"Paperless Office" Solution Framework for Banking & Financial Services

– A Business Process Automation (BPA) Approach

A White Paper

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1st June 2007

Abstract

Highly competitive banking & financial sector needs effective knowledge sharing with efficient business process management for both internal as well as customer centric operations.

A vision towards Paperless Office demands that optimization of knowledge resource by effective communication and collaboration among employees to offer best services to the customers.

To enable organizations in banking and financial services in extending their potential through the use of software, Microsoft delivers agile and adaptive framework for automating their internal and external business processes.

To increase collaboration and process management in the working environment, a Portal based solution is proposed using out-of-box features of "Microsoft Office SharePoint Server 2007" (MOSS 2007) connecting the head office and all the branches managing the operations with documents and information being managed centrally from the head office.

These out-of-the box offerings provide a "Paperless Office" Framework and are based on Microsoft's Business Process Automation (BPA) platform called "Microsoft Office SharePoint Portal server 2007" (MOSS 2007).

SharePoint Portal Server 2007 is an end-to-end platform with Documents & Records Management, Workflow & Collaboration, Portal & Content Management with integrated Search capabilities.

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Microsoft

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1. Introduction:

Today's financial enterprises are under pressure to provide a more seamless customer experience across multiple channels. Burdened by aging legacy systems and processes, their current channel silos and fragmented customer interactions result in high cost of sales & service and poor productivity. This also limits their flexibility for introduction of new products and services to the demanding customers.

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These out-of-the box offerings provide a "Paperless Office" Framework and are based on Microsoft's Business Process Automation (BPA) platform called "Microsoft Office SharePoint Portal server 2007" (MOSS 2007).

SharePoint Portal Server 2007 is an end-to-end platform with Documents & Records Management, Workflow & Collaboration, Portal & Content Management with integrated Search capabilities.

2. What is Business Process Automation (BPA)?
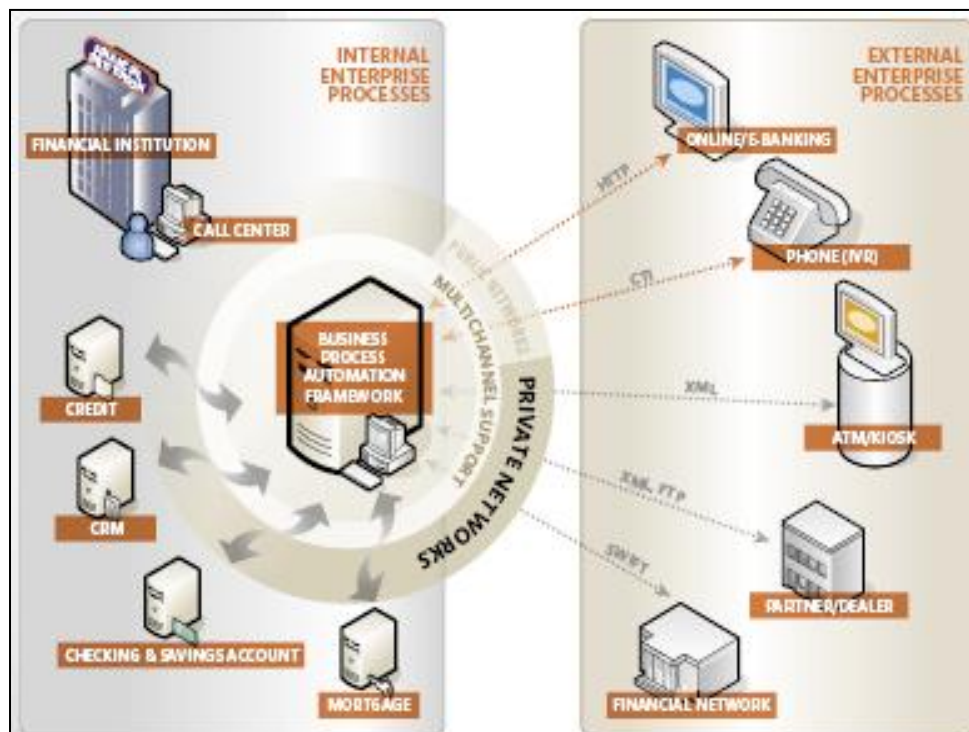
BPA solutions provide the tools, technologies, and infrastructure to automate end to end complex business processes in order to help increase competitive advantage and deliver tremendous value and visibility to your business, customers, and trading partners.

This enables:

- **Increased personal and organizational productivity.** By automating business policies and best practices, removing manual tasks, and eliminating error-prone reentry of information, BPA boosts individual and team efficiency, which enables organizations to deliver results faster and with greater predictability.

- **Better Decision Making.** By providing real-time insight into key business metrics and providing proactive alerts and notifications, BPA gives broader insight into essential business processes critical to your business and provides real-time analytics that enable you to make better decisions faster.

- **Enhanced operational excellence.** Business processes in financial institutions are mission critical, demanding the utmost levels of reliability. BPA provides a rock-solid foundation that delivers the security, performance, scalability, and reliability demanded by the distributed, mission-critical systems of modern financial businesses.

3.   Foundations for Business Process Automation: Collaboration

A solid foundation for comprehensive BPA offerings should provide organizations with an integrated collaboration solution for managing the entire lifecycle of different type of content including documents, forms, images, e-mail, IM and more.

The key functional components of a BPA solution should incorporate workflow & document management, collaboration tools, records management, web content management and search in an integrated & unified platform. Moreover, these components should be designed to work together, to be flexible, and to interoperate with other technologies.

Microsoft's Collaboration Vision:

Microsoft's collaboration vision is to provide software and services to deliver pervasive capabilities to enable people to work together effectively. Collaboration is not as a set of new applications, but rather as a set of pervasive capabilities that end users draw on and use in the context of their work

Considering this, Microsoft has made investments in four distinct areas.

    i.   Integrated Communications

    ii.   Collaborative Work Spaces & Portals

    iii.   Access to Information and People

    iv.   People-Driven Processes

4.   "Paperless Office" Application Framework

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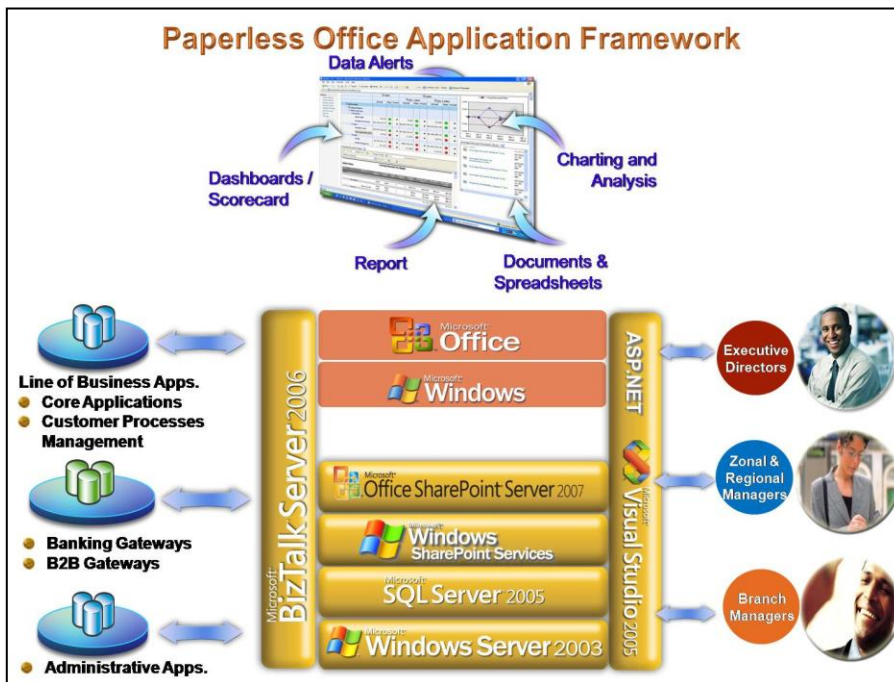
A vision towards Paperless Office demands that optimization of knowledge resource by effective communication and collaboration among employees to offer best services to the customers.

To increase collaboration in the working environment, a portal based solution is proposed using out-of-box features of Microsoft Office SharePoint Server 2007 connecting the head office and all the branches managing the operations with documents and information being

managed centrally from the head office.

A solution based on MOSS 2007 delivers simplified automated business processes and workflow management, secured documents and records management with efficient communication and collaboration at reduced operational cost.

5. Windows SharePoint Services 3.0 & Office SharePoint Portal Server 2007 Architecture
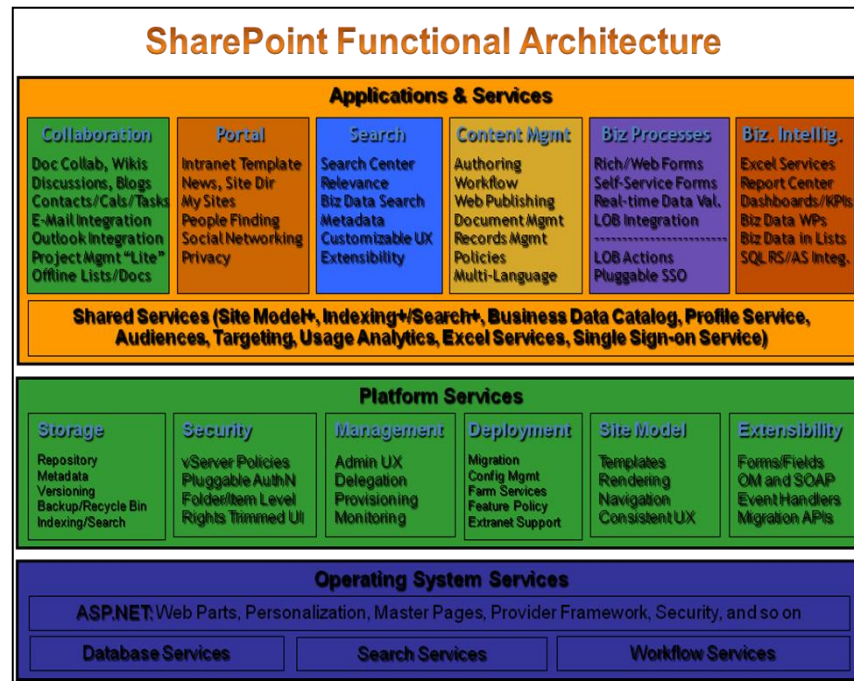
Overview

Microsoft® Windows® SharePoint® Services 3.0 is technology of Windows Server® that offers an integrated portfolio of collaboration and communication services. Windows SharePoint Services is designed to connect people, information, processes and systems both within and beyond the organizational firewall. Downloadable at no additional charge, Windows SharePoint Services helps simplify the process of implementing and managing a team collaboration infrastructure.

SharePoint Functional Architecture

Applications & Services

Collaboration	Portal	Search	Content Mgmt	Biz Processes	Biz. Intellig.
Doc Collab, Wikis	Intranet Template	Search Center	Authoring	Rich/Web Forms	Excel Services
Discussions, Blogs	News, Site Dir	Relevance	Workflow	Self-Service Forms	Report Center
Contacts/Cals/Tasks	My Sites	Biz Data Search	Web Publishing	Real-time Data Val.	Dashboards/KPIs
E-Mail Integration	People Finding	Metadata	Document Mgmt	LOB Integration	Biz Data WPs
Outlook Integration	Social Networking	Customizable UX	Records Mgmt		Biz Data in Lists
Project Mgmt "Lite"	Privacy	Extensibility	Policies	LOB Actions	SQL RS/AS Integ.
Offline Lists/Docs			Multi-Language	Pluggable SSO	

Shared Services (Site Model+, Indexing+/Search+, Business Data Catalog, Profile Service, Audiences, Targeting, Usage Analytics, Excel Services, Single Sign-on Service)

Platform Services

Storage	Security	Management	Deployment	Site Model	Extensibility
Repository	vServer Policies	Admin UX	Migration	Templates	Forms/Fields
Metadata	Pluggable AuthN	Delegation	Config Mgmt	Rendering	OM and SOAP
Versioning	Folder/Item Level	Provisioning	Farm Services	Navigation	Event Handlers
Backup/Recycle Bin	Rights Trimmed UI	Monitoring	Feature Policy	Consistent UX	Migration APIs
Indexing/Search			Extranet Support		

Operating System Services

ASP.NET Web Parts, Personalization, Master Pages, Provider Framework, Security, and so on

Database Services	Search Services	Workflow Services

In addition to providing a foundation for collaboration, Windows SharePoint Services is a platform for developing Web-based business applications including human and systems workflows.

Workflow applications can improve the efficiency and accuracy of many business processes. By creating Windows Workflow Foundation and making it a standard part of the operating system, Microsoft has provided the basis for a broad set of workflow applications. By hosting WF workflows, Windows SharePoint Services 3.0 offers developers and information workers the ability to construct document-oriented human workflow applications.

Adding Office SharePoint Server 2007 lets these applications interact with their users through InfoPath forms presented in Office 2007 desktop applications. It also provides a group of pre-defined workflows that address common business scenarios.

6. Business Process Application Templates

Microsoft has also developed forty Application Templates to provide out-of-the-box, web-based business applications to address the needs of specific business processes such as assets management and tracking. Leave application management, expense management, coordinating a Help Desk. Each application template addresses a business scenario and provides a base of functionality that can be either used directly out of the box, or customized for company specific needs.

Microsoft developed these application templates to be usable immediately after deployment. However, they also can function as a starting point for partners and developers looking to build more sophisticated Windows SharePoint Services solutions using Microsoft Office SharePoint Designer 2007.

Available Application Templates for business process areas

The application templates have been grouped by scenario and mapped to common business areas within an organization. These groupings help put into context how the application templates can be applied to specific processes or sets of tasks, whether within business groups or for certain job functions.

Template Name	Description	Business Area
Absence Request and Vacation Schedule Management	Help employees manage requests for out of office days, including listing days they will be unavailable who will cover their responsibilities while they are gone.	*Human Resources*
Board of Directors	Provide a single location for board meeting notes, tasks and issues and events.	*Business Management / Finance*
Budgeting and Tracking Multiple Projects	Help track and budget multiple, interrelated sets of activities with project creation, tasks, Gantt Charts and common status designator tools.	*Project Tracking / Product Management*
Business Performance Reporting	Help track customer satisfaction through surveys and online discussions.	*Business Management / Finance*
Call Center	Help individuals manage the process of handling customer service requests from issue identification to cause analysis and resolution.	*IT / Operations*
Customer Escalation Management	Help manage tasks, documents and assignments related to customer escalations.	*Customer Operations*
Change Request Management	Help users track risks associated with a design change, including the ability to approve or reject the change.	*Project Tracking / Product Management*
Training Schedule Management	Help instructors store and organize course content, calendar items and announcements.	*HR / Training*
Competitive Analysis Site	Help organize the results of competitor's offerings through useful competitive analysis technique templates.	*Sales / Marketing*
Compliance Process Support Site	Help executive management manage regulatory compliance implementation endeavors by specifying control tasks and managing document libraries.	*Business Management / Finance*
Contacts Management	Help teams manage contact information among team members, including synchronization with Microsoft Office Outlook® 2007.	*Sales / Marketing*
Disputed Invoice Management	Help accounts payable departments track information regarding invoices due to vendors, including value of early payment and reasons for delayed payment.	*Business Management / Finance*
Document Library and Review	Help teams manage the document review cycle with a version-tracking document library including a threaded discussion to provide a feedback.	*Project Tracking / Product Management*

Template Name	Description	Business Area
Employees Activities Site	Help employees create and sign up for activities and events sponsored by the company.	*Human Resources*
Employee Self-Service Benefits	Enable employees to locate and sign-up for benefits offered by their employer.	*Human Resources*
Employee Training & Scheduling	Help schedule training as well as provide a location for employees to sign up and receive course material.	*Human Resources*
Equity Research	Provides a centralized location to help consolidate the research done to evaluate financial equities.	*Specialized / Vertical (Financial Services)*
Event Planning	Help teams organize events through the use online registration, schedules, communication and feedback.	*Specialized / Vertical (Professional Services)*
Expense Reimbursement and Approval	Manage elements of the expense approval process, helping to save time for approvers.	*Business Management / Finance*
Help Desk	Help teams manage the process of handling service requests including managing identification of the root cause and tracking status.	*IT / Operations*
Integrated Marketing Campaign Tracking	Enable tracking of marketing campaign performance.	*Sales / Marketing*
Inventory Tracking	This template helps organizations track elements associated with inventory by capturing manual input of updated inventory information notifying users when each part reaches the reorder quantity.	*IT / Operations*
IT Team Workspace	Help teams manage the development, deployment and support of software projects by updating project tasks, issues, milestones and bugs.	*IT / Operations*
Job Requisition and Interview Management	Enable your recruiting team to streamline the process of managing job requisitions and filling job openings.	*Human Resources*
Knowledge Base	Enable employees to share knowledge resident within their organization.	*Project Tracking / Product Management*
New Branch Opening	Help teams manage the process of opening a new branch including project and task management tools.	*Specialized / Vertical*
Physical Asset Tracking and Management	Help teams manage requests and tracking of physical assets such as location, condition, manufacturer, model, current owner and estimated value.	*IT / Operations*
Product and Marketing Requirements Planning	Help organize the process of developing new products and marketing content through useful planning templates and collaboration tools.	*Sales / Marketing*
Project Tracking Workspace	Help small teams manage project information such as project issues, tasks and project status.	*Project Tracking / Product Management*
Request for Proposal	Help manage the process of creating and releasing RFPs as well as the collecting proposal submissions and acceptance notification.	*Business Management / Finance*

Template Name	Description	Business Area
Sales Lead Pipeline	Help teams manage the sales pipeline by tracking leads, opportunities, contacts, and accounts.	*Sales / Marketing*
Team Work Site	Enable project teams to centrally store background documents, track calendar events and submit action items that result from team meetings.	*Project Tracking / Product Management*
Timecard Management	Help simplify the process of tracking hours spent on multiple projects through employee 'punch-in / punch-out' capabilities and reporting of work in progress and project hours worked to date.	*Project Tracking / Product Management*

7. Reference Application Pack for Loan Origination Systems – A Business Process Automation Case using SharePoint Portal server 2007

In the loan origination & management, there are many business drivers for banks: process consolidation, regulatory compliance, and faster product delivery (loan completion).
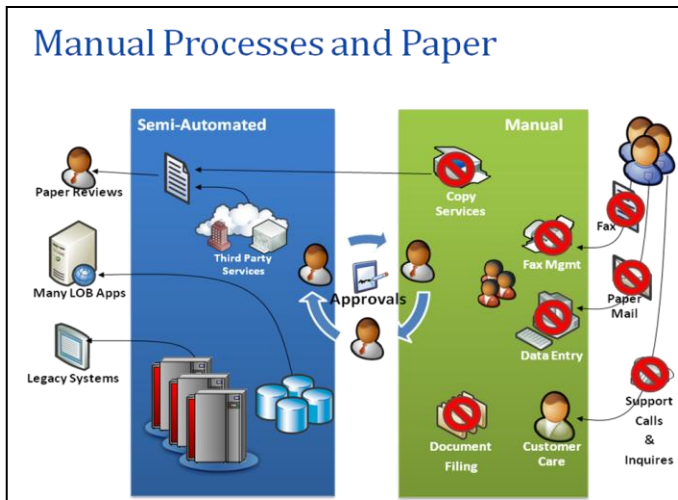

Loan products change frequently and are usually dynamic based on location (regional or state). Developing and modifying products in an agile manner enables banks to be highly competitive and adaptable in key markets. Also, compiling and staying on top of regulatory laws is always a challenge given the turbulent changes happening in the industry today. Banks are now trying to consolidate processes to reduce this complexity and maximize value.

To achieve these objectives the Office Business Application (OBA) Reference Application Pack for Loan Origination Systems (OR-LOS) has been released by Microsoft which provides:

- **Architectural Guidance** – a set of whitepapers that are real world scenario driven to help guide architects through the decision making processes of building loan architectures,

- **Application Building Blocks** - An installable code base, message schemas, BizTalk accelerator and install guides will jump start your development effort.

The same is available for download at http://msdn2.microsoft.com/en-us/architecture/bb265266.aspx.
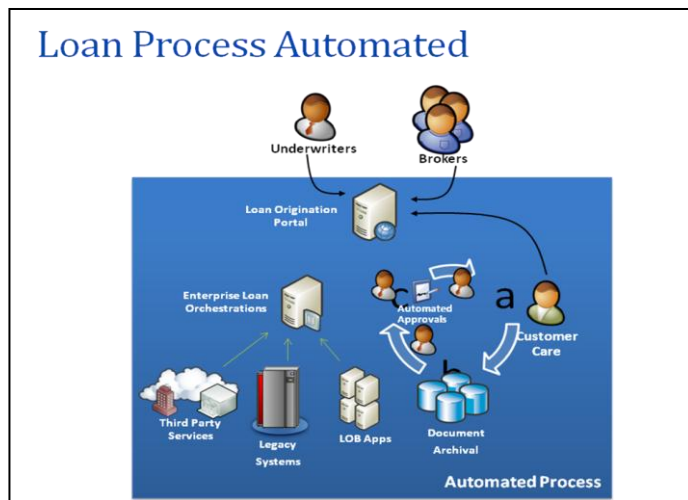
8.   Conclusion

BPM has gone mainstream. As its technologies continue to spread, more and more organizations will use them to make business processes faster, less error-prone, and more reliable. Even in companies whose business leaders haven't embraced a process-oriented perspective, BPM technologies can provide significant value in a variety of IT projects.

Microsoft's BPM offerings aim at supporting this move. Many customers rely solely on these technologies, while others also use the more specialized products provided by Microsoft's ISV partners. In both cases, the result is the same: better business processes and improved business results.

References

Microsoft and BPM:

http://www.microsoft.com/bpm

Understanding Workflow in Windows SharePoint Services and the 2007 Microsoft Office System:

http://download.microsoft.com/download/9/d/d/9dd464d6-41a3-40ed-ababa4f175f80cc0/Understanding%20Workflow%20in%20Windows%20SharePoint%20Services%20and%20the%202007%20Office%20System.doc

Introducing Microsoft Windows Workflow Foundation:

http://msdn2.microsoft.com/en-us/library/aa480215.aspx