Workflow and BPM: What Are the Differences?

Global360

In the SharePoint community, workflow and BPM are often used synonymously. Although the two terms are related, there are significant differences between the two that need to be recognized. This paper is intended to help educate the SharePoint community on some of the differences between workflow and BPM. In addition to this report, we recommend two other independent papers that discuss SharePoint, Windows Workflow Foundation, and Business Process Management Suites: Derek Mier's *SharePoint as a Strategic Weapon* and and Forrester's *SharePoint BPM – Finding the Sweet Spot*.

WORKFLOW AND BPM

Managing workflow works well in simple environments. Workflow technologies, like those provided natively in SharePoint, enable the flow of work -- generally around the flow of a document (e.g., expense form approval, or vacation requests).

As an analogy to simple workflow, consider a low-end GPS in your car. GPS provides you a sequence of directions to route you through an environment from your starting point to your end destination. The GPS directs your car on a defined route.

Now, let's contrast workflow with BPM. BPM orchestrates and optimizes the way complex systems operate. Where workflow considers the flow of a work, BPM considers the overall process and its lifecycle. BPM technologies allow organizations to model, automate, analyze, and optimize process work.

Returning to the GPS analogy – BPM will take traffic management to a new level. Similar to traffic planners analyzing a transportation system, business analysts can use BPM tools to model process flows, analyze constraints, and optimize overall performance of the environments. Similar traffic reporters and law enforcement directing traffic daily, managers and supervisors can monitor and direct work in real-time across their organizations. Similar to contruction workers building new roads, BPM technologies allow process builders to design and implement automated process flows to optimize the performance of the overall environments.

Orchestrating and managing the optimal performance of these complex systems requires sophisticated interaction of planners, analysts, information workers, supervisors, and builders. BPM orchestrates complex processes through a variety of systems and various roles interacting in a coordinated environment.

AN EXAMPLE OF WORKFLOW

SharePoint and tools that leverage SharePoint's Windows Workflow Foundation (e.g. K2, Nintex) have the ability to manage simple workflows.

As depicted below, if an electronic document (e.g. loan application) is in SharePoint you can create a simple workflow that originates with a loan officer scanning (or saving) the loan document into the SharePoint repository. SharePoint workflow can then direct that document to a loan processor's queue for review, and next to an underwriter's queue to approve or reject it. In the example pictured below, workflow can be defined as the "document flow" involved in electronically routing a loan application through its life cycle. Instead of the paper moving manually through the office from one person to another, SharePoint helps you move the electronic version of the document through a series of pre-defined work tasks.

As noted in Derek Meir's SharePoint as a Strategic Weapon paper, "SharePoint 'workflows' are either screen flows (used within an application), or they tend to operate as reporting points for a process that sits in the heads of the end-users – i.e., workflows don't tend to drive the work itself, instead they merely report on its change in state.

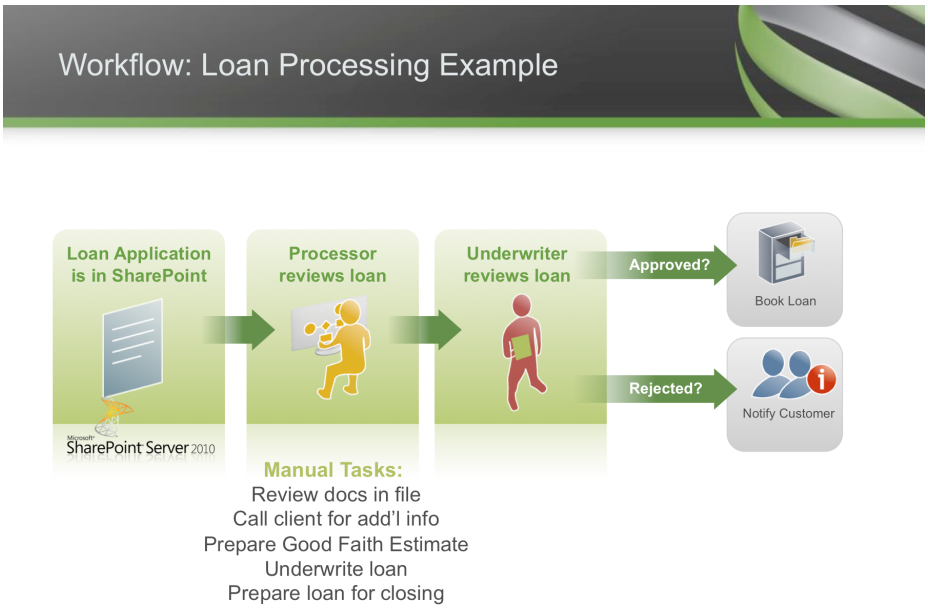

Figure 1

Workflow revolves around the basic flow of work and content (e.g. expense form approval, or vacation requests).

It is important to notice that there are still many manual tasks that remain outside of that "document flow" that need to be handled by that processor or other end users. The manual tasks (e.g., call the client for additional information) are related to but not managed by the workflow engine within SharePoint. Other actions may fall outside of SharePoint's managed workflow (e.g., when the processor logs into an external application to prepare a Good Faith Estimate).

According to a 2010 Forrester Report, SharePoint and BPM – Finding the Sweet Spot, "while SharePoint makes simple workflows easy to create, on its own it is not suitable for business process applications. A rich BPM experience is available using the SharePoint platform, but this will require the use of partner products to achieve optimum results. Microsoft itself recommends against use of SharePoint for enterprise BPM solutions (without the addition of a suitable partner product)."

AN EXAMPLE OF BUSINESS PROCESS MANAGEMENT

Now, let's compare workflow with business process management.

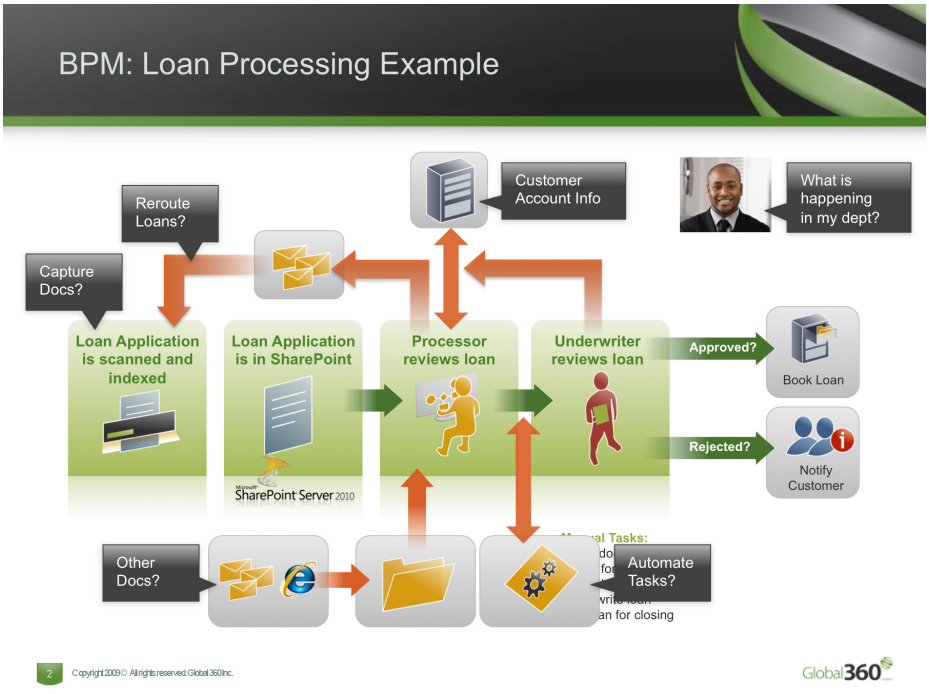

Figure 2

BPM takes a more holistic view of work, concentrating on the orchestration of business process management efforts involving everyone from the managers and process participants, to business analysts and process builders.

Where workflow "routes" documents through work steps, Business Process Management (BPM) orchestrates work and provides a discipline for optimizing the way a business operates. The routing of a document is just one aspect of BPM. Where workflow focuses on replacing the physical movement of documents with an electronic image through a pre-defined sequence, BPM focuses on managing the overall process, interactions of people with the process, and continuous optimization of the process. BPM incorporates multiple systems and information into a common interface, provides improved exception handling, provides managers better visibility into process performance, etc.

BPM uses a combination of process-centric technologies like process modeling, routing, monitoring, reporting, analysis, and simulation. BPM process-centric technologies may be used by many roles across the organization, including: process participants (e.g., loan processors, underwriters), process builders (IT or application developers), business process analysts, and process supervisors.

To offer more concrete descriptions of BPM, the following three examples discuss some of the functionality available in BPM solutions that are not available from SharePoint workflow solutions:

- Process Monitoring and Reporting. BPM allows both users and managers to gain real-time visibility across the entire process. For example, BPM monitoring and reporting can provide visibility to which processors are busiest and how each line of business or loan type is performing. Managers can use real-time reports to change work priorities on the fly if SLA's are not being met. Managers can also view historical trend reports to access seasonal or business trends impacting their operations, and then adjust process operations accordingly.
- BPM technologies are also great at helping to manage exceptions. For example, BPM can easily handle situations where a loan application requires additional information and it needs to be sent back to the customer, or work needs to be immediately routed to additional information workers to reduce the backlogs within a specific step of the process.
- BPM technologies are also great at easily tying multiple systems and information together in order to optimize a process. For example, what if the processor

determines that the documents requires further information from the customer or needs to see customer account information in order to make a decision about the loan? What if other documents (e.g. a housing appraisal or credit reports or related email correspondence) need to be associated with a loan? In best-in-class business process management systems, all of this information is presented in one common, integrated application interface through no to minimal coding effort (e.g., assembling SharePoint web parts the deliver process-related information to the user). Additionally, many of the non-essential tasks are automated with little effort (e.g. associating all of the pieces of work with a single "case").

BEST PRACTICE: USE THE LEAST EXPENSIVE OPTION AVAILABLE

When considering workflow and BPM technologies, the answer is not always a "one size fits all" effort. A best practice recommended by industry experts is to use the right tool for the job – often translating to, "use the least expensive option available".

For simple processes (e.g., vacation leave requests, expense report submittals), SharePoint out-of-the-box and declarative workflows might work best. But

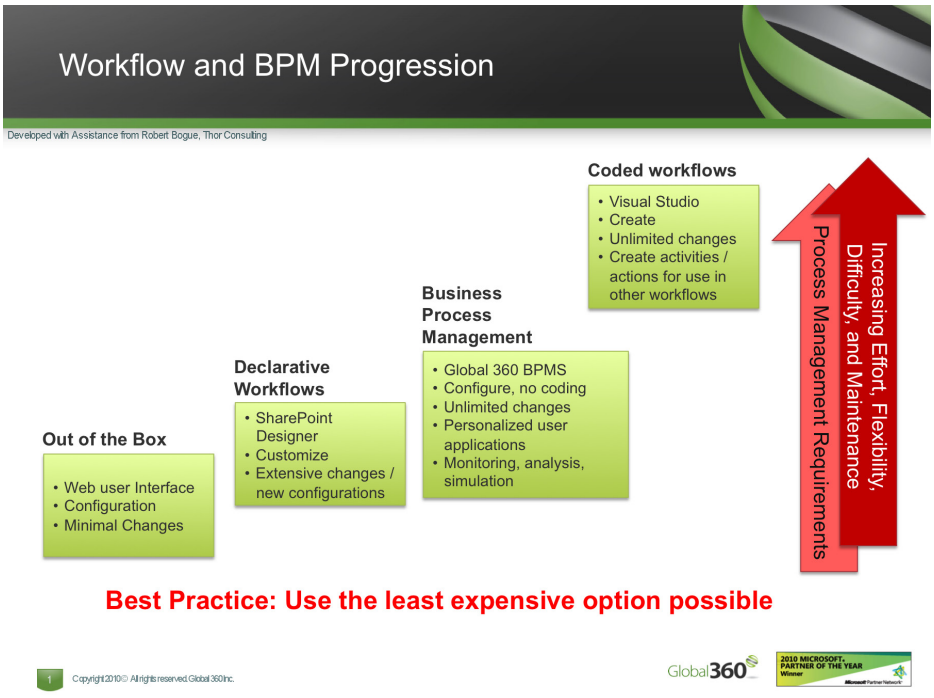

Figure 3

When considering Workflow or BPM technologies, use the least expensive option possible in order to meet the expectations of the business.

when these simple workflows require constant changes due to business rules, organizational changes, frequent exception handling, industry regulations, etc., they become expensive and difficult to maintain as custom coding is introduced and on-going maintenance of the code is required

BPM Suites offer more scalable and less expensive alternatives to Coded Workflows, especially when business rules or business demands lead to frequent changes in the process. Frequent changes wreak havoc on custom code and are costly to maintain, where a BPMS suite and process engine provide smooth transitions between process changes and workflow – lowering overall development and maintenance costs in enterprise process environments.

A PERSPECTIVE ON LEADING WORKFLOW AND BPM VENDORS

To assess BPM and workflow technology solutions, it helps to know how the foundation of their workflow and process management platforms. Let's take a look at four well-known vendors in the market: Microsoft, K2, Nintex, and Global 360).

Microsoft itself provides out-of-the-box tools to design and implement workflows (Visio, SharePoint Designer, Visual Studio). In some cases, third party vendors like Nintex have simplified Microsoft's out-of-the-box workflow functionality to make it easier to use for novices. As Forrester remarks, "Nintex leverages and extends the native SharePoint process engine. Essentially, it relies on the Workflow Foundation (WF), and therefore suffers from some of the limitations around process adaptability. However, Nintex does make process development much easier, and it can handle process invocation and chaining."

Other vendors like K2 have extended SharePoint's workflow capabilities through IT-focused development environments. As Forrester remarks, "This vendor has taken a subtly different approach, building its process engine based on WF (effectively replacing the one that comes with SharePoint). This has allowed the vendor to circumvent some of the limitations of that environment." According to end-users familiar with the environment, the solution is a delivered as a workbench that offers IT a tool to build simple processes while maintaining custom code to support complex process environments.

Because of their reliance on Windows and SharePoint Workflow, workflow automation engines like K2 and Nintex fall short of process management needs where processes are long-running or unforeseen exceptions effectively invalidate the process description (developed beforehand). Additionally, where process environments require complex process logic and rule sets, or parallel and dependent human interactions workflow-based offerings will lead developers into more custom coding or workarounds to the workflow capabilities.

Global 360's BPMS replaces the underlying workflow engine in SharePoint and thus avoids many of WF's limitations. In addition to the powerful exception handling, complex rules management, and parallel interactions supported by a Global 360, a BPMS also provides vastly superior process reporting, the ability to re-direct work in progress, easy to use drag-and-drop process design, and powerful process analytics including simulation offerings.

(UPDATE) WORKFLOW WITHIN SHAREPOINT 2010

- SharePoint 2010 did improve workflow in a few ways, but the underlying workflow technology is the same on SharePoint 2007 and SharePoint 2010. Specifically, both are using Windows Workflow Foundation 3.5, not the newly released Windows Workflow Foundation 4.0. Most of the limitations of SharePoint 2007 highlighted in Derek Miers whitepaper still hold.
- Within SharePoint 2010, the majority of improvements were on the design side and extending workflow to other components within SharePoint. This MSDN article gives a good recap of those changes. Highlights include:
- Improvements to the SharePoint workflow design tools – can now use SharePoint Designer, Visio, and/or Visual Studio. Each of these allow you to do different things.
- New OOTB SharePoint workflows
- Ability to specify Site vs. List workflows – SharePoint 2007 required that a workflow be associated with a list.
- Reusable workflows created with SharePoint Designer

The fundamental differences between SharePoint Workflow and Global360 BPM still hold true:

- Workflows typically start with some action outside of the SharePoint system
- Most enterprise class processes (workflows) have numerous reroutes, decisions, integration tasks that add to the complexity
- Within Global360 BPM, we are typically organizing a number of documents (or other content) that arrives at different times and sources. The ability to organize and present that information is difficult with SharePoint workflow
- Most of our customers' solutions require integration with 3rd party systems – again, harder for SharePoint.
- Managers need visibility – Global360 BPM exposes process metrics (and analytics) through reports and dashboards.

ABOUT GLOBAL 360, INC.

With more than 2,000 customers in 70 countries, Global 360, Inc. is a leading provider of Process and Document Management solutions. Global 360 is headquartered in Texas with operations in North America, Europe, Asia Pacific and South Africa. For more information, call 1-214-520-1660 or visit the company web site at www.global360.com.