When the Doctor Takes His Own Medicine

SAP’s Roadmap towards Business Process Management

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“What we will change is to accelerate the pace of the innovation we deliver to you. We will do that by energizing our entire company to become even more open to and informed by the needs of your company. This is not a new task, as innovation has long but quietly flourished in many groups within SAP. Our goal now is to bring these groups together and unleash the creativity at SAP by fostering a new motivated employee culture, increasing customer involvement, and by increasing the clock speed of development efforts.” (Bill McDermott and Jim Hagemann Snabe, 2010)

1. Introduction

1.1 Challenge

In 2005, the CEO of SAP, Henning Kagermann was facing several challenges. Sales from existing products were soaring and the organization was complex making customer focus difficult. Leading a company with 33 years continuing growth and profitability, it would be tempting to go for “business as usual”. However an analysis nicknamed the “Sun-Tzu” document outlined the strategic opportunities and challenges for SAP and the industry from 2006 to 2010. The analyses lead to the formulation a new growth strategy requiring a complete transformation of the company. The challenges included the Enterprise Service Architecture vision and the delivery of a Business Process Platform. In addition, SAP Business ByDesign (a new SaaS ERP) was being developed and SAP needed to improve the internal processes for this product, since it was aimed at small-/medium-sized businesses where the margins would be smaller than compared to the flagship ERP solution[1].

SAP is the world’s leading provider of business software. More than 47,800 customers in more than 120 countries run SAP applications. SAP delivers products and services that help accelerate business innovation for their customers. SAP believe that doing so will unleash growth and create significant new value – for their customers, SAP, and ultimately, entire industries and the economy at large. With subsidiaries in more than 50 countries, the company is listed on several exchanges, including the Frankfurt stock exchange and NYSE under the symbol “SAP”.

In this paper we explore the journey of a functional oriented organization towards process orientation. We present the challenges and the approach taken and we will show how Business Process Management (BPM) blends with service-oriented technologies. Finally we reflect on the role of information technology in this
transformation, and conclude that the doctor takes his own medicine. The SAP roadmap we present has been developed during the BPM journey and it has later been formalized, validated and generalized using similar company cases [2]. Throughout the description of this journey, we present the SAP experiences and lessons learned.

![Diagram: Strategic Business Goals, Business Processes, Technology, Roles]

**Figure 1. Best Run Business Processes.**

### 1.2 Background of the BPM organization

Around 2005 the slogan of SAP was "The Best Run Companies run SAP". Just about 2005/2006, SAP created seven corporate goals, one being "Operational Excellence". By focusing on Operational Excellence, the executive board wanted to create “best-in-class processes” to match the company slogan. Initial maturity analysis however rendered a process-wise heterogeneous organization and it was realized that a profound transformation was needed.

In order to drive this transformation a new process organization were inaugurated. The Business Process Organization (BPO) was sponsored by the executive board and established in February 2006 with the overall tasks of establishing company-wide process governance and consulting in process management related topics. The main process management governance tasks of the BPO were to:

- Ensure compliance with the framework of methods and standards for BPM at SAP
- Create instruments to prioritize BPM projects
- Determine roles, responsibilities and organizational structures for BPM
- Measure and report on business processes and process initiatives
• Drive a culture of process thinking and continuous improvement
• Facilitate communication and cross-functional collaboration on end-to-end processes

The consulting tasks — or services of the BPO included the following:

• Managing process initiatives
• Updating and applying the SAP BPM methods
• Supporting initiatives and organizations with process expertise
• Analyzing, designing and implementing processes

This aim of the BPO is to help SAP to be a best-run company by providing the best people, best processes and the best IT infrastructure in the software industry. Thus SAP can achieve operational excellence through enablement, collaboration, and transformation.

Another requirement was the establishment of a dedicated project team for implementing BPM. This team was considered the engine that transforms the driver (the BPM sponsor) and the entire company from being a functional organization to being a process-driven organization.

1.3 The BPM Journey
At SAP Business Process Management (BPM) refers to the integrated and continuous analysis, design, implementation, execution, measurement and monitoring of business processes in order to increase effectiveness and efficiency with respect to the corporate strategy. BPM also covers the process-related environment, such as organizational structures, people, and technology. In particular it deals with cross-functional and inter-organizational business activities.

Figure 2. The PML methodology.
The BPO at SAP developed a BPM framework based on a process management lifecycle (PML) approach. This general framework for BPM includes a methodology for completing process improvement projects, called the PML methodology. The PML lifecycle consists of the four phases: 1) Analyze; 2) Design; 3) Implement, and 4) Run/Monitor, with Organization, People, and Technology as key elements. Process Governance and Process Ownership hold the lifecycle together.

The next section of provides a step-by-step approach, or roadmap, for implementing BPM in any type of company. Just like an ordinary roadmap provides a driver with the details he needs to get from Point A to Point B, the BPM roadmap provides a detailed guide for becoming a process-oriented company driven by BPM.

Before beginning on the BPM journey, there are a few prerequisites. The first is the naming of a senior executive to sponsor and actively support the implementation of BPM. In other words, the company needs a “driver” who is in charge of following the BPM Roadmap. This is especially important if the goal is to make the company as a whole process-oriented, and not just a specific business unit, function, or department. The company’s BPM initiative will most likely fail if no executive sponsor is named.

The driver has to ensure that BPM is accepted as a long-term investment. This person therefore holds a key role in transforming the culture of the company from being functional to being process-oriented. This appointed executive should be someone who is respected at all levels of management and who is an excellent communicator, constantly “preaching” to all employees the importance of the company’s transformation, and how this transformation fits into the business strategy.

The second organizational requirement is the establishment of a dedicated project team for implementing BPM (the BPO). This team can be considered the engine that moves the driver (the BPM sponsor) and the entire company from being a functional organization to being a process-driven organization. A company may decide to create a process center of excellence, a process excellence team, or a virtual project team consisting of external consulting resources and members from various departments (e.g. IT and operations). What is important is that the resources have the necessary skills to perform this work, ideally already having a strong understanding of cross-functional processes.

BPM requires supporting activities throughout the transformation. These activities are the building blocks that ensure that the company as a whole is aware of the BPM effort understands how the effort will affect different areas, and can support the effort with technology focused on processes. These building blocks include: 1) Build Process-centric IT; 2) Manage Change; and 3) Communicate and Train.
Process-centric IT means that the IT organization responsible for the systems supporting the business processes — also becomes process-oriented. Business process management will not succeed if only business or IT, but not both, begin thinking in terms of processes.

To increase the awareness of process thinking, communication needs to include all actors affected by BPM, such as senior managers, IT architects, or finance employees. Training should be provided for individuals simply interested in process management but also for future process owners and other business process management roles. Finally, communication and training should be heavily integrated into overall change management efforts.

2. The BPM Strategy
SAP defines BPM as a management discipline intended to increase effectiveness and efficiency with respect to the corporate strategy. BPM must support a company’s strategy to be of value to the organization. The link to corporate strategy is important, because business processes impact all areas of a company. Without a clear BPM strategy, there cannot be a cohesive approach to operational improvement.

This part of the roadmap presents how to develop and monitor a BPM strategy: 1) Link to strategy: Understand and define how business process management supports the corporate strategy; 2) Define building blocks: Determine the factors that need to be considered, analyzed, and adjusted to make BPM a success; 3) Choose
path: Define the best way to approach Step 3 of the BPM Roadmap, the transition path; and 4) Monitor fit-gap: Report on and review the defined building blocks during the overall BPM transformation.

### 2.1 Link to Strategy

A corporate strategy relies on effective and efficient processes, but many organizations do not have a clear link between the two. A company’s strategy may be double-digit growth, acquisitions, increasing profitability, or entering new markets. All of these strategies require business processes that are embedded in adequate organizational structures and supported by people and technology.

By developing a BPM strategy based on the corporate strategy, a clear link and transparency can be created between the processes and the strategy. Demonstrating this strategic benefit of BPM will make it much easier to convince the relevant stakeholders to turn the enterprise into a process-oriented organization. In turn the company can benefit from SOA, leading to business process innovation.

### 2.2 Define Building Blocks

When the link between business process management and the corporate strategy is understood, the company needs to analyze its current process management maturity and determine what factors, or building blocks, need to be introduced or improved in the BPM implementation.

![Building Blocks Need to Cover Four Elements: People, Processes, Structures, Technology](Figure 4. The BPM Building blocks.)
Building blocks, as can be inferred from the term itself, are interdependent elements needed to turn a company into a process-oriented organization. The blocks have to evolve in a coordinated and gradual manner to enable increasing maturity levels and benefits of BPM across all functional units on an enterprise level.

2.3 Choose Path

In addition to defining the building blocks required for implementing BPM, a path for the transition should be developed. The strategy as a whole should cover all of the steps in the BPM Roadmap: the set-up, the transition, and continuous improvement. But unlike the set-up, which can and should always be executed the same way, three different paths exist for performing the BPM transition, each with their own strengths and weaknesses:

- Revolutionary approach (or big bang): The company, business unit, or department wants to get the most benefit out of all of its processes within the shortest period of time.
- Step-by-step approach (or project by project): The company, business unit, or department works on key strategic projects, not taking into consideration the end-to-end processes affected.
- Evolutionary approach (or process by process): The company, business unit, or department tackles the most critical processes first, realizing that lower priority projects not using a BPM standard approach may be going on in other areas of the company.

The BPM transition can be the same for the entire company, or different paths can be chosen for the different business units or functions. Many factors influence what path to take, including the size of the company, and its culture. In the following list, four influencing factors are identified to help you determine how the transition should be handled:

- Convenient projects: Opportunities arising from existing projects may exist for creating an ideal BPM showcase. Or, top management may want to start a new, high-profile project where BPM could play a vital role.
- Degree of maturity: The cultural maturity of an organization is a critical factor in determining what transition path to take. If process-thinking is already established and strongly supported by senior management, a revolutionary approach may be best to take advantage of this situation. If the company is still very function-oriented, a step-by-step or evolutionary approach may be the most feasible.
- Resource situation: The resources available and their skill levels also play a role in choosing the appropriate transition path. The revolutionary approach requires a large workforce skilled in process management. The other two approaches require fewer resources and allow process management testing in a particular project or on a particular process.
- Existing pain points: Critical pain points with a high priority may exist in the organization, or in a particular area. These may be the catalyst driving BPM activities.
Because the BPM transition can be considered the keystone of a successful BPM implementation, it is important to take the time to analyze the organization to determine the most appropriate approach. However, this approach can always be adjusted or changed over time, depending on the changes that occur in the company itself.

2.4 Monitor Fit-Gap
During the execution of the BPM Roadmap, it is important to always have transparency of the progress being made and of the status of the transformation towards becoming a process-oriented company. With the help of a fit-gap analysis — and using the BPM building blocks as a basis — this status overview can be developed and measured.

The measurement can be performed using the same maturity criteria as that for the processes themselves. When measured on a regular basis (e.g. monthly or quarterly), the results of this analysis provide a good indicator of what building blocks act as bottlenecks at a particular point in time, and what blocks already have a sufficient degree of maturity. This ensures that any issues that could hinder the overall BPM transformation are identified in a timely manner, and lets the company concentrate its BPM efforts on the most critical building blocks.

2.5 Lessons Learned
SAP developed a medium-term strategy with a number of corporate goals. One of these goals is: “Operational Excellence: Improve organizational response time, productivity, and quality to turn ideas into execution through the efficient use of our resources.”

Based on this goal, SAP’s BPO discussed the BPM strategy with the following individuals or departments: 1) The executive board sponsor responsible for processes; The chief information officer (CIO); A number of senior managers in the business units

As a result of these discussions, a vision and mission were developed. To support the mission, two actions were defined, as follows: 1) Transparency; Enable clear end-to-end business processes with dedicated process owners who are accountable for process performance; 2) Process efficiency: Drive and manage major process improvement projects across the company.

Finally, to integrate these actions into the corporate strategy, KPIs were identified for measuring the progress of the BPM strategy. Two examples of KPIs are the percentage of processes with designated process owners, and the percentage of processes with defined process performance indicators.

Before the appropriate transition approach was chosen for SAP, the BPO analyzed the various departments and business units to determine their maturity, the amount of resources they had available for process management, and the number of process initiatives that were underway.
Building blocks, as can be inferred from the term itself, are interdependent elements needed to turn a company into a process-oriented organization. The blocks have to evolve in a coordinated and gradual manner to enable increasing maturity levels and benefits of BPM across all functional units on an enterprise level.

Figure 5. SAP’s BPM vision and mission.

The result of this analysis showed that a mix of all three transition paths was necessary, in order to get all business units aligned as quickly as possible.

The main lessons learned are:

- The corporate strategy is the basis for the BPM strategy. You therefore have to understand what the focus and goals are of the corporate strategy, and ensure buy-in from all relevant parties.

- Building blocks provide you with the elements needed to complete the BPM Roadmap and should evolve in a coordinated and gradual manner.

- Based on the BPM strategy, a path should be chosen to complete the BPM transition. This path depends on many factors, including the size of the company and its culture.

- The fit-gap analysis should be used to measure the progress made in the overall BPM transformation. The analysis should measure the maturity of each building block on a regular basis to ensure that bottlenecks do not occur.
3. The BPM Setup
Regardless of the BPM strategy decided upon, and the path or paths chosen for the transition, a set-up needs to be completed. Otherwise, without a conceptually sound approach to BPM, it will be much more difficult for an enterprise to bring various business units and IT on the same page. By developing a clear concept based on the corporate strategy, a company has a much higher chance of becoming process-oriented.

The BPM set-up concentrates on the concepts for implementing business process management, for example, what BPM roles and decision making bodies are required. During the set-up, a company should test the concepts developed, using pilot projects. This way, the company can adapt and enhance the concepts so that the transition can be executed without running into major obstacles.

This section covers the following building blocks: 1) Define basics: Process map, roles and tasks, and decision-making bodies; 2) Develop analytics: Process maturity plan and process performance measurement; 3) Create methods: BPM methodology, modeling conventions, and BPM tool landscape; and 4) Harmonize terms: Process terminology.

3.1 Define Basics
The defined basics are the foundation for all other BPM building blocks. Examples of the challenges here are how a process map, or enterprise process landscape, should be defined and how to determine the required roles, tasks, and decision-making bodies. Spending enough time on creating a well thought-out concept for a process map, process roles, and decision-making bodies is very important. The lessons learned are:

- Use a classification framework to ensure use of the same process terminology.
- Get a clear understanding of the different actors and ensure they get the correct views.
- Show business units the value of one central process map, and ensure that they do not feel that they are losing their own business unit view.
- In defining roles and decision-making bodies, try to build on the existing organization structure of the company.
- Discuss proposals with both the business and IT, ensuring that both are on the same page.

With this basis, the company can now concentrate on the other conceptual topics in preparation for the BPM transition.

3.2 Develop Analytics
Analytics focuses on defining the measures for determining process maturity, efficiency, and effectiveness. It is important to come up with an integrated approach for measuring processes to ensure that an objective and fair comparison can be made for internal and external benchmarking purposes. In addition, a standardized approach to process measurement will help the company identify its best practices.
Without process measurement, it is not possible to verify that the objectives of business processes have been met. Determining the maturity of a company's processes forms the foundation for value-adding process management, which contributes to the company's strategy.

The performance measurement process provides benefits at all levels, regardless of central or local execution. No matter what choice is made, critical, control-relevant information is gained that helps manage the process more effectively. The same goes for the process maturity analysis. However, the benefits of centralized execution are forfeit in this case, primarily because the interaction and interdependencies between the processes — and thus their interfaces across the processes landscape — are not taken into account. The lessons learned are:

- For new processes, the performance measurement process should be taken into account as early as the design phase.
- It is critical to give thought to just how informative the collected performance information will be and how it can be used to guide the process and the company in general.
- It is important to not reveal any person-specific information in the process performance measurement, as the objective is to analyze processes, not individuals.
- Detailed documentation of the performance indicators is needed to build the foundation for an efficient implementation to maintain an overview of the existing measuring points and their importance at all times.
- A complete map of the processes in scope is required, and each of these processes should be assigned to a responsible process owner who can provide detailed information within the analysis framework.

### 3.3 Create Methods

Standard BPM methods are necessary if a company wants to ensure efficiency and effectiveness of process activities on an enterprise level. Only then can a company take full advantage of comparable and reusable processes, knowing that the same type of deliverables have been provided for each completed process activity. The efficiency and quality of BPM activities depend primarily on the tools that are available and used. That is why it is important to have appropriate process management tools — and conventions for those tools — that support the BPM methodology.

### 3.4 Harmonize Terms

After the initial steps in the BPM set-up have been completed, it is time to bring the various terms and definitions that have been created together. Accurate process-related terminology is needed to clarify any content issues in different business areas and IT and should be supported by valid, understandable examples. The consolidated process terminology must then be communicated and effectively rolled-out to be used and understood by everybody in the company.
3.5 Lessons Learned
Although a central process organization was established at SAP, the company already had a number of decentralized process organizations, project management organizations, and process initiatives.

Therefore, an initial review of all existing process-related teams and bodies was completed to determine the BPM roles and decision-making bodies required. The review consisted of discussions with business units, decentralized process organizations, and IT. In the end, seven business roles and four IT roles were defined. In addition, two decision-making bodies were named, one based on an existing IT steering committee, and the other to be newly introduced.

SAP’s PML methodology was also enriched with a view of the interaction between business, IT, and assigned senior management. This makes it easier to go into the details of the tasks of these three parties and the interaction between them.

Figure 6. Interaction View of SAP PML Business, IT, and Senior Management.

The diagram provides an overview of the interaction between business, IT, and senior management within the stages of the PML methodology. The methodology is triggered through input from the SAP business and IT strategy. Business and IT can process analyze and run/monitor phases separately, while the design and implement phases must be carried out jointly. If the measured performance of a specific business process
systematically falls beneath a defined value, the process owner can initiate a new improvement cycle for this process.

If process reporting at the senior management level reveals multiple deficits in the performance data, this could indicate that farther-reaching changes are needed, such as business process reengineering for entire process areas. In this case, assessment from a strategic perspective is needed.

The PLM methodology was developed in close collaboration and coordination with the local process initiatives and project management offices that have been established in many organizational areas at SAP. These areas have an excellent overview of ongoing processes, the necessity for change, and the methods they use. In particular, the BPO coordinated with IT at an early stage.

Aside from the bilateral exchange with these areas, a committee that met regularly was appointed. The committee included other relevant experts, such as the global Sarbanes-Oxley (SOX) team and employees from global risk management and enterprise controlling.

When developing the PML methodology for SAP, it was important to strike a balance between strict instructions and the necessary degree of freedom, in line with SAP’s corporate culture. With respect to this, the methodology enables maximum flexibility to use a wide range of individual methods.

To ensure that the results remain comparable despite the use of different methods, a set of deliverables limited to the absolutely necessary was described and defined through documentation templates.

Based on these deliverables, the BPO began to develop a PML methodology handbook with the primary aim to achieve widespread use and acceptance of the methodology. Accordingly, the focus was on creating a simple handbook that all employees could use directly. Complex individual methods were deliberately omitted. Nevertheless, the manual is thorough and covers the entire process lifecycle.

At the same time, brief, manageable pilot projects were identified and given extensive support. The experience gained from these projects led to further improvement of the PML methodology details. The basic approach of stages and steps proved to be robust and successful in practice.

The BPO determined what modeling tools were required based on the PML and the BPM tool landscape. Based on this aspect, and following the motto “less is more,” modeling conventions were defined, covering a core set of elements needed for process modeling.

If different business units determined that additional symbols or process attributes were required, these were reviewed by the BPO to determine if the request was applicable to the entire company and whether there was a possible alternative to use symbols or attributes in the existing modeling conventions to cover this request. If no alternative existed and the request was valid for the entire company, the modeling conventions were adjusted to include the requested additions. If the request was only valid for that particular business unit, an exception was noted for that unit.
To ensure that process modelers would stick to the standards, the tool that was implemented was locked in such a way that no additional symbols, notations, and so on could be used. This locking of process modeling elements could be seen as the technical implementation of the modeling conventions document.

This reduced complexity of modeling helped the company focus on the correct elements and thereby enabled an efficient and effective modeling, while supporting model uniformity and company-wide comparability through a single set of elements.

SAP’s BPO consolidated all of the terms defined during its BPM set-up. In addition, terms were collected, reviewed, and consolidated from the various decentralized process and project management organizations to ensure that none of the terms had duplicate meaning.

Two things were done to publish the terminology. First, a “process glossary” located on the BPO’s intranet page was announced. Second, all of the process terms in SAP’s internal terminology database were included. This database is used in development in particular, to ensure that the same terms are used across all of SAP’s products. But the database was also ideal for “institutionalizing” the process terms.

To ensure acceptance for the process terminology, a BPO email address was made available on the intranet page to all employees. Using this email address, questions concerning the process terminology can be sent, or suggestions for new or changes to existing terms can be made.

4. The BPM Transition

BPM transition is one of the key steps in the BPM Roadmap because it will be continuously executed and improved over time. The transition is where the company, based on the path or paths chosen in the BPM strategy, implements the concepts developed in the BPM set-up and begins, for the first time, to manage processes. It will continue to do this as the company enters the continuous improvement step, with enhancements added or pieces of the BPM approach adapted during each succession.

The BPM transition can be considered a cycle, consisting of four stages covering most of the building blocks discussed in the BPM set-up. In the transition, however, the concepts defined in the set-up are rolled out within the company. In addition, as compared to the set-up where concepts were tested with pilot projects, the transition is the step in which BPM becomes more formalized and institutionalized.

Because the transition is a cycle, any one of these stages can be the starting point. For example, some companies may find it easier to start with the optimize processes stage, requiring documented processes, assigned responsibilities, and defined measurements as deliverables. These deliverables then are the source for the process map, process owners, and PPIs in the create basis stage.

The four are: 1) Create basis: Process map, roles and tasks, and process performance measurement; 2) Perform analysis: Process maturity plan and corporate process reporting; 3) Define portfolio: Process-oriented strategic planning, project portfolio management, and decision-making bodies; and 4) Optimize processes.
4.1 Create Basis
The create basis stage of the transition is based entirely on the results of the concepts from Define Basics. In this stage, the concepts are acted upon — meaning that an enterprise process map is developed, with assigned process owners and defined PPIs. The result of this work provides a clear structure for the next three stages of the transition.

4.2 Perform Analysis
After the basis has been created, an analysis and reporting of the current state of the company’s business processes and overall BPM transformation is possible. With the structure of the process map and designated process owners, a process maturity can begin. The addition of defined PPIs in an overall management reporting, can provide input into the next steps required for successfully completing the BPM transition step and the overarching BPM transformation.

4.3 Define Portfolio
Although a project portfolio can be created without a preceding analysis step, it is advantageous to include certain criteria — such as process maturity — in a portfolio plan.

The goal of process-oriented project portfolio management is to identify the process areas that have the greatest impact on reaching the enterprise goals. Accordingly, it focuses on the processes that have the greatest potential to realize the defined enterprise goals through an improvement in process quality. Targeted process projects within the identified areas can help achieve this improvement.

The prerequisite for this process is the corporate process map, which is based on the company’s strategic focus. The business processes support the company in achieving its corporate goals, making them the primary criteria in the prioritization matrix.

The main tool for the selection process is the prioritization matrix, which helps the company’s decision-making bodies identify and select the processes, and thus the relevant projects. In this approach, the processes from the process map are compared with the weighted, valuated decision-making criteria for the process areas under analysis.

Process-oriented projects can be the result of periodic strategic planning, or can arise independent of planning. The prioritization matrix is used primarily in the context of specific project planning. If the processes resulting from the matrix are directly related, they can also be consolidated, which means one process project can involve several different processes. Regardless of whether it involves one process or several, the objective of a project is to modify the process to meet customer requirements or other process performance criteria such as process quality, cost, or execution time.

The process level of the business processes to be analyzed within the matrix depends on the desired process granularity and on the observer’s specific optimization requirements. The more detailed the process level, the easier it is to estimate the scope of the future process project. The optimization measures and processes,
which are carried out within the identified process areas and derived from the matrix, can take the form of a process renovation or a process improvement.

4.4 Optimize Process
After the first three stages of the BPM transition have been completed, the company can now start with its first process improvement projects. With the established process map, the company now knows where the processes that should be improved fit within the overall process landscape. The designated process owners can manage or sponsor the projects, and PPIs have been defined to measure how well the planned improvements actually worked out. Finally, the introduction of a maturity analysis as input for the project portfolio ensures a fact-based decision-making process completed by the process bodies instituted in the company.

There are a number of different methods for improving processes. In this section, two possible methods are discussed. One is the PML methodology, based on SAP’s overall BPM framework. The other is Six Sigma. Regardless of the method a company chooses, it needs to be part of the overall business process management approach. This is because BPM is about more than just improving processes; it’s about managing processes through their entire lifecycle.

4.5 Lessons Learned
One of the major tasks for SAP was developing a true enterprise process landscape. A lot of effort was put into this because the company believes that only with a global, uniform enterprise landscape is it possible to get a transparent view of the business processes across the company and different business units. This landscape no longer represents departments or functions (for example, “sales and marketing”) but rather the actions that take place in the company (for example, “market and sell products and services”). A number of challenges had to be addressed in creating a process map in this way, and the two main issues were as follows:

- Many of the business units believed that they have unique processes that would not fit in an overall, company-wide process landscape
- Employees and management confused their departments or functions with processes

To resolve the first issue, the BPO based the SAP process map on the APQC process classification framework. The more general terminology used in the company allowed BPO to create the first two levels on a global basis, with each business unit linking their process documentation at the lower levels.

This enabled the flexibility of having process variants that still fit into one complete process landscape.

It also made it easier for the company to identify business process owners, with global business process owners at the top two levels, and operational business process owners at the levels below.

The second issue is still being worked on. Right now, business units are encouraged to think of their processes in terms of a verb and a noun, but most of the descriptions provided are accepted. BPO believes that over time, however, there will be more and more consistency across the board.
The process owner is the central point of contact for a specific business process with a responsibility to manage the process end-to-end and to ensure efficiency and effectiveness throughout the entire process management lifecycle.

The process owner is implemented explicitly by the board with decision power independent from functional priorities to control and optimize the business process continuously and reinforce process thinking to the performers.

SAP decided to assign executive process owners who are responsible globally at the top two levels of the process map that had been designed. From level 3 on, SAP assigned business area-specific process owners who are responsible for their specific process variants. For instance, the “level 2 process: “Perform advertising, pricing, and promotional activities” could have several variants: it will be configured differently for large enterprise business than for small and midsized enterprise business. These variants need to be aligned and controlled by the global process owner at level two.

After having defined the process owner role within SAP’s organization the company is at the same time in the process of assigning global executive owners at process levels one and two. Thus, structures that grew in a decentralized environment before companywide BPM activities had been started will be adopted into this top-
down approach where possible. In other areas where clear responsibilities had not yet been assigned, pilot projects have been started to assign more operational process owners.

By following these steps and by defining engagement models to drive interaction between process owners and other relevant roles, the company is on its way to establish a matrix process organization.

Approving and managing a process project portfolio based on the corporate strategy allows a company to optimize the processes that bring true benefit to the enterprise as a whole. Having decision-making bodies in place to monitor the project progress and approve items such as a standardized BPM methodology ensures that a governance structure is in place for the overall BPM transformation.

The lessons learned are:

- When prioritizing processes, make sure to align with the corporate strategy and include input from the process maturity analysis.
- Perform a thorough analysis of the “clear” winners of the process prioritization to ensure that they are indeed the best for the overall company.
- When implementing decision-making bodies, try to use existing management committees or councils, therefore avoiding duplicate governance structures.
- Create a charter for any new bodies or adapt the charter of an existing body to reflect the process-related tasks and how they link to BPM and the corporate strategy.

5. Continuous Improvement
After the first three stages of the BPM transition have been completed, the company can now start with its first process improvement projects. With the established process map, the company now knows where the processes that should be improved fit within the overall process landscape. The designated process owners can manage or sponsor the projects, and PPIs have been defined to measure how well the planned improvements actually worked out. Finally, the introduction of a maturity analysis as input for the project portfolio ensures a fact-based decision-making process completed by the process bodies instituted in the company.

There are a number of different methods for improving processes. One is the PML methodology, based on SAP’s overall BPM framework. Another is the well-known Six Sigma. Regardless of the method a company chooses, it needs to be part of the overall business process management approach. This is because BPM is about more than just improving processes; it’s about managing processes through their entire lifecycle.

5.1 Add Process-based rewards
The BPM Strategy, linking BPM to the corporate strategy increases awareness and understanding of the benefits of BPM. In a similar fashion, linking BPM activities to performance objectives provides employees with
a much better picture of how their individual performance supports process performance and, therefore, the corporate strategy.

This link also reinforces the importance of BPM to the organization. For example, a process owner with a dual role as head of a business unit will be able to prioritize annual activities more clearly with rewards targets that include process performance goals. Without this reinforcement, employees may find themselves with annual rewards targets that conflict with process management goals, damaging the progress a company is making towards becoming process-oriented.

A number of process-based goals exist that can be included in an individual’s performance objectives. The most common is meeting specific annual process performance targets, for example a defined customer satisfaction result. However, process improvement project targets or process maturity targets are also possible.

It is important to ensure that the agreed upon individual performance objectives clearly tie into the process performance objectives and the corporate strategy.

5.2 Expand Reporting
Even if a company has completed a successful BPM transformation, the biggest advantage comes afterwards when the monitoring and reporting of these processes proves their performance.

This data is the basis to detecting and deciding on further improvement potentials or needs. It proves the successful design and implementation of processes by matching the expected results with the AS-IS performance. This information is relevant for business and IT. It will be able to optimize the supporting IT-architecture, systems, and services, and business is able to continuously improve the business process, organizational structures, and skills of process executors. All of these aspects should be covered by a good BPM methodology.

5.3 Allocate Budget
Process-based budget and cost allocation focuses on the end-to-end processes and not on functional units. Depending on the size and history of an organization, this may be one of the more difficult building blocks to implement. Two types of budget and cost allocations are possible: 1) Centralized allocation to process projects; and 2) Allocation to the business processes themselves.

The centralized allocation of budgets to process projects relates to the funding of process activities. Because project budgets are sometimes distributed among various business units in a company, with each unit defining its own project priorities, the risk of redundant or competing process improvement projects might exist.

By centralizing the funding of these process activities, a company can ensure a more coordinated effort in improving processes and reduce the likelihood of duplicate efforts significantly. In addition, centralized budget allocation ensures that only process activities take place that align with the company’s goals.

This centralized allocation can be performed by a specific decision-making body, for example the process steering committee, based on the strategic process plan. The funds can then be provided to the designated
process owners or process centers of excellence that have the task of executing on the process activity. In this case, the funding can always be tracked centrally, ensuring that company resources are used properly and aligned within the organization.

The method for allocating budget and costs to business processes depends on the type of organization you have. In the influencing process organization, this type of allocation would be too difficult to implement because the processes are not owned end-to-end, but instead parts are owned by each of the organization’s functions. In the pure process organization, functions are more or less non-existent, so an allocation to the processes is required. This type of organization already has costs allocated to the processes and has process owners that have full responsibility for the budgets of their respective processes.

A matrix-process-organization has a mix of budget and cost allocation. Functions will require their own budgets because they will continue to generate costs, for example employee salaries. However, processes and their process owners will also need budgets. In this type of organization, a “balance of power” has to be ensured so that functional heads and process owners are allocated the appropriate amount of budget to complete their tasks, without competing with one another for more funding.

5.4 Perform Audits
The purpose of this audit is to determine whether processes on which the organization is focusing are reaching a higher level of maturity than planned. The results of this audit are included as one criterion for determining the process project portfolio.

Although the process maturity analysis can be conducted by a process center of excellence, a process-oriented organization can also implement other audits that can be performed by the company’s internal audit department. Audits types are: 1) Process improvement project audits; and 2) Process compliance audits.

Process improvement project audit involves the assessment of process improvement projects to ensure that they follow standard BPM guidelines and methodologies established by the company. Process compliance audits have a much broader scope. Process compliance audits can include assessing the use of standardized processes in an organization’s subsidiaries, or testing standard process controls as required by the SOX Act, Section 404.

Both types of audits should provide comparable results and transparency on an enterprise level. And as with the other building blocks mentioned in this section, audits also underscore the importance of processes and process-thinking in an organization. They help support the process governance structure that is vital in ensuring a uniform business process management approach.
5.5 Lessons Learned
During continuous improvement, the steps are continuously reviewed and adjusted to ensure that BPM continues to support the overall corporate strategy. The lessons learned are:

- Because continuous improvement is a repetition and refinement of the previous BPM tasks the fit-gap analysis should be continued to determine what building blocks to adjust and what new building blocks to add.
- Process-based rewards will only work if they are directly linked to the overall corporate strategy.
- The best way to allocate budget and costs depends on the company’s organizational structure.
- Process audits should enhance existing audit activities, such as the process maturity analysis, rather than replace them.

6. Conclusions
6.1 Results
In June 2008 SAP was awarded the Business Process Excellence Award from IDS Scheer (now Software AG). The award was based on a major process improvement project in the Global Purchasing Organization focused on controlling. The vision was to create a showcase within the company for measuring system-based processes.

SAP has increased transparency over process execution and established a continuous improvement program for processes on purchasing types. Thus, the Global Purchasing Organization is able to simplify the processes and increase process automation where necessary. Using a process intelligence approach, cycle times and operating time of the purchasing organization have become visible and traceable, leading to measurable end-to-end processes. This allows managers at all levels of the organization to receive and analyze Process Performance Indicators specific to their needs. Another benefit of the project is related to SOX Compliance. SAP can now easily monitor whether controls in the process are executed effectively on a global level.

This was seen as a major milestone towards BPM success and consequently SAP was ready to take BPM to the next level. SAP has a vision for companies of all sizes to see clearly, think clearly, and act clearly so that they can close the gap between strategy and execution and become best-run businesses. Best-run businesses drive clarity into their organizations by gaining insight for improved performance, efficiency for optimized operations, and flexibility to adapt quickly to changing circumstances.

SAP is committed to improve its own operations to become more sustainable and to deliver customer solutions to improve sustainability on a grand scale. Over the past 10 years, SAP has been recognized by the Dow Jones Sustainability Index for upholding ethical, environmental, social, and governance values in products and services.

For the second consecutive year, SAP released its 2008 Sustainability Report. This report highlights SAP’s efforts in corporate environmental, social, and governance performance, as well as the delivery of product and services that support sustainable operations.
To support this vision and long-term sustainability commitment SAP have following goal: “SAP’s goal is to ensure that we are meeting the end-to-end needs of our customers, maximizing the value they get from our solutions. We need to continuously improve the speed of our business and technology innovation and drive scale in how we develop, sell, and support our solutions”. To enable this goal and vision SAP is using Business Process Management to approach sustainability as the next generation Business Process Excellence.

6.2 Discussion

When the SAP BPM initiative originally was conceived, it deliberately positioned as a pure internal business activity not related to IT. However over time it was realized that the IT was an important enabler of BPM and eventually “Build Process Centric IT” became a distinct building block on the roadmap.

The SAP business suite has evolved into a business process platform enabled by service-oriented architecture. The architectural vision of decoupling the technology from the business processes is threefold. First the aim is to be able to deliver business process innovations without disrupting the business. The second benefit of the service enabled platform is the ability to establish an end-to-end view of the business processes across systems in the entire value chain. Third, it gives the company the flexibility to embark on business network transformation.

The point here is that BPM can be leveraged using service-oriented technologies – BPM blends perfectly with SOA. The key to this concept is the idea of process-centric IT. Process-centric IT is only just emerging, and the understanding of the new skills, capabilities and transformation required has not yet fully materialized.

Process-centric IT is a new paradigm to carry out daily IT business in a challenging environment, to enhance the quality of IT solutions and services, and to improve communication between business and IT.

The IT department always works in a business process-oriented way and structures itself along process lines. This is reflected, for example, in the fact that service offerings by the IT department are structured along processes and that the task structure of employees, as well as the organizational structure, is organized according to processes. Even IT costs are assigned to business units according to process use, and SLAs are defined along processes. The overall framework for this is the hierarchically structured process map of the company.

Business process models are driving both business and IT. The process model provides a common, integrated view for the IT department and its internal customers and it brings these different views together. Internal customers and IT staff use the process model as a starting point for information retrieval. Using the same process model, they can branch into their specific views (technical and business).

As a conclusion, we see BPM as a critical prerequisite the transformation of information technology investment into operational excellence. The roadmap we have described here is instrumental in this transformation. We believe that SAP successfully has taken the medicine prescribed to customers, and – as indicated in the opening quote – is ready to leapfrog forward.
6.3 The Road Ahead
The transformation towards being responsive to changing customer requirements is a challenge shared by many organizations. SAP has approached this challenge using its own technology and methods. The case illustrates how leading management practices can be enabled using service-oriented technologies. The experiences are described through a generic framework for an approach that can be applied at other large organizations having a complicated SAP and non-SAP landscape.

References