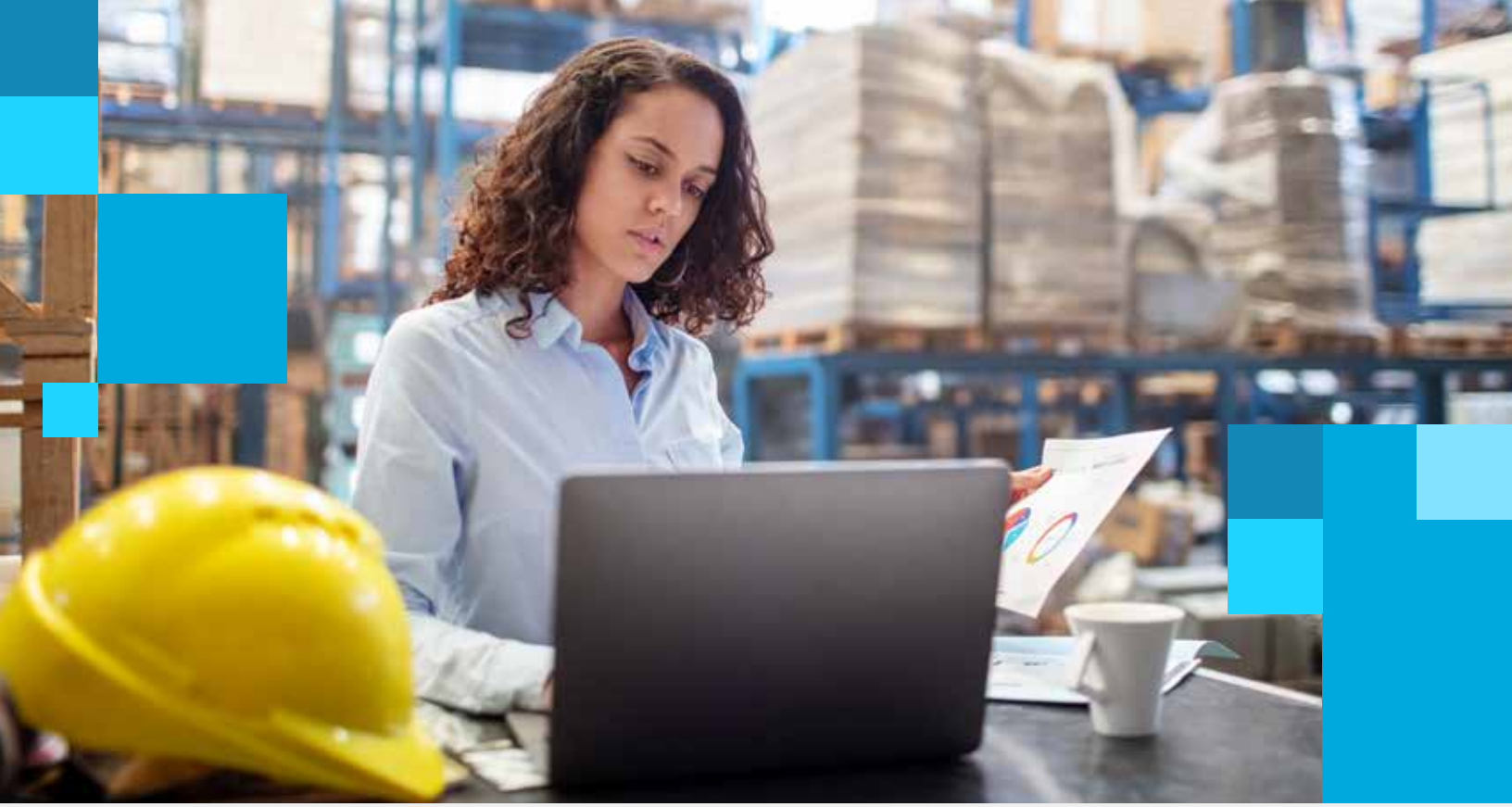


Creating a roadmap for sustainable labeling in the cloud

A cloud-first labeling approach means better traceability, less scrap, fewer labeling errors, and less rework

Loftware™

White Paper

It's time to move your labeling to the cloud

With the cloud, more sustainable labeling practices are within reach.

Today's consumers see themselves as catalysts for change. More of them are intertwining sustainability into their purchase decisions, effectively forcing brands to implement and use sustainable business practices that meet or exceed customers' expectations around environmental, social and governance (ESG).

Consider these facts:

- Over the last five years, there's been a 71% increase in the number of global, online searches for "sustainable goods."[1]
- Consumers believe the brands have as much responsibility as governments do when it comes to driving positive environmental change.[2]
- Two-thirds of US adults (66%) say they're willing to pay more for sustainable products.[3]
- A recent McKinsey survey found that 66% of all consumers—and 75% of millennial buyers—consider sustainability when making a purchase.[4]
- 75% of supply chain leaders understand the importance of the circular economy, yet just 19% feel their organizations have sufficient capabilities in this area.[5]

Consumers are driving the charge on the ESG front, and companies have to be able to respond or risk losing customers, investors, and partners. "Customers now align themselves with brands that are compatible with their values and priorities," Business News Daily points out. "With environmental stability as a high priority for many people, it's important that businesses do their part to lower their carbon footprints."

1. Martins, Andrew, Most Consumers Want Sustainable Products and Packaging, Business News Daily, February 21, 2023
2. Martins, Andrew, Most Consumers Want Sustainable Products and Packaging, Business News Daily, February 21, 2023
3. Majority of US Consumers Say They Will Pay More for Sustainable Products, Sustainable Brands, October, 2023
4. The State of Fashion 2020, McKinsey & Co.
5. Turner, Jordan, 4 Initiatives That Will Give Your Supply Chain a Competitive Advantage, Gartner, February 23, 2023

Driving sustainability across the enterprise

As more customers shift purchasing behaviors toward brands that run environmentally friendly operations, cloud-based labeling helps organizations build strong ESG strategies at a time when governments, business partners, investors, customers, and other stakeholders are paying closer attention to these efforts.

Cloud-based labeling solutions can help your company:

- Gain higher levels of overall supply chain sustainability
- Improve product traceability
- Dramatically reduce labeling errors
- Eliminate the rework needed to address and fix those errors
- Reduce scrapped products and pre-printed labels
- Save money
- Eliminate a large global footprint

Because labeling touches all corners of an organization, moving it into the cloud positively impacts the entire enterprise—from manufacturing and distribution to sales and customer service. Cloud-based labeling solutions also help organizations reduce inventory levels, reduce scrap, minimize their global footprints and ensure all products are made, shipped, and delivered to the right place. This reduces waste, eliminates errors, and saves money.

As noted by John Blake, Gartner Senior Research Director, at Loftware's 2022 Convergence conference, compliance violations in the pharmaceutical industry alone have exceeded $50 billion annually since 2000, while the average cost of non-compliance has grown by 43% over the past nine years. Non-declared allergens, mislabeling, and inaccurate packaging graphics continue to be a leading cause of product delays and recalls, ultimately costing manufacturers millions of dollars in lost sales.

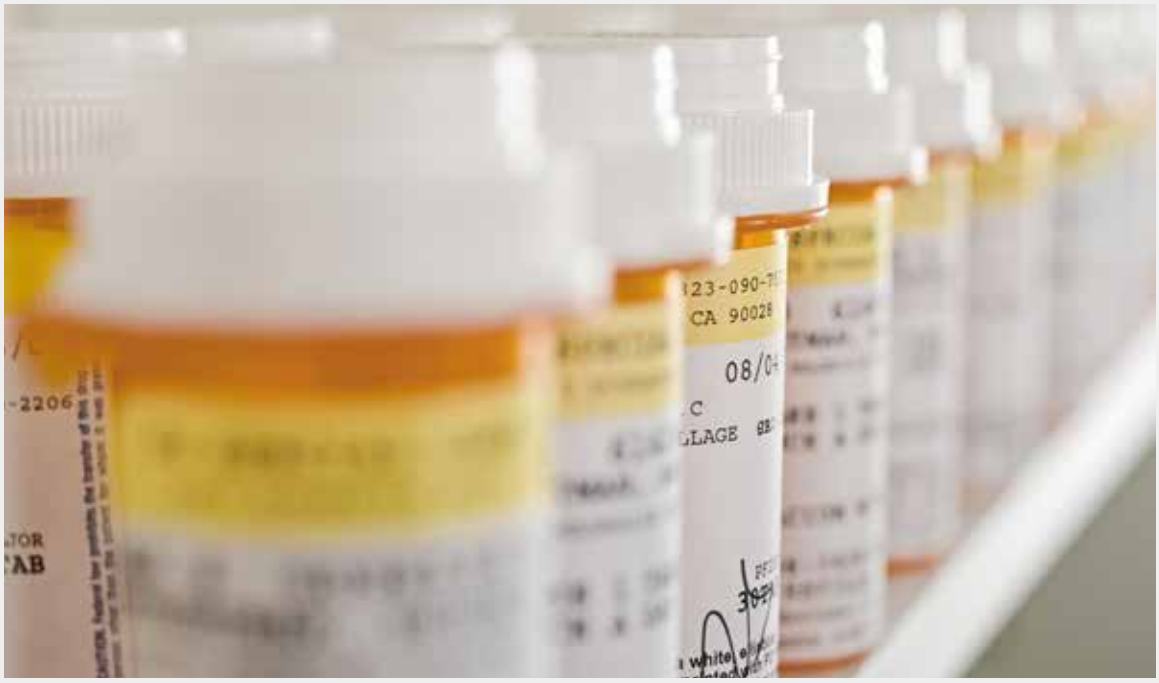
Enterprise-wide sustainability initiatives reign

According to Loftware's "2023 Top 5 Trends in Labeling & Packaging Artwork" survey, 76% of companies already have enterprise-wide sustainability initiatives in place. As part of this charge, companies are improving their labeling and packaging strategies. They're also improving the customer experience, watching their bottom lines, and coming up with new ways to meet their corporate ESG goals.

An enabler of traceability, cloud-based labeling provides a full audit trail of a product from the raw material stage to manufacturing to distribution and right out to the end user. This is key for any organization that is not just answering consumer demand for more sustainability but is also operating under increased regulatory scrutiny.

For example, France's new anti-waste law aims to accelerate the change in the production and consumption model in order to limit waste and preserve natural resources, biodiversity, and the climate. The law focuses on eliminating single-use disposable plastics by 2040, better informing consumers, reducing waste, and minimizing planned obsolescence.

In the European Union, the EU Ecolabel certifies products with a guaranteed, independently verified low environmental impact. To earn this certification, a company's goods and services must meet high environmental standards across the entire lifecycle — from raw material extraction through production and distribution to disposal.



The need for traceability is accelerating

Consumer engagement, anti-counterfeiting, and regulatory requirements are driving conversations around traceability. As companies add new partners, expand into new regions, and comply with increasing regulatory and customer demands, global supply chain visibility has become table stakes.

When you can trace products both upstream and downstream, you're able to better manage the end-to-end product lifecycle; ensure sustainable sourcing; and track, trace and authenticate products at every stage of the journey — from raw materials to consumer goods. This ensures quality, safeguards products, protects patients, streamlines inventory positions, and guarantees on-time delivery to market.

To achieve these and other goals, businesses need solutions that support faster reaction times to manage potential recalls and avoid risks associated with falsified goods and counterfeit products, all of which could damage brands and threaten customer safety.

Managing these threats requires technology that improves the ability to track and trace products throughout their complete lifecycles and across the global supply chain. With labeling as the vehicle that carries relevant data — that has specific product information like serial numbers, certificates of origin, and lot/batch information — cloud-based solutions provide the essential link between digital and physical.

With proper labeling and traceability enabled by a cloud-based solution, companies can respond quickly to costly disruptions across their supply chain to manage risk and expedite any necessary recalls.

When you can trace products both upstream and downstream, you're able to better manage the end-to-end product lifecycle

Up next: digital product passports

As a tool to create transparency and unlock circularity, the Digital Product Passport (DPP) has been proposed by the European Commission (EC). The DPPs share product information across the entire value chain (i.e., data on raw material extraction, production, recycling, and so forth). That way, all stakeholders — consumers included — know what materials went into the products that they're buying, selling, and/or consuming.

While not in use yet, DPPs will change the way product manufacturers and distributors address traceability and sustainability. This will likely happen at some point in the next 5-7 years as Europe and other countries continue developing circular economy initiatives.

In the meantime, organizations are looking at the type of data that they'll have to link to their DPPs. For example, furniture makers want to know where the lumber used to make a particular chair came from, while apparel makers want to know the origins of their textiles.

At each stage in the supply chain journey, the individual parts, raw materials, and processes will have to be identified and then shared via the DPP, which is used to store all relevant information on a product. A critical component of Enterprise Labeling, content management ensures consistency and accuracy for all your label data. You gain full transparency by housing all your digital content in a central and secure location. This optimizes printing for labels that include real-time data from integrated applications alongside data and images stored within the content management repository.

Content can be routed through workflows and all versions/changes managed and stored using configurable metadata. The content management repository provides the latest status of each item; whether it's approved, by whom and when, as well as where it's used.

Case in point: The fashion industry needs cloud labeling

The global fashion sector accounts for around 10% of global greenhouse gas emissions and consumes more energy than both aviation and shipping combined. This is mainly due to the garment lifecycle, which starts at manufacture and transportation and includes laundering and eventual disposal into a landfill. Also, the dyeing processes contribute to water pollution and microfibers that escape into the environment.

The rise of fast fashion over the last two decades has only exacerbated the problem, leading to overproduction and overconsumption. Since the late-80s, garment companies have been integrating environmental practices into their business models. Today, the most established brands also recognize the importance and profitability of adopting a more sustainable approach.

With discussion circulating around the potential introduction of carbon footprint labeling within the food and beverage industry, clothing labels could provide information or a rating on the environmental impact of the product. Should this carbon labeling become mandatory for the textile and apparel sector, manufacturers would have to ensure that labels are accurate in order to remain compliant.

At that point, legacy labeling systems and outdated processes will surely fall short but modern, cloud-based labeling solutions would centralize control of the label design and printing throughout the business and/or across multiple sites. This would reduce mislabeling and enhance supply chain sustainability by eliminating re-labeling, waste, and scrapped supplies. The cloud can also future-proof labeling processes by providing scalability and minimizing dependencies on time consuming and costly IT resources.

When companies use cloud labeling solutions, everyone wins

Under pressure from consumer buying habits and industry regulations, companies are finding ways to cut down on waste, use fewer resources, and reduce their carbon footprints. Labeling is one area that's ripe for improvement at companies where labeling errors may result in the scrapping of otherwise saleable goods.

Getting labels processed quickly and right the first time — all while minimizing resource usage — has never been more important. Cloud-based labeling solutions help companies increase the efficiency of their logistics, mitigate mislabeling risk, and reduce unplanned downtime.

Cloud labeling solutions also:

- Centrally store labels so that you can access them from anywhere
- Assure higher levels of consistency and accuracy
- Let you manage labeling more efficiently by easily scaling printing to third parties and providing them with secured access to your labeling solution to update, design, and print labels as needed
- Support enhanced sustainability for businesses that want to reduce reliance on internal IT infrastructure, servers, and electricity
- Work seamlessly with cloud-connected printers as part of a fully integrated infrastructure
- Help reduce the environmental impact and resource-heavy nature of traditional manual labeling
- Boost productivity and integrate printing within a wider enterprise resource planning (ERP), warehouse management system (WMS), or product lifecycle management (PLM) system

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The good news is that sustainable label printing is now increasingly achievable and here to stay. "It's a challenging business backdrop and all companies around the world are focused on cost-effective and time-efficient production lines. As a result, cloud adoption should be at the heart of every labeling strategy – and it's something businesses often overlook," Josh Roffman, Loftware's SVP of Marketing and Product Management, told Manufacturing Digital[6].

"When it comes to sustainability, by offering a centralized cloud-based labeling solution that provides instant access to label templates throughout a business or across multiple sites, Loftware helps companies improve consistency and accuracy, while also reducing the likelihood of mislabeling," he continued. As a result, there are far fewer instances where products need to be withdrawn, recalled from the market, and scrapped as waste. This effectively reduces a company's environmental footprint, empowering it to meet its sustainability goals.

6. Adams, Helen Sydney, Loftware on sustainability & supply chain disruptions, Manufacturing Digital, December 19, 2022.

Loftware™

The world's largest cloud-based Enterprise Labeling and Artwork Management provider

White Paper

Loftware is the world's largest cloud-based Enterprise Labeling and Artwork Management provider, offering an end-to-end labeling solution platform for companies of all sizes. Maintaining a global presence with offices in the US, UK, Germany, Slovenia, China, and Singapore, Loftware boasts over 35 years of expertise in solving labeling challenges. We help companies improve accuracy, traceability, and compliance while improving the quality, speed, and efficiency of their labeling. As the leading global provider of Enterprise Labeling and Artwork Management, along with Clinical Trials Labeling and Content Management, Loftware enables supply chain agility, supports evolving regulations, and optimizes business operations for a wide range of industries. These include automotive, chemicals, consumer products, electronics, food & beverage, manufacturing, medical device, pharmaceuticals, retail, and apparel.