



ALTUS SUMMIT - 2026

# NEXT GEN OPERATIONS

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**Chase Carlson**

President, CEO

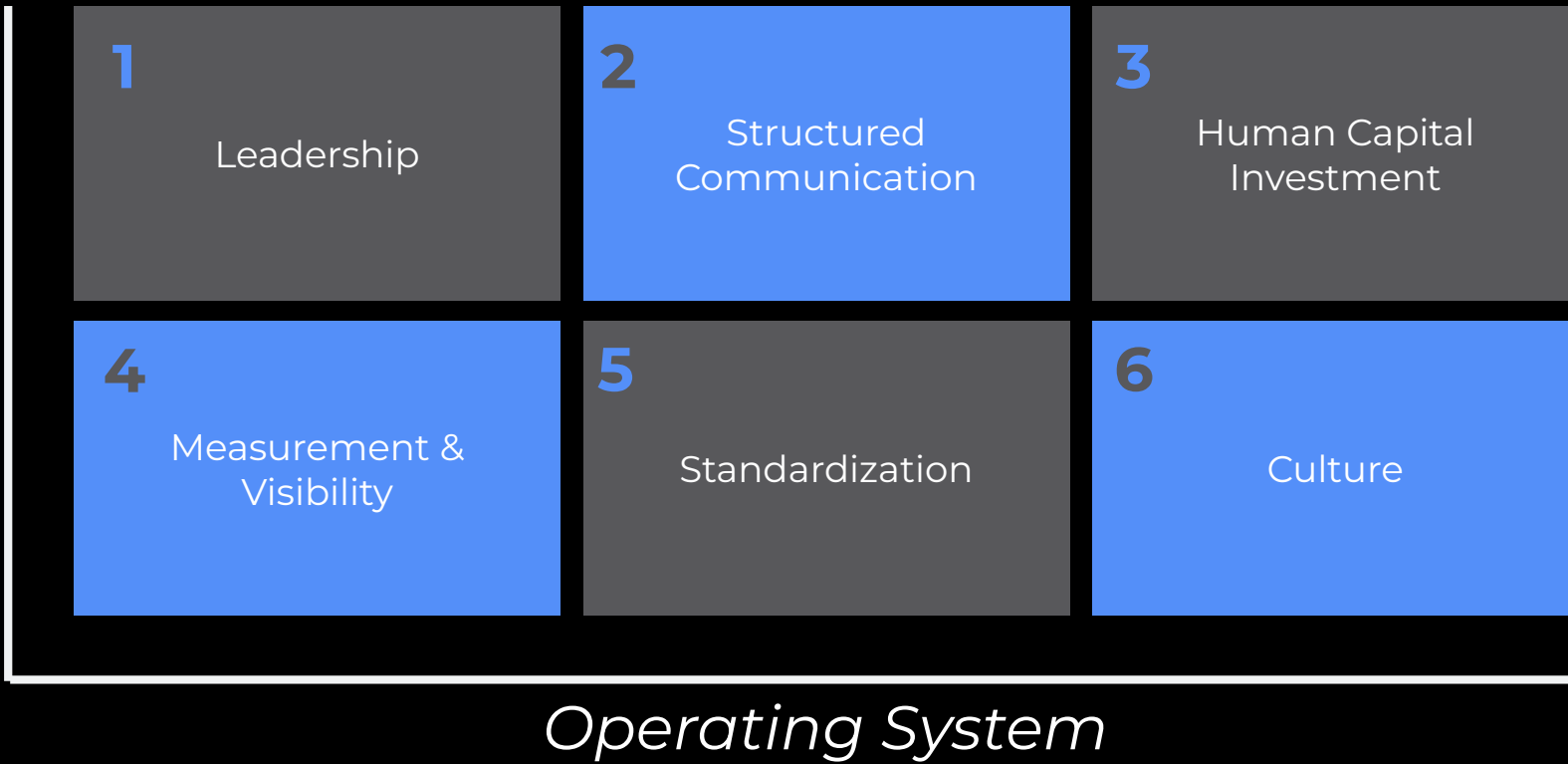
*Pioneer, LLC*

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Recap from April...

# 6D Framework

to achieving Operational **Consistency / Excellence**



What does the  
**next generation** of  
cleaning look like?





NEXORA  
TECHNOLOGIES



This is the **future**

## CHANGING FACILITIES AND UTILIZATION



DYNAMIC SPACES



VARIABLE UTILIZATION



FLEXIBLE OPERATIONS



HIGHER EXPECTATIONS



## ROBOTS, HUMANOIDS AND TECHNOLOGY



AUTONOMOUS CLEANING ROBOTS



HUMANOID ASSISTANTS



AI AND DATA INTELLIGENCE



SMART SYSTEMS



AUTOMATION AND IOT

## AN AGING JANITORIAL LABOR FORCE



RETIREE WAVE



LABOR SHORTAGES



PHYSICAL DEMANDS



RECRUITMENT CHALLENGES



TRAINING GAPS



## A CONVERGENCE CREATING NEW POSSIBILITIES





# Labor Force

# Three challenges surrounding the Labor Force:

1

CHALLENGE 01

**Revenue growth far exceeds labor force growth over the next 10 years**



2

CHALLENGE 02

**Age and turnover are draining the workforce faster than it can be refilled**



3

CHALLENGE 03

**Competency gap to replace institutional knowledge and manage future technology demands**

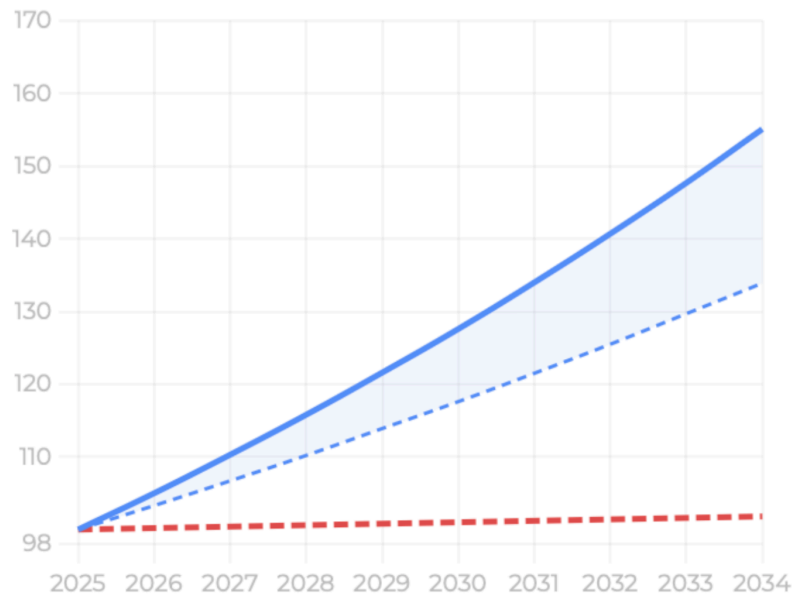


# Revenue grows **25-30x** faster than the workforce behind it.

INDEXED GROWTH · 2025 = 100

— Revenue range (3.3–5.0% CAGR)

- - - Labor supply (~0.2% CAGR)



REVENUE CAGR · IBISWORLD

**3.3 – 5.0%**

Per year for 10 years. Cumulative growth of 38–63% by 2034.

LABOR FORCE CAGR · BLS

**~0.2%**

2% total over 10 years — not per year. Cumulative labor supply expansion of roughly 2% by 2034.

ANNUAL CAGR GAP

**3.1 – 4.8 pts**

Every year, for a decade. Revenue demand compounds. Labor supply barely moves.

## THE IMPLICATION

You cannot staff 38–63% more revenue with 2% more people. The only path forward is **technology, automation, and outcome-based delivery** — or you absorb the gap through margin compression and service failure.

# Median age of **48** is nearly a decade older than the U.S. worker average

**2.4M**

Total employed janitors & building cleaners in 2024

*BLS Occupational Outlook Handbook, 2024*

**\$17.27**

Median hourly wage — vs. \$23.18/hr for supervisors

*BLS OEWS, May 2024*

**150%**

Estimated annual industry turnover rate

*IBISWorld / ISSA Workforce Report*

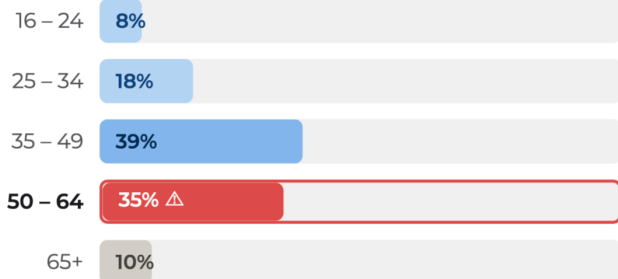
**+2%**

Projected workforce growth 2024–2034 — slower than all occupations avg.

*BLS OOH 2024–2034 projection*

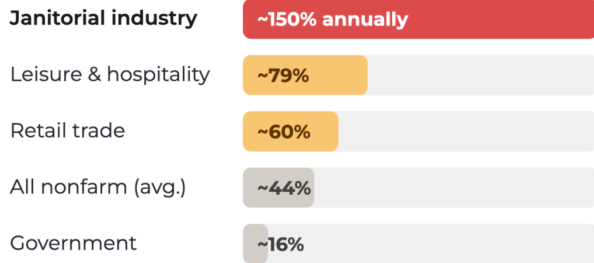
### Age distribution — U.S. janitors & building cleaners

Median age ~48 years — nearly a decade older than the U.S. workforce median of 38.9 years. The 50–64 cohort alone represents 35% of total employment.



### Industry turnover vs. all other sectors

At ~150% annually, janitorial turnover is among the highest of any U.S. industry — more than 3× the national average for all nonfarm workers.



**45%**

Workers 50+ — at or near retirement age

**26%**

Workers under 35 — the pipeline generation

### The pipeline is inverted

There are nearly 2× as many workers approaching retirement (45%, age 50+) as there are entering the workforce (26%, under 35). Without intervention, this gap widens every year through the mid-2030s.

### BLS projected annual openings — what it means

351,300 new positions per year from occupation growth and permanent departures. Company-level churn adds millions more on top.

**~4.8K**

Net new roles per year from 2% growth

**~346K**

Openings from permanent departures — retirements & career exits

Sources: U.S. Bureau of Labor Statistics — Occupational Outlook Handbook, Janitors and Building Cleaners (2024); BLS OEWS May 2024 (wage data); BLS Current Population Survey 2024 (age distribution, median age); BLS Job Openings definition: new positions from employment growth + permanent labor force exits. Industry turnover rate: IBISWorld Janitorial Services U.S. Report; ISSA Workforce Trends. All-nonfarm turnover: BLS JOLTS 2023 annual calculation. Leisure/hospitality and retail turnover: BLS JOLTS sector data.

# 68% of BSC firms have no formal training program

## 57%

**of BSC operators report difficulty finding workers with adequate skills**

Not just bodies — qualified workers capable of infection control, chemical handling, and technology-integrated workflows. The bar is rising while the talent is thinning.

## < 2 yrs



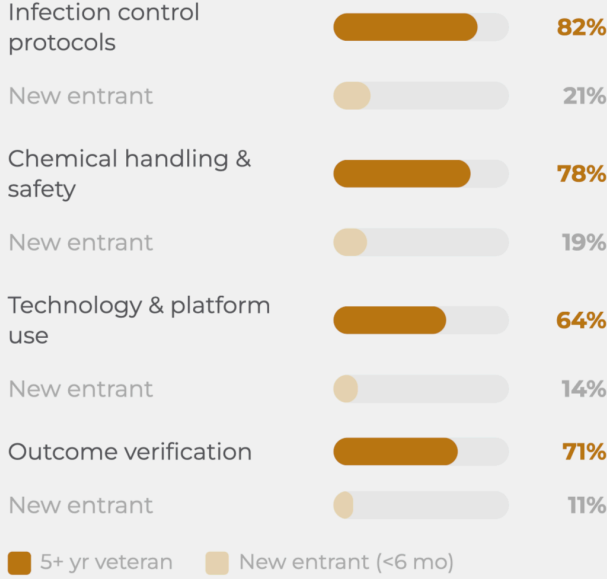
Median industry tenure. Most workers leave before reaching full competency — let alone mastery.

## 100%+



Annual voluntary turnover rate industrywide. The workforce effectively replaces itself every year.

### WORKER PROFICIENCY · EXPERIENCED VS. NEW ENTRANT



## 68%



of BSC firms have no formal training program beyond basic onboarding. Skills are passed person-to-person — or not at all.

# Labor Force Takeaways:

1

## Build a 90-day onboarding track

Role-specific milestones, a designated buddy, and structured check-ins at 30, 60, and 90 days. Stop the bleed where it starts.

**30–50%**

early turnover reduction with structured onboarding

2

## Commit to a learning platform

Mobile-first, built for a distributed workforce. Cover infection control, chemical handling, technology use, and outcome verification. Learning must be the pathway to advancement.

**68%**

of BSC firms have no formal training program

3

## Build job descriptions of the future — not just today

Define a visible career ladder: Frontline Cleaner → Skilled Technician → Site Lead. Recruit into a future, not just a shift. A career path is a retention strategy disguised as an org chart.

**<2 yrs**

median tenure — workers leave before reaching full competency

4

## Tie pay to skill — with clear progression

Attach pay differentials to each competency tier. Advancement is earned, transparent, and documented — not based on tenure or manager preference. Give workers a financial reason to grow.

**2.4×**

higher retention in companies with structured advancement vs. tenure-only pay

5

## Launch a veteran mentor program — and attach incentives to it

Pair your 50+ veterans with rising workers before they retire. Pay mentors for the transfer — a stipend, a title, a schedule preference. Institutional knowledge doesn't transfer by osmosis. You have to make it worth their while.

**45%**

of the workforce is 50+ — the clock is running



# Facilities

# Facility trends that are **rewriting** cleaning programs



## Occupancy fluidity

Hybrid work has permanently fractured the 5-day, full-building model

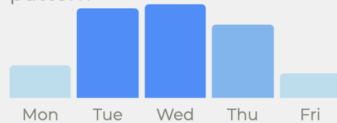
**40–60%**

AVG CLASS A OFFICE UTILIZATION MON–FRI

**3 days**

MEDIAN IN-OFFICE DAYS PER WEEK, HYBRID WORKERS

Typical weekly occupancy pattern



### BSC IMPACT

Contracts written for 5-day full coverage are over-servicing 2 days/week. Dynamic scheduling tied to real occupancy data is the only defensible model.



## Health-certified buildings

WELL, RESET, and LEED are becoming baseline tenant expectations

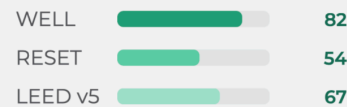
**4x**

GROWTH IN WELL-CERTIFIED SQ FT SINCE 2020

**68%**

TENANTS CITING HEALTH STANDARDS AS LEASE CRITERIA

Certification adoption trajectory (indexed)



### BSC IMPACT

Cleaning becomes a compliance function. BSCs must deliver ATP-verified outcomes, air quality documentation, and digital audit trails — or lose Class A contracts to those who can.



## Space densification swing

Activity-based layouts concentrate traffic — then decompression reverses it

**151 sf**

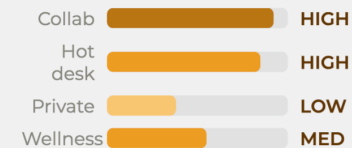
AVG SQ FT PER WORKER

— DOWN FROM 225 SF IN 2010

**3x**

HIGHER CONTAMINATION IN HOT-DESK VS ASSIGNED ZONES

Cleaning demand by zone type (relative index)



### BSC IMPACT

Same building, radically different demand by floor and zone. Uniform cleaning schedules waste labor in low-traffic areas and under-serve high-touch collaborative spaces.

# What **2.2** billion sq ft of tenant data tells us

**2.2B**

Sq ft of commercial space benchmarked in the Kingsley Index

**>70%**

Renewal rate when tenants rate satisfaction "good" or "excellent"

**9 mo**

Average leasing downtime when a tenant is lost

**2 yrs**

Time to recover lost revenue after a tenant departure

## WHAT DRIVES OVERALL TENANT SATISFACTION

- 1 Location & building quality Fixed
- 2 Rent & lease terms Fixed
- 3 **Property management & service** 4.49

**Only #3 is controllable.** Location and price are fixed. Service is the only lever property managers — and their BSCs — can pull to move renewal intent.

## BOMA 360 BUILDINGS VS. NON-DESIGNATED

Overall satisfaction 4.49

Non-designated average 4.28

Staff professionalism rated 4.76/5 in BOMA 360 buildings — highest individual score tracked.

## WHERE CLEANING FITS IN THE SATISFACTION STACK

- Restrooms #1
- Common areas #2
- Lobby / entry #3
- Elevators #4
- Tenant suites #5

*Ranked by frequency as top tenant complaint area. Restrooms are the single most-cited service failure in Kingsley commercial surveys.*

**80%** of workers say cleanliness directly affects their productivity and wellbeing

**94%** of Kingsley ratings were positive in buildings with structured cleaning accountability

## THE RENEWAL MATH — WHAT'S AT STAKE

Satisfied tenants >70% renew

Dissatisfied tenants ~28%

### Cost of losing one tenant (JLL)

- 1 month** of lost rent immediately
- 3 months** of construction / re-fit time
- 9 months** average leasing downtime
- 2 years** to fully recover lost revenue

### The BSC implication

Your cleaning score is a direct input to tenant renewal intent. A BSC that can document quality — via inspections, ATP data, and digital logs — gives property managers evidence to defend satisfaction scores and protect NOI.

# Facility Takeaways:

1

## Audit your schedules against actual occupancy — not the contract

Pull occupancy data from your top accounts and map it against your service schedule. Where the two don't match, you're either over-servicing empty space or under-servicing peak demand. That gap is a margin problem — and a service quality problem.

**40–60%**

avg. Class A utilization Mon–Fri

2

## Build a quality system your clients can actually see

ATP testing, digital inspection logs, a monthly report clients can share upward. Most BSCs deliver service with nothing to show for it. Documented outcomes are what protect renewals and move Kingsley scores — and they're what separates you from the low-price competitor.

**94%**

Kingsley ratings positive with structured cleaning accountability

3

## Reposition your offering around health — not just cleanliness

WELL, RESET, and LEED are becoming baseline in Class A. Pick one account, learn the certification requirements, and align your protocols to support them. Then make it a standard part of every proposal you write.

**68%**

of tenants cite health standards as a lease criterion



**Technology**

# Earn the right to **automate**.



### THE TEMPTATION TO AVOID

Skipping phase one because the technology looks ready is the most common BSC mistake. If your team doesn't trust it, your clients won't either.

### THE UNLOCK IN PHASE TWO

Data discipline built in phase two is what makes phase three defensible — to your clients, your workforce, and your investors.

### THE STRATEGIC ENDGAME

Scale isn't about fewer people. It's about the same revenue with a more resilient, measurable, and margin-accretive operating model.

# Robotic adoption increase by **50%** over the next five years

**<5%**

**BASELINE — 2026**  
**of all commercial cleaning performed by robots**

Automation is nascent across most BSC portfolios. Hard-floor scrubbing leads. Most tasks remain entirely human-executed.



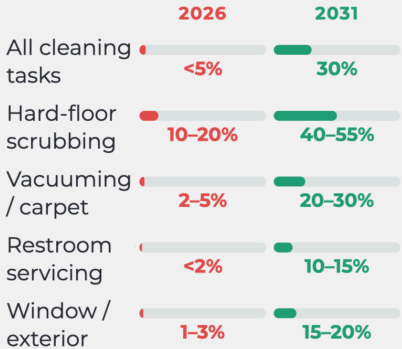
**30%**

**PROJECTION — 2031**  
**of commercial cleaning performed by robots**

Driven by 23.7% CAGR robot market growth and 4.2% annual wage escalation. Autonomous floor care and sensor-dispatched cleaning become standard.

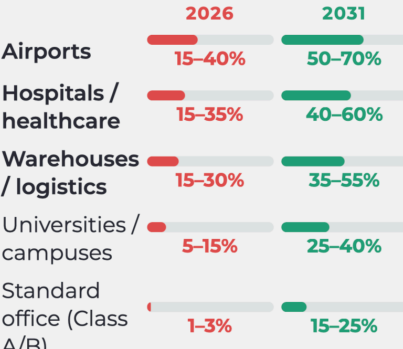
**Penetration by task type**

Where robots are replacing or augmenting human labor



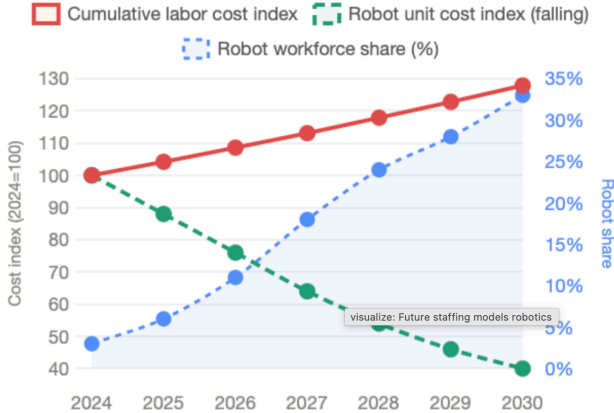
**Penetration by facility type**

Large-format facilities are years ahead of standard commercial



**The labor cost / robot cost intersection**

Wages rising 4.2%/yr. Robot costs falling as the market scales 23.7%/yr. The crossover is already in motion.



**+15%**

Projected wage increase by 2027 — adding \$5,200+ in annual labor cost per worker

**3.5x**

Robot market expansion by 2030 — volume drives unit cost down and availability up

Sources: Grand View Research — Global Cleaning Robot Market 2024–2030 (23.7% CAGR, \$6B→\$21B); BLS OEWS May 2024 / Swept Wage Report 2024 (4.2% wage growth); ISSA / IBISWorld automation penetration estimates; Heathrow Airport ROI study. 2031 projections are illustrative estimates based on current market trajectory.








# AI Adoption - **Real** Talk

<p>01</p>  <h3>Intelligent routing</h3> <p>Teaching the model how a building works — then letting it optimize labor deployment.</p> <ul style="list-style-type: none"><li>• In development</li></ul>	<p>02</p>  <h3>Quality control</h3> <p>Cora closes the loop — inspect, score, correct, and verify without manual intervention.</p> <ul style="list-style-type: none"><li>• Active — East and West</li></ul>	<p>03</p>  <h3>Reporting &amp; analytics</h3> <p>Snowflake and Roadhouse turn operational data into client intelligence and account alerts.</p> <ul style="list-style-type: none"><li>• Active — client reports in pilot</li></ul>	<p>04</p>  <h3>Business administration</h3> <p>Client communications and proposals — all crafted with Pioneer's brand guidelines.</p> <ul style="list-style-type: none"><li>• Active and expanding</li></ul>
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THE PLATFORM UNDERNEATH ALL FOUR AREAS

### Pioneer's data infrastructure

A connected stack of operational, financial, and people systems — all feeding a single source of truth. Any Pioneer leader can query the business in plain language, without writing a report or waiting on someone to run one.

 <p><b>Snowflake</b> Data warehouse</p>	 <p><b>Sigma</b> BI &amp; dashboards</p>	 <p><b>Claude</b> AI agent</p>	
 <p><b>Cora</b> Operations</p>	 <p><b>WinTeam</b> ERP</p>	 <p><b>Paycom</b> HR &amp; payroll</p>	 <p><b>HubSpot</b> CRM</p>



# Final Thoughts

# Next Gen **Playbook** to help ready your company:

## < \$10M

This week's priority: stop the bleed

### LABOR

- Write a one-page onboarding checklist for your most common role — today, not next quarter
- Name one veteran employee as an informal mentor and tell them — that's the program
- Decide what "skilled" looks like in your company and tie \$1/hr to it

### FACILITIES

- Call your top account and ask if their occupancy has changed — listen to the answer
- Send a one-paragraph summary of what you did last month to every active client

### TECHNOLOGY

- Open Claude.ai — use it to draft your next proposal, job post, or client email
- Download a free mobile inspection app and run your first digital check this week

Cost to start: \$0. Time to start: today.

## \$10–25M

This month's priority: build the system

### LABOR

- Block time this week to write a 30/60/90 onboarding track for your lead cleaner role
- Identify your three most at-risk veteran employees and schedule a conversation with each
- Post one open role in a workforce development program or re-entry organization

### FACILITIES

- Buy an ATP meter — test your top 5 restrooms this week and write down what you find
- Pull badge or entry data from one building and compare it to your current service schedule

### TECHNOLOGY

- Select and deploy a mobile QC inspection platform — give supervisors 30 days to use it
- Contact one autonomous scrubber vendor and request a site demo at your largest account

If it doesn't have an owner and a deadline, it won't happen.

## \$25–50M

This quarter's priority: connect the dots

### LABOR

- Rewrite your three most-hired job descriptions to include technology and career path language
- Assign a learning platform vendor to evaluate this quarter — make someone own the decision
- List every employee over 55 — that's your knowledge transfer priority list

### FACILITIES

- Send an AI-generated service report to your top 10 clients this month — no exceptions
- Map actual vs. contracted hours on your 5 largest accounts — identify the gap in writing

### TECHNOLOGY

- Get all operational data — payroll, job cost, inspections — into one system this quarter
- Run your first two accounts through an AI routing analysis and compare to what you deploy

Stop managing by instinct. Start managing by data.

## > \$50M

This quarter's priority: commit to the model

### LABOR

- Redesign two job titles to reflect the hybrid human-robot model you're building toward
- Launch a paid mentor program — stipend, title, schedule preference — this quarter
- Define your natural attrition transition plan in writing and share it with your leadership team

### FACILITIES

- Identify your first outcome-based contract candidate — one account, one pilot, this year
- Pick one Class A account and begin aligning your protocol to their WELL or LEED requirements

### TECHNOLOGY

- Deploy a pilot AI routing model on your 3 most complex accounts this quarter
- Write your robotics playbook — site types, ROI threshold, integration protocol — before you buy

At your scale, delay is the most expensive decision you can make.