

01 · PLAN

Data centre upgradation consulting for legacy assets

Operating a legacy facility is not a static problem, it is a compounding one. We give operators a structured assessment of where they are and a workable plan for getting where they need to be.

WHAT THIS SERVICE COVERS

Power densities have changed, cooling technologies have advanced, and compliance standards have become more rigorous. Most facilities were not designed for the demands placed on them now.

The DC Upgradation Consulting service covers three workstreams, which can be engaged independently or as a combined programme. PUE enhancement identifies the specific interventions that will reduce the facility's power usage effectiveness, typically a combination of cooling optimisation, airflow management improvements, and power infrastructure upgrades. Connectivity redesign covers dark fibre access, carrier diversity, and DC interconnect options to increase the facility's commercial attractiveness and resilience. Compliance posture improvement maps the facility's current position against applicable standards and produces a prioritised corrective action plan. Each workstream produces a structured report with specific, costed recommendations.

PUE improvement roadmap

Connectivity & interconnect redesign

Compliance posture assessment

WHAT WE DELIVER

Deliverables from this engagement

01

PUE Enhancement Roadmap

Assessment of current PUE, specific interventions, estimated improvement for each, indicative cost and payback period, and a prioritised sequence.

02

Cooling Optimisation Assessment

Evaluation of current cooling infrastructure, airflow management, containment, and CRAC/CRAH configuration, with specific recommendations.

03

Connectivity & Interconnect Assessment

Assessment of carrier availability, dark fibre access, and DC interconnect options, with recommendations for improving diversity and resilience.

04

Compliance Posture Assessment

Gap analysis against TIA 942C, ISO 27001, ISO 45001, and other applicable standards, with a prioritised corrective action plan.

05

Asset Upgrade Matrix

Structured matrix of recommended interventions, prioritised by impact and cost, with timelines and sequencing to minimise disruption.

06

Technology Roadmap

Forward-looking roadmap covering technology and infrastructure changes required over a three to five year horizon.

WHY TECHNAVIOUS

What makes our upgradation advisory effective

1 Data centre specialists, not generic facility consultants

Upgradation advisory for data centres requires specific knowledge of DC infrastructure standards and operational protocols. A generic MEP consultant may not account for TIA 942C implications or the constraints of a live data centre.

2 Workstream-based pricing with clear deliverables

Each workstream is unit-priced with a fixed deliverable set, so clients can engage one workstream without committing to all three, and know exactly what they are getting before the engagement begins.

3 Compliance alignment from the assessment stage

The compliance posture workstream is aligned to the same standards framework used in our TIA 942C and ISO multi-standard services, so the corrective action plan can feed directly into a subsequent certification programme.

HOW WE WORK

Four phases from assessment to roadmap delivery

01	02	03	04
Scoping	Facility assessment	Analysis	Roadmap delivery
Workstreams confirmed. Facility documentation requested. Site visit scheduled.	On-site assessment of infrastructure, operations, and compliance posture across selected workstreams.	Data analysis, benchmarking against current standards, and development of prioritised recommendations.	Workstream reports, asset upgrade matrix, and technology roadmap delivered with client debrief.

THREE INDEPENDENT WORKSTREAMS

PUE enhancement

Connectivity redesign

Compliance posture improvement

CASE STUDIES

Upgrade and optimisation work we have delivered

HYPERSCALE DC OPERATOR

Power density upgrade across 100 live racks, from 6 kVA to 15 kVA, a 150% increase, CFD-validated with zero hot spots and no disruption to tenant operations.

PRIVATE SECTOR BANK

DC health-check and operations assessment across 40+ infrastructure tests and an eight-category O&M process audit. 500+ days of uninterrupted operations and 100% SLA performance achieved following remediation.

COLOCATION SERVICE PROVIDER, JORDAN

HVAC and cooling stabilisation for a 0.75MW facility. Recurring chiller shutdowns and alarm cycles eliminated, with a prevention-first framework established.

FREQUENTLY ASKED QUESTIONS

Questions we are regularly asked about upgradation consulting

Do we need to engage all three workstreams, or can we start with one?

Each workstream is independent. Most clients start with the compliance posture assessment because it identifies the most time-sensitive risks, but PUE enhancement often produces the fastest financial return and is a common starting point for energy cost reduction.

Can upgradation work be carried out without causing downtime?

The assessment phase does not require downtime. Implementation recommendations are designed around the facility's operational constraints and sequenced to minimise disruption risk. Where temporary interruptions are unavoidable, we plan and schedule them as part of the roadmap.

How does the compliance posture assessment relate to TIA 942C certification?

It maps the facility against TIA 942C requirements using the same framework our certification team uses for formal audits. The corrective action plan can be used directly as the remediation plan for a subsequent TIA 942C engagement, typically reducing time to certificate.

What level of PUE improvement should we expect?

PUE improvement potential varies by facility age, current configuration, and investment appetite. Most legacy facilities above 1.8 PUE can achieve improvement to 1.5 or below through cooling optimisation, containment, and power infrastructure changes. We provide specific, evidence-based estimates for each intervention.

Ready to assess your facility's upgradation potential?

Tell us your facility size, current PUE, and primary objective, and we will confirm which workstreams apply.

[Talk to us today](#)