



## STRUCTURED CABLING

### Market sLOWs DOWN

*As enterprises are increasingly trying to work on zero downtime platforms to counter competition, they have realized the importance of a well designed cabling infrastructure and are ready to make investments and deploy solutions*

**M**ass enterprise IT adoption has resulted in an increase in enterprise data. A number of developments in the Indian enterprise are driving the need for a robust cabling infrastructure. Organizational growth, use of converged networks, new enterprise applications, demand for data centers and network virtualization have only increased the importance of structured cabling solutions.

As enterprises are increasingly trying to work on zero downtime platforms to counter competition, they have realized the importance of a well designed cabling infrastructure and are ready to make investments and deploy solutions.

#### Structure your Future

Network gear like switches, servers, and routers are upgraded once every few years and hardware components like RAM, hard disks, and mother-

boards are upgraded/replaced quite often. But cabling infrastructure is a vital component of the network that will outlive the rest of the information transport systems. Seventy percent of the network downtime is due to poor cabling. Hence, it is important for companies to choose the right solution.

**Shajan M. George, Technical Director-India, Reichle & De-Masari (R&M)** says, "Selections are long and sensitive processes that end with a purchasing action. Typically, purchasing decisions are valid when commodities are involved and unfortunately many consider cabling a commodity while it is not. Cabling is a system and therefore all elements must be evaluated with competence that generally doesn't belong to only one individual".

The quality concern applies to the entire value added chain of a cabling system—from the production to the

installation to the operation and maintenance. A building is erected starting from fundamentals. Most of the time cabling is considered as last and sometime not even considered as part of IT. Structured cabling is the backbone of the information system, thus an enterprise must do a careful evaluation before finalising on a solution. A cabling solution must satisfy the needs of the enterprise. For the network solution to satisfy all customers' requirements, not only does the choice of products have to be right, but the cabling has to be planned, installed, and operated in a qualified way too.

A solution must score high on the parameters of security and reliability. Also, it should comply with industry standards such as TIA/EIA and ISO. Another important thing to consider is that the solution must be scalable, so that it could be upgraded for additional speed or data needs. The



In terms of technology, **Cat6** continued to rule the **SCS** market. **Cat6A (STP)** implementations were limited to **datacenter** projects especially in the network backbone. The **Cat 6A** market is picking up because of high bandwidth requirements, especially in **datacenters** and enterprises where **high-speed** data transmission is required for mission-critical **applications**.

solution should provide a zero bit error-free performance and must be capable to support minimum gigabyte throughput and future applications.

Cost is another guiding factor in choosing a solution, but it must be borne in mind that cost is very important but not the decisive one. First, selected cabling must satisfy the performance requirements; after all whatever the cost is always a cost.

### Current Trends

According to cabling manufacturers, the major turning points in the industry have been the progress in technology from fast ethernet to gigabit ethernet and more recently to 10 gigabit over copper. IT managers realize that the speed, performance, and manageability of networks are important factors

In terms of technology, Cat6 continued to rule the SCS market. Cat6A (STP) implementations were limited to datacenter projects especially in the network backbone. **K K Shetty, Director Sales, (India and SAARC), Tyco Electronics Corporation India Pvt. Ltd.** says, "The surprising pick up in Cat5A sales is attributed to the markets opening up in B and C Class cities. In terms of fiber while enterprises sales have not been very high they still contributed to about 8 percent to 10 percent of SCS business. One major change that we see in terms of fiber is in the telecom industry where Fiber to the Home is primed to become a reality".

The Cat 6A market is picking up because of high bandwidth requirements, especially in datacenters and enterprises where high-speed data transmission is required for mission-critical applications. **Subashini Prabhakar, Chief Technology Manager, Dax Networks** says, "The current cabling market shifted to Cat-6A on copper both UTP and STP versions. In fiber moved more on Single mode fiber with 'Zero Water Peak' with 10G capability and to support WDM". However, many small and medium enterprises in India still prefer to go with Cat 5e cables.

10G as a market segment is fast evolving in India and the acceptance of the technology is growing amongst the corporate. **Rajesh Kumar, Country Manager, Siemon** says,

"Higher speed ethernet standard 10 gigabit ethernet, are creating an environment where internet protocol (IP) and the delivery of advanced IP services like voice over IP, IP videoconferencing and IP-based security are becoming common applications". This is a healthy sign where we are moving towards an integrated and converged network. There is a definite increase in the demand in Internet traffic. New applications coupled with the growth of Internet users are driving the need for increased bandwidth. One such technology that addresses this demand is 10 gb/s ethernet over structured copper cabling systems which can be seen in upcoming data centers/knowledge centers. One of the latest trends is the growth in the need for 10 gb/s cabling systems.

Another trend sees the cabling systems increasingly getting intelligent especially the ones deployed in the enterprise space as manpower and down time cost involved is higher as compared to initial cost. These systems provide for real-time management of the physical layer, which enables immediate troubleshooting of problems, if any, besides optimum utilization and efficiency and gives RoI to the management. The intelligent structured cabling is able to track IP-based devices such that the network manager can access, control, and manage them from one central location. This is more critical considering the distributed computing environments that we have today and the acute need to troubleshoot them remotely. There is a scarcity of network management staff and therefore remote access and management of devices is logical. For this, use of an intelligent structured cabling system is a must. Besides this, there is a growing trend towards interoperability and providing higher security to the user as well.

### Market Dynamics\*

AMP NetConnect (Tyco Electronics) clearly led the market with over 30 percent market share. Tyco Electronics dominated the high end market segment of the SCS market and also had significant presence in the mid end market segment.

DIGILINK and Systimax Commscope accounted for a combined market share of 35 percent (Tier 2). DIGILINK dominated the

\* based on independent ADI MEDIA RESEARCH