



Upside Research

Having it Both Ways: Finding the Right BPM Tools for Workflow and Project-Based Processes

Authored by:

David A. Kelly and Heather Ashton

*Upside Research, Inc.
www.upsideresearch.com*

THE CURRENT STATE OF BPM: NOT ALL PROCESSES ARE THE SAME

When it comes to business processes, change is what it's all about. That holds true even when it comes to business process management. By now we've probably all learned that business process management (BPM) is a great approach for automating business processes. And over the past few years we've found that BPM solutions have proven they are good for automating well-defined workflows and enabling organizations to streamline a wide range of business processes.

But they're not perfect. In fact, as organizations have learned to apply BPM technologies to more and more types of situations, it's clear that there are some business processes where traditional workflow-oriented BPM approaches are not a natural fit. Sometimes organizations need to automate processes that have dependencies, interrelationships, and perhaps timelines, but that lack a specific work- or process- "flow."

Provisioning equipment, on-boarding new employees, or opening new stores, for example, are all business processes that can be managed using a traditional BPM approach. But such an approach might not be the best fit. That's because BPM solutions usually pigeonhole organizations into managing processes using a workflow (or flowchart) interface. Yet many businesses often have business processes that are less about process and more about completing specific activities. As a result, processes such as on-boarding new employees or provisioning equipment do not always lend themselves to the somewhat rigid structure of a workflow format. In fact, they may be closer to "project management" than they are to "process management."

That's why when it comes to BPM, it makes sense to "look before you leap" and understand the type of problems that need to be solved. In fact, any organization that's considering BPM to help automate or streamline business processes should step back and understand what is at the core of the process – is it a well-defined workflow? Or, does it have a set of related tasks or steps that are interdependent and yet not tied to a rigid sequence?

Answering these questions will help define the right BPM solution. In many cases the solution may not reside in the traditional workflow-oriented BPM category of tools, but rather in an activity-based approach or a hybrid of activity- and workflow-based technologies. To help organizations better define their processes and process management needs, let's take a closer look at the distinction between activity-based processes and traditional flow-based processes.

ACTIVITY-BASED PROCESS MANAGEMENT

Activity-based process management is an alternative approach to traditional workflow-oriented BPM. But what exactly does activity-based process management mean? One could think of it as workflow without the “flow.” In other words, it’s process automation that focuses less on the specific sequencing of steps, and more on the specific tasks and their relationships (or dependencies) on those tasks. Because not all business processes can be laid out in neatly ordered, sequential workflows, modeling those processes has been challenging for business users.

Now, with activity-based process management, organizations can more easily (and efficiently) tackle non-linear processes using a checklist or task list-type approach.

Take the opening of a new store for a retail chain, for example. There are a number of tasks that must be accomplished in order for that new store to open successfully on a scheduled date. From construction and build-out of the store’s interior, to requisitioning products and stocking shelves, to hiring employees, ordering signage, and launching a PR campaign to coincide with the opening, all of these tasks need to be completed on a schedule. Some of them can occur in parallel, however, while other tasks are interrelated and need to follow a specific sequence. Since all are deadline-related, using a traditional workflow to optimize this store opening is not ideal, because if one step gets held up, it puts all other steps in the process on hold - *even though* those steps that could be completed *independently* of the currently stalled step.

BPM solutions have traditionally done a good job of servicing well-organized, workflow-oriented processes. When it comes to activity-based processes, the results haven’t been as strong. Organizations attempting to use BPM to automate and manage activity-based processes have typically been forced to arrange them into specific workflows or sequences. This typically makes the processes more difficult to manage, and it often ends up changing the way a business user actually completes the process. That adds even more challenges. In addition, tying an activity-based process to a workflow structure makes it more difficult to adapt the process to changes in the business as a workflow structure makes it more difficult to modify the components of a process that will impact the project timeline. As a result, there are significant limitations to using workflow-based solutions to optimize an activity-based process.

To further illustrate how complex an activity-based process can be, let’s take a look at a few scenarios and how the different approaches stack up.

A WORKFLOW-BASED BPM SCENARIO

A good example of a company using traditional workflow-oriented BPM is Liquid Controls. Liquid Controls is part of IDEX Corporation, and has been an industry leader in flow measurement and process control instrumentation for 50 years. As a result, IT investments at IDEX Corporation are driven from the corporate level, and flow through to all of its companies, including Liquid Controls.

Within Liquid Controls is an intranet that employees rely on to access information and forms. The intranet cuts across all of the departments within the company and enables information sharing throughout the organization. Initially, the function of the intranet had been to act more as a repository for information, rather than the dynamic portal that IT envisioned it could be. Many of the forms were static, requiring them to be printed and filled out by hand. There was no workflow associated with a number of tools and forms that were posted to the intranet, and as a result most of the processes were manual.

The IT team began a search for a solution that would provide the dynamic level of forms processing and workflow that Liquid Controls employees needed. Some of the key requirements included: online automated forms and workflow, minimal coding, easy-to-use, user-managed change functionality, scalability, cost-effectiveness, and out-of-the-box deployment.

Liquid Controls selected Workflow Director from BP Logix to create electronic forms and workflow processes in a number of applications throughout the company, ranging from attendance applications and Engineering Change Control to shop floor work constructions. Some of the processes even cut across different companies within the IDEX family. All of the accounting departments in IDEX Corporation, for example, are required to submit Capital Appropriation Requests (CAR) at the beginning of each year. Once approved, the companies can spend against the CARs using an Expenditure Request workflow. Using Workflow Director, Accounting can now track CAR balances automatically using Workflow Director's integrated SQL function capabilities. The built-in reporting functions also provide a snapshot of current capital spend at any time.

There are three other areas where Liquid Controls has found Workflow Director to be helpful: ERP migration, sales tools, and SOX compliance. Workflow Director has been easy to deploy, and has offered a fast on-ramp for employees using the electronic forms and workflows. Integration with the IT infrastructure, including email systems, file systems, company portal, and scanners, was straightforward. And the web-based nature of the product has made the vision of a dynamic intranet a reality for the company.

AN ACTIVITY-BASED BPM SCENARIO

On the other side of the BPM coin is Waterton Residential, which had processes that pointed it more in the direction of an activity-based BPM tool. Waterton Residential is one of the leading multifamily management companies in the nation. With more than 16,000 apartment homes in 36 communities in twelve states, Waterton employs approximately 450 associates across the country.

The company had also used Workflow Director to provide electronic forms routing for property evaluations. However, Waterton realized it had multiple other business processes that didn't fit into standard workflow-type scenarios, including a new hire process and a process for taking over new residential properties. Waterton had different needs for its processes than Liquid Controls. Let's take a closer look at the property takeover process to illustrate how some processes don't fit into standard workflow-based construct.

When Waterton gets ready to acquire a new property, it often has only a month to complete roughly 400 tasks, all of them time-sensitive relative to the ultimate deadline date that the property becomes a Waterton residence. On the finance side, for example, the company must open new bank accounts for the property, and set up deposit activities for renters. A website and portal need to be created for the property, because each property has its own web page and resident portal. Waterton needs to convert the property from the existing property management system to Waterton's. A number of human resource-related steps must occur, from staff evaluation to recruitment of new staff.

The challenge with this 'take over' process is that there isn't a "workflow" that leads from one task to the next. Some steps have dependencies on others, but not every step follows a sequential flow.

The alternative is to perform these 400+ tasks manually. When this happens, Waterton's Regional Managers end up becoming the de facto project managers for the new property acquisition process. In the past this required check lists, sending emails back and forth and getting information to the right person at the right time. Waterton wanted to simplify the entire process, take the pressure off its Regional Managers, and enable the entire process to be managed through a BPM tool. The company realized that the property acquisition process wasn't a standard workflow process. Rather, it was actually a series of tasks that have interdependencies and a number of things that occur simultaneously.

That's when Waterton decided to evaluate BP Logix's Process Director. Using Process Director, Waterton was able to accommodate the different tasks and their dependencies, and fit them into an overall project-based schema that a manager can look at to see how the entire project is going relative to the deadline. Process Director enables Waterton to keep track of where it is in the take-over process. It allows the project manager

instant visibility regarding where tasks have fallen behind, and what they need to do to bring the project back on track.

A PROJECT MANAGEMENT INTERFACE FOR ACTIVITY-BASED BPM

As the above scenario illustrates, non-linear, activity-based processes require a different type of BPM solution. A key difference is not only the management of the process itself—but also in the *interface* for how that process is managed. An effective activity-oriented business process solution needs to enable business users to manage the associated tasks from a project perspective, rather than a workflow perspective. Moving away from the reliance on an identified “flow,” there needs to be a focus on tasks and their completion in a time-sensitive format. And, ultimately, the business user needs an interface that displays the specific tasks and the relationships and interdependencies on those tasks.

A good solution for this challenge is a project management interface, since it enables business users to manage activity-based processes to their completion. The optimal project management interface enables business users to make changes to the process while it is happening in order to reach the desired end goal in the necessary timeframe.

If a certain task is taking longer than planned and will throw off the timeline, the business user can easily modify other tasks to bring the process back in line to successfully meet the deadline.

The standard interface for workflow-focused BPM solutions is a flowchart-type environment, where process analysts map processes in individual “swim lanes.” This isn’t an ideal solution for activity-based processes. Instead, an effective activity-focused BPM interface would follow a project management structure (much like a Gantt chart) that enables business users to easily see where various tasks in a process are, and make changes to see the resulting impact on the overall process *immediately*.

EVALUATING INTERFACES FOR ACTIVITY-BASED PROCESSES

When evaluating a BPM solution to manage and optimize activity-based processes, consider the following features for the interface:

- Follows a Gantt chart structure
- Web-browser based for ease of access
- Interactive – provides business user ability to drill down and make changes without IT resources.
- Timeline orientation that can alert managers of activities that *will be* late.

ANOTHER ACTIVITY-BASED SCENARIO

A major North American global manufacturing company was interested in optimizing the process of on-boarding new employees once they were hired. The “process” didn’t necessarily have a specific workflow, yet had a number of critical tasks that needed to be completed to facilitate the arrival of the new employees. For example, an employee hired for the sales department needed a cell phone, a new phone extension, an email address, a desk, a PC, an office and business cards. Likewise for an employee hired for accounting, engineering or development.

The important distinction with this process from a more standard electronic form approval workflow is that the lists of tasks that need to be completed for a new employee do not necessarily have to be carried out in a specific order. There were certain dependencies that still needed to be honored. Business cards could not be ordered, for example, until email addresses and phone numbers were assigned. A standard workflow process is not able to easily reflect the nuances of this type of process.

By using an activity-based interface for the same BPM solution, the business manager was able to create a process that resembled the task-list nature of on-boarding an employee, including all of the important interdependencies and conditions. This provided visibility into the entire process of on-boarding that employee, and helped the company more quickly reach its goal.

SUPPORTING THE PROJECT MANAGEMENT INTERFACE: WHAT MUST LIE BENEATH

While a project-management style interface is the most important distinction when trying to optimize an activity-focused business process, in order for it to be successful the interface must work within a platform that incorporates all of the standard components of a solid BPM solution, including the following:

- **A process engine.** The process engine is the heart of a BPM solution and enables the business user to transform their task lists and projects into an automated or semi-automated process. The process engine needs to be able to handle non-linear processes and also enable users to incorporate timelines into the process.
- **A business rules engine.** Business rules are reusable objects that help business users easily define conditions for certain components of a process. Having a rules engine as part of the BPM platform is important because it enables business users to identify rules-based business logic that helps to control the overall process flow.
- **Integration with existing systems.** Because business processes often touch many different applications and systems within an organization, it is important that the BPM solution provide easy integration with the major applications that run the

business. This may include content management, sales management, customer management, and ERP systems. It should also enable easy integration with web services, web portals, and other similar applications.

- **Reporting and monitoring tools.** Since feedback and visibility are critical to the success of process optimization, ensuring that the BPM solution has these built into the project-management interface is essential for the business user. Real-time monitoring and alerts will enable the business user to make necessary changes through the interface to keep processes on track.
- **Predictive Analysis.** Being alerted to a prospective problem “before” it becomes a problem is the desire of business managers and users alike. Using predictive analysis, the BPM solution ‘understands’ past performance of activities and uses that information to anticipate delays or missed deadlines of “future” activities. That information is then automatically provided via alerts, giving the users an opportunity to look at trade-offs, construct ‘What if scenarios?’ and potentially arrive at other decisions.

Together, these components of a solid BPM platform enable an activity-based process to function and integrate with the entire ecosystem of business processes throughout the organization. Without them, the project-management interface cannot succeed at process optimization.

BP LOGIX: PROVIDING ACTIVITY-FOCUSED AND WORKFLOW-FOCUSED TOOLS FOR BPM

BP Logix is one of the first companies to understand that different types of processes need different interfaces to optimize and manage them. In fact, Process Director specifically addresses the needs of activity-focused processes. Organizations can use Process Director as a standalone solution or with Workflow Director, BP Logix’s product for flow-driven processes.

Process Director is a modular BPM solution that fuses project management methodologies with a process management interface. Process Director incorporates electronic forms, rules management, and process automation, and is designed to be used by business analysts and users. It enables business analysts to create and quickly implement non-linear business processes that include many interrelated tasks and dependencies. The web-based interface enables business users to create and model processes through a project management interface, with no coding

In addition to Process Director, BP Logix offers Workflow Director. Workflow Director has a more typical flow-based interface for business analysts and users that need to automate linear processes. It shares the same BPM platform as Process Director, and offers a web-based interface that allows business users to define and graphically model workflow

processes, without relying on programming. Workflow Director supports both pre-defined and dynamic routing, allowing business users to define processes that fit the way they work, instead of forcing them to alter their work patterns.

For organizations that have complex business processes that incorporate both activity-focused and workflow-based components, Process Director and Workflow Director work together to provide an integrated BPM platform that will meet a wide range of process needs. For a new hire requisition process, a company may choose to utilize Workflow Director to build out the process. In contrast, on-boarding a new employee lends itself more to a Process Director flow. The flexibility of the different interfaces enables an organization to put the proper tools in the hands of the business analysts to facilitate process optimization in the best manner possible.

CHOOSING THE RIGHT BPM TOOL: WHAT TO LOOK FOR	
Activity-oriented BPM (Process Director)	Workflow-oriented BPM (Workflow Director)
<ul style="list-style-type: none">• Complex, non-linear process• New to BPM or workflow tools• Need project-management view• Independent tasks• Timeline-oriented process	<ul style="list-style-type: none">• Linear, flow-based process• Experience with traditional BPM or workflow tools• Approval or flow-based view• Sequential dependencies

HAVING IT BOTH WAYS

The difference between workflow-based and activity-focused business processes is distinct. Organizations need to understand the types of processes they are trying to automate and optimize, and select the appropriate tools to support them. While traditional BPM solutions have leaned towards a workflow format for process modeling, there has also been a need for a BPM interface that supports task-based and project-oriented business processes. The best solution is a BPM platform that incorporates a project-management interface for modeling and managing non-linear business processes.

BP Logix offers a BPM platform that includes all of the important components of a solid process automation solution, and offers two different interfaces to address the unique needs of two different kinds of business processes. Workflow Director meets the needs of standard, flow-based processes, while Process Director is designed to provide an effective

interface for modeling more non-linear, activity-based processes. Together the two interfaces can provide organizations with the opportunity to model, optimize, and manage all of their most important business processes.

When looking at a BPM solution, organizations need to take an inventory of the types of business processes they are looking to automate. If there are processes that do not fall into the neat package of flowcharts and linear approval processes, then it is important to find the right modeling interface that will support your requirements. Using the checklist in this paper is one step to take, and evaluating solutions like BP Logix is another that will help organizations to further understand how to best meet their process management needs.

GETTING STARTED – NEXT STEPS FROM BP LOGIX

To learn more about BP Logix Activity-oriented BPM solutions, email marketing@bplogix.com or visit www.bplogix.com for additional white papers and resources.

About Upside Research, Inc.

Upside Research is a research and consulting firm focused on helping clients put application development, Web services, business process management, integration, and enterprise infrastructure challenges in perspective. Upside Research helps organizations find practical ways to achieve their IT goals and profit from the diversity of a changing technology landscape.

Upside Research, Inc.

www.upsideresearch.com | info@upsideresearch.com