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S&OP Goes Beyond Just Aligning Supply and Demand

SAP's New xApp Consolidates Plan Data for More Adaptive S&OP



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Many companies use sales and operations planning (S&OP) simply as a pre-production check to see if they can fulfill customer demand. While this is one good use of S&OP, it underutilizes what can be a powerful tool for evaluating the past and future success of your business. S&OP is a planning process that can extend beyond your sales projections and production capabilities; it can take your company's financial goals, marketing efforts, and inventory targets into account. When everyone involved in the S&OP process – from the CEO to the shop-floor manager – can share information and work from one consolidated plan, you ensure that one number, not a series of individual plans, is driving your business.

Companies looking to make this S&OP transformation – whether they're embarking on an

S&OP project or evolving their current S&OP process – should first consider some fundamental challenges:

- How will you support this expansive process and aggregate all of the relevant planning data that resides across your system landscape?
- How will you document, track, and follow up on strategic planning decisions, many of which will take shape at your monthly S&OP meetings? (*Hint: Simply looking at plan data in spreadsheets won't do it.*)
- How will you present this information to the S&OP process's key stakeholders – both those who need to see aggregated trend data in dashboards and those who need to drill down into specific product and operations data?

The S&OP process answers key questions, including: Are we hitting our plan and our budget? How does our performance compare to how we've done in the past? Where might we have potential problems in the future? What can we do to prevent these issues?

S&OP: What It Is, and Why Your Planning Efforts Could Fall Short Without It

Sales and operations planning (S&OP) is a process that enables a company to determine the one plan that will allow it to meet its operational, sales, and financial goals. The process is typically the responsibility of a specific S&OP team, which includes high-level directors and managers of marketing, sales, finance, operations, and customer service.

The goal of S&OP is to have a demand plan and a synchronized supply plan that are both feasible and in line with the company's financial goals. If a company wants to increase prices by 10%, for example, S&OP would help determine how this price change could affect all departments involved. The process itself is fairly simple, and comprises five essential steps:

1. Create a demand plan
2. Create a supply plan
3. Compare the demand and supply plans
4. Reconcile the demand and supply plans with the financial plan
5. Update the S&OP plan

Within each step, the S&OP team compares multiple plan versions and evaluates the risks and assumptions involved in each. The expected result? A single plan that addresses needs across the company and considers key tradeoffs – between sales and production or sales and finance, for example.

According to a recent AMR Research study, S&OP is the fourth-largest planned investment in supply chain management.¹

There are many places to generate supply and demand plans in the SAP landscape – helpful tools like Supply Network Planning (SNP) and Demand Planning (DP) in mySAP SCM, and Integrated Planning for budget planning in SAP BW. But there still hasn't been a single, consolidated place to collect, analyze, and track all of the data pertinent to S&OP – until now.

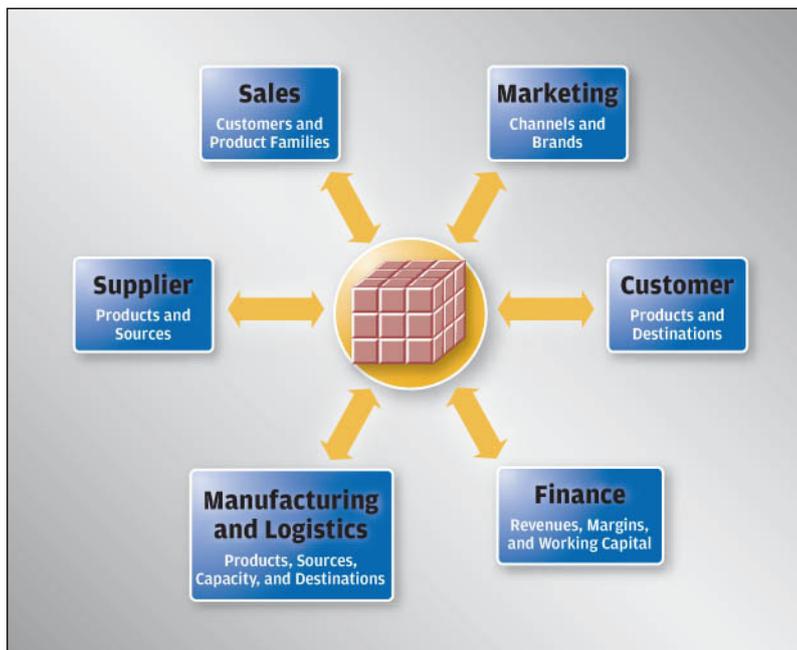
SAP is introducing a new S&OP composite application, or xApp, that will help streamline the planning process and enable S&OP teams to analyze data and make decisions – without having to hunt around for planning information and pour it into spreadsheets.

Support the Entire S&OP Process with One Application

Consider a consumer products company that plans to sell a million units of laundry detergent next month. The sales manager and marketing director could look at the million-unit projection and know precisely the revenue numbers they need to hit. But the manufacturing manager could look at the same number and need much more detail: How much of this detergent will be powdered? How much will be liquid? How many detergent tablets will his team need to plan for? Additionally, all involved parties should ask a key question: Are we sure this is the best strategy for the company's financial well-being?

FIGURE 1 ▼ SAP's new SAP xSOP application enables the key sales and operations planning stakeholders to see the same data from their department's perspective

¹ AMR Research, "The Supply Chain Management Spending Report, 2005-2006" (June 2005).



Earlier planning tools pumped out a lot of relevant plan data, but lacked a cohesive way to aggregate that data so that different stakeholders could drill down to the level of detail they needed – to tell the manufacturing manager how much liquid detergent to produce, for example. What SAP delivers with **SAP xApp Sales and Operations Planning (SAP xSOP)** – a standalone installation available in the first half of 2007 – is the ability to support *the entire S&OP process* in one system. This new xApp pulls data from a company's current planning solutions and allows S&OP team members to look at one number and analyze the consolidated data for their department's purposes (see **Figure 1**).

SAP has structured SAP xSOP around three main functional areas – integration, process management, and data analysis – that map to the major pain points we hear from customers around the S&OP process.

Challenge #1: Integrate Planning Tools and Data for Consolidated S&OP

Customers often grapple with how to get a consolidated view of all the planning-related data streaming through their existing planning tools and backend applications. To overcome this hurdle, *integration* is crucial, and is now possible with SAP xSOP. The goal of the new S&OP application is not to replace the tools you may already be running, but to leverage their capabilities as part of a holistic S&OP process.

Built on the SAP NetWeaver stack, SAP xSOP can connect to all SAP systems, primarily using services available in the SAP ERP Central Component (SAP ECC) core, in SAP BW, and in SCM applications. These services allow you to pull data from any planning tools you may already run – Flexible Planning, Material Requirements Planning (MRP), SCM Demand Planning (DP), SCM Supply Network Planning (SNP), or BI Data Providers for financial data. This open integration gives you the flexibility to continue using any of these tools as your fundamental planning application for generating demand, supply, and financial plans.

Included in SAP xSOP's integration configuration are settings that can map key figures and characteristics between BW and SCM systems. Planning data can then be extracted from the backend systems and stored in SAP xSOP. This allows users to simulate plans in SAP xSOP itself in real time – live at an S&OP meeting, for example.

Challenge #2: Streamline S&OP with Built-In Process Management and Tracking

Successful S&OP involves various stakeholders and multiple processes all working in parallel – and companies are often overwhelmed trying to manage it all. *Process management* capabilities within SAP xSOP allow the customer to define the steps of the process that need to occur before each monthly or weekly S&OP meeting, adding structure and organization to the process – and allowing for variations – on both a business-unit and regional level.

Within each process step, you define tasks that must be completed before that step in the process is finished (see **Figure 2**). This can include system tasks, such as loading demand history to SCM DP, or non-system tasks, such as reviewing the demand plan with the sales force – two tasks that need to be tracked and completed before you can sit down and report your progress at the executive S&OP meeting. With SAP xSOP, users can explain what different versions of a plan represent, describe any assumptions they used when planning, call out potential risks, and propose an associated mitigation strategy. All of this information can be stored in documents, such as word-processing documents or spreadsheets, using the cFolders engine embedded in SAP xSOP. S&OP teams can then track exactly what happens at each step in the process and email these documents to interested parties or post them on internal Web pages.

Ensuring a successful S&OP process also means tracking all the decisions made at the S&OP meeting and following up on related questions and issues. Consider a case where the S&OP meeting identifies

that, in five months, your company won't have enough capacity to produce a specific product family. The operations manager is tasked with investigating this issue and must follow up with the manager of the plant responsible for this product family. The plant manager is asked to investigate his options – either having his staff work additional hours or installing additional production equipment – and must complete this analysis by the next S&OP meeting. In this case, action items can be created and assigned to the operations manager, who also identifies the external user (the plant manager) in the action item. The S&OP team can then review and assess these action items at each meeting.

Challenge #3: Easily Gather Analytics and Reports to Evaluate S&OP Decisions

With some planning tools, customers often find predefined reporting and analytics to be a key pain point because there are no predefined reports to review trends and progress. These reports also need to be customized; executive-level stakeholders want summarized data while demand planners want a more granular level of detail.

The *analytics* functionality in SAP xSOP is, in many ways, the heart of the application. The xApp is predelivered with analytic KPIs in several general categories, including demand, supply, inventory, capacity, and budget. Customers can easily change all KPI calculations or add new KPIs to the system to meet their specific reporting needs.

Within SAP xSOP's UI, users can select multiple views for high-level analysis. Depending on which

FIGURE 2 ▼ SAP xSOP includes comprehensive process-management functionality to add structure and organization to your sales and operations planning process

S&OP Process Steps

Process Step	Due Date	Task	Task Status	Action Item	Action Item Status	Region	Business Unit	Responsible
UPDATE DEMAND	04.01.2007	4	50 %	0	0 %	XX_BUDAPEST	Middle Europe	STENGERT
DEMAND CONSENSUS MEETING	05.01.2007	0	0 %	1	30 %	XX_BUDAPEST	Middle Europe	STENGERT
UPDATE SUPPLY PLAN	10.01.2007	0	0 %	0	0 %	XX_BUDAPEST	Middle Europe	STENGERT
PRE-S&OP MEETING - SUPPLY	12.01.2007	0	0 %	0	0 %	XX_BUDAPEST	Middle Europe	STENGERT
EXECUTIVE S&OP MEETING	16.01.2007	0	0 %	0	0 %	XX_BUDAPEST	Middle Europe	STENGERT

S&OP Tasks

Task	Due Date	Status	Responsible
UPDATE HUNGARY FORECAST	02.01.2007	1 %	BARTAM
UPDATE AUSTRIA FORECAST	02.01.2007	1 %	BIROZ
LOAD MARKETING DEMAND	03.01.2007	100 %	BORSIKI
LOAD TRADE PROMOTION FROM CRM	03.01.2007	100 %	STENGERT

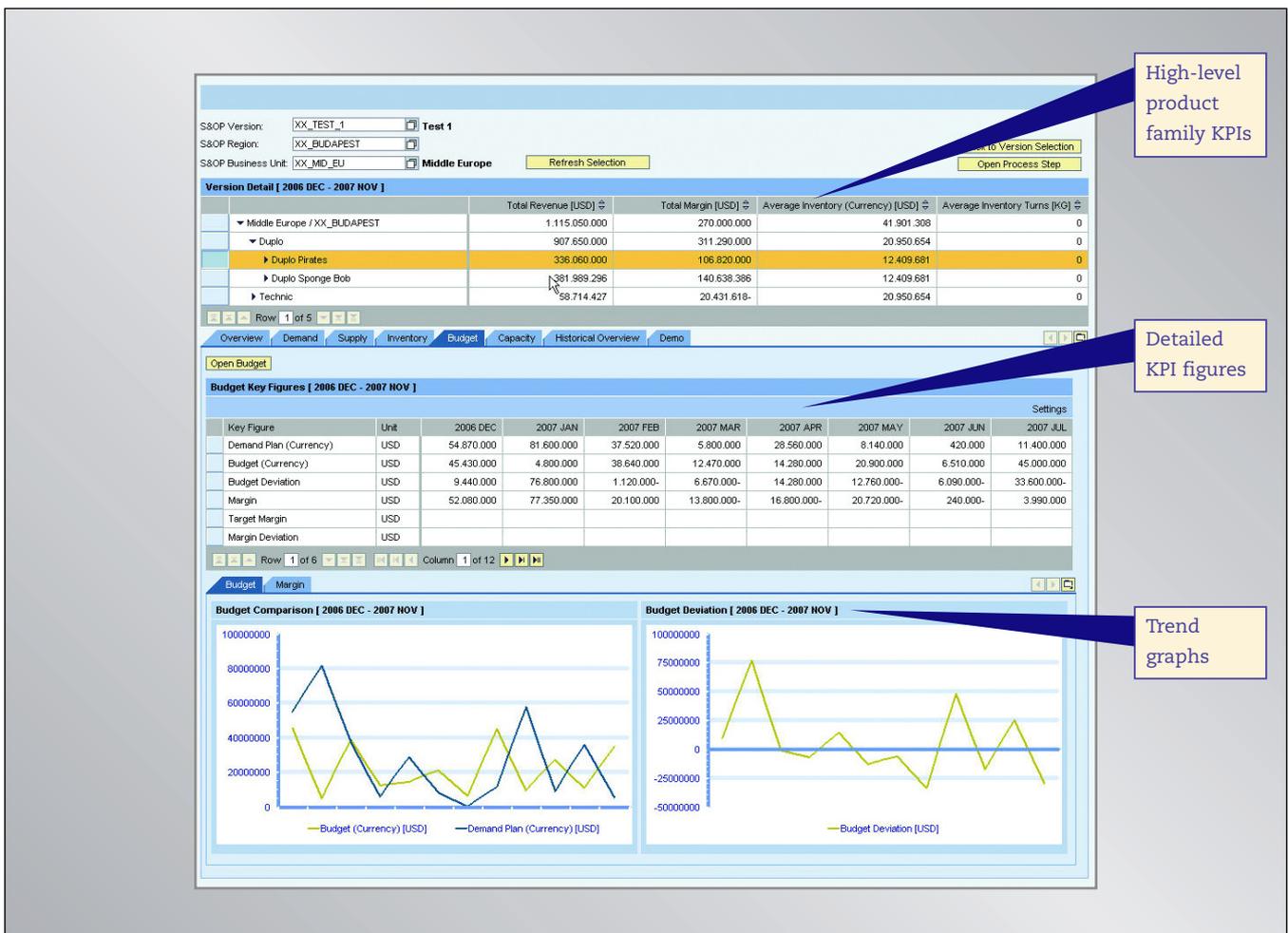


FIGURE 3 ▲ The analytic capabilities of SAP xSOP enable users to view planning data in the format of their choosing — high-level or detailed, numeric or graphic

products they're interested in, users can drill down into the details (in the format of either specific data or trend graphs) and examine the KPIs for that product family, as shown in **Figure 3**.

The goal of this analytics functionality is to help companies determine what the “right” S&OP plan to drive the business is – to identify the plan with the least risk that fulfills the company’s operational, sales, and financial goals. With SAP xSOP’s analytics, S&OP teams can update plan values and recalculate KPIs in real time. This is particularly useful for simulating the effects of changes to the S&OP plan. What’s more, S&OP teams will soon be able to write these simulated plans back to all backend systems.²

Conclusion

While there are many places to generate supply and demand plans in the SAP landscape, there has not been a single, consolidated place to analyze all of the data pertinent to S&OP. With SAP xSOP, you will not

only have a place to consolidate financial, demand, and supply plans, you will also get predelivered analytics to support your S&OP process. Add to this the ability to track the process and integrate to other SAP systems, and you have a powerful tool that supports your entire S&OP process, as well as all the stakeholders it involves. ■

Additional Resources

- “What’s new and improved from SAP for sales & operations planning (S&OP),” a session at the *Logistics and Supply Chain Management 2007* conference in Barcelona and Orlando (www.sapscom2007.com)
- “Use World-Class SOP Strategies to Balance Future Supply and Demand” by Wolfgang Eddigehausen in the March 2006 issue of *SCM Expert* (www.SCMexpertonline.com)

² Currently, users can write simulated demand plans back to SCM DP.