



ImproveDesk

WHITE PAPER

The Improvement Operating Model in the Age of AI

Why detecting more has not meant improving more — and what closes the gap

AUTHOR	ITSM Ltd
PUBLISHED	July 2026
VERSION	1.0
AUDIENCE	Service, governance & transformation leaders adopting AI
CLASSIFICATION	Public

Executive summary

Few IT organisations have ever seen so many signals of where they might be better. Telemetry, ticket text, user sentiment, change records and monitoring alerts now arrive in volumes no service desk could read unaided. Artificial intelligence reads them. It clusters incidents, surfaces recurring friction, drafts candidate problem statements and flags anomalies analysts would take weeks to notice. Where it has been applied well, the operational gains are real: in one 2025 analysis, teams using generative AI resolved incidents 17.8% faster on average, and the strongest adopters 54.3% faster.^[4] The supply of things worth fixing has widened sharply.

The improvement that reaches the balance sheet has not widened with it. Backlogs grow faster than the capacity to act, and detection has outpaced decision. A more sensitive instrument registers more tremors, yet registering a tremor is not the same as strengthening the building.

The constraint has moved. The scarce resource was once knowing what to improve; increasingly it is deciding well, at pace, and proving it sound afterwards. That shift rewards a disciplined operating model and exposes those that lack one.

Key takeaways

- AI multiplies improvement signals, but signal is not improvement.
- A capture–prioritise–decide–evidence model keeps human judgement and auditability central.
- Guard against automation bias: an unexplained, unowned recommendation has no place in the record.

1 Signal is not improvement

A signal indicates that something could be better. Improvement is an evidenced, durable change in an outcome that matters. Between them sit choices no volume of data makes for you: whether the pattern is real, whether acting is worth its cost, and whether the change worked. Continual improvement practice, as set out in ITIL 4, is the discipline of moving deliberately from the first to the second, and the improvement register exists because good ideas outnumber the capacity to pursue them.^[1] PDCA names the same loop — plan, do, check, act — with the check as load-bearing as the plan.^[2] Unmatched by disciplined decision, more signal accumulates as noise, not gain.

2 What AI changes, and what it does not

AI alters three things about the improvement environment, and each cuts two ways. It raises signal volume: pattern detection across incidents, changes and sentiment finds candidates manual review would miss, but floods the register with correlations that resemble causes. It raises speed: assistive

triage and drafting compress the time from observation to proposal, though a faster route to a wrong conclusion is not progress. And it introduces failure modes the model must defend against.

Adoption is running ahead of proof, which sharpens the risk. Uptake in specific tasks is already high — 85% of organisations in one 2025 survey reported using AI in incident management — yet a separate study found just 10% running AI extensively in production, and 44% judging it too early to assess the impact at all.^{[5][6]} Three failure modes deserve naming. Automation bias leads people to accept a recommendation because a system produced it, discouraging the challenge improvement depends on. Unexplained recommendations arrive without traceable reasoning, so a team cannot tell insight from a confident artefact of the training data. And provenance erodes: when a machine drafts the analysis and a human clicks approve, the record of who decided, and on what basis, can quietly disappear. None of this argues for withholding AI; each argues for holding the operating model firmly around it.

3 Capture, prioritise, decide, evidence

A durable operating model runs four stages, and AI assists each without owning it.

Capture. Signals from telemetry, service data and human observation gather into one register. AI adds reach — clustering duplicates, drafting problem statements, linking related records. It populates the register; it does not curate it unseen.

Prioritise. Candidates are weighed against value, risk, effort and strategic fit. AI can rank and model impact, exposing its assumptions for scrutiny. The weighting itself stays an accountable human choice: priority encodes intent no model holds.

Decide. A named owner commits to act, defer or decline, and records the rationale. AI may assemble evidence and surface options; it does not approve. The decision and its reasoning belong to a person who can account for both.

Evidence. The change is tested against a baseline, and the outcome — confirmed, partial or null — is recorded with the reasoning that led to it. AI Ops measurement assists most here: the check stage is where improvement is proven or merely imagined.

4 The human and process dimension

The four stages hold only if judgement and accountability run through them, and judgement counts for little unless it leaves a record. A decision record showing who decided, on what evidence, and why — the standard implied by ISO/IEC 27001's Clauses 9 and 10 on evaluation and improvement — separates a governed change from a lucky one.^[3] That provenance grows harder to preserve, and more valuable, as machines draft more of the analysis.

Guarding against automation bias is therefore a design requirement, not an attitude. The model should oblige a human to state the reasoning independently of the tool, keep dissent visible in the register, and treat an unexplained recommendation as a prompt to investigate rather than a verdict to enact. A

recommendation no one can explain and no one will own has no place in an evidenced improvement, however fluent its phrasing.

The temptation is to let throughput stand in for progress — to mistake a fuller register and faster drafting for a better-run organisation. A more sensitive instrument earns its keep only when someone reads it, decides what to reinforce, and keeps a record legible enough to defend.

What compounds is not signal but evidenced decision, accumulated and open to inspection. AI raises the throughput of a good operating model; applied to a weak one, it raises the throughput of waste. The advantage will not settle on those who detect the most. It will settle on those who can still show, case by case, that a person weighed the evidence, made the call, and was right often enough to prove it.

See it in ImproveDesk

Run continual improvement, reviews and audit-ready evidence in one place. Contributors are always free.

improve-desk.com/white-papers

About ImproveDesk

ImproveDesk is a continual-improvement register, review engine and audit-ready evidence platform for ISO 27001, ISO 20000 and SIAM teams. Contributors are always free.

Get in touch [hello@improve-desk.com] · [improve-desk.com] · [linkedin.com/company/improve-desk]



An ITSM Ltd brand

References & further reading

[1] AXELOS / PeopleCert — *ITIL® 4* continual improvement practice and model, and the improvement (CSI) register. <https://www.peoplecert.org/browse-certifications/itil>

[2] W. Edwards Deming — the Plan-Do-Check-Act (PDCA) cycle.

[3] ISO/IEC 27001:2022 — *Information security management systems — Requirements*, Clause 9 (performance evaluation) and Clause 10 (improvement). <https://www.iso.org/standard/27001>

[4] SolarWinds — *2025 State of ITSM Report* (GenAI users resolved incidents 17.8% faster on average; top adopters 54.3% faster). Reported by ITSM.tools. <https://itsm.tools/2025-state-of-itsm-report/>

[5] HCLSoftware & ITSM.tools — *The State of AI in ITSM 2025* (10% of organisations running AI extensively in production; 44% judging impact too early to assess). <https://itsm.tools/state-of-ai-in-itsm/>

[6] Scopism — *Global SIAM Survey 2025* (85% of organisations using AI in incident management). <https://www.scopism.com/>

This paper is provided for general information only and does not constitute certification, audit or legal advice. © 2026 ITSM Ltd. All rights reserved.