

STRUCTURED CABLING

# Strengthening with Structured Cabling

*With installation, deployment and technology advancement becoming an everyday affair, cabling systems are no longer waiting in the wings to get noticed for their pivotal role in data centers*



The IT czars seem to have consensus over one thing. It is the growth of the structured cabling market in India. And if we look at the technology front, the boom can be validated, because the vendors in the domain are making strategies to create a market in their focus segment. Today, vendors are beginning to see value in having robust cabling infrastructure, and are ready to make investments, and deploy solutions. Cat5, Cat6, and Cat6A take the cake for proven solutions, increasing the demand for structured cables in India.

## STRUCTURED CABLING SOAR HIGH

A structured cabling system provides a universal platform upon which an overall information system's strategy is built. With a flexible cabling infrastructure, a structured cabling system can support multiple voice, data, video, and multimedia systems regardless of their manufacturer. A well-designed cabling plant may include several independent cabling solutions of different media types, installed at each workstation to support multiple system performance requirements. While STP is the domi-

nant technology abroad, especially in Europe, in India unshielded copper cabling still rules networks, especially when it comes to regular office networks. Some essential steps include identifying the service providers available for the job site; establishing diverse and redundant routes for bringing the service into the facility; coordinating the point of entrance for each respective service provider; accounting for the respective equipment requirements; and allocating space for each service provider.

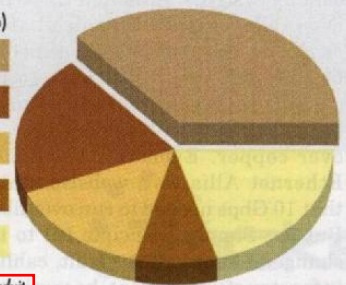
Of the many advantages, structured cabling provides to a data center, we can enumerate a few. Structured

cabling offers consistency and flexibility, provides support for multi-vendor equipment, simplifies troubleshooting, and provides support for future applications. Looking beyond the traditional, the vendors in the structured cabling market are looking for new business opportunities. Targeting the small and medium businesses, till date structured cabling is recognized when it comes to home networking, distributing audio, video, and home data. From wired to wireless, vendors in the structured cabling arena are using all possible measures to ensure customer specifications.

The structured cabling market in In-

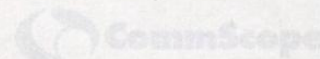
INDIAN STRUCTURED CABLING MARKET  
Total Sales Rs. 1,260 crore

Vendors	Sales (Rs. Cr.)	Share (%)
Tyco	456	36.2
Systemax Commscope	252	20.0
D-Link	189	15.0
Molex	101	8.0
Others*	262	20.8



\*Others include: R&M, ADC Krone, Sterlite, TVS ICS, PDR, Nexans, Panduit, Legrand, Bolden, Clipsal, Dax, Siemon

2007-08



“The structured cabling market has grown rapidly over the last year. Tacker Technologies offers a wide range of products that are growing day-by-day. With the state of the art technology, we have emerged as the trend setters in the market. With more intelligently built solutions, we cater to the widespread technological needs. We have launched many new products. 10G on Copper launched this year adds on to the growing need for bandwidth. Despite this, the need of the hour is to break the ice with datacenter solutions. If we compare the Indian market with other regions in the Asia-Pacific, we see a huge potential for growth. Although India is a price conscious market, still the attention is more toward India, as other regions in the South-East Asia are saturated.

However, attention is required from the side of the skilled manpower required in the installation of cabling systems in the country. Installation of cabling seems to become the last priority on the list of customers which leaves almost no time for the installer to do the perfect job within the time constraints. Moreover, since conventional methods are still in practice, less automation and more manual labor is rampant in the market. Despite these challenges, the future of the market looks bright, since cabling systems form the backbone across all businesses. Since the applications around cabling systems are also seeing an upward trend, where we have moved from 10Mbps to 100Mbps to 1Gps to 10Gps to 100Gps on copper, we can conclude that the cabling market is mushrooming. ”



**Amit Tacker,**  
Director -  
Marketing, Tacker  
Technologies

India grew to Rs. 1260 crore in 2007-08. Tyco emerged as the leading player in 2007-08 with a market share of 36.2 percent. The second in the line was Systimax Commscope, grabbing 20 percent of the market share. D-Link was in third place with 15 percent market share, while Molex accounted for 8 percent market share. The balance market share was collectively accounted for by players such as R&M, ADC Krone, Sterlite, TVS ICS, PDR, Nexans, Panduit, Legrand, Belden, Clipsal, Dax, Siemon, and Finolex.

#### CABLING MEETS NEW TECHNOLOGY

Technology advances are opening up new doors of opportunities in the cabling systems market. Until mid-November 2002, the fastest speed of Ethernet achievable over twisted-pair copper was 1 Gbps—capable of being run over Cat 5e or Cat 6 cabling systems. Although there had been talks that Cat 6, which has its electrical characteristics specified up to 250 MHz, would be theoretically capable of 2.5 Gbps, IEEE had no plans for anything faster than 1G over copper. Even the 10 Gigabit Ethernet Alliance's website stated that 10 Gbps needed to run over fiber. But the Shannon principle led to the change of heart. As a result, cabling infrastructure is fast becoming a vital component of an enterprise's

IT strategy. The threat of wireless taking over the wired no longer exists as cabling needs of an enterprise are increasing year after year. A structured cabling systems offers scalability, flexibility, easy and low cost changes, and investment. Often regarded as the lowest cost component in networking, structured cables have a longer upgrade cycle compared to other components as switches, PCs, and other hardware. But, with the increase in bandwidth, vendors are relying on users to re-invest in next generation enterprise applications and deliver communications services such as 'triple play'. The growing size of networks and the introduction of higher-speed access methods create an overwhelming need for reliable and manageable cabling systems. Careful planning will prevent congestion that can dramatically diminish a network's performance.

#### CABLING PRODUCTS

In the year 2007, Cat 6 alone accounted for approximately 65 percent of the overall structured cabling market. The rest of the space was taken up by Cat 5E with approximately 25 percent. 10G over UTP also gained significant market share in the last one year. However Cat 6 and Cat 5E continued to dominate the market in terms of volume. The key players in the market have also launched many products to increase

the range of products in the cabling systems. Molex has launched a new product in the Cat6 and IM solutions series. Sterlite is extending its product portfolio to include Cat5e FTP/STP and Cat6 FTP/STP. ADC Krone has come up with fiberguide and upgradeable PLM panel. Nexans has developed the LANmark-7A solution to meet the predicted demand for 40 gigabit. D-Link has already made names like 48P high density patch panels in Cat6+ and 10G segments familiar terms in the structured cabling arena.

#### APPLICATION

However, if we look at the segment-wise distribution of the cabling systems in the country, in the year 2007-08, the IT-ITes emerged as the largest buyer of the structured cabling systems. This was followed by telecom, banking, finance, manufacturing, automobile, and retail verticals. The BPO industry is set to create 8 million new jobs, which means more avenues for structured cabling in India. And this does not seem to be enough; real estate market with builders, eager for ready-to-use infrastructure for building residential and corporate complexes, is another bright area for structured cabling. Other than these, the rapid growth rate in data centers, disaster recovery centers, and the entry of numerous multi-national companies has also strengthened the cabling market.