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Towards Structured Growth

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The Indian structured cabling industry has been on a growth phase for the past few years. From the 38 percent growth it achieved in FY 2006-07, the industry has managed to grow by 41.8 percent during FY 2007-08. According to IDC's India Structured Cabling Solutions (SCS) Market Study, mid-CY 2008 release, SCS shipments in the country, comprising copper and fiber cabling solutions, look all set to cross the Rs 1,000 crore mark in CY 2008. The increasing copper price hasn't deterred the overall industry's growth, as amidst the copper price hitting the roof, the SCS industry was able to register an impressive growth during last year and the momentum is continuing.

According to KK Shetty, Director—Sales, India, SAARC, Tyco Electronics, the structured

cabling industry is growing at a pace of 15 percent YoY. "The growth will be a continuous one and it may even grow more than 20-25 percent at times. But still the market for structured cabling is at a very nascent stage and we still have a huge opportunity to tap this market," Shetty said. He also claimed that the total SCS market is worth Rs 1,100-1,200 crore and in eight years time the market would multiply to touch Rs 5,000-6,000 crore.

Growth drivers

Government and hospitality industry are the new areas where structured cabling industry is seeing fresh opportunities, with e-governance projects and healthcare getting prominence across the globe, especially in India. The data center industry has become the heart of

every operation, hence it is the topic of much discussion.

According to Surjyadeb Goswami, Manager—Communications Research, IDC India, "The India data center cabling market is expected to have a 47.7 percent CAGR over the five-year forecast period from 2008-13, with the contribution of data center cabling expected to grow from 17 percent in 2008 to over 46 percent in 2013."

The other new areas that are fuelling the growth of the structured cabling industry are building management systems, residential flats, satellite colonies and educational institutions. Pawan Kumar, Head—Marketing and Communications of Bangalore-based structured cabling manufacturer, Apsis Technologies feels that the non-IT segments like retail, pharma

and financial services are the few new verticals that have started to deploy structured cabling solutions.

Vendors in the space

Tyco Electronics' AMP NetConnect remains the market leader in the SCS space with revenue of Rs 299.5 crore followed by Systemax CommScope with revenue of Rs 221 crore; D-Link with Rs 180 crore; Molex with Rs 98 crore and Reichle and De-Massari (R&M) with Rs 55 crore. There are other companies like ADC Krone, Panduit, Sterlite Technologies, CDT Belden, Dax Networks and Apsis Technologies, who have products of all ranges in the SCS space.

Evolution of SCS

The industry has moved towards Cat 6 range of solutions. With

constant innovations and R&D, many companies have started offering Cat 6E, the 10Gigabit Ethernet solution for bandwidth hungry applications.

Among all these solutions Cat 6 rules the roost. According to IDC figures on SCS market, Cat 6 cable segment is expected to clock a CAGR of around 22 percent, growing from Rs 365 crore in 2008 to Rs 977 crore in 2013. Cat 6 is expected to thus remain the biggest market segment throughout the five-year forecast period. "Unshielded twisted pair (UTP) still has the highest potential for structured cabling solutions. The bandwidth available today is up to 625MHz, capable of driving up to 10Gbps. The switches are yet to catch up with this sort of data rates. At least for the next five to six years, I do not see any threat for UTP," said Rajesh Shenoy, Business Head, ES—South Asia, Belden.

The Cat 6 solution remains the most preferred among Indian enterprises. Voice&Data estimates suggest that around 70 percent of the deployments in the structured cabling industry are dominated by Cat 6 followed by Cat 5E with 25 percent deployments, while Cat 6A deployments are still at a nascent stage.

Sudha Jagadish, COO, Dax Networks feels that the industry has started to focus more on Cat 6 range of solutions. "The current market is focusing more on Cat 6 and Cat 6A. The current application requires more bandwidth, secured connectivity and high-speed data rate. To meet customer requirements on performance, Cat 6 is the solution, which satisfies the customers demand with zero bit error free performances and 100 percent assured performance," she said. A major transition is happening in the structured cabling industry, where most

EMBRACING CHALLENGES

Company	Challenge	Solution
Milind Tamhane VP—Manufacturing D-Link India	<ul style="list-style-type: none"> Compromise on performance quality for insignificant financial savings. It is a fact that out of total IT budget SCS bill of material consumes only seven percent but irony is that customers/SIs tend to cut corners in reducing this expenditure and pay far bigger amounts in down time and replacements in times to come. 	Digi-Link has certified Cabling Engineer courses, offered to select SIs, a week long dedicated course on best practices, technologies and hands-on training conducted at its manufacturing setup. It is termed as DCCE (Digi-Link Certified Cabling Engineers). In addition there are courses to update knowledge levels for earlier qualified DCCEs and there are courses for IT teams from corporate customers, this includes constant inflow of personnel from Core of Signal, Indian Army.
Sudha Jagadish COO, Dax Networks	<ul style="list-style-type: none"> Immediate support 	Dax has brand awareness in the industry/market. Total end-to-end active and passive solutions is a great advantage for channel partners and end users, as Dax is the one-point contact for their active and passive solutions/support.
Dinakaran, Country Manager, Apsis Technologies	<ul style="list-style-type: none"> Termination of insulation displacement contacts (IDC) in information outlet(I/O) and jack panel. These are the two areas in the scope of SI. The rest is all factory manufactured. Improper sleeving of PVC jackets especially in Cat 6 and above. 	<ul style="list-style-type: none"> Highly skilled trainers impart training specifically related to key areas where there is general tendency for errors in implementation. Standard procedure for designing, planning and implementation is taught by theoretical examples and practical hands-on sessions.
KK Shetty, Director— Sales, India, SAARC, Tyco Electronics	<ul style="list-style-type: none"> Uncertified engineers and traditional practices like hand crimping 	<ul style="list-style-type: none"> Launched new automated tools. Training for top SIs once in six months apart from providing certification to over thousands of SIs on a regular basis.

companies are moving from Cat 5, 5E to Cat 6 solutions due to its ratification by the Telecommunications Industry Association (TIA) and other bodies.

Limitations in UTP

Even though large scale of deployments are happening in the Cat 6 front, there are few limitations due to its unshielded nature. The industry has slowly started feeling the need for going for shielded copper over unshielded, feels Shetty. "UTP has its own limitations. In UTP the installation quality has to be to the best and the margins are also very less there. However, in shielded even if there are no proper installations, we have so much headroom that can take care of it. Even we have started recommending shielded solutions, as there won't be any wastage in bandwidth due to improper installation," he said. Tyco is recommending 10G-shielded solutions for their customers for a perfect lifetime of the SCS and bandwidth requirements.

Shenoy of Belden too felt that the industry has started to feel the need for Cat 6A solutions. "Industry has moved beyond Cat 6. The new cabling standard of Cat 6A is making a big entry, with lots of clients showing interest. This new standard is capable of driving 10Gbps to desktops making the industry revolutionized. Belden, with its patented technologies is already making waves in the developed markets," Shenoy claimed. Dinakaran, Country Manager—AamberNet Range of Networking Products, Apsis Technologies, strongly believes that enterprises of any range must have default technologies like 10GE for competing in the global market. "Enterprises, medium or large, should have the latest technologies at least at the data center level, to be more competitive. Enterprises planning or working on ERP/CRM which are bandwidth hungry applications, should go with Cat 6E technologies as this can support higher bandwidth with low loss margins," he averred.

Need for intelligent cabling

Every vendor in the structured cabling arena feels that the

Indian enterprises are feeling the need for the intelligent cabling solutions, predominantly in the data center space. "We have done as much as 50 data center installations in the past one-year and in most of the data centers we have enabled intelligent cabling, as only in the data center the customers feel the value of intelligent cabling solutions. The need for intelligent cabling solutions is predominantly felt among data centers. If something goes wrong then they get an SMS or e-mail alert. From the backup point and the security point, intelligent cabling is the only solution for the data center operations," Shetty informed.

Role of SIs

System integrators (SIs) play a vital role in deploying SCS. The vendors feel that the perfectly integrated cabling solutions would be able to exist for a maximum of 25 years. Shetty of Tyco Electronics said that 70 percent of the problems that exist in the structured cabling arena are pertaining to the networking errors. In order to solve these issues, Tyco is conducting a seven-day certification program for system integrators every two months at its centers in Bengaluru, Mumbai, Pune and Delhi on how to design, install and certify the network. "Even though we train thousands of SIs, we still feel the necessity to have more certified SIs to tap the huge potential existing in this space," Shetty informed.

Milind Tamhane, VP—Manufacturing, D-Link India said that the SIs need to adhere to certain installation practices for providing best of integration to their customers. "Commercial complexes are governed by two standards—EIA/TIA 568-B.2 and ISO/IEC 11080, however in applications that ask for residential places the standards are EIA/TIA 570-B-2004. Similarly for data center applications the dedicated standards are TIA-942. And there are standards for fire stopping, grounding and even labeling," he informed.

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