

Project & Operations Portfolio

Selected synthetic case studies illustrating project recovery, practical project controls, and evidence-based process improvement.

01 Project Recovery & Controls

Troubled-project diagnosis, recovery priorities, acceptance evidence, and integrated controls.

02 Project Controls Setup

Multi-project visibility, standardized governance, risk/change ownership, and executive exception reporting.

03 Operations & Process Improvement

Cycle-time decomposition, constraint diagnosis, measurable interventions, and 90-day control plan.

Project Recovery & Controls

NorthStar Warehouse Automation Modernization

A warehouse-automation program approaching go-live with supplier exposure, integration defects, schedule variance, training gaps, and approved changes affecting cost.

FINAL COST

\$4.92M

vs \$4.80M baseline

SCHEDULE VARIANCE

+7 days

controlled through change process

ACCEPTANCE METRICS

5 / 5

defined criteria met

Executive diagnosis

Separate visible variance from the risks that actually threaten acceptance.

BASELINE BUDGET

\$4.80M

Approved baseline

FINAL COST

\$4.92M

+2.5% vs baseline

GO-LIVE VARIANCE

7 days

Accepted through control

OPEN CRITICAL/HIGH

1

Residual exposure

Situation

- A seven-day schedule shift was visible, but supplier and integration exposure created more material delivery risk than the calendar variance alone.
- Approved changes explained most of the cost movement; the control problem was decision quality and traceability, not unexplained cost leakage.
- Operational readiness had to be judged against measurable throughput, error, proficiency, availability, and safety criteria - not installation completion alone.

Control response

- Link schedule, risk, issue, change, cost, quality, and executive decision records into one control picture.
- Use explicit decision owners and deadlines where supplier or integration exposure could consume remaining float.
- Protect acceptance quality: extend testing rather than reducing scope, then verify readiness against defined operating metrics.

PRIMARY CONCLUSION

The project did not need a cosmetic 'green' status. It needed controlled acceptance of the seven-day shift, traceable decisions around the remaining risks, and evidence that operational performance met defined criteria.

Evidence behind the recovery decision

Selected measures from the integrated control package.

Operational acceptance

Measure	Target	Actual	Status
Peak throughput	1,550/hr	1,585/hr	MET
Pick error rate	<= 0.60%	0.52%	MET
Operator proficiency	>= 90%	94%	MET
Availability	>= 99%	Verified	MET
Safety closure	100%	Verified	MET

Risk exposure recorded

Critical	1
High	5
Medium	0
Low	0

Milestone variance vs baseline

Design baseline		0d
Facilities		+7d
Equipment install		+7d
Integration		+7d
UAT / training		+7d
Go-live		0d

Cost position

BASELINE BUDGET \$4.80M Approved baseline	FINAL COST \$4.92M +2.5%
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Approved changes explain the cost movement; the remaining decision is readiness, not unexplained spend.

Recovery plan and client deliverables

A bounded control package designed to make decisions visible and execution measurable.

Recovery actions

1

Protect long-lead procurement

Use early decision authority and alternate sourcing where supplier lead time threatens the installation window.

2

Resequence constrained work

Add commissioning capacity and resequence activities after schedule float disappears.

3

Preserve test quality

Extend UAT rather than reducing regression scope to manufacture an on-time date.

4

Control scope and cost

Track approved changes, implementation status, cost impact, and verification evidence.

5

Close on operating evidence

Use explicit acceptance metrics and documented decisions to transfer ownership to operations.

Selected deliverables

- Project health and recovery assessment
- Integrated schedule and milestone variance view
- Risk register with response ownership
- Issue, action, and decision controls
- Change-control log with cost and schedule impacts
- Cost performance and funding view
- Quality and acceptance dashboard
- Closeout evidence and transition controls

CLIENT VALUE

A clear answer to what is actually threatening the project, what decisions are required now, and what controls will keep recovery on track.

Project Controls Setup

Harborview Construction Services | 10-project portfolio

A regional contractor managed concurrent projects through different spreadsheets, email, meetings, and limited specialist-tool licenses. Leadership lacked a consistent view of milestones, risks, changes, and cost exposure.

PORTFOLIO VALUE

\$12.89M

10 active projects

ACTIVE PROJECTS

10

standardized reporting

HIGH / CRITICAL RISKS

19

exception workload

The problem was consistency, not software

Standardize control logic and management visibility without forcing a new enterprise platform.

OVERDUE MILESTONES

14 -> 6

Six-week rollout

UNOWNED HIGH RISKS

11 -> 0

Ownership required

PENDING DECISIONS

7 -> 2

Five-day escalation

REPORTING EFFORT

3.5 -> 1.5h

Per project / week

Design principles

- One standardized weekly update feeds schedule, risk, change, action, and executive reporting.
- Detailed scheduling can remain in specialist tools where licenses exist; the controlled Excel view keeps the broader team aligned.
- Field updates stay lightweight while project managers retain accountability for complete control records.
- Executives see exceptions, decisions, and trend movement rather than another detailed status meeting.

Governance

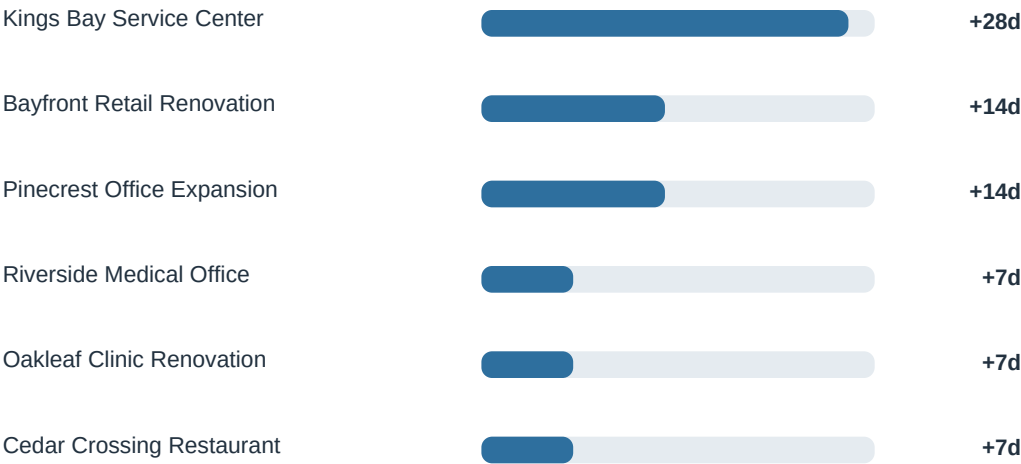
- Required owner and next-review date for material risks.
- Decision-due dates for changes with cost or schedule impact.
- Weekly PM working session for exceptions and overdue actions.
- Monthly executive review focused on red/amber conditions and decisions.

The solution is a common control model that makes exceptions visible while allowing teams to keep detailed planning in the tools they already use.

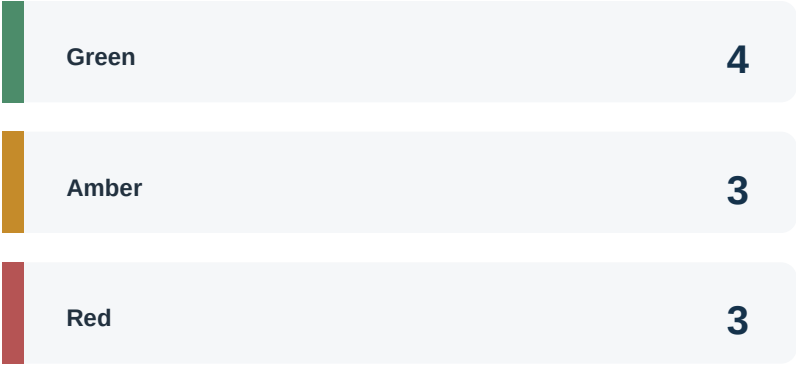
Portfolio visibility

Exception-based reporting concentrates management attention where it matters.

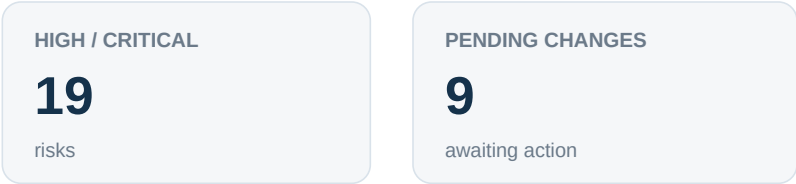
Largest schedule exceptions



Portfolio status



Exception workload



Management attention is concentrated on a small number of projects rather than spread evenly across the portfolio.

Control system and client deliverables

A lightweight operating system that works even when tool access is uneven.

Control framework

Control	Purpose	Management question
Portfolio rollup	Exception visibility	Where does leadership intervene?
Milestone schedule	Controlled dates / variance	What moved, by how much, and why?
Risk register	Ownership / review cadence	Which exposure lacks an owner?
Change control	Decision deadlines / impacts	What is waiting on a decision?
Stakeholder plan	Engagement ownership	Who must be aligned?
Governance cadence	Repeatable review rhythm	What is reviewed weekly vs monthly?

Selected deliverables

- Portfolio dashboard and project rollup
- Standard milestone and schedule-control view
- Risk and change registers with owners and due dates
- Stakeholder and communication plan
- Governance calendar and review cadence
- Implementation roadmap and adoption checkpoints

BEST FIT

Organizations with multiple projects, inconsistent reporting, limited tool access, or weak management visibility that need practical controls without unnecessary bureaucracy.

Operations & Process Improvement

Atlantic Equipment Services | Service cycle-time diagnostic

A commercial equipment-service operation had growing revenue but worsening turnaround time. Management suspected technician capacity; the data showed that waiting and rework were consuming the larger share of elapsed time.

JOBS ANALYZED

60

synthetic service records

MEDIAN CYCLE TIME

6.1 days

baseline turnaround

REWORK / RETURN RATE

16.7%

capacity lost to repeat work

The constraint was waiting, not touch time

Decompose elapsed time before recommending additional capacity.

AVG CYCLE TIME

6.07 days

60-job baseline

PARTS WAIT

1.98 days

32.6% of stage time

APPROVAL WAIT

1.53 days

25.1% of stage time

REPAIR TOUCH

0.95 days

15.6% of stage time

Diagnosis

- Most elapsed time is queue or waiting time, so adding technician capacity would not address the largest delay components.
- Parts waiting is the largest single delay stage; supplier concentration and stock policy become priority questions.
- Customer approval is the second-largest queue and is partly policy-driven rather than capacity-driven.
- A 16.7% rework / return rate consumes capacity that should be recovered before adding more work into the system.

Primary conclusion

The first 90-day test should reduce avoidable waiting and rework, then measure whether cycle time improves. Capacity expansion becomes a later decision only if the constraint remains after those controls are implemented.

WHY THIS MATTERS

A staffing decision made from total turnaround time alone would have targeted the wrong part of the system.

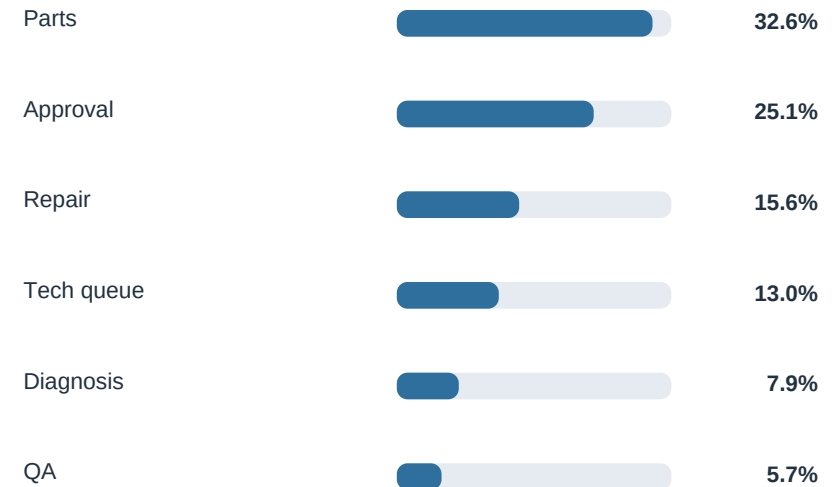
Cycle-time decomposition

Measured stage time shows where the service flow actually waits.

Average days by process stage



Share of measured time



WHAT THE DATA CHANGES

Without decomposition, slower turnaround can look like a staffing problem. The baseline indicates that supplier and parts policy, approval rules, and rework controls should be tested before recommending additional technician capacity.

CONTROL METRIC

Track end-to-end cycle time together with parts wait, approval wait, first-time-fix / rework, and aged-job ownership. A single average cycle-time number is not enough to manage the queue.

90-day control plan

Convert findings into owned actions, measurable tests, and a repeatable review cadence.

Action	Control	Expected signal
Top-25 recurring parts min/max	Stock + alternate supplier matrix	Lower parts-wait days
Repair pre-approval thresholds	Account-specific decision rules	Lower approval-wait days
Daily aged-job queue	Named owner + next action	Fewer stalled jobs
Standard final QA checklist	Defect capture + weekly review	Lower rework / returns
Weekly KPI review	Cycle / wait / rework trends	Evidence of sustained change

Selected deliverables

- Current-state process and data assessment
- Cycle-time decomposition and delay Pareto
- Root-cause hypotheses tied to measurable evidence
- Quality and corrective-action controls
- Supplier and procurement actions
- Risk and issue register
- 90-day implementation schedule
- Management KPI and review cadence

ENGAGEMENT VALUE

Establish the baseline, identify the most plausible constraint, design a small intervention, and define the evidence required to decide whether the change worked.