Intelligent Chemicals

Extracting More Value with Agile Procurement Solutions
An Industry in Transition Relies on Procurement Excellence

Chemical companies face a profound transition that is changing the structure of the entire competitive landscape. Raw materials are scarce. Public concern over environmental accountability is growing. Even the market is narrowing due to a rise in merger activity and commodity offerings.

All of these challenges are empowering companies to create new business models, respond more nimbly to market dynamics, and automate processes for increased efficiency and profitability.

Shifts in Demand and Supply

Already volatile supply chains are becoming more complex as customer preferences evolve and supply centers encounter escalating trade wars and rising protectionism. Overcoming these realities calls for increased visibility into imposed taxes, innovation of niche products to satisfy local regulations and user needs, and continuous monitoring of global trade compliance and border crossings.

Intensifying Margin and Cost Pressures

To offset ongoing margin erosion and competition from low-cost suppliers, chemical companies are looking to reduce costs and increase capacity wherever they can. Areas of improvement may include procurement governance and negotiation and management of service contracts. Some organizations are taking further steps to utilize and oversee their contingent workforce more effectively, while enhancing yields, operational efficiency, asset utilization, and business productivity.

Disrupted Supply Chains

Facing volatile demand caused by pandemic-related disruptions and fickle consumers, chemical companies must react and adapt their production schedules accordingly.

Since they focus nearly 75% of their spend on direct materials and maintenance, repairs, and operations (MRO), chemical companies should collaborate with their suppliers to help ensure an uninterrupted supply chain. Tight collaboration of suppliers and increased visibility into operational, reputational, and regulatory risks are critical to respond to changes quickly.

An Aging Workforce

In response to demand spikes, chemical companies need to expand their production capacity and fulfillment accuracy and speed, while ensuring operational stability and flexibility. Such efforts call for recruitment strategies that include the acquisition of contingent labor with the right skills and machine certifications. This external workforce must be onboarded in ways that help ensure the entire workforce’s safety and health, while increasing operational compliance and lowering financial risk.

Focus on Sustainability

To avoid considerable fines when using raw materials that are single-use or nonrecyclable, chemical companies operating or selling into the European Union must shift their strategic goals to demonstrate environmental and social accountability. At the same time, these green practices can become a value proposition that can be implemented globally to address customer preferences, improve business performance, and lower material costs.

Procurement Spend Reflects Business Complexity

For chemical companies, the types of products they produce and sell impact their spend profile. For example, commodity providers that fulfill the need of cost-sensitive customers focus their spend mostly on direct purchases (62%), planned maintenance services (18%), and MRO activities (11%). In comparison, specialty producers divide their spend across direct (45%), services (26%), and MRO (20%). (See Figure 1.)
Procurement Spend Reflects Growing Industry Complexity

Figure 1: Buying Channels as a Percentage of Transactions

Source and Contract Commodity Chemicals

Indirect
User Driven
- Catalog, spot buys, and marketplace
- Non-purchase order buys
- Travel and expense

Services
Contingent Labor
- Services statement of work
- External services

MRO/Assets
Project and Maintenance Driven
- Plan, replenishment, and predictive forecasting
- Catalog, inventory warehousing, and spot buys

Direct
Plan and Forecast Driven

Source and Contract Specialty Chemicals

Indirect
User Driven
- Catalog, spot buys, and marketplace
- Non-purchase order buys
- Travel and expense

Services
Contingent Labor
- Services statement of work
- External services

MRO/Assets
Project and Maintenance Driven
- Plan, replenishment, and predictive forecasting
- Catalog, inventory warehousing, and spot buys

Direct
Plan and Forecast Driven

State of the Chemicals Industry

2x
expected growth in the chemicals market in the next three years

12%
of chemical organizations, only, make informed decisions on the profitability of ad hoc manufacturing campaigns.

13%
plan to deploy artificial intelligence in the next two years

1 Based on SAP customer data
2 SAP internal data analysis
3 SAP Fast Facts
New Expectations and Challenges
Bring New Opportunities

By digitalizing procurement spend and the supply chain network, chemical companies can align and integrate strategic and operational buying activities while optimizing purchasing and resource use.

Take, for example, procurement and supply chain solutions from SAP. They help pursue a bold vision for product and service innovation, while optimizing operations. By going beyond traditional procurement strategies, your chemical business can drive growth despite the complexity of customer expectations, regulatory requirements, and market volatility.

Sell Business Outcomes, Not Just Products
View your value chain from the customer’s perspective. By shifting your focus toward individualized products, you can co-develop and deliver sustainable applications and services that drive relevant and highly coveted outcomes. Results may include minimized resource and energy consumption, recycling and return capabilities embedded in the product experience, and achievement of carbon targets prescribed by international accords.

With this approach, your spend management becomes more flexible and service-oriented – changing how supplier and customer contracts are negotiated and finalized and how finances are controlled and governed.

Simplify Operations and Shrink Cycle Times
React more quickly to demand changes beyond the production line. By pivoting your spend strategies quickly, you open the door to flexible innovation and optimized investments and resources. Moreover, streamlining operational contract call-off processes improves your ability to issue purchase orders and measure contract consumption.

For instance, automation technologies can accelerate the ordering of spare parts and services for MRO activities, support intelligent invoice management and auto-clearing of payments, and speed quality approvals. Furthermore, machine learning, artificial intelligence, and predictive models can enable scenarios such as lights-out manufacturing, touchless orders, and intelligent invoice matching and payment clearing to fulfill the overall vision of becoming an autonomous enterprise.

Bidirectional data transfer between material requirements planning (MRP) and procurement systems saves weeks in sourcing time. In this case, outline agreements are centrally managed and integrated to guide requisitioners through the purchasing process with dynamic forms – improving compliance and avoiding potential fraud.

Compete as an Ecosystem
Collaborate with suppliers to gain visibility into forecasts, inventory, and capacity levels, and acquire the skills needed to manage complex services. Your organization can augment or upskill your workforce with contingent workers or external services and tap toll manufacturers to avoid production delays proactively. At the same time, you are optimizing your back-office functions to facilitate mergers, acquisitions, and divestitures.

In such a collaborative and cohesive environment, you can extend an integrated technology platform across the value chain. This tactic delivers the actionable insights and visibility to take on new opportunities and mitigate risks – no matter how flexible and complex your supply chain and manufacturing operation.

Adopt Strategic Agility
Adjust your strategy and portfolio in response to market opportunities and needs. With more flexible capabilities for business-to-consumer sales and product management, you can manage diversified product and application portfolios in a segment-of-one relationship. Additionally, mandate and policy changes are addressed more responsively, while related information is disseminated to suppliers and channel partners in real time.

Process automation tools allow your organization to ease spend management and lower the risk of noncompliance when supervising each step of the business operation, which may differ by region and product. This scenario includes visualizing and managing corporate risks based on a single source of data and uniting pre- and post-merger activities. Furthermore, workforce skills can be augmented flexibly by integrating the use of contingent service workers.
Success Across the Industry

Achieving agility in a constantly changing marketplace requires procurement functions to swiftly adapt and contribute to their organizations’ overall value while addressing unique requirements and customer demands.

Worldwide, SAP customers are digitalizing their procurement and supply chain operations and achieving significant outcomes. Here are some of their stories.

Evonik Industries AG simplified procurement for 32,000 employees.

Flint Group reduced invoices without a proper purchase order by 64%.

Milliken & Company increased transparency with their suppliers across the globe.

Sasol cut the cost of accounts payable in half by putting 75% of transactions through Ariba Network.

By digitalizing their procurement and supply chain operations, SAP customers have achieved significant outcomes, including:

1.5 days length of invoice cycle times for top-quartile organizations are 1.51 days

13% annual sourcing savings by running more competitive sourcing events

5–6 SAP customer benchmarking data
Procurement Agility Fuels
Supply Chain Stability and Control

Evolving economic, social, environmental, and regulatory expectations will continue to play a significant role in shaping the future of your business. SAP customers within the industry’s commodity and specialty segments facilitate agile procurement and supply chain processes – supporting operational flexibility, visibility, and collaboration across the value chain.

Risk and Compliance
Reduce risks with advanced supplier qualification and management processes and ensure compliance with guided purchasing based on approved contracts and negotiated rates.

Inventory and Operations Planning
Aggregate raw material forecasts automatically by region and share them with suppliers to increase service visibility and flexibility, optimize inventory, and simplify maintenance processes.

Procurement
Increase spend compliance by running source-to-settle processes that are faster, smarter, and smoothly integrated with processes, ERP systems, and supply chain applications.

Working Capital and Cash
Combine dynamic discounting technology with payment best practices to improve cash flow, increase net income, free up working capital, and stabilize the entire supply chain.

Supplier Relationships
Survey, analyze, and act on supplier issues more purposefully by using experience data and the world’s largest business network to understand the reasons behind every situation.

Supply Chain Collaboration
Align your supply chain operations with all your trading partners by sharing inspection results and deviations on components, work in process, and end products.

Supplier-Managed Inventory
Collaborate with suppliers by forecasting and reporting actual inventory quantities to track scheduled deliveries, alert suppliers when levels run low, and meet demand.

Shutdown Turnaround
Optimize all forms of services spend with visibility and control. With a single dashboard view, you can requisition external services, confirm the order with a service entry sheet, and reconcile invoices against rates and gate times across multiple work orders.

Direct Sourcing and Contracts
Accelerate sourcing events by procuring materials and services directly from an MRP system, easing contract negotiation with artificial intelligence, and awarding work through an ERP.
SAP® Solutions Unlock
Next Generation Procurement Practices

By digitalizing procurement and supply chain activities, your chemical company can pursue a bold vision that addresses the industry-specific and organizational challenges of innovating products and services, optimizing operations, and running future-focused processes. More importantly, your entire value chain is equipped to deliver outcome-driven products and services, while complying with mandates for lower carbon footprints, green packaging, and sustainable production.

SAP Ariba® and SAP Fieldglass® provide the financial discipline, workforce efficiency, and risk mitigation necessary to successfully:

- **Respond** to change and quality issues quickly and on demand with rapid, automated communication with material and service providers.
- **Locate** and onboard the right talent by validating proper certification, negotiating contract terms, and monitoring pay based on agreed rate cards.
- **Increase** asset uptime with a predictive approach to forecasting breakdowns and informing resource and MRO availability.
- **Reduce** maverick spend and control spot buys by basing purchase decisions on contract terms and negotiated rates.
- **Optimize** vendor-managed inventory with better transparency into supply and demand.

SAP Business Network can also help by unifying all the points of interaction and integration across your processes for procurement, supply chains, logistics, and asset management. Your buyers can discover and connect to trading partners through a single directory with near real-time data and lean workflows. This network-wide intelligence can enable you to predict new opportunities and disruptions more effectively, adapt operations quickly, and improve organizational stability. More importantly, your vendor relationships can grow stronger and more collaborative, especially when contracts are negotiated to optimize pricing and service levels and mitigate risk.

By unlocking all these capabilities, your company can lower procurement costs with forward-thinking strategies to develop and maintain a highly skilled workforce, working together to deliver exceptional customer value.

### Success Across the Industry

- >6,500 chemical companies in 97 countries are innovating with SAP solutions
- 100% of the greenest chemical companies in Europe run SAP solutions
- 94% of the most successful specialized chemical companies in the world run SAP solutions

### Learn more

For more information on procurement solutions from SAP, contact your local SAP representative, or click the link below.