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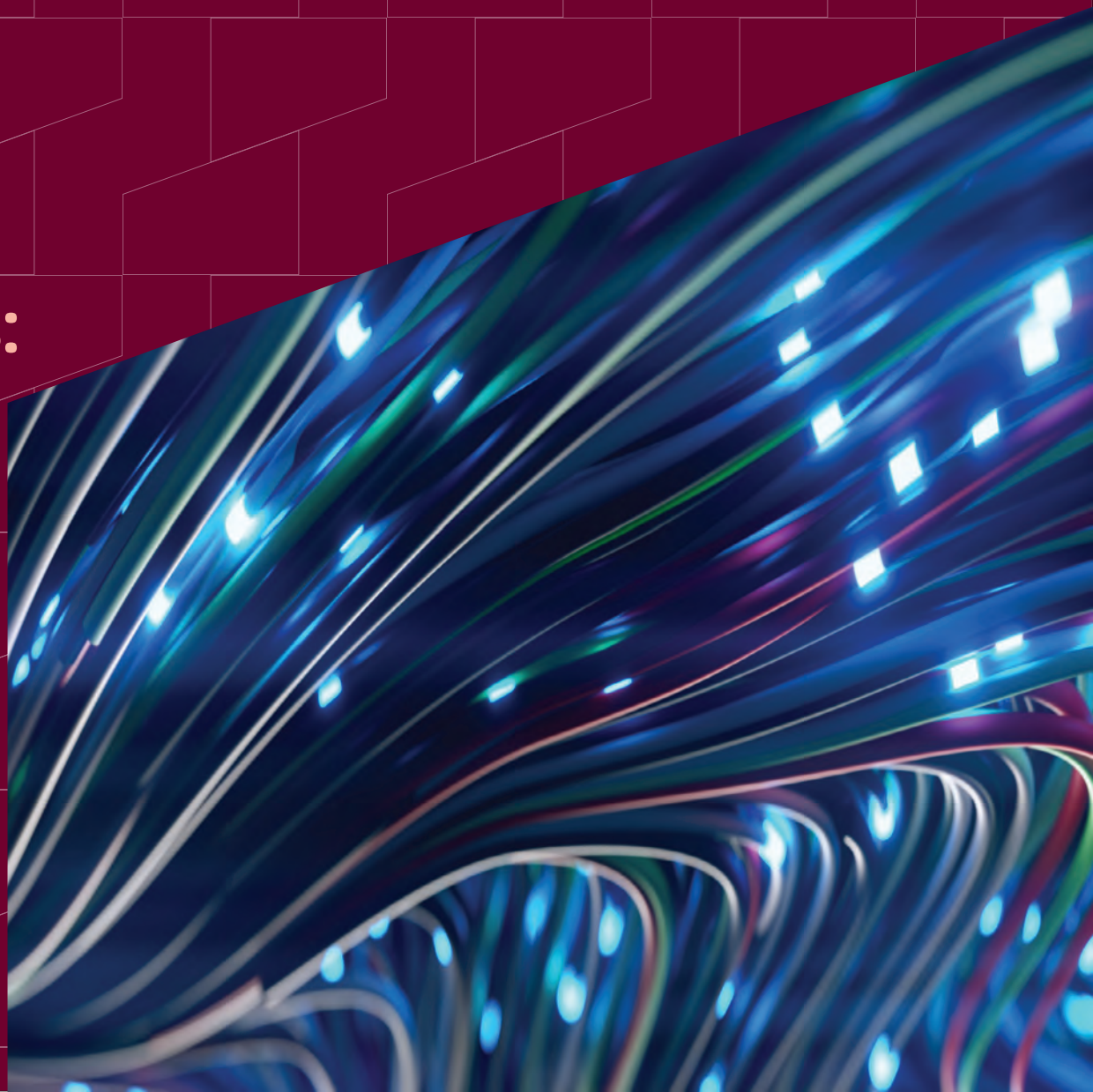
# Unlocking Revenue from Fiber Investments: The Case for Fiber Wholesale



Scale at Speed™

## Executive Summary

Telecom companies worldwide have invested billions of pounds in building extensive fiber networks, aiming to deliver high-speed connectivity to homes and businesses. However, many operators face a fundamental challenge: slow customer acquisition and long payback periods are delaying returns on these massive capital expenditures.

To accelerate monetization, operators must transition from a pure B2C model to a B2B2C model by adopting local loop unbundling (LLU), also known as fiber wholesale. By enabling multiple tenants and service providers to access their fiber infrastructure, operators can significantly boost utilization rates, unlock new revenue streams, and shorten the time-to-value of their investments.

While this strategy introduces short-term risks such as potential cannibalization of retail sales, it delivers a powerful multiplier effect over time by enabling diverse sales channels, increasing network traffic, and ultimately maximizing ROI.

# Table of Contents

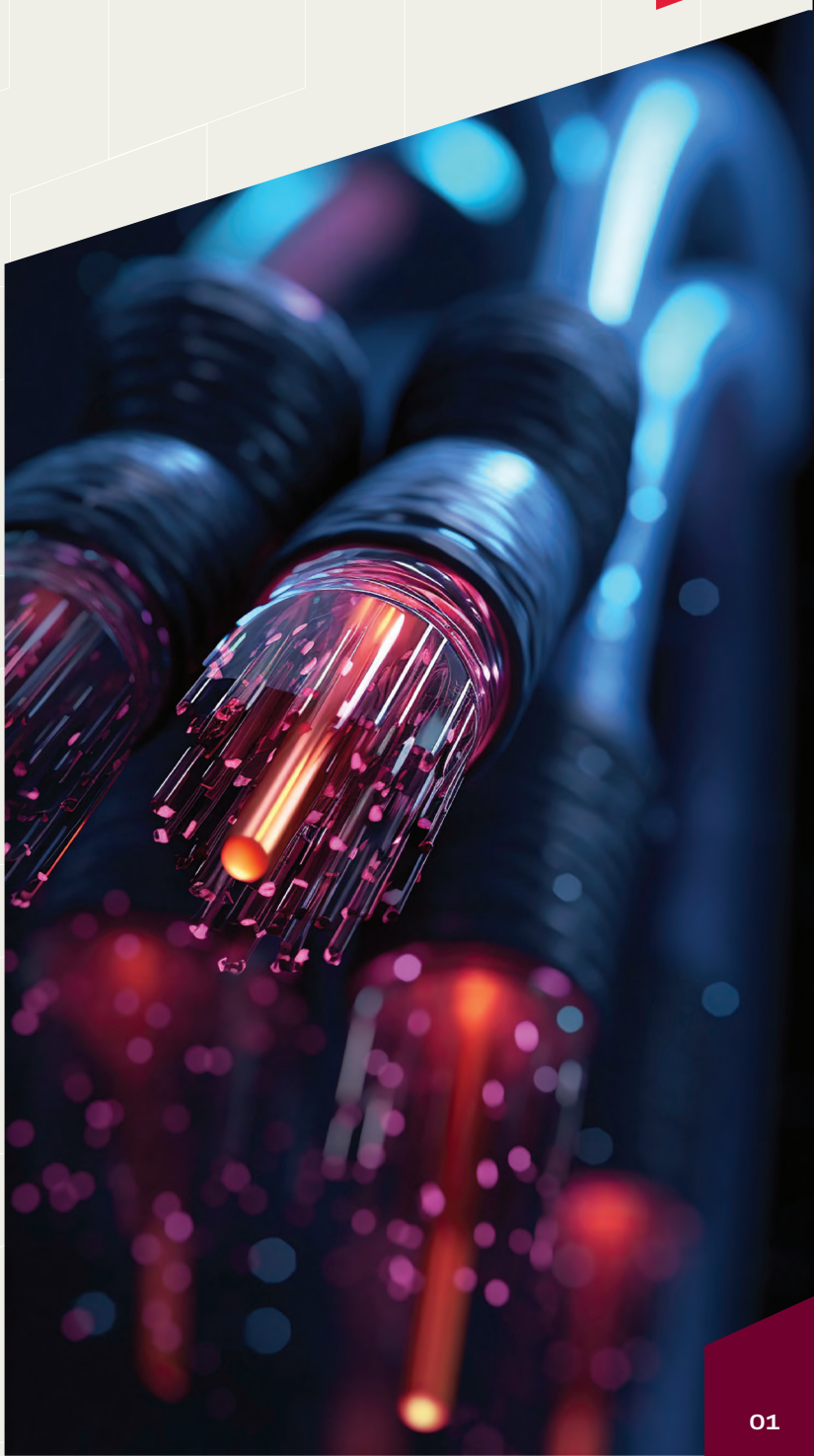
## The Financial Reality of Fiber Network Investments

Telecom operators in the UK and globally have invested tens of billions of pounds in fiber broadband infrastructure over the last decade as part of the shift toward future-proof, gigabit-capable networks. Yet monetizing these investments remains challenging. A typical UK fiber deployment costs £300–£500 per premises passed (PPP) in dense urban areas, rising sharply to £1,000–£3,000 PPP in rural regions due to higher civil works intensity and lower dwelling density. When including the cost to connect customers, which can add another £150–£300 per premises connected (PPC), the upfront capital requirement becomes substantial.

## Revenue Constraints and Extended Payback Periods

Against this background, retail broadband ARPUs in the UK remain relatively low, averaging only £28–£35 per month, which inherently stretches the payback profile. Depending on geography, operators often face 8–12-year payback periods in commercially viable zones and 15–25+ years in rural and low-revenue areas, with some remote builds proving impossible to recover without subsidy. In the UK, the fiber rollout has accelerated significantly in recent years.

According to Ofcom's latest Connected Nations updates, around 77% of households now have access to full-fiber, and approximately 86% can access gigabit-capable broadband from fiber or upgraded cable networks. Despite this progress, wide regional disparities persist.1 Urban and semi-urban rollouts continue to expand rapidly, while large portions of rural counties remain commercially unattractive due to high per-premise build costs and low ARPU potential. In these regions, for example, operators frequently face negative ROI projections without alternative monetization mechanisms or public funding.



## Fiber Rollout Progress in the UK and Government Intervention with Project Gigabit

In the UK, the fiber rollout has accelerated significantly in recent years. The structural imbalance is one of the key drivers behind Project Gigabit, the UK Government's national program aimed at ensuring equitable broadband access. Through this initiative, the government has committed £5 billion in funding to extend gigabit-capable broadband to the hardest-to-reach 20% of UK premises, which are areas where private operators struggle to build profitably. The ambition is to achieve 99% gigabit coverage by 2032, supported through regional procurements, build contracts, and the Gigabit Broadband Voucher Scheme. Project Gigabit directly acknowledges that, in many rural areas, the cost of deploying full-fiber infrastructure can exceed the lifetime revenue potential of customers, making government support essential.

Despite accelerating coverage and strong public policy support, operators still face persistent financial pressures. Capital-intensive civil works dominate network build budgets; labor shortages increase deployment costs, and the low incremental revenue per customer means the commercial case remains fragile in many regions. In commercially marginal zones, the cost of delivering a fiber connection can exceed £3,000 per home, while revenue expectations remain low, pushing payback to more than 20 years. This reinforces the need for diversified monetization models. Relying solely on retail customer acquisition leaves significant network capacity underutilized for many years, amplifying the financial strain.

These realities underscore why operators increasingly view wholesale models, in which multiple service providers share the same fiber network, as essential to improving utilization, aggregating demand, spreading commercial risk, and ultimately shortening the payback horizon. As coverage grows and competition intensifies, expanding beyond traditional B2C retail models into more diversified B2B2C wholesale strategies is becoming a strategic imperative for operators seeking to stabilize financial returns and fully monetize their fiber investments.

## The Strategic Solution: Fiber Wholesale as a Monetization Model

Fiber wholesale has emerged as the most effective and financially attractive model for operators looking to accelerate the monetization of their fiber investments. Instead of relying solely on a single retail business to fill the network, wholesale enables multiple service providers—large ISPs, niche digital players, alternative networks, and specialized service providers—to use the same underlying fiber infrastructure. This transforms a traditionally slow retail-led growth curve into a multi-channel engine of scale, where demand is aggregated across many tenants rather than built slowly through one operator's own sales efforts.

The wholesale model directly addresses one of the biggest structural challenges in fiber economics: underutilized capacity. Most new fiber networks are built with far more potential throughput than initially used, leaving large parts of the infrastructure 'dark' and generating no revenue. By opening the network to multiple tenants, operators can rapidly monetize this dark fiber, as each tenant brings its own customer acquisition engine, marketing channels, and retail presence. The result is a force multiplier: instead of one sales team trying to acquire customers street by street, dozens of service providers are effectively selling the same asset simultaneously.

As more tenants join and more customers activate services, network utilization increases sharply, which is one of the most important drivers of profitability in telecom infrastructure. Higher utilization spreads fixed costs over a wider customer base, improving EBITDA margins and reducing the economic breakeven

point. This increased traffic density materially shortens the payback horizon compared to a traditional B2C-only model, where it may take years to reach meaningful penetration

levels. In many markets, wholesale models can reduce the investment payback cycle by several years by expanding available revenue streams without requiring additional capex.

Another critical benefit is revenue diversification. A single-operator model depends entirely on its own ability to acquire customers, which is subject to competitive pressure, churn, and fluctuations in market demand. In contrast, a wholesale-enabled fiber operator draws revenue from multiple service providers simultaneously. Each tenant competes independently for customers, brings its own pricing strategy and go-to-market plan, and grows its subscriber base using the underlying wholesale network. This not only reduces dependency on the operator's own retail business but also creates a more stable, recurring, and resilient revenue profile.

Over time, a mature wholesale business can also unlock a significant valuation uplift. Investors place a premium on neutral, open-access, multi-tenant fiber platforms because they generate predictable, infrastructure-grade cash flows and are less exposed to retail market volatility. As network utilization rises and wholesale revenue streams stabilize, operators often have the opportunity to spin off the wholesale unit into a standalone business, either through a stock market listing or a private equity investment. This can generate substantial capital inflows for further expansion or debt reduction, while allowing the wholesale entity to operate as a neutral and commercially independent fiber platform.

In this way, wholesale fiber is not only a commercial tactic but also a strategic operating model that accelerates monetization, enhances asset productivity, diversifies revenue, and strengthens long-term enterprise value. It converts fiber networks from slow-maturing, underutilized assets into high-velocity, multi-tenant platforms that deliver superior financial performance.

## Enabling the Shift to a Multi-Tenant Wholesale Fiber Ecosystem

Adopting a wholesale model requires significant organizational transformation across four key dimensions:

- **People:** New roles, skill sets, and operating models tailored for wholesale relationship management
- **Processes:** Redesign of order management, SLAs, and partner onboarding workflows
- **Technology:** An industrialized, API-driven architecture is critical for supporting multiple partners and ensuring seamless customer and wholesale journeys
- **Data:** Strong segregation and guardrails to protect sensitive customer and partner information, ensuring compliance and avoiding conflicts between B2C and B2B2C channels

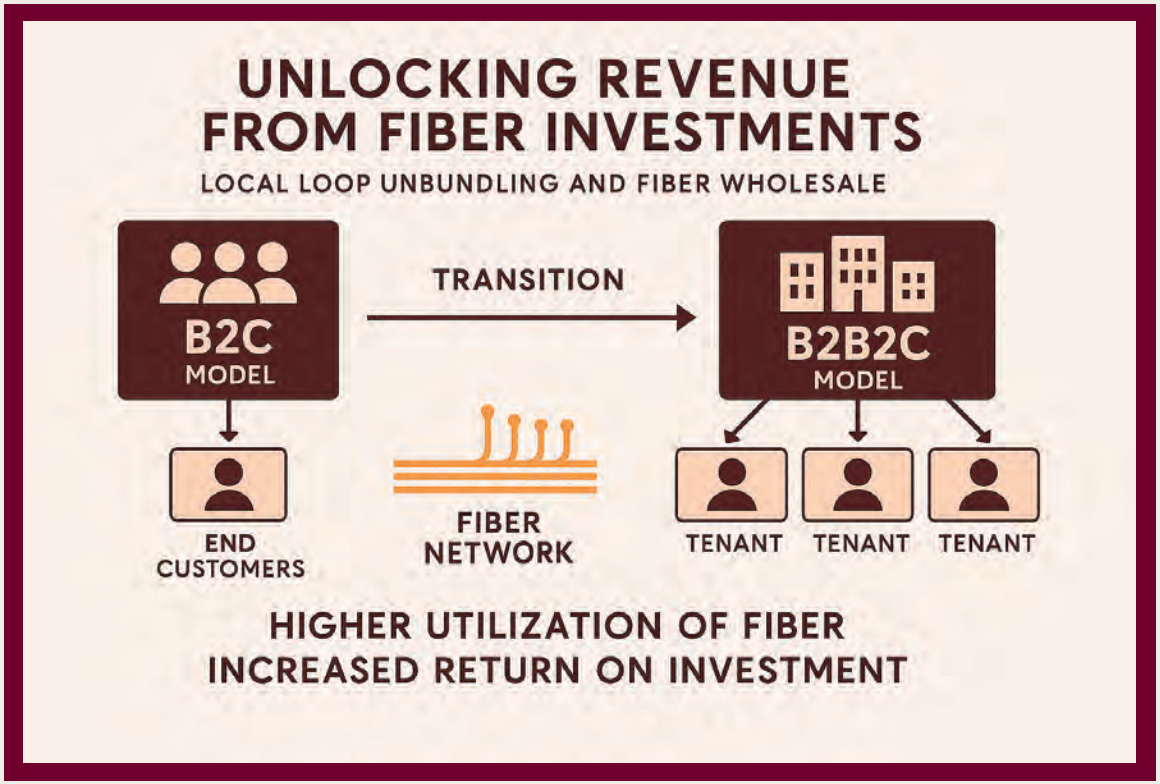



*Figure 1: Shift To Multi-Tenant Wholesale Fiber Ecosystems*

For ISPs, service providers, or niche digital players to successfully operate within a B2B2C framework, the wholesale fiber provider must establish a robust and scalable foundation:

- **Industrialized API-Driven Technology Stack:**
  - Tenants need seamless, bi-directional data exchange between their systems and the wholesale provider's systems
  - APIs must support end-to-end visibility of both customer journeys (B2C) and wholesale operations (B2B), ensuring smooth onboarding, order processing, billing, and service assurance

- **Comprehensive Onboarding Process:**
  - Onboarding a tenant is complex, typically involving hundreds of functional and technical requirements across customer journeys and wholesale journeys
  - These requirements must be systematically mapped to the people, process, application, and data layers within the wholesale organization
  - Joint workshops and alignment exercises between the wholesale provider and tenant are critical for successful integration

- **Investment by the Wholesale Provider:**
  - People: Dedicated teams to support wholesale operations, partner success, and SLA adherence
  - Technology: Scalable systems with secure, multi-tenant API architecture capable of supporting multiple service providers simultaneously
  - Data security: Strong safeguards to protect tenant and customer data, ensure isolation between tenants, and maintain compliance with data privacy regulations

By meeting these foundational needs, the wholesale fiber provider not only simplifies tenant integration but also enhances its appeal as a preferred infrastructure partner, creating a scalable ecosystem that accelerates monetization for both the provider and its tenants.

## Building Wholesale Capability

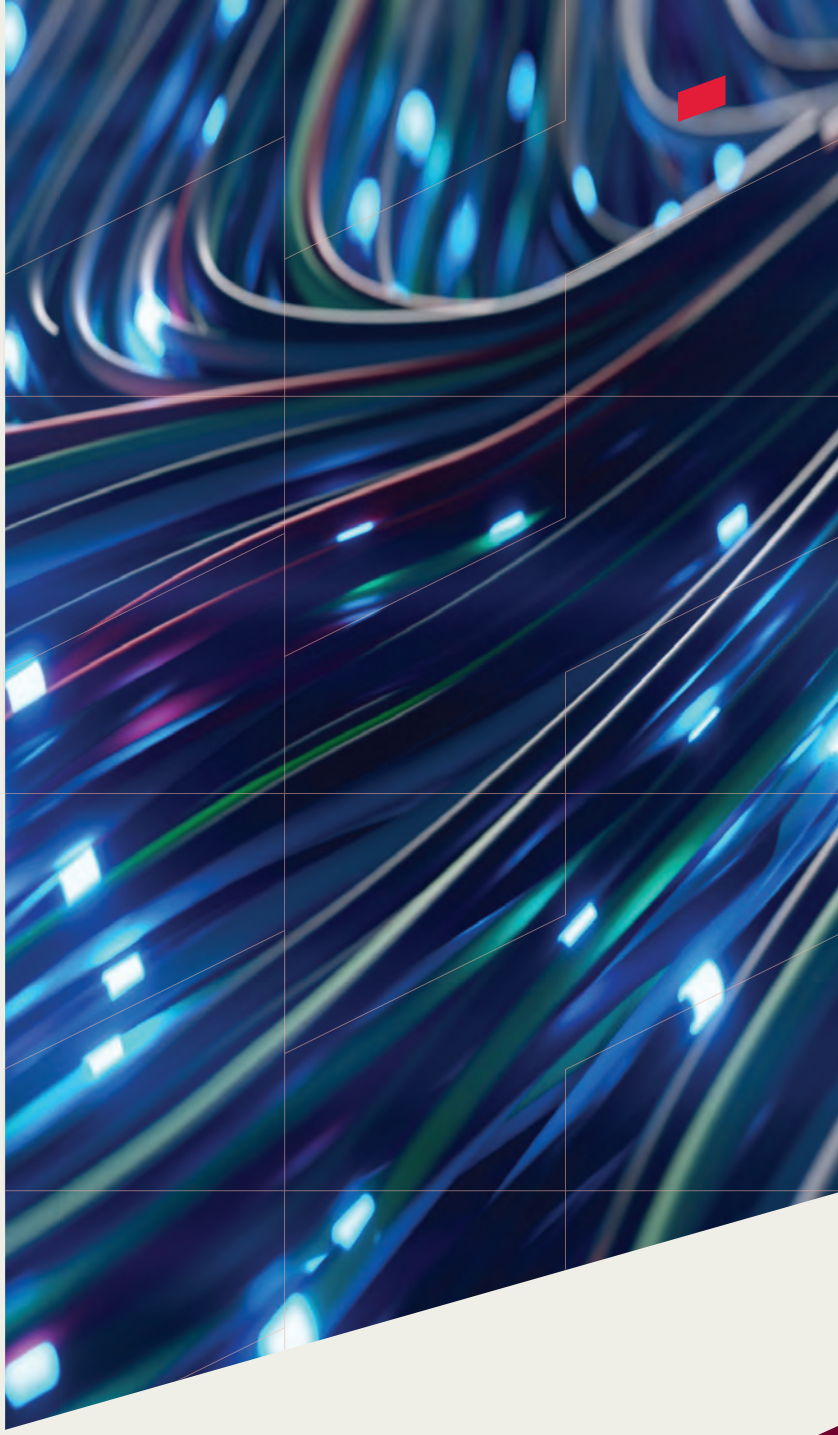
Launching a successful wholesale division requires 70-80 foundational capabilities, which can be categorized as:

- **Dedicated Capabilities:** Wholesale-specific functions like partner management, interconnection, billing, and SLAs
- **Shared Capabilities:** Core infrastructure, support services, and systems shared with the parent organization
- **Guardrails:** For shared capabilities, clear guardrails across people, process, technology, and data are essential to avoid channel conflicts and ensure operational efficiency

## Addressing the Cannibalization Concern

A common hesitation among fiber wholesale operators is the fear of cannibalizing their B2C retail business. While this may occur in the short term, the long-term benefits outweigh the risks:

- Multiple tenants act as a force multiplier, driving customer growth at a pace no single operator can achieve alone
- Greater network traffic leads to improved economics and faster ROI recovery
- Market leadership can be secured by becoming the preferred wholesale fiber backbone for diverse service providers



## The Two-Step Value Unlock from Fiber Investments

The journey of monetizing fiber investments can be viewed as a two-step value unlock process:

### Step 1: Wholesale Product Portfolio Development

- The wholesale service provider develops a comprehensive product portfolio that enables home broadband service providers (ISPs) to use its fiber network
- Value Creation: Dark fiber gets monetized as ISPs resell the network to end customers, with lit fiber penetration increasing significantly
- Short-Term Trade-Off: Some degree of cannibalization may occur, as existing retail broadband customers could migrate to other ISPs that use the same network
- Long-Term Outcome: Overall fiber utilization grows, leading to superior ROI and accelerated investment recovery

### Step 2: Organizational Carve-Out and Capital Unlock

- Once the wholesale business scales, it can be carved out as a standalone entity
- This unlocks significant value through:
- Stock exchange listing, providing long-term capital access and market valuation uplift
- Private equity investment, where PE firms recognize recurring revenue streams and invest for growth

This two-step journey ensures both operational monetization through wholesale sales and financial monetization (through carve-outs or investment inflows).

## Value for ISPs and Home Broadband Providers

For ISPs and home broadband providers, fiber wholesale delivers a clear value proposition:

- No Network Investment Required: ISPs avoid heavy capital expenditure on fiber rollouts
- Geographic Reach: By contracting with multiple fiber wholesalers, ISPs gain broad coverage across most postcodes
- Reduced Time-to-Market: Ready-made infrastructure allows ISPs to focus on products, services, and customer experience, rather than network buildouts
- Onboarding Timelines:
- Large ISP onboarding typically requires 12–18 months, given complex integrations
- Smaller ISPs can integrate in 6–12 months, enabling faster market entry

Thus, ISPs gain a faster, lower-risk route to market, while wholesalers maximize utilization of their assets.

## The Endgame: Carve-Out for Valuation Unlock

Once the wholesale business matures, operators can transition the unit into a standalone entity. This unlocks significant valuation potential by:

- Attracting private equity and institutional investors seeking infrastructure-backed revenue streams
- Positioning the wholesale entity as a neutral, open-access fiber platform, appealing to a broader ecosystem of tenants
- Generating capital infusion for further network expansion or debt reduction

We enable wholesale service providers to carve out their fiber divisions as standalone, high-value entities within a multi-tenant environment. We support end-to-end separation, from defining scope and operational boundaries to segregating shared IT systems and migrating data securely, while ensuring minimal disruption to existing tenants. Our services include operational optimization, automation of network and billing workflows, and creation of independent performance dashboards, ensuring the carved-out entity is immediately efficient and scalable.

Beyond technical execution, we help unlock valuation through support for financial and investor readiness. This includes building robust financial models, identifying levers for revenue and cost optimization, preparing compelling business cases, and targeting private equity or institutional investors. We also ensure full regulatory compliance, risk management, and post-carve-out governance, providing ongoing IT and managed services to sustain operational excellence.

In essence, we position the new wholesale fiber entity to be investor-ready, operationally independent, and value-maximized, supporting both immediate and long-term strategic objectives. The future of fiber monetization lies in open access, partner-driven growth, and agile wholesale models—turning today's infrastructure investments into tomorrow's profit engines.

## About the Author

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Telecom Consulting & Growth Partner with strong academic background holding Bachelor of Engineering and a master's in business. With 20+ years of international professional experience advising telecom and technology organizations on business strategy, modernizing technology/enterprise architecture, Wholesale & Infrastructure Monetization, operating model transformation, AI strategy, Outsourcing strategy, Technology Roadmaps, Customer Experience Strategy & Maturity Modeling and commercial value creation. Combines deep industry & technology expertise with a strong commercial mindset, owning the end-to-end advisory lifecycle from opportunity shaping to strategic impact. Proven track record of building and scaling consulting practices, shaping board-level conversations, and advising senior executives across India, UK, Europe, and USA. Recognized for designing enterprise and national-scale strategies, monetizing connectivity, and creating investment-ready business models.

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## About TechM Consulting

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