



## Market Dynamics

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The Indian modem market grew at a CAGR of 14.3 percent to Rs. 400 crore in 2007-08 from Rs. 350 crore. Atrie Technology led the market with a share of 40 percent that translated into Rs. 160 crore of revenue earned from this segment. Atrie was followed by Bharti Teletech with revenues of Rs. 57 crore from this segment and market share of 14.25 percent. The third position was taken by MRO-Tek that earned revenues of Rs. 45 crore from this market segment and accounted for 11.25 percent of the market share. Other major players that accounted for the balance 34.5 percent market share and Rs. 138 crore earned revenues from this segment included: Artek Enterprise, D-Link, Dax Networks, Gemini Communications, Linquest Telecom, Nomus Comm-Systems, and Sterlite Technologies.

Atrie Technology consolidated its leadership position with orders from the BFSI sector including: Bank of India, Bank of Maharashtra, Dena Bank, Oriental Bank of Commerce, and Vijaya Bank. Other major revenue sources for Atrie included PSU and service providers. Bharti Teletech is second position, received its major revenues in the modem market from service providers. MRO-Tek has strong focus on the leased line modem segment and has built its reputation in this space through its compression equipment and media converters. MRO-Tek also has plans to consolidate its position in the broadband space in the future.

### PRESENT SCENARIO AND FUTURE

The present scenario of modem market in India is surely to take off as soon as 3G

### INDIAN MODEMS MARKET (VENDOR-WISE)

Total Rs. 400 crore

Vendor	Sales (Rs. crore)	Share (%)
Atrie Technology	160	40.00
Bharti Teletech	57	14.25
MRO-Tek	45	11.25
Others*	138	34.50

\*Others include: Artek Enterprise, D-Link, Dax Networks, Gemini Communications, Linquest Telecom, Multi-Tek, Nomus Comm-Systems, and Sterlite Technologies



technology is in place. IPTV, movie downloads, and mobile TV would be highly promoted with the advent of 3G rollout in the country. Government's thrust for broadband and its regulation to make it mandatory for internet speed at 256 kbps for every broadband operator would help a lot of subscribers migrate to broadband. The number of broadband subscribers (with a download rate of 256 private Kbps or more) reached 3.9 million at the end of March 2008.

A growing number of service providers are using ADSL 2 which has an advantage over other kinds of mo-

dem. The reason is ADSL utilizes the existing copper wire link that ordinary telephones have used for the last several decades, to deliver internet. This is like a boon for last mile connectivity, for it considerably cuts down the cost of setting up a dedicated internet delivery system. The market for DSL modems comprises Small Office/Home Office (SOHO) and SMEs. The ISDN digital subscriber line (IDSL) 64/128K leased line has started seeing a major growth in banking and finance, with the growth of segments such as railway and airline ticketing system

along with freight management system. The modem market, which rides on an impressive growth, has also been helped by corporations installing large capacity leased lines, SOHO broadband users, increasing number and large number of executives having datacards for laptops for connectivity to internet.

Another area where there will be excellent growth is GSM/CDMA modems. Growing number of executives, on the go, would be using this modem and the demand has already seen a considerable growth.

## MAJOR PLAYERS

### ATRIE TECHNOLOGY

Atrie Technology Private Limited, a professional modem manufacturer for over two decades, is providing a range of reliable data communication products as well as systematic

technical and marketing support for its customers.

The company is manufacturing state-of-the-art products such as leased line modems, ethernet switches, enterprise routers, ADSL equipment

(DSLAMs & CPEs), converters, rack mount series and LAN extenders to serve the data communication community. The company has been very successful in sale of leased line modems and ADSL equipment during the last year.



**“We are focusing on embedded product range which instantly adds communication ability to existing or new products with minimal engineering effort”**

— Tony Sharma,  
IT – Head, Multi-Tech, India

and also for M2M applications.

analog or ISDN dial-up, cellular wireless, Bluetooth® wireless, or Ethernet, Multi-Tech has a solution. It makes device networking both easy and affordable.

### On major trends

- Embedded modems widely accepted for both PCs and laptops and other M2M applications.
- ADSL modems are getting popular in India and are mostly provided by the service providers as a package to the end user.
- GSM/CDMA modems are getting popularity for AMR and remote management solutions

### On your USP

Multi-Tech has taken modem connectivity to a new level. It has introduced a new line of device networking solutions. This comprehensive product line includes familiar MultiModem® modems as well as a new generation of cellular wireless modems and device servers. These device networking solutions connect virtually any serial device to the Internet or IP network for remote monitoring, control and configuration. Whether required to connect via

### On your future plans

Multi-Tech is focusing on embedded product range which instantly adds communication ability to existing or new products with minimal engineering effort giving the user an edge on his competition while accelerating time-to-market. Multi-Tech's universal socket is a flexible, comm-port architecture that provides cellular, Ethernet, PSTN or Wi-Fi network access with interchangeable communication devices.

The company's system integration partners include Wipro Infotech, HCL Infosystems, Tata Consultancy Services, Hewlett Packard - Compaq, CMC, IBM, UTL, Datacraft, HCL Comnet, 3D Networks, etc. The company's client list ranges from service providers such as MTNL, BSNL, VSNL, Airtel, BSES, HFCL, Satyam Infoway, and Bharti Teleservices to nationalized banks such as Canara Bank, State Bank of India, Union Bank of India, Oriental Bank of Commerce, Syndicate Bank, Bank of Maharashtra, Vijaya Bank, Corporation Bank, Indian Bank, Dena Bank, Punjab National Bank, Bank of India, Karur Vysya Bank, Lakshmi Vilas Bank, Bank of Baroda, and Indian Overseas

Bank. In the government/PSU sector, the company's clients include Indian Railways, Indian Air Force, Indian Oil Corp, HPCL, Software Technology Parks of India, West Bengal State Wide Area Network, Jharkhand State Wide Area Network, WEBEL, Oriental Insurance Corporation, etc.

#### BHARTI TELETECH

Bharti Teletel established in 1985 is a subsidiary of India's leading integrated telecommunications group, Bharti Enterprises. The company has one of the largest distribution networks amongst consumer durable companies in India and is currently engaged in distribution and marketing of a wide range of prod-

ucts that include Motorola handsets and accessories, BlackBerry, Thomson, high quality cordless phones, modems, audio/video conferencing products from Polycom, cameras from Casio, free to air set top boxes, fixed cellular phones, and fixed wireless terminals. Apart from this, Bharti Teletel is also engaged in manufacture of high quality land-line telephones at its manufacturing operations at Goa and Ludhiana under Beetel brand for Airtel, BSNL/MTNL as well as for retail market and exports to 30 countries across 5 continents. Bharti Teletel currently commands a leading share in retail as well as the telecom service provider segments. Buoyed by its experience and success in distribu-



## "MPLS VPN is becoming more popular than point-to-point leased lines"

— Jignesh Sanghani,  
President, Nomus Comm-Systems

**O**n major trends  
Modems with Ethernet port and embedded SNMP management are becoming more popular particularly in large networks of government. MPLS VPN is also becoming more popular than point-to-point leased lines with last mile on modems or wireless as per availability at site.

#### PRODUCT GUIDE - MODEMS

Category	Model	MRP (Rs.)
2 Mbps Modem	Gateway i	20,000.00
V.35/ G703 Converter	Gateway IFC	18,000.00
Ethernet Converter	Gateway i RB	20,000.00
Router/ Bridge	Gateway i RB/ IP	25,000.00

#### On technology trends

VDSL is the new high bandwidth (>10Mbps) technology for short distances but still it is not very popular in India.

#### On key driving factors

Increased usage of Internet and convergence of voice and data networks.

#### On major issues

Still local manufacturers are at a disadvantage because of the import tariff structure. The major telcos do not use managed modems making it difficult for users to diagnose the fault in the circuit.

#### On your USP

Locally developed and manufactured modems allow the company to give the most practical solution/features, highest reliability and performance; and the best after sales support.

#### On your key achievements

Successful deployment of managed modems in large State Wide Area Networks (SWANs) like Gujarat SWAN, Bihar SWAN, Kerala SWAN, etc. on all popular NMS systems like HP Openview, CA eHealth, etc. Launch of 2 WAN port router with back-up port and dial-up routers. The backup/dial-up port can use any media - ISDN, CDMA, GPRS or PSTN making it the most flexible product available.

#### On your future plans

VOIP gateway products and fiber products.

#### On your major customers

#### MAJOR CUSTOMERS

Organization Name	No. of Locations Installed base in the same network
Bihar SWAN	1200 +
TNSWAN	500 +
GSWAN	500 +
BSNL Bangalore	1000 +
Punjab SWAN	200 +

tion and marketing as well as the changing sphere of Indian economy, the company plans to offer a high range of products to the consumers, going forward.

#### MRO-TEK

MRO-TEK a leading provider of product-based solutions to access every network, is operating its business in India, other SAARC countries, and Japan. The company is customizing most of its products to suit Indian conditions. It is serving a wide range of customers such as Bharti, Railtel, BSNL, Reliance, Ericsson, Nokia, Nortel, Tata Teleservices, Idea, and Hutch. It has received the best partner award from Bharti.

The company is offering leased line product – ASM-20, which is a 64Kbps synchronous short range 4wire modem. Other leased line products include ASM-31, which is a 2-wire 64 Kbps short range modem.

LRS-24 and ASM-MN-214 are the racks for housing card modem at the central site.

The company is focusing on building alliances with operational partners and improving its R&D initiatives to tap the potential in India. Accomplishing a sustainable growth rate in India is among the primary goals of the company.

#### D-LINK

D-Link (India) Limited is a part of the multinational D-Link Corporation, which has a presence in over 100 countries. Its core business is in the area of networking and communications.

D-Link India is present in the high end enterprise segment with a complete range of co-branded products from Foundry Networks, Inc. of U.S.A in India. D-Link India's product range enjoys substantial market share in India and ranks

among the leaders in modems structured cabling, wireless LAN and switches.

D-Link (India) has a strong infrastructural presence with ISO 9001:2000 and ISO 14001:1996 certified state-of-the-art manufacturing plants in Goa; software and R&D centres in Goa and Bangalore; and a Global Tech Support Call Centre in Mumbai. It has a nationwide network of 17 offices, 21 territory distributors, 1000+ system integrators and dealers and 5000+ resellers and 4 overseas distributors in SAARC countries providing active sales and service support.

#### GEMINI COMMUNICATIONS

Gemini Communication Ltd. offers a wide spectrum of networking, services and security solutions. The company's product portfolio includes solutions for networking, security, storage, supervision and IT services. Gemini's solutions are centered on



**“We would maintain leadership in the DSL area in Asia PAC, east Europe and south America besides consolidating the market share”**

**— Ravichandran,**  
Managing Director (India & SAARC), Atrie Technology Pvt. Ltd.

**O**n your plans and strategies  
Maintain leadership in the DSL area in Asia PAC, east Europe and south America besides consolidating the market share.

**On M&As/JVs/MoUs you have recently entered**

We have acquired an EMS company in China

for outsourcing our internal dial up and blue-tooth module for desktop and laptop which gives a boost to our revenues and bottom line.

**On some major customers of the company**

This year our major customer acquisitions were: Indian Air Force, West Bengal State Wide Area Network, Assam State Wide Area

Network, Centre for Railway Information Systems etc. Our usual customers range from service providers such as MTNL, BSNL, VSNL, Airtel, BSES, HFCL, Satyam Infoway and Bharti Teleservices to nationalized banks such as Canara Bank, State Bank of India, Union Bank of India, Oriental Bank of Commerce, Syndicate Bank, Bank of Maharashtra, Vijaya Bank, Corporation Bank, Indian Bank, Dena Bank, Punjab National Bank, Bank of India, Karur Vysya Bank, Lakshmi Vilas Bank, Bank of Baroda and Indian Overseas Bank. In the government/PSU sector, the company's clients include Indian Railways, Indian Air Force, Indian Oil Corp, HPCL, Software Technology Parks of India, West Bengal State Wide Area Network, Jharkhand State Wide Area Network, WEBEL, Oriental Insurance Corporation etc.

IT infrastructure and management and carry the message of innovation and leadership. The services portfolio is broadly organized into infrastructure implementation services (IIS), infrastructure managed services, (IMS), infrastructure outsourcing services (IOS), and infrastructure consultancy services (ICS) apart from its LAN, WAN and telecom solutions. Gemini is serving various verticals such as education, banking/financial services, insurance, government, health care, IT/ITeS, call centers/BPOs/KPOs/SDCs, and various service providers like cable operators, mobile operators, and wireless carriers.

Gemini has reported a 52 percent jump in net profit at Rs. 27 crore as against Rs. 18 crore in FY07. The net revenue for the year 2007-08 increased by 47 percent to Rs. 236 crore as compared with Rs. 161 crore in the previous financial year. Gemini enters the year 2008-09 with an order book valued at Rs. 250 crore, an amount roughly equal to 2007-08 top line.

It has two subsidiary companies, which design, develop, and manufacture products. Gemini Traze RFID Private Limited is one among them, which enters the RFID hardware design space and offers a comprehensive range of product solutions in RFID including HF and UHF readers and antennas, HF and UHF tags, active RFID readers, tags, and antennas. The other subsidiary company is PointRed Telecom Private Limited, which it acquired in the year 2006-07. The company has its design center in Bangalore and manufacturing base in Taipei, Taiwan. It manufactures outdoor wireless radios and pre WiMAX wireless products and has released fixed WiMAX and mobile WiMAX (IEEE 802.16e) product lines.

Gemini's recent acquisition of stake in a Chennai based security and availability solution firm strengthens Gemini's network security and busi-

ness continuity capabilities, and has also increased the company's client base.

#### DAX NETWORKS

In 1999, Dax launched SOHOHO (SOHO + HOme) internet related products; initially modems followed by other networking and internet products. Today, Dax is an ISO-certified services company offering the latest enterprise routers and switches, structured cabling, wireless, VPN and many new networking technologies. Key differentiators are the ability to certify and support a complete layer-3 structured switching and routing network which can interoperate and comply with core enterprise systems in any LAN/MAN/WAN Network.

Dax continues to be one of the most respected OEM 'networking-infrastructure' vendors in India. Its network is extensively utilized by all networking OEMs, VARs, distributors, dealers and solution providers. Over 70 percent of Dax professionals and managers are technically qualified. And, most have been with Dax for over a decade.

Today, Dax is India's foremost value-added services and solution provider of networking products. All Dax products are positioned and work in synergy with Cisco, Nortel and Juniper. Customers highly value Dax '1-payment guarantees 3-years performance' maxim and 'Specify Dax' as their preferred networking product choice. And, the 20 years expertise in networking helps support that.

#### ARTEK ENTERPRISES

Founded in 1979, Artek has formed strategic alliances with major global manufacturers and vendors for latest technologies. ARTEK Enterprises is an ISO 9001:2000, privately organized company, celebrating 25 glorious years in operation and specialized in system integration and networking since

the last 17 years.

#### LINQUEST TELECOM

Linkquest serves various verticals such as education where it provides wireless radio-Wi-Fi campus solution. The other verticals such as banking, financial services, insurance, IT/ITeS call centers, BPOs, KPOs, and SDCs are provided wireless and wireline modems. The company also has service providers (cable and mobile operators and wireless carriers) as its customers. It offers RF PTP and PMP radios under WLAN category and lease line modems and provides integration of wireless network system in network integration services. It also executed SCADA project (supply and installation) for Siemens in 2006-07. The company's major suppliers were SAF (PDH and SDH radios), GE-MDS (radio for SCADA), RADWIN (PTP license free radio), Airspan (Wi-Fi and WiMAX radios), and Tainet (lease line modems). The customers of the company include Siemens (SCADA), Dishnet Wireless Limited (wireless broadband radio), ITI Limited, Nokia, and Ericsson (PDH and SDH radios).

#### STERLITE TECHNOLOGIES LIMITED

Formerly known as Sterlite Optical Technologies Ltd, Sterlite Technologies Limited is India's leading global provider of optical fibers, telecommunication cables and power transmission conductors. It is India's only fully integrated optical fiber producer and one of the largest suppliers of optical fibers to overseas markets in China, Europe and South East Asia. Sterlite Technologies Limited is listed on the National Stock Exchange and Stock Exchanges at Mumbai and Kolkata. The Company has a world class optical fiber manufacturing plant located at Aurangabad and telecom cable and power transmission conductor plants at Silvassa, Haridwar and Pune. ■

