CYIENT | Nothing Less



Expanding and Modernizing Network Coverage

with Faster, Scalable Fiber-as-a-Service

The challenge

As telecom operators accelerate fiber expansion, gigabit broadband rollouts, and fixed network modernization, execution continues to face significant friction. Deployment cycles remain prolonged, engineering effort stays high, and transformation programs are often slowed down by fragmented systems and inconsistent data.

Key challenges shaping the industry include:

Labor intensive manual cycles

Limited workflow intelligence increases engineering effort, extends iteration loops, delays rollout, and raises project costs.

Lack of a scalable execution framework

Without standardization, scaling becomes difficult, CAPEX and OPEX rise, and bottlenecks slow time to revenue.

Limited input versatility

Rigid schemas and inconsistent formats across sources, field inputs, and user systems restrict automation.

Data quality and reliability gaps

Mismatched GIS and field data drive design errors, migration issues, compliance risk, field clashes, and rework.

Fragmented GIS, inventory, and planning environments

Disconnected silos and incomplete inventory create downstream disruption across design, permitting, construction, and operations.

Limited autonomous and AI enabled completeness

Missing automation and cross domain correlation reduces reuse potential and slows modernization.

Inability to assess and monetize assets

Without a network assessment platform, operators struggle to decide what to reuse, replace, or reclaim, limiting monetization.

As operators invest in mergers, network upgrades, and next gen deployments such as broadband backhaul, 5G readiness, and IoT connectivity, they must modernize quickly while maintaining legacy continuity and meeting financial expectations.

60+ million homes passed with automated fiber rollout	**170+ million** feet of copper reclaimed in the US	**650+ million** network data elements managed

The Cyient solution

What we do

Our next gen intelligent network solution framework enables telecom operators to modernize fixed networks with greater speed, automation, and lifecycle integrity.

The framework combines engineering depth with embedded AI, analytics, automation, and orchestration to scale fiber as a service, ensure continuity across legacy and next gen networks, and unlock stronger monetization outcomes.

How it works

We integrate fixed network transformation through a complete suite of design, migration, intelligence, and orchestration capabilities:

Core area	What we deliver
Plan and design (CyPlanIQ)	Automates fiber planning and design for HLD, LLD, as planned, and as built, with X design accelerators. Generates job packs, workprints, and construction and maintenance docs with 3D layering for spatial precision and reuse ready modelling.
Data ingestion, migration, and integrity (CyDataTransitionIQ)	Ingests and normalizes multi source data, then transforms and loads it across source and target systems. Adds scripted and RPA validation, reconciliation, and correction to improve completeness and compliance.
Permitting and TCP orchestration	Manages end to end permitting and traffic control planning to accelerate underground, aerial, and pole build approvals.
AI inspection and intelligence	AI powered inspection and document intelligence with annotation, labelling, OCR, pattern recognition, anomaly detection. Adds RCA via annotation and detection to strengthen quality and reduce repeat issues.
Aerial and survey acceleration	Pole profiling, structure analysis, and pole loading assessment for aerial deployments. Automates desktop surveys and post survey processing to speed field to build readiness.
Assessment, reclamation, and monetization (CyCuRec)	Network assessment to guide reuse, replace, and reclaim decisions. Supports copper retirement and asset monetization.
Lifecycle orchestration	Connects analytics, automation, AI, and orchestration across construction management, service, network and system, and API layers. Aligns plan-to-build, order-to-service, trouble-to-resolve for end-to-end continuity at scale.

Next-gen intelligent network solution = FaaS (Fiber-as-a-Service)

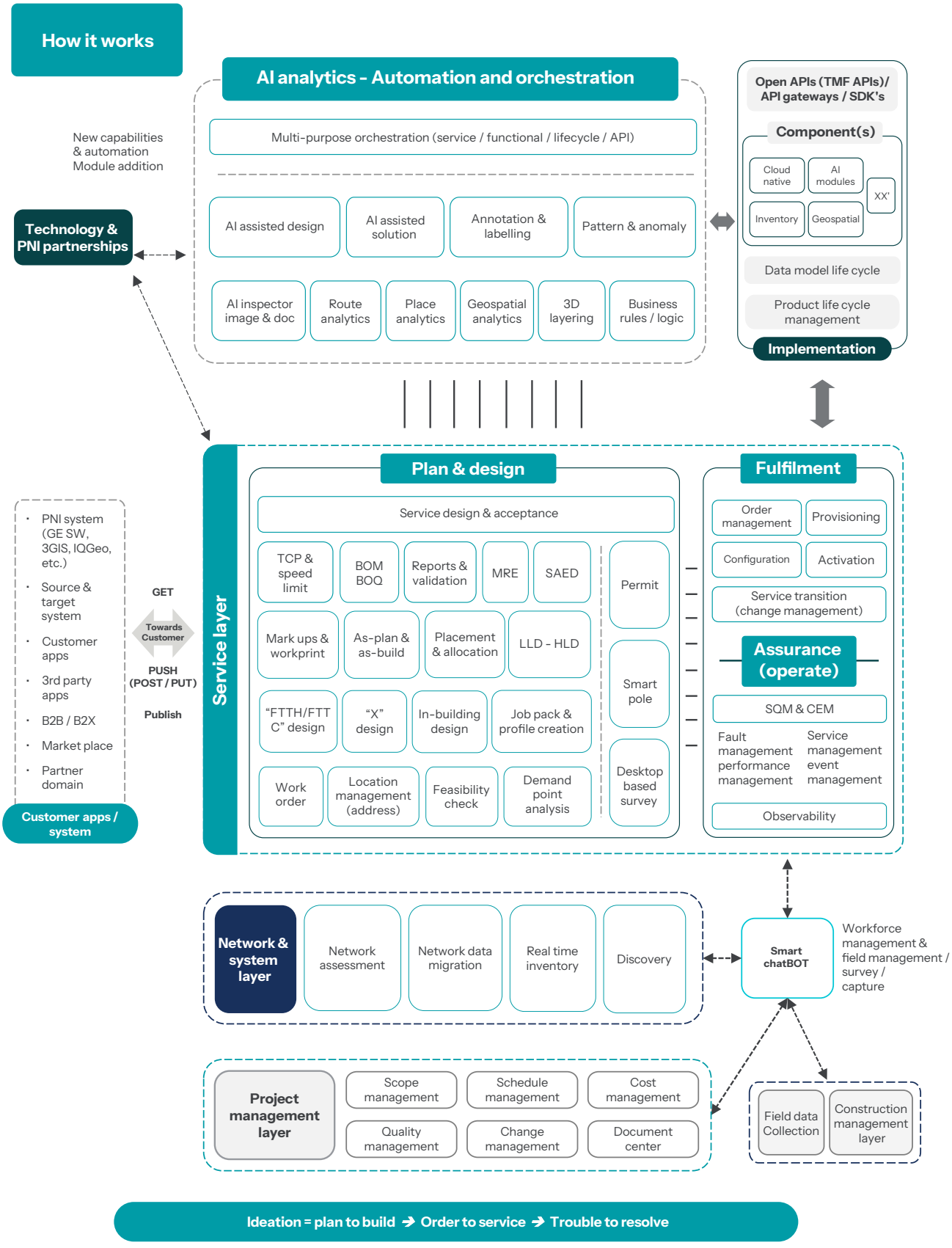

Fig 1: Next – Gen intelligent network solution = FaaS (Fiber as a Service)

The results



Up to **40 to 50 % faster engineering cycles** through automation across planning, design, approvals, and deployment.

Cleaner inventory and fewer downstream defects with automated migration assurance, validation, and reconciliation.

First-time right execution that reduces design to build friction and limits field rework.

Faster rollout and earlier revenue capture, including post-merger acceleration through streamlined plan to build workflows.

Stronger cost predictability and monetization insight using BOM, BOQ, CAPEX, ROI forecasting, and reclamation inputs.

Lower compliance and operational risk through integrated permitting, TCP orchestration, AI inspection, and anomaly-based quality reinforcement.

Why us

Complete lifecycle expertise

End-to-end delivery across planning, design, migration, building, operations, and reclamation with single partner accountability.

Unified vendor neutral framework

Works across systems, data formats, and workflows to standardize execution and simplify transformation.

AI enabled quality and automation

AI inspector, anomaly detection, and automation accelerators embedded into delivery to drive faster, first time right outcomes.

Orchestration across core workflows

Plan-to-build, order-to-service, and trouble-to-resolve connected through lifecycle orchestration for continuity and control.

Sustainable modernization and asset value

Copper reclamation and reuse pathways improve sustainability while unlocking additional monetization.

Industry impact

Accelerating intelligent network modernization for telecom operators, we strengthen fixed network transformation through standardized lifecycle delivery and asset value unlock.

Turn network complexity into faster rollout.
Talk to our fiber modernization experts.

cyient.com

Cyient is a global lifecycle engineering services company powering mission-critical industries from design to aftermarket across products, plants, and networks. With 300+ customers and 15,000+ associates across 30+ countries, we combine human expertise, deep domain knowledge, and AI to deliver intelligent engineering for every lifecycle across Aerospace and Rail, Automotive and Mobility, Connectivity, Energy, Healthcare, Mining, Utilities, and beyond.

North America Headquarters
USA
T: +1 860 528 5430

Europe, Middle East, and Africa Headquarters
UK
T: +44 118 3043720

Asia Pacific Headquarters
Australia
T: +61 2 8887 8600

Global Headquarters
Hyderabad
T: +91 40 6764 1000

© Cyient 2026. All rights reserved.