl C. Plummer, "Magic Quadrant for Business Process Management Suites", Gartner, 18 February 2009

- 3. Cordys Dynamic Knowledge Intensive Process Leverage the Knowledge in the Enterprise
- 4. Cordys Enabling Operational Visibility

About Fujitsu America

Fujitsu America, Inc., is a leading ICT solutions provider for organizations in the U.S., Canada and the Caribbean. Fujitsu enables clients to meet their business objectives through integrated offerings and solutions, including consulting, systems integration, managed services, outsourcing and cloud services for infrastructure, platforms and applications; data center and field services; and server, storage, software and mobile/tablet technologies. For more information, please visit: http://solutions.us.fujitsu.com/ and http://twitter.com/fujitsuamerica

About Fujitsu

Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Over 170,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers. Fujitsu Limited (TSE:6702) reported consolidated revenues of 4.5 trillion yen (US\$55 billion) for the fiscal year ended March 31, 2011. For more information, please see http://www.fujitsu.com

Fujitsu, the Fujitsu logo, Interstage, and "shaping tomorrow with you" are trademarks or registered trademarks of Fujitsu Limited in the United States and other countries. Cordys is a trademark or registered trademark of Cordys Software, B.V. in the United States and other countries. Microsoft is a trademark or registered trademark of Microsoft Corporation in the United States and other countries. SAP is a trademark or registered trademark of SAP AG in the United States and other countries. All other trademarks referenced herein are the property of their respective owners.

Product description data represents Fujitsu design objectives and is provided for comparative purposes; actual results may vary based on a variety of factors. Specifications are subject to change without notice.

Copyright ©2012 Fujitsu America, Inc.

All rights reserved. FPC58–3089–01 05/12. 12.0262

FUJITSU AMERICA, INC.

1250 East Arques Avenue Sunnyvale, CA 94085–3470, U.S.A. Telephone: 800 831 3183 or 408 746 6000 Contact Form: http://solutions.us.fujitsu.com/contact

FUJITSU LIMITED

Shiodome City Center, 1–5–2 Higashi–Shimbashi Minato–ku, Tokyo 105–7123, JAPAN Telephone: +81–3–6252–2220 www.fujitsu.com

http://solutions.us.fujitsu.com/