

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.

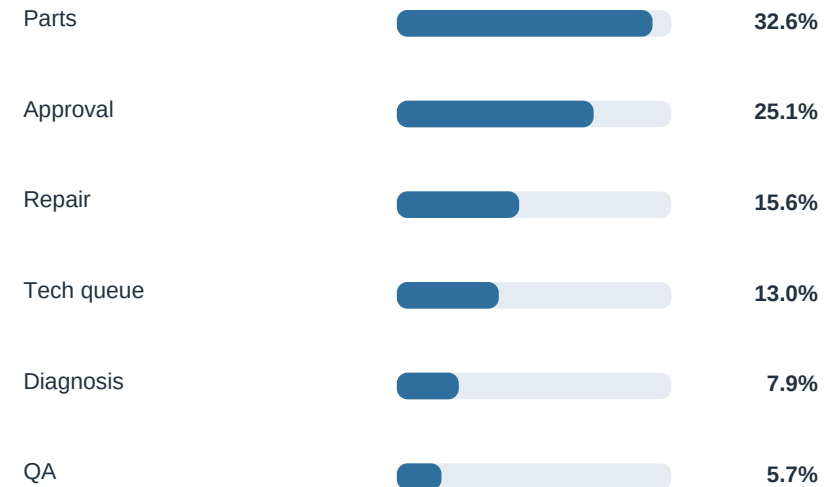
Cycle-time decomposition

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.