software AG

Business & IT:

Sharing the Vision of Enterprise BPM

Sandy Kemsley
Kemsley Design LTD.

May 2011

Business White Paper

webMethods

ARIS Platform

CONTENTS

INTRODUCTION	3
THE CHANGING NATURE OF PROCESS MODELING AND EXECUTION	3
DIFFERENT VIEWS FOR DIFFERENT PEOPLE	4
SHARING MODELS ACROSS PERSPECTIVES	5
THE NEED FOR PROCESS LIFECYCLE GOVERNANCE	6
THE BENEFITS OF LINKING MODELS TO EXECUTION	7
SUMMARY	8
MODEL TO EXECUTE - SOFTWARE AG'S VALUE PROPOSITION	8

Sandy Kemsley is an independent analyst, application architect and blogger, specializing in business process management and Enterprise 2.0. During her career of more than 20 years, she has started and run successful product and service companies, including a desktop workflow and document management product company and a 40-person services firm implementing BPM and e-commerce solutions, and held the position of BPM evangelist for a major BPM vendor.

Currently, she practices as a BPM industry analyst and architect, performing engagements for end-user organizations and BPM vendors. She writes the popular "Column 2" BPM blog at www.column2.com, is a contributing author on other business and social media-related blogs, and is a featured speaker on BPM and its impact on business.

INTRODUCTION

How we create process-based applications is changing. In the past, business-level models were created as a minor part of the business requirements and usually recreated by IT in a separate process implementation tool. Now, process models are becoming a more important part of business requirements—in some cases, almost completely replacing written requirements. The need to share models between business and IT is critical in order to reduce model translation errors and speed up implementation times.

Although business and IT will continue to have different perspectives on process models, governance of the process modeling lifecycle can coordinate modeling efforts among different participants. This helps to create a seamless integration from the highest-level business models to executing processes, thereby aligning the goals and efforts of business and IT.

Governance of the process modeling lifecycle helps to align the goals of business and IT.

THE CHANGING NATURE OF PROCESS MODELING AND EXECUTION

In the past, there has been a sharp division between how processes are modeled and how they are executed. Business analysts and process specialists, in conjunction with business users, created process models that represented how the business works and how it should work: the classic "as-is" and "to-be" models that include human activities, human-computer tasks and fully automated activities.

These future state models formed part of the requirements that were passed along to a development team, which then recreated the process models using a different set of tools in order to generate executable processes. This led to a number of challenges.

Challenge #1: Lack of business-IT communication

Using separate, non-integrated tools created a communication barrier between business and IT, since the business process models and the executable process models often bore little resemblance to each another. Not only did the business models contain non-automated steps that would not be translated into an executing process model, but the executing process models may have had automation steps at a more granular level than were present in the business models. In fact, executing process models may not have existed as graphical process models at all, but only as code.

Challenge #2: Errors in model translation and synchronization

Business requirements represented in the process models could be lost during the manual translation into executable processes. Furthermore, synchronization between the models—whether from business to IT due to a business process change or from IT to business due to an implementation change—was manual and ungoverned by any methodology and, therefore, prone to translation errors or even omitted.

Challenge #3: Lack of transparency

There was often insufficient visibility for the business stakeholders into the executable processes, making it difficult to align cultural and organizational changes, such as dynamic work reassignment or measurement of Key Performance Indicators (KPIs).

In other words, the lack of alignment between the business and executing process models created a corresponding lack of alignment between business and IT.

Solution: Model-driven approach to BPM

To achieve this alignment, we need a model-driven approach to Business Process Management (BPM), in which business analysts perform the initial business process analysis (BPA) and the same processes are automated and executed in a Business Process Management System (BPMS). Creating this direct link from process modeling to process execution allows for greater collaboration and alignment between business and IT.

By providing different stakeholders with process tools appropriate to their needs, yet sharing the resultant models between the tools, it is possible to create a shared vision of process excellence while allowing creativity across all modeling efforts.

Different stakeholders need process tools appropriate to their needs

DIFFERENT VIEWS FOR DIFFERENT PEOPLE

Early efforts at model-driven development in BPM resulted in business participants being confronted with complex technical tools that the average business person was neither capable of nor interested in using. Furthermore, the level of detail required in a process at the execution level was far beyond that required for business people to be able to model and understand their processes.

Instead, business analysts continued to create their process models using familiar tools, such as Microsoft Visio or ARIS, then passed these on to IT for manual translation by developers using a technical process modeler. Although this created an easier environment for the developers, who could now model much of an executing process using a graphical environment rather than with code, it did not address the challenges of lack of alignment due to a lack of shared process models.

As process modeling tools became more integrated with the process execution environments, it became obvious that different roles, such as those of process owners, business analysts, process engineers and developers, required different views of a process model.

Whereas a process owner is most concerned with the high-level activities and KPIs, a business analyst needs to document activities and the process flow in complete detail. Process engineers require more detailed logical views and optimization tools, such as simulation, while developers need to be able to attach and configure automated services to the process to make it executable. Clearly, one size does not fit all when it comes to process modeling tools.

The multiple views required of business processes are similar to those in an enterprise architecture framework, where moving to lower levels of models isn't simply a matter of creating a similar but more detailed model, but rather it's a matter of translating to a completely different perspective appropriate the key stakeholders at that level. In fact, most enterprise architecture frameworks include a column for process models, in which the higher levels represent the perspective of the process owner and business analyst, and successively lower levels represent more technical perspectives for implementers.

It is equally valid to make changes to the models at any level, since those changes may be made for different reasons, and those changes must be propagated through all perspectives. For example, the higher-level process models may contain activities that are purely manual, such as the movement of physical documents, which will not be translated into system functionality at the lower levels. Similarly, technical services attached at the lower levels may be rolled up into less-granular business services in the higher-level perspectives, or may not be represented at all if they don't add value at that level and may confuse the audience.

SHARING MODELS ACROSS PERSPECTIVES

Some perspectives may use the same underlying notation— such as Business Process Model and Notation (BPMN)—but also use different elements to represent the model appropriately for that level. Alternatively, a business-level perspective represented in an ARIS Event-driven Process Chain (EPC) or other business-level notation may be translated to BPMN for full technical implementation. It is important to distinguish a common notation from a shared model.

However, in cases where the higher- and lower-level models are significantly different, it may be desirable to use different models (even if they are both represented in BPMN) and translate between them, rather than attempt to mask the irrelevant portions at each level.

In other situations in which the different perspectives are very similar, it may be possible to use a single model. The choice of whether to use one or multiple notations and models must be based on a sound modeling methodology within an organization so that different model perspectives are created and linked together consistently. This decision may depend on the modeling tools as well as the preference and skills of the modeling participants.

Regardless of whether the different perspectives are implemented as a shared model or translated between multiple models, the key issue is establishing links between information at different levels:

- Process model flow diagram, typically modeled at all levels of business, logical and implementation perspectives
- Data model, modeled at the logical level and implementation level
- Service definitions, including access to a service repository, modeled at the implementation level
- User interface, possibly modeled at the business and logical levels as use cases or storyboards, and in a more representational form at lower levels
- KPIs, modeled at the business level and translated to events and metrics at lower levels

It is necessary to have not only a methodology for model translation, but governance to control how this synchonization occurs.

These links between levels cannot be ad hoc if they are to be applied consistently. It is necessary to have not only a methodology for model translation, but governance to control how this synchronization occurs.

THE NEED FOR PROCESS LIFECYCLE GOVERNANCE

In an enterprise architecture view of a business process, business strategy maps to business goals, which map to business operations, and from there to business-level process models and technical process models. There are multiple conceptual models involved in any BPM design and implementation. Furthermore, process models must be linked closely to data models and organizational models to allow process, data and roles to be modeled coherently between business and IT. The business view of a process can be quite different from the IT view, and they aren't necessarily directly representative of each other.

Given that there are two or more different models, how do business and IT coordinate their modeling efforts?

A key challenge is the link between business requirements and technical implementation. As process models become a common part of, or a replacement for, business requirements, it is even more critical that the lifecycle of process models from requirements to implementation is properly managed.

With multiple artifacts, whether they represent different aspects of the enterprise architecture or different perspectives of the same aspect, the concerns become traceability, consistency and impact analysis between models when a change is made to any of the models. Adding a governance framework to the process modeling lifecycle reduces model transformation errors and greatly speeds up modeling and implementation efforts.

Process governance provides an answer to managing the lifecycle of process models. It guides the design and implementation of process applications and also enforces alignment between business and IT by coordinating the collaboration efforts. Governance also provides consistency management, not just between versions of the same model but between models of different types that represent the same process, where there may be an overlap of information representation.

Without process lifecycle governance, there are significant challenges in model transformation and synchronization (when BPA and BPM are done in different tools) and in coordinating the efforts between business and IT process modelers regardless of whether one or more modeling tools are used.

Process model lifecycle governance is based on a deceptively simple procedure: when the business creates or changes a process model, it hands it over to IT for implementation. IT is notified of the handover and proceeds with the tasks required to turn the business-level model into an executable process.

Conversely, if IT changes the model to optimize it for automation, IT hands it back to the business for approval, which is notified of its approval task. Although this may involve model transformation, it is primarily about synchronization and collaboration of efforts between business and IT. Any of the modeling participants can view the status at any time to understand process steps have taken place and what steps are required to complete it.

THE BENEFITS OF LINKING MODELS TO EXECUTION

Sharing models—even if seen from different perspectives—allows all stakeholders to speak a common language and share a vision of the process improvement. This also shortens the time to move from the business vision to executing processes and to make updates to the processes, providing significant cost savings.

Creating a link from business-level process models to executable processes through lifecycle governance is critical to achieving business-IT alignment, since the models become the method of communicating business goals and strategy directly into action. Modeling tools that allow for the direct translation between different modeling perspectives ensure that business requirements are communicated accurately and completely to the implementation team, and that technical limitations that might impact the business-level view of the process are communicated to the business.

Many higher-level business models do not, however, link directly to executable processes, but require a proper architectural framework and methodology to guide both business and technical modelers through the connections between these radically different perspectives. Such frameworks and methodologies can turn a disconnected set of models into a unified view of a business process, as seen from different perspectives, and require proper governance to translate consistently between the perspectives.

Sharing models allows all stakeholders to speak a common language and share a vision of process improvement

In addition to promoting business-IT collaboration and reducing translation errors in requirements, sharing models creates efficiencies in the process implementation cycle, allowing changes to processes to flow between different stakeholders seamlessly. Rather than requiring a complete redevelopment effort when a business process changes, this allows modifications to a process to flow from the business analyst's model to that used by developers for the technical implementation. This reduces the time and effort required for a change to a business-level model to be reflected in the operational process, allowing for continuous process improvement.

There must be governance over the lifecycle of process modeling to guide and support the collaboration between business and IT

SUMMARY

Sharing a vision of process excellence between business and IT is no longer a dream. Yet there are two things are required to make it a reality. First, process models must be transformed easily between business and IT perspectives, since business-level process models now form a significant portion of the requirements for implementation. Second, there must be governance over the lifecycle of process modeling to guide and support the collaboration that must occur between business and IT in order to create, modify and maintain process models across multiple perspectives. Working in concert, these will:

- Reduce translation errors between different process model perspectives
- Decrease the time required to model and implement business processes
- Improve business-IT collaboration

ENTERPRISE BPM - SOFTWARE AG'S VALUE PROPOSITION

In many organizations, BPM is implemented in departmental silos using different tools and methodologies. Those silos don't interact with each other very well or not at all. Under these circumstances, process improvement initiatives have no chance to be successful and thus, the power of BPM cannot be leveraged.

Recognizing this need, Enterprise BPM is breaking up silos to recombine them in a holistic, sustainable program. An integrated software suite brings together industry-leading BPM technology that enables customers to define their corporate strategy and to model, analyze, execute, and monitor processes to establish continuous process improvement. All stakeholders are connected through a collaborative EBPM environment and strong process governance:

- Establish efficient processes that align business and IT around organizational goals
- Define role-based workflows that address who should do what and when
- Implement new processes within the enterprise or across specific IT environments
- Govern an architecture and enable it for Service-Oriented Architecture (SOA) to build new processes faster

Areas of improvement can be easily identified by deploying ARIS enterprise-wide as a tool and framework for an efficient BPM approach and for the analysis of the weak points and optimization potential in a process landscape. The tight integration with CentraSite and webMethods BPMS then makes it easy to take business processes from a strategy and design point of view and transform them into models for process automation.

Process owners retain control over the entire lifecycle with flexible governance and full transparency. The result is a faster and more collaborative approach to process improvement—one that ensures the business is in the driver's seat and IT is fully enabled to deliver. It's time to Unleash Process Power.

NOTES:

NOTES:

TO FIND THE SOFTWARE AG OFFICE NEAREST YOU, PLEASE VISIT WWW.SOFTWAREAG.COM

Take the next step to get there – faster.

ABOUT SOFTWARE AG
Software AG is the global leader in Business Process Excellence. Our 40 years of innovation include the invention of the first high-performance transactional database, Adabas; the first business process analysis platform, ARIS; and the first B2B server and SOA-based integration platform, webMethods.

We offer our customers end-to-end Business Process Management (BPM) solutions delivering low Total-Cost-of-Ownership and high ease of use. Our industry-leading brands, ARIS, webMethods, Adabas, Natural, CentraSite and IDS Scheer Consulting, represent a unique portfolio encompassing: process strategy, design, integration and control; SOA-based integration and data management; process-driven SAP implementation; and strategic process consulting and services.

Software AG - Get There Faster

SAG_ARIS-wM_BusIT_WP_May11