Chemical Companies Jumpstart SAP ERP with Implementable SAP Best Practices

Increasingly, chemical companies across the globe base their SAP ERP implementations on the SAP Best Practices for Chemicals template. In fact, every chemical industry SAP ERP implementation in the United States in the last three years was based on the industry template. Companies of all sizes are finding that these SAP Best Practices save time and money, and that the solution template provides an excellent starting point for fitting the system to their own business.

SAP Best Practices for Chemicals is a set of predefined, industry-specific business processes – or scenarios – that chemical companies can use to significantly speed up an SAP ERP implementation project. They were developed with the help of system integrators, chemical industry solution providers, chemical industry associations, and other industry experts. The detailed scenarios provided in SAP Best Practices for Chemicals support various aspects of an overall chemical company business model, capturing the interplay of business processes among the major business functions such as Supply Chain, Sales, Planning, Purchasing, R&D, Manufacturing, Maintenance, and Transportation.

In a paper published in 2009, “Implementable Best Practices Speed Chemical Industry SAP ERP Deployments,” ARC Advisory Group described SAP Best Practices for Chemicals, the types of implementable scenarios available, the formal qualification process for implementation partners, and the benefits of using this approach. Now in its eighth release, SAP has updated this industry template to version 1.605 based on Enhancement Package 5 (EhP5). This paper focuses on the recent improvements available in this version.
Cloud-Based Quick Start Solution Preassembly

SAP now offers its Best Practices for Chemicals industry template in a cloud-based environment. In addition to demos and evaluation, it can be used to quick-start implementation projects by leveraging the underlying template in a cloud. This cloud environment can incorporate a tailored set of up-to-date SAP solutions like SAP Best Practices for Chemicals with content pre-installed, pre-configured, pre-tested, pre-loaded and specific to a given implementation project and customer.

With this SAP service offering, chemical companies can start projects before making any incremental infrastructure and hardware investments. Projects can be pre-assembled for evaluation and fine-tuning in the cloud, using the customer’s own data. Then, at any given time, the project can be migrated to the final production environment, either on-premise or to a cloud environment. This approach speeds time-to-value, reduces cost, and reduces risk because new business processes can be evaluated before infrastructure investments are made.

SAP’s Value Prototyping Preassembly team took an active role in building the cloud-based, SAP environment for quick start. This environment contains Rapid Deployment Solutions (RDS), applications such as CRM, SRM, and SCM, and Best Practices Baselines. To support multinational rollouts, it also has an SAP ‘World Template’, with all SAP Best Practices baseline packages pre-implemented upfront in one client. It can be enhanced by adding countries based on a generic template or by SAP Best Practices for Chemicals. The cloud environment is always up and running and refreshed.

This means that chemical companies can now quickly select solutions and create a private cloud for any purpose and any need. A customer, partner, or SAP presales person can get access to the system and use it as a live demo environment. Companies no longer need to budget 80 hours or so to install the ERP and install and activate the Best Practices templates, since this now only takes about two hours. The partner or client rents the environment based on actual usage time. When desired, the project can be migrated to another environment.

More complex systems are also supported, and partners can pick and choose other solutions. For instance, you could get a private cloud with Best Practices for Chemicals, combined with CRM and SRM, and selected
Rapid Deployment Solutions, all connected and up and running. While this needs to be assembled by the SAP preassembly team, this type of an environment could still be provided in a matter of days.

**Best Practices for EHSM**

With the latest shipment SAP introduced a new industry template, Best Practices for EHSM. Best Practices for EHSM was created by carving out all EHSM scenarios from the Chemicals package and adding several new scenarios from other industries. This makes these scenarios more readily available to customers in other industries looking for an SAP environment, health, and safety management solution. It also helps ensure that the Best Practices for Chemicals package stays manageable in size. This flexible approach benefits existing customers, new customers wishing to use both Best Practices for Chemicals and Best Practices for EHSM, and customers and prospects in other industries.

<table>
<thead>
<tr>
<th>Category</th>
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<tr>
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<td>SAP Best Practices for EHSM</td>
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<tr>
<td>Cloud-Based QuickStart</td>
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**Partner Qualification Process**

Implementation partners must undergo a formal qualification process to use SAP Best Practices for Chemicals. The qualification process typically takes 4-5 months, and each system integrator or partner must demonstrate its capability in a training system environment. Some partners take it to the next level by offering a tailored set of best practices to their clients. This allows chemical manufacturers to get a fixed scope implementation for a fixed price and schedule, and then perform any additional configuration as required.

**Galata Chemicals Implements Hosted SAP Environment in 90 Days**

Based in Southbury, CT, Galata Chemicals was formed in 2010 as a spinoff from Chemtura. From Day 1, Galata Chemicals was a complete organization with 250 employees, production capabilities in multiple continents, assets and $350 million in revenue, so rapidly standing up a complete SAP environment to support financial and manufacturing processes was of the
essence. The new company had no time to build or to develop internal IT resources. A key project objective was to deliver the technical infrastructure in three months with complete data security and high availability for the systems supporting manufacturing processes.

In addition to using SAP Best Practices for Chemicals, Galata Chemicals worked with Protera, a flexible hosting and managed services partner of SAP, to provide project management expertise and methodology to design and deploy the technical infrastructure. During the deployment phase, Protera worked in close collaboration with Galata and their integration partner to fully document the technical specifications of the landscape, including number of SAP users, volume of transactions, and type of interfaces to support.

To deploy the infrastructure, Protera selected a tier one data center located in Chicago. This SAS 70-certified data center offers a large number of connectivity options. During the deployment phase, EntryPoint, the system integrator, installed SAP ERP 6.0, Reach Module, Citrix, Microsoft Exchange, Microsoft SharePoint and other custom applications using a three-tier landscape. Protera also performed acceptance tests with the integration partner at each milestone of the process.

Following the on-time completion of design and deployment, the integration partner performed stress tests. These validated that the performance of the servers exceeded expectations. Protera also tested and validated production backup and disaster recovery procedures.

To prepare to go live, Protera worked with the integration partner to plan all connectivity aspects to guarantee that users would get access to the application from their workplace.

After the go-live, Protera deployed a wide variety of production support services including application uptime monitoring, SAP monitoring, basis administration, OS monitoring, DB monitoring, backup monitoring, and monitoring of the SAP component of interfaces with other information system components. In the production stage, Protera guarantees incident response times consistent with Galata's requirements and provides monthly reports of services KPIs and metrics.
Single Source of Truth at ACTEGA

To be able to achieve “one source of truth,” specialty coatings and sealants company, ACTEGA (ACTEGA Kelstar and ACTEGA WIT), implemented SAP Business Suite with Enowa Consulting to replace multiple existing business systems. Using the SAP Business Suite, a single system now covers the raw material-to-finished goods process. This eliminates the previous process of manually reconciling disconnected processes supported by non-integrated systems. The fact that the implementation spanned three legal entities, two production sites, seven third-party warehousing and distribution facilities, and three countries further complicated the implementation. The scope included the initial implementation of core functionality in SAP ERP Central Components release 6.0 (ECC6) as well as selected business process scenarios from SAP Best Practices for Chemicals.

Brian Long, Chief Operating & Financial Officer at ACTEGA Kelstar, said, “We strongly believe that because we used SAP Best Practices for Chemicals, we were able to avoid a lot of the pitfalls of an implementation. This approach has been very successful for us.” Management believed that people are extremely adaptable to change. Accordingly, ACTEGA chose to implement SAP Best Practices for Chemicals as recommended, rather than make modifications to accommodate historical processes. Key to the success was an early decision to embrace change. Success factors included the involvement of a Change Management consultant from Enowa as a liaison between the implementation team and users. In addition, management expected that these changes would create a wide range of emotions - from uninformed optimism, to informed pessimism, to informed optimism and ultimately to the realization that the project was a success. This cycle is discussed in detail in the widely cited article, The Emotional Cycle of Change, by D. Kelly & D.R. Connor, published in the 1979 Annual Handbook for Group Facilitators. “Setting expectations and helping individuals understand the emotions of change was critical to the keeping the team motivated,” said Long.

ACTEGA used SAP’s business process flowcharts delivered as part of the template documentation to review and understand the business processes and as a basis for documenting any refined or revised business process flow charts specific to their implementation. The process flow charts also define the specific roles within an organization that are involved in a given business process (Sales Administration, Warehouse Clerk, Sales Billing and
Accounts Receivable). To provide a sense for what these scenarios involve, we describe one below.

**Sales Order Processing: Sale from Stock**

This scenario describes the entire process sequence for a standard sales process (sale from stock) with a customer. This key business process for a specialty chemicals company such as ACTEGA encompasses all steps from creating an order to clearing a customer account after payment is received. This scenario consists of the following steps: a sales order is entered; a delivery is created; the goods issue is posted; and the billing is created.

The process starts with the creation of a customer’s standard sales order. Depending on the customer and the material, various special events take place during the order entry, such as customer/material pricing, inserting applicable discounts, checking the availability of the materials, and checking the customer’s credit history.

A check is performed to determine whether enough required material is available in the storage location. If not, a stock movement takes place. Then the system generates the picking slips for the warehouse clerks to stage the product for shipment to the customer.

Once picked, the quantity physically shipped has to be registered in the system to ensure that there are no differences between the sales order and the delivery document. Any discrepancies are also documented to ensure correct postings.

After picking, the warehouse clerk systematically relieves the inventory. This involves recording the physical quantity being shipped to the customer. Eventually, the costs of the sold goods are recorded.

Once the inventory has been relieved, the delivery can be invoiced and the associated revenue and cost of goods sold recorded in management accounting. This step signifies the end of the business transaction in Sales and Distribution.
ACTEGA achieved its goals for the initial implementation phase:

- Provided the business with a fully integrated business system supporting all core business processes
- Established a solid foundation for subsequent enhancement projects
- Started with the capabilities to support all core business processes, planning for certain non-critical capabilities be postponed to subsequent phases
- Utilized standard SAP functionality and SAP Best Practices for Chemicals to the fullest extent

**Red Spot Uses SAP Best Practices to Quickly Get ERP Value**

Red Spot Paint & Varnish, Co., Inc. was founded in 1903 and privately held until it was acquired by Fujikura Kasei in 2008. Red Spot gained attention in 1937 as the first manufacturer to produce paint for coating plastic. The company is recognized for developing and supporting breakthrough technologies in automotive, forward lighting, sporting goods, and functional coatings markets. Red Spot has 275 employees, two production facilities in North America, and affiliates in South Korea and Brazil.

The business reasons leading Red Spot to undertake an ERP project are not dissimilar to the pressures faced by many chemicals companies. The company needed an IT strategy consistent with its parent company and the ability to easily exchange data with the parent company. It needed to comply with evolving financial regulations including IFRS and JSOX. It needed a system that could support the company’s expanding business, both in moving from domestic to international markets where localization was needed, and in growing beyond the automotive segment. Finally, its existing IT systems were obsolete and the company needed the ability to utilize new technology to optimize current business processes.

Working with implementation partner YASH Technologies, Red Spot decided to implement SAP ERP utilizing SAP Best Practices for Chemicals

**Best Practices Saved Time**

Red Spot didn’t have to start from scratch to define its processes. Instead, the team only had to identify any delta requirements from SAP’s Best Practice scenarios, which was much quicker. In most cases, the provided scenario only required minor changes, if any. An additional benefit was
that the team saved time and reduced risk getting buy-in from the business process owners because they could just show them how things would work, instead of promising something that they then had to make work.

**Best Practices Accelerated Knowledge Transfer**
Red Spot used demo systems, pre-defined scripts, available end-user training materials, and script playbacks to review the scenarios. This ramped up the knowledge of the business process owners quite effectively. The team used Red Spot data in their testing, which further accelerated their understanding of the systems.

**Best Practices Improved Project Predictability**
In the end, one of the strongest benefits was the ability to predict with good accuracy and a high level of confidence how the project would turn out. Because the team started with proven, quality content, they didn’t run into unplanned gaps or process errors. Because they could see how the processes would work, they avoided the temptation to do a lot of error-prone customization or time-consuming manual configuration. And because they could test everything up front, blueprinting was easy.

<table>
<thead>
<tr>
<th>Order to Cash</th>
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<tbody>
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<td>Sales Order Processing (921)</td>
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<tr>
<td>Sales Order Processing with Warehouse Management (922)</td>
<td>Accounts Payable (158)</td>
<td>Managed Stock Materials (901)</td>
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<td>Free of Charge Delivery (110)</td>
<td>Asset Accounting (162)</td>
<td>Consumable Purchasing (129)</td>
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<td>Third Party with Shipping</td>
<td>Period End Closing Financial Accounting (159)</td>
<td>Return to Vendor (136)</td>
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<td>Notification (107)</td>
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<td>Debit Memo Processing (116)</td>
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**Red Spot Best Practice Scenarios – Initial Set**

**Results**
Red Spot completed the project was completed on-time and on-budget in January 2012; a 30-week SAP ERP implementation. On go-live, both production facilities were fully operational with 75 users. Both facilities were taking orders and purchasing materials, and shipped finished products the
next day (the LTL carriers had been on holiday on go-live). With the new system, Red Spot was able to support a 20 percent increase in revenue as the automotive market recovered. Next steps include business intelligence and KPIs, warehouse enhancements, quality management, EHS, maintenance, and product lifecycle improvements.

**Conclusion**

SAP Best Practices for Chemicals has matured to support an overall chemical company business model that even larger chemical companies also find attractive. The pre-defined business process scenarios span all major business functions such as Supply Chain, Sales, Planning, Purchasing, R&D, Manufacturing, Maintenance, and Transportation. The new Best Practices for EHSM allows companies to focus on building out the health and safety scenarios. Now, with the availability of a cloud-based, quick-start option, projects can be started even before infrastructure and hardware have been acquired and pre-assembled and fine-tuned “in the cloud” using the customer’s own data. This approach will undoubtedly continue to gain traction because it saves time and cost while reducing risk and unpredictability.
ABOUT THE AUTHOR:

As ARC’s Vice President for Collaborative Manufacturing and Architecture, Greg Gorbach is a thought leader in collaborative manufacturing, providing clients in a number of manufacturing vertical markets with strategic advice in dealing with boundary-crossing business processes. Greg’s primary areas of focus are Collaborative Manufacturing, Sustainable Manufacturing, Production Management, Business Process Management, Manufacturing Intelligence, and the synchronization of plant systems with CRM, ERP, PLM, Supply Chain and other business systems. He brings over twenty years of hands-on experience to ARC, with direct experience within manufacturing organizations, as well as extensive experience with suppliers to manufacturers.

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- Implementable Best Practices Speed Chemical Industry SAP ERP Deployments .................................................. June 2009

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