Smart Buildings SHOW
14-15 October 2026 • ExCeL London

PROVE
TECHNOLOGY DECISION INTELLIGENCE

MANAGEMENT & PROPTECH THEATRE

Occupancy Data Is Not Workplace Intelligence

Why Smart Buildings Still Make Dumb Decisions

15 October 2026 | 11:45–12:20

ExCeL London

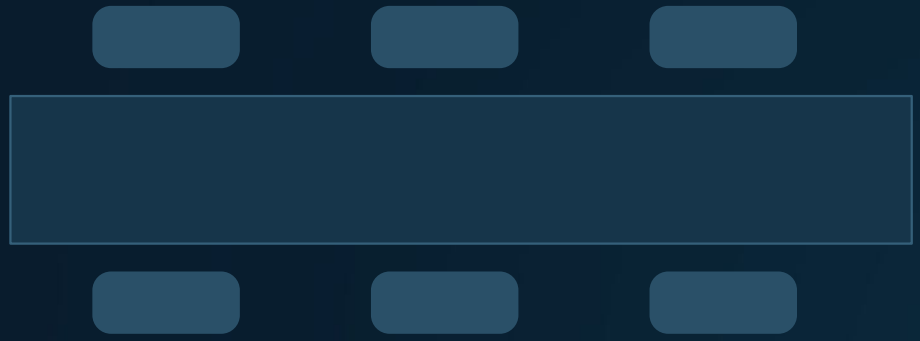
FREDERIK JOUSTRA

Founder, Prove TDI



I've been on both sides of the table.

SUPPLIER PROPOSITION
The selling side



BUYER DECISION
The buying side

The workplace tests both sides' assumptions.



BOTH SIDES OF THE TABLE

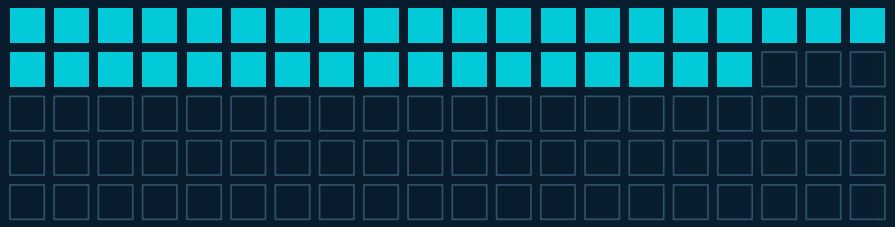
OCCUPANCY DATA IS NOT WORKPLACE INTELLIGENCE

Same people. Same moment.

BEFORE

37%

37 occupied desks ÷ 100 available



Now remove fifty available desks.

Illustrative arithmetic: occupied desks ÷ available desks at a single moment. Not a weekly average. Establishes neither a benefit nor a failure.

BOTH SIDES OF THE TABLE

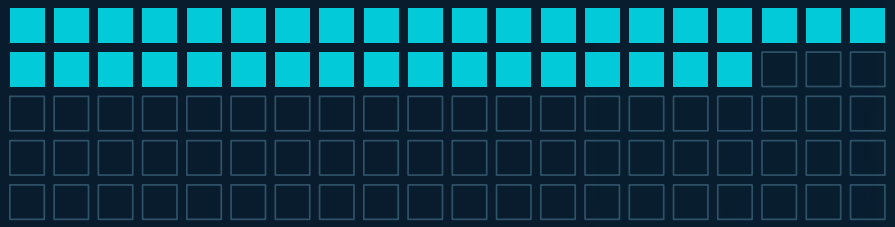
OCCUPANCY DATA IS NOT WORKPLACE INTELLIGENCE

Same people. Better percentage.

BEFORE

37%

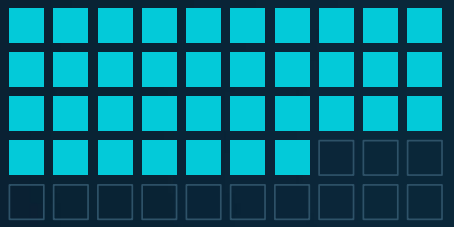
37 occupied desks ÷ 100 available



AFTER

74%

37 occupied desks ÷ 50 available

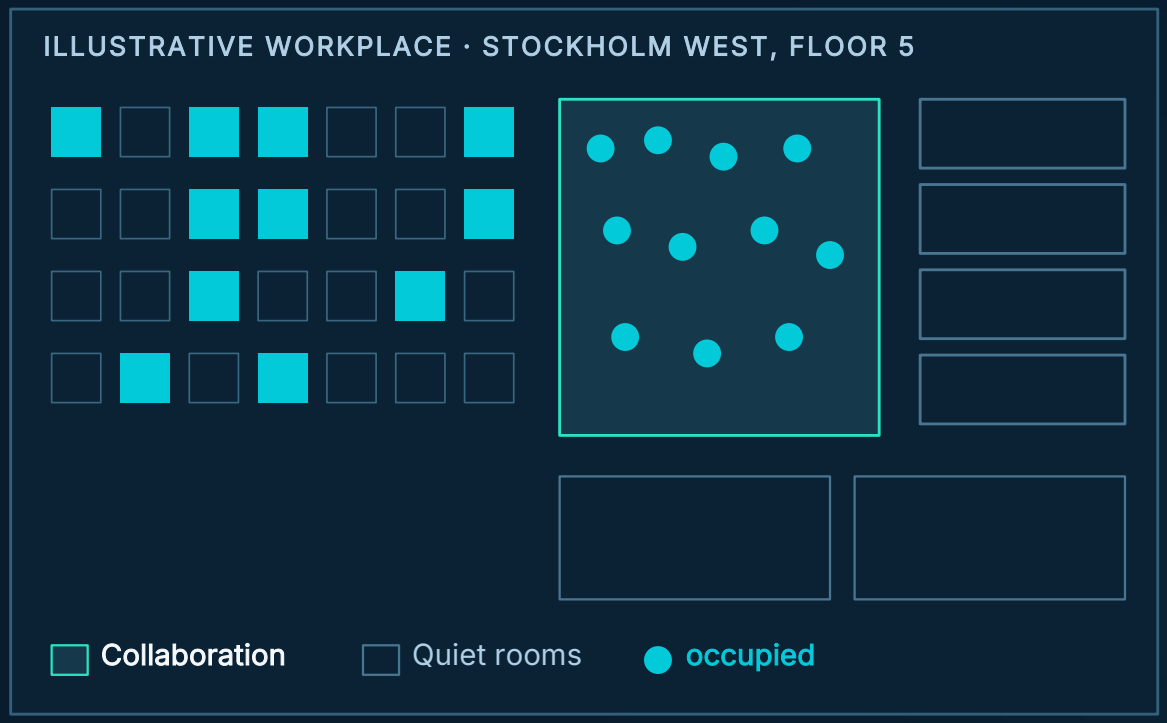


Did we improve the workplace?

A better percentage is not proof of a better workplace.

Illustrative arithmetic: occupied desks ÷ available desks at a single moment. Not a weekly average. Establishes neither a benefit nor a failure.

Collaboration areas: consistently busy.



SUPPLIER PROPOSITION

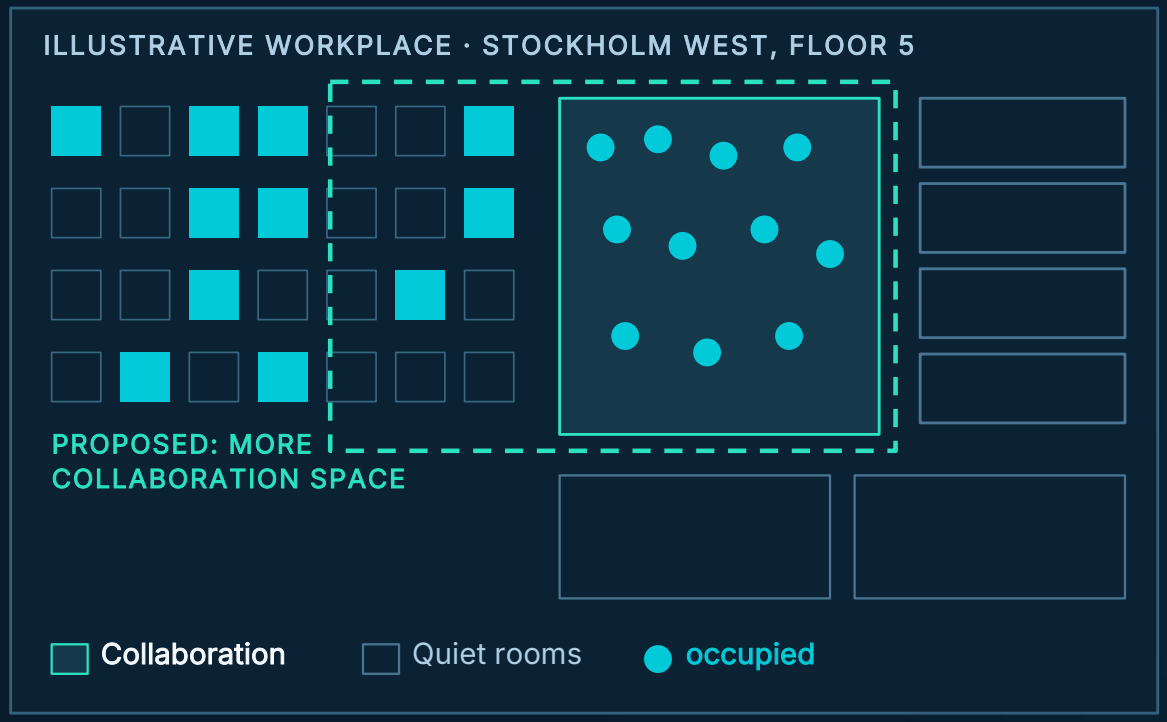
"We can show you exactly where the space is being used."

BUYER DECISION

WORKPLACE REALITY

Illustrative workplace and fictional dialogue. Not customer or supplier quotations.

Collaboration areas: consistently busy.



SUPPLIER PROPOSITION

"We can show you exactly where the space is being used."

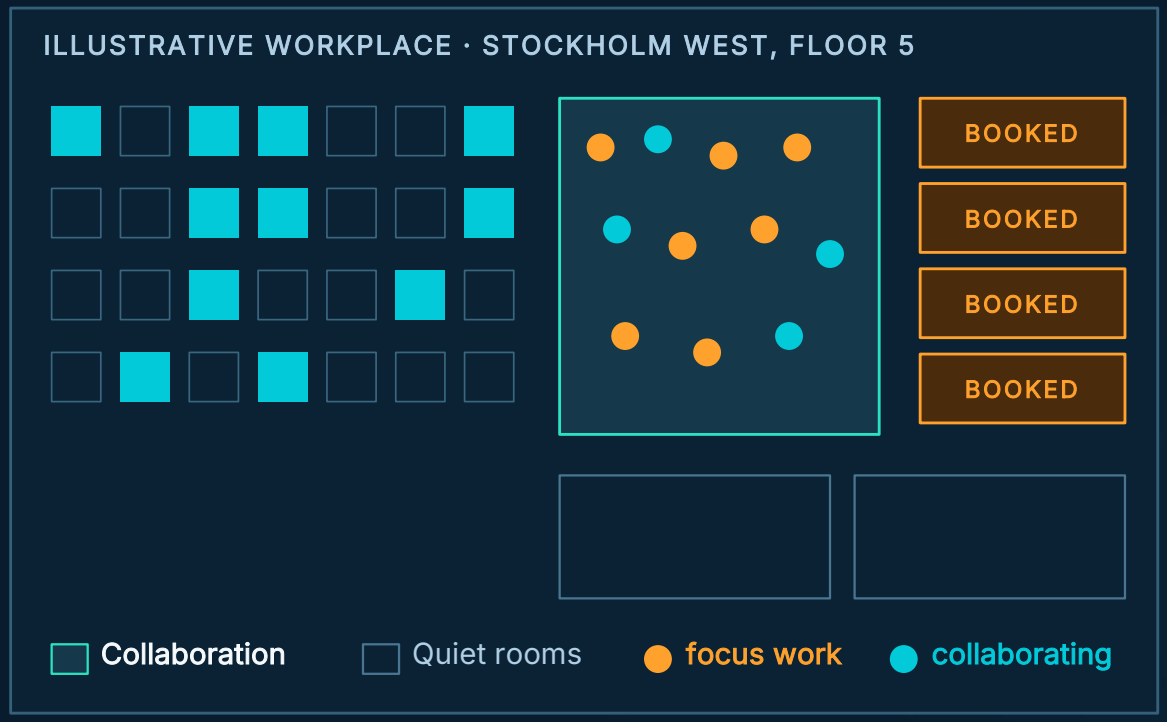
BUYER DECISION

"Excellent. We should create more of that space."

WORKPLACE REALITY

Illustrative workplace and fictional dialogue. Not customer or supplier quotations.

Same data. A different reason.



SUPPLIER PROPOSITION

"We can show you exactly where the space is being used."

BUYER DECISION

"Excellent. We should create more of that space."

WORKPLACE REALITY

"I sit there because the quiet rooms are always booked."

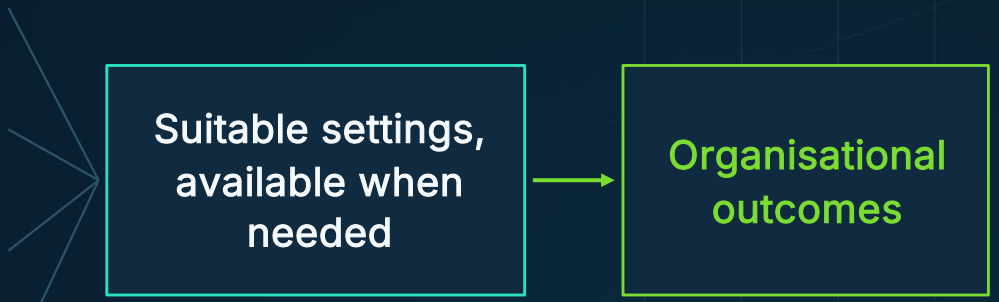
People may be using the workplace successfully.
Or they may be successfully working around it.

Illustrative workplace and fictional dialogue. Not customer or supplier quotations.

Presence is not collaboration.

Presence is an observation. Collaboration is an activity. A business result is an outcome.

Concentration	needs quiet
Coordination	needs a quick conversation and a screen
Collaboration	in person or remote; a good call is not a failed meeting
Learning	needs people nearby to ask



ONE STUDY

Two headquarters that moved to more open offices saw face-to-face interaction fall by roughly 70%, while email and messaging rose.

Bernstein & Turban (2018), Phil. Trans. R. Soc. B 373: 20170239. Two organisations; measures interaction volume, not collaboration quality.

Four lenses on one busy room.

THE SAME DATA **Collaboration areas full. Quiet rooms always booked.**

TECHNOLOGY

Are we measuring the right thing?

A booking is not use. Occupancy shows presence, not activity.

PSYCHOLOGY

Why do people choose these spaces?

Predictable company. A place to concentrate.

WORKPLACE STRATEGY

What is the space actually for?

Perhaps the mix of settings is wrong, not the amount.

OPERATIONS

What constrains it?

Booking rules, cleaning, heating, the lease.

WORKING DEFINITION

Workplace intelligence combines evidence about space, people, work, organisational purpose and operating constraints to support decisions and evaluate their consequences.

Write the purpose down first.

DECISION RECORD · STOCKHOLM WEST

PURPOSE

WHAT WORK MUST IMPROVE?

Focus work squeezed into collaboration areas

WHAT MUST NOT BE SACRIFICED?

Suitable settings on the busiest days

WHAT ARE THE COMPETING EXPLANATIONS?

Too much space · the wrong mix · booking behaviour · team rhythms

WHAT REMAINS UNKNOWN?

Why people choose the settings they choose

Proportionate evidence: a few conversations, booking data and one short pulse question. Not more tracking.

Fictional organisation and record. Illustrative, not a product screen.

Both sides of the table need to change.

SUPPLIER PROPOSITION

For vendors

FOUR DIFFERENT CLAIMS

01 Counts accurately

02 Worked elsewhere

03 Fits this organisation

04 Delivers the intended outcome here

The standard worth competing on: show the conditions, limitations, relevant evidence and what needs validating locally.

BUYER DECISION

For buyers

Both sides of the table need to change.

● SUPPLIER PROPOSITION

For vendors

FOUR DIFFERENT CLAIMS

01 Counts accurately

02 Worked elsewhere

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04 Delivers the intended outcome here

The standard worth competing on: show the conditions, limitations, relevant evidence and what needs validating locally.

● BUYER DECISION

For buyers

“We want better collaboration” is an ambition, not yet a test a supplier can pass.

Which people?

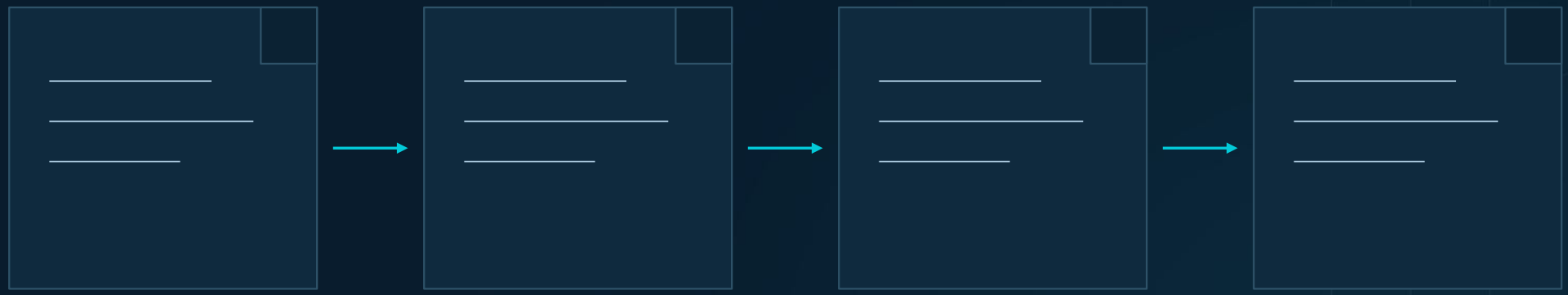
Doing what?

What gets in their way?

What would count as improvement?

Do not ask a supplier to prove an outcome your organisation has not defined.

Four documents.



SUPPLIER STATEMENT

CASE STUDY

ARTICLE

AI SUMMARY

Fictional source chain.

Four documents. One underlying claim.



A claim does not become independent because AI repeats it.

Repetition doesn’t make the original claim false. It just doesn’t make it stronger.

Fictional source chain.

No particular assessed product has to win.

INDEPENDENCE · WORKING DEFINITION

The organisation’s requirements and attributable evidence determine the technology recommendation. Commercial interests must not buy the conclusion, the reasoning remains open to challenge, and the organisation remains free to choose differently.

Retain existing technology	Reconfigure it	Integrate another component	Select a different supplier	Buy nothing additional

STOCKHOLM WEST’S REQUIREMENTS, APPLIED TO EVERY OPTION · NONE IS RIGHT BY DEFAULT

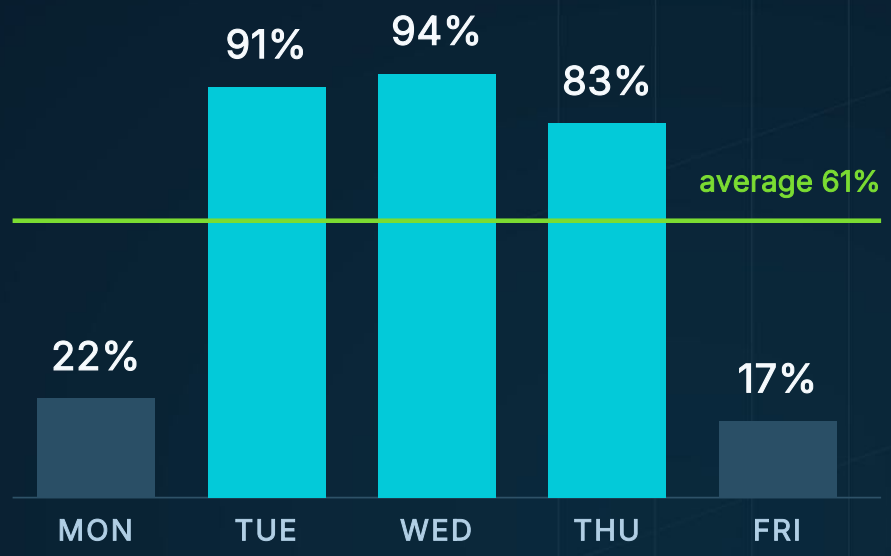
Independent advice doesn’t replace your authority. Stockholm West still decides.

“Should Stockholm West consolidate?”

ILLUSTRATIVE AI PROPOSITION

Average desk use across the week is 61%.

Consolidation could reduce operating costs.



A useful hypothesis. Not yet enough to authorise the change.

Illustrative AI proposition and separate illustrative week: equal windows and capacity; mean 61.4%, shown rounded; daily values are not simultaneous peaks.

From hypothesis to decision brief.

ILLUSTRATIVE DECISION BRIEF · STOCKHOLM WEST	
OBJECTIVE	Reduce avoidable space cost while preserving access to suitable settings
COMPETING EXPLANATIONS	Excess capacity · space mix · scheduling · operating practice · configuration
OPTIONS	Retain · configure · integrate · targeted capability · buy nothing additional
EVIDENCE	Demand patterns · activity needs · operating constraints · source quality · technology tests
NEXT JUSTIFIED STEP	Investigation or a bounded trial with a clear learning objective
AUTHORITY AND REVIEW	Named owner · scope · limits · stop conditions · evaluation criteria

WHERE AI HELPS

- Trace sources
- Identify missing evidence
- Expose assumptions and contradictions
- Compare genuine alternatives
- Propose informative tests

Use AI to make the decision easier to examine, not merely the answer easier to accept.

Illustrative brief, not a Prove TDI product screen. AI behaviours are desired behaviours to evaluate, not automatic capabilities of every model.

When did a measurement become permission?

When did a measurement become permission?

Prediction is not permission.

What would you authorise for Stockholm West today?

01 Analysis?

02 A recommendation?

03 A bounded trial?

04 A consequential operational change?

Control has to be usable.

Not a human signature on every routine action. Clear boundaries, set by people accountable for the outcome.

01 The organisation defines success

02 It can inspect and challenge evidence

03 Actions stay within explicit permissions

04 People can intervene safely

05 Material changes trigger review

Practical conditions, not a certification checklist. Context: NIST AI RMF 1.0 (2023), Appendix C on defining human roles in AI-assisted decisions.

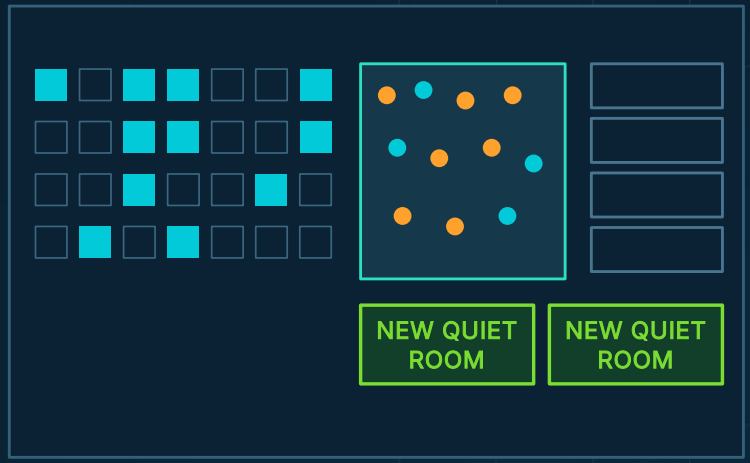
Stockholm West chooses a bounded trial.

DECISION RECORD · STOCKHOLM WEST — AUTHORITY

✓ PURPOSE	Cut avoidable cost; protect busy days
✓ EVIDENCE · OPTIONS	Explanations weighed; options compared

THE TRIAL

Close Floor 6 on Mondays and Fridays. Turn two Floor 5 meeting rooms into bookable quiet rooms.



FLOOR 6 closed Mon and Fri

Fictional trial and record. Earlier entries are retained, not rewritten.

The trial gets clear boundaries.

DECISION RECORD · STOCKHOLM WEST — AUTHORITY

✓ PURPOSE	Cut avoidable cost; protect busy days
✓ EVIDENCE · OPTIONS	Explanations weighed; options compared

THE TRIAL

Close Floor 6 on Mondays and Fridays. Turn two Floor 5 meeting rooms into bookable quiet rooms.

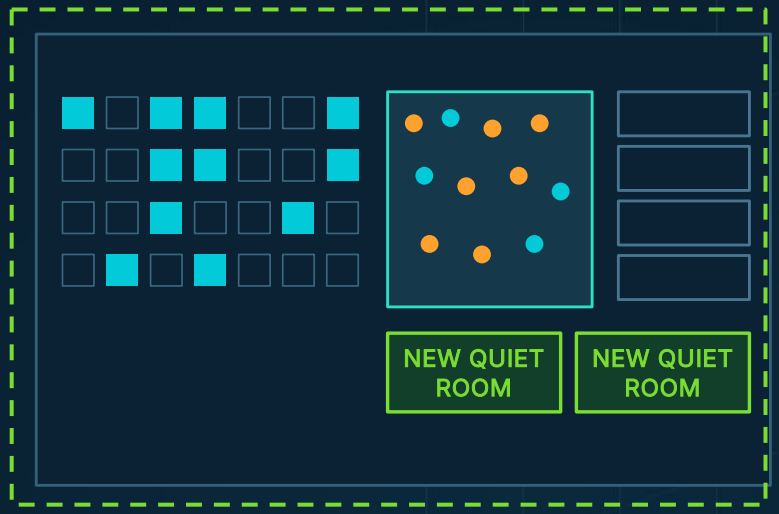
OWNER
Head of workplace

SCOPE · FLOORS 5 AND 6
No lease decision

LIMIT
Eight weeks

STOP CONDITION
Busy-day quiet rooms below agreed level

REVIEW
Against the original purpose

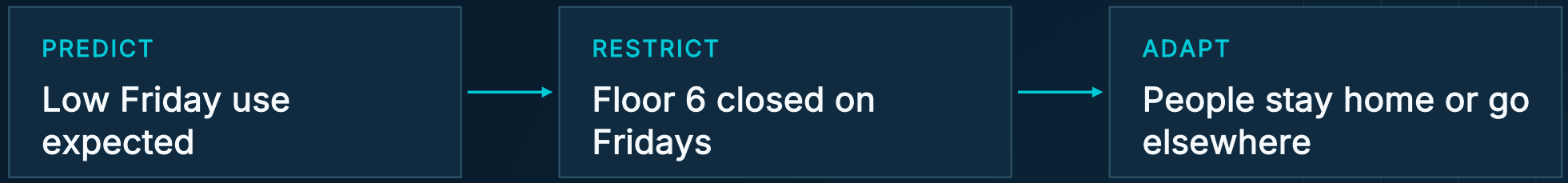


FLOOR 6 closed Mon and Fri

TRIAL BOUNDARY · 8 WEEKS · STOP CONDITIONS AGREED

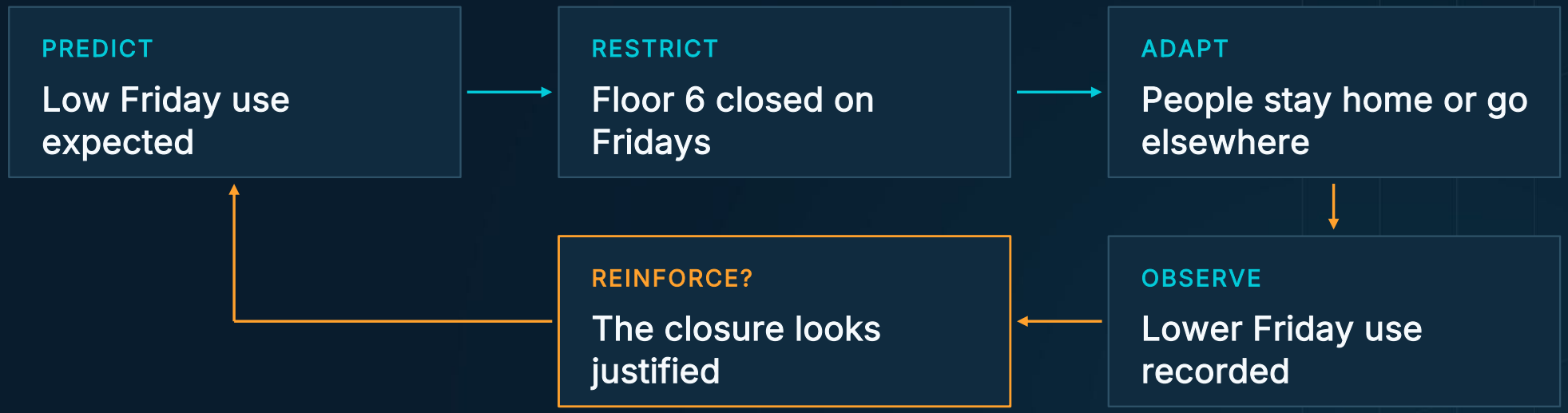
Fictional trial and record. Earlier entries are retained, not rewritten.

Did we measure demand, or shape it?



Hypothetical application of a general mechanism (Perdomo et al., 2020, performative prediction). Not a field trial; feedback loops are not inherently harmful.

Did we measure demand, or shape it?



Are we learning what people need, or measuring how they adapted to the options we left them?

Remember not only what happened, but what we changed before it happened.

Hypothetical application of a general mechanism (Perdomo et al., 2020, performative prediction). Not a field trial; feedback loops are not inherently harmful.

Back to the original purpose.

WORKPLACE REALITY — Asked of the people using the building, not only the sensors

Can people access appropriate settings?
Better; Wednesdays still tight

Are intended savings realised?
Partly; Floor 6 still leased

Is the required collaboration supported?
Not yet known; ask team leads

What changed in employee experience?
Mixed

Can the workplace absorb recurring demand?
On most days

Unintended effects or new constraints?
Friday attendance fell; cleaning changed

Judged on utilisation alone, this trial is already a success. That is the trap.

Fictional, deliberately mixed outcome review. Not a customer result.

The record keeps its history.

DECISION RECORD · STOCKHOLM WEST

OUTCOMES · REVIEW

WHAT DID WE KNOW?

Use by space and day

WHAT DID WE ASSUME?

Attendance stays stable

WHAT DID WE AUTHORISE?

Eight-week bounded trial

WHAT CHANGED?

Floor 6 closed Mon/Fri; two quiet rooms added

WHAT DID WE LEARN?

Quiet rooms help; Fridays adapted

NEXT JUSTIFIED DECISION?

Extend quiet rooms; retest Fridays

A good outcome doesn’t prove the original reasoning was good.

Decision memory is for learning, not blame.

Getting to a purchase and getting to a better workplace are different achievements.

- **SUPPLIER PROPOSITION**
  The promise
- **BUYER DECISION**
  The decision
- **WORKPLACE REALITY**
  What actually changed

One record connects the promise, the decision and what actually changed.

WHAT SUPPORTS IT? · WHO CONTROLS IT? · DOES IT STILL HOLD?

Assurance throughout the cycle.



What supports it?

Evidence before the choice

Who controls it?

Authority during delivery

Does it still hold?

Review through renewal or exit

Educational lifecycle model. Assurance here means evidence-based confidence for the organisation: not certification, audit or a guaranteed outcome.

WHAT SUPPORTS IT? · WHO CONTROLS IT? · DOES IT STILL HOLD?

Assurance throughout the cycle.



What supports it?

Evidence before the choice

Who controls it?

Authority during delivery

Does it still hold?

Review through renewal or exit

Assurance you can’t inspect isn’t assurance.

Educational lifecycle model. Assurance here means evidence-based confidence for the organisation: not certification, audit or a guaranteed outcome.

Are we improving the work, or improving the number?

Occupancy data is not workplace intelligence. It becomes part of it when what we observe is connected to people, work, purpose, the decision and its consequences.

01	02	03	04	05
Measure the space	Understand the work	Examine the evidence	Make the decision	Return and ask what changed

PROVE

TECHNOLOGY DECISION INTELLIGENCE

Independent judgement. Throughout the cycle.

Questions after today?

Ask directly, no meeting needed.
Download this deck. No registration.
provetdi.com/smart-buildings-show-2026

Frederik Joustra | Founder, Prove TDI

Prove TDI's three questions

What supports it?

Any number. Any dashboard.

Who controls it?

Any AI. Any automation.

Does it still hold?

Any saving. Any promise.