CHAPTER 4
PROFILE OF THE SELECTED US, JAPANESE AND INDIAN COMPANIES

The study is related to two sectors of the huge Electronics Industry – Consumer Electronics Sector and Computer Software Sector. This chapter presents profiles of the selected US, Japanese and Indian companies in both the sectors. To begin with, this chapter throws light on the prevailing market conditions in India, pertaining to both Consumer Electronics Industry and Computer Software Industry.

4.1 CONSUMER ELECTRONICS INDUSTRY

4.1.1 Market Scenario of Consumer Electronics Industry in India

a) Introduction

The Consumer Electronics Industry in India is categorized mainly into Television, Audio and the Video Segments. The Television (TV) Industry in Indian can be categorized into the Colour and Black and White (B&W) segments. B&W TVs still sell more than Colour TVs. However, the scenario is set to change with consumers, mainly from the rural areas, keen to replace their B&W TV sets with a new colour TV. Industry experts expect sales of 4.5 mn sets in the year 2000, up about 100percent from the year 1998. Consequently, growth rates of B&W TVs are set to decline.

Audio products in India range from a simple radio set to ultra modern high fidelity systems. Radio sales are expected to pick up with the FM Channel widening its reach in the country. However, the real action, in terms of growth, is the high end hi-fi segment where foreign majors like Sony, Panasonic, and AIWA have made the going difficult for local giants like Philips and BPL. With car
sales set to rise in the future, the car stereo segment is also bound to flourish.

Players in the Video Cassette Recorders and players, expect consumers to bring home the new product to hit the market– Digital Video Discs (DVDs). With India producing 900 films a year, consumers can look forward to seeing high definition pictures coupled with Dolby Sound effects sitting in their homes.

The main factors which determine the demand for Consumer Electronic goods in India are :-

- Price
- Replacement Customization
- Income Levels
- Availability of Financing Schemes.

b) Size of Consumer Electronics Market in India

In the TV segment, CTV sales have shown marked rise, after several MNCs setting shops in India in the past two years. After years of dominating the CTV market, domestic majors are steadily losing out to multi national brands; with the former holding approximately 65 percent market share and the latter holding the rest.

The audio market size is estimated at Rs.15 bn. Of this, the branded segment accounts for Rs.12 bn while the unorganized sector contributes the rest. The unorganized sector mainly caters to the radio and lower end cassette recorder segments. The industry did well in 1996-97 growing by 15 percent in contrast to near stagnation in TV segment.
Table 4.1
B&W and Colour TV Sales (in million) (1999)

<table>
<thead>
<tr>
<th>Year</th>
<th>B&amp;W</th>
<th>CTV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>3.4</td>
<td>1.3</td>
</tr>
<tr>
<td>1989</td>
<td>4.0</td>
<td>1.2</td>
</tr>
<tr>
<td>1990</td>
<td>3.6</td>
<td>1.2</td>
</tr>
<tr>
<td>1991</td>
<td>3.1</td>
<td>0.88</td>
</tr>
<tr>
<td>1992</td>
<td>3.4</td>
<td>0.83</td>
</tr>
<tr>
<td>1993</td>
<td>4.1</td>
<td>1.1</td>
</tr>
<tr>
<td>1994</td>
<td>5.2</td>
<td>1.3</td>
</tr>
<tr>
<td>1995</td>
<td>5.6</td>
<td>1.8</td>
</tr>
<tr>
<td>1996</td>
<td>6.0</td>
<td>1.91</td>
</tr>
<tr>
<td>1997</td>
<td>6.5</td>
<td>2.2</td>
</tr>
<tr>
<td>1998</td>
<td>7.0</td>
<td>2.65</td>
</tr>
<tr>
<td>1999</td>
<td>7.5</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Source: Indiainfoline.com

Figure 4.1: B&W and Colour TV Sales (in million) (1999)
The VCR segment is presently in the doldrums with sales falling to a low of only 50,000 units in the year 1999 as compared to 1,50,000 a year before. The proliferation of movie cable channels has sounded death knell for the industry. However, with the coming in of state–of–the–art Video Compact Disc (VCD) and Digital Video Disc (DVD) players in India, the market is expected to be active again.

c) Market Shares of Consumer Electronics Companies in India (in percent) (1999)

<table>
<thead>
<tr>
<th>Companies</th>
<th>TV</th>
<th>Audio Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPL</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>Videocon</td>
<td>15</td>
<td>–</td>
</tr>
<tr>
<td>Onida</td>
<td>12</td>
<td>–</td>
</tr>
<tr>
<td>Aiwa</td>
<td>8</td>
<td>45</td>
</tr>
<tr>
<td>Samsung</td>
<td>5.4</td>
<td>3</td>
</tr>
<tr>
<td>Philips</td>
<td>6.5</td>
<td>15</td>
</tr>
<tr>
<td>LG</td>
<td>5.9</td>
<td>–</td>
</tr>
<tr>
<td>Sharp</td>
<td>4.1</td>
<td>–</td>
</tr>
<tr>
<td>Sony</td>
<td>3.1</td>
<td>14</td>
</tr>
<tr>
<td>Daewoo</td>
<td>1.3</td>
<td>–</td>
</tr>
<tr>
<td>Akai</td>
<td>1.9</td>
<td>3</td>
</tr>
<tr>
<td>Thomson</td>
<td>1.9</td>
<td>–</td>
</tr>
<tr>
<td>Kenwood</td>
<td>–</td>
<td>7</td>
</tr>
<tr>
<td>Panasonic</td>
<td>2.1</td>
<td>2</td>
</tr>
<tr>
<td>Sansui</td>
<td>5.1</td>
<td>–</td>
</tr>
<tr>
<td>Others</td>
<td>10.9</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Indianinfoline.com
It would be interesting to note that in case of Televisions, Indian market is dominated by Big Indian players holding 46 percent of the total market share (Others' category is being excluded),
nevertheless the foreign players are not far behind, rather closely following with a share of 38.9\%o. In the Audio segment, the Indian market is dominated to a very large extent by the foreign players holding 89\%o of the total market share, BPL being the single most noteworthy Indian company holding 8 percent share.

4.1.2 Company Profiles

4.1.2.1 Profiles of Indian Consumer Electronics Companies

The following Indian Consumer Electronic majors have been selected as the sample:

1. BPL
2. Videocon International
3. Mire Electronics
4. Salora International

Their profiles are being presented briefly, as under.

1. BPL

BPL was founded in 1963 by TPG Nambiar to manufacture hermetically sealed panel meters. Over three decades, later, it is a Rs 3200 crore conglomerate and a leader in Consumer Electronics, Home Appliances and Tele Communications market.

BPL’s journey to the top, reached a new high when A&M-ORG-MARG’97 rated it India’s Most Admired Consumer Durables Marketing Company.

BPL is India’s largest colour TV manufacturer, with substantial interest in other durable product lines such as home appliances, B&W TVs, Audio equipment etc. Despite intense competition, BPL has managed to hold on to its CTV market share in the year 1999
(20 percent in CTVs). It has assumed leadership position in four (20, 21, 25 and 39 inch) out of the five segments in the CTV market. Black and White TV segment has accounted for 8.4 percent of the total turnover in 1999.

**Fig. 4.4 : Sales Revenue for BPL Ltd. (Rs. million)**

Source : Annual reports of the company.

For the financial year 1999, BPL posted 11 percent rise in sales to Rs.1939.7 mn and a 20 percent increase in net profit to Rs.1024.7 mn. Net profits of the company have increased from 48.4 Crore in 1994-95 to Rs.85.6 crores in 1997-98.

BPL has 26 ultra modern manufacturing facilities with a 13,000 strong work force. Besides, possessing international quality certifications by the Government of India, it has collaborations with the world’s best companies, e.g., Sanyo, Japan for Consumer Electronics. It is also India’s largest exporter of electronic goods
2. Videocon International Ltd. (VIL)

VIL, the flagship of the Videocon group was incorporated in 1985, by NM. Dhoot. VIL is the dominant player in TVs and audio products. It is the market leader in the B&W TV segment and has a 15 percent share in the CTV segment. In the audio segment, VIL stands third with 12 percent market share. The company also markets VCRs, washing machines, refrigerators, air conditioners etc. made by its group companies, It also acts as a marketing conduit for the other group company’s products viz. VCR/VCPs, washing machines refrigerators etc. All these products are sold under the Videocon Brand name.

Fig. 4.5 : Sales Revenue for Videocon International Ltd.

TV sets occupy 49 percent of the total production and are produced at its Chittegaon plant in Maharashtra. TV manufacturing operations are characterized by a high degree of indigenization. Audio products and Electronic Appliances occupy another 35 percent of the total production. These are also characterized by high degree of indigenization. VIL has recently launched TV
computer, a combination of a computer and a TV.

During the financial year 1999, the company has posed a top line growth of 15 percent to Rs. 24224.4 mn. The sales volume (units) of consumer electronic items has increased from 17,05,102 in 1995-96 to 5,1,09,123 in the year 1998-99 which is a growth of about 200 per cent. The net profit after tax was Rs. 1341 mn for 1998-99 as against Rs. 1238 mn for the previous year representing a growth of 8.32 percent over the previous year.

3. **Mirc Electronics**

Mirc Electronics was set up in the early 1980s. Right from the fledging days the company was involved in designing, manufacturing and marketing of wide spectrum of Televisions under the Brand name –ONIDA. The company is also engaged in marketing and servicing professional equipment from JVC Japan. The company’s brand value (ONIDA) is estimated to be around Rs 9-10 bn. Despite raging price wars and commodification of Television in domestic market, Onida has maintained its premium image. The company has dominance in B&W TVs in the rural market with a 13 percent share. In the year 1998–99, the company gained lost grounds, its market share in CTVs improved from 9 percent to 13 percent. World class quality of Onida has enabled the company to make a break through in the exports front. Onida is a leading brand in the Gulf market.

Television form 99 percent of the total revenue of the company. Besides Televisions, Mirc manufactures video cassettes and audios. Trading contributes to amount 50 percent of the revenues.

Mirc electronics shot into limelight after recovery in it’s market share. Operating incomes during the financial year 1999, increased by 31.8 percent to Rs. 6886 mn.
Sales surged as a result of the geographical expansion of the market, introduction of new products and consolidation by achieving premium positioning. During the year 1999, company recorded volume growth of 70 percent against the industry average of 30 percent.

4. Salora International Ltd.

Salora International Ltd. is an offshoot of the Electronics Consortium Pvt. Ltd. (ECPL) which was incorporated in 1968 and was taken over by its present promoters in 1977. Starting with the manufacture of B&W TV sets, the company has gradually diversified. Today, the company also manufactures colour televisions (beginning 1982), flyback transformers (1986), Speakers (1988). The company is marketing the Panasonic brand of fax machines, printers, Panaboard and digital cameras, and is also marketing colour monitors and cordless phones of world renowned manufacturers under its own brand name.
Located at Delhi, Noida and Kashipur (UP), the company's manufacturing units are manned by over 1300 employees out of which 200 are qualified engineers and professionals. The company is also a Star Export House exporting Televisions as well as other traded merchandise.

**Fig. 4.7 : Sales Revenue for Salora International Ltd.**

SIL is engaged in the manufacture of Televisions and Television components for more than a decade. It has been able to adopt new technologies in its product range by entering into technical collaboration with foreign partners. The company has a well spread distribution network across the country. Although SIL has only a small market share in the television industry, it expected to increase with continued focus on tapping Semi-urban and rural markets and introduction of variety of new models. The company produces entire range of B&W TVs of 14", 17" and 21 models and CTVs of 14", 20", 21" FFST and other models of high sizes. The televisions are being exported to Bangladesh, Vietnam Hong Kong, Singapore, Sri Lanka etc. According to CETMA (Consumer
Electronics and Television Manufacturing Association), the company was the largest exporter of B&W TVs for the financial year 1996-97.

In case of TV sets and Video products, the sales revenue has increased from Rs.578.3 mn in 1997 to Rs.903.5 mn in 1999. The sales volume has increased from 2,55,745 in 1997 to 2,74,754 in 1999.

4.1.2.2 Profiles of Selected Japanese Consumer Electronics Companies (In India)

The following Japanese Consumer Electronics majors have been selected as the sample:

1) Sony India
2) Kalyani Sharp India
3) National Panasonic India
4) Sansui India
5) Akai India

Their profiles are being presented briefly as under:

1. **Sony India**

Sony is the name synonymous with technological revolutions. Over the last 53 years, the company has evolved into a luminous brand with a unique selling proposition – technology innovation, quality and premium. The company's leadership position in the world, today, is a reiteration of its ability to connect with the customer's mental space. Sony is not new to India. Whether it was the television, or the walkman, a Sony always remained a must on the wish list of any Indian returning home. This love for the brand culminated into a new relationship when inspired by a reform friendly Indian business environment, Sony Corporation decided to
set up a 100 percent subsidiary called Sony India on 16th January 1995.

**Figure 4.8 : Sales Revenue for Sony India**

Since its inception in 1995, Sony India has exclusive sales and distribution channels. Sony India today has about 33 distributors and 1475 dealers. In all metros, the company has direct sales offices. The company has about 13 exclusive Sony outlets. Sony India carries a wide range of consumer electronic items with major contributions coming in from CTVs - 63 percent, followed by Hi-fi audios - 18 percent, Recording media and batteries - 7 percent, Car Audio - 3 percent, Portable audios - 3 percent, Colour monitors - 1 percent, Digital Cameras (Handycam & Mavica) - 2 percent and Telephones 3 percent.

The company’s turnover in 1999-2000 was at Rs. 613 crores, which was 21.28 per cent more than the Rs. 505.32 crore turnover it registered in 1998-99. Its net profits are expected to show a significant increase this year over the Rs. 6 crore it posted in 1998-
1999. In volume terms, Sony’s share in the CTV market is a mere 5 percent, which according to the ORG-GFK retail audit, places the company at the sixth position.

2. Kalyani Sharp India

Sharp Corporation came into being in Japan in the year 1912. In 1960, Sharp introduced Japan’s first colour TV. Sharp set its foot in India in the year 1986 as Kalyani Sharp India Ltd., with 51 percent equity of Sharp Corp. Japan and 49 percent share with Kalyani India Ltd. The company aims to provide Indian customers with products of international quality at affordable prices. The company has already launched its international range of CTVs, VCRs, VCPs, Fax machines, LCD projectors, audio products and shortly plans to introduce Microwave ovens, refrigerators and washing machines.

Figure 4.9: Sales Revenue for Kalyani Sharp India Ltd.

The sales turnover of the company in 1998-1999 was Rs. 2886 million which grew to Rs. 3333 mn in the year 1999-2000.
showing a growth of 15 percent. In the year 1999-2000, the company achieved 37 percent growth in CTV sales. The Company holds a market share of 3 percent in the TV segment.

3. National Panasonic India

National Panasonic India Ltd. is a 100 percent subsidiary of Matsushita Electric Co., Japan. It came into India in the year 1995. National Panasonic India is a separate marketing company, while Matsushita Television and Audio India is a separate manufacturing company for the products that are marketed by NPI. In all there are eight Matsushita companies in India and each company is a separate legal entity.

**Figure 4.10 : Sales Revenue for National Panasonic India Ltd.**

![Graph showing sales revenue for National Panasonic India Ltd.]

Source: Annual reports of the company

Globally, Panasonic television sets command a share of about 10 percent of a total size of 120 million, with a revenue of $25-28 billion. The company has invested around Rs.85 crores in a facility in Noida, near Delhi for the manufacture of audio and video
products. The level of indigenization achieved for conventional TVs is about 65 percent and for the flat TVs it is about 30-35 percent.

The sales turnover for the year 1999-2000 was Rs. 1960 million and the company aimed at a market share of 2 percent in colour televisions.

4. Sansui India

Sansui brand of Televisions, Appliances and Audio systems is being manufactured in India by Kitchen India Ltd. (Electronic division) with Technical collaboration from Sansui Electric Co., Japan. This brand is being marketed by Videocon International in India. Sansui came into India in the year 1997.

Sansui aims to provide quality products at affordable prices. Sansui has launched the 100 Hz model and is ready with the millennium range of televisions that will provide the customers with the latest in 25” and 29” pure flat series.

Figure 4.11: Sales Revenue for Sansui India Ltd.

![Graph showing sales revenue for Sansui India Ltd.]

Source: Annual reports of the company
In the year 1998-99 it held 5 percent share of the CTV market and aims at 12 percent in the year 2000-2001. Its sales turnover in the year 1998-1999 was Rs. 3 9 80 million.

5. Akai India

Akai brand entered India in the year 1994 when Baron International (marketing company for Akai) revolutionized TV marketing with long running exchange offers for Akai TVs. Akai changed hands in 1999, when the Hong Kong based Semitech group that owns the brand chose to move it to a 30:70 joint venture with the Dhoots of Videocon. In one year the brand captured a market share close 5 percent, selling 18000 television sets a month. The company hopes to end 2000-01 with a 10 percent market share to touch 5.5 million units by March 2001.

Figure 4.12: Sales Revenue for Akai India Ltd. (1999)

Source: Annual reports of the company
Fig. 4.13: Consolidated Sales Revenue Chart for Indian Consumer Electronics Companies

Source: Annual Reports of the companies
Fig. 4.14: Consolidated sales revenue chart for Japanese Consumer Electronics Companies

Source: Annual Reports of the companies
4.2 COMPUTERS SOFTWARE INDUSTRY

4.2.1 Market Scenario of Computer Software in India

a) Introduction

As per NASSCOM, the Indian software sector crossed the Rs.100 bn mark during the financial year 1998. The sector grew by 58 percent during the year. Exports accounted for Rs.65.3 bn while domestic market accounted for Rs.35.1 bn.

The exports grew by 61 percent in rupee terms and 55 percent in dollar terms. The export growth during the financial year 1998 is the highest recorded in the last 5 years. About 158 of the Fortune 500 companies sourced their software requirements from India during the financial year 1998. While USA continued to remain the single largest customer and its relative share improved from 58 percent in the financial year 1997 to 59 percent in the financial year 1998. There was a sharp fall in exports to South East Asia, whose share has come down to 5 percent. Exports to Europe and Japan have increased at a faster pace.

b) Types of Software Services in India

The shift from onsite to offshore services continued during the financial year 1998. The ratio of offshore to onsite services improved from 34:66 in the financial year 1997 to 41:59 in the financial year 1998.

<table>
<thead>
<tr>
<th>Type of Services</th>
<th>Rs. Million</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Site Services</td>
<td>22890.00</td>
<td>58.7</td>
</tr>
<tr>
<td>Offshore Services</td>
<td>11780.00</td>
<td>30.2</td>
</tr>
<tr>
<td>Offshore Packages</td>
<td>4330.0</td>
<td>11.0</td>
</tr>
<tr>
<td>Total</td>
<td>39000.00</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: NASSCOM, India
c) Top 20 Software Companies in India

As per NASSCOM, for the first time a software company has emerged as the largest IT company in terms of revenues – TCS revenues exceeded Rs.10 bn in the financial year 1998. Also the number of companies exporting more than Rs.100 mn worth of software increased from 8 companies in the financial year 1993 to 73 companies in the financial year 1998.

The following table lists the Top 20 software companies by revenue (domestic and exports).

**Table 4.4 : Top 20 Software Companies in India (1999)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Companies</th>
<th>Figure in Rs. Mn</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tata Consultancy Services</td>
<td>16522.73</td>
</tr>
<tr>
<td>2</td>
<td>Wipro Limited</td>
<td>7572.40</td>
</tr>
<tr>
<td>3</td>
<td>NIIT Limited</td>
<td>5428.50</td>
</tr>
<tr>
<td>4</td>
<td>Pentafour Software &amp; Exports Ltd.</td>
<td>5256.80</td>
</tr>
<tr>
<td>5</td>
<td>Infosys Technologies Ltd.</td>
<td>5088.90</td>
</tr>
<tr>
<td>6</td>
<td>Satyam Computer Services Ltd.</td>
<td>3781.23</td>
</tr>
<tr>
<td>7</td>
<td>IBM Global Services (I) Pvt. Ltd.</td>
<td>3544.10</td>
</tr>
<tr>
<td>8</td>
<td>Cognizant Technology Solutions</td>
<td>2900.30</td>
</tr>
<tr>
<td>9</td>
<td>Tata Infotech Ltd.</td>
<td>2498.00</td>
</tr>
<tr>
<td>10</td>
<td>DSQ Software Ltd.</td>
<td>2238.00</td>
</tr>
<tr>
<td>11</td>
<td>Patni Computer Systems Ltd.</td>
<td>2199.00</td>
</tr>
<tr>
<td>12</td>
<td>HCL Technologies India Pvt. Ltd.</td>
<td>2083.00</td>
</tr>
<tr>
<td>13</td>
<td>Mahindra British Telecom Ltd.</td>
<td>1725.50</td>
</tr>
<tr>
<td>14</td>
<td>L&amp;T Information Technology Ltd.</td>
<td>1550.40</td>
</tr>
<tr>
<td>15</td>
<td>Siemens Information Systems Ltd.</td>
<td>1516.90</td>
</tr>
<tr>
<td>16</td>
<td>International Computers (I) Ltd.</td>
<td>1429.05</td>
</tr>
<tr>
<td>17</td>
<td>IMR Global Ltd.</td>
<td>1398.40</td>
</tr>
<tr>
<td>18</td>
<td>Birla Soft Ltd.</td>
<td>1385.00</td>
</tr>
<tr>
<td>19</td>
<td>Citicorp Information Technology Industries Ltd.</td>
<td>1378.90</td>
</tr>
<tr>
<td>20</td>
<td>Mastek Ltd.</td>
<td>1344.00</td>
</tr>
</tbody>
</table>

Source : NASSCOM, India
d) **Breakup of Software Industry in India**

In the recent years, the Indian Software companies have become more speciality oriented and have a definite focus on specific segments of software development. Nearly two third companies are engaged in developing end user application products and services ranging from straightforward accounting systems to specialized market products or customized services.

The rest obtained their revenue from consultancy, systems integration, supply of specialized software systems, such as software tools, communications software and software for dedicated hardware devices.

**Fig.4.15 : Software Segment Breakup**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Software Development</td>
<td>59%</td>
</tr>
<tr>
<td>Communication Software</td>
<td>21%</td>
</tr>
<tr>
<td>Firmware</td>
<td>7%</td>
</tr>
<tr>
<td>Software Development</td>
<td>11%</td>
</tr>
<tr>
<td>Consultancy Bespoke Development</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: NASSCOM, India

e) **Advantages in the Indian Software Market**

The Indian Software market has several advantages which enable it to grow at a fast pace. They can be listed as:

- **Locational Advantage**: The 12-hour difference, from the world's largest market - USA enables almost continuous
working on software projects, being subcontracted from U.S. companies to the Indian companies.

• Talented and technically Qualified English Speaking Manpower.

• Low cost.

• Wide Gamut of Services.

• No Baggage of Outdated technology.

• Project Management skills.

• High on Learning Curve.

• Infrastructural facilities.

• Professional Management Culture

• Conducive Regulatory Framework.

f) Marketing Channels used by Software Companies

Marketing is the most critical issue for the development of the Indian Software industry. The size of the Indian software export industry is very small compared to the world market. To emerge as a major player in the world software market, there has to be a significant expenditure on marketing. In India, the software vendors operating in the export market have traditionally depended upon direct marketing to end-users. However lately, many software companies have set up their own offices in various countries. Also, in an effort to expand their software operations, many global and system hardware companies are subcontracting software development to a consortium of software companies.
Fig. 4.16: Marketing Channel Revenues in Software Industry

Source: NASSCOM, India

4.2.2 Company Profiles

4.2.2.1 Profiles of the Selected Indian Software Companies

The following Indian Software majors have been selected as the sample.

1. Tata Consultancy Services Ltd. (TCS)
2. Wipro Ltd.
3. National Institute of Information Technology Ltd. (NIIT)
4. INFOSYS Technologies.
5. HCL Technologies Ltd.

1) Tata Consultancy Services

Tata Consultancy Services is a part of Tata Group which is India’s largest Industrial Conglomerate. It began its operations in
the year 1968. It deals in both software products and services which include system integration, custom software development and packaged software. As far as the segment wise breakup is concerned, software services occupy 95.7 percent. Packaged software occupies 2% and the rest 2.3 percent is occupied by the other operations. Out of the total products and services offered, 91.9 percent are exported, 6.9 percent are distributed in domestic market and 1.2 percent are offered through agencies.

**Fig. 4.17 : Sales Revenue for Tata Consultancy Services**

The company invests 5 percent of its total revenue in research. TCS has already patented 12 e-commerce solution product packages and has filed six more applications for patent licenses. Over $25 million were spent on enhancement of hardware and software infrastructure. The company now has 72 offices worldwide. As many as seven centres were assessed at SEI Level 5 in 1999.

TCS continues its focus on consultancy. In the year 1998-99,
financial services contributed the maximum at 40-50 percent, while Y2K and Telecom contributed 10 percent and 15 percent respectively of the total export. 57 percent was onsite while remaining 47 percent came from offshore development. In the year 1998-99, the company cornered 15 percent of the total exports registered by Indian software industry, and the company grew by 55 percent over the previous year to touch the gross Rs-1652.27 crore. Exports grew from Rs.955.27 crore to Rs-1518 crore in 1998-99 at a rate of 59 percent.

2. Wipro

Wipro is a diversified company with major interests in Information Technology products and consumer products like Vanaspati and Toilet Soaps. Its other business include fluid power and lighting. Though the infotech divisions of the company were started in 1981, but in the year 1995, two Infotech subsidiaries of Wirpo viz Wipro Infotech - a hardware company and Wipro systems - a software company launched. Wipro is the flagship company of the Azim H. Premji Group. It is both into Software and Hardware products and services. The software products and services include operating systems, cross industry applications, vertical industry applications, development tools, Hardware support and Software support.

The hardware includes Servers, PC servers, desktops, portables, impact printers, non impact printers, LAN products, WAN products, VSATs and structured cabling. As far as segment wise breakup is concerned- 2.6 percent is contributed by Packaged software, 4.5 percent by Networking, 14.6 percent by Peripherals, 26.0 by systems and 52.2 by services. Domestic distribution of products and services includes 35.3 percent by Wipro itself and 19.8 percent through agency and the rest 44.9 percent are the exports. Software exports have grown at a very brisk pace and
Wipro has emerged as the second largest domestic software exporter. Wipro also has a global R&D division which specializes in software for designing chips and hardware components. Overall, Wipro has registered a growth of 38 percent in the year 1998-99 over the previous year.

Fig. 4.18 : Sales Revenue for Wipro Ltd.

3. **NIIT (National Institute of Information Technology)**

NIIT was incorporated in 1981, under the name of PACE Electronics Ltd. By Shiv Nadar, RS Pawar and VK Thadani (also promoters of HCL). The name was later changed to National Institute of Information Technology Ltd. And again to NIIT Ltd. It was started with a mission to bring people and computers together. NIIT, is a part of HCL group, which is one of the leading IT companies in India.

The products and services it deals with include– IT training, systems integration, custom software development and packaged software. It sells 54.2 percent of its products and services
domestically on its own and the rest 45.6% is exported. NIIT’s mainstay is the training business. The focus currently has tilted towards software sales and services which brought in 60% of the total revenues, learning solutions accounting for only the rest. The software and training major has identified E-business solution, E-transformation solutions and E-knowledge solutions to be company’s future growth drivers. In the year 1998-99, growth in domestic revenue was 17% and growth in export revenue was 53%.

**Fig. 4.19 : Sales Revenue for NIIT Ltd.**

4) Infosys Technologies

Infosys Technologies started its operations in 1981. It mainly deals with packaged Software and Software exports. Software services contributed 97.1% to the revenue whereas Packaged software contributed 2.9% to the total revenue. Infosys is the highest - scrip- value firm on Indian bourses. One of the main reasons for that is possibly the soaring profit margins that stood at Rs.285 crore, up from 132 crore in 1998-99.
As a part of its continuing efforts towards globalization, Infosys has set up a global development centre in Toronto. In 1999, Infosys became the first Indian company to get listed on NASDAQ. One of its performance highlights in 1998-99 includes the implementation of SAP across the organization in a record five months; and also almost 90 percent of revenues came from repeat business. It distributes 1.7 percent of its products domestically on its own and 98.3 percent comprise the exports.

Fig. 4.20 : Sales Revenue for Infosys Technologies

![Graph showing sales revenue for Infosys Technologies from 1995-96 to 1999-2000]

Source: Annual reports of the company

5) HCL Technologies

This company started its operations in the year 1996 and mainly deals in Software exports. It is a part of the HCL group. With 20 subsidiaries in various countries worldwide, HCL Technologies has sought to achieve a balanced revenue mix using a two fold approach. First, to increase contribution from high value added services and off shore development and second, to derisk business by avoiding a client concentration strategy. The new slant is definitely on the Net and E-Commerce-Centric software services
that brought in 42 percent of the total revenues in the first quarter of year 2000. HCL is the only Indian software firm with a global reach spanning over 80 percent of the World IT market. In the year 1999-2000, its revenue witnessed 26 percent growth over the previous year to touch the mark of Rs. 908 crore.

**Fig. 4.21 : Sales Revenue for HCL Technologies**

Source : Annual reports of the company

### 4.2.2.2 Profiles of the Selected US Software Companies

The following US Software companies (operating in India) have been selected as the sample.

1. Microsoft India
2. Oracle Software India
3. Texas Instruments (I) Ltd.
4. IBM Global Services
5. Hewlett Packard (I) Software Operations (HP ISO)

Their profiles are being presented briefly as under.
1) Microsoft India

It started its operations in the year 1990 and deals in Packaged Software and accessories. It has 3000 dealer outlets all over India with four branch offices and about 100 employees working for it. In the year 1998-99, 95 percent of the revenue was contributed by packaged software and the rest 5 percent by the peripherals. Among the revenue share of Packaged Software, Back office comprises 11 percent, office Suites 88 percent, Server OS-12 percent and client OS-49 percent of the total revenue. Microsoft is undoubtedly the king in the packaged software market. The company has increasingly worked up its way from the homes to the medium size users to large enterprises in the Indian market. It sells its 100percent products and services on its own. Its revenue witnessed an increase of 35percent in the year 1999-2000 to touch 450 crore from 333 crore in the previous year.

Fig. 4.22 : Sales Revenue for Microsoft India
2) **Oracle Software India**

It started its operation in India in the year 1993 and deals in Packaged Software. It has 180 employees working for it and sources 100 percent of its products domestically on its own. As far as the segment wise break up is concerned, Packaged software accounts for 90 percent of the revenue and the rest 10 percent is contributed by the services. The company strengthened its focus on vertical industry segments by launching products specifically targeted at potential buyers. It has also tied up with Pricewaterhouse Coopers for an enterprise software for the power industry. Of late, the company has been touting its e-business capabilities with a spate of promos, in line with its professed mantra – ‘Internet Changes Everything’. It witnessed a growth of 35 percent in the year 1999-2000 to touch 195 crore revenue from 140 crore in the previous year.

**Fig. 4.23 : Sales revenue for Oracle Software India**

![Graph showing sales revenue for Oracle Software India from 1995-96 to 1999-2000]

Source : Annual reports of the Company
3) **Texas Instruments (I) Ltd.**

It started its operations in India in the year 1985 and mainly deals in software exports. TI is among the three centres outside the US, the other being in Nice, France and Tokyo. In March 1998, the company launched the first DSP designed entirely from its centre here and also developed the programmable resolution Analog to Digital converter. In line with its strategy to grow steadily it launched xstream DSP Technology for high speed printer applications in March this year. It's revenue grew by 63% in the year 1999-2000.

**Fig. 4.24 : Sales Revenue for Texas Instruments India**

4) **IBM Global Services**

It started its operations in India in the year 1997 and deals in Custom Software development, software exports, system integration, network integration, IT training and maintenance services. It has 1667 employees working for it and 13 Branch offices spread all over India. It sources 35.8% of its services in the domestic market on its own and exports the rest 64.2%.
Services account for its 100 percent revenue contribution.

The focus of IBM GS is on the small and medium business segment and to capture a major mindshare and market share of this market through IBM solutions. IBM Global Services garnered Rs.475.84 crore in revenue in the year 1999-2000, of which Rs .246.37 crore came from software services export.

Fig. 4.25 : Sales Revenue for IBM Global Services

![Graph showing sales revenue for IBM Global Services]

Source : Annual reports of the company

5) Hewlett Packard (I) Software Operations

It started its operations in India in the year 1989 and deals in software exports. It is a part of the Hewlett Packard’s Internet Business unit. It has approximately 1000 professionals who form a critical part of HP software engineering services for developing and supporting E-services solutions. The focus has also been on systems software and solution development for its parent company. The company showed about 61% increase in growth to post Rs.91.33 crore in the year 1998-99. It exports 100 percent of its products and services.
Fig. 4.26: Sales revenue for HP India

Source: Annual reports of the company
Fig. 4.27: Consolidated sales revenue chart for Indian Software Companies

Source: Annual Reports of the companies
Fig. 4.28: Consolidated sales revenue chart for American Software Companies

Source: Annual Reports of the companies
4.3 CONCLUSION

The chapter presents a brief picture of the prevailing market conditions in Consumer Electronics Industry and Computer Software Industry in India. The emphasis of the chapter is on providing profiles of the selected US, Japanese and Indian companies undertaken for study. Through the profile, an attempt has been made to delve briefly into the history of the company and also highlight its performance in the period undertaken for study (1995–2000).

The chapter provides factual proof for the fact that despite the rapid liberalization and globalization, the two sectors namely Consumer Electronics and Computer Software, are dominated by domestic companies in India.

Specifically, it is interesting to note that in case of Televisions, Indian Market is dominated by Big Indian players (BPL, Videocon and Onida), holding 46 percent of the total market share. In comparison, the Japanese global giants hold merely 17 percent. Despite the presence and onslaught of foreign companies in the consumer electronics market of India, domestic companies have shown continuous progress. In the year 1999–2000, the two top Indian companies, Videocon and BPL, posted a sales revenue of Rs.27000 crores and Rs.2014 crores respectively. On the other hand the top Japanese companies in India, Sony and Sharp posted a sales revenue of Rs.613 crores ad Rs. 295 crores respectively. These figures signify the market leadership of Indian companies.

Even the Computer Software Industry shows the dominance of domestic companies in India, the three top giants being TCS, WIPRO and NIIT, posing a massive sales revenue of Rs.2034 crores, Rs.2036 crores and Rs.1096 crores, respectively (in the year 1999–2000). In contrast, the global giant, Microsoft and Oracle...
have generated a sales revenue of Rs.466 crores and Rs.195 crores, respectively. Nevertheless it may also be noted that the area of specialization differ for the Indian and US companies. Whereas the former are mainly involved in Software Services (Domestic and Export), the latter have a marked presence in Packaged Software. But it may also be noted that even on the same platform i.e. Software services, the US companies such as IBM Global Services and HP India Software Operations, are yet to match the Indian software service providers.

To conclude, this chapter not only portrays the individual profiles of the selected companies but also lays the foundation of presenting a comparative picture between the companies.