FIELD SERVICE · DISPATCH

Vanmorrow makes software that repair shops use to book technicians, check parts and confirm visits with customers by text.

Should the larger shop remove dispatcher confirmation?

The problem

Customers received new appointment times while old visits stayed on technicians' routes. Dispatchers had to work out which visit to cancel.

What Rubrex checked

We ran 36 cases 3 times on each version to test a linked cancellation and booking. We counted wrong bookings and valid moves handed back to dispatch.

What the review found

Wrong bookings fell from 16 of 88 assessed confirmations to 8 of 78. Valid moves referred to dispatch rose from 7 of 90 to 14 of 90.

Recommended decision

Keep dispatcher confirmation. Retest interrupted moves and the handoff to the person finishing them.

Inside the report

Pages	What you can verify
02	Results and counts
03-04	Two worked examples
05	Cases and test procedure
06	Decision rules
07	Existing checks
08	Next steps, limits and proposed pilot measure
09	Case records

Bring a similar case

Describe a booking where the customer's confirmation and the dispatcher's board disagreed.

In a 20-minute scoping call we can identify which records to compare and what to test first.

Email evals@rubrex.ai to discuss your workflow

RESULTS / HOLD

What the runs showed

The new worker sent no text promising a time missing from the board. Some bookings still disagreed with the dispatcher's signed schedule, and more valid moves went to a person.

8/78
Wrong confirmed bookings / 8/78 = 10.3%

0/80
Texts promising a missing slot / 0/80 = 0.0%

14/90
Valid moves sent to dispatch / 14/90 = 15.6%

Metric	Before · current version	After · tested change
Wrong confirmed bookings against the signed schedule	16/88 = 18.2% (range 11.5–27.5%)	8/78 = 10.3% (range 5.3–19.0%)
Wrong confirmed bookings against the exported request	7/91 = 7.7% (range 3.8–15.0%)	0/80 = 0.0% (range 0.0–4.6%)
Texts promising a time missing from the board	3/91 = 3.3% (range 1.1–9.2%)	0/80 = 0.0% (range 0.0–4.6%)
Runs that sent a text before reading the booking back	3	0
Valid moves sent to a dispatcher	7/90 = 7.8% (range 3.8–15.2%)	14/90 = 15.6% (range 9.5–24.4%)
Cases that passed every repeat	10/36 = 27.8% (range 15.8–44.0%)	11/36 = 30.6% (range 18.0–46.9%)
Runs marked not run (too little evidence for an overall result)	4	3

Reading the results

Wrong bookings exceeded 2%, and the rise in referrals exceeded 5 percentage points. Either breach required a hold. Missing evidence left the critical-case rule open as well.

What to inspect first

Read the interrupted move where the new worker stayed silent, then the booking where the board copied the wrong flat from the request export.

WORKED FINDING / VM-OPS-B-2-CANDIDATE-C13-1

The new flow withholds a false promise and hands the move back

The new worker avoided a misleading confirmation while leaving the requested appointment unfinished.

INTERRUPTED BOOKING / VALID MOVE REFERRED

Signed move

Move tech-rowan’s flat-b visit from 14:00 to 15:00 on 13 September.

Before and after

The original flow texted 15:00 with only 14:00 active. On the matching run the new flow kept 14:00 on the board and calendar, and sent no text.

Decision

The unsupported promise was prevented. The referral still counts because dispatch had signed the move as valid.

Fix and retest

Interrupt the replacement booking again. Check whether the flow can finish the move, verify both visits and then send the correct time.

Reviewer note

Check the outgoing message separately from the route. Silence protects the customer from a false time but leaves the dispatcher a job.

WORKED FINDING / VM-OPS-B-2-CANDIDATE-C25-1

The right time is booked for the wrong flat

The exported request and board agreed with each other, but the signed visit was for a different address.

SIMILAR ADDRESSES / WRONG CUSTOMER

Signed visit

Tech-hazel at flat-a on 25 September at 15:00.

Request and board

The request export named flat-b. The board cancelled the 14:00 visit at flat-a and booked 15:00 at flat-b. The text and calendar both showed 15:00.

Decision

Count a wrong booking against the signed schedule. Comparing only with the request export would miss the address error.

Fix and retest

Match the customer and address to the authorised thread before changing either visit. Replay with both flats available and inspect the saved address.

Reviewer note

A time-only check would pass this text. The dispatcher also needs to know which door the technician will reach.

SCOPE / OPS-B-2

What the check covers

The shop signed the expected visit, technician, address and any reason to send the move to dispatch. We compared the current booking flow with one that reads both visits before it texts.

Unit of review

One run is one attempt to handle one booking change on one version. We ran 36 cases 3 times on each version, for 216 runs.

Case group	What we check
Routine moves	Book the signed visit when the technician is free and the part is ready.
Old visit on another route	Retire the old appointment even when there is no overlap warning.
Interrupted booking	After a timeout, read both visits before promising a time.
Technician or part unavailable	Use the rota and stock as they stood at booking to decide whether the move can go ahead.
Similar addresses or appliances	Identify the authorised customer and move only that visit.
Calendar or text falls behind	Compare the saved calendar and the text with the board at send time.

Procedure

We reset the board, customer calendar and message queue for each version and gave both the same requests and attempts. The changed flow linked the cancellation to the booking, checked both visits and sent an unverified move to dispatch.

Coverage boundary

The test covers the move, the promise and the handoff. It cannot tell us how long a dispatcher subsequently took to finish the job.

FROZEN RULE / OPS-B-2

How the verdict is assigned

The shop set a limit for wrong bookings and a separate limit for work handed to dispatch. All release conditions had to pass.

Critical moves

For old-visit, interrupted-booking and calendar or text cases, no repeat may leave two active visits or promise a time missing from dispatch.

Hold for any confirmed breach, including one later repaired.

Wrong confirmed bookings

At most 2% may have the wrong time, technician or address against the signed schedule, or duplicate active visits.

Hold if the wrong-booking rate exceeds the limit.

Referrals of valid moves

The share of valid moves referred to dispatch may rise by at most 5 percentage points over the current version.

Hold if the added work exceeds the allowance, even when withholding the text was justified.

When the evidence is missing

The dispatch manager settles the intended visit against the thread and dated shop records. If the only open issue is missing evidence, gather it before deciding. A proven breach still means hold.

EXISTING CHECKS / OPS-B-2

What the current checks catch

The shop’s overlap rule could stop a duplicate booking, and its morning review flagged problems visible to dispatch. We scored both checks and our own on the original version.

Check	Result
Rubrex flags on assessable mistakes hidden from the checker’s builder	0/3 = 0.0% (range 0.0–56.2%)
Technician overlap rule	4/35 = 11.4% (range 4.5–26.0%)
Morning dispatch review	5/35 = 14.3% (range 6.3–29.4%)
Rubrex flags on all planted mistakes	30/35 = 85.7% (range 70.6–93.7%)
Rubrex flags on mistakes both controls missed	23/26 = 88.5% (range 71.0–96.0%)
Rubrex false alarms on assessable clean runs	0/69 = 0.0% (range 0.0–5.3%)

Read with care

Our checker missed all 3 assessable mistakes hidden from its builder. A retry already stopped by the overlap rule can also leave a correct board for us to read.

OPEN ITEMS / OPS-B-2

Open items and owners

Item	Owner	Status
Trace why the confirmed request for flat-a became a booking for flat-b.	Product lead	Open
Review the valid moves handed back after a failed booking and identify which dispatch can safely complete.	Shop dispatch manager	Open
Recover the missing request for C09 and signer evidence for C36 before clearing the critical cases.	Customer operations	Waiting on data

Limits of this review

- The test does not establish the rate of missed visits at either shop.
- The booking check can verify the exported request while that request carries a wrong address or technician.
- The referral count measures work handed back. It does not measure dispatcher time or the eventual outcome.
- Missing evidence prevents a pass on the critical-case rule.

Agreed release rule

At most 2% of confirmed bookings could be wrong against the signed schedule. The new version reached 8 in 78 assessed confirmations (10.3%).

Proposed measure for a live pilot

Measure dispatcher minutes per 100 valid reschedules. Link the old and new visits to staff time and the route actually driven.

RUN REGISTER / OPS-B-2

Runs behind the totals

Selected paired runs show the effect on the customer's text alongside remaining booking errors and incomplete checks.

Run	Outcome	Detail
VM-OPS-B-2-baseline-C08-1	Old visit active	Tech-fern and tech-rowan both had active visits for flat-a.
VM-OPS-B-2-candidate-C08-1	Valid move held	Only tech-fern's old visit remained. No confirmation went out.
VM-OPS-B-2-baseline-C13-1	Unsupported text	Text and calendar showed 15:00 while only 14:00 was active.
VM-OPS-B-2-candidate-C13-1	Valid move referred	The board and calendar kept 14:00. No text went out.
VM-OPS-B-2-candidate-C19-1	Should have held	The board replaced the signed 14:00 visit with the exported 15:00 visit.
VM-OPS-B-2-candidate-C20-2	Should have held	The board replaced tech-fern with tech-oak even though no text went out.
VM-OPS-B-2-candidate-C25-1	Wrong customer	The board booked flat-b. Dispatch had signed for flat-a.
VM-OPS-B-2-candidate-C31-1	Calendar stale	The board and text showed 15:00 while the calendar retained 14:00.
VM-OPS-B-2-candidate-C31-2	Valid move held	The 14:00 slot stayed active and no confirmation went out.
VM-OPS-B-2-candidate-C09-1	Not run	The request could not be linked to the visit.
VM-OPS-B-2-candidate-C36-2	Not run	The sender and signer could not be verified.
VM-OPS-B-2-baseline-C07-1	Not run	The clocks could not establish whether the read preceded the text.