



# Extending Asset Lifespan and Reducing Downtime

How to keep your grocery & convenience store retail assets running longer



# Introduction:

## Why asset management matters

Grocery & convenience retail is powered by a complex network of assets, from refrigerators and HVAC systems to checkouts (both traditional and self-service), coffee machines, and more. Each asset plays a vital role in ensuring smooth daily operations and delivering a high-quality shopping experience to all customers.

So, when these revenue generating assets and systems fail, the consequences can be felt throughout the business. Even the most minor outage or malfunctioning machine can lead to operational disruptions. This can also mean increased costs, a loss of revenue, and, unfortunately, an impact on customer loyalty.

Take, for example, a single failing refrigeration unit. This can be very costly and inconvenient for the store. For one thing, the perishable goods it holds, valued at an average of \$800, must often be discarded. Not to mention, emergency repairs can cost an average of \$8,000 to \$10,000.

The stakes are equally high for other assets like slushie machines, grab-and-go hot food cabinets, and coffee makers, which can differentiate the store, contribute to customer satisfaction and add to incremental revenue.

For this reason, the fast-paced and competitive nature of retail environments demands more proactive asset management. By reducing downtime and extending the lifespan of key equipment, retailers can experience a range of benefits such as operational efficiency, cost savings, and, crucially, enhanced customer experience.

In this guide, we will explore why asset management matters so much in grocery retail. We'll also offer actionable insights to help retailers safeguard their operations and profitability while delivering consistent value to their customers.



# Getting started:

## Understanding your assets

To get an effective asset management strategy in place, you must first understand the current asset landscape of your stores. In this section, we'll lay the groundwork for building a proactive asset management strategy, providing practical steps and advice for getting started.

### Build a strong foundation

In order to keep your retail assets running longer and reduce downtime in your retail store, you need a strong foundation for your asset management strategy. You can ensure this by:

- 1 Conducting a survey and collecting a comprehensive inventory of all critical assets, including refrigeration units, HVAC systems, and any other specialty equipment.
- 2 Transitioning from fragmented systems, such as individual spreadsheets, to a centralized platform for unified visibility.
- 3 Implementing a streamlined, scannable asset registration approach and leveraging IoT monitoring tools to ensure real-time visibility into the status of critical equipment.
- 4 Ensuring data accuracy with regular audits and scalable tools to keep asset records updated as you add new locations or equipment.





## Practical steps and top tips

Here are some practical steps and top tips to help you build a strong foundation on which to base your asset management strategy.

### → Set clear key performance indicators (KPIs)

It's important to set and track KPIs as early as possible. This could be indicators like downtime, maintenance costs, and repair frequency. This will enable you to evaluate and optimize your asset management strategy over time.

### → Ensure data accuracy

Use a modern Integrated Workplace Management System (IWMS) or Computerized Maintenance Management (CMMS) solution to align asset registration within one centralized platform. This helps to avoid duplication or data inconsistencies. You should also regularly validate and update your records to ensure reliability.

### → Scalable inventory management

It's important to conduct regular audits using digital tools as this allows you to maintain an up-to-date inventory. As new locations or equipment are added to your retail store or chain, ensure they are promptly registered and incorporated into the system.

### → Leverage IoT and monitoring tools

Implement IoT-enabled sensors and real-time monitoring solutions to track asset performance, identify inefficiencies, and prevent failures before they occur.

More specifically, QR codes or RFID tags can be attached to assets for tracking and data accuracy. A quick scan gives facilities managers (FMs), technicians and other relevant parties instant access to the maintenance history during breakdowns or outages.

### → Establish a proactive maintenance schedule

By using predictive analytics tools and historical data, you can create a detailed routine maintenance schedule. This can reduce unplanned downtime and extend the life of your most important assets.

### → Prioritize high-impact assets

You should also focus your efforts on the assets that are most critical to your operations and work outwards from there. For example, refrigeration, HVAC systems, smoothie machines, and checkouts can have a direct and massive impact on revenue and customer satisfaction.

### → Train staff on asset usage

Providing ongoing training to all of your employees can be useful to ensure they handle this equipment correctly. This will minimize misuse or unnecessary wear and tear and can reduce the risk of damage or downtime to critical assets.



# Gaining efficiency:

## Smarter workflows

**Leveraging technology and smarter workflows within your asset management strategy can enhance task accuracy.**

In particular, IoT sensors, predictive analytics, and centralized management systems help to streamline workflows, ensure quick, efficient maintenance responses, and minimize downtime.

Let's now look in more detail at how technology and smarter workflows make it possible to improve asset management and increase efficiency across retail environments.

### Optimizing maintenance processes

Smarter workflows and automation make it possible to optimize asset maintenance processes in retail environments.

For one thing, automating maintenance scheduling helps prevent equipment failures, while IoT devices enable real-time performance monitoring for quick issue detection.

Automating and streamlining the monitoring, reporting, and diagnostic processes can reduce response times and minimize the risk of human error.

→ **Example:** If a convenience store manager identifies a flickering light in an aisle, a faulty freezer or a broken fuel dispenser, an automated system can immediately triage the issue and assign it to the appropriate contractor. This ensures a swift resolution with minimal disruption to staff and the customers.



## Increasing work order accuracy

Increasing work order accuracy in grocery stores ensures that maintenance tasks are clearly defined and correctly prioritized. This can help to reduce delays and miscommunication.

Implementing digital checklists for store teams to provide detailed issue descriptions, including images or videos, can increase work order accuracy.

Accurate work orders provide precise instructions and relevant details, enabling technicians to address issues more efficiently, extending the assets' lifespan, and minimizing operational disruptions.

## Empowering your teams and technicians

Empowering your teams and technicians is essential for effective asset management in grocery & convenience stores.

This includes providing field technicians with mobile apps and tools that offer real-time diagnostics, asset history, and repair guidelines to enhance their ability to perform accurate and efficient maintenance.

Creating cross-functional alignment between operations, maintenance, and procurement also ensures seamless communication and resource sharing.

→ **Example:** During an HVAC system repair, sensors can provide real-time alerts via an IWMS or CMMS to notify the technician. This system delivers an optimized work order that includes a detailed fault history, the manufacturer's maintenance guidelines, and the current inventory status for spare parts at nearby locations.

This enables them to quickly and efficiently address the issue, reducing downtime and disruption to the store and its customers.

“Implementing digital checklists for store teams to provide detailed issue descriptions, including images or videos, can increase work order accuracy.”



# Driving continuous improvement:

## Data-driven maintenance

In retail, leveraging data is crucial for transitioning from reactive to proactive asset management. Once you have all the right processes and tools in place, it becomes possible to collect key data, which becomes the foundation for making informed and strategic decisions.

### Leveraging data for long-term asset management

By analyzing data trends, retailers can better predict potential failures and prioritize asset maintenance or replacements. This ensures smooth operations and minimizes disruptions.

Not only that, but identifying inefficiencies and improvement opportunities, such as pinpointing assets that are most prone to failure, allows for targeted actions that maximize equipment reliability.

For example, IoT sensors can be installed in refrigeration units to monitor temperature fluctuations and humidity levels. These sensors can then alert the facilities team to deviations that may signal compressor issues or coolant leaks.

These IoT solutions are already being introduced into grocery stores across the globe, and in the US, they have allowed food retailers to reduce food loss by 40% and experience net energy savings of up to 30%.

Data-driven insights like this not only reduce waste and unplanned downtime but also position asset management as a strategic advantage. This can help to bridge the gap between immediate operational needs and long-term planning.

### Using data to make smarter budgeting decisions

Data analysis also plays a critical role in guiding smarter budgeting decisions, especially when evaluating the total cost of ownership (TCO) for each asset.

By understanding the long-term costs associated with the repair, maintenance, and replacement of assets, retailers can allocate budgets more effectively. This can also help with repair vs. replacement analysis.

By leveraging repair cost trends and asset performance data, retailers can make informed decisions about whether they continue to extend an asset's life or if it's time to invest in a new one.

On top of this, data-driven strategies facilitate sustainable and innovative practices, such as introducing more energy-efficient equipment. This can lead to bigger savings and align with the company's wider environmental goals.

Utilizing data-driven insights in this way ensures that budgetary decisions not only meet current needs but also contribute to the future stability and success of the business.





## Actionable insights

Keeping all of this in mind, here are some actionable insights grocery & convenience stores can use to make data-driven decisions about asset maintenance in the retail environment.

### Utilize data to forecast repairs to critical equipment

Retailers should regularly review data to identify recurring issues across locations and assets. For example, if revenue generating assets frequently fail, implement a pre-emptive maintenance or replacement strategy.

It's also important to use predictive analytics and IoT-enabled devices to monitor asset performance in real-time. That way, you can detect early warning signs of wear and tear.

By analyzing both historical and real-time data, retailers can forecast failures in critical systems like refrigeration, checkouts, and HVAC, enabling planned maintenance instead of costly reactive fixes.

### Conduct Total Cost of Ownership (TCO) analysis

Assess long-term costs, including repairs, energy consumption, downtime, and replacement expenses, to determine the true value of maintaining or replacing an asset. Start by focusing your resources on high-impact assets like cooling systems and checkout equipment that are critical to the daily running of the store.

### Understand the 50% rule for repairs vs. replacement

It's also essential to evaluate repair costs and downtime to decide whether repairing or replacing assets is the best option.

As a general rule, if repair costs exceed 50% of the replacement cost, replacement is more cost-effective. For example, replacing an \$8,500 HVAC unit is not necessary or wise if repairs cost only \$1,000.

### Implement preventive maintenance schedules

Establish maintenance intervals based on data rather than arbitrary timelines. For example, refrigeration maintenance can be scheduled based on hours of operation rather than calendar dates.

You should also address issues proactively by replacing consumable parts, such as filters and belts, before they cause larger system failures and outages.

### Leverage management systems

Centralize maintenance history, performance metrics, and repair logs using management systems like IWMS and CMMS. These systems streamline workflows, improve scheduling efficiency, and enable data-driven decisions about asset upkeep.

### Integrate sustainability goals

Finally, energy usage data can be used to replace outdated, power-intensive assets with energy-efficient alternatives. You should monitor metrics like greenhouse gas emissions and energy savings to align with your company's wider sustainability objectives.





# Conclusion:

## The path to smarter asset management

From understanding assets to leveraging smarter workflows and data, proactive management is the key to reducing downtime and maximizing asset lifespans. In order to do this, retailers must:

- Conduct a survey and collect a comprehensive inventory of all critical assets
- Transition from fragmented systems to modern centralized software platforms
- Invest in modern technologies such as IoT and monitoring tools to ensure data accuracy, scalability, and actionable insights

By embracing smarter workflows and leveraging technology in this way, grocery retailers can enhance task accuracy, empower their teams and technicians, and collect the data needed to make informed decisions.

These insights enable stronger budgeting, accurate repair forecasting, and effective cost-benefit analyses for repair versus replacement decisions.

The result? A more efficient, sustainable, and customer-focused retail environment.

So, if you're ready to extend the lifespan of your assets and reduce downtime in your grocery & convenience stores, take the first step: assess your current practices, embrace technology, and commit to a smarter asset management strategy.

By adopting modern tools like Nuvolo's IWMS platform and integrating with IoT devices, you can optimize operations, elevate customer experiences, and ensure a healthier bottom line.





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