Chemical Solution White Paper



CHEMICAL INDUSTRY BUSINESS MANAGEMENT

MOVING BEYOND LEGACY IS NO LONGER A LUXURY, BUT A NECESSITY!

Now more than ever companies in the chemical industry are under intense pressure to stay competitive while complying with a myriad of challenges, from federal and state regulations to global competition, innovation demands, and pricing and margins.

Most chemical companies do have business management systems in place, but many are a combination of dated off-the-shelf systems combined with significant manual workarounds. These systems may have been sufficient in the past, but after several years, they become a resource drain. And to be sure, they don't position a company well for growth - they are typically unable to provide up-to-the-minute data when needed.

As well, they frequently lack the robust functionality that is required by forward-thinking and growing companies. Finally, they draw precious resources into repetitive tasks when resources could be employed in higher value activities. A modern enterprise level system, with features specifically designed for chemical, is ideally suited to meet all of these challenges with flexibility, simplicity, and efficiency while managing the most elaborate business processes.

"In many chemical R&D labs, up to 50 percent of resources are spent on tasks such as documentation, data entry and analysis, and order or material management. Our experience suggests that bundling repetitive, non-innovative activities in dedicated units, integrating data and information management, and automating workflows can facilitate chemical companies to shift up to 50 percent of resources from repetitive tasks to innovative activities."



WHETHER A CHEMICAL COMPANY IS MULTINATIONAL OR IN ONE LOCATION, A STRONG, INTEGRATED ENTERPRISE MANAGEMENT SYSTEM IS A NECESSITY

For chemical manufacturers and distributors to seize the productivity and market-growth potential of their value chain, it is essential to integrate crucial elements of the supply, development, and sales chains, both within a company and externally. There must be fluidity between:

- · Identifying product opportunities,
- Prototyping, formulating, and piloting products,
- Increasing productivity,
- Delivering products to the market, and
- Keeping products relevant throughout their life cycles.

To fulfill these new management requirements a proactive level of flexibility and responsiveness can only be achieved through an integrated application of Internet technologies and advanced management practices.

Recently, BCG compared digital champions and digital laggards among some 1,900 companies in the US and Europe. The champions that embedded digital practices and behaviors across the organization scored an average 14 points higher on our Digital Acceleration Index. The impact of culture was even greater than that of two other levers: investing in digital initiatives and recruiting digital talent.

OLD ERP FAILS TO DELIVER; MODERN ERP ENABLES A GROWTH STRATEGY

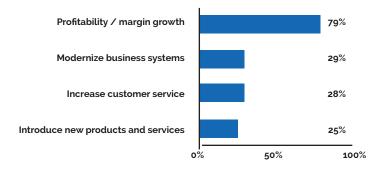
ERP analyst Nick Castellina in his report, ERP's Role in the Modern Manufacturer, published by Aberdeen Group, cited the following strategies as ways that leading manufacturers gain competitive advantage:

- Streamline and accelerate processes to improve efficiency and productivity
- Modernize technology infrastructure and applications
- Optimize the supply chain and improve interoperability and collaboration



The foundation for all of these strategies is a modern ERP system. Castellina says the combination of these strategies along with servicing and growing customers "are the keys to success in the modern manufacturing environment." Castellina notes the following priorities by leading manufacturing companies in his report:

FIGURE 1: TOP MANUFACTURING GOALS



THE BENEFITS OF A NEW MODERN ENTERPRISE LEVEL SOFTWARE FOR CHEMICAL COMPANIES

The benefits of a new modern enterprise level software versus old outdated legacy systems are numerous. Here are three that stand out as critical for a chemical company's success:

1. Streamlined Manufacturing - Optimizing the Supply Chain

A robust enterprise-level management system offers best-in-class supply chain and financial management with built-in tools to manage regulatory compliance, formula management, quality control, manufacturing, and customer service. With a single source, chemical companies have complete, centralized real-time information on inventory and production as product moves through various stages of the supply chain. This ability to quickly access and drill down into data to understand exceptions and respond to management and clients with accurate and confident answers streamlines operations and increases productivity.



A modern enterprise level management system can help optimize the supply chain in the following ways:

- Leverage advanced planning and forecasting so supply matches closely to demand.
- Streamline purchasing by using Electronic Data Interchange (EDI) for value-added networks and partners.
- Manage and utilize data to have access to production costs, requirements and raw materials available for each formula and component.
- Ensure the right raw materials are collected with Material Requirements Planning (MRP).
- Track lot numbers, quality, expiration dates, and numerous measure units.
- Improve accessibility of warehouse activity from receipt of goods to final destination shipping.

2. Flexible production, supply chain and shipping processes in Chemical

A chemical manufacturing or distribution company has production and supply chains with many moving parts, each complex and challenging in their own right, so coordination and process flow optimization are essential. A robust ERP is built to take care of these issues, so a chemical business can run smoothly.

A proactive and strong ERP provides:

- Perfect demand analysis and forecasting by formula, ingredient, location, customer, and product,
- A real-time view of status through each step of the production process to minimize bottlenecks,
- Superior and optimized schedules and enterprise-wide plans so multi-plants can effectively control and manage a complicated supply chain,
- Deployment of inventory across channels and distribution echelons to minimize inventory carrying costs and lost tonnage,
- Robust integrated business planning and comprehensive views of supply chain performance,
- Customizable workflows and process definitions to support changing business needs.
- Simple planning and scheduling to maximize capacity,
- Automated tracking of variances and defects for business optimization and compliance needs,
- Reduced lead times for faster delivery, and
- Repeatable high-quality data that fortifies automation and digitization, alongside AI and advanced analytics.

Companies are extending the life of key supply chain assets including machinery, engines, transportation and warehouse equipment by finding new patterns in usage data collected via IoT sensors.



3. Solve Regulatory Compliance Challenges

"Chemical manufacturers and distributors must comply with government regulations. It is not a choice but is a business imperative. And regulatory requirements in the chemical industry are always in flux. The domains impacted include chemical product safety, facility process safety, security, and transportation. Chemical companies have to follow the OSHA (Occupational Safety and Health Administration) Hazard Communication Standards, SARA Title III and, GHS reports.

Chemical manufacturers and distributors of hazardous chemicals are all required to provide the appropriate labels and material safety data sheets to the employers to which they ship the chemicals. Every container of hazardous chemicals you receive must be labeled, tagged, or marked with the required information."

An enterprise-level system well-suited to chemical companies can facilitate control over reporting processes; therefore, enabling compliance with regulatory and environmental requirements. The use of a modern ERP system also helps companies comply with financial and transportation safety regulations. In contrast, most legacy systems require heavy resources for manual paper-based reporting, leaving chemical companies vulnerable to human error.

A modern enterprise management system can:

- Ensure Compliance is simple with (GHS) Global Harmonized System and Safety Data Sheets (SDS) features.
- Create traceability reports for goods, ingredients, finished as well as shipping and packaging.
- Satisfy Global Food Safety Initiative (GFSI) requirements quickly.
- Produce (COA) Certificates of Analysis quality control documentation.

It's certain that a chemical manufacturer or distributor must provide regulatory oversight. But compliance doesn't have to be a burden. Enterprise level software designed and deployed with the chemical industry in mind will automate core processes and provide corporate and regulatory transparency.

IN CONCLUSION

Today's leading chemical manufacturers and distributors are moving from legacy business management to robust enterprise level software in order to gain a competitive advantage. The benefits of implementing an enterprise level system now and graduating from antiquated and outdated IT tools and platforms, cannot be underestimated - these benefits are imperative to effectively compete.

Delaying or prolonging an ERP implementation can create a real lack of communication and sharing of data within a company. The time is now to give a business the tools it needs to compete and exceed expectations regarding to profitability, operational efficiency, customer service, and innovation.



BROUGHT TO YOU BY NET AT WORK

Net at Work is full service technology and business consultancy serving the chemical industry. Combining years of experience and specialized skills across the chemical industry their solutions accelerate growth and deliver a superior digital experience to their clients while improving business efficiencies. The Net at Work team understands that to manage the risks involved in the chemical industry, every company needs to utilize technology allowing their employees to focus on innovation and quality, instead of day to day business management issues.

800-719-3307 | info@netatwork.com www.netatwork.com



