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THE INDIAN SOFTWARE INDUSTRY CONTINUES TO GROW

The global slowdown may have little impact on India's IT industry, which is projected to grow at a steady rate of 15 per cent till 2010-2011. The Indian software exports industry will continue to play a major role in this growth.

The Indian software industry has helped to change the world's perception of India with respect to technological advancement, and its fast growth has added immensely to national pride. Presently, there are more than 500 software firms in the country, which is a reflection of the tremendous growth of this industry in India.

This industry has been growing at about 40 per cent per year. Its main raw material is trained and highly skilled manpower. The Indian software industry has grown from a mere US\$ 150 million in 1991-92 to a staggering US\$ 5.7 billion in 1999-2000. No other Indian industry has performed so well against global competition. According to statistics, India's software exports were US\$ 46,744 million in 2007-08. The total share of

India's software exports in the global market rose from 4.9 per cent in 1997 to 20.4 per cent in 2002-03.

It is estimated that the Indian software industry generated a total

employment of around four million people, which accounted for 7 per cent of India's total GDP, in the year 2008. Today, the software industry in India exports software and services to nearly 95 countries around the world. The share of North America (US and Canada) in India's software exports is about 61 per cent. In 1999-2000, more than one-third of the Fortune 500 companies outsourced their software requirements to India.

The government has also played a vital role in the development of this industry. In 1986, the Indian government announced a new software policy, which was designed to serve as a catalyst for the software industry. This was followed in 1988 with the World Market Policy and the establishment of the Software Technology Parks of India (STP) scheme. In addition, to attract foreign direct investment, the Indian government permitted foreign equity of up to

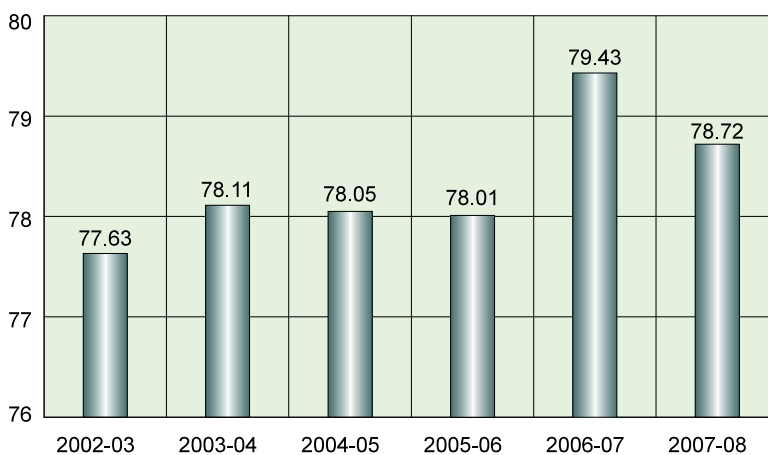


Table I
Total Software Production

Production	2006-07		2007-08		Per cent growth	
	Rs cr	US\$ mn	Rs cr	US\$ mn	In Rs	In US\$
Domestic	37,000	8,554.91	47,300	11,748.63	27.84	37.33
Software for export	146,000	33,757.23	175,000	43,467.46	19.86	28.76
Total	183,000	42,312.14	222,300	55,216.10	21.48	30.50

registering a growth of 27.84 per cent (37.33 per cent in US\$ terms) over the year 2006-07, when the domestic software/services industry was estimated at Rs 37,000 crores (US\$ 8,555 million).

Growth in Percentage Share of Export in Production of Software/Services During 2002-03 to 2007-08



Export of computer software/services, including ITES/BPO

Of the total production of computer software/services, 78.72 per cent was exported in 2007-08.

Export of computer software/services (including ITES/BPO) registered a growth of 20 per cent (29 per cent in US\$ terms) during the year 2007-08 over the year 2006-07. In value terms, export of this sector during 2007-08 is estimated to be Rs 175,000 crores (US\$ 43.46 billion), up from Rs 146,000 crores (US\$ 33.75 billion) estimated in the year 2006-07.

Major destinations for software and services exports during 2007-08

North America remained the top destination for India's exports of computer software/ services during the year 2007-08 as well, with a growth of 19.4 per cent (28.31 per cent in US\$ terms) in exports during the year 2007-08 over the year 2006-07. In value terms, exports to North America increased from Rs 90,109 crores (US\$ 20.83 billion) estimated in 2006-07 to Rs 1,07,625 crores (US\$ 26.73 billion) in the year 2007-08.

Exports to EU countries registered a growth of 19 per cent (27 per cent in US\$ terms) during the year 2007-08. In value terms, exports of software and services from India to EU countries during 2007-08 are estimated to be Rs 46,725 crores (US\$ 11.6 billion) up from Rs 39,420 crores (US\$ 9.11 billion) estimated in the

100 per cent, and duty-free import of all inputs and products for this industry.

The software industry, being the main component of the IT Industry in India, has also helped the IT sector in India to grow at a good pace.

Current scenario

Hit by the slowdown, India's software exporters are exploring new markets in the Middle East and Africa to increase IT exports by 10 per cent and touch US\$ 54 billion in the current fiscal. IT software exports were valued at US\$ 49.5 billion in 2008-09, which was about 14 per cent more than that in 2007-08. The Electronics and Computer Software Export Promotion Council (ESC) has set a target of US\$ 4.5 billion for electronics hardware export in the current fiscal, which is about 15

per cent more than the shipments of US\$ 3.9 billion in 2008-09.

With most of the country's main markets, like the US and EU, reeling under the impact of demand slowdown, the ESC is encouraging the industry to explore the Middle East, Latin America, South Africa and Japan to increase exports. India will be showcasing its strength in IT hardware, software and services and telecom sectors at GITEX, an IT exhibition in Dubai. India had exported electronics hardware and software worth US\$ 980 million to the Middle East countries in 2007-08.

Domestic software and services industry

During the year 2007-08, India's domestic computer software/services market was estimated to be Rs 47,300 crores (US\$ 11,749 million),

Table II
Export Performance of States and Union Territories

Region	States/ Union territories	2005-06		2006-07		2007-08	
		Rs cr	US\$ mn	Rs cr	US\$ mn	Rs cr	US\$ mn
East	West Bengal	2,721.84	614.83	3,625.00	838.15	4,135.00	1,027.07
	Orissa	466.00	105.26	732.00	169.25	850.00	211.13
	Bihar	4.22	0.00	6.43	0.00	7.00	0.00
	Chhattisgarh	1.00	0.23	1.56	0.36	3.00	0.75
	Region total	3,193.06	720.32	4,364.99	1,007.76	4,995.00	1,238.95
North	Haryana	8,410.25	1,899.76	12,540.00	2,899.42	12,115.00	3,009.19
	Uttar Pradesh	8,455.30	1,909.94	8,670.00	2,004.62	13,214.00	3,282.17
	Delhi	3,693.44	834.30	4,165.00	963.01	4,880.00	1,212.12
	Punjab	265.28	59.92	620.00	143.35	315.00	78.24
	Rajasthan	459.17	103.72	407.00	94.10	425.00	105.56
	Madhya Pradesh	201.98	45.62	300.00	69.36	253.00	62.84
	Chandigarh	295.00	66.64	377.15	87.20	385.00	95.63
	Himachal Pradesh	12.50	2.82	9.27	2.14	42.00	10.43
	Uttaranchal	8.00	1.81	0.94	0.22	10.00	2.48
	Jammu & Kashmir	1.00	0.23	1.56	0.36	3.00	0.75
Region total	21,801.92	4,924.76	27,090.92	6,263.80	31,642.00	7,859.41	
South	Karnataka	41,429.94	9,358.47	52,175.00	12,063.58	58,464.00	14,521.61
	Tamil Nadu	14,573.96	3,292.06	21,325.00	4,930.64	28,940.00	7,188.28
	Andhra Pradesh	12,620.32	2,850.76	19,140.00	4,425.43	26,075.00	6,476.65
	Kerala	852.89	192.66	1,400.00	323.70	1,575.00	391.21
	Pondicherry	40.00	9.04	43.58	10.08	50.00	12.42
	Region total	69,517.11	15,702.98	94,083.58	21,753.43	115,104.00	28,590.16
West	Maharashtra	19,644.79	4,437.49	32,100.00	7,421.97	35,500.00	8,817.69
	Gujarat	443.12	100.09	763.61	176.56	850.00	211.13
	Goa	25.00	5.65	96.90	22.40	109.00	27.07
	Region total	20,112.91	4,543.24	32,960.51	7,620.93	36,459.00	9,055.89
Grand total	114,625.00	25,891.30	158,500.00	36,645.91	188,200.00	46,744.41	

year 2006-07. With a high growth of 44.44 per cent (55.17 per cent in US\$ terms), Singapore, Hong Kong and other South Asian countries have emerged as the third top destination for India's software and services exports during the year 2007-08. Exports to this region increased from Rs 4,500 crores (US\$ 1,040 million) estimated in 2006-07 to Rs 6,500 crores (US\$ 1,614 million) in the year 2007-08. Japan, Korea and other Far East countries were the fourth top destination for the export of computer software/services from India during 2007-08.

Top countries for India's electronics hardware and computer software/services exports

UK and USA remained the top two countries for exports of electronics and computer software/services from India during 2007-08. These two countries accounted for a share of 74.67 per cent of India's total electronics and computer software/services exports. Singapore, with an overall share of 3.16 per cent, emerged as the third top country for exports in this sector during 2007-08.

Germany, with a share of 2.64 per cent was at the fourth position, and Japan with a share of 2.60 per cent, was at the fifth position during 2007-08. The other major countries for India's electronics and computer software/services exports were Switzerland, Australia, Canada and Hong Kong.

In 2006-07, exports to the top five countries (USA, UK, Singapore, Netherlands and Germany) accounted for 82.42 per cent of India's total electronics and computer software/services exports. The next five countries (Japan, Switzerland, Australia,

Canada and Hong Kong) accounted for 7.36 per cent in this year.

The top 10 countries accounted for 89.78 per cent of the total software exports in 2007-08.

Contribution of states and union territories

Karnataka remained the highest exporter of electronics and computer

software/services from India during the year 2007-08 as well. Exports from this state during 2007-08 are estimated to be Rs 58,464 crores (US\$ 14,522 million), up from Rs 52,175 crores (US\$ 12,064 million) estimated in the year 2006-07, registering a growth of 12 per cent (20 per cent in US\$ terms).

The second largest contributor to India's electronics and computer software/services exports is Maharashtra, which accounts for a share of 18.86 per cent of the total exports in this sector during 2007-08. The other major contributing states are Andhra Pradesh, Tamil Nadu, Haryana, Uttar Pradesh, Delhi, West Bengal, Kerala, Orissa and Gujarat.

Indian software exports

Table 3 indicates that software exports from India, which stood at US\$ 1,650 million in 1997-98, steadily increased to US\$ 23,200 million in 2006-07.

Table 4 gives the Top 10 list from the 2008 edition of Software Magazine, which

is one reason it cannot be compared to the Forbes list. Software Magazine usually publishes a new edition in September. Due to the inclusion of services revenues, many IT services companies appear on the 2008 list: EDS, Accenture, CSC and Cap Gemini.

The ranking given by NASSCOM (National Association of Software and Services Companies) in June 2006 forms the basis for this list. The NASSCOM survey included only companies incorporated in India, which were ranked on their export revenues (excluding that from BPO-ITES). According to NASSCOM, India's software exports were US\$ 17.3 billion in 2005-06, a 33 per cent increase over the previous year.

It is to be noted that companies headquartered outside India were not covered in this study. This is what the report says: "Had they been ranked based on their India revenues, companies such as Cognizant, Accenture, IBM and HP would have been placed amongst the Top 10 of this list, and companies such as Kanbay, Syntel and Intelligroup would have been amongst the Top 20."

The road ahead

The current financial year has been challenging for economies across the globe. But the Indian IT-BPO industry has exhibited a balanced growth. We have seen Europe, Asia Pacific and the rest of the world grow more than the US, reaffirming geographical diversification as an encouraging trend for this industry. It is expected that the Indian software and BPO industry will grow by 15 per cent annually till 2010-11, to log export revenues alone of US\$ 60-62 billion. Due to its strong fundamentals and as a derivative of the value it adds to our global customers, the Indian software industry will continue to grow in spite of the global slowdown.

NASSCOM has made a few

Table III
Growth in Software Exports

Year	Software exports (US\$ mn)	Export growth (per cent)
1997-98	1,650	65%
1998-99	2,180	32%
1999-2000	3,600	65%
2000-01	5,300	47%
2001-02	6,200	17%
2002-03	7,550	22%
2003-04	8,800	17%
2004-05	12,400	41%
2005-06	16,800	35%
2006-07	23,200	38%

Source: Interviews, Indian Dept. of Electronics annual reports, Dataquest (India) surveys

Note: Figures represent gross foreign exchange earnings. Net earnings (less outflow of foreign exchange from India to pay for travel and living allowances of Indian software workers who undertake their contracts overseas, marketing, multinational profit repatriation, import of hardware and software) are estimated to be around 35 per cent of the gross figures

Table IV
Top Ten Software Companies in the World

Top Ten Software companies in 2000	Top Ten Software companies in 2008
IBM	IBM
Microsoft	Microsoft
Oracle	Electronic Data Systems (now an HP company)
Google	Accenture
Softbank	HP
SAP	Oracle Corporation
Accenture	SAP
Computer Sciences Corporation	Computer Sciences Corporation
Yahoo!	Cap Gemini
Cap Gemini	Lockheed Martin Corporation

Source: Forbes Global 2000 and Software Magazine 2008

projections for this industry, the highlights of which are:

1. Total IT-BPO industry to touch US\$ 71.7 billion in 2008-09.
2. The industry to account for 5.8 per cent of the country's gross domestic product.
3. Domestic BPO market to grow by over 40 per cent.
4. BPO exports estimated to grow by 17.5 per cent to \$12.8 billion.
5. IT services exports estimated to grow by 16.5 per cent to \$26.9 billion.
6. Software products, engineering services to grow by 14.4 per cent to \$7.3 billion.
7. Exports to Europe will log highest growth, while US will remain the dominant market.
8. Uncertain economic environment to prevail in 2009.
9. Indian IT industry expected

Table V
Top 10 Software Companies in India

Rank	Company
1	Tata Consultancy Services Ltd
2	Infosys Technologies Ltd
3	Wipro Technologies Ltd
4	Satyam Computer Services Ltd
5	HCL Technologies Ltd
6	Patni Computer Systems Ltd
7	I-flex Solutions Ltd
8	Tech Mahindra Ltd (formerly Mahindra-British Telecom Ltd)
9	Perot Systems TSI (I) Ltd
10	L&T Infotech Ltd

Source: NASSCOM

to grow 15 per cent annually till 2010-11.

10. Exports projected to US\$ 60-

62 billion by 2010-11.

11. Industry will remain a net hirer with 2.23 million new direct jobs.

12. Indirect job creation estimated at 8 million.

The software industry is India's sunrise industry, and India is slowly emerging as a global IT superpower. This success can be attributed to the high quality of software human resources in the country, which has helped the country to increase software exports substantially over the last two decades.

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