



WHY LABELING MATTERS FOR TODAY'S MANUFACTURERS

ENTERPRISE LABELING FOR THE MANUFACTURING INDUSTRY



COMPLEX SUPPLY CHAINS, INTENSE COMPETITION, SWEEPING TECHNOLOGICAL CHANGES. HOW ARE YOU ADAPTING?

Over the past several decades, manufacturing has gone through many profound changes. Globalization has resulted in a widely dispersed supply chain, opened up many new markets, introduced a new body of regulations, and greatly intensified competition. Customers today are more knowledgeable about their options, and more demanding of the companies they work with. They're looking for high quality, delivery as promised, and lightning-fast responsiveness. Technology—automation, robotics, mass customization, 3D printing, the Internet of Things—is altering the production process in many ways.

Today, manufacturing has to move fast. Products become more rapidly obsolescent, and with shorter product lifecycles, manufacturers are less forgiving of hiccups in their supply and distribution chains. Factor in cyclical swings and slowdowns, and the picture becomes even more complex and challenging.

In this world, the pressure is on manufacturers to operate more efficiently to keep costs down and quality up, to improve their ability to respond quickly to customer requirements, and to make sure that goods flow throughout the supply chain as rapidly and seamlessly as possible. And those pressures aren't being felt by one individual group acting in isolation. Organizations at every junction of the manufacturing supply chain—from raw material suppliers, to OEMs, to component manufacturers; from the warehouses, logistics companies, distributors, and retailers that support them—are finding more and more demands being placed on them. In order to survive and thrive, companies must increasingly operate as a part of a seamless whole, one that recognizes its interconnectedness and the need to work cooperatively.

With so many impactful changes to deal with, it comes as no surprise that manufacturers and their partners are looking for proven solutions that can help them meet their challenges head on. One system that's paying major dividends for manufacturers is a standardized, enterprise-wide labeling solution.

FOR MANUFACTURING, LABELING MOVES FROM A TACTICAL OPTION TO A STRATEGIC IMPERATIVE

Labeling systems have been around for years. So how is it that labeling software has moved from a nice-to-have, an option that could deliver marginal efficiencies and cost savings, to a strategic imperative? What are the trends that are driving this shift?

OPERATIONAL EFFICIENCY/COST REDUCTION

Because manufacturing is so highly competitive, there is continuous pressure to keep costs low and quality high across the entire supply chain ecosystem. Given the pace of innovation, global companies don't want to take the risk

of stocking up on inventory—while paying higher interest costs—for raw materials and components that may soon become obsolete. This is making the demand to be faster and more efficient especially acute. Automated labeling eliminates manual processing costs, improves accuracy and reliability, and helps companies significantly reduce lead times in the supply chain.

Operational efficiency is also achieved when labeling mishaps—increasingly costly in terms of time, money, and reputation—are reduced. Minimizing labeling errors calls for the centralized, integrated management of label data, an approach that also avoids redundancies and removes the burden of managing disparate, patchwork labeling systems throughout your supply chain.

GLOBALIZATION

Manufacturing is truly global, and countries that were not on its landscape a decade ago— Indonesia, Vietnam, Thailand — are emerging as powerful players. This presents a number of concerns around consistency and quality, regulations, intellectual property, and other areas where labeling plays a role. Despite occasional slowdowns and disruptions, the marketplace for manufactured products is also growing, as developing nations grow their business and consumer economies. This means that manufacturers are looking for ways to deliver products into an expanded and more diverse range of countries. Labeling must be sophisticated enough to keep up with a growing number of languages, and a growing body of rules and regulations, so that manufacturers can successfully compete locally, regionally, and internationally.

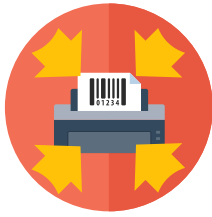
ADOPTION OF NEW TECHNOLOGY

The increasing deployment of automation and robotics on the shop floor is starting to have a major impact on how manufacturing operates. One of the areas where the impact is felt most sharply is the speed at which the “assembly line” now runs. Once automated and standardized, labeling processes can keep up with more rapid production, and labeling will no longer be a bottleneck, with backlogs of rapidly-produced goods waiting to be labeled. Automation is also enabling customization, further elevating the importance of labeling. When a manufacturing run is no longer producing identical products, if each shipment has been tweaked for a particular customer or market, accurate labeling becomes paramount.

Automation is just one technology that’s helping turn labeling into a strategic imperative. The manufacturing supply chain will be greatly impacted by the Internet of Things. The IoT has the potential to transform the supply chain into a transparent system where all participants have real-time visibility into the production and flow of goods. The IoT is driven by data, lots of it. Effective labeling at each intersection along the way must be properly managed in order to ensure that data collection is fast and accurate.

TRACEABILITY/PRODUCT RECALLS

Throughout the manufacturing supply chain, companies need to track shipments from so many different suppliers. When each partner in the supply chain takes its own approach to labeling, traceability and the ability to quickly respond



GLOBAL SUPPLIER OF AUTOMOTIVE SYSTEMS, MODULES AND COMPONENTS

Key manufacturer in the automotive supply chain, selling to OEMs and aftermarkets

OBJECTIVES

- Adopt a single labeling system worldwide alongside their rollout of SAP to 80+ global locations
- Simplify design, update and maintenance of labels by centralizing control
- Maintain a centrally managed label catalogue to ensure labeling consistency across locations

BENEFITS

- Increased accuracy by leveraging certified integration to drive label printing directly from SAP as single source of truth for label data
- Ensured labeling consistency, simplified maintenance, and improved the speed of creating and updating labels through centralized deployment of enterprise labeling
- Achieved greater operational efficiency and improved customer responsiveness
- By utilizing business rules, enabled dynamic selection of labels and rapid support for labeling variations

to product recalls can become problematic. In addition, relabeling efforts can cause confusion that may have dire consequences for both parts suppliers and manufacturers. In many manufacturing sectors, counterfeiting, the sale of obsolete components, and the risk of parts that have been tampered with, have become major industry problems. Proper labeling, especially when augmented with serialization, offers better visibility into components and products as they traverse the supply chain.

CUSTOMER REQUIREMENTS

Throughout the global supply chain, manufacturers are facing increasing demands from their customers for a wide range of specific labeling requirements. That means meeting a variety of needs: logo placement, language variations, location specific information, country regulations, labeling that conforms to a customer's existing systems, and more. For example, regional regulations may require proper label format or products will be held at the border. Requirements may dictate the exact type and placement that goes on the product, box, carton, and pallet, with specifications for label size, data titles, data field identifiers, and other guidelines for barcode symbologies. Requirements have to be met with fast turnaround, and are subject to rapid change as products are more quickly altered. What doesn't vary is the demand that these requirements be met consistently and in a timely fashion.

Without the ability to quickly meet customer-specific labeling needs, manufacturers run the risk of losing customers to a competitor, incurring fines for noncompliance, or experiencing returned shipments due to mislabeling. For manufacturers, the ability to effectively meet customer-specific requirements can be a powerful mechanism for driving new business opportunities.

REGULATIONS

Manufacturing organizations are often surprised to find that some aspect of their product or shipping process is much more regulated than they knew, and must scramble to find a way to address labeling regulations. Even worse, not complying with regulations and standards can result in lost business.

Regulations will vary greatly across industry and geography, but the bottom line is that adhering to regulations that define how products are developed, marketed, shipped, and disposed of is essential to avoid fines, retain customers, enter new markets, and in some cases, remain in business. OSHA's HCS , GHS regulations for chemicals as applied to various domestic and international markets, RoHS 2 for electronics, and other regulations may seriously affect labeling in manufacturing. By taking a strategic approach to labeling, companies more easily meet regulatory requirements.

And what's the cost of not addressing these strategic requirements? With countless variations of labels, parts, and products processed each day, errors from improper labeling lead to millions of dollars in unnecessary costs and penalties each year.



MANUFACTURER OF COMMERCIAL AND RESIDENTIAL WATER HEATING EQUIPMENT

Leading company in its industry with 13,000+ employees in 60 countries

OBJECTIVES

- Implement an enterprise-wide labeling solution as part of global SAP deployment
- Eliminate need for replication of databases within multiple plants worldwide; standardize labeling across organization
- Meet requirements of a global roll out, including language, customer, and regional needs without requiring coding within SAP
- Reduce costs and inefficiency of labeling processes

BENEFITS

- Leveraged certified integration to drive labeling directly from SAP, resulting in improved labeling accuracy and greater operational efficiency
- Enabled central design and updates of labels to ensure label standards are met throughout the organization globally
- Leveraged label design capabilities to empower business users to manage label design and changes without utilizing costly IT resources

Overall, labeling that's inaccurate may result in shipments stalled at customs or refused by customers, penalties incurred from governments or customers, lack of traceability, and damage to a company's reputation and its bottom line. The right labeling solution can help companies throughout the manufacturing supply chain take these challenges head-on, making labeling—more than ever before—a strategic process, not just a tactical one.

TIME FOR A STANDARDIZED, ENTERPRISE-WIDE APPROACH TO LABELING

For labeling in global manufacturing supply chains, an enterprise-wide solution is the most efficient, streamlined way in which companies can meet the labeling demands for these business drivers, all at the same time.

By treating labeling as a strategic process—and by implementing a standardized, enterprise labeling solution—companies throughout the manufacturing supply chain are able to make shipments more traceable, achieve consistent branding, reduce regulatory costs, eliminate data redundancy, and improve overall labeling efficiencies. The right enterprise labeling solution lets companies turn labeling into a high-value, strategic element of the overall manufacturing and distribution process

What is enterprise labeling? Enterprise labeling is an approach that integrates labeling with existing business processes to standardize and automate labeling. This dynamic, data-driven approach allows businesses to more nimbly react to evolving customer, regional, and regulatory requirements, and empowers business users to quickly and efficiently design, maintain, and share barcode labels. It also ensures consistency across a global supply chain, enabling companies to meet performance and scalability requirements with the power and flexibility to support complex, global, and high-volume labeling demands.

Loftware Enterprise Labeling sets the standard for strategic labeling, providing a new level of visibility and control for companies throughout the manufacturing supply chain, and delivering these benefits:

IMPROVE ACCURACY, REDUCE COSTS WITH “SOURCE OF TRUTH” LABELING

Most manufacturing companies have invested heavily in ERP and other systems for managing their business, complying with regulations, and preventing outright counterfeiting. Loftware sources label data directly from approved sources of truth, i.e., from key data repositories, ERP systems, and other applications. Through tight integration with systems like SAP and Oracle, you can automate and centralize labeling to improve accuracy, save time, and enable better traceability, while also reducing and often eliminating complex data replication and synchronization costs.

MEET CUSTOMER-SPECIFIC REQUIREMENTS USING A FLEXIBLE APPROACH

Organizations within the manufacturing supply chain are increasingly required to respond to customer and partner labeling demands for information that meets their specific needs (language, location, branding, regulatory, etc.).



GLOBAL MANUFACTURER OF PLASMA, LASER, AND WATER JET CUTTING SYSTEMS

Client roster includes some of the most well-known global manufacturers

OBJECTIVES

- Eliminate \$1.5 - \$5M in lost revenue from production downtime due to labeling system failures
- Address connectivity issues to meet supplier needs and offer ability to scale
- Improve customer satisfaction by eliminating occurrence of mislabeling due to human error
- Simplify maintenance and reduce complexity of label design

BENEFITS

- Centralized solution eliminated production downtime by removing requirement to have software deployed locally on each print station
- Browser-based print capability helped ensure supplier connectivity while simplifying the partner onboarding process
- Leveraged business rules to automate print processes and streamline usage to eliminate human error
- Simplified label design/maintenance empowered business users to rapidly make label changes without IT involvement

With Loftware's integration with ERP, CRM, and other customer data sources, companies are able to quickly and accurately keep up with customer requirements—and ever-changing label templates—no matter how unique they may be.

DRIVE QUALITY AND EFFICIENCY WITH INTEGRATED LABEL PROCESSES

When labeling is integrated with enterprise business processes, these processes are simplified and non-value-added activities are reduced. With Loftware, companies can perform their critical manufacturing, packaging, and distribution tasks without having to access separate labeling systems or worry about keeping labeling synchronized with process or operational data.

RAPIDLY RESPOND TO CHANGING DEMANDS WITH BUILT-IN BUSINESS LOGIC

Loftware enables companies to respond swiftly to the evolving demands from partners and customers, as well as to changing regional and international regulatory requirements for labeling. By leveraging a built-in business rules engine, companies can create rules and logic that empower select users to make formatting changes quickly, in a controlled manner, without having to wait for updates to your enterprise applications. Easy-to-use design tools with a WYSIWYG interface make it that much easier for business users, not IT, to update templates as needed.

SCALE LABELING AS NEEDED

As manufacturers expand into new markets or grow in their existing territories, they need to be able to drive a higher volume of labels. Supporting the native drivers of more than a thousand different print devices (rather than relying on Windows-based drivers), Loftware's Enterprise Labeling solutions connect directly with printers for high-speed processing that won't bog down the network. This allows customers to produce thousands, even millions, of labels faster than ever before. And because label templates are shared across the organization and changes can be made dynamically, you dramatically reduce the number of templates you need to manage— not to mention the time, headaches, and errors associated with managing so many templates.

EXTEND LABELING TO SUPPLY CHAIN PARTNERS

Full traceability requires that all partners within the supply chain share a systematic approach to labeling. Loftware Enterprise Labeling provides secure, remote access to label templates, so that suppliers, 3PLs, and others can simply run off the labels as needed by the manufacturer with the right data and information to route incoming goods more quickly. By gaining new visibility into when materials are labeled and shipped, and eliminating the need to relabel goods upon receipt, companies can save thousands, even millions, of dollars on labor, material, and inventory costs.

DRIVING BETTER, MEASURABLE RESULTS WITH ENTERPRISE LABELING

In today's complex and challenging manufacturing supply chain environments, forward-looking companies are increasingly taking a more strategic approach to labeling. With Enterprise Labeling from Loftware, they're able to put a labeling strategy into action, and with it, they're able to reduce inefficiencies and costs, respond faster to customer and regulatory requirements, and improve the overall bottom line.



SEE HOW LOFTWARE CAN HELP YOU DRIVE SIMILAR BENEFITS ACROSS YOUR EXTENDED MANUFACTURING SUPPLY CHAIN, AND VISIT WWW.LOFTWARE.COM AND KEEP UP WITH THE LATEST INDUSTRY NEWS BY SUBSCRIBING TO OUR [BLOG](#).

Loftware, Inc. (www.loftware.com) is the global market leader in Enterprise Labeling Solutions with more than 5,000 customers in over 100 countries. Offering the industry's most comprehensive labeling solution, Loftware's enterprise software integrates SAP®, Oracle® and other enterprise applications to produce mission-critical barcode labels, documents, and RFID Smart tags across the supply chain. Loftware's design, native print, and built-in business rules functionality drives topline revenue, increases customer satisfaction, and maximizes supply chain efficiency for customers. With over 25 years of industry leadership, Loftware's Enterprise Labeling Solutions and best practices enable leading companies to meet their customer-specific and regulatory requirements with unprecedented speed and agility.



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