SMARTER OPERATIONS START HERE

Go beyond mandates with RAIN RFID and automation that deliver real ROI.

DecisionPoint TECHNOLOGIES

RAIN RFID RISES TO MEET RETAIL MANDATES & FSMA 204 REQUIREMENTS

Automated data capture technologies like radio frequency identification (RFID) are gaining prominence across the North American landscape. Retail supplier mandates at industry giants such as Target, Macy's, Nordstrom, and Walmart mean vendors that don't deliver RFID-tagged merchandise risk chargebacks, penalties, and lost contracts.

On the food supply chain side, the United States Food and Drug Administration's **Food Safety Modernization Act Section 204 (FSMA 204) update goes into effect on July 20, 2028**. It outlines new recordkeeping and reporting requirements to ensure transparent traceability of products on its Food Traceability List.

While FSMA 204 doesn't mandate the use of any specific technology, RFID offers efficiency, accuracy, and precision in recordkeeping, reporting, and recall response that would be tough to achieve without it.

Retailers' RFID mandates are the proof: companies are achieving bottom-line improvements when they take full advantage of automated data capture across their operations.

As a direct result of these mandates, manufacturers are increasingly applying

RFID TAGS OR LABELS DURING PRODUCTION PROCESSES.

AUTOMATED DATA CAPTURE & CONNECTED SOLUTIONS

DELIVER RESULTS

RFID is revolutionizing the way businesses manage and control supply chains by connecting four powerful capabilities:

- Item-level identification
- Serialization
- Automated data capture
- Real-time monitoring and tracking

Precision-tracking individual items improves visibility and control throughout production and supply chain processes, delivering real-time insights into the status and location of materials and products.

When you use RFID to connect physical items with the digital information about them, the granular level of detail that results makes more accurate inventory management and process automations possible.

Industry leaders are using technology's powers to achieve a growing list of business goals:

- Modernizing agricultural practices
- Streamlining industrial processes
- Enhancing safety
- Preventing loss due to shrinkage, waste, and diversion
- Improving sustainability
- Addressing labour shortages
- Refining forecasts and informing decision-making
- Strengthening brand trust

CAN RFID DO EVERYTHING?

ALMOST.

Like any technology, even RFID has its limitations. Certain materials like liquids and metals can interfere with radio waves and disrupt RFID transmission. High-interference environments with a lot of radio “noise” can also impede performance.

But challenging and harsh environments aren’t necessarily a no-go. Today’s RFID tags, IoT-connected tools, and even mobile devices are made to withstand rugged, extreme, and even explosive environments.

CAPITALIZE ON INSIGHTS IN ANY INDUSTRY

Agriculture & Food Production

For decades, the agricultural sector has captured and analyzed data to optimize operations and improve efficiency in what's often a resource-intensive enterprise.

Innovative data capture solutions enable producers to track, monitor, and analyze vital operations in real time. Among other details, agribusiness decisions can be more comprehensive and quicker with up-to-the-minute data on:

- Location, status, and condition of equipment, tools, and supplies
- Movement of livestock or products within an operation
- Inventory levels and storage locations of seed and crop protection products like fertilizers, herbicides, insecticides, fungicides
- Availability of feed, supplements, vaccinations, medications, and medical devices
- Security of high-value breeding livestock, semen, seed stock, and nursery stock

Data collected through automated processes can help producers maximize yields, reduce waste, and minimize negative environmental impacts.

Advanced RFID systems facilitate seamless coordination of farm machinery to plant, apply crop protection products, irrigate, and harvest with precision, optimizing use of resources, minimizing waste, and increasing overall productivity. Operators apply predictive analytics to the data captured to improve planning and resource allocation in an increasingly challenging and competitive industry.

Processing & Manufacturing

Automated data capture technologies such as barcodes and fixed scanners, machine vision, and RFID can all play key roles in an industrial company's digital transformation. They're fast and virtually error-free, unlike humans—so automated technologies can deliver more accurate data when it's needed, not after the fact.

In industrial environments, data can be collected by fixed, handheld, or wearables, or by automated, IoT-connected devices alongside production lines, in storage areas, and at key locations like gates and dock doors.

As manufacturers implement automated data capture, they're quickly discovering new ways to use it. Here are just a few examples:

- Increasing receiving accuracy and improving receiving time by 90%[1]
- Seamlessly tracking fixed and shared assets—including expensive IT assets
- Securing and monitoring hazardous materials or controlled items
- Managing inventory of raw materials, parts, components, and/or ingredients to prevent stockouts, shortages, and overstock issues
- Tracking supply chain events to improve lead times, prevent disruption, and improve planning
- Structuring processes and organizing order schedules to increase production rates, prevent bottlenecks
- Adjusting schedules on the fly to optimize resource allocation, improve efficiency, and maintain high levels of productivity
- Monitoring equipment performance and predicting scheduled maintenance to reduce equipment downtime and save on energy costs
- Automating repetitive and menial jobs and redeploying human workers to tasks that add value
- Inspecting product and packaging quality
- Optimizing storage, shipments, and order fulfillment
- Controlling employee access to restricted areas
- Countering counterfeiting to reinforce brand authenticity
- Reducing shipping costs and claims

By automating data capture and analysis, manufacturers can achieve a view of operations that is comprehensive in scope yet granular in detail—essentially, the most holistic operational awareness possible. By integrating these technologies into manufacturing and adjacent processes, leaders drive continuous improvements, boost the bottom line, and improve their competitive edge.

Warehousing, Distribution & Logistics

On their own, constant motion, high speeds, complexity, and scale of operations each increase the likelihood of human error on the job. Combined, the risk is multiplied, and you'd be hard pressed to find a more apt description of the industry. There may be no better application—or greater potential for benefit—than in warehousing, distribution, and logistics operations.

Real-time tracking and visibility improve efficiency and help leaders better plan, allocate, and manage labour, footprints, assets, inventory, and shipments. And the ability to gather data 24/7 from multiple sources creates a robust data source that supports informed decision-making.

Here are a few ways enterprise data is making a difference to distributors, warehouse operators, and logistics providers:

1. **Inventory Management:** RFID-enabled data collection eliminates human error for real-time inventory accuracy that averages 95%. That helps ensure optimal stock levels and timely ordering for replenishments, reducing stockouts and overstock. And the benefits of serialization.
2. **Order Processing:** Automation technologies speed and streamline picking, improve accuracy, and reduce human error for an 80% improvement in picking and shipping accuracy. Orders are fulfilled faster—and also more accurately.
3. **Asset Tracking:** Tracking assets like forklifts, pallets, reusable transport items, tools, and mobile devices optimizes resource allocation, utilization, and maintenance. Tracking and managing IT assets, contracts, and schedules helps teams get more done with less. And tracking reusable transport items improves sustainability and reduces waste.
4. **Dock Door Shipment Verification:** Whether inbound or outbound, shipments can be tracked from the moment they leave a warehouse until they reach their destination, for real-time visibility and proactive resolution of issues. On arrival, automated shipment check-in creates an instant, error-free record of receipt.
5. **Resource Optimization:** Technologies like RFID not only enable robust data collection to help identify underutilized space; they also integrate with automated storage and retrieval systems to gain vertical space.And preventing re-ships can significantly reduce fuel, energy, and labour costs.
6. **Task Automation:** RFID tags and labels can be integrated with IoT-enabled equipment like robotics and autonomous mobile robots to redeploy human workers away from repetitive tasks, heavy lifts, long carries, and risky jobs. Workers can be safer, get more value-added work done, and enjoy their jobs more.
7. **Supplier and Vendor Performance Analysis:** Data on supplier performance metrics such as delivery times and order accuracy helps businesses evaluate and manage supply chain partners more effectively. When it's easier, it gets done more often, so vendor management can be proactive instead of reactive.

8. **Demand Forecasting:** Analyze historical sales data, trends, and seasonality to forecast future demand and make informed decisions about inventory, purchasing, and hiring.
9. **Quality Control:** Monitor product and shipment quality, identify issues, and implement corrective actions to minimize waste and returns, and support excellence in customer experience.
10. **Performance Metrics and Reporting:** By automating the collection and analysis of key performance indicators (KPIs), leaders can track progress against goals, and identify areas to focus on improvements.
11. **Item-level Tracking and Traceability:** RFID-enabled serialization saves time and helps maintain an unbroken record of accountability for products' location, status, and condition.
12. **Recall response and Management:** In the event of a product recall, serialization enables quicker, more precise response to improve outcomes and reduce wasted product.

Retail, Grocery & QSRs

In intensely competitive, fast-paced industries like these, operational efficiencies and customer experiences can make the difference between success and failure.

Technologies that enable automated data capture allow these businesses to **keep stock levels optimal, reduce waste, and streamline replenishment** to support quality, smooth operations, top-notch customer service, and an employee experience that helps **retain workers in a tight labor market**.

Automated delivery verification, for example, makes it possible to **receive and confirm shipment contents and perform cycle counts**—even during peak hours—without a heavy demand on workers' time and focus. That helps keep employees efficiently and attentively serving people, **elevating the customer experience** and increasing the number of orders teams can effectively complete each shift.

Without the risk of human error, delivery receipt records are accurate. That can improve shipping claims reporting and loss prevention outcomes. RFID-enabled storage solutions facilitate more effective **first-expiry/first-out (FEFO) inventory management** by allowing data-driven decision-making on product placement, promotions, and specials. Stores can **maximize sold product, minimize food waste, and lift sales** in the process.

Should product recalls or quality issues arise, automated records provide a level of transparency that **strengthens trust between supply chain partners**. Response is faster, more effective, and more precise.

Consumers are better protected—and so are brands.

EMRACE THE WIDE-RANGING ADVANTAGES OF

AUTOMATED DATA CPATURE

If you're implementing RFID or another automated data capture system and you're interested in getting more return on the investment than mere regulatory or vendor program compliance, the sooner you reach out for guidance, the better.

When you choose to partner with a trusted integrator of supply chain technologies, you get more than the products and services your operations needs. You get a team of experts and their combined experience, all focused on gaining a deep understanding of your process and your people—before they recommend technology solutions.

DecisionPoint is that trusted partner. Our collaborative teams help companies be more efficient, accurate, and connected in order to reach their goals, no matter the industry.

BOOST YOUR ROI FROM DATA CAPTURE INVESTMENTS WITH BENEFITS BEYOND COMPLIANCE.

Reach out to the experts at DecisionPoint Technologies!

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[1]GS1, The Always-On, Always-Open Omni-Channel Shopping Experience Delivered by EPC-Enabled Item Level RFID.

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