



ENTERPRISE LABELING

A SUPPLY CHAIN STRATEGIC IMPERATIVE



AN INITIATIVE OF LOFTWARE, INC AND VDC RESEARCH

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EXECUTIVE SUMMARY

Doing business in today's global supply chain has become a complex challenge. International regulations, global distribution channels and evolving customer requirements are becoming the norm, and companies are starting to recognize labeling as a mission-critical component of the supply chain. Labeling influences a variety of strategic business drivers including regulatory compliance, customer responsiveness, business continuity, and supply chain efficiency. Consequently, it is essential that labeling strategies evolve alongside supply chain strategies for companies to be successful.

To meet these new demands, companies must ensure that today's labeling solutions offer the opportunity to integrate with existing business processes, provide standardization and consistency, as well as the ability to scale. However, businesses often struggle with how to address these challenges through existing homegrown/custom, third party or multiple a solutions. This struggle combined with the focus on the strategic value of a label necessitates a different approach to labeling.

To further determine where the industry is headed, hundreds of leading supply chain professionals were polled to assess their labeling practices and challenges. Combined with industry analysis and insights from [VDC Research](#), the leading authority in AutoID and Data Capture, we'll review our findings and assess the importance of taking an "Enterprise Labeling" approach and look at what the future brings as supply chains become more interconnected and complex.

You'll find out how Enterprise Labeling empowers companies with the agility to deal with the nuances of today's complex labeling requirements and regulations, the ability to support high levels of variability in labeling, while providing the speed and scalability to support global supply chains. Learn how leading providers in the labeling industry are similar to other enterprise application providers offering a common set of solutions that companies are deploying across the supply chain. This smarter and more efficient way of doing business provides standardization, allowing companies to achieve consistency and flexibility to support changing labeling requirements. It also provides a platform that is scalable and easily supported and maintained.



"Companies are clearly thinking more globally today and those supply chain executives that view the label as a mission-critical component in embracing this new interconnected, flexible and efficient supply chain model, are poised to sustain a competitive advantage in their market."

*David Krebs, Executive Vice President of
Enterprise Mobility & Connective Devices at VDC Research*

INTRODUCTION

Did you ever stop to realize that almost every product, package, and pallet that moves through the supply chain all have one primary thing in common - a label. It's the barcode label that serves to bridge almost every aspect of the manufacturing, warehousing and distribution process, both internally and externally, to intersect multiple points across the supply chain. The barcode label allows businesses to identify, group, ship, locate and track goods and merchandise that flow upstream and downstream in their supply chain.

As the business environment becomes more global and complex, companies need to look at labeling differently to meet the demands of new multi-faceted, dynamic supply chains. Today's supply chains are enablers of business and growth, driving topline revenue and overall efficiency, leading to greater profitability. Labeling has become a mission-critical segment of the modern supply chain. Companies today are recognizing the integral part that labeling plays in gaining true supply chain efficiency, achieving higher levels of customer satisfaction, maintaining business continuity and meeting evolving regulatory demands.

So the questions are - How has labeling changed with the new global supply chain model and how can labeling solutions meet the needs of today's enterprise businesses?

ENTERPRISE LABELING: THE NEW FRONTIER IN LABELING

Labeling is no longer just a tactical necessity. Labeling has become a strategic imperative and C-Level executives are recognizing labeling as a part of the business that influences a variety of key business drivers and directly impacts their top and bottom lines. This focus on the strategic value of labeling has required a different approach - a newer more innovative approach to labeling called "Enterprise Labeling."

Enterprise Labeling integrates labeling processes with business processes to standardize mission-critical labeling across the supply chain. This approach promotes integration to applications that serve as a source of truth for label data, enabling labeling to be both dynamic and data driven. It allows businesses to react to evolving regulatory, language, regional, business and customer specific requirements by leveraging the power of configurable business logic. Enterprise Labeling empowers business users with the flexibility to design and update labels to address complex and variable business needs. Printing natively to printers or devices enables companies to meet the performance and scalability requirements of a global supply chain. Deployed with best practices and domain expertise, Enterprise Labeling provides a standardized approach to ensure labeling consistency throughout an organization and its supply chain while offering the power and flexibility to meet complex, global and high volume labeling requirements.

Over the years, many businesses have utilized a variety of "homegrown" or custom solutions, third party applications and native ERP functionality to address their labeling needs. However, with the challenges of evolving global supply chains, as companies change the way they do business, they must also take a more global view on labeling.

This is prompting companies to embrace the Enterprise Labeling model, which empowers businesses to standardize for consistency and control, while allowing them to manage today's complex label requirements. "Labeling solutions must be dynamic and scalable with advanced automation and integration capabilities to successfully deal with the vast amount of customer and regulatory requirements in today's ever-evolving global supply chain," commented VDC Research Senior Analyst, AutoID & Data Capture, Richa Gupta. "Enterprise Labeling is a strategic enabler for customer responsiveness, regulatory and standards compliance, brand consistency, enterprise collaboration, business continuity and supply chain efficiency," she added.

WHY IS LABELING A MISSION-CRITICAL COMPONENT IN TODAY'S GLOBAL SUPPLY CHAIN?

As technology continues to evolve and business continues to expand globally, companies will extend their reach outward aligning with business partners, distributors and suppliers around the world. This means they must now concentrate on a variety of customer specific, regional, language and regulatory requirements, to meet all the complexities of working in a global supply chain.

As a core component in supply chain operations, labeling contributes to a wide range of factors. In many instances, without proper labeling, production lines stop, productivity is impacted and business is lost. Mislabeling can cause items to be rerouted and ultimately can result in customer returns and fines, as well as recalls. Of course, labeling plays an important role in offering supply chain visibility, which is viewed as a critical aspect that impacts both cost and service. Labeling is also crucial in ensuring compliance with government, industry and consumer mandates. According to results obtained from VDC's recently conducted end-user survey, adherence to government, industry, and customer standards is a key driver for barcode technology investments, as indicated by approximately 60% of all respondents. However, respondents expressed dissatisfaction with the regulatory compliance support offered by their labeling generation solution partners.ⁱ



THE RISE OF THE BARCODE LABEL

In 1948 the barcode concept was developed at Drexel University and later in 1949 the first patent was filed. However, it wasn't until the 1980's that barcodes became commercially successful. Then, in the late 1980's the first generation of labeling solutions was introduced that provided basic label design and print capabilities.

During the 1990's Enterprise Applications allowed businesses to apply software to automate manual processes in order to connect people and business processes. This rise of ERPs had a significant impact on the supply chain, and leading companies began to examine their labeling process and determine how they connected with their enterprise applications infrastructure.

Also in the 1990's business was becoming more connected with advances in telecommunications and the growing adoption of the Internet. As a result, more data was being passed through the supply chain and the need to represent that information in a barcode was recognized. Coinciding with this development, Microsoft Windows became the new standard and companies began to offer Windows-based graphical label design and print solutions.

At that time, labeling was largely manually driven and was typically not integrated with enterprise applications. This pushed the market for expanded capabilities in labeling software and barcode printing hardware.

In the 2000's evolving technology and the progression of enterprise applications offered the promise of server-based applications and a different, more advanced level of integration to support the seamless exchange of data. Some labeling software solutions followed this trend and introduced server-based solutions that could centrally manage the printing of labels across a network of printers.

As integration between enterprise systems gained prominence, the demand for integrated labeling solutions also became more prevalent. With that, labeling became recognized as a critical component of doing business in the supply chain and moved beyond simply automating manual processes, and is now being viewed more strategically than ever.

In the fast-paced global economy, it's important to identify, understand and measure how certain business drivers impact the supply chain and influence a company's performance and overall success. To do so, you must consider the substantial role that Enterprise Labeling plays in meeting the demands of the following [Key Business Drivers](#): Supply Chain Efficiency, Regulatory Standards & Compliance, Customer Responsiveness, Business Continuity, and Enterprise Collaboration.

SUPPLY CHAIN EFFICIENCY

With today's supply chain becoming more complex and global in scale, it has become increasingly challenging to ensure responsiveness and efficiency throughout. Labeling is a critical factor when considering a business's ability to quickly and seamlessly distribute products from supplier to customer.

To ensure an effective supply chain strategy, companies must consider how labeling intersects with evolving demands such as globalization of manufacturing, safety and quality of products, shorter lead-times, lean business environments, and changing market demands.

Bottlenecks and errors in labeling can cause a major threat to any business and a disruption in the supply chain can be devastating to the company's growth and bottom line. In today's modern supply chain, every product and shipment includes a barcode label, incorporating all of the information necessary to ensure that each item moves throughout the supply chain at the intended speed, and to the intended destination. This makes labeling a mission-critical component where disruptions in manufacturing, inventory, receiving, and shipping can threaten production and distribution and result in hefty fines, loss of customers, and ultimately result in millions of dollars of lost revenue and profitability.

Implementing an Enterprise Labeling Solution offers businesses flexibility, scalability, variability and high throughput to seamlessly meet customer requirements while optimizing supply chain efficiency. Enterprise Labeling Solutions automate labeling, offering an alternative to time-consuming manual labeling, which can reduce supply chain efficiency and increase the incidence of mislabeling. Allowing access to a standardized solution to remotely print labels, extends the capabilities of supply chain partners and helps to avoid costly downtime brought on by system failures and production stoppages.

REGULATORY STANDARDS & COMPLIANCE

The effect of regulations and emerging standards can have a significant impact on business as supply chains become more global and complex. "The necessity to adapt to ever-evolving regulatory standards and mandates across the breadth of today's global organization is a major challenge, one that VDC believes Enterprise Labeling Solutions are primed to proactively address," reports VDC Research Senior Analyst, AutoID & Data Capture, Richa Gupta.



According to industry analysts at VDC, enterprises are streamlining the flow of products and information across channel, network, and organizational boundaries to create a flexible and competent demand-driven supply chain while also meeting their profitability objectives. 73% of organizations surveyed by VDC cite operations improvement and cost savings as leading barcode technology investment criteria. ¹

Labeling is a specific area where constant change is necessary to comply with these evolving standards, especially those where labeling and identifying parts and packages can play a critical role to consumer safety. In the 2014 Enterprise Labeling Survey, which polled nearly 400 supply chain professionals, half of all companies with revenue greater than \$1 Billion polled, indicated that they have regulatory and compliance involved labeling.ⁱⁱ Adhering to regulations that define how products are developed, marketed, shipped, and disposed is essential to avoid fines, retain customers, enter new markets, and in some cases, remain in business.

The core tenet of Enterprise Labeling is to provide companies with the ability to dynamically manage labeling and support the extensive variability brought on by the complexity of regulations, products, geographies, and languages. Implementing Enterprise Labeling empowers business users to enable rapid labeling changes without requiring custom development or waiting for software release cycles. Changes and updates can be made in hours or days rather than months, to meet critical compliance deadlines.

Also, it's important to have a solution that offers the ability to drive label data from a single source of truth. This allows businesses to control consistency throughout a supply chain by using the same data to support existing regulatory labeling requirements. Enterprise Labeling removes the threat of mislabeling and ultimately non-compliance, allowing suppliers, contract manufacturers, and other supply chain partners' access to centralized data to produce labels remotely.



In a recent survey, 65% of those polled listed Customer Specific & Regulatory Requirements as a top challenge today.ⁱⁱ

CUSTOMER RESPONSIVENESS

Changes to labels are often being driven by customer-specific requirements and labeling requirements are more demanding and variable today than ever. Failing to meet requirements in a timely fashion results in dissatisfied customers that may turn to competitors. Businesses that view labeling as a key enabler in customer responsiveness, find increased opportunities to better serve their client base and drive revenue.

Enterprise Labeling provides the capability to meet customer requirements quickly, securing a competitive edge. With Enterprise Labeling business users can be securely enabled to take ownership of the design process, which means eliminating the need for costly and scarce IT resources.

Finally, Enterprise Labeling works to support global expansion for true customer responsiveness. Companies today need to manage variability across multiple customer segments and regions to meet the rigors of the customers' global requirements, including variability in languages, images, formats, and printers.

BUSINESS CONTINUITY

Natural and man-made disasters—whether a storm, a flood, a fire, or geopolitical unrest can wreak havoc with a company's supply chain and have significant financial consequences. Companies operations that include manufacturing and distribution facilities across the globe must ensure continuous flow of goods from suppliers and partners to customers without interruption. However, when it comes to business continuity, companies most often think about

manufacturing and shipping, but frequently overlook an essential element - labeling. Even when issues with production and distribution are addressed, if products cannot be labeled during a crisis, continuity is still broken.

Companies must be able to shift label production from one facility to another rapidly, while leveraging the correct data in order to keep the supply chain flowing. Enterprise Labeling allows users to leverage labels across locations to minimize the impact on the supply chain during a disruption and continue business as usual.

Additionally, allowing multiple facilities and/or suppliers to securely access centralized data to seamlessly produce labels remotely is crucial to business continuity. Enterprise Labeling Solutions offer a centralized approach to labeling providing the ability to securely connect and integrate all key sources of label data to drive label production from any remote site.

ENTERPRISE COLLABORATION

Supply chain collaboration allows global businesses to reduce costs and add value for business partners such as suppliers, contract manufacturers, and third party logistics providers. Companies that understand the importance of sharing information and aligning processes for collectively generating, communicating and refining information are able to streamline business to improve efficiency, increase productivity and respond more readily to any business issues. In a recent Enterprise Labeling Market Survey, which polled approximately 250 supply chain professionals, nearly half of all companies with revenue greater than \$1 Billion view enabling supplier and partner labeling as “very important.”ⁱⁱⁱ Companies that share a common language and approach are able to communicate effectively with business partners to realize new opportunities, cost-cutting strategies, and recommendations for productivity. When it comes to developing a structure for an enterprise to collaborate across the supply chain, labeling must be considered a crucial component of that framework.

Companies that don't attempt to connect business partners across the global supply chain are missing opportunities to meet customer demands, grow markets and increase competitive advantages. Extending secure, shared access to labeling systems can play an important part in generating value from the supply chain network to improve efficiency and meet customer demands. Conversely, when supply chain partners take an individualized approach to labeling there is a tendency to create redundancy, establish inefficiencies, and increase costs.

Enterprise Labeling provides the ability to connect and integrate to key sources of label data and allow businesses to enable suppliers, contract manufacturers and business partners to print labels that have been approved for their use and provisioned for access. This approach ensures consistency of labels produced by business partners, eliminating the need for relabeling upon receipt of goods, and fostering supply chain efficiency. Additionally, the data that is fundamental to labeling is made securely accessible for label printing by business partners ensuring that labels produced upstream meet requirements for downstream use.



86% of \$1B+ companies have six or more locations using labeling as part of their supply chain.ⁱⁱ

HOW IS LABELING CURRENTLY BEING ADDRESSED?

Businesses today that are attempting to address the key supply chain drivers outlined above are consistently hampered by their approach to labeling and the labeling solutions they have implemented. Many of these labeling solutions have not been designed to scale with the business and are not integrated with the existing business processes and vital data sources to provide standardization and consistency. These companies are struggling with how to address a variety of labeling challenges that range from adapting to today's evolving landscape of regulatory standards to addressing mislabeling and customer requirements. Some of the existing methods commonly being used today are outlined below.

HOMEGROWN / CUSTOM SOLUTIONS

Some companies opt to build and manage their own custom or homegrown labeling solutions. Both the homegrown solution developed by internal resources, and the standard custom solution which employs an outside consulting firm or System Integrator, can have significant initial appeal. Each allows the business to develop exactly what they need, when they need it, to meet their existing requirements. However, although each of these solutions may be designed to meet all of the company's needs initially, neither provides much flexibility to accommodate for growth or scalability.

These types of solutions are often customized with layers of third party applications, presenting a multitude of challenges and over time become difficult to maintain and are often a drain on IT resources. As a company evolves and expands so must their labeling solution.

Another variation of a custom solution is to engage with a custom developer to extend native capabilities from enterprise systems such as SAP, Oracle or another ERP solution. Considering that these types of enterprise applications generally don't have a specific focus on labeling, those capabilities are usually very limiting and don't maintain the type of flexibility needed to manage labeling for the enterprise.

Ultimately the lack of flexibility in the homegrown /custom approach can cause an inherent issue with maintenance and a lack of capability to quickly and seamlessly meet evolving labeling requirements. Businesses that employ these solutions find themselves reliant either on IT to manage all label creation and updates, or on the availability of outside resources. Additionally, they can run the risk of losing access to the team who built and implemented their system.

The difficulty of updating and maintaining these types of solutions can ultimately cause issues including downtime, loss of productivity, fines, and even loss of business for those who aren't able to respond in a timely manner to customer and/or regulatory requirements.

THIRD PARTY LABELING SOLUTIONS

Third party labeling applications offered by companies who specialize in software development represent another alternative. These solutions offer a range of different capabilities that include integration to sources of label data,

graphical label designers and print management. Third party labeling solutions are often delivered with services at an additional cost, to help in the implementation and training, and typically include customer support.

Although these solutions are not custom built for individual clients, they are generally developed to meet a wide range of requirements and are maintained and updated periodically by the third party solution providers. They have the benefit of being maintained independent of changes to existing enterprise applications. Further, they remove the burden on IT or consulting organizations to make updates to labels or the labeling system required by the business.

However, these solutions have a wide range of capabilities and some are not designed for the rigors and scale of a modern global supply chain. Certain solutions lack the depth and flexibility of integration, and the ability to scale and meet high volume labeling requirements. Many also only provide limited native printer support, which drives the ability to read existing printer languages and ultimately maximize print performance.

Additionally, some providers deliver exclusively through “non” value-added resellers who may not understand the nuances of the software or the challenges of customer and industry specific requirements. Because all third party labeling solutions are not alike, companies must thoroughly research provider solutions to determine the level of depth and capability each provides to meet labeling requirements.

MULTIPLE SOLUTIONS

It is very common for large global organizations to have employed multiple approaches for labeling across their supply chains. The 2014 Enterprise Labeling Survey reports that 55% of respondents from companies with revenue greater than \$1 Billion are utilizing multiple solutions to meet their labeling requirements.ⁱⁱ This is generally the result of decentralized decision-making around solutions or due to the acquisition of companies that had deployed alternative labeling approaches. The challenge with this type of mixed approach is that they experience the best and the worst of all of those solutions combined and lack a single consistent labeling approach that can be easily maintained and replicated.

Companies that deploy multiple solutions must deal with an increased maintenance level to accommodate all of the varying platforms. This of course requires readily available access to IT resources, which cost time and money. Additionally, these companies run the risk of not having the specific solution knowledge to react to critical business requirements. This limited flexibility also means there is no single platform for growth, impacting a company’s ability to scale.

Clearly there is a wide range of ways companies are addressing the growing complexity and demand for labeling. Today, companies are beginning to take a more strategic approach to labeling and are looking for solutions that combine all of the flexibility of custom and homegrown solutions, with the benefits of third party supported software. These third party applications offer the promise of meeting current and future requirements without needing costly and expensive customizations, while at same time avoiding disruptions to other enterprise applications. The notion of Enterprise Labeling is specifically designed to meet these challenges.



71% of respondents that claim to use multiple solutions expressed interest in standardizing on a new enterprise labeling solution.ⁱⁱ

ENTERPRISE LABELING: THE FUTURE IS NOW

As supply chains become more interconnected and complex, businesses are adopting standards for enterprise applications across their global footprint. Now, they are looking to be able to do the same thing from a labeling perspective. Today's labeling solutions must provide the ability to integrate with existing data sources and enable standardization for a consistent approach to labeling. They also must provide the agility to deal with the nuances of today's complex labeling requirements and regulations, and evolve to support high levels of variability, while providing the speed to meet business requirements. Solutions that support this type of flexibility and performance without requiring extensive coding or customization are the types of solutions that will prove most successful.

Enterprise Labeling offers businesses the opportunity to standardize, to integrate with existing business systems, and to provide dynamic content and flexibility in labeling to meet all of these growing demands. Providing a wide range of capabilities and benefits, Enterprise Labeling allows all types of businesses to meet their unique requirements. The following outlines the foundation for Enterprise Labeling in today's global supply chain.

ENABLING INTEGRATED, DATA-DRIVEN LABELING

Essential functionality in today's solutions include certified integration capabilities to allow companies to automate their labeling process, directly leverage sources of truth for label data, and avoid mislabeling issues which can cost businesses time and money. Integrating labeling with enterprise applications and existing business processes allows companies to maintain their existing systems and user interactions, while automating their labeling processes and improving overall supply chain efficiency. "Our end-user focused research indicates that labeling today is no longer a standalone function. Integration with business process applications such as ERP and WMS is critical to support seamless and pervasive communication across the enterprise," stated VDC Research Senior Analyst, AutoID & Data Capture, Richa Gupta.

ALLOWING RAPID CHANGE TO MEET BUSINESS REQUIREMENTS

Companies faced with evolving customer and business requirements can streamline label changes with advanced business logic. This enables label formatting and content to change dynamically to support a myriad of different label combinations with a minimum number of label designs. Business logic allows users to support a wide range of regional, language, customer and regulatory requirements, while enabling the automatic routing of print requests. When labeling changes are needed, users can quickly and easily configure business rules to redefine labeling to support the new requirements. This is a crucial component for business today as noted in the 2014 Enterprise Labeling Survey with nearly half of all respondents indicating that responding quickly to demands for label changes was a top challenge.ⁱⁱ Also, configurable business rules remove a significant burden from IT, eliminating the need to maintain custom code or manage a staggering number of label designs.



83% of \$1B+ companies have two or more ERP applications integrated to drive labeling.ⁱⁱⁱ

EMPOWERING BUSINESS USERS TO MANAGE COMPLEX LABEL DESIGN

Enterprise Labeling allows centralized control and consistency while enabling people across the supply chain to seamlessly participate in the design process. It offers business users the flexibility to design labels to meet evolving requirements without needing IT assistance. Avoiding the involvement of IT eliminates resource bottlenecks and speeds the process. Labeling solutions offering browser-based capabilities make deploying design capabilities and managing usage easier than ever.



SUPPORTING HIGH VOLUME AND GLOBAL PRINTING

In most global organizations it's critical to be able to print fast to a diverse set of printer makes and models. Enterprise Labeling Solutions allow companies to optimize speed and network efficiency by communicating with printers in their native language, with the ability to design labels independent of the printer make/model. Enterprise Labeling can automate the print process, whether driven directly from enterprise applications, mobile devices or browser-based, on-demand interfaces to maximize print performance.

72% of \$1B+ companies print labels in five or more languages. ⁱⁱ

EXTENDING LABELING FOR BUSINESS PARTNERS

Enabling partners in the supply chain to partake in the labeling process offers a means of cutting costs and streamlining operations. Empowering these external resources is critical, as noted in the recent Enterprise Labeling Survey where 45% of all companies with revenue greater than \$1 Billion view supplier and partner labeling as "very important."ⁱⁱ Allowing these suppliers and business partners to execute label printing enables immediate deployment of label changes, while ensuring accuracy and adherence to standards. Browser-based, on-demand print capabilities have been introduced to enable central control of label designs while providing flexibility to print anywhere across the global supply chain. This practice increases supply chain efficiency, while decreasing the risk and associated costs from mislabeling.



PROVIDING SIMPLIFIED MAINTENANCE & DEPLOYMENT

Offering the ability to standardize and deploy labeling solutions on a centralized basis provides great flexibility. This allows companies to govern how capabilities from design to print, and even integration, are deployed across their global landscape. Providing a standard for labeling, allows businesses to maintain consistency and provide another level of scalability and reliability to support a global network of printers. The focus, even when deploying solutions in a distributed fashion, is to continue to maintain the ability to leverage common data sources, components and configurations across sites. This is essential to handle the rigors of global infrastructures, allowing users to manage outages and connectivity issues, while providing high availability, failover and disaster recovery capabilities. The advent of modern, multi-tier architectures and browser-based labeling solutions offers even more flexibility to enable centralized and decentralized deployment options.

VDC's research shows that targeted, vertical-specific applications with automated label design updates will be highly sought after, particularly as supply chains become global and labeling requirements evolve. ⁱ

LEVERAGING BEST PRACTICES AND DOMAIN EXPERIENCE

Most uniquely, Enterprise Labeling stresses the importance of domain expertise in labeling. This approach focuses on understanding the unique regulations, business processes and regional nuances that are pervasive in each industry to target the appropriate labeling solutions and best practices. At the same time, the mission-critical nature of labeling in a global supply chain requires expert level round the clock support to enable continuous operations.

Looking toward the future, businesses are taking a more standardized approach and respecting the importance that labeling plays in the supply chain. Companies are beginning to understand that they need to develop a strategic labeling strategy alongside their supply chain strategy. They are working toward identifying a solution to meet all of the challenges of functioning in today's global supply chain. The answer is Enterprise Labeling.

Leading providers in the labeling industry are following the path along with other enterprise application providers to offer a common set of solutions that companies are deploying across the supply chain. Enterprise labeling offers a smarter and more efficient way of doing business which provides standardization, allowing companies to achieve labeling consistency and flexibility to support changing requirements. It also provides a labeling platform that is scalable and easily supported and maintained.

"Companies are clearly thinking more globally today and those supply chain executives that view the label as a mission-critical component in embracing this new interconnected, flexible and efficient supply chain model, are poised to sustain a competitive advantage in their market," stated Executive Vice President of Enterprise Mobility & Connective Devices at VDC Research, David Krebs.

To hear firsthand about how Enterprise Labeling can improve your company's labeling practices, browse the [Loftware Resource Center](#) where you can find a webinar or customer case study that interests you.



VDC's research shows that businesses today seek configuration flexibility, vertical market/domain expertise, training and consulting services, and premier support from their technology solution partners.¹

ABOUT LOFTWARE

[Loftware, Inc.](#) 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.

ABOUT VDC RESEARCH GROUP

[VDC Research](#) is a leading technology market analyst firm covering the connected world. Founded in 1971, the firm provides market intelligence to the world's leading technology vendors, who rely on VDC analysts for winning market strategies and technology adoption decisions. With unmatched domain expertise and rigorous primary research methodologies, VDC enables clients to find new opportunities for growth and make critical decisions with confidence. Based on a unique blend of quantitative and qualitative analysis that offer granularity and breadth of coverage, VDC is organized around five practice areas, each with its own focused area of coverage.

RESOURCES

ⁱ VDC Research "Barcode Label Generation Software End-User Survey" (respondents include 162 data capture technology professionals) 2013

ⁱⁱ Loftware "Enterprise Labeling Survey" (respondents include 390 supply chain professionals) 2014

ⁱⁱⁱ Loftware "Enterprise Labeling Market Survey" (respondents include 250 supply chain professionals) 2013