

# The Ultimate Facilities Playbook



A step-by-step guide from industry experts  
on how to tackle your top challenges



# Table of Contents

About the Experts	1
Introduction	2
<b>Chapter 1:</b> Building Complete, Accurate, and Actionable Asset Data	3
<b>Chapter 2:</b> Moving from Reactive to Proactive Maintenance	5
<b>Chapter 3:</b> Strengthening Facilities Workflows	7
<b>Chapter 4:</b> The Roadmap to Resilient Capital Planning	9
<b>Chapter 5:</b> Reducing Operational Costs	11
Conclusion   About Nuvolo	13

## About the Experts



### Corey Losinski

Corey Losinski is an expert in Enterprise Asset Management (EAM), helping enterprises unlock the full potential of their assets by connecting people, places, and technology. With more than 15 years of experience spanning architecture and facilities management, he has shaped Nuvolo's Enterprise Asset Management strategy, delivering solutions that improve reliability, compliance, and operational efficiency at scale.



### Anna McKee

Anna McKee is a Senior Product Manager at Nuvolo. With a background in industrial engineering and extensive experience in the construction industry, Anna brings a problem-solving mindset and a passion for process improvement to facilities management software. She leads cross-functional teams, develops product roadmaps, and conducts user research to deliver solutions that meet the needs of facilities teams and user experience.



### Paul Head

Paul Head is a seasoned technology leader with over 30 years of experience in strategic and operational management of facilities and real estate. As the current president of the IFMA Public Sector Council and Director at Nuvolo, he is a passionate advocate for leveraging technology to drive operational transformation. His expertise lies in helping organizations align their mission with operational goals, using a digital-first approach to enhance effectiveness across the entire real estate lifecycle.



### Olga Leskova

Olga Leskova brings more than a decade of experience in capital planning and large-scale project delivery across the public sector. In her current role as Senior Product Manager for Nuvolo's Capital Planning & Projects product, she applies that expertise and serves as the voice of the customer to deliver results-driven technology for facilities teams. Her work empowers organizations with practical solutions that create measurable, lasting value.



### Bob Mostachetti


Bob Mostachetti is a Nuvolo strategy leader with primary responsibility to set the product and go-to-market strategies for the workplace solutions. Having spent a portion of his career on the owner and occupier side of the business, Bob draws on his practical experience to serve as a subject matter expert on topics including Corporate Real Estate & Facilities operations, Smart Building Technology, and Integrated Workplace Management Systems (IWMS).




# Facilities leaders are under constant pressure to do more with less, all while maintaining safe, compliant, and efficient environments.




The role demands both strategic vision and operational precision, yet the obstacles are persistent:




Incomplete asset data




Capital planning errors



Overreliance on reactive maintenance



Constant pressure to reduce costs



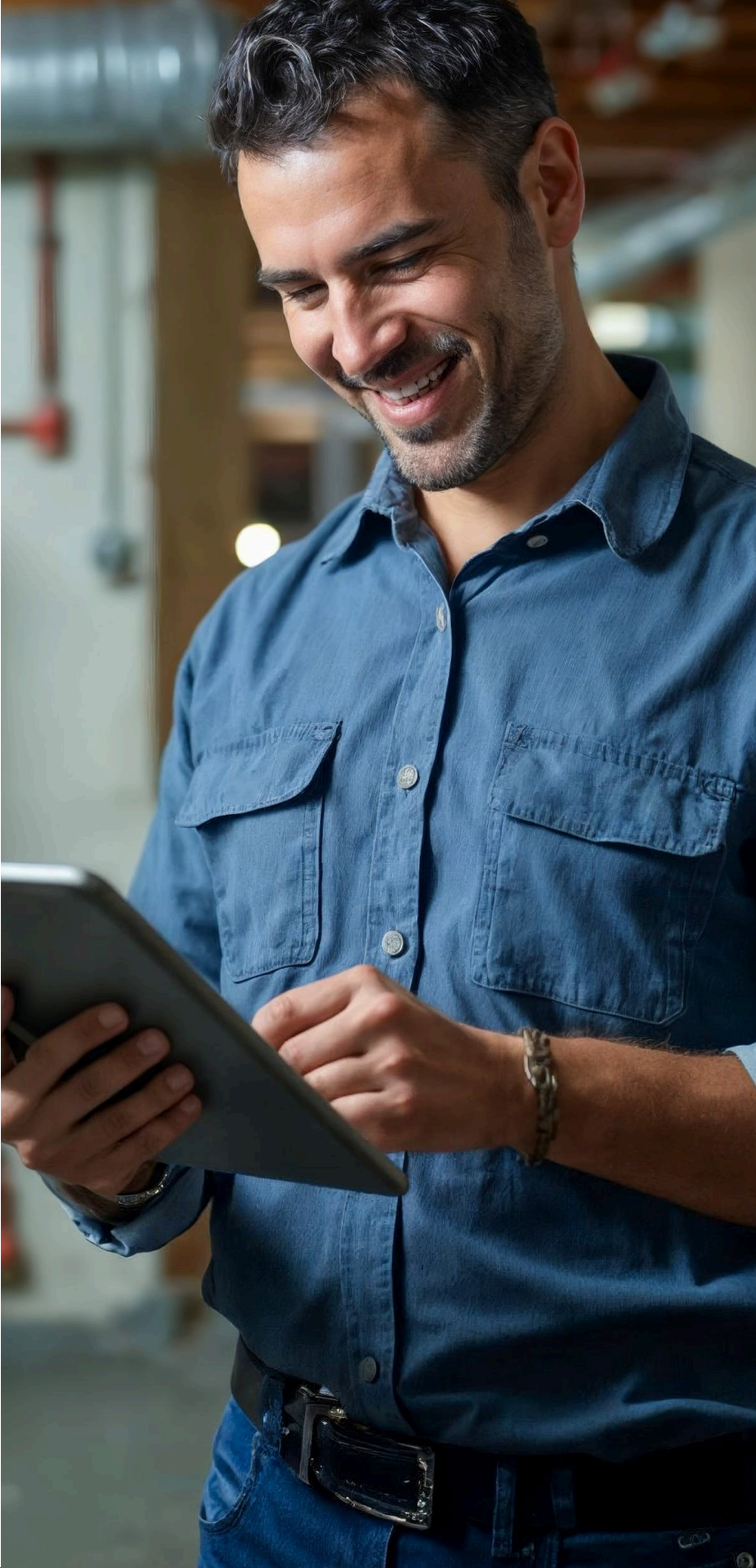
Workflows that hinder progress

This playbook is designed to help facilities senior managers and directors tackle these challenges head-on. Each chapter focuses on one of the five issues that most often stand in the way of operational excellence. The insights you'll find here come directly from **conversations with seasoned facilities experts**; professionals who have navigated these same problems, implemented solutions, and seen the results firsthand.

Rather than theory, you'll get real-world guidance:

- Practical strategies that can be applied in both single-site and multi-site operations
- Actionable recommendations to improve performance and reduce risk
- Proven approaches you can adapt to your organization's unique priorities

While every facility is unique, the patterns are consistent. By leveraging proven approaches from those who have already overcome these challenges, you can avoid common pitfalls, accelerate improvements, and position your team for long-term success.





# 1

## Building Complete, Accurate, and Actionable Asset Data



**Corey Losinski**  
Enterprise Asset  
Management (EAM) Expert

For Corey Losinski, the foundation of effective facilities management begins with one thing: reliable asset data.

Without it, even the most well-intentioned maintenance strategies and capital plans are “built on shaky ground,” as he puts it.

Corey emphasizes that keeping asset data complete, accurate, and useful from acquisition to decommission requires three elements working in unison:

- **Clear processes** that everyone follows
- **The right technology** to make accurate data capture effortless
- **Accountable people** who take ownership of data integrity

### The Root Cause of Poor Asset Data

Corey has seen asset data fail for the same reasons time and time again: **gaps in people, processes, and technology**. Common culprits include:

- No single source of truth and poor system integration
- Inconsistent data standards, naming, and documentation
- Gaps in lifecycle update processes and ownership/accountability
- Manual data entry and limited mobile tooling for field teams
- Legacy migration challenges and low data-quality culture

### The Cost of Limited Asset Visibility

*“Limited asset visibility turns decision-making into educated guessing.”*

The guesses spiral and turn into a series of problems including:

- **Slower response times** when asset location/condition is unclear
- **More unplanned downtime** from missed warning signs
- **Higher operational costs** from unnecessary replacements and excess inventory
- **Inefficient resource use** from duplicate work and manual checks
- **Weak data-driven planning** leading to poor budgeting and replacement decisions





# Steps to Improve Asset Data Accuracy

*“You should think of asset data like a living record. Keep it updated at every step, make updates part of the daily workflow, use tech to make it easy, and give people ownership so the data stays clean and useful.”*



## 1. Establish Standards and Governance

- Define a CMMS, EAM, or IWMS platform as your single source of truth.
- Standardize asset taxonomy for naming classification and attributes.
- Set required data fields for every asset record.
- Assign clear data ownership and approval rules.



## 2. Integrate Data Into the Asset Lifecycle

- Acquisition: Capture all details from suppliers, verify at install, and tag with barcode or RFID.
- Operations and maintenance: Require updates during field work using mobile tools.
- Modifications and moves: Make sure your system sends notifications if assets are moved, upgraded, or reassigned.
- Decommissioning: Log the removal, update the record to show it's out of service, and note how it was removed, recycled, or disposed of.



## 3. Leverage Technology for Accuracy and Efficiency

- Implement barcoding or RFID for fast, precise identification.
- Use IoT sensors for condition usage and performance tracking.
- Leverage BIM or digital twins for detailed, visual asset context.
- Integrate systems to eliminate duplicate entry.
- Automate validation rules to flag missing or inconsistent data.



## 4. Monitor and Continuously Improve

- Perform regular audits confirming what's in your system matches the field.
- Use dashboards to see where data is missing or out of date.
- Fix problems and adjust processes so they don't happen again.




## 5. Foster Culture of Data Stewardship

- Train staff and contractors on the “why” behind data accuracy.
- Share real-world wins where good data prevented problems.
- Include data quality goals in performance reviews.

# Key Metrics to Track



**Accuracy and completeness**  
% of correct records, % of required fields populated



**Operational Impact**  
Total downtime, mean time between failures (MTBF), mean time to repair (MTTR)



**Visibility**  
% of assets found where the system says they are, % tagged vs. untagged



**Financial Impact**  
% of time assets are actively used vs. idle, cost per asset



**Lifecycle Performance**  
Average lifespan of assets compared to expected lifespan, preventative vs. reactive maintenance ratio

# Corey's Takeaway

Corey's message to facilities leaders is clear: You can't manage what you can't see. By making asset data accuracy part of everyday operations, supported by clear processes, integrated technology, and shared accountability, facilities leaders gain the visibility they need. But the next challenge is learning how to use that visibility to escape the constant cycle of **reactive maintenance**.

# 2

## Moving from Reactive to Proactive Maintenance



**Anna McKee**  
Senior Product  
Manager at Nuvolo



As Product Manager for Nuvolo's Asset and Maintenance product, Anna McKee's top priority is helping customers break the cycle of what she calls "firefighting," or reacting to problems only after they occur.

While this approach may seem responsive, the hidden costs are enormous. True resilience comes from shifting toward proactive maintenance, where facilities leaders anticipate problems, prevent downtime, and build a culture of readiness.

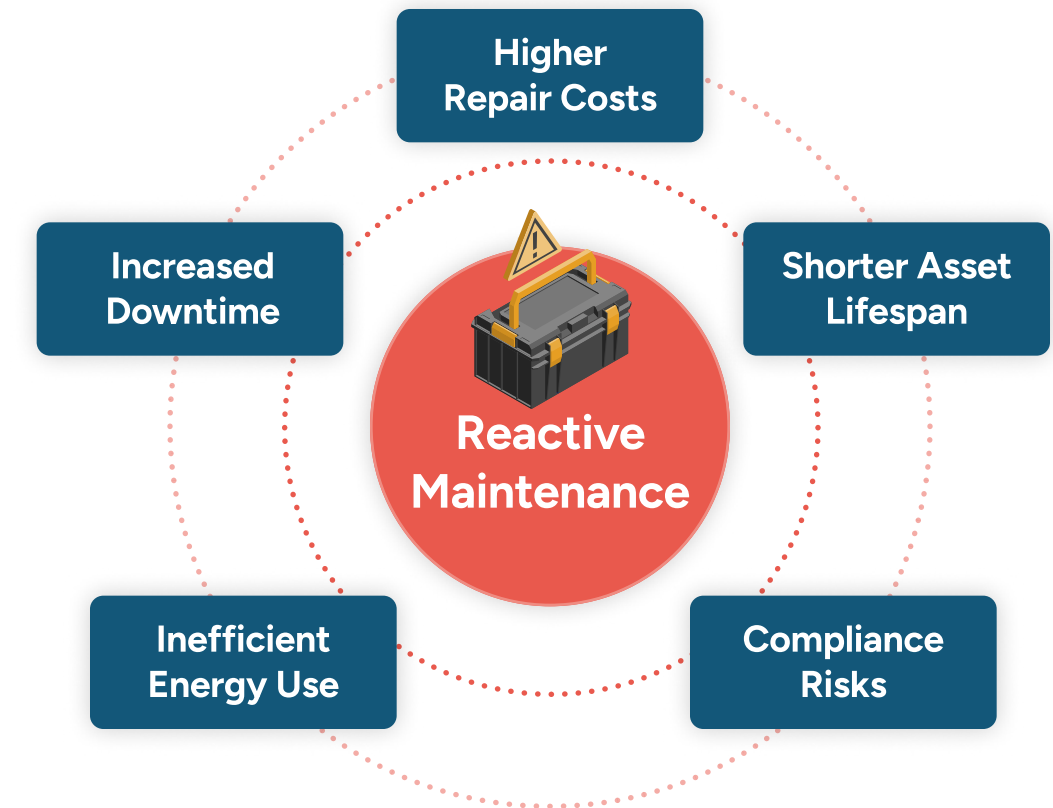
### Why Facilities Default to Reactive Maintenance

According to Anna, many organizations rely on reactive strategies for reasons that feel logical in the short-term:

- **Immediate Response Culture:** Facilities teams are often measured by how quickly they resolve occupant issues. This creates pressure to "fix fast," even if it means ignoring long-term solutions.
- **Budget Constraints:** Leaders often view preventative programs as discretionary spending. Without visibility into the total cost of ownership, short-term fixes appear cheaper, until repeat failures pile up.
- **Unpredictability:** Some problems truly are unpredictable, like spills or accidents. But others, such as motor burnouts or clogged filters, can be avoidable with proactive monitoring.

### The Hidden Costs of Staying Reactive

Anna stresses that the price of reactive maintenance is far higher than many leaders realize:



*“It’s often faster to patch and move on, but those quick fixes keep teams stuck in the same cycle.”*



When added together, reactive maintenance is the most expensive form of maintenance. However, by making the switch that Anna recommends, preventative maintenance programs **can generate cost savings of 12–18%<sup>1</sup>**, compared to purely reactive approaches.

## Taking the First Steps Toward Proactive Maintenance

Shifting away from reactivity doesn’t happen overnight. Anna recommends starting small:

1

**Review Current Practices**  
Identify where reactive work dominates. Flag “bad actor” assets with frequent breakdowns or excessive downtime.

2

**Set Specific Goals**  
Define measurable objectives, such as reducing reactive work orders by 20% in the next year.

3

**Educate Staff**  
Show technicians how proactive approaches reduce stress, increase safety, and save money. Provide training on new tools and procedures.

4

**Focus on Critical Assets 1st**  
Start with life-safety systems, HVAC, or high-cost equipment. Build early wins before expanding to all assets.

5

**Reassess and Improve**  
Track progress, identify what’s working, and expand proactive practices over time.

## Using Data to Guide Proactive Strategies

**Work order history** and **asset data** are powerful tools for breaking the reactive cycle. By analyzing historical trends, leaders can:

- Spot assets with unusually high corrective maintenance.
- Track downtime by system to uncover hidden patterns.
- Compare planned vs. reactive workload over time to measure progress.

*“Proactive maintenance is tough to deliver without the right technology. A modern CMMS, connected sensors, and mobile tools give teams the real-time visibility and data needed to choose and execute the right maintenance strategy.”*

## Key Metrics to Track



The Society for Maintenance & Reliability Professionals (SMRP) sets a world-class target of **90% planned work and less than 10% corrective or reactive work<sup>2</sup>**.



Not every organization will reach that benchmark immediately, or ever, depending on the scale of operations. Still, many practitioners point to the 80/20 rule, based on the Pareto Principle, as a practical starting point. **By identifying the 20% of assets that drive 80% of operational success, facilities teams can focus resources on preventative maintenance for the highest-impact equipment.** In fact, a study in the healthcare sector found that a small subset of medical devices accounted for the majority of maintenance demand, reinforcing how the 80/20 principle plays out across entire asset inventories<sup>3</sup>.



This progression, from 80/20 toward 90/10, gives facilities leaders a roadmap for measuring how far they’ve come and **how much further they can push toward resilience.**

## Anna’s Takeaway

Moving beyond reactive maintenance isn’t just about culture change. It’s about creating the conditions for smarter, more consistent operations. The next step is looking at how those operations are structured day-to-day through **better planning and workflow management.**

# 3

## Strengthening Facilities Workflows



**Paul Head**  
Director at Nuvolo



Paul Head has spent years helping facilities teams improve the way they work.

His perspective is simple: strong outcomes depend more on the **health of the process** than on the heroics of individual technicians.

### Common Workflow Challenges

Some of the most frequent issues Paul sees include:

- Unclear priorities
- Lack of planning
- Weak inventory control
- Data discipline issues

### How Inefficient Workflows Impact Teams



These issues have a direct impact on performance. According to Paul, **an unplanned job can cost 4 to 6x more than a planned one**, once you account for wasted labor, emergency part runs, and rework.



Teams slip into “firefighting mode,” as Anna puts it, customer satisfaction declines, and schedule reliability breaks down. Paul explains that technicians end up spending only about **25-30% of their time on actual repairs**, when it could be closer to **40-60%** with good processes in place.

### Key Metrics to Track

~80%

Planned Work

20-30%

Reactive Work

50-60%

Scheduled Hours

4-6 Weeks

Backlog Size

>95%

Schedule Compliance

Supplementing these, organizations should also measure customer feedback, monitor the accuracy of planned vs. actual hours, and track how many unplanned parts runs take place. The goal is not to overwhelm teams with data, but to use a handful of reliable indicators that keep the process on track.

“Staff an analyst to audit and assess your data, helping you spot trends and areas for improvement. Data discipline is crucial.”



# Proven Workflow Fixes



- 1. Prioritization with RIME**
- Use a clear prioritization system that scores work by asset criticality and task urgency, for example a RIME-style 1-100 index, so the backlog is easily sorted.



- 2. Dedicated Planner/Scheduler**
- Assign a dedicated planner and scheduler role, even part-time, to protect weekly schedules, reduce chaos, and increase wrench time.



- 3. Parts Prepared in Advance**
- Prepare and organize parts before dispatch, also known as kitting, so technicians have everything they need before starting a job.



- 4. Barcode and RFID Storerooms**
- Implement barcode or RFID tracking in main and satellite storerooms to maintain accurate counts and cut down on wasted trips.



- 5. Limit “Bucket” Work Orders**
- Restrict the use of broad bucket work orders and ensure every part and labor hour is tied back to an asset record.



- 6. Close the Customer Loop**
- Provide updates during the job and survey satisfaction after completion.



- 7. CMMS as a Support Tool**
- Treat the CMMS as a servant of the process rather than the process itself. The goal is disciplined, accurate data that informs decisions, not just filling out screens.

# A Success Story

A perfect example of planning over reacting came on a multi-building campus. Paul helped assign one of the 15 technicians to a full-time planner/scheduler role. At first glance, that looked like losing capacity, but by improving workflow, the opposite happened. With better planning, parts kitting, and a formal weekly schedule, the results were compelling.



Wrench time rose from about **30% to 35%**. This effectively backfilled the ‘loss’ technician and allowed the 14-person crew to outperform the former 15-person crew. Kitting alone paid for itself **3 to 4 times** over by eliminating supply-house runs and rework. Customer feedback improved as schedule compliance stabilized.

# Paul’s Takeaway

What this outcome makes clear is that success and facilities management is rarely about working harder, but about working smarter. Even small shifts, like dedicating a planner, preparing parts in advance, or tightening up scheduling, create ripple effects that multiply across the operation.

When workflows are aligned and technicians are equipped with the right processes, facilities can operate with greater efficiency. With those fundamentals in place, the focus can shift to **building the case for the resources and investments** needed to sustain progress.



# 4

## The Roadmap to Resilient Capital Planning



**Olga Leskova**  
Sr. Product  
Manager at Nuvolo



Over her career, Olga has learned that few responsibilities carry as much long-term impact for facilities leaders as capital planning.

Done well, it secures the resources to keep buildings safe, compliant, and operationally efficient. Done poorly, it leads to deferred maintenance, regulatory risks, and emergency costs that erode credibility with leadership.

*“The goal of capital planning is simple. Forecast needs, set priorities, and give leadership a plan they can trust.”*

### Common Challenges of Facilities Capital Planning

Across many organizations, capital needs often far outpace available funding. In healthcare facilities alone, research shows that an average of **41% of infrastructure assets are already deferred beyond their useful life<sup>4</sup>**. This backlog reflects years of tight budgets and the difficulty of making strategic choices in a reactive environment. At the same time, facilities leaders contend with a set of recurring hurdles that make effective planning even harder:



**Data silos:** Asset data, facility condition assessments, and budget information are often spread across separate systems.



**Bad data:** Outdated asset data can hurt facilities capital planning and lead to poor investment decisions.



**Reactive mindset:** Leadership often funds only what has failed, rather than proactively investing in assets nearing the end of life.



**Competing priorities:** Each department brings forward urgent requests, making it difficult to separate the loudest voices from the most critical needs.



**Budget uncertainty:** Escalating material and labor costs make forecasting difficult, and limited transparency leads to mistrust from finance.






Left unchecked, these hurdles turn capital planning into a yearly battle for funding instead of an opportunity to prove the strategic value of the facilities team.





# How to Forecast Costs

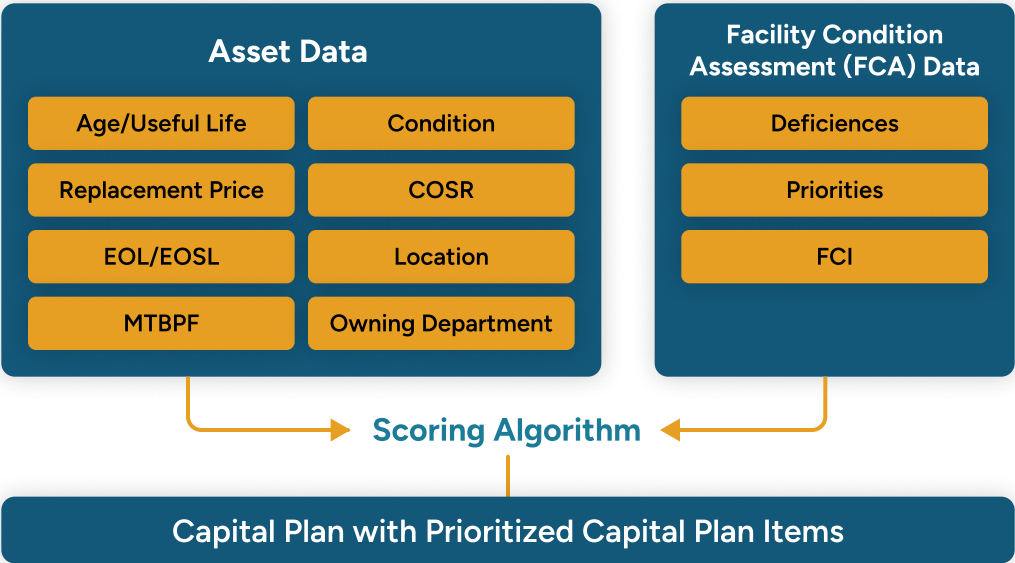
The cornerstone of a credible capital plan is accurate forecasting. Instead of being surprised by costs, facilities leaders can strengthen estimates by:

-  **Leveraging historical data:** Use past repair and replace costs, downtime records, and failure trends to set realistic baselines.
-  **Factor in useful life, condition, and performance:** Combine asset age with condition scores and performance metrics to see when equipment is truly nearing end of life.
-  **Build scenarios:** Model different funding levels, from minimum compliance to full investment, to prepare for tradeoffs.
-  **Adjust for escalation:** Anticipate inflation in materials, labor, and energy to avoid underestimating future costs.
-  **Account for hidden costs:** Include compliance requirements, safety retrofits, and downtime risks alongside purchase or replacement price.

Backed by this data, forecasting builds credibility with leadership. When decision-makers see the evidence behind each estimate, they are more likely to approve the budget with confidence.

## What Data to Use for Prioritization

Strong capital plans need to be able to distinguish between what’s urgent and what can wait. The most effective way to prioritize is by combining **asset data**, information related to the condition, value, and performance of physical assets, with **Facilities Condition Assessment (FCA) data**, which evaluates the physical state of facilities and identifies maintenance or renovation needs, to rank projects objectively by risk, compliance impact, cost, and organizational alignment.



“Scoring assets in spreadsheets takes a lot of time and can lead to mistakes. Software can automate this process, giving you accurate insights and a prioritized capital plan more efficiently.”

## How to Build a Capital Plan

Olga explains that capital planning is best approached as a living roadmap. It shows where you are, where you need to go, and how to get there, while evolving with new data, shifting costs, and changing priorities. Treated as a continuous process, it becomes more than an annual budget request. It gives facilities teams a reliable way to demonstrate foresight, manage risk, and build lasting credibility with leadership.

# Key Steps



## The Takeaway

With the right capital planning process in place, facility investments can deliver strategic value for organizations’ long-term goals. By grounding forecasts in data, integrating asset and FCA insights, and engaging stakeholders through clear criteria and scenarios, facilities leaders shift from defending budgets to leading with foresight. But even with the right planning and foresight, one question always remains: how to **keep costs under control** while delivering reliable, high-quality service.

# 5

## Reducing Operational Costs



**Bob Mostachetti**  
VP Workplace  
Strategy at Nuvolo



For facilities leaders, controlling costs is a top priority. But as Bob Mostachetti explains, the biggest expense in operating buildings isn't always maintenance or staffing, but the cost of space itself.

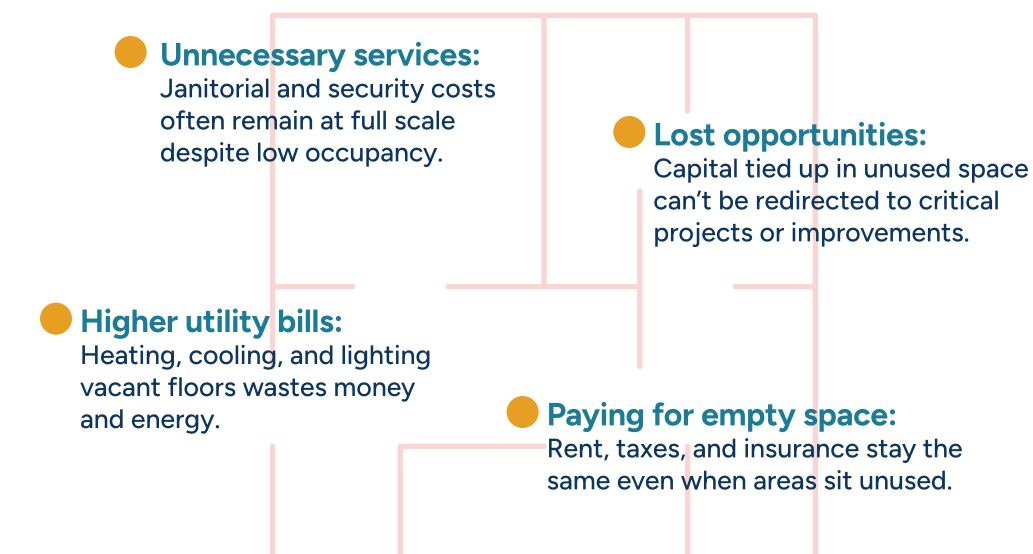
Bob explains that in the commercial real estate space, the top cost is the cost per square foot in a leased model. With average office utilizations hovering between 40–50%<sup>5</sup>, most office buildings are sitting half empty.

That gap between what organizations pay for and what's actually being used is why **portfolio optimization** is a growing priority.

*“When you consider operational costs on top of the lease costs, you're looking at a significant expenditure on an underutilized asset.”*

### The Hidden Costs of Underutilized Space

When space isn't fully used, costs can add up in ways that aren't always immediately obvious:



### Where Facilities Can Find Cost Savings

One of the quickest wins comes from **connecting utilization data with operating costs**. Bob shares an example from a healthcare organization in Southern California where occupancy dropped sharply on Fridays in the summer, so the team raised HVAC setpoints and dimmed lights in those areas. This resulted in lower utility bills during the most expensive months, without any impact on comfort or performance.

### Balancing Cost Control with Service Quality

Cutting costs can't come at the expense of safety, compliance, or occupant satisfaction. Bob's advice: **make feedback part of your strategy**.

Send occupant and end-user surveys on a regular basis to determine satisfaction with services, maintenance, and overall facilities management. Include questions about maintenance quality, communication, and staff responsiveness. Then continue to adjust and



refine your approach until you find the right balance.

Occupant feedback ensures that cost-saving measures, like scaled-back janitorial schedules, don't undermine satisfaction or productivity.

## Steps to Optimize Costs and Utilization



**1. Measure Utilization at Every Level:** Track campus, building, and floor usage to understand how space is being used.



**2. Compare Costs to Usage:** Connect utilization data with rent, energy, and services to identify inefficiencies.



**3. Test Small Changes:** Adjust HVAC setpoints, lighting, or janitorial schedules where occupancy is low, and measure the results.



**4. Scale What Works:** Roll out proven savings strategies across the portfolio.



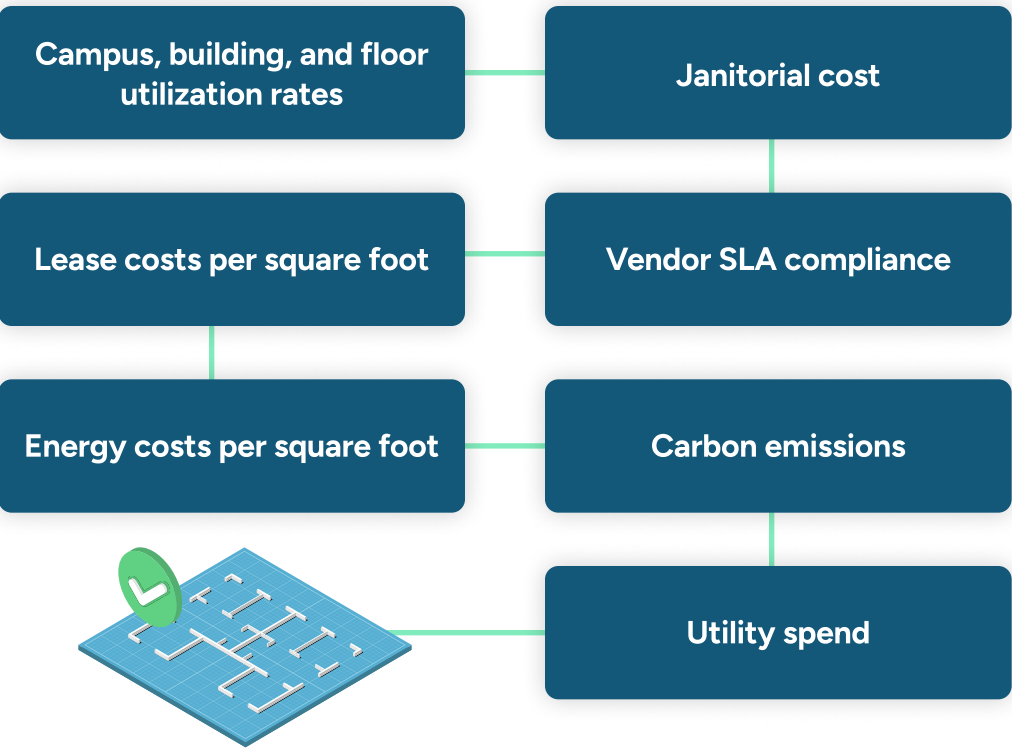
**5. Gather Feedback:** Use surveys to confirm that changes don't harm occupant comfort or service quality.



**6. Build the Executive Case:** Present data in financial terms that align with leadership priorities.

## Key Metrics to Track

Bob recommends that facilities leaders focus on metrics that connect costs directly to how space is used:



These measures highlight where resources are misaligned with demand and provide the data needed to support cost-saving decisions.



## Bonus Insight: How AI Helps Cut Operational Costs

Bob's story about adjusting HVAC setpoints on low-occupancy summer Fridays shows how small, data-driven changes can quickly reduce energy spend. Forward-thinking facilities leaders are now using **Artificial Intelligence (AI)** to take that same idea further by scaling and automating those energy-saving tactics across every building they manage.

## Modernization Without Disruption

In the past, improving HVAC efficiency often required expensive equipment replacements and disruptive retrofits. AI changes that by layering onto existing building management systems through the cloud. Platforms like [BrainBox AI's HVAC Optimization](#) connect with facilities' current infrastructure, pulling data from building controls, sensors, and weather forecasts. From there, the AI:

- Learns each individual building's temperature patterns.
- Predicts temperatures in every zone with exceptional accuracy.
- Automatically adjusts HVAC equipment settings in real-time to cut energy waste while maintaining comfort.
- Continuously revise it's commands to fit evolving seasons, usage, and sustainability goals.

**Dollar Tree**, for example, deployed **BrainboxAI** across hundreds of stores, saving over \$1M in annual energy costs with a payback in less than 12 months, all without major system upgrades or disruption<sup>6</sup>.

*AI is not just an optimization tool. It is the backbone of smarter, autonomous buildings that empower facility managers to drive efficiency, resilience, and sustainability at scale."*

**BRAINBOX AI.**  **Omar Tabba**  
VP Products, BrainBox AI



# Conclusion

This playbook explored the five challenges that most often stand in the way of operational excellence: incomplete asset data, reactive maintenance cycles, inefficient workflows, capital planning errors, and rising operating costs. Each chapter offered proven strategies and advice from experienced facilities leaders, showing that the key to success is a foundation of reliable data. Backed by this, facilities leaders can move towards proactive maintenance, tighten workflows, build strong business cases, and deliver measurable value.

The future lies in using technology, like the example of AI for HVAC, to scale these efforts across the entire portfolio and help organizations meet cost and sustainability goals.

Take the first step today and lead the change toward smarter, more resilient facilities.



1. U.S. Department of Energy, Federal Energy Management Program. (n.d.). Operations and maintenance best practices: A guide to achieving operational efficiency and sustainability. Retrieved from [https://www1.eere.energy.gov/femp/pdfs/OM\\_5.pdf](https://www1.eere.energy.gov/femp/pdfs/OM_5.pdf)
2. Society for Maintenance & Reliability Professionals. (2019, July–August). SMRP Solutions, Vol. 14, Issue 4. Retrieved from <https://smrp.org/Portals/0/Solutions%20issues/SMRP%20Solutions%20Vol%2014%20Issue%204%20July-Aug.pdf>
3. Cecchini, A., Masselli, G. M. P., & Silvestri, S. (2021). Evaluation and optimization of CES performances: Application of Pareto principle to KPIs. Global Clinical Engineering Journal, 4(1), 14–21. <https://doi.org/10.31354/globalce.v4i1.87>
4. American Hospital Association. (2021, February 3). The impact of reduced facility budgets. Health Facilities Management. Retrieved from <https://www.hfmmagazine.com/articles/4180-the-impact-of-reduced-facility-budgets>
5. Shende, S. (2025, August 13). Office space utilization statistics by layouts and facts (2025). Market.biz. Retrieved from <https://market.biz/office-space-utilization-statistics/>
6. BrainBox AI. (n.d.). Dollar Tree unlocks major energy and emissions savings with BrainBox AI. Retrieved September 9, 2025, from <https://brainboxai.com/en/case-studies/dollar-tree-unlocks-major-energy-and-emissions-savings-with-brainbox-ai>

# About Nuvolo

Nuvolo is a global leader in modern, cloud-based Integrated Workplace Management Solutions (IWMS). As part of Trane Technologies, Nuvolo benefits from strategic alignment with innovators in building controls and energy optimization, including BrainBox AI, to deliver smarter, more sustainable operations

Built on the ServiceNow™ Platform, Nuvolo’s flagship solution, Connected Workplace, unifies facilities management, space optimization, and enterprise asset lifecycle management into a single, seamless platform. This empowers organizations to streamline operations, improve efficiency, and make data-driven decisions with confidence.

Nuvolo supports a wide range of industries, including healthcare, life sciences, retail, public sector, higher education, technology, financial services, and large enterprises.

Recognized as a market leader by Verdantix and IDC MarketScape, Nuvolo continues to set the standard for CMMS solutions worldwide.

