DemandFlow Investment Planning

DEMANDFLOW®

Multi-year investment plans built from the estate's own end-of-support, capacity and project signals, reviewed, prioritised and released into projects

DATA SHEET

A network operator's medium-term plan is assembled every year from spreadsheets: each department lists what it thinks it needs, finance squeezes the totals, and the result is approved without anyone checking it against the platforms that are actually going out of support, the projects already in flight or the capacity that will run out first. By the time it is released, the estate has moved on.

DemandFlow® builds the plan from the records it already holds. The lifecycle dates on every platform instance, the capacity trends, the in-flight projects and the department's own cost history produce the candidate lines; the business unit reviews, allocates and prioritises against its budget; and releasing the plan creates the projects, roadmap lines and forecasts that the delivery and finance modules then run.

What it is

Investment planning for telecom and IT network operators: a platform lifecycle registry with software, hardware and component end-of-life dates, dependencies and capacity; plan lines by year, month, spend type and vendor with reference-class estimates and appraisal; an AI draft plan generated from end-of-support, carry-over and capacity needs; a business unit review console with allocations, scenarios, an optimiser and a prioritisation funnel; demand governance with decision authority and headroom; roadmaps with funded and proposed layers; and release into projects, roadmap lines, forecasts and benefits.

It sits inside DemandFlow, so a plan line that upgrades a platform knows which services depend on it, a released line becomes a project under the department's portfolio with its forecast already in finance, and the roadmap shows the approved plan beside the projects already running.

What a planning team gets

- **Lifecycle in the record.** General availability, end of sale, end of support and end of life on every software, hardware and component version, with an end-of-life roadmap across platforms and the services each one affects.
- **Needs found for you.** End-of-support, capacity exhaustion and CVE signals become draft demands with impact, priority, cost of delay and an estimate.
- **A draft plan in minutes.** The AI plan reads the instances, projects and cost history and proposes lines with action, driver, year, size, estimate range and rationale, without touching manual lines.
- **Estimates with a basis.** Reference-class estimates from the department's own closed projects on the same platform, with P50 and P80, and appraisal with NPV, IRR and payback.
- **Review that fits the budget.** A console of departments by year with requested, allocated and headroom; scenarios compared side by side; an optimiser; a prioritisation funnel with a composite score.
- **Decisions with authority.** Demands move through triage, assessment and decision; authority climbs from department to division to business unit against auto-approve limits.
- **Release that creates the work.** Accepted lines become projects, roadmap lines, forecasts, benefits and dependencies, re-runnable as the plan changes.
- **Board pack from the data.** A PDF of the review, plan versus actual, benefits, accepted risks, dependencies and the price of saying no.

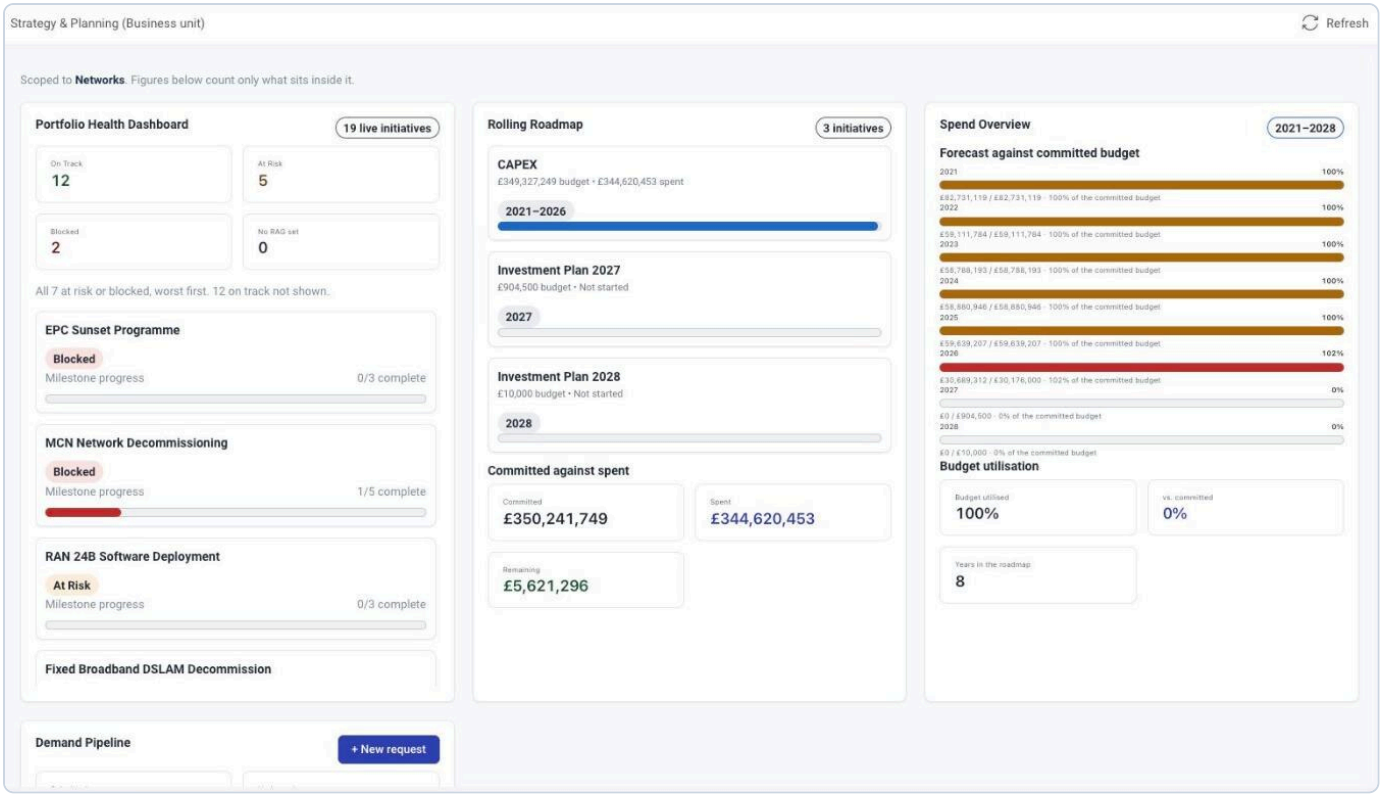

FIGURE 1. STRATEGY AND PLANNING FOR A BUSINESS UNIT: PORTFOLIO HEALTH WITH THE INITIATIVES AT RISK, THE ROLLING ROADMAP WITH THE 2027 AND 2028 INVESTMENT PLANS, AND SPEND AGAINST COMMITTED BUDGET BY YEAR

The platform lifecycle registry

Platform types hold software versions, hardware versions and component versions, each with general availability, end of sale, end of support and end of life. A platform instance records its current version, environment, criticality, vendor, support agreement, owning department, commission and decommission dates and its capacity (unit, current, maximum and forecast exhaustion). Dependencies between instances are recorded and drawn on a dependency map; an impact analysis walks them to the platforms and services affected; a consistency check finds records that disagree.

The end-of-life roadmap is a gantt across platforms with the affected services traced and a risk score for each version. A vendor end-of-support watch alerts the department manager and proposes an upgrade line in the draft plan; support renewals alert ninety days ahead. The technology estate dashboard counts instances, dependencies, critical systems and record coverage, shows the support runway and lists where the record is thin.

Layer	Records
Lifecycle	Platform types, platform instances, software versions, hardware versions, component versions, instance dependencies, capacity snapshots, support agreements
Plan	Investment plans, plan lines (existing or proposed project), cost lines by spend type, vendor and month, dependencies between lines, scenarios and scenario lines
Money	Business unit budgets per fiscal year (capex and opex), department allocations with lock and release, budget history
Demand	Demands and demand lines with triage, assessment and decision
Roadmap	Roadmaps and roadmap lines per project, year, spend type and vendor with budget, revised, plan, forecast and actual
Baselines	Numbered project baselines with schedule and money snapshots

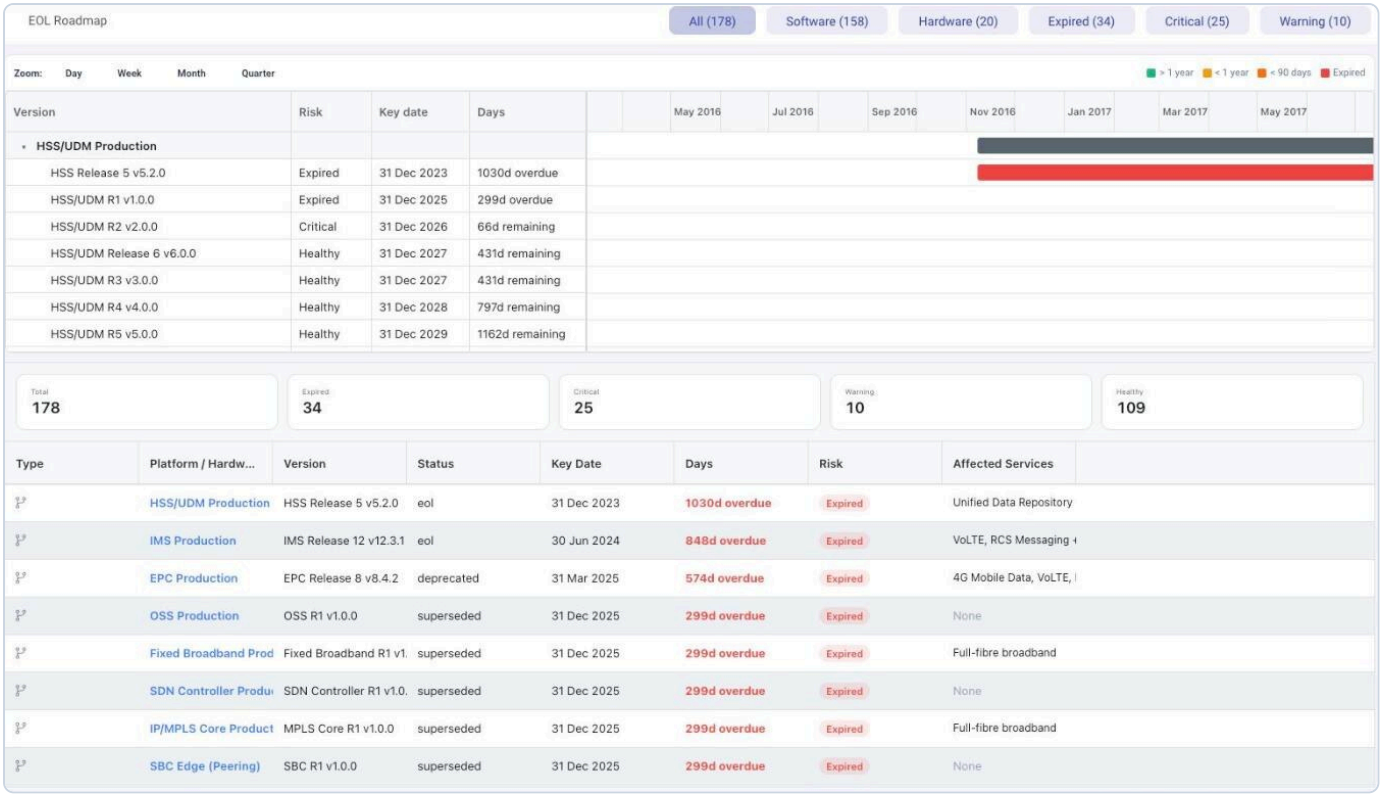

FIGURE 2. THE END-OF-LIFE ROADMAP: 178 VERSIONS WITH 34 EXPIRED AND 25 CRITICAL, THE HSS/UDM RELEASE HISTORY ON THE GANTT AND EACH VERSION'S KEY DATE, DAYS REMAINING AND AFFECTED SERVICES

Building the plan

A plan belongs to a department and a start year, with one candidate per department per cycle. Each plan line is an existing project or a proposed one, with a required priority and a platform action (install, upgrade, decommission or capacity upgrade). Cost lines carry year, month, spend type, vendor, quantity, unit price, amount and currency, with the exchange rate locked at submission. Lines can be entered freely or built from a bill of materials, a component, a resource template or a resource, and picking an existing project seeds the costs from its forecast. Panels show the plan summary by spend type and year against the allocation, cost by platform, and per line the reference-class estimate (P50 and P80), appraisal (NPV, IRR, payback), expected benefits and what the line requires or is required by.

Submission checks that priorities are set, costs sit inside the horizon, allocations are respected (a hard allocation blocks, a soft one warns), capex and opex class ceilings hold, estate coverage is above 80 per cent and no funded line depends on an unfunded one. Statuses run draft, submitted, returned, accepted, locked, released and superseded, with audit stamps, budget history on every change and a roll forward of deferred lines to the next cycle.

Generate plan (AI). On a draft or returned plan, the AI reads the platform instances, software and deployed platforms, projects, plan and roadmap lines, spend types, department ceilings and remaining forecasts, and optionally capacity uplifts. It builds the software end-of-support needs with a one-year lead, the in-flight and pushed-back projects and the capacity needs, picks the target release with the longest runway (never a retired, deprecated or superseded one), and prices each from closed projects on the same instance or platform within the department. Each proposed line has a name, description, action (create, extend or replan), priority, driver (end of life, carry-over, strategic or regulatory), start and end year, T-shirt size, an estimate with low, high and confidence, the cost basis, a rationale and a breakdown by year and spend type, with a project management allowance of 8 to 15 per cent and inflation of about 4 per cent. Bands are about plus or minus 10 per cent with references and 25 per cent without. The allocation is treated as a soft ceiling, AI lines never overwrite manual ones, and no project exists until release. The run is asynchronous and opens the Plan Dashboard when it completes.

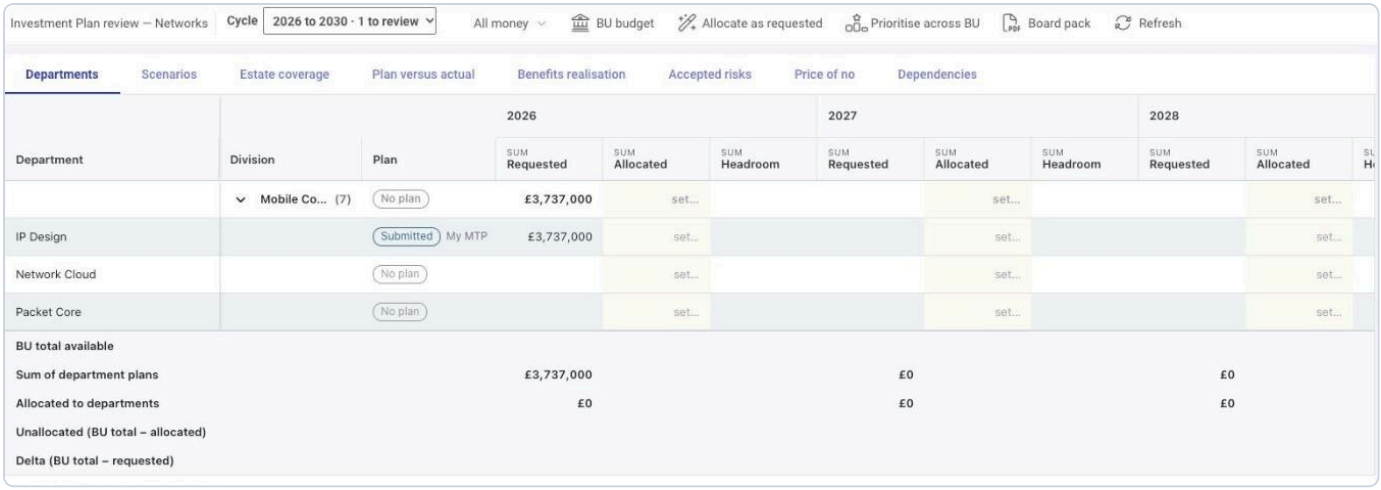

FIGURE 3. THE BUSINESS UNIT REVIEW CONSOLE: DEPARTMENTS BY YEAR WITH REQUESTED, ALLOCATED AND HEADROOM, THE BU TOTAL, AND TABS FOR SCENARIOS, ESTATE COVERAGE, PLAN VERSUS ACTUAL, BENEFITS, ACCEPTED RISKS, THE PRICE OF NO AND DEPENDENCIES

Review, prioritise, decide and release

Business unit review. Departments in a grid with requested, allocated (edited in place) and headroom per year, totals, views for all, capex, opex and must-do, the BU budget, Allocate as requested, Prioritise across the BU on a priority matrix, and Return with a note, Accept, Lock and Release, each emailing the department manager. Tabs cover scenarios, estate coverage, plan versus actual, benefits realisation, accepted risks, the price of no and dependencies, and a board pack PDF gathers them. Edits are guarded on the server once a plan is locked.

Scenarios and the optimiser. Seed a scenario from allocations, fund as requested, must-do first, or run the optimiser: a deterministic greedy multi-year pass that takes must-do and locked lines first and draws a budget frontier of spend against risk retired. Compare up to four scenarios and promote one into the allocations and budgets. Fleet what-ifs can be sent to the plan.

Prioritise. A funnel of fund, defer and decline with drag, a top N or a budget cap, and a composite score weighted 40, 25, 15, 10 and 10. Deferring a high or critical line opens a risk acceptance that creates a risk record.

Demand governance. A demand moves from submitted through triage and assessment to decision: fund now, fund what fits and refer the rest, next cycle, defer, reject or escalate. Authority climbs from department to division to business unit against auto-approve limits and then to a forum, with the headroom shown before the decision. Fund now creates the project, roadmap lines and forecast; next cycle places it on the next draft plan.

Release. A new line becomes a project under the department's portfolio with its deliverable fields; an in-flight line extends its project; roadmap lines are written per year, spend type and vendor, forecast lines for the released year, benefits are carried and line dependencies become project dependencies. Release is re-runnable. Plan versus actual joins the roadmap to the forecast.

Roadmaps. A year selector with grid and timeline views; the gantt shows funded projects and proposed plan lines as two layers with dependencies and swimlanes by department, portfolio, programme, objective or platform; a single writer with rollback keeps the lines consistent. Assistants reach the module through MCP tools for portfolio summary, headroom, demand creation, scenario creation and comparison, plan impact and status report drafts.

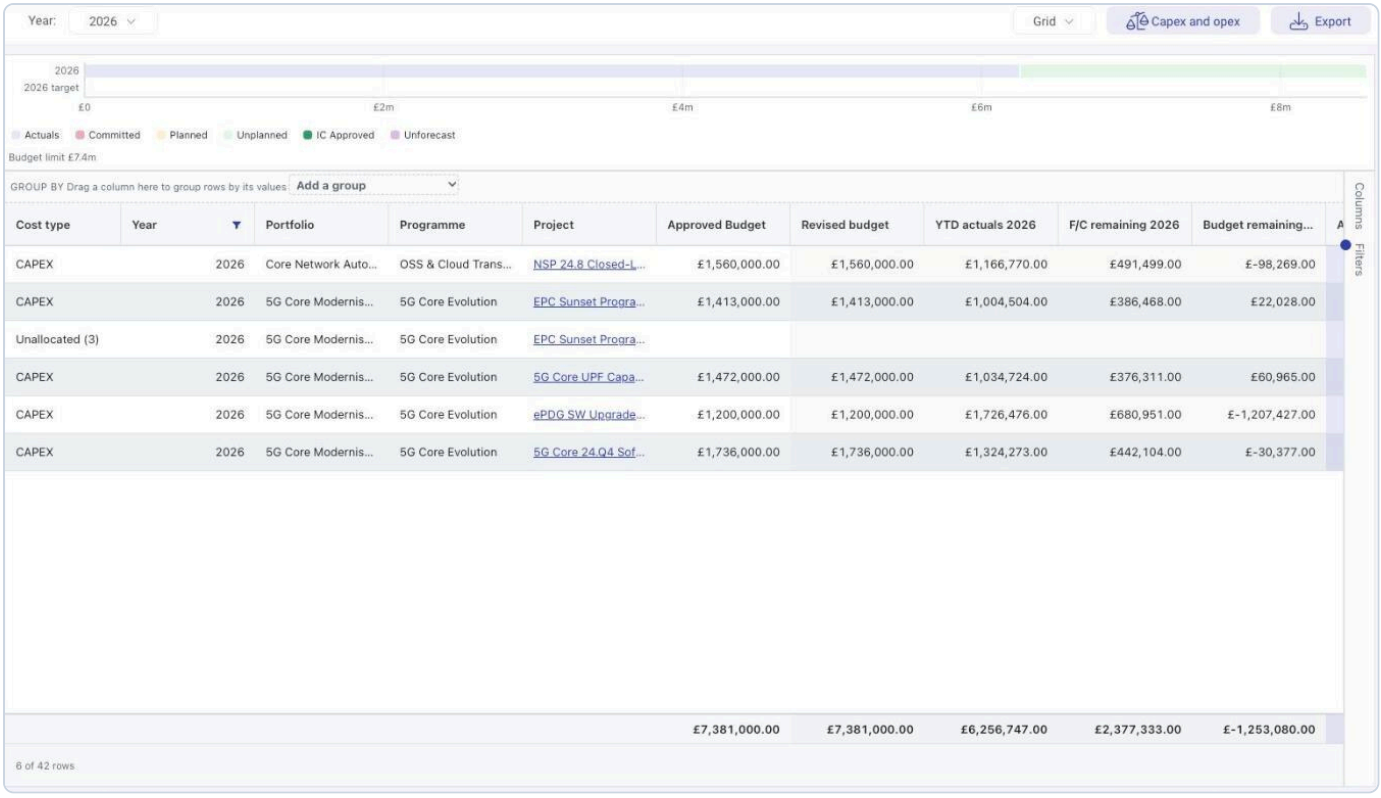

FIGURE 4. THE ROADMAP FOR 2026: ACTUALS, COMMITTED, PLANNED AND UNPLANNED AGAINST THE BUDGET LIMIT, AND ROADMAP LINES BY PORTFOLIO, PROGRAMME AND PROJECT WITH APPROVED BUDGET, REVISED BUDGET, YEAR-TO-DATE ACTUALS AND FORECAST REMAINING

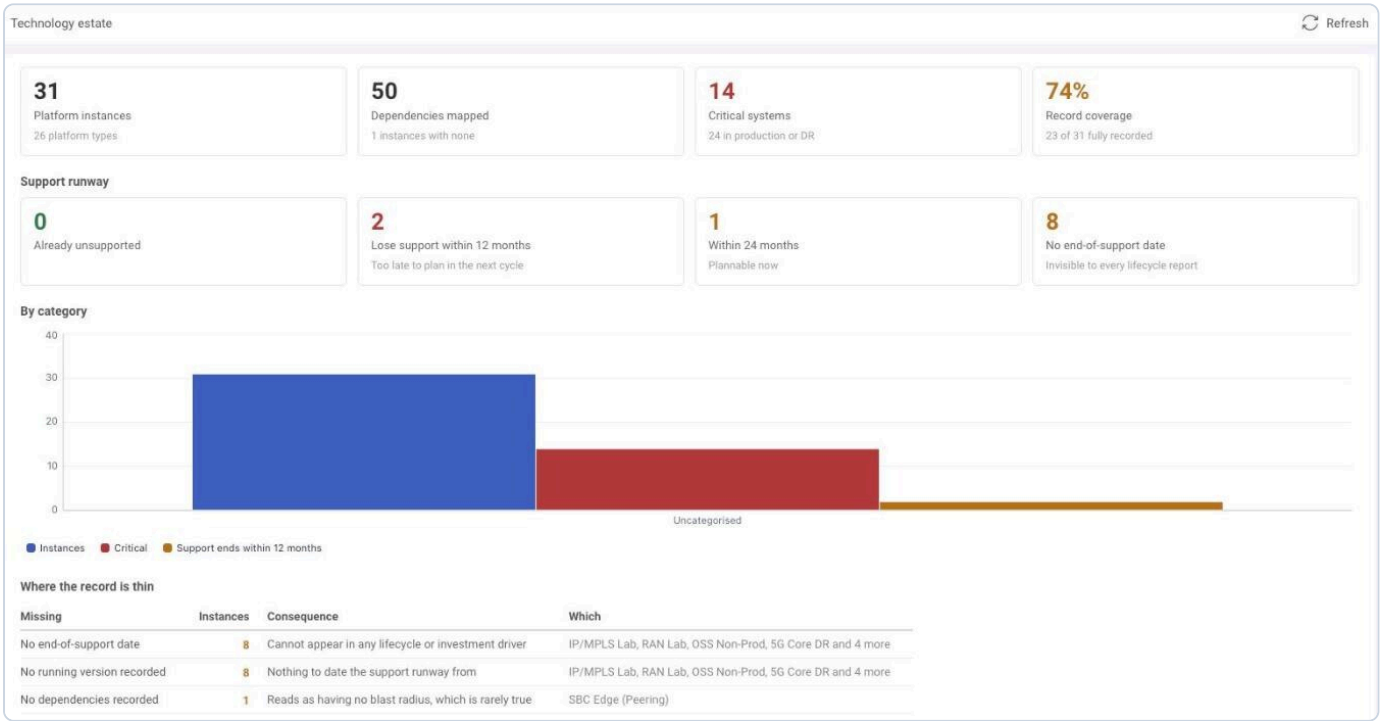

FIGURE 5. THE TECHNOLOGY ESTATE: PLATFORM INSTANCES, DEPENDENCIES, CRITICAL SYSTEMS AND RECORD COVERAGE, THE SUPPORT RUNWAY, AND WHERE THE RECORD IS THIN

Summary of specifications

Item	Detail
Horizon	Configurable plan length (default 3 years); fiscal year budgets per business unit split capex and opex; department allocations in soft or hard mode

Item	Detail
Lifecycle	GA, end of sale, end of support, end of life on software, hardware and component versions; instance version, environment, criticality, vendor, support agreement, capacity with forecast exhaustion; dependency map, impact analysis, consistency check; EOL roadmap gantt with risk scores; end-of-support watch; renewal alerts 90 days ahead
Plan lines	Year, month, spend type, vendor, quantity, unit price, amount, currency with FX locked at submit; from free entry, BOM, component, resource template or resource; priority and platform action; reference-class P50 and P80; NPV, IRR, payback; benefits; requires and required by
AI plan	Needs from software end of support (1-year lead), carry-over projects and capacity; target release with longest runway; references from the department's closed projects; PM allowance 8 to 15 per cent; about 4 per cent inflation; bands about 10 per cent with references, 25 per cent without; AI lines never overwrite manual lines; asynchronous
Submit checks	Priorities set; costs inside horizon; allocation (hard blocks, soft warns); capex and opex ceilings; estate coverage above 80 per cent; funded lines not depending on unfunded ones
Review	Departments by year with requested, allocated, headroom; all, capex, opex, must-do views; allocate as requested; priority matrix; return, accept, lock, release with email; board pack PDF; server-side lock guard on edits
Scenarios	Seed from allocations, as requested, must-do first, or optimiser (greedy multi-year, must-do and locked first, budget frontier); compare up to 4; promote to allocations and budgets
Prioritise	Fund, defer, decline funnel; top N or budget cap; composite score 40/25/15/10/10; risk acceptance on deferring high or critical lines
Demand	Submitted, triage, assess, decide; fund now, fund what fits, next cycle, defer, reject, escalate; authority department to division to business unit with auto-approve limits; headroom shown
Release	Projects under department portfolios, roadmap lines, forecast lines, benefits, dependencies; re-runnable; plan versus actual; baselines numbered with schedule and money snapshots
Roadmaps	Grid and timeline; funded and proposed layers; dependencies; swimlanes by department, portfolio, programme, objective or platform; export
Assistants	MCP tools: portfolio_summary, headroom, demand_create, scenario_create, scenario_compare, plan_impact, status_report_draft

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