TELCO NETWORK INFRASTRUCTURE:

STRUCTURAL SEPARATION IS THE KEY TO MAXIMIZING VALUE

A Capgemini Invent view

Contents

Introduction

Telecom is an asset-intensive business. Over the years, network infrastructure assets have become key differentiators for traditional telecom companies which, by no surprise, also provide a competitive advantage.

Telecom infrastructure constitutes a wide variety of assets which mainly includes telecom towers, active and passive network equipment, data centers, real estate, inventory warehouses, copper networks, fiber networks, and many more. Building these extensive network assets, uses up a lot of resources. Telcos need to invest billions in capex. They need a significantly long time frame, encompassing many years, and substantial manpower to build the networks. In India, for example, Reliance Jio took between 3-5 years to build their 4G network.[1][2] This included building mobile towers and fiber networks. Verizon launched its first 4G LTE service in December 2010, covering one third of the American population. It took Verizon another 2-3 years to increase their coverage to 97% of the population.[3] Further, maintenance of these assets is no easy feat. Opex, covering equipment maintenance and manpower costs, forms a very important expense entry in the accounting books.

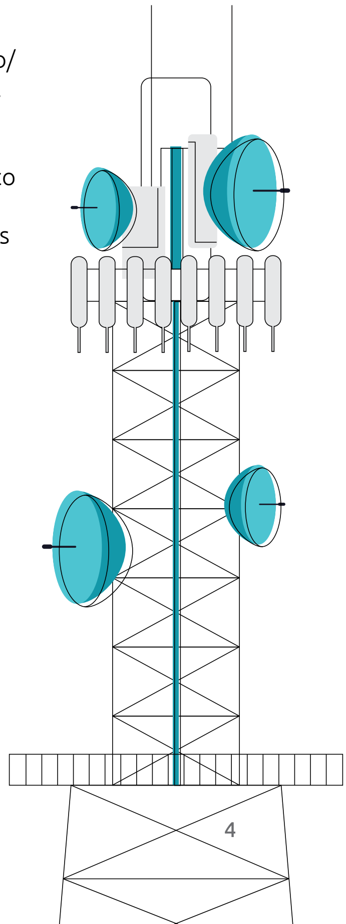
Building a telco network is time-consuming and expensive. Moreover, recovering the investment from the telco network could turn out to be even more time-consuming. It usually takes years altogether, if not decades, to recover the investments made on these assets. For instance, a fiber network's break even period is estimated to be around 15-20 years.[4]

Telecom networks are not immune to technology changes either. With the onset of every new generation (G) of mobile networks, a telecom network needs regular upgrades and makeovers. Sometimes, a completely new network with a different set of active and passive infrastructure is required. It is also possible to harmonize networks belonging to two different technologies, which is a strategy that most telcos are adopting in their 5G deployment. Apart from the network roll-outs, telcos also need to acquire customers, provide good customer experience (CX), reduce churn and keep competitors at bay. Moreover, it is also quite tedious to have product launches with such traditional arrangements.

Managing such a diverse set of activities leads to additional strain on the enterprise leadership. With these organizational complexities, the constant need to adapt to new technologies, and the perpetual threat from Over the Top (OTT) players and native digital service providers, it becomes challenging for telcos to generate good return on investment (ROI).

In the telcos' quest to reinvent themselves and gain lost ground, a paradigm shift has been taking shape on the asset side, wherein telcos are offloading or spinning off their network assets into a separate firm. The motive for such a move could either be external or internal in nature. In many regions, it could be driven primarily due to regulatory requirements or by the advent of a new competitive force in the market. This leads to creation of a "NetCo", which manages the network infrastructure assets, while the remaining part which is the "ServCo" focuses on serving the customers better. The NetCo could further be identified based on the assets they control, i.e. a firm handling tower assets would be termed as "TowerCo" while a firm handling Fiber assets would be called as "Fiber". A spin-offs is not the only option to carve out a separate NetCo. It is also possible to form a joint venture with a third party to form a dedicated network infrastructure management entity.

This white paper further evaluates the compelling reasons for such a move, i.e. creation of NetCo/TowerCo/FiberCos, and how it helps the telcos. The white paper also sheds some light on the latest happenings across various markets in the context of telco Spin-offs. Further, it also provides a set of guidelines or recommendations for telcos wanting to go down this path of creating Spin-offs.



The prospect of financial rewards is driving telcos towards spin-offs

Thanks to the data explosion driven by 4G and 5G, the marketplace across the globe is becoming increasingly accessible and smaller. This has led telecommunication services, and revenues generated from it, to have a key multiplier effect on the growth of the nation. However, this increasing importance of the telecom industry has not translated into sustainable revenue growth. The decreasing revenue from traditional services like voice (in both mature and emerging markets), increasing competitive tariffs, increased expenditure on asset management and enormous infrastructure spending to roll out 5G has only added to debt on their books. Additionally, with the COVID-19 pandemic, a large portion of the global population has been forced to stay indoors and support their business from their homes, thereby increasing the data services consumption. This has put further pressure on service providers across geographies to ensure better quality of service (QoS), and 24X7 network availability, and to roll out 5G sooner.

All these factors have pushed communications service providers (CSPs) to desperately find ways to reduce debt on their books, the cost of their operations, and look for alternative sources of revenue generation. The creation of a NetCo/TowerCo/FiberCo as a separate business entity has become an increasingly popular solution to this problem, over the last decade. Encouraged by governments in some regions and by the need to deploy asset-light networks, the idea of asset sharing is driving telcos towards Spin-offs.

Shifting tower as an asset from balance sheets

The CSPs that owned their towers, offloaded that part of their business into separate companies. This has helped CSPs to shift tower assets from their own balance sheets and transferring them to dedicated TowerCos. This sharing model enabled the CSPs to lease out their tower assets. As per an industry report, a telco that rents upto 75% of its sites from tower companies can reduce its first-year costs by 60%. Thus, the capital deployed by the CSP is much more efficient and offers considerable savings in opex.[5]

Moving fiber assets to a wholly-owned subsidiary or a separate FiberCos

Similar to towers, moving fiber assets to a wholly-owned subsidiary or a separate FiberCo and a potential sale help CSPs in bringing additional capital (into the core mobility business) and reduce future capex investment. The separation of the fiber business eventually results in fiber-related capex avoidance for the core mobility business and boosts operational efficiencies. Additionally, CSPs can increase their operational income by reselling spare fiber capacity to competitors and other players (such as OTT players and other enterprises).

Individual NetCo/TowerCo/FiberCo have more valuation than an integrated telco

This sharing model also prompted the emergence of independent tower companies such as Viom (with around 50,000 towers), GTL Infrastructure Ltd., American Tower Corp. and ATC (with 35,000 and 10,000 towers, respectively), Cellnex, and Inwit of Italy. These companies do not have the traditional telecom components. The operating model is building and leasing of towers for a fee per month, for typical contracts of 15-20 years.

Some of these tower specialists have significantly higher valuations than telecom operators. For example, Cellnex and Inwit of Italy are valued higher than CSPs in their region. This valuation is being derived by measuring the ratio of enterprise value to earnings before interest, taxes, depreciation and amortization (EBITDA). Cellnex's enterprise value stands at approximately 34 times its EBITDA, whereas the ratio is 6.77 for Deutsche Telekom and 5.02 for Vodafone.[6]

Case for Spin-offs

NetCos/TowerCos/FiberCos deliver a number of benefits to CSPs, the wider wireless sector and, ultimately, the consumer. Some of the key benefits entailed, are listed below:-

Key business levers	Benefits due to Spin-offs
Opex investment	Creating a separate NetCo/TowerCo/FiberCo results in focused opex planning. The new entities specialize in operating wireless network infrastructure like towers, hence have an efficient opex planning focused on investing in infrastructure. As per a recent industry report, opex efficiencies delivered by independent TowerCos were higher as compared to those of full-service mobile network operators (MNOs). The impact of this efficiency for independent TowerCos translates into reduction of overall cost per user, as compared to that of MNOs.
Growth potential	While unused tower or spare fiber capacity may be a depreciating asset for a CSP, for NetCos it becomes a potential source of long-term revenue from multiple CSPs.
Economic savings	As per a recent industry report, typical location of a wireless network operator managed by a TowerCo is around 40% more efficient than one managed by an MNO, resulting in economic savings of €31 billion across Europe between 2019 and 2029.[7]
Regulatory relief	In a bid to make state-of-the-art telecom offerings available to customers, governments across the globe have been encouraging emergence of NetCos by providing regulatory relief to pricing and thereby improving gross margin on creation of infrastructure players. For example, in the Czech Republic, O2 estimated that retail price regulation impacted its gross margin before separation. By structurally separating O2 and CETIN & O2, O2 got maximum flexibility for its retail business. In effect, both O2 and CETIN gained greater pricing and contracting flexibility.[8]
Better partner management resulting in bigger addressable market	Since the revenue earned by a NetCo is from multiple CSPs, it is less dependent on the success of a particular CSP. A carrier-neutral NetCo can grow its wholesale business with other operators, since aggregating demand from multiple wholesale customers increases household conversion rates for FiberCos and, thus, ROI for new builds. In the case of O2 in the Czech Republic, the carrier-neutral CETIN, untethered from its former parent, grew beyond its original business by adding subscribers and traffic from the customer bases of other operators.[8]
Sustainable operations	Network infrastructure has a significant carbon footprint. Towers which run on diesel add to tremendous carbon emissions; in fact the telecom sector was responsible for 5.2 million tons (mt) of carbon dioxide emissions (out of 13 mt overall) annually. A TowerCo business helps to reduce the building of redundant towers in the same location, thereby decreasing the carbon emissions and enabling a more sustainable business model.
Operational efficiency	With the emphasis on infrastructure asset development and maintenance, NetCos have sharpened management focus on improved operational efficiency. For example, rural areas tend to see less investment in communications infrastructure, and can lack the coverage and service quality seen in urban areas. Alternatively, network infrastructure building in urban areas can become difficult due to lack of space and associated high costs. Additionally, for different CSPs it may result in repetitive network infrastructure development for the same areas. From a sector's perspective, it translates into depletion of already scarce funding, with no tangible benefit in sight. With NetCos this depletion can be avoided, thus resulting in transacting benefits for the CSPs. This, in turn, results in better customer satisfaction and revenue figures. Additionally, environmental benefits are achieved due to co-location, as fewer towers are needed to meet demand.

All these factors lead to enhanced stakeholder value and better ROI, thereby enabling investments at more predictable returns.

The tangible benefits due to Spin-offs has created a strong case for TowerCos / FiberCos / NetCos.

Examples of some major Spin-offs across the globe include:

2017

In 2017, to support tower co-share model China Independent Tower Alliance (CITA) was created. This has helped to legitimize China's independent TowerCos, thus paving the way for consolidation and access to additional financing.[15]

Vodafone and Idea Cellular merged and sold their combined 20,000 towers to American Tower.[16] Reliance Communications divested its 43,000 towers, fiber, and spectrum rights to Reliance Jio.

2018

TPx in the US sold and leased back metro fiber assets to Uniti Group, to pay debt and increase investments in managed services.[12]

2018

In August 2018, the telecom regulator BTRC announced it will grant four TowerCo licenses (pending ministerial approval) to edotco, TASC Summit Towers, iSON Tower Bangladesh and AB HighTech Consortium, to rationalize the country's 30,000 towers. This move was made to support 4G, which was introduced in 2018. The TowerCos played a key role in upgrading existing towers, extending network coverage, and also in rationalizing the existing portfolio of assets by decommissioning duplicate towers.[14]

In Italy, Vodafone and Telecom Italia created a new infrastructure asset "Inwit". Both parties retained joint control (each with 37.5% of the shares). And, Altice in France sold 49.99% of SFR FTTH to maximizing the financial gain while still keeping control.[9]

The merger between Bharti Infratel and Indus Towers will run a portfolio of over 163,000 towers controlled by Airtel and Vodafone.[17]

2019

In 2019, Proximus and Orange Belgium announced their joint venture to develop the mobile access network of the future by sharing their networks across the country. This mobile access network sharing will allow a faster and more comprehensive 5G roll-out in Belgium, encompassing the 2G, 3G, and 4G technologies as well as aid in improving coverage.[10]

2020

Vodafone Group has already set up its tower assets as a separate company called Vantage Towers. It rolled out its IPO in Frankfurt earlier this year. It was one of the biggest listings this year in Europe. Vodafone has said, it will use the proceeds to cut its debt, which totals about 69 billion euros, according to Refinitiv data.[11]

Australia's largest wireless carrier – Telstra – has decided to carve-out all of its non-mobile related assets like towers, fiber infrastructure, copper and subsea cables into a separate InfraCo.[13]

2020

Lastly, BSNL and MTNL are both considering strategic moves to monetize their infrastructure assets.

2021

Apart from this, several smaller European operators have moved to unload their tower assets in recent years. France's Iliad, Switzerland's Sunrise Communications Group, and Ireland's eircom Group have all sold tower assets to specialist companies such as Spain's Cellnex Telecom or Blackstone Group-backed Phoenix Tower International.

How should telcos plan their network asset Spin-offs strategy?

Spin-offs, if managed well, could lead to a significant increase in the valuation of a telco's network infrastructure. A Netco/TowerCo/FiberCo would focus on managing the infrastructure assets while the parent telco (the ServCo) would focus on improving the customer experience and create differentiation in the market via value-added services and product offers. Together, this plan could work very well.

However, this is easier said than done. Implementing a Spin-offs from a telco's assets is a tricky task and needs a great level of planning and focus on the overall outcome. A variety of factors and scenarios need to be taken into consideration.

It needs time, efforts, and dedication from enterprise leadership. It needs proper planning and detailed assessment of multiple aspects involved. Lack of appropriate preparation could lead to costly losses and brand damages, not to mention losing the opportunity to monetize the telco's assets and, by the virtue of this, put the house in order.

Given the enormity of this exercise, here is a proposed framework that covers almost every aspect of this initiative. This framework is indicative in nature and provides a broader outline of the criteria a telco needs to consider while planning a Spin-offs. Careful evaluation of every parameter will lead to building a very practical strategy for the Spin-offs initiative.

1. STRATEGY:
Assess the business and market situation

NetCo strategy and planning
- Role of NetCo in the future
- Spin-off (right) timing
- Assets with competitive advantage
- A say in future plans of NetCo
- Spin-off roadmap
- NetCo service offerings

Asset evaluation and management
- Control of assets
- Tailored strategy for each asset type
- Asset portfolio assessment and selection
- Asset inventory information

Network investment
- Capex and investment
- Expansion of network

Target operating model
- NetCo target operating model
- Alignment with ServCo target operating model

Sector regulations
- Regulatory environment
- Regulatory relief

Infrastructure readiness
- Current state of infrastructure
- Readiness of Tower and Fiber infrastructure

Network co-operation trends
- Current state of network co-operation in the market

Potential investors for NetCo
- Funding and investment options

2. ORGANIZATIONAL COMPLEXITY:
Focus on the internal organizational aspects

IT architecture assessment and planning
- IT architecture modifications
- Duration of IT instability

Leadership orientation
- Management focus
- Sponsorship from top management

Time and effort
- Time and effort required from the overall team

Process assessment and planning
- Need for new processes (internal and customer-facing)
- Need for Process redesign (internal and customer-facing)

Suppliers
- Managing current suppliers
- Need for new suppliers
- Contract negotiations
- Favorable contracts
- Master service agreement

Tax, legal, and finance
- Tax implications
- Legal implications and processes
- Financial impacts

3. ORGANIZATION & TALENT:
Organize and manage the manpower

Change management
- Change management plan
- Transfer of knowledge
- New roles

Talent management
- Talent realignment
- Culture for innovation

Governance
- Formation of a strong governance team
- Authority to take key decisions
- Managing Risks and Issues

External capabilities
- Partners and advisors

4. GROWTH & BENEFITS:
Assess the potential growth and efficiencies

Growth potential
- NetCo growth prospects
- Growth in market share
- Competitive edge due to NetCo

Synergy
- Business/market synergies
- Organizational synergies
- Operational synergies

Environmental Sustainability
- Sustainable operations
- Sustainable supply chain
- Sustainable IT
- Increased green energy usage & reduced carbon footprint

5. COST & SUCCESS:
Identify expenditure and parameters to measure success

Spending on the initiative
- Overall cost of the initiative
- Internal funding for the initiative

Measuring Success
- Defining key metrics and KPIs
- Procedure to measure metrics and KPIs

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With the help of our comprehensive frameworks, assets and in-depth Industry expertise, we can enable our clients to form a strategy and roadmap for monetizing their network infrastructure assets. We can help clients in governing structural separation initiatives and realize business value for stake holders.

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