Compliments of LOFTWARE™

Loftware Special Edition

Enterprise Labeling

FOR DUMMIES®

A Wiley Brand

Learn to:

- Automate and streamline labeling by integrating with business applications
- Meet customer labeling demands faster than ever
- Comply with complex regulations across industries and regions
- Scale globally to support your changing business needs



Steve Kaelble

About Loftware

Loftware is the global market leader in Enterprise Labeling Solutions. 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 more than 30 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.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Enterprise Labeling

FOR DUMMIES®
A Wiley Brand

Loftware Special Edition

by Steve Kaelble

FOR DUMMIES®
A Wiley Brand

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Enterprise Labeling For Dummies®, Loftware Special Edition

Published by
John Wiley & Sons, Inc.
111 River St.
Hoboken, NJ 07030-5774
www.wiley.com

Copyright © 2016 by John Wiley & Sons, Inc., Hoboken, New Jersey

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the Publisher. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at http://www.wiley.com/go/permissions.

Trademarks: Wiley, For Dummies, the Dummies Man logo, The Dummies Way, Dummies.com, Making Everything Easier, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates in the United States and other countries, and may not be used without written permission. Loftware and the Loftware logo are trademarks or registered trademarks of Loftware, Inc. SAP is a trademark or registered trademark of SAP SE in Germany and several other countries. Oracle and Java are registered trademarks of Oracle and/or its affiliates. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc., is not associated with any product or vendor mentioned in this book.

LIMIT OF LIABILITY/DISCLAIMER OF WARRANTY: THE PUBLISHER AND THE AUTHOR MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES OR PROMOTIONAL MATERIALS. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR EVERY SITUATION. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING LEGAL, ACCOUNTING, OR OTHER PROFESSIONAL SERVICES. IF PROFESSIONAL ASSISTANCE IS REQUIRED, THE SERVICES OF A COMPETENT PROFESSIONAL PERSON SHOULD BE SOUGHT. NEITHER THE PUBLISHER NOR THE AUTHOR SHALL BE LIABLE FOR DAMAGES ARISING HEREFROM. THE FACT THAT AN ORGANIZATION OR WEBSITE IS REFERRED TO IN THIS WORK AS A CITATION AND/OR A POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE AUTHOR OR THE PUBLISHER ENDORSES THE INFORMATION THE ORGANIZATION OR WEBSITE MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. FURTHER, READERS SHOULD BE AWARE THAT INTERNET WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ.

For general information on our other products and services, or how to create a custom *For Dummies* book for your business or organization, please contact our Business Development Department in the U.S. at 877-409-4177, contact info@dummies.biz, or visit www.wiley.com/go/custompub. For information about licensing the *For Dummies* brand for products or services, contact BrandedRights&Licenses@Wiley.com.

ISBN 9-781-119-32921-3 (pbk); ISBN 978-1-119-32987-9 (ebk)

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Publisher's Acknowledgments

We're proud of this book and of the people who worked on it. For details on how to create a custom *For Dummies* book for your business or organization, contact `info@dummies.biz` or visit `www.wiley.com/go/custompub`. For details on licensing the *For Dummies* brand for products or services, contact `BrandedRights&Licenses@Wiley.com`.

Some of the people who helped bring this book to market include the following:

Project Editor: Martin V. Minner

Senior Acquisitions Editor: Amy Fandrei

Editorial Manager: Rev Mengle

Business Development Representative: Susan Blessing

Production Editor: Kumar Chellappan

Loftware Contributors: Ken Allen, Maureen Perroni, Josh Roffman

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Table of Contents

Introduction 1

About This Book 1
Foolish Assumptions 2
Icons Used in This Book 2

Chapter 1: What Is Enterprise Labeling? 3

From the Barcode to Enterprise Labeling 3
Linking Labeling with Business Processes 5
Taming the Beast 5
Bringing Order to Complexity 6

Chapter 2: Intersecting with the Supply Chain 7

Driving Supply Chain Efficiencies 7
Keeping Customers Happy 8
Following the Rules 9
Keeping the Lights On 9
Linking Supply Chain Partners 10

Chapter 3: The Essentials of Labeling Success 11

Change Happens 11
Empowering Users 12
Integrate, Automate, Alleviate 13
Making Rules Work for You 14
It Isn't a Small World 14
Turning Up the Volume 15
Best Practice Makes Perfect 16

Chapter 4: Six Trends in Enterprise Labeling 17

Everyone's Getting Involved 17
Heading to the Cloud 18
Partners on the Same Page 18
Dynamic Labeling 19
Living Color 19
Regulations Are Driving Change 20

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Introduction

Supply chains are becoming increasingly global, traveling greater distances, and crossing more borders to connect with suppliers on one end and customers on the other. And the more global they become, the more complex they become. Regulations are confusing and constantly evolving, and customer requirements are more complicated and demanding than ever. Companies are realizing how much labeling has become a mission-critical part of the supply chain, with a powerful and positive impact on compliance, responsiveness, revenue, and efficiency.

One of the keys to making this happen in a successful way is by integrating labeling systems with existing business processes and spreading them across the organization. That's what Enterprise Labeling is about — connecting labeling systems directly with the data source of truth, centralizing operations, and blending the power of standardization with the flexibility needed to address requirements that vary dramatically from one place and one customer to another.

About This Book

Enterprise Labeling For Dummies, Loftware Special Edition, is your introduction to the new world of labeling that links all parts of the supply chain, both internally and externally. On the pages of this book are details on the background of bar-code labeling, the value of connecting labeling with existing business processes, and efficiencies that an enterprise-wide approach can have on your supply chain. The chapters ahead discuss how global regulations can make labeling a challenge, as well as how customer requirements provide both hurdles to overcome and opportunities to build a competitive advantage. They spell out the essentials for Enterprise Labeling success and highlight labeling trends that are keeping companies on their toes.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Foolish Assumptions

Every reader is a unique individual. I know that. But that said, as I've prepared this book, I've based these words on a few assumptions about you, the reader.

- You fill a role within your organization that has an interest in labeling — perhaps in manufacturing, distribution, operations, IT, regulatory, packaging, marketing, the supply chain, or one of the many other areas affected by labeling.
- You recognize that labeling is both increasingly complex and vitally important to your company's supply chain.
- As an executive, you hear all the time about the complexity and problems of labeling, and the money it costs, and you need to know the basics. You don't have all the time in the world and would appreciate an introduction to a better, more enterprise-oriented approach to labeling.

Icons Used in This Book

Throughout the pages of this book, you'll notice attractive icons in the margins. They're there to draw your attention to some important things.



The words next to this icon are of particular importance to your success in Enterprise Labeling, so please pay special attention to them.



This paragraph contains some helpful hints for making Enterprise Labeling work in your organization.



Labeling problems can be potentially disastrous and costly, so please pay special attention to these paragraphs.



Want to track the trends in labeling? The words next to this icon include survey data on the subject.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Chapter 1

What Is Enterprise Labeling?

In This Chapter

- Tracking the history of barcodes
- Connecting labeling with business processes
- Steering clear of homegrown solutions
- Bringing order to complexity

Labeling, or the systematic process of creating labels to convey information throughout the supply chain, isn't what it used to be. Don't worry — that's a good thing! As your business has grown larger and more complicated, your labeling needs have become all the more challenging. Fortunately, Enterprise Labeling can bring order to the chaos.

This chapter explores how barcode labeling has changed through the years, why you need to connect labeling more seamlessly with your business processes, and why homegrown or custom solutions won't solve all your problems.

From the Barcode to Enterprise Labeling

Barcodes are virtually everywhere today — on every product shipped from a factory, every pallet in a warehouse, every carton in a distribution center, and every item in a store. You can find barcodes on mobile phones, equipment asset tags, express packages, and even shipments of emergency medical

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

supplies. Not long ago, manufacturers had to worry about whether the next box of machine parts would arrive in time for Tuesday's production run, and cashiers manually punched in every can of green beans at the cash register. Today, barcodes handle all of that, at every step in the supply chain.

Barcodes, needless to say, have changed life dramatically. The graduate student at Drexel Institute of Technology who pioneered the concept in 1948 probably could never have dreamed where the idea would lead. Indeed, it wasn't until the mid-'70s that a supermarket in Ohio made history by scanning a package of chewing gum, the first time the technology was used to sell a retail product. It was another decade before the majority of major retailers had barcode technology in place.

Even before that, back in the 1950s and '60s, another icon in the industry, Mr. Andy Anderson, was involved in the first auto-identification efforts to track and identify inbound and outbound railroad containers using a specialized, electro-reflective, multicolored symbology — what we now know as the barcode. In 1986, Mr. Anderson founded Loftware, one of the first barcode labeling software companies.

There were lots of important developments in the 1990s, including the rise of more powerful enterprise applications that could automate business processes, new capabilities for businesses to design and print labels, and the advent of new Internet-enabled business functions. It was only a matter of time before these advances started converging across the supply chain to power vast new possibilities.

That said, progress has been anything but fast or easy. It was clear in the 1990s that the barcode offered great potential for representing supply chain information, but labeling tended to be manual, with users typing in label data, even as enterprise applications became increasingly integrated and server-based in the 2000s.

These days, there's widespread recognition that integrated labeling is a whole lot more than just automating those manual processes — and, in fact, that it's a strategic part of doing business in the supply chain. But many organizations have a long way to go to maximize the capabilities of Enterprise Labeling.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Linking Labeling with Business Processes



Simply put, the concept known as *Enterprise Labeling* focuses on linking labeling processes with business processes, all across the supply chain. Labels convey information, and Enterprise Labeling allows direct integration with the applications that are the source of truth for that label data. This allows labeling to become dynamic, because its data is driven by business applications.

A direct link to enterprise applications is just the beginning. Enterprise Labeling's dynamic nature gives you a powerful ability to adjust labeling to account for continuous change. Regional, language, industry-specific, and customer-specific requirements are no longer obstacles but opportunities when you can apply business logic.

With Enterprise Labeling, you have the flexibility to design and update labels that meet complicated, variable business needs. As your global supply chain scales, your labeling infrastructure can print natively to devices and printers in as high a volume as needed, an approach that encourages consistency and reduces network traffic while allowing the required variability.

Taming the Beast

Evolution isn't fast, and it often isn't pretty. When it comes to making labeling work across global supply chains, many organizations have tried to meet their evolving needs through a variety of homegrown solutions, custom solutions, third-party products, or native enterprise resource planning functionality. Such solutions may provide steps in the right evolutionary direction, but they don't get the job done adequately.

The problem is that solutions that aren't integrated can't always meet the challenges of global supply chains. They may not be equipped to keep up with the changes in business processes that a global company requires.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

These solutions may seem appealing initially. For one thing, they may have the appearance of being cost-effective because they focus on a narrower part of the organization. Whether you're using internal resources to develop custom applications or hiring a system integrator, you may find something that seems like it's just what you need to meet existing requirements.



The key word is *existing* requirements. Homegrown or custom solutions are often not sufficiently scalable. They may rely on layers of third-party applications that must be untangled and rewoven in order to grow and change, and that may drain your IT resources. These solutions are often difficult or costly to maintain, which can lead to downtime and loss of productivity.

The lesson is: Look down the road. You can't always be sure what the future holds or where your organization will be heading, but you'll be thankful if the vehicle you acquire can go the distance.

Bringing Order to Complexity

Today more than ever, the supply chain enables business growth and drives top-line revenue. It also directly affects the bottom line by enhancing overall efficiency. The supply chain is multifaceted, dynamic, and complex, and labeling is a critical piece of this picture.

That's what makes the Enterprise Labeling model so vital. Businesses use it to standardize for both consistency and control, while at the same time managing label requirements that are more complex than ever. Customer and regulatory requirements are demanding, not always predictable, and always on the move. Labeling solutions must respond by being scalable and dynamic, capable of powerful and advanced automation and integration.



Enterprise Labeling maximizes supply chain efficiency and builds bridges for collaboration across the enterprise. It also offers a foundation for business continuity, increases customer responsiveness, promotes brand consistency, and ensures regulatory and standards compliance.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Chapter 2

Intersecting with the Supply Chain

In This Chapter

- Driving supply chain efficiencies
- Ensuring that your customers are happy
- Complying with rules and regulations
- Maintaining business continuity

Some like to say "it's a small world." As global trade intensifies, that's a fitting thing to say. But ask any company that has expanded its supply chain across that small world, and you'll find out that — small or not — it's a complicated world.

Indeed, reaching out to align with global business partners, suppliers, and distributors opens the door to a plethora of customer-specific, regional, and regulatory challenges. This chapter explores how Enterprise Labeling intersects with the complex global supply chain to drive new efficiencies, respond to the needs of customers, deal with regulatory hurdles, and handle unforeseen dilemmas.

Driving Supply Chain Efficiencies

Even as customer expectations continually climb, so do the challenges in managing the supply chain to meet those expectations. The complex, global nature of the supply chain makes it that much trickier to maximize efficiency and ensure responsiveness. Labeling is a critical component.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Companies can't arrive at an effective supply chain strategy if they don't consider how labeling intersects with the evolving demands of the supply chain. Shorter lead times and changing market demands are posing challenges, along with lean business environments and the globalization of manufacturing.



In that kind of setting, error-free labeling is more important than ever, given just how disruptive to the supply chain label errors and other bottlenecks can be. Pretty much every shipment flowing through the supply chain has a barcode label that conveys all the vital information necessary to get the shipment where it's going at the right speed and time.



If the label isn't right, it can disrupt manufacturing, inventory, and movement of product. Production and distribution can grind to a halt, resulting in unhappy customers, potential fines, and as a result, major losses in revenue and profit.

With Enterprise Labeling, this all-important function is standardized across the enterprise and fully automated, which not only boosts efficiency but also reduces the chances of error. Standardization improves consistency, reliability, and uptime, eliminating bottlenecks in the supply chain.

Keeping Customers Happy

Businesses have been following the "customer is always right" philosophy for generations now. But when it comes to the evolving supply chain, keeping customers satisfied is becoming increasingly challenging.

Customer-specific needs and labeling requirements, which vary by region and even language, are more variable now than ever, and that's driving changes to labeling. Customers' labeling demands are often an extension of the demands placed on products, and customers are increasingly particular about the format, the data attributes, the branding, and the barcode. Enterprise Labeling turns such challenges into opportunities, because customer responsiveness ultimately drives revenue and profit.

Enterprise Labeling allows users greater control over the label creation and update process. That, in turn, enhances the ability to meet customer requirements quickly and cost-efficiently,

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

because it often eliminates the need to call in IT resources that are frequently scarce and always expensive.

Following the Rules

If you're going to do business on a global scale, each region has its own rules. Or, perhaps it's more accurate to say, *sets* of rules. Regulations — whether set by government or standards bodies — cover all aspects of supply chain operations, right down to the labeling.



A survey of supply chain professionals confirmed that the majority face labeling-related regulatory and compliance requirements. Indeed, proper labeling and identification of parts is often seen as critical to product safety.

That means labeling is subject to constant change, as standards evolve and as products move through the supply chain. Enterprise Labeling allows companies to dynamically manage their labeling to keep up with this high level of variability.



Enterprise Labeling can, in fact, handle this challenge with relative ease, allowing rapid changes — in hours or days, rather than weeks or months — in order to meet compliance deadlines. And users can handle the changes themselves, rather than waiting for IT.

And one more thing — it's all driven by a source of truth, because labeling is integrated with other business applications. That reduces the risk of errors and allows consistency across the supply chain, even as your organization interacts with suppliers and contract manufacturers.

Don't forget, compliance is critical to enter new markets and it can prevent costly fines and improve consumer safety. These regulations can impact revenue and profitability. Most importantly, they can save lives.

Keeping the Lights On

Business continuity planning is a vital part of long-term success. Your business must be able to move forward even in the

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

midst of disaster, whether it's something natural like a storm or a fire, or manmade such as geopolitical unrest.

Your operations professionals spend lots of time thinking the unthinkable, planning so that manufacturing and distribution across the global supply chain can carry on, even as problems arise. But are they thinking about the labeling?



If they aren't considering the labeling, they should. You can go to heroic lengths to keep the lights on and the processes moving in the plants and warehouses, but if products can't be labeled during a disaster, your business continuity has been broken. In the event of a crisis, you need to be able to quickly shift label production from one facility to another.

Enterprise Labeling solutions can help tremendously with this challenge because they are, by nature, adept at allowing you to orchestrate complex labeling needs across multiple locations. And because it can enable multiple suppliers and facilities secure access to centralized labeling and data, Enterprise Labeling is well suited to handle the challenge when circumstances are less than perfect.

Linking Supply Chain Partners

Enterprise Labeling isn't all about you. Yes, it's a solution to your organization's labeling challenges, but it likely entails connections up and down the supply chain. Your solution can add value not only for you but also for suppliers, contract manufacturers, third-party logistics providers, and others.

It also may mean extending labeling processes to those outside parties. An Enterprise Labeling solution can enable these business partners to print labels approved for their use, which can ensure consistency and eliminate the costly practice of relabeling goods upon receipt. In short, connecting business partners across the supply chain allows companies to meet new customer demands and grow into new markets.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Chapter 3

The Essentials of Labeling Success

In This Chapter

- Rolling with the changes
- Letting users handle the design
- Automating and integrating
- Dealing with requirements and regulations
- Going global successfully

Ready to make Enterprise Labeling happen in your organization? You have plenty of things to consider as you choose a solution and a provider.

This chapter sets forth a game plan for venturing into the business of Enterprise Labeling. It spells out the various topics you should consider as you plan an implementation and consider who will help make it happen.

Change Happens



Whether your organization is large or small, you have to deal quickly with change. It just gets more complicated as the organization grows. Enterprise Labeling helps you deal with rapid change across the global supply chain. One of the keys is centralization. Enterprise Labeling gives you the ability to apply a common set of label templates for your entire organization, templates that can be dynamically filled with label content from your source of truth.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Here's where the magic comes in — your label templates can adapt to all the required variations that are driven by region, language, product, and brand information. Instead of having a ridiculously large library of label templates that is impossible to manage, you can drive a wide variety of labels from a small number of highly variable templates. And when you need to make a change that affects a bunch of those different label variations, you can make that change in just one place.

Empowering Users

You ask a lot from your labels, but the two most important things that labels must be are correct and consistent. *Correct,* of course, means the label contains accurate information in the right format. *Consistent* labels encourage efficiency up and down the supply chain — from one location to another, one region to another.

Consistency is easier said than done, but the right Enterprise Labeling solution can help tremendously. Business users must have the ability to create and update labels. They need to be able to do so without calling for help from IT or outside consultants. They need easy-to-use design capabilities — often known as WYSIWYG, short for "what you see is what you get."

Giving label design power to the actual business users offers so many advantages. Users no longer need to be concerned with the availability of IT resources, which is a good thing because those resources are often scarce. And users don't need to spend time and energy ensuring that those folks understand the requirements. If users need a last-minute change, they can make it themselves.



That isn't to say IT no longer has an important role. IT resources are your allies in ensuring that your labeling system gets the data it needs and is integrating effectively with the source of truth. You need IT for access to that information, connectivity, security, and system maintenance. You simply don't need their help for creating and updating labels.

Instead, others should have a say in label design. You need input from marketing and branding experts, those involved in operations and production, and the regulatory specialists. Your labels must account for industry, customer, and regional demands. Stakeholders up and down the supply chain need to

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

weigh in on what kind of information shows up on the label, as well as how it is formatted.

Integrate, Automate, Alleviate

Some things are best done by hand. Automation is not the best way to make a pizza crust. The human touch is what makes a fine craft or a work of art special.



On the other hand, you have nothing to lose and lots to gain when you eliminate the manual processes in labeling. That's what you accomplish when you integrate labeling with enterprise applications and the source of truth for label data. Enterprise Labeling adds incredible efficiency while preventing mislabeling issues that can cost time and money.

You've already invested in those enterprise applications that house your data. Why go to the trouble to replicate data in another location, simply for labeling? Why not drive the label directly from the systems in which you've already invested?

Efficiency and accuracy are clearly important, but that's only part of the story. With Enterprise Labeling, you create a closed-loop process, which provides better traceability through the supply chain. Your labeling is connected directly to applications or repositories that also happen to contain all the important product and transactional data needed for labels.

That's helpful in a number of ways, including tracing an item as it moves through the supply chain. Every label scan can be fed right back into the enterprise application. Customers can check the original source of data and gain visibility into where items are in the supply chain.



Data can come from practically any kind of application, from enterprise resource planning applications such as SAP and Oracle to supply chain management systems, from regulatory databases to product lifecycle management systems. These systems can fill the label with customer information, details about the product, manufacturing and inventory information, order numbers, and all kinds of other details.

In fact, Enterprise Labeling can interact and draw from multiple sources of information. You simply need to be sure you have flexible integration capabilities to make it possible.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.



Integrating labeling with your existing applications and processes saves you the trouble of creating one more process that doesn't add any value. Connected is a whole lot better than disconnected.

Making Rules Work for You

There are so many requirements that together make labeling increasingly complicated. Regional variations, language requirements, customer-specific needs, and regulatory mandates all must be met successfully, quickly, and efficiently.

The fact is, there's no such thing as a standard label that works for everyone. Customers are increasingly particular about the labels on the goods and products they receive, distribute, and sell. Even if the product is the same from one customer to the next, each customer may have different labeling requirements, with different data or different images.

Regulatory requirements vary greatly, depending not only on the country and region, but also on the industry. If your business is something along the lines of chemicals, pharmaceuticals, medical devices, food and beverages, or electronics, odds are you're facing lots of regulatory complications that affect your labeling, and those regulations vary by country.



The hoops you must jump through may be a pain or a blessing — it all depends on your approach. The more you must deal manually with requirements and regulations, the more it'll cost you in time and money. Using business rules to automate and deal with all these variations can turn that burden into an opportunity to outperform your competitors.

It Isn't a Small World

The more global your organization becomes, the more your labeling must adapt to different customs, standards, and languages. Just as you can't easily travel in a distant land without speaking the language, you can't effectively label in that land without understanding its unique requirements.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Enterprise Labeling solutions are, of course, centralized and standardized, but they also need the ability to allow localized autonomy when required. The good news is that it is, indeed, possible to achieve the best of both of these worlds.



An Enterprise Labeling approach can allow access to the same centralized data, regardless of location, and it can draw upon standardized labeling templates. And at the same time, it can allow users on the other side of the world to log in and make certain adjustments to labels to meet their local needs. You still have the power of templates that drive global consistency, but you get the flexibility to make them work wherever you are operating.

Yeah, you may have some flexibility if you stick with the dozens of different labeling solutions you need to operate all over the world. In fact, as your organization has expanded, you may have acquired a whole fleet of different systems, each designed for its own purpose and place. But with multiple systems you risk consistency, and it's far more challenging and costly to maintain.

The troubles with that disjointed approach begin with label design questions and potential branding errors. Beyond that, a patchwork of different systems around the globe is an IT nightmare. By contrast, an Enterprise Labeling solution uses the same technology platform across the globe. That makes the system easier to maintain and allows easier problem solving if one area experiences downtime. With a unified system, another area can ramp up and pick up the slack while the interruption is fixed.

Turning Up the Volume

The bigger your organization, and the more you scale up across the globe, the more powerful you need your labeling operation to be. You need a high-volume, highly efficient system — otherwise, you may experience delays, missed deadlines, customer dissatisfaction, fines, and production delays.

Effective Enterprise Labeling gives you the power to easily scale your labeling system to handle the volumes of label throughput, no matter how high they get. You need a system with the speed and network efficiency that gets the job done, regardless of your printer's make and model.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Achieving this level of efficiency begins with powerful printer management capabilities. Your system must be able to see and connect with printers in faraway places as well as with printers right around the corner.



Your system also must work well regardless of the computer from which you're working. Browser-based capabilities are key — you're much better off if you don't need to install client software to make the system work.

Enterprise Labeling makes a complex world seem simple. The right system can reduce print streams to minimize network traffic and increase print speed. And a system with adequate scaling capabilities makes it a snap to add a new location or absorb an acquisition, because labeling can be managed centrally.

Best Practice Makes Perfect

Don't be afraid to ask for help. Technology can provide some fantastic answers to the challenges of labeling in a global supply chain, but it needn't be a do-it-yourself project.



Professional services can offer the right guidance and expertise to address unique business challenges. In order to get the most out of an Enterprise Labeling Solution, companies should take advantage of the best practices available — advice and knowledge that can only come from a vendor's real-world experience with customers and the knowledge of the software that the vendor develops and implements.

The right services and consulting ensure that the right components are chosen, the right integrations are put in place, the right business rules are enacted, and the right data sources are identified.

Ask your provider for training assistance, too. You'll need it for sure at the time of implementation, but you'll also likely benefit from training as your organization grows and your needs become more complex.

Of course, you'll also want access to the best technical support. And if you're a global operation that runs 24/7/365, you need your labeling to do the same. That means you need your tech support on that schedule too.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Chapter 4

Six Trends in Enterprise Labeling

In This Chapter

- Involving players across and outside the organization
- Benefiting from cloud-based advances
- Leveraging data with integrated systems
- Increasing use of dynamic labeling
- Making the most of color labeling
- Keeping up with regulatory changes

No matter what role you have in an organization, you'll be well-served by staying ahead of the curve and on top of the trends — rather than being behind the times. But to paraphrase a non-business guru, Bob Dylan, these times they are a-changin'. With that in mind, here are six ways the labeling business is a-changin'.

Everyone's Getting Involved

Who cares about labeling? These days, more and more people across the organization and along the supply chain. As labeling in today's global supply chain becomes more complex, companies are realizing the vital role it plays in meeting customer and regulatory demands. Here are some of the various departments and operational areas that may have a need to think about labeling: manufacturing, warehousing, supply chain, regulatory, quality, operations, IT, logistics, marketing, and packaging. Labeling is clearly a global initiative, with requirements specified by all kinds of people.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

As the number of people and corporate groups involved in labeling grows rapidly, it's becoming more and more important to provide labeling solutions that can meet their varied needs. With so many cooks in the kitchen, an Enterprise Labeling approach with the concept of centralized labeling is increasingly attractive.

Heading to the Cloud



Isn't everyone moving to the cloud? Technology is moving at a rapid pace and new technology platforms are bringing dramatic change to business processes. One study, for example, found that nearly two-thirds of enterprise applications that are deployed in the next three years will live in the cloud, not on the organization's own local servers. So it's critical that today's labeling solutions can connect to and work with these applications, whether they are deployed on-premises or in the cloud.

The time is ripe for a more centralized approach to labeling. Companies need unified management of administration and label templates across the supply chain. They need the ability to grow and scale easily, and they need powerful disaster recovery capability. Centralized, cloud-based technology reduces the complexity and the headaches involved in installing and maintaining labeling systems. The result is instant access to functionality, streamlined management, and greater security over access and visibility.

Partners on the Same Page

Because there's so much labeling happening up and down the supply chain, and because there's so much value to be had by integrating this labeling, it's increasingly important to get others involved. Enterprise Labeling is not just about bringing together all parts of your organization — you're also likely to need to involve outside suppliers and other business partners. Indeed, handoffs from one organization to another are critical places where relabeling has been needed in the past, and where mislabeling is a real risk.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Businesses are looking for an easy way to get everyone on the same page. Upstream and downstream, from sourcing to production to distribution and delivery, companies are finding places where labeling intersects the supply chain. The more these different places can be integrated, the more efficient and productive the supply chain becomes, and the less likely it will be affected by mislabeling or the need to relabel.

Dynamic Labeling



Of companies that have sales of at least a billion dollars, more than two-thirds say they'll be integrating labeling with their enterprise applications within the next few years, if they have not done so already. One of the biggest reasons is the need to deal with change. When your company designs labels that leverage configurable business logic, you're more likely to meet customer demands, be on time for delivery dates, and avoid fines for non-compliance.

Companies without a labeling approach that enables rapid change globally need to keep track of a massive number of label templates, and all of them must be created and maintained separately. Maintaining labels this way is a whole lot more expensive and definitely a lot less consistent. On the other hand, configurable business logic lets users quickly and easily support new customer requirements, allowing label formatting and content to be changed dynamically.

Living Color

You could argue that labels printed in multiple colors are prettier than black-and-white labels. Who could disagree with that? But there are plenty of other reasons why color labeling is happening more and more. For one thing, some regulatory requirements specify the use of color — for example, to highlight certain safety warnings related to what's in the package. Customer branding and use requirements may specify the use of color, too. Color is also used on labels to distinguish inventory and sizes and variations of product.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

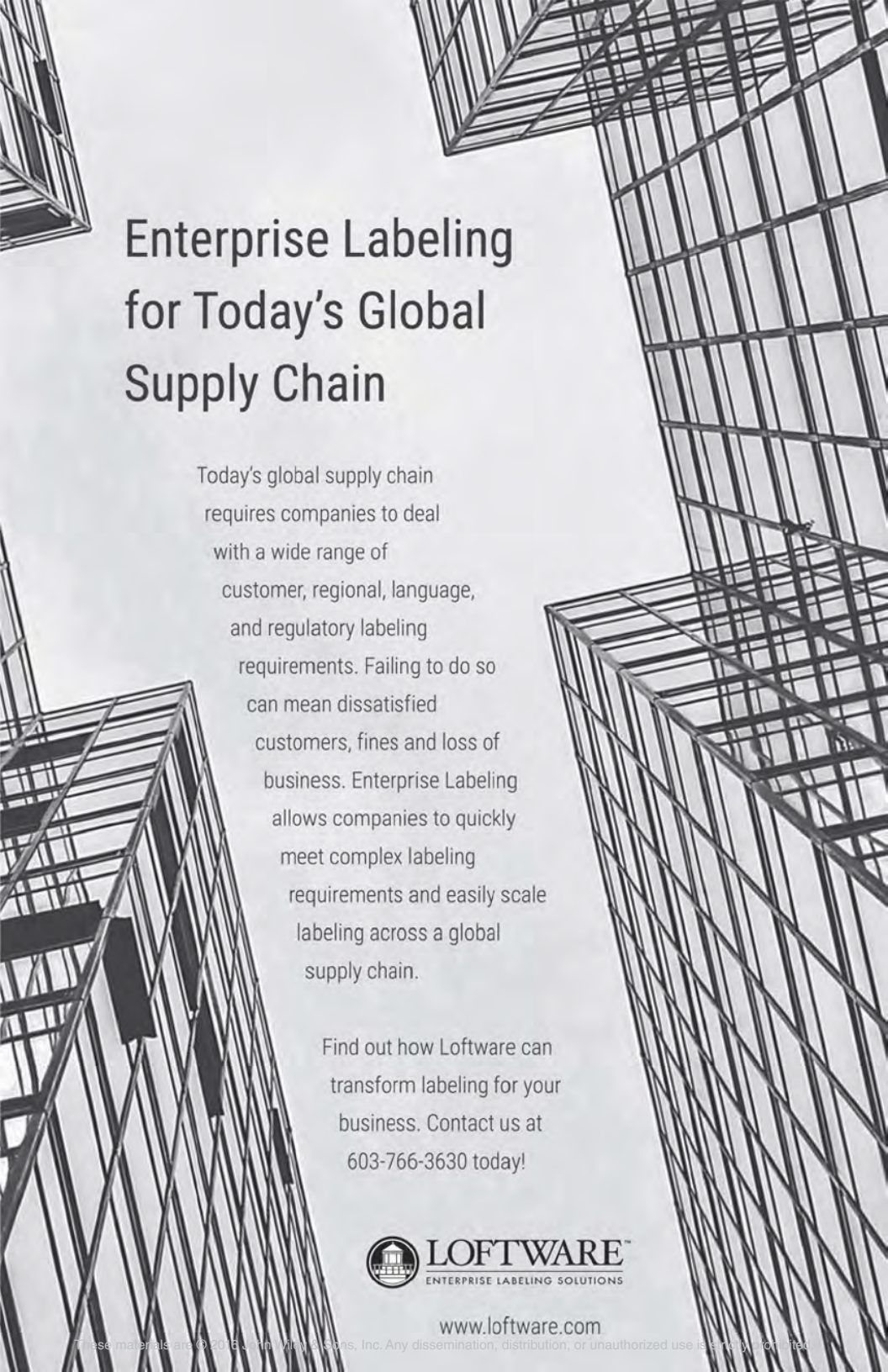
You might be able to support some of those branding and regulatory labeling challenges with preprinted label stock, but color label printing can eliminate that need. That's a good thing, because it's cheaper to print on blank labels and you can avoid having to manage an inventory of label stock. Getting rid of that inventory saves both time and money, because you longer have to constantly switch label stock, or eat the cost of wasted stock that is no longer in use.

Regulations Are Driving Change

Businesses in almost every industry today need to deal with regulatory hurdles. Regulations and standards cover lots of industries, including chemicals, food and beverages, medical devices, pharmaceuticals, and electronics, to name a few. Requirements seem to change so quickly that old-school labeling methods just can't keep up with them. Businesses need labeling solutions that can easily adapt to new labeling requirements.

In order to comply, companies must find new and improved ways to include specific data elements on labels, to incorporate designated formatting and even, in some cases, pictograms and other regulatory data — the list goes on. But there's an answer — the best way to deal with these complexities is to connect your labeling with your business applications, integrating with your source of truth, so you can use that data to trigger your labeling. Then you can handle regulatory change and avoid fines, supply chain disruptions, and loss of business.

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.



Enterprise Labeling for Today's Global Supply Chain

Today's global supply chain requires companies to deal with a wide range of customer, regional, language, and regulatory labeling requirements. Failing to do so can mean dissatisfied customers, fines and loss of business. Enterprise Labeling allows companies to quickly meet complex labeling requirements and easily scale labeling across a global supply chain.

Find out how Loftware can transform labeling for your business. Contact us at 603-766-3630 today!

LOFTWARE™
ENTERPRISE LABELING SOLUTIONS

www.loftware.com

These materials are © 2016 John Wiley & Sons, Inc. Any dissemination, distribution, or unauthorized use is strictly prohibited.

Regain control over your global supply chain labeling

Barcode labeling has evolved to become a critical part of global supply chain strategy. In this book, you'll learn best practices for driving efficiencies in your supply chain. Find out how Enterprise Labeling can help you meet complex labeling requirements while saving time and money — and keeping customers happy.

- ***The evolving barcode* — *see how traditional out-of-the-box software has developed into an Enterprise Labeling Solution model that integrates with business applications to meet complex global supply chain requirements***
- ***Avoid supply chain roadblocks* — *eliminate delays, keep up with customer and regulatory requirements, and ensure business continuity***
- ***Adopt labeling best practices* — *integrate labeling with business processes, empower business users, and ensure proper training and support***
- ***Drive supply chain efficiencies* — *provide access to partners, dynamically change label data, and manage high volume printing***



Open the book and find:

- **What Enterprise Labeling is, and what it can do for you**
- **How to drive efficiencies in labeling across a global supply chain**
- **How to keep up with changing regulatory and customer requirements**
- **Making the most of color labeling**

Making Everything Easier!™

Go to Dummies.com®
for more!

Steve Kaelble is an author and corporate communications specialist who enjoys bringing complicated subjects to life in easy-to-understand ways.

FOR DUMMIES®
A Wiley Brand

Also available as an e-book

ISBN: 978-1-119-32921-3
Not for resale

WILEY END USER LICENSE AGREEMENT

Go to www.wiley.com/go/eula to access Wiley’s ebook EULA.