

# Connecting telecom services with industry needs

A globalising economy is driving demand for more cloud-oriented data connectivity solutions. Providers and customers alike may still segment technology to better meet the unique needs of each industry.



**BY CALVIN CHU YEE MING**

The US\$135 billion-dollar regional telecommunications market is currently experiencing developments that range from evolving business practices and industry rationalisation, to market liberalisation and the popularisation of new technologies. A recent study by Synovate Business Consulting has found that senior executives across various industry verticals coping with intensifying competition, new government initiatives and recent investments, are changing their connectivity requirements. This study, of over 200 multinational companies across Asia-Pacific, documents a need for companies to come to terms with the wide range of data services currently available.

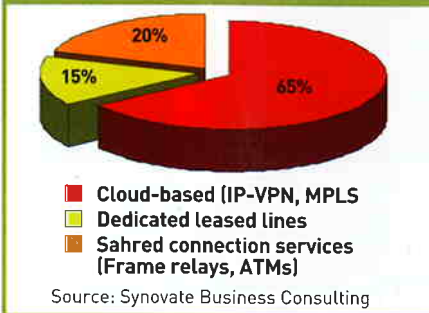
## Popular categories of telco services

Telecommunications and IT managers are increasingly particular not only about the technical aspects of various connectivity solutions, but also the implications that their business needs and processes have on the usage of different telco services. Deciding on the most suitable technology to use first requires a careful analysis of the strengths and weaknesses of each technology type, then matching these against the unique needs of each vertical. Synovate has identified three main groups of technologies that have become most popular among multinationals in the region:

### 1. Dedicated leased lines

Leased circuits are the most basic "point-to-point" connections, offering a dedicated line between two physical access points. The dedicated access guarantees a fixed and secure bandwidth, although these lines tend to be more costly and may take more time to install or upgrade. Because larger networks resultantly require more physical lines, they are also more complex to manage and are therefore more suitable for networks with fewer connection points.

## DATA REQUIREMENTS OF DIFFERENT SECTORS



### 2. Shared connection services

Services such as Frame Relay lease lines or ATM networks continue to physically connect between client sites. They however build on leased circuits because telco providers actually manage bandwidth allocation on shared networks, and therefore feature some flexibility to offer extra bandwidth during off-peak times. On a shared network, Frame Relay and ATM providers may still offer a Committed Information Rate at lower costs than the same bandwidth on leased circuits. Customers have however indicated concerns over an inability to specify the data route.

### 3. Cloud-based services

Many companies are also realising a keen interest in this latest category of data services, which provides connectivity on an Internet Protocol (IP) network. This eliminates the need for a physical line from the client site, and is therefore significantly less costly and more scalable than both Leased Line and Frame Relay-type services. A key feature is that IP-based data connections, not running on a specified physical route, allow connections across multiple locations, and are therefore increasingly viewed by global companies as a turnkey solution to connect all their

offices. With recent advances in security measures such as firewalls and encryption technology, as well as the advent of private virtual networks, companies are becoming less concerned over information security issues. Finally, the latency problem with IP networks has become an issue of the past, with data packet prioritisation in services like Multi-Protocol Label Switching (MPLS). The popularisation of VOIP applications is testimony to the real-time performance of such managed networks.

## Identifying business processes and resulting service requirements

In recent few years, companies feeling the pressure to shift up the value chain have started to engage in more data-intensive activities. Successful telecommunications providers are better able to leverage on in-depth industry knowledge when marketing solutions to different customer verticals. For instance, the business processes of five key sectors with data-intensive business processes are identified in the table below, illustrating how different service requirements lead to demand for specific data services.

## Matching solutions to industry needs

Companies sometimes deliberately procure different telco services for different purposes, and also to ensure complete redundancy. Yet, the supporting infrastructure available in each country also influences the choice of technologies to prioritise. Therefore, providers in technologically-advanced countries such as Singapore market the newer cloud-based technologies quite aggressively. Still, providers and customers alike may now realise the opportunity to more clearly segment various telco services, to better meet the changing demands of a data-intensive global economy.

Calvin Chu Yee Ming is a Project Manager at Synovate Business Consulting. For more information please contact [bc@synovate.com](mailto:bc@synovate.com)

SECTOR	KEY BUSINESS PROCESSES	SERVICE REQUIREMENTS	DATA SERVICES DEMANDED
Manufacturing	<ul style="list-style-type: none"> <li>Enterprise planning for operational efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical support</li> <li>Low price sensitivity</li> </ul>	<ul style="list-style-type: none"> <li>Leased Lines</li> </ul>
Finance	<ul style="list-style-type: none"> <li>Data processing &amp; transfer</li> </ul>	<ul style="list-style-type: none"> <li>Strong security needs</li> <li>Heavy reliability considerations</li> <li>Low price sensitivity</li> </ul>	<ul style="list-style-type: none"> <li>Frame Relays / ATMs</li> <li>Leased Lines</li> </ul>
Shared services	<ul style="list-style-type: none"> <li>International voice applications</li> <li>Data applications, especially for data centers and software houses</li> </ul>	<ul style="list-style-type: none"> <li>Low latency</li> <li>Cost a key driver for competitiveness; therefore frequently at less developed countries</li> <li>Strong demand for international connectivity</li> <li>Data centers have strong need for reliability</li> </ul>	<ul style="list-style-type: none"> <li>VoIP</li> <li>ILCs for international connectivity &amp; reliability</li> </ul>
Information Technology	<ul style="list-style-type: none"> <li>Data transfer</li> </ul>	<ul style="list-style-type: none"> <li>Ease of usage &amp; management</li> <li>Scalability</li> </ul>	<ul style="list-style-type: none"> <li>IP-based technologies</li> </ul>
Research & Development	<ul style="list-style-type: none"> <li>Data processing &amp; transfer</li> </ul>	<ul style="list-style-type: none"> <li>Low bandwidth requirements</li> <li>Cost constraints as many nanotechnology/pharmaceutical/biotechnology research companies still small</li> </ul>	<ul style="list-style-type: none"> <li>IP-based technologies</li> </ul>

Source: Synovate Business Consulting