Perspective

Anything That Can Be Connected, Will Be Connected

Today's telecommunications industry is one of the biggest contributors to the growth of the economy. Apart from contributing in terms of revenue, it also influences the growth and progress of many other sectors such as health, education, e-governance, rural development, etc. Government of India has recognized the influence and the importance of this industry, which is evolving at a rapid pace; however, there is still a long road ahead before the nation benefits to the fullest extent from the telecom industry.

The fast pace at which telecom operators are expanding their reach and launching 4G services in India, it seems we are headed to another telecom revolution in the country. Indians can expect new services, better call quality, and much more competitive call rates in days to come

Not only operators, the Indian telecom service industry too is often cited as a true success story of economic reforms in India. With the government initiative to liberalize the sector, and active participation from the private sector, the industry has grown from strength to strength. This becomes apparent from state-of-the-art telecom infrastructure in the country along with a huge subscriber base.

2015-16 proved to be quite a beneficial year for Indian telcos and the telecom industry and customers as well, and 2016-17 is expected to be even bigger and better. While last year LTE, public Wi-Fi, and wearables grabbed the limelight, the next expected milestone in Indian telecom market is the Internet-of-Things (IoT) and a main steering for continuous growth in the telecom sector. At present, a wide range of industry sectors—including automotive, healthcare, manufacturing, home and consumer electronics, and well beyond – are considering the potential for incorporating IoT technology into their products, services, and operations. The term Internet-of-Things (IoT) also denotes a trend where a large number of embedded devices employ communication services offered by the Internet protocols. Many of these devices, often called *smart objects*, are not directly operated by humans, but exist as components in buildings or vehicles, or are spread out in the environment.

In the coming years, mobile video surveillance may evolve to be available on aircraft, drones, cars, and safety and security personnel for monitoring houses/buildings, targeted areas, special events, etc. However, low-cost connected devices and enhanced coverage, coupled with support of device volumes, are some key requirements for cellular to enable these services to have mass adoption. IoT also represents the convergence of a variety of computing and connectivity trends that have been evolving for many decades.
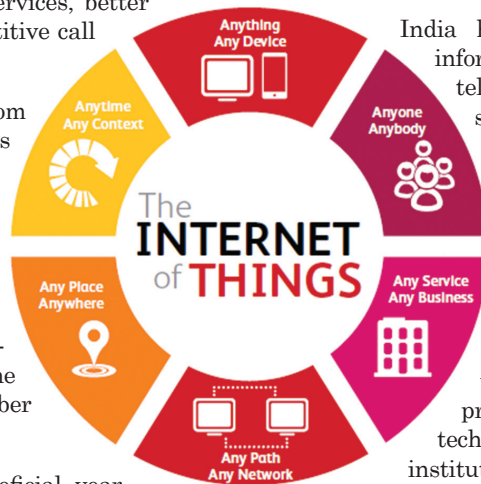
India has strong capabilities/expertise in information technology, manufacturing, telecommunications, and digital services along with the demand-side of healthcare, transport, retail, and utilities to implement the IoT without any delay. Although the government has taken steps to promote IoT, policy makers may need to allocate more resources to improve telecom infrastructure to enable the IoT use. Also along with the government, telecom service providers will need to work with the technology companies and research institutions to establish standards for interoperability and security between sensors and connected devices that are proliferating across homes, offices, and public places. Consequently, the bottleneck currently in India is at the *create* stage of the loop due to the lack of an appropriate application of sensor technology. Whoever controls the bottleneck is typically best positioned to capture a disproportionate share of the value created.

Needless to say, there will be a vast array of changes that will make 2017 an exciting year for the telecom sector also and the new rule for the future is going to be, "Anything that can be connected, will be connected." ■

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