

TrueVUE

Building a Digital Blueprint of the Physical Store

How inventory intelligence helps unify the shopping experience and unleash what's possible





Where the Sales Are: Getting the Most by Creating the Right Experience

Stores still drive the majority of retail sales and the shopper experience is the key for success. Even in the burgeoning direct-to-consumer market, which is responsible for a large portion of e-commerce growth, the most successful startups are turning to pop-ups or full-on brick-and-mortar to give shoppers what they want.

What they want is to be treated as individuals. And as their expectations for seamlessness across channels rise and a right-now mindset continues, retailers need to deliver if they want to remain competitive. In fact, **a more personal shopper experience is their No. 1 priority in 2020**, according to research from RIS News.

To meet today's demands and create what's next, retailers will require a similar level of shopper knowledge in the store as they have online. **Building this digital blueprint of the physical store and in-person behavior requires a full technology stack that's built on inventory intelligence.**

The preponderance of necessary data sources is generated by a stack of in-store technology like traffic counters, radio frequency identification (RFID) sensors, beacons, Bluetooth, WiFi, cameras, and much more. Deriving insights comes through the virtual part of the tech stack — cloud, machine, learning and, increasingly, artificial intelligence (AI). The integration bridges the device gap and provides one source of truth.

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Stores are responsible for at least

86%

of retail sales after adding 6% for click-and-collect and 6% for ship-from-store.”

Source: RIS News, “2020 Store Experience Study Convergence of Store and Digital Technology Redefines Retail”



“

...over

80%

of organizations expect to compete mainly based on customer experience (CX).”

Source: Gartner, “Customer Experience in Marketing Survey 2017: Greater Expectations, Greater Challenges”



The Power of the Retail Tech Stack

Research from RIS News shows that **inventory visibility is a critical part of the stack and the No. 2 priority for IT**. Of course, the solution is not new, but the use cases have evolved. It's about knowing what's in stock and where, in real-time.

Beyond product availability, the technology is about successfully achieving unified commerce, providing enhanced shopper engagement, capturing data about movement and events along the customer purchase journey, and turning that insight into business outcomes.

Taking inventory intelligence to the next level helps retailers unlock source data from the rest of the stack to unleash what's possible and realize the greatest value. In turn, it helps shoppers find what they are looking for, at the moment they are searching for it.

This is more important than ever. Consider that someone could be buying from a desktop, while another shopper checks out via mobile app, and yet another person purchases in store — all at the same time. Each shopper must have the same experience and level of service regardless of how, when, or where they choose to shop. All of their orders should be 100% fulfilled, on time.

This puts new demands on an inventory management system, a scenario that was perhaps not even possible when the system was first deployed. **Cloud computing, machine learning, and AI can help overcome the deficiencies of legacy technology, bringing it to the level to enable real-time events.**

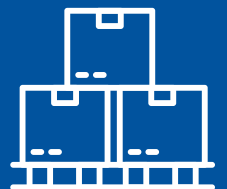
The integration and aggregate information from across the stack creates a holistic view of the complete shopper journey, which helps retailers get the most sales, wherever the shoppers are.

As McKinsey says in its article, “A transformation in-store,” we’re reaching a technology tipping point.

“Machine learning and big-data analytics techniques are ready to crunch the vast quantities of customer data that retailers already accumulate. Robots and automation systems are moving out of factories and into warehouses and distribution centers. The Internet of Things allows products to be tracked across continents, or on shelves with millimeter precision. Now is a great time for retailers to embrace that challenge of bringing technology and data together in the offline world.”



63%
of retailers
name
personalizing
the customer
experience
as an IT
priority for
2020.



54%
of retailers
cite inventory
visibility to
ensure high
in-store stock
levels as their
No. 2 priority
(54%).

Source: RIS News, “2020 Store Experience Study Convergence of Store and Digital Technology Redefines Retail”



Creating Personalized Experiences

Imagine having the insight to know when the best shoppers will come to the store to pick up items purchased online. This understanding might start with third-party data outside the store — GPS or social media, for example, combined with loyalty data and information from the rest of the stack.

The sales associate can be armed with the shopper's buying preferences and browsing habits and alerted when the guest arrives. Additional offerings could be presented via a mobile device and through the associate who can engage with shoppers about what they would like to buy.

In-store shoppers are more likely to buy something unplanned. McKinsey sees this type of personalization and optimization as the wave of the future and believes it will “likely achieve EBIT margins twice those of today.”

Real-time, actionable insights, and predictive analytics drive operational excellence and help create unique shopper experiences to entice them into the store so they will spend more. Of course, success depends on whether a product is available or not.

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Now they [retailers] need to think about how they use emerging technologies and rich, granular data on customers to transform the in-store experience. The rewards for those that get this right will be significant:

83 percent of customers say they want their shopping experience to be personalized in some way, and our research suggests that effective personalization can increase store revenues by 20 to 30 percent.”

Source: McKinsey, “A transformation in store”



Building a Digital Blueprint with Inventory Intelligence

That's why inventory intelligence is the foundation of this strategy, with RFID, cloud infrastructure, machine learning and, increasingly, AI at its core. It allows retailers to keep pace with growing computing demands driven by mounting source data and ever-expanding number of consumer touchpoints to create a dynamic digital blueprint.

Bridging the online/offline gaps is like climbing the rungs of a ladder, one layer of the stack at a time. This enables primary, secondary and tertiary use cases starting with the most basic ascending higher to what's possible, including:

- **Accurate real-time in-store inventory availability** for sales floor execution and effective back-to-front replenishment
- **Visibility of real-time inventory across stores** to the unique item-level helps ensures omni-channel fulfillment (online purchasing, ship-from-store and BOPIS), including knowing whether items are available on the sales floor, the stockroom, reserved for customer pick up, being shipped from store or returned
- **Real-time visibility of cycle counts and enterprise-wide changes** for lower bounce and partial order fulfillment rates
- **RFID-enabled autonomous exits** help protect merchandise while enabling frictionless checkout.
- **Transaction visibility** at the point-of-sale to help protect against sweet-hearting
- Source to consumer's home **supply chain visibility**
- **Intelligent fitting rooms, geo-location, and much more...**

The result of this progression is an agile store environment with a single source of the truth that can empower store associates to anticipate shopper visits and transactions that increase sales while driving the development of new use cases.



“Deploying advanced big data and algorithm-driven capabilities within core retail systems is viewed as a **game-changer.**”

Source: RIS News, “2020 Store Experience Study Convergence of Store and Digital Technology Redefines Retail”

ROI: Metrics to Meet Today's Experiences

Reducing frustration and friction all around is clearly a primary benefit of inventory intelligence. With flexible deployment options and intuitive user experiences, TrueVUE helps eliminate sales barriers for associates and remove purchasing obstacles for customers.

This seamlessness is necessary for retailers to meet the expectations of today's shoppers and take advantage of new opportunities to win. For instance, if a shopper places an order on the way home from work to pick-up in store, RFID, geo-location, cloud, and app data must work together to ensure what's ordered is fully available and recommend additional items.

In the store, associates can leverage RFID mobile devices to locate products to cross-sell and upsell in real-time, either to complement what the shopper has already purchased or play to preferences with personalized suggestions.

RFID supports a wide range of retail business metrics (see sidebar). The combination of ever-more granular electronic product code (EPC) item-level merchandise data with shopper account and outside store data is powered by smart algorithms and AI. **Intelligent integration provides predictive shopper analytics for optimal assortment, merchandising, and efficient operational execution.**



Improvement in Key Retail Metrics Before and After RFID

Up to
99%

Inventory Accuracy¹

Up to
75%

Cycle Counting Labor Savings²

Reduce by
20%

Price Markdowns³

Reduce by
40%

Out-of-Stocks⁴

Up to
10%

Increased Revenue⁵

1-Auburn University, 2015 Annual Report, 2-Measuring the Impact of RFID in Retailing, GS1 2018, 3 & 4-Kurt Salmon, RFID in Retailing Report 2016, 5-GS1 US Connect 2014



Future Forwarding the Retail Strategy with Inventory Intelligence

As we look towards the future of experience and opportunity, inventory intelligence can provide unprecedented insight into an under-leveraged area of opportunity, the place where actual buying decisions are made — the fitting room. Once shoppers have reached this point, they are 67% more likely to buy, according to expert and Marge Laney, author of “Fit Happens; Analog Buying in a Digital World.”

RFID-enabled, smart fitting rooms provide real-time data on shoppers and their interactions with merchandise. This understanding can help associates provide a more interactive customer experience that influences buying decisions in this important conversion zone.

With technology blurring our physical and digital worlds, today's retailers can no longer rely on separate channels and processes to facilitate shopping journeys. They need a digital blueprint of the physical store and in-store behavior to align with their online customer persona. Unified commerce requires a single view of enterprise-wide inventory data that can be shared in real-time and is always accessible.

Connecting the online to the offline optimizes shopper engagement by capturing data about real-time inventory availability, movement, and events along the customer purchase journey.

The right stack of inventory technologies is crucial to enabling successful enterprise-wide outcomes.

Sensormatic Solutions' TrueVUE Inventory Intelligence

Intelligence is built on the Google Cloud Platform to provide a future-proof infrastructure with global scale, security and high performance. Google Cloud's AI and machine learning solutions will support Sensormatic Solutions' innovation to help retailers succeed.

The TrueVUE Inventory Intelligence SaaS platform has a highly scalable and extensible API-first design to simplify and speed integration while delivering modern and fresh mobile apps. The solution improves visibility into real-time inventory information, which is the foundation of today's world of unified commerce.

RFID-enabled cycle counting, interactive restocking and inventory analytics help retailers know exactly what merchandise is available on the sales floor, stock room, and other zones for efficient unified commerce execution and a frictionless shopper experience.

TrueVUE allows retailers to specify precise inventory outcomes through its unique Item Label and Recipe configuration options. These features allow retailers to not only identify items for restocking, and direct associates to comply with inventory standards for merchandising and displays, but also to separate certain items from their available inventory.

Retailers can now use TrueVUE for buy online, pickup in-store (BOPIS) tasks through intuitive order notification, picking and fulfillment features that allow customers to shop anywhere, anytime. This in turn ensures both online, and in-store shopping experience to drive sales conversion through reliable and accessible merchandise inventory visibility.

Learn more about future forwarding your retail business with TrueVUE.

► Request A Consultation

About Sensormatic Solutions

Sensormatic Solutions is the leading global retail solutions portfolio of Johnson Controls enabling smart and connected shopper engagement. By combining critical insights into retail inventory, shopper traffic and loss prevention, Sensormatic Solutions powers operational excellence at scale and helps create unique shopping experiences. Our solutions deliver real-time visibility and predictive analytics for accurate decision-making across the enterprise, enabling retailers to confidently move into the future. With more than 1.5 million data collection devices in the retail marketplace, we capture 40 billion shopper visits and track and protect billions of items each year. Our retail portfolio features the premier Sensormatic, ShopperTrak and TrueVUE brands.

Please visit <http://www.sensormatic.com>, or follow us on LinkedIn, Twitter, and our YouTube channel.

About Johnson Controls

At Johnson Controls, we transform the environments where people live, work, learn and play. From optimizing building performance to improving safety and enhancing comfort, we drive the outcomes that matter most. We deliver our promise in industries such as healthcare, education, data centers and manufacturing. With a global team of 105,000 experts in more than 150 countries and over 130 years of innovation, we are the power behind our customers' mission. Our leading portfolio of building technology and solutions includes some of the most trusted names in the industry, such as Tyco®, York®, Metasys®, Ruskin®, Titus®, Frick®, Penn®, Sabroe®, Simplex®, Ansul® and Grinnell®.

For more information, visit www.johnsoncontrols.com or follow us @johnsoncontrols on Twitter.

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