

# The old model is broken. Telcos need to reinvent themselves

Consolidation may ease some pain for Singapore players, but it won't address the many challenges the telecoms sector faces.

**Tiffany Tsai**

The collapse of the Simba-M1 merger and Singtel's renewed interest in consolidation have revived debate over the structure of Singapore's telecommunications sector. But the discussion should not focus only on whether the market needs three or four telcos. The deeper question is how Singapore's telcos arrived at this point, and why consolidation alone may not solve the sector's problems.

Singapore's telecoms sector has gone through more than three decades of liberalisation and competition. The process began in 1992 with the corporatisation of Singtel. In 1997, M1 entered the mobile market. In 2000, limits on the number or type of telecoms licences were removed, except where there were physical or resource constraints. StarHub also entered as Singapore's third mobile operator in April 2000. This liberalisation opened a market that had once been dominated by one operator, and gave consumers more choice through competition. The Telecom Competition Code, finalised in September 2000, helped prepare the market for the move from monopoly towards competition. It dealt with issues such as consumer protection, infrastructure sharing, competition rules and mergers.

The early years of competition also coincided with strong demand growth. Total mobile subscriptions rose from 414,000 in January 1997 to 2.44 million by December 2000, according to the Infocomm Media Development Authority (IMDA). At that time, telecommunications was still a high-margin business, with voice calls and SMS serving as major sources of revenue. Operators controlled scarce spectrum, owned essential networks, and consumers paid directly for communications services.

However, the world has changed. The sector remains capital-intensive, but its traditional revenue model has weakened. A structural shift in demand, pricing power and value



The telecommunications sector remains capital-intensive, but its traditional revenue model has weakened, says the writer. A structural shift in demand, pricing power and value capture has squeezed revenues significantly. Voice and SMS have been displaced by internet-based messaging and digital services. PHOTO: ST FILE

capture has squeezed revenues significantly.

Voice and SMS have been displaced by internet-based messaging and digital services, while consumers now expect large amounts of data at very low prices. According to IMDA, SMS volumes fell from about 2.46 billion in the third quarter of 2011 to about 577 million in the first quarter of 2019, while reported mobile data volume rose from 7.73 petabytes in the first quarter of 2014 to 20.54 petabytes in the first quarter of 2019.

Telcos still carry the traffic, maintain the networks, and invest in spectrum and infrastructure, but much of the value is captured by platforms and digital services that depend on those networks.

## A TOUGHER TERRAIN

Competitive pressure also increased in the 2010s. In 2016, TPG, now Simba, won the new entrant spectrum auction. That competition benefited consumers by pushing the industry further into low-cost, high-data plans, but it also put telco revenues under greater pressure. According to Maybank IBG Research, Singapore's mobile average revenue per user has declined by

36 per cent to 41 per cent since 2017.

The market is also already highly penetrated. According to IMDA, Singapore had about 9.8 million mobile subscriptions and a mobile population penetration rate of around 165 per cent as at July and August 2024. This means there is little future growth from adding domestic mobile users. In a saturated market, more competition would mainly redistribute revenue among operators rather than expand the total revenue pool.

A recent forecast projects Singapore's mobile service revenue to grow at only 0.7 per cent a year between 2025 and 2030, while voice revenue is expected to decline by 5.8 per cent annually over the same period. This pressure was compounded by the need to keep investing. The move to 5G added another layer of capital expenditure. That underlines the main point: consolidation may ease some pressure, but it does not by itself create a new growth model.

There is, of course, a real economic logic to consolidation when demand has stagnated. Telecommunications is an industry with high fixed costs and

**Having fewer players raises another concern: whether there will be enough competition to protect consumers and businesses. This is why the debate cannot stop at numbers. The sector's problem may not primarily be whether the market has three or four operators. It may be whether telcos have the right business model, investment incentives and policy direction to respond to changing demand.**

strong economies of scale. Operators must invest heavily in spectrum, networks, infrastructure and service quality. In a small domestic market, having four mobile network operators may make it difficult for some to remain profitable. Fewer players may improve cost

that consolidation reduced the number of banks. It is that consolidation supported a broader transformation of the sector during a phase of growth.

The telecoms sector is different because its demand outlook is more constrained. Connectivity is increasingly commoditised, consumer plans are price-sensitive, and traditional voice and messaging revenues are under pressure. If the industry's future is merely to provide cheaper data pipes for consumers, telcos will remain trapped in a race to the bottom. Lower pricing power may also make firms less able or less willing to invest in reinvention. Unlike banks, telcos also face more limits in expanding beyond the domestic market because networks are tied to spectrum, local regulation and physical infrastructure.

Consolidation can help address some of these pressures. It can improve cost efficiency and reduce duplicated infrastructure investment. In a small market like Singapore, it may not always be efficient for every operator to build and maintain parallel networks, especially when the underlying infrastructure is costly and demand growth is limited. But if consolidation simply leaves fewer telcos competing in the same commoditised pipe business, it will not solve the structural change in demand facing the sector. In this sense, consolidation may support the sector's transformation, but it cannot replace it.

## WHAT TRANSFORMATION SHOULD LOOK LIKE

We should also note that the demand for digital infrastructure has never been stronger. Artificial intelligence, cloud computing, cybersecurity, autonomous systems, smart logistics, financial technology and digital government all depend on high-quality, secure and resilient connectivity. These are not separate from the telecoms sector. They depend on the networks, data flows and infrastructure that telcos help provide.

The value of telcos is therefore no longer only in the SIM card, fibre plan or monthly consumer bundle. It lies in integrating networks with computing, security, data flows and enterprise services. The telco industry of the future should therefore not see itself merely as a retailer of mobile plans, but as a trusted provider of digital infrastructure.

This transformation is already under way in parts of the sector. Some telcos have started diversifying into cybersecurity, data centres, enterprise services and regional digital infrastructure. Singtel has moved into cybersecurity, enterprise technology, data centres and regional digital infrastructure. StarHub has also been growing its enterprise and cybersecurity services, while M1 has pursued cloud-based digital transformation and business security offerings. But these

CONTINUED ON PAGE B2

# Potential areas of transformation

## FROM B1

efforts need to become a core part of the sector's next stage of growth, allowing telcos to capture more value from the digital services that depend on their infrastructure.

There are several potential areas of transformation. First, telcos can strengthen demand by offering integrated products and services that combine broadband, cloud access, cybersecurity, devices, software and data services. Many consumers and businesses would prefer these

services to be integrated, so they do not need to manage every digital service separately. They want digital services that are reliable, convenient and secure. Telcos are well positioned to play this role because they already provide essential connectivity and have longstanding relationships with households and enterprises.

Cybersecurity is another important area of growth if telcos are to move further away from the basic pipe business. As more services move online, connectivity and security become

harder to separate. Telcos already sit close to networks, devices and data flows. This gives them a direct way to bundle connectivity with security and provide cyber protection, especially for customers that may not have the ability to manage complex cybersecurity needs on their own.

In addition, there is more room to expand 5G use in industrial and enterprise applications. For many individual customers, 5G may simply mean faster mobile data for videos or games. But for businesses and public services, it can support more advanced uses in areas such as smart logistics, autonomous systems and digital operations. This could create new services and revenue around reliable, fast-response and secure connectivity.

Regional digital infrastructure is another key area of transformation. Telcos can invest in infrastructure that connects

data centres, submarine cables, cloud providers and enterprise customers. These connections are increasingly important because cloud services, AI applications, online platforms and cross-border business operations all depend on data moving securely and efficiently across networks. By building and managing this infrastructure, telcos can support businesses, cloud services and digital platforms across Singapore and the region.

This is where IMDA can play a useful role. In the short run, the choice is not only between full consolidation and each operator building everything on its own. IMDA can encourage collaboration short of full mergers. This could include network sharing, infrastructure pooling, cybersecurity standards, enterprise 5G sandboxes, and partnerships with cloud and data centre providers.

Such arrangements may improve infrastructure utilisation and cost efficiency while preserving competition. In some areas, parallel infrastructure investment may be wasteful and could lead to overinvestment. In others, competition remains important. Shared infrastructure or common standards may help reduce unnecessary investment while still allowing firms to compete in services, innovation and customer relationships.

In the long run, IMDA should continue protecting competition, but also frame consolidation around transformation. Any future merger should be assessed not only by prices and market share, but also by whether it supports investment, resilience, cybersecurity, innovation and regional digital infrastructure. If a merger only reduces competition without changing the underlying business model, the case for it is

weaker. But if consolidation helps operators invest, improve resilience and move faster into digital infrastructure and enterprise services, then these transformation benefits should be explicitly considered as part of the regulatory assessment.

The answer to the current telco debate may be that consolidation is necessary, but not sufficient. The real question is not just how many telcos the market can sustain, but what kind of telecoms sector will be needed for the next decade. The sector's challenge is not simply to manage decline in the old model, but to build a stronger role in a digital economy that increasingly depends on secure, resilient and intelligent connectivity.

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