Remaining competitive today involves satisfying shopper expectations for flexible, easy checkout options. Retailers who can reduce long lines and promote a “quick-in, quick-out” shopping experience gain a significant edge on competitors.

Digimarc offers retailers a cost-effective, easy-to-implement technology that makes shopping easier and improves retail operations in all parts of the store. Digimarc Barcode is an advanced code for packaging, thermal labels, apparel hangtags, and more to ensure more reliable, efficient scanning for shoppers and associates.

Benefits of the Digimarc Platform:
- Supports all store formats and sizes
- Reduces shrink and supports loss-prevention efforts
- Links your physical and digital stores to increase sales
- Helps improve inventory management accuracy
- Adds barcode data redundancy across packaging, providing a more reliable scan

Scan and Scale Your Business

The Digimarc Platform delivers convenience, choice and control for a modern retail environment
The New Retail Mandate

Shoppers have become accustomed to the ease of online shopping and now expect the same conveniences and product availability (“the endless shelf”) of the ecommerce experience. Retailers who make the brick-and-mortar experience easier and more enjoyable are in a better position to compete with international retailers and new players in the market.

CHALLENGES INCLUDE:

• Long lines degrading customer satisfaction and impacting revenue
• Maintaining shopper loyalty for private-label products
• Online retailers entering brick-and-mortar business
• Inefficiencies in perimeter departments, such as damaged thermal labels
• Data inaccuracies impacting inventory management
• Impact of shrink, including from unscanned bottom-of-basket items

Damaged Fresh Food Labels Slow Checkout

The Harris Poll conducted a survey of 500 cashiers on behalf of Digimarc and found that torn, wrinkled or damaged labels can be difficult to scan, and this is impacting both retail operations and the customer experience.

THE SURVEY FOUND:

86% Agree customer lines get backed up when cashiers have difficulty scanning grocery products
82% Agree customers get frustrated when items don’t scan properly
52% Say it takes at least 30 seconds on average to deal with a label scanning issue if the barcode can’t be read

Long Lines Damage Shopper Satisfaction & Reduce Revenue

A Forrester study of 1,000 consumers found that long lines are a factor in shoppers’ decision to leave a store empty handed or even change where they shop.

RESULTS REVEALED:

34% Of shoppers are very satisfied with the checkout experience
39% Of shoppers admit to having left a store empty handed due to long lines
Better Barcode, Better Business

Digimarc Barcode is an advanced code that is reliably and efficiently scanned by consumer phones, associate mobile devices and retail barcode scanners. It supports and enables our Platform solutions for retailers:

Smart Packaging
Easier checkout improves the customer experience and reduces cashier repetitive-motion injuries. Digimarc Barcode for Packaging ensures cashiers get a reliable and efficient scan without having to search for a traditional barcode. And when used in conjunction with Datalogic’s LaneHawk LH5000, retailers can easily detect bottom-of-basket items and reduce shrink.

Thermal Labels
Research shows scanning issues are more common with fresh labels than with barcodes on product packaging. Digimarc Barcode for Fresh Product Labels makes scanning more reliable and efficient, which saves time, cuts operational costs and promotes accurate data in retail and logistic environments.

Apparel Hangtags
The “endless shelf” is a significant challenge for retailers, because shoppers have high expectations for item availability, style recommendations and product details. Apparel hangtags enhanced with Digimarc Barcode allow customers to scan products in-store, linking them to ecommerce sites, as well as connecting store associates to the inventory management system.

According to the University of Arkansas, Digimarc Barcode showed a **30% increase in IPM (Items Scanned per Minute)** compared to the visible UPC barcode.'
# The Platform Supporting Easy Shopping

Retailers can leverage Digimarc technology, including Digimarc Barcode and Digimarc Discover software, to help shoppers and retail associates reliably scan product packaging, apparel hangtags, retail displays, shelf-edge tags, virtually anything in the store.

<table>
<thead>
<tr>
<th>For Packaging, Shelf-Edge Tags, Thermal Labels, Apparel Hangtags and Print</th>
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<tbody>
<tr>
<td><strong>Digimarc Barcode</strong></td>
</tr>
<tr>
<td>• Imperceptible enhancement of packaging, printed materials and images</td>
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<tr>
<td>• Leverages patented digital watermarking, signal processing and color science</td>
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<tr>
<td>• Extensible data capacity for wide-ranging commercial purposes</td>
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<tr>
<td>• Activates images to launch interactive experiences and access web content</td>
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<tr>
<td>• Reduces shrink by detecting bottom-of-basket items</td>
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<tr>
<th>For Retail Apps</th>
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<tr>
<td><strong>Digimarc Mobile SDK</strong></td>
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<tr>
<td>Powers apps with high-performing and robust mobile scanning of the most common barcodes in retail, including QR codes and the exclusive capability to scan Digimarc Barcode for product packaging, thermal labels, commercial print and audio.</td>
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<tr>
<th>For Retail Barcode Scanners, Associate Mobile Devices and Inventory Management Robots</th>
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<tbody>
<tr>
<td><strong>Digimarc Embedded Systems SDK</strong></td>
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<tr>
<td>Enables retail barcode scanners, handheld scanners, associate mobile devices, inventory management robots and inspection systems to detect Digimarc Barcode. We partner with the industry’s leading scanning manufacturers to make it easy to have your hardware read Digimarc Barcode.</td>
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<th>For Retail Scales</th>
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<tr>
<td><strong>Digimarc Label SDK</strong></td>
</tr>
<tr>
<td>Enables retail scales and thermal printers to generate Digimarc Barcode, an unobtrusive pattern of tiny dots that print dynamically and contain important data. We have relationships with all the major retail-scale manufacturers, so it’s easy to enable your scales to print labels with Digimarc Barcode.</td>
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</table>
The Digimarc Platform for Retail

Digimarc technology helps retailers of all store formats and sizes achieve digital scale fast and without the expensive infrastructure. The Digimarc Platform is a comprehensive set of technologies for identifying, discovering and interacting with digitally-enhanced media and objects. The Platform provides reliable, efficient identification that powers an ecosystem of applications.

Digimarc Ecosystem

Digimarc has formed global partnerships with many companies to enhance the power and reach of the Digimarc Platform, and work with our customers to seamlessly implement Digimarc technology.

Our global partners include industry leaders in the following categories:

- Barcode scanner manufacturers
- Retail scales and thermal label printers
- Premedia agencies
- Printers and printing companies

LEARN MORE
digimarc.com/partners
How to Get Started with Digimarc

Establish Objectives: Establish strategic objectives and key performance indicators to ensure maximum benefit for your business.

Identify Assets and Data: Identify all your store media and artwork (private-label packaging, hangtags, labels, signage, displays, circulars and more) you would like to enhance with Digimarc Barcode for auto identification and discovery.

Frame Project: Define project scope, milestones and identify all stakeholders essential for success including your consumer brand suppliers, your premedia and print suppliers and your systems integrators.

Prepare Stores: Verify your retail scanners and retail scale environment and equipment is ready and enabled to support Digimarc Barcode.

Mobile First: Assess your consumer and retail store mobile applications and consider using Digimarc Mobile software development kit (SDK) for your scanning engine.

Enable Stores: Work with Digimarc, scanner and scale hardware manufacturers or systems integrators to add Digimarc software to your devices.

Enhance and Produce: Begin process of adding Digimarc Barcode to your identified media assets and artwork working with your production suppliers.

Train Associates: Leverage Digimarc’s retail training kit and Digimarc Barcode integration guide to train associates on the benefits of Digimarc Barcode.

Contact Us
If you have questions about getting started, please contact us: sales@digimarc.com

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Digimarc Corporation (NASDAQ: DMRC) is a pioneer in the automatic identification of everyday objects such as product packaging and virtually any media, including print, images and audio. The Digimarc Platform provides innovative and comprehensive automatic recognition technologies to simplify search, and transform information discovery through unparalleled reliability, efficiency and security. Digimarc has a global patent portfolio, which includes over 1,100 granted and pending patents. These innovations include state-of-the-art identification technology, Digimarc Barcode, as well as Digimarc Discover® software for barcode scanning, image recognition, as layers of its ground-breaking Platform. Digimarc is based in Beaverton, Oregon. The Digimarc Platform enables applications that benefit retailers and consumer brands, national and state government agencies, media and entertainment industries, and others. Visit digimarc.com and follow us @digimarc to learn more about The Barcode of Everything®.

1 Cashier Ergonomic Study by the University of Arkansas Exercise Research Center