

**SAP Solution in Detail
mySAP Business Suite**



ENABLING SUPPLIER COLLABORATION WITH mySAP™ BUSINESS SUITE

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EXECUTIVE SUMMARY

Supplier Collaboration: Why Do You Need It?

Supplier collaboration has become an increasingly important topic. As the economic and business environment threatens profit margins, you face intense pressure to reduce costs while increasing innovation, adaptability, and speed. Concerns about cost reduction have prompted many companies to explore lower-cost regions and to develop new relationships with suppliers globally. In addition, the ongoing trend toward outsourcing nonstrategic activities to suppliers has led to higher dependency upon close and e-enabled partnerships. But suppliers with restricted capabilities can severely limit how much you can use the Internet as a collaborative supply network. Nonetheless, integration with suppliers remains the largest part of your challenge.

Business Challenge: Get All Your Suppliers Working in Tune with Your Processes

Collaboration means working together, and in this age of electronic business, the two most common tools for buyer-supplier collaboration remain the telephone and the fax machine. Orders are received, designs are discussed, delivery schedules are exchanged, and sales are concluded – all over the humble phone line.

The reasons for doing so are no mystery. Connecting with a wide range of suppliers – all with different technical capabilities – is traditionally a costly, complicated, and time-consuming proposition. And the prevailing alternative technique, electronic data interchange (EDI), is cost-effective only when your major suppliers agree to exchange a large volume of documents and data on a regular basis. Thus, the central obstacle to extending the benefits of streamlined collaboration to your entire supply base is supplier enablement. How can you enable all of your suppliers – large and small – to connect to your internal processes in an efficient, automated, cost-effective manner?

Business Solution: mySAP™ Business Suite

The mySAP™ Business Suite family of business solutions holds the answer. With supplier collaboration functionality that extends throughout the entire supplier relationship life cycle, the mySAP Supplier Relationship Management (mySAP SRM), mySAP Supply Chain Management (mySAP SCM), and mySAP Product Lifecycle Management (mySAP PLM) solutions make integration with suppliers of all sizes economical and easy to manage. With its powerful, Web-based, and scalable supplier portal, mySAP Business Suite provides your suppliers with immediate access to supply-side transactions and relevant information. The portal is a single point of entry where suppliers can perform a variety of tasks, including updating catalog data, sending process acknowledgements, tracking payment status, and obtaining supply chain information, such as inventory and supply and demand plans. With the supplier portal, you can build and control your own supplier extranet. The portal is easy to implement, and suppliers require nothing more than a Web browser to use it.

Although the benefits of secure, role-based access to relevant structured or unstructured business content are obvious, the ultimate focus is to improve collaborative processes regardless of the medium – not just use the Web to communicate with suppliers. Where phone, e-mail, and fax communication predominate, mySAP Business Suite solutions aid communication by automatically generating e-mail alerts to notify suppliers of events and to keep supply processes running smoothly. Over time, as individual suppliers build upon their existing infrastructure to deploy direct system-to-system communication, the SAP NetWeaver® platform helps aid further collaborative activity with support for XML-based data exchange and Web-services interfaces that automate processes and allow more sophisticated forms of interaction and cooperation. And to extract even greater long-term value from supplier relationships,

mySAP Business Suite solutions are tightly integrated. This integration enables value-added capabilities, such as more efficient design, sourcing, and order collaboration, as well as the ability to execute collaborative inventory replenishment programs.

Accordingly, mySAP Business Suite solutions offer a unique multichannel approach to supplier collaboration that allows you to develop relationships based upon the potential long-term value that suppliers offer, rather than the current technical competencies of a given supplier. The solutions also allow you to connect quickly with your entire supply base through whatever medium is most practical at the time, while providing tools to automate and enhance collaborative activity as relationships grow. This approach gives you the ability to compete better today and to maintain a competitive advantage well into the future.

mySAP SRM offers a unique and comprehensive solution to address both issues. If you plan to run your own supply network to remain flexible in terms of process changes, mySAP Business Suite solutions help you to self-manage and control collaboration throughout the entire supplier life cycle. The solution goes beyond pure maintenance repair and operation (MRO) document exchange services; it also spans the integration of your strategic partners. If you're looking for an easy-to-implement and hosted marketplace service offering, the SAP® Supplier Network offering can unleash the full potential of your e-procurement initiative. mySAP SRM customers with a buy rather than a build IT strategy who otherwise might not have the necessary resources to run their own supplier collaboration solution receive immediate network participation and connectivity to thousands of member suppliers. You can take advantage of economies of scale in supplier connectivity, catalog content management,¹ and standardized procurement document exchange services.

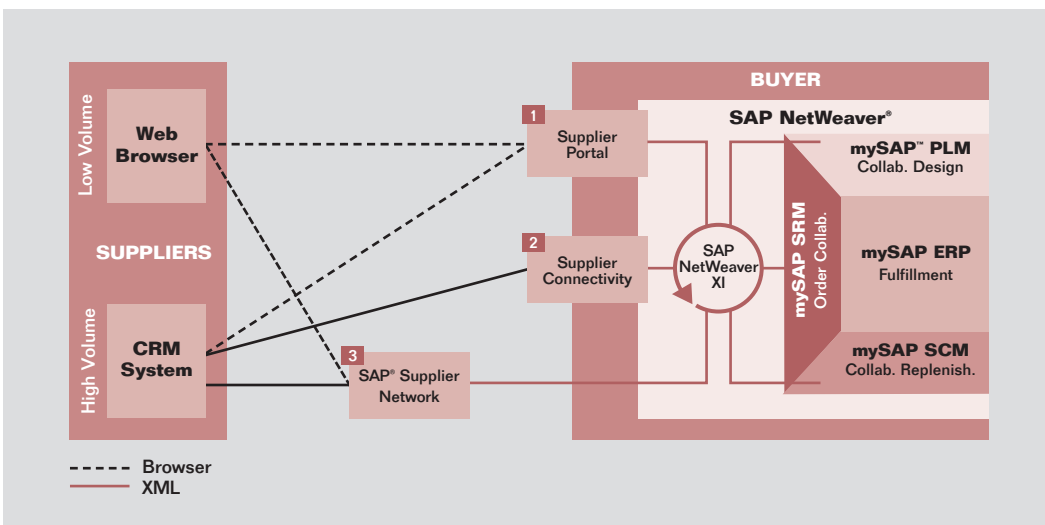


Figure 1: Supplier Collaboration via Three Cost-Effective Channels

1. Catalog content management services are subject to additional partner licensing.

SUPPLY NETWORK COLLABORATION WITH mySAP BUSINESS SUITE

mySAP Business Suite solutions deliver supplier collaboration functionality and preassembled, premium content through the supplier portal. The content is provided by a suite of Web-enabled services that allow suppliers direct access to your SAP and non-SAP applications. The supplier collaboration business package bundles together all available role-based services. These services offer functions that range from simple self-services to complex collaborative chores – tasks that suppliers execute every day as part of their procurement and delivery fulfillment operations. The supplier portal acts as an umbrella, integrating all underlying collaborative elements, including the SAP Supplier Self-Service component of mySAP SRM, the SAP Inventory Collaboration Hub (SAP ICH) component of mySAP SCM, and the Collaboration Folders (cFolders) application, part of mySAP PLM, as well as non-SAP systems.

Supplier Registration

Before beginning collaborative activity with any supplier, you need to register and qualify prospective vendors. mySAP SRM helps streamline both tasks. By allowing suppliers to self-register, your personnel are relieved of an administrative burden while still benefiting from having the supplier’s contact and product information on hand. mySAP SRM provides the tools to ascertain quickly whether a given supplier has the ability to fulfill all your requirements, so you can easily qualify new suppliers. These features help purchasing professionals to do their jobs better and faster, while giving your company new abilities to improve customer service and service delivery.

Supplier Self-Registration

With the supplier self-registration function of mySAP SRM, interested suppliers can register to offer goods or services by filling in an online application form. Suppliers can also manage their contact data themselves, relieving your purchasing personnel of this routine task.

Supplier Qualification

With questionnaires that can be sent to potential vendors to gather relevant information, mySAP SRM makes it easier for purchasing professionals to identify and select qualified suppliers. You can customize questionnaires to include relevant information, such as compliance with required standards, support for specific business practices, or logistical functions that ensure on-time delivery.

Although they are typically used on first contact, questionnaires can also be an invaluable source of information throughout the course of the relationship. You can evaluate the answers, store them, and use them throughout the sourcing cycle to select additional suppliers as the need arises. You can also assign suppliers to specific product categories to accelerate processes. In effect, these functions allow you to outsource the management of product-related information to your supply base, while giving your suppliers the ability to position their products, service levels, and competitive advantages as they see fit.

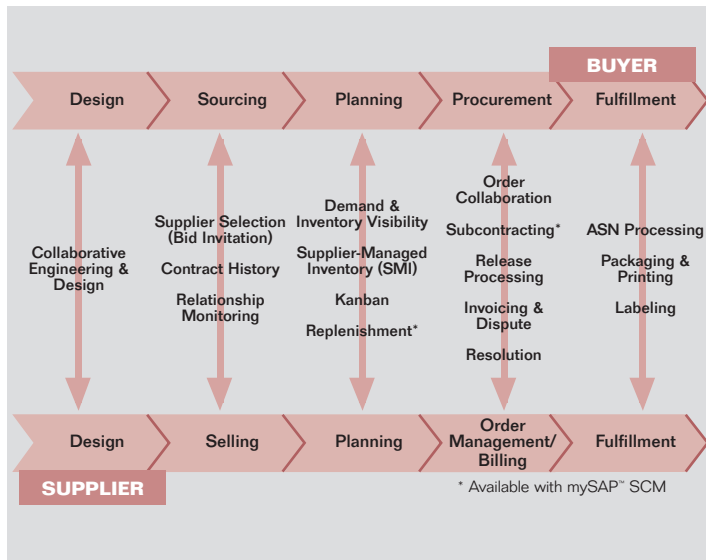


Figure 2: Effective Supplier Collaboration Processes

The following sections provide an overview of supported collaboration functions that are available throughout the supplier relationship life cycle.

Design Collaboration

Product development documents are typically sent by mail, fax, electronic file transfer, or e-mail as copies or simple files. There's no control and no record of who sent what, to whom, and when. Business partners do not usually receive structured documents or documents with professional object visualization, such as redlining and markups. Instead, they have only a sequential flow of information, and the communication process is extremely time-consuming.

SAP's design collaboration functionality empowers you to codevelop new or existing products with your business partners, maximize the expertise of the design team, and achieve better research and development results across organizational boundaries. It enables collaboration among virtual design teams, and it increases process efficiency through tighter integration of new product development and purchasing. Design collaboration functionality – empowered by cFolders – provides a common platform and environment for collaboration between you and your suppliers, as well as within and across all of your departments. Instead of relying upon in-person meetings, on-site visits, fax, or mail, suppliers with engineered-to-order products can interact with your design engineers online and in real time to review, mark up, and approve designs and design changes. This collaborative ability saves time, increases productivity, and helps you better leverage the expertise and innovation that valued supply partners can provide.

Although suppliers traditionally enter the design process for new products late in the game, mySAP PLM helps you minimize risk and improve success rates by incorporating supplier insight from the earliest stages. Even before a request for quotation (RFQ) is issued, suppliers can view product specifications online and provide needed input. And throughout the new product design phase, sophisticated document management functions enable suppliers' engineering teams to exchange complex design documents quickly and efficiently.



Figure 3: Collaboration on Design Documents

The collaborative product management functionality of mySAP PLM allows you to work more closely with your suppliers to manage product-development projects for greater speed, efficiency, and accuracy. mySAP PLM supports the entire range of project activities – from concept and planning through execution and project closing. You can structure projects by phase, task, and checklists to specify which suppliers are responsible for each element. You can link individual segments of the project to relevant documents and business objects – like purchase orders – that are located in other systems. You can also configure alert notifications to monitor deadlines or upcoming scheduled tasks. These features help you extend internal project processes to trusted suppliers to ensure that projects are completed on time and that products are brought to market with greater speed and efficiency.

Bid Invitations

SAP's supplier collaboration functions also provide suppliers with a direct link to the SAP bidding engine, the sourcing component of mySAP SRM, so they can view additional details of calls for incoming bids. Suppliers can then submit a bid according to their offering and send it straight to you.

Order Collaboration and Invoicing

Order collaboration functionality within mySAP SRM and in some areas within mySAP SCM provides suppliers with a streamlined order management system, a user-friendly interface, and comprehensive search options that make their jobs easier. Outbound discrete purchase orders are sent from the purchasing system to SAP Supplier Self-Service (or in some

instances to SAP ICH) via either the SAP Enterprise Buyer (SAP EB) component of mySAP SRM or the back-end materials management component, where suppliers can view, change, respond, print, and download orders. All subsequent communications about a purchase order, such as acknowledgements, confirmations, and invoices, are exchanged electronically. The software generates these follow-on documents on the basis of document control information stored in the purchase order items. Follow-on document control is available for purchase order confirmations, advanced shipping notifications (ASNs), confirmations, invoices, and evaluated receipt settlements.

You can keep your purchasing organization's data safe and secure by setting up a firewall between purchasing and the order management system. The software supports most up-to-date authentication and authorization methods.

Deploying Order Collaboration with a Single SAP Enterprise Buyer System

You can deploy the supplier collaboration functionality of mySAP SRM with SAP Enterprise Buyer and SAP Supplier Self-Service. In this situation, SAP Enterprise Buyer handles the entire procurement process without integrating to other back-end systems. The shopping cart and all follow-on documents are created in SAP EB. This deployment scenario supports all the processes and functions described in the following section.

Order Collaboration and Financial Settlement

A purchase order (PO) is created in the e-procurement system. This action triggers the creation of a sales order in SAP Supplier Self-Service. All document exchange between the systems takes place via the open exchange infrastructure of the SAP NetWeaver Exchange Infrastructure (SAP NetWeaver XI) component, using XML as the *lingua franca*.

A supplier logs on to SAP Supplier Self-Service, processes the sales order, and creates a PO response, which is forwarded to the e-procurement system. If the PO response contains the same

terms as the PO – items, quantities, delivery date, and so on – it automatically receives the status of *Accepted by supplier* in the e-procurement system. If the supplier can't meet all the terms specified by the original PO and changes any of them, purchasing personnel might not agree to the changes and decide to change them once again. In this case, the supplier receives a changed PO and must send a new response. This cycle is concluded when both parties agree on the terms of the PO.

When the goods ordered have been shipped or the service performed, the supplier prepares one or a series of confirmation sheets (or ASNs). For orders that simply state the services type and total cost without including a breakdown of activities and materials – that is, a limit PO for unplanned services or materials – you can prepare confirmation sheets by selecting and including the appropriate items from the catalog. The open catalog interface connection to the product and service catalog enables such preparation.

The confirmation is sent to the e-procurement system, where your purchasing organization can either approve or reject it. Generally, the e-procurement system initiates a workflow to obtain the necessary approvals. After approval, the e-procurement system sends a confirmation response to the supplier, who updates the status of the confirmation sheet. Suppliers can cancel the entire confirmation if the status of the confirmation is *Completion reported* or *Approved by customer* and no follow-on documents have been generated.

In the final step, the supplier creates an invoice, which your purchasing organization must verify and approve or decline. This cycle may be repeated until the buyer and seller agree upon the content of the invoice. For legal reasons, a purchasing organization can't modify an invoice received from a supplier. Invoices are created within SAP Supplier Self-Service; suppliers do not need a financial accounting system to create an invoice. Upon approval, the software sends an invoice response to the supplier and updates the invoice status.

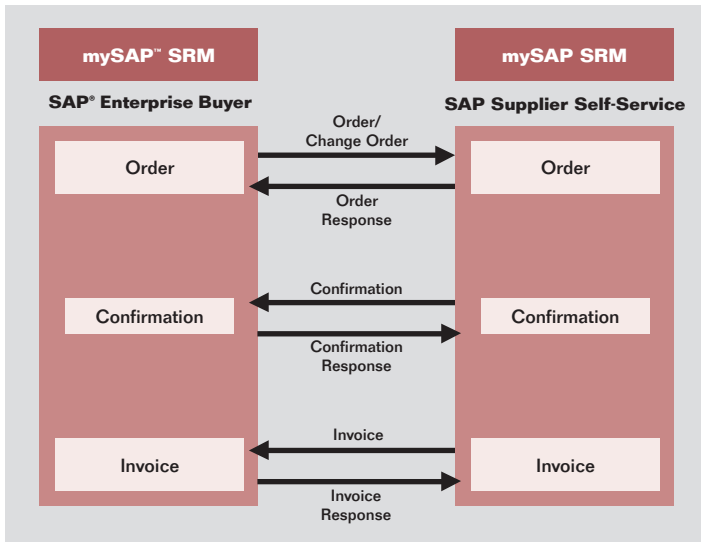


Figure 4: Process Flow for SAP® Enterprise Buyer and SAP Supplier Self-Service

mySAP SRM also supports the evaluated receipts settlement process – an automatic settlement procedure based upon confirmations. Your purchasing organization must have an agreement with the supplier concerned, under which the supplier does not create an invoice for each order transaction. Instead, mySAP SRM automatically posts an invoice document based upon the purchase order and confirmation. This approach eliminates invoice variances and communication errors, and it speeds up the completion of transactions. The e-procurement system sends the automatically generated invoice documents to the supplier electronically.

In other instances, suppliers can post invoices without a reference to a PO, post one or more credit memos with a reference to an existing invoice, or post bundled invoices that are based on several POs or confirmations.

Deploying Order Collaboration with the Materials Management Component of mySAP ERP

You can also deploy the supplier collaboration function of mySAP SRM and mySAP SCM using the materials management component and SAP Supplier Self-Service (or SAP ICH in certain

situations). In this case, the materials management component, rather than SAP Enterprise Buyer, handles procurement and inventory management – primarily direct materials. This approach is unsuitable for procuring services because the supplier collaboration functions and processes supported differ from those for the single deployment scenario for SAP Enterprise Buyer described previously.

You create a PO in the materials management component; the order–change order cycle between you and the supplier is the same as in the single deployment scenario for SAP Enterprise Buyer described previously. When the supplier ships the materials, an ASN is created and sent to the materials management component. You can use the contents of this notification to prepare for incoming goods receipt procedures. The invoicing procedure is the same as the one used in the single deployment scenario for SAP Enterprise Buyer.

As of 2005, you can use cFolders with the order management system. This allows suppliers to link to cFolders from, for example, the PO, and they can access related documents and files like drawings or technical specifications. Suppliers can also upload additional documents related to the purchase to cFolders for you to review.

mySAP SRM also supports the return handling process in which suppliers are informed by e-mail about incoming return delivery documents, as well as goods receipt cancellations from the materials management component.

The greatest advantage of this approach is that it enables you to electronically exchange order and invoice documents with smaller suppliers of direct and indirect materials, dispensing with an error-prone and labor-intensive paper chase and accelerating the procurement process from end to end. This approach also offers easy entry into the world of mySAP SRM and mySAP SCM, and it makes it just as easy for you to connect with your supply base. You simply implement the SAP order management

functionality together with SAP NetWeaver XI without modifying your existing procurement processes in the materials management component or the system itself.

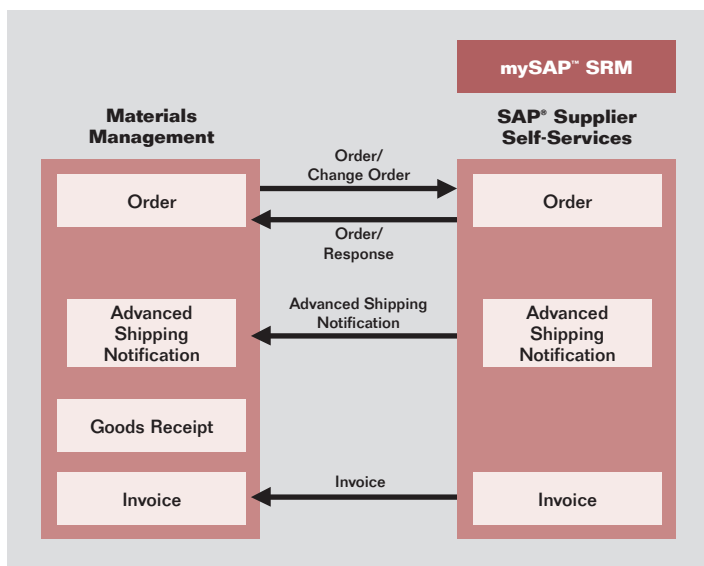


Figure 5: Process Flow for SAP Supplier Self-Service and the Materials Management Components of mySAP ERP

Payment Status

Suppliers can also inquire about the status of payments and invoices in your back-end financial system. For example, a supplier might notice that a particular invoice wasn't paid in full. With Web-based access to account information, the supplier can check the details of the invoice to discover the reason for the discrepancy and immediately contact you for clarification. This is an important capability, because simply making payment schedules available online can speed processes and significantly reduce incoming calls for accounts payable.

Services Procurement

The procurement of services (such as temporary labor, consulting, maintenance, marketing, legal, and facility management) differs significantly from the procurement of materials. Service requirements are largely undefined when the requisition is made; the actual scope of requirements isn't fully known until the service is performed. Therefore, you need to collaborate

more closely with service providers to define the scope of the service and identify the right person for the job, based upon required skills and availability.

Integration with content, request for proposal, order collaboration, confirmations, and invoicing allows mySAP SRM to streamline interaction with third-party service providers and consulting agencies:

- **SAP catalog content**
Once the supplier and buyer have a contract in place, both parties get an insight into the current catalog of services needed by the buyer and services offered by the supplier.
- **Request for proposal (RFP)**
Buyers can issue an RFP for services to one or more suppliers. The RFP shows up in the supplier's portal.
- **Purchase order**
Once the RFP negotiations on availability are complete, the buyer issues the PO to the supplier. The supplier then usually posts an order response.
- **Confirmation**
As soon as the supplier has delivered the ordered services, a user enters services within the portal, recording the actual hours worked and specifying any additional expenses or costs until the limit amount is reached. The requestor receives a workflow item to determine that the work was performed satisfactorily. The requestor then accepts or rejects the confirmation.
- **Invoice**
When the confirmation has been posted, the supplier issues the invoice. Once accepted, payment is triggered.

Collaborative Replenishment

Collaboration within the supply chain has become increasingly complicated and critical. Manufacturers and suppliers need visibility into demand, requirement, and inventory information to ensure that suppliers know what to expect and how to fulfill expectations. To compensate for limited visibility, companies

frequently have to build up buffer inventories along the supply chain – a process that obviously increases costs. The ramifications of such inventory build-ups are spread throughout the supply chain, reducing the flexibility to respond to changes. This inflexibility causes frustrating delays, and ultimately undermines your competitive advantage. SAP ICH fulfills these needs, giving you and your suppliers easy, seamless access to supply chain information and the ability to collaborate and synchronize supply and demand. On top of the order management function, mySAP SCM supports the following processes.

Supplier-Managed Inventory

Supplier-managed inventory (SMI) is designed for suppliers that are responsible for replenishing stock at a customer’s location (such as a warehouse or a plant). The main characteristic of this process is that you hand over the replenishment task to an external business partner that is usually the supplier of a product required for your production. SMI is relevant for business situations in which you want to delegate the responsibility for replenishment to a business partner to save effort or to rely on the business partner’s greater business experience with the handling of the replenishment process.

SAP ICH serves as a joint platform for all business partners involved in the SMI process (such as your company and any number of its suppliers) and allows the partner that has to fulfill the replenishment task visibility into your inventory data. You periodically transmit current inventory data and gross demands to SAP ICH. SAP ICH keeps the records of the minimum and maximum inventory level for each product and location combination that was officially agreed upon (such as in a blanket PO or a long-term contract).

By regularly checking the inventory status using the inventory monitor in SAP ICH, a supplier can always keep the inventory level within the agreed-upon range between the minimum and the maximum level. The supplier can create a replenishment plan directly through the Web interface, or SAP ICH can suggest the best one for the agreed-upon minimum/maximum limits.

In addition, the supplier can convert the plan into actual purchase orders on SAP ICH – POs that can be transmitted to your ERP system so you can see the commitments the supplier has made. Later, when goods are shipped, the supplier can create an ASN in SAP ICH, referencing the previous PO. The PO is optional in the SMI process. The replenishment plan can be converted directly into a shipment – an ASN, if needed.

Key figures	Initial	28.02.2003	01.03.2003	02.03.2003	03.03.2003	04.03.2003	05.03.2003	06.03.2003	07.03.2003
Demand	1800,00	190,00	180,00	100,00	190,00	180,00	100,00	100,00	
Planned receipts	920,00				300,00	100,00	190,00		
In transit	300,00								
Projected stock	128,00	20,00	80,00	180,00	20,00	20,00	20,00	80,00	
Max. proposal	800,00	80,00	180,00	200,00	300,00	180,00	100,00	100,00	
Min. proposal	820,00		180,00	200,00	300,00	180,00	100,00	100,00	
Minimum stock	20,00	20,00	20,00	20,00	20,00	20,00	20,00	20,00	
Maximum stock	100,00	190,00	180,00	100,00	190,00	180,00	100,00	100,00	
Days of coverage	1,80	0,28			0,20	0,20	0,20	0,20	

Figure 6: The Inventory Monitor Screen for Supplier-Managed Inventory

SAP ICH also alerts suppliers of any exceptional situation. This alert monitor guarantees that you can avoid critical understock – or worse, out-of-stock – situations. It also significantly reduces the risk of bottlenecks or production downtimes. In addition, you can define individual settings for automatic notification of any exceptional situation. This means that an employee does not even have to check the inventory monitor regularly. SAP ICH automatically alerts the employee by e-mail or fax; the employee only needs to use the inventory monitor to clear the situation from the system.

SAP ICH also includes a simulation function, which simplifies replenishment. Before publishing a goods issue and an ASN on the inventory monitor, the person responsible can simulate the step and can launch the activity only after having calculated the adequate quantity. Using SAP ICH to support your SMI process allows you to reduce the time and effort involved in standard procurement with purchase requisition and PO creation for each requirement. Document transmission across company boundaries is no longer an issue.

The main business value is that you no longer have to perform the MRP net planning and replenishment activities, and suppliers can better utilize their capacity by handling the planning and execution pieces.

Scheduling Agreement Release Processing

Scheduling agreements help shorten lead times, reduce unnecessary paperwork, and enable suppliers to plan and allocate their resources more efficiently. In contrast to SMI, in which the supplier initiates replenishment according to inventory levels and demands published on SAP ICH (or alternatively in a lean scenario within SAP Supplier Self-Service), replenishment with release processing is triggered by the customer. Suppliers have full visibility into your scheduling agreement releases and can download, print, compare, set acknowledgement flags, and create ASNs for each release.

In addition, SAP ICH has extended ASN functionality for packaging. Suppliers can create multilevel hierarchies representing how a certain product is packed, including packing materials. Each level is represented by handling units, which suppliers can print on bar code labels. The packaging functionality is an optional step within the ASN creation functionality. The ASN and packaging functionality in SAP ICH is available for most processes, such as POs, SMI, kanban, and contract manufacturing, as well as scheduling agreement release processing. Scheduling agreement releases are net customer requirements over time, usually with both a firm-order horizon and a forecast horizon. The process is fully integrated with mySAP ERP, including both forecast releases and just-in-time (JIT) releases. New features also include supplier confirmations against releases, which means that suppliers can change the requested schedule lines in a release update and send back a confirmation.

All previous release updates are available; the newest release is assumed to be the active one. Made available via a simple Web interface, this feature is of special value for integrating second- and third-tier suppliers that lack technical and process sophistication.

The main business value to you is that you can communicate requirements accurately and in real time, replacing older methods like phone, fax, and e-mail. Suppliers can find their requirements using a Web browser only, and they are proactively alerted to exception situations, such as a new updated release, on screen or via e-mail. Suppliers can respond to the requirements quickly and accurately via confirmations and ASNs.

Dynamic Replenishment

Complementing MRP-driven execution processes, such as PO or release processing, dynamic replenishment provides the most adequate forecasts for the mid- and long term. Dynamic replenishment allows for overall visibility spanning from customer sales forecasts to supplier production planning. It means that you have as much insight into your business partners as you do into your own company’s situation. The software delivers a big picture view that assures maximum efficiency for supply chain partners. With dynamic replenishment, suppliers can compare their customer forecasts or planning data with their production plans to better match supply with customer demand. Using the demand monitor tool, suppliers can compare their firm customer commitments or orders with the supplier’s orders.

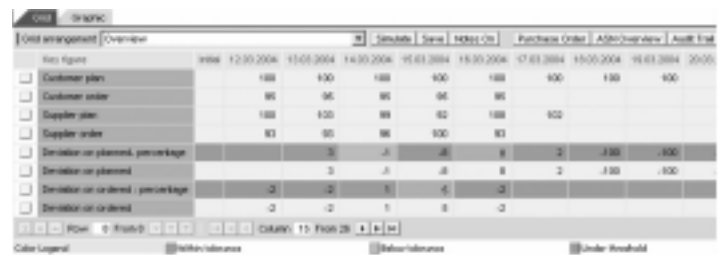


Figure 7: The Demand Monitor Screen in Dynamic Replenishment

The demand monitor is the planning environment for dynamic replenishment, a net demand-based planning process. Suppliers can compare forecasts and firm orders with their customers’ plans, forecasts, and firm orders. The software automatically presents deviations with color-coded threshold limits to both you and your suppliers.

The main business value is that both you and your suppliers obtain a mid- to long-term awareness of deviations in supply and demand so you can take appropriate action early to avoid delayed shipments or overproduction.

Kanban Processing

mySAP SCM enables communication of replenishment requirements with kanban signals. Kanban functionality allows you to send out kanban replenishment signals to suppliers using SAP ICH. Kanban signals are typically generated as part of your MRP run, or you create them manually. Suppliers can view kanbans by status, control cycle ID, kanban ID, or product number and print or download information as well. Suppliers use a dashboard for kanban processing; at shipment, they can create ASN messages that update your ERP system.

The main business value is that you can communicate kanban requirements accurately and in real time, replacing older methods like phone, fax, and e-mail. Suppliers can find their requirements using only a Web browser, and the software proactively alerts suppliers to exception situations, such as a new empty kanban, on-screen or via e-mail. Suppliers can respond to the requirements quickly and accurately via ASNs.

Replacing manual kanban procedures with electronic kanban reduces costs and increases delivery reliability. Electronically triggering replenishment improves delivery performance and reduces costs by automating processes and providing automatic alerts. The ability to visualize and process empty, refilled, and in-transit containers for a supplier on a common Web platform also improves delivery performance and reduces costs.

The Delivery Control Monitor

The delivery control monitor function of SAP ICH allows for supplier-driven replenishment based on inventory signal levels at your site. Inventory levels are frequently updated from your ERP system and made available in the Web screens of SAP ICH, ensuring that your suppliers can replenish products when needed. Suppliers use SAP ICH to monitor the stock level and

compare it to a set signal level, reorder point, and minimum and maximum levels. They can respond to decreasing stock levels by creating ASNs or shipments to your site as well as track current stock and in transit and planned shipments.

The main business value is that you no longer have to perform the MRP net planning and replenishment activities for reorder-point-driven replenishment, and suppliers can better utilize their capacity by handling both planning and execution.

Supply Network Inventory

Inventory visibility, projection, and collaboration with contract manufacturers and key suppliers fills an information gap that currently minimizes the benefits you can achieve from outsourcing manufacturing. SAP gives you the opportunity to automate these processes. Supply network inventory functionality in SAP ICH allows you to view stock at a supplier location as part of two main approaches: customer-owned and managed components (OEM) and supplier-owned and managed components (contract manufacturing). The first approach allows for visibility of stock at both your locations and at supplier locations. The second approach allows for visibility of stock at supplier locations.

In both cases, SAP ICH calculates and displays the future stock (or projected stock) along with the planned replenishments (for example, incoming POs) and planned outtakes (like production orders) with minimum/maximum levels and associated alerts.

The main business value is that you can manage the liability on the finished goods level by monitoring the component inventory situation at contract manufacturers' locations. This allows you to catch exceptions early on and take immediate action.

Procuring Contract Manufacturing

The contract manufacturing procurement functionality in SAP ICH enables you to share information on subcontracting requirements with contract manufacturers, who can report back on the progress of production and component usage. This information gives you a real-time view into outsourced

production, allowing greater accuracy in commitments and supply planning. The contract manufacturing procurement functionality allows you to communicate subcontracting POs to suppliers using SAP ICH. This approach is an extension of the regular PO functionality, and it allows suppliers to view, print, and download the component list (bill of materials [BOM] components that make up the finished goods) as part of the PO.

Suppliers can request changes to both the finished goods quantity and date, as well as the components and quantities. This is part of an approval process in which you can approve or reject a request via the Web. You can add or delete components along with the consumed quantities. All changes are later updated in your ERP system.

This function can work in combination with the PO or scheduling agreement release processing so that you can issue regular POs or scheduling agreements against component or raw material suppliers, instructing them to ship to a contract manufacturer's site. In that case, the contract manufacturer can see all POs, releases, and ASNs being delivered to its site via specific *Goods Recipient* Web screens in SAP ICH.

The main business value is that you and your suppliers can communicate your respective requirements and responses around a contract manufacturing relationship accurately and in real time, and you can keep your ERP environments up-to-date.

Reporting Tools

SAP ICH provides suppliers with about a dozen standard reports. For example, the expiring contracts report helps suppliers easily identify which of their contracts will expire soon and must be renegotiated for renewal or any amendments. Suppliers can also easily identify which invoices have not yet been issued and which deliveries have not yet shipped by using the open invoices and open deliveries reports. These reports help suppliers ensure prompt receipt of payments and timely shipment of goods. The overview report on incoming payments saves suppliers from having to check when payments have been made and which payments are due.

Other reports that help suppliers gain more insight into their sales activities and improve their customer relationships proactively include the following:

- Purchase order history
- Purchase order information
- Confirmation information
- Invoice information
- Contract overview
- Contract history
- Item overview per contract

Automatic Alert Notification for Suppliers

Suppliers can choose which alert types (such as incoming purchase orders, out of stock situations, and ASN past due) trigger a notification via e-mail, fax, or short message service (SMS). For example, they don't need to go online every day to check for orders. The great advantage of notification is that the software delivers users directly to the appropriate object (like an order) in the supplier portal for implementing exception-based processes. Alert types include the following:

- Purchase order alerts
 - New PO arrives
 - Changed PO arrives
 - PO confirmation for a quantity that is less than what was ordered
 - PO confirmation for a delivery date that is later than what was ordered
- Scheduling agreement release alerts
 - New release update
 - Unacknowledged (or unflagged) release
- SMI alerts
 - Out of stock for projected or future stock balance
 - Above maximum limit for projected or future stock balance
 - Below minimum level for projected or future stock balance
- ASN alerts
 - Past-due ASNs without posted goods receipts
 - Goods receipt message with a different quantity than the relevant ASN

Catalog Content Management

Before you can work with a supplier, you must have information about the supplier's products or services. With mySAP SRM, your purchasing organization can involve suppliers in the management of catalog content. Using a simple procedure, suppliers can upload new or modified product or service data and pass it along to you. Suppliers can add or modify content quickly and easily whenever necessary, for example, when prices, part numbers, or delivery times change. However, your purchasing organization has ultimate control over what is published in the catalog, so you can ensure that only content that adheres to your company's purchasing guidelines and rules is published.

SUPPLIER CONNECTIVITY

Integration Broker

To take advantage of enhanced buyer-supplier collaboration, you need a solid infrastructure to manage the myriad of technical details involved in interenterprise connectivity – an infrastructure that is open and flexible enough to handle varying degrees of technical sophistication and a host of heterogeneous system environments.

mySAP SRM is powered by the SAP NetWeaver platform, so it promotes smooth interaction with the entire supply base and enables you to connect easily to electronic marketplaces. Using widely accepted standards, such as XML, simple object access protocol (SOAP), and http, SAP NetWeaver XI acts as an integration broker, capturing shared business semantics and serving as a mediator between business-critical services and their underlying technology. It also provides a sophisticated infrastructure for business process management, enabling high-performance process execution within and across organizational boundaries. The following sections detail some of the important elements of this integration infrastructure as it relates to supplier relationship management.

Document Exchange

The ability to exchange any document in any format across heterogeneous systems is a fundamental requirement for intra-enterprise and interenterprise collaboration. mySAP Business Suite solutions help ensure smooth document exchange with a set of generic adapters that facilitate messaging between SAP and non-SAP systems – both internally and externally. This exchange helps integrate the SAP supplier portal fully with the operational procurement and materials management functions of ERP systems.

Automatic Routing

Although the ability to exchange documents between heterogeneous systems is important, you also need a way to route documents to their proper locations automatically. mySAP SRM supports open standards, and it automatically receives, processes,

and transfers all messages. Documents enter the system at a central location; the integration broker of SAP NetWeaver determines the relevant receiver and routes the document accordingly. Such routing enables flawless collaboration by ensuring that all documents supporting business-critical supply processes consistently reach their final destination.

Format Mapping

To handle the conversion of documents formatted according to different data definitions, mySAP Business Suite solutions include flexible format-mapping functions that ensure seamless collaboration between internal departments and between buyers and external suppliers. Both XML Common Business Library (xCBL) and XML are offered as standard business document formats, but each implementation of mySAP Business Suite also maps all internally used interfaces to enable flawless document exchange right out of the box. The implementation of additional mapping easily supports other document formats. This ability helps you increase internal collaboration and offers unprecedented functionality for seamless communication with the widest possible range of external supply partners.

SAP SUPPLIER NETWORK

SAP is committed to helping you connect with all of your suppliers efficiently and cost-effectively so that you can fully benefit from the e-procurement functionality provided by mySAP SRM. To complement mySAP SRM, SAP offers the SAP Supplier Network offering, a global document exchange offering that allows you to transact business electronically with thousands of suppliers worldwide through a single, standards-based network connection. Providing low-cost, hosted services for nonstrategic procurement collaboration, SAP Supplier Network enables rapid supplier adoption and facilitates millions of transactions and billions in spending per year.

mySAP SRM customers with a buy rather than a build IT strategy who otherwise might not have the necessary resources to run their own supplier collaboration solution receive immediate network participation and connectivity to thousands of member suppliers. Adding new preferred vendors to the network takes just hours. As a buyer, you can make purchases online, conduct all order-to-pay transactions electronically, and centralize and analyze all purchasing data within mySAP SRM. At the same time, suppliers receive hosted order management and access to thousands of potential buyers worldwide in addition to support services.

Suppliers with high order volumes also have the option of integrating their sales management system directly with SAP Supplier Network rather than connecting via the Web.

By making it easy to add suppliers and collaborate on nonstrategic procurement, SAP Supplier Network complements mySAP SRM. For more strategic procurement needs, you can continue to use the supplier enablement functionality included with the entire mySAP Business Suite family of solutions for self-managed supplier collaboration in such areas as design and replenishment as well as forecasting and planning.

BENEFITS FOR BUYERS AND SUPPLIERS

All the supplier collaboration functions of mySAP Business Suite solutions have a single, common goal: to improve and streamline collaboration between you and your suppliers while drastically decreasing procurement and inventory costs and maximizing the value of relationships on both sides. Ultimately, of course, supplier collaboration benefits both you and your suppliers. You can expect increased supplier participation and automation of cross-company processes. Supplier collaboration capabilities enhance supply chain visibility and increase the overall speed, accuracy, and adaptability of your supply network.

Collaborative replenishment can reduce necessary inventory levels while managing the variations in demand across several internal facilities and external providers more effectively. By eliminating manual data entry, the SAP supplier portal improves communication and reduces errors and process costs. Greater efficiency frees up resources at the purchasing end that can be used for more strategic tasks. Moreover, enhanced process transparency helps increase supply base visibility, so you can monitor and evaluate suppliers with real-time performance feedback. On the supplier side, streamlined, automated collaboration processes help suppliers improve customer service and enhance their business value for important customers – like you.

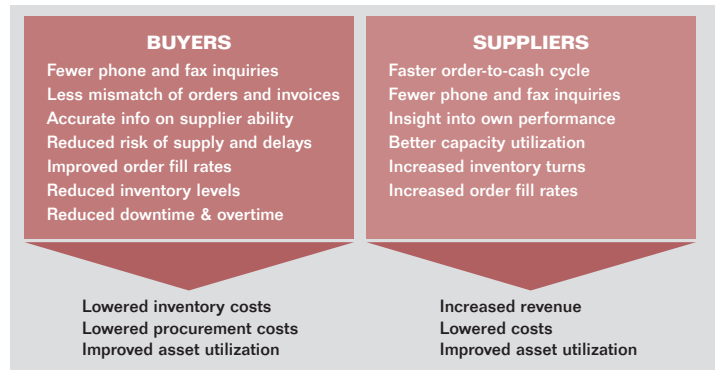


Figure 9: A Win-Win Situation for Both Buyers and Suppliers

According to customers, improved ROI through process automation and supply chain visibility are the most important benefits of supplier collaboration with mySAP Business Suite solutions.

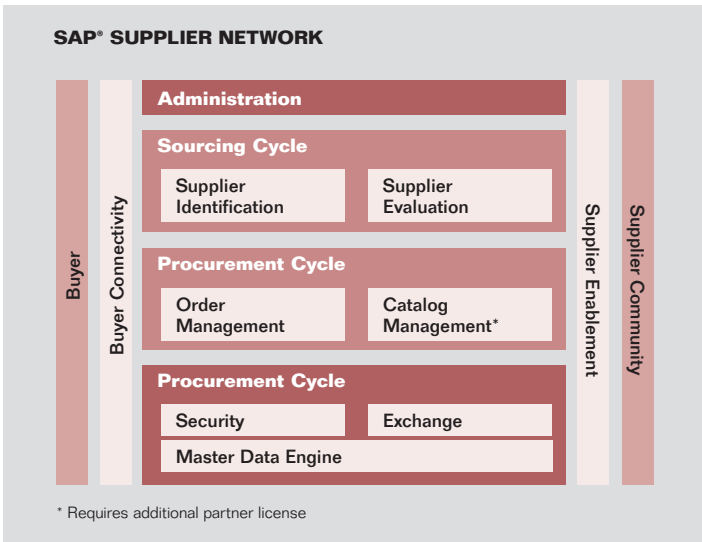


Figure 8: SAP Supplier Network

SAP Supplier Network allows you and your suppliers to automate all business document processing. As a buyer, you can safely send and receive an unlimited number of purchasing documents. SAP Supplier Network currently supports POs, PO changes, PO responses, ASNs, invoices, and credit notes. SAP Supplier Network guarantees document delivery and monitors documents end to end. For reference, documentation, and audit purposes, SAP Supplier Network tracks all messages for one year. The Web-based order collaboration services within SAP Supplier Network provide suppliers with a streamlined order management system and a user-friendly interface. Outbound discreet POs are sent from your purchasing system to the network, where suppliers can view, change, and respond to them. All subsequent communications relating to POs are exchanged electronically.

SOLUTION COMPONENTS

The following components and applications deliver supplier collaboration functionality:

- SAP Supplier Self-Service for supplier services
- SAP Inventory Collaboration Hub for collaborative replenishment
- cFolders for collaboration
- SAP Enterprise Buyer or the materials management component for e-procurement
- SAP NetWeaver XI for document and data exchange
- The SAP user management engine for user administration
- SAP NetWeaver Business Intelligence, an optional SAP NetWeaver component for data analysis
- SAP NetWeaver Portal, an optional SAP NetWeaver component for portal integration

SAP Supplier Self-Service

SAP Supplier Self-Service is a Web-based component for collaboration between you and your suppliers. It provides suppliers with processing capabilities for purchase and work orders by providing access to hosted order and content management functions. It integrates small and midsize suppliers into the procurement process of large purchasing organizations. Your company hosts the functionality; your suppliers need only a standard Web browser to use it.

SAP Inventory Collaboration Hub

SAP ICH extends inventory visibility to suppliers and supports the replenishment process. Suppliers can see the status of their inventory at all manufacturers' plants and are alerted via e-mail when levels get too low. Suppliers can respond to the alerts by creating ASNs via the Web. SAP ICH integrates with the back-end transaction and planning systems and updates them with the relevant data in real time. It reduces costs and increases the overall velocity and accuracy of the supply network.

cFolders

Collaborative folders enable you to communicate with your partners and suppliers over back-end objects (for example, documents, materials, and BOMs in mySAP PLM) without exposing their ERP systems to them. Your suppliers and partners can change or modify these documents, and then back-end users can integrate these changes seamlessly from collaborative folders to your SAP ERP systems.

SAP Enterprise Buyer and the Materials Management Component

SAP Enterprise Buyer is the core e-procurement component of mySAP SRM. As such, it enables all key stakeholders – employees, managers, and professional buyers – to collaborate easily in e-procurement using a Web-based interface tailored to their individual roles. For example, it empowers your employees with self-service procurement functionality, enables centralized direct procurement, and provides professional purchasers with tools to make the best purchasing decisions.

The materials management component shares accurate inventory and procurement order information across the supply chain network to ensure that the materials required for manufacturing are available in the right place at the right time. It facilitates plan-driven procurement, inventory management, and invoicing, and it is the key to closing the feedback loop between demand and supply successfully. The materials management component improves fill rates and customer satisfaction by increasing replenishment velocity and by improving delivery confirmation and invoice accuracy. It drives value across the supply network by reducing raw material spend, procurement costs, safety stocks, raw material, and finished goods inventory.

SAP NetWeaver XI

SAP NetWeaver XI is used for document exchange between systems. It drives process-centric integration and collaboration by integrating business processes and systems within and across company boundaries and across heterogeneous solutions and technologies. SAP NetWeaver XI provides an open, flexible, and message-oriented infrastructure based upon open Internet standards, such as XML and SOAP. It supports both document exchange and conventional communications protocols, such as remote function calls (RFCs).

SAP NetWeaver BI

SAP NetWeaver BI, an optional SAP NetWeaver component for supplier collaboration, is a state-of-the-art data warehouse that provides rapid access to the knowledge captured in disparate systems. It provides your planners and executives with powerful tools for information extraction and analysis, including key performance indicators (KPIs), personalized alerts, and work-group comments. You can work flexibly with the information and perform ad hoc analyses to explore it from different perspectives.

SAP NetWeaver Portal

SAP NetWeaver Portal, an optional SAP NetWeaver component for supplier collaboration, unifies applications, information, and services in multiple systems. This personalized, interactive gateway provides employees, partners, and suppliers with a single point of access to everything they need to do their jobs.

To learn more about supplier collaboration with mySAP Business Suite solutions and to view special solution maps of mySAP Business Suite collaborative solutions, please visit www.sap.com/solutions.

www.sap.com/contactsap