

28 February, 2008

Key Data (INR)	
CMP	880
Target Price	1053

Key Data	
Bloomberg Code	TCS IN
Reuters Code	TCS.BO
BSE Code	532540
NSE Code	TCS
Face Value (INR)	1
Market Cap. (INR Mn.)	861,168
52 Week High (INR)	1,330
52 Week Low (INR)	730
Avg. Daily Volume	250,486
F&O	
Market Lot	250
Turnover (INR Mn.)	1136.1

Shareholding	%
Promoters	77.8
Mutual Funds / UTI	1.4
Financial Institutions / Banks	0.1
Insurance Companies	3.9
Foreign Institutional Investors	10.6
Bodies Corporate	0.8
Individuals	5.3
Clearing Members	0.1
<b>Total</b>	<b>100</b>

(Rs. mn)	FY08E	FY09E	FY10E
Revenue	228442.8	282267.5	358921.4
EBITDA	65062.2	75473.8	92216.3
EBITDA Margin (%)	28.5%	26.7%	25.7%
PAT	51314.1	58028.8	64382.2
PATM (%)	22.5%	20.6%	17.9%
EPS (Rs.)	52.4	59.3	65.8

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## Tata Consultancy Services Ltd. (TCS)

### Background

Tata Consultancy Services Ltd. (TCS), established in 1968 by Tata Sons, is the largest Indian IT services company and one of the top 10 global IT services company. TCS has pioneered the concept of offshoring IT services in India. Besides IT services, TCS also provides IT Enabled Services (BPO), Software Products, and Engineering and Industrial Services (EIS).

### Investment Rationale

- TCS is increasing its employee strength in emerging markets such as China and Latin American countries, which provide dual advantage of lower delivery costs and opportunity in terms of fast growing local IT market. Besides Chinese and Latin American markets, it is also targeting high growth from Indian markets. This will support its revenue growth despite concerns about the U.S. economy.
- TCS is diversifying its services portfolio, whereby its dependence on traditional service line (i.e. application development & maintenance services-ADM) has come down from 58% of the revenues in FY06 to 49% in 9M FY08. The diversification is expected to benefit TCS, as non-traditional service lines are expected to grow at a CAGR of 30% over the period of FY06 - FY11P, compared with a 20% CAGR in traditional service line.
- The value of deals in pipeline in final stage of negotiations at the end of Q3 FY08 is 2.5 times the deal pipeline at the end of Q3 FY07. Whereas, the number of large deals (\$50 million plus) in pipeline is 30 as compared with 19 deals at the end of Q3 FY07.
- Increase in offshore component in the revenue mix and leverage of selling, general and administration expenses, will help it in moderating the impact of wage inflation, going forward. Whereas, impact of INR appreciation on margins, is expected to be reduced by its foreign exchange hedging policy.

### Valuation and Recommendation

We expect, TCS's revenue to grow at a CAGR of 24% over the period of FY07 - FY10E, considering the strong deal pipeline and high growth in emerging markets. Whereas, net profit is expected to grow at a CAGR of 15.2% over the same period, considering the impact of completion of STPI scheme in FY09. At Current Market Price of Rs. 880 the stock trades at PER of 14.8x and 13.4x its FY09E and FY10E EPS of Rs.59.3 and Rs.65.8, respectively. Considering the trend towards gradual offshore shift in IT budget allocation and TCS's positioning as a leading offshore player, we recommend BUY rating on the stock with a target price of Rs.1053 based on 16x FY10E EPS of Rs 65.8.

“  
**In last four years, growth in IT spend has outpaced growth in World GDP**  
 ”

### Information Technology (IT) services industry

In last two decades, technology especially Information Technology (IT) has transformed business by creating productivity gains and new business models. This has resulted in the increased importance of IT in the success of companies worldwide.

### IT Services market size

With an increase in adoption of technology by businesses and individuals, spending on IT services (excluding BPO, hardware and software) has outpaced the growth in World's GDP in past (as can be seen in the table given below).

(In USD Bn)	2004	2005	2006	2007	CAGR (2004-07)
World GDP	58,051.1	61,300.0	64,242.4	67,711.5	4.3%
Worldwide IT services	418	441	467	495	5.8%
As % of World GDP	0.72%	0.72%	0.73%	0.73%	

(Source: IMF, NASSCOM)

“  
**Worldwide IT services spend is expected to grow by 5%-7% in 2008**  
 ”

Going forward, evolution of technologies and Internet applications will lead to greater proliferation in IT. Further effects of the 'internet generation' entering the working age population are expected to boost IT usage and adoption. For instance, it is estimated that over a third of the internet users in India are less than 23 years old.

Even as macro indicators hint at a slowdown across the major developed economies in the ensuing year, the global technology outlook reflects continued optimism. For instance, TPI and Forrester (consultants for IT related services), project growth in IT services of around 5% to 7% (after considering slower growth in developed economies) in 2008. This is further corroborated by IMF's latest projections of 4.1% growth in World GDP.

### IT Services market structure

IT Services market can be segmented based on execution responsibility into 'Outsourced services' and 'Captive Units' (in-house). Independent service providers provide 'Outsourced services', undertaking delivery responsibility for a price. The trend towards Outsourced services continues because of increase in demand for IT specialists.

Considering the location from where service is provided, the market can be classified into 'Onshore' services and 'Off-shore' services (i.e. services outsourced outside the home country). Offshore locations leverage their strength in availability of skilled talent at relatively lower cost to provide cost effective services.

#### Classification by Delivery Location \ Execution responsibility

Captive-Offshore	Third Party-Offshore
Captive-Onshore	Third Party-Onshore

Within IT services, captives constitute major portion followed by onshore services and offshorable services having share of 57%, 37% and 6%, respectively.

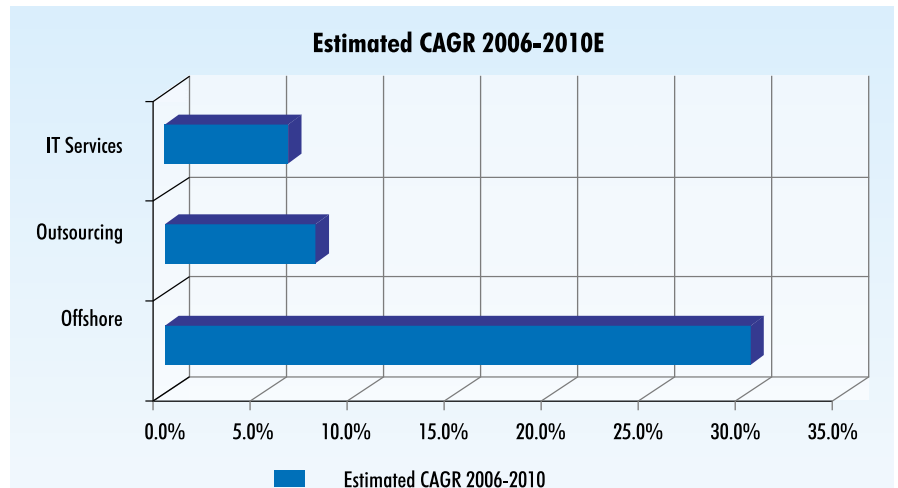
**Structure of IT services market**

(In USD bn)		2005
<b>Outsourced services</b>		
-Offshorable services	27	
-Onshore services	166	193
<b>Captives (in-house services)</b>		<b>251</b>
<b>Worldwide IT Services</b>		<b>444</b>

Source: NASSCOM

However, going forward, share of captives is expected to come down (due to increased complexity in IT services, requiring services from 3rd party), whereas that of outsourced services is expected to increase. Further growth in outsourced services is expected to come from offshore locations (because of the significant cost advantage in delivering services as against delivery from onsite location).

“  
**Offshore IT services market is expected to grow ~4 times faster than Worldwide IT services market**  
”

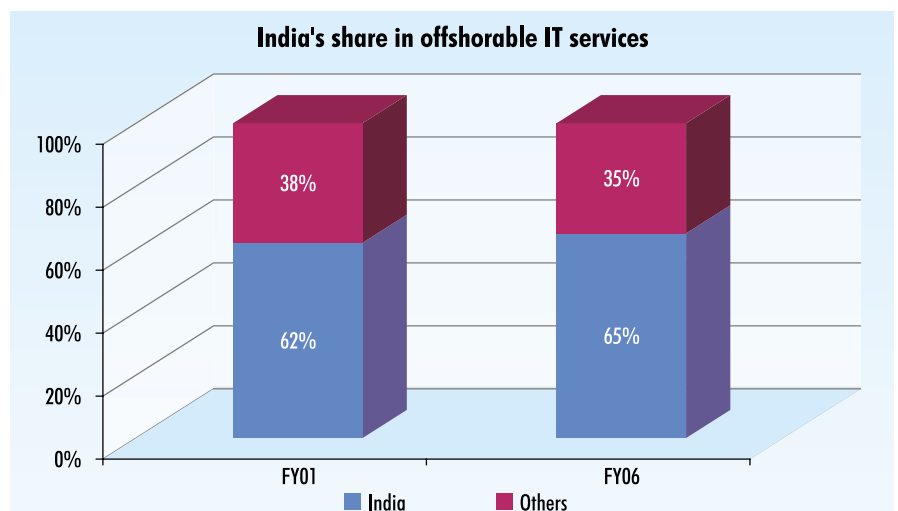


(Source: NASSCOM)

**Indian IT Services market**

India is the most favored offshore location for IT Services (Source: - AT Kearny Global Services Location Index 2007). The same is evident from the increase in dominance of India in total offshorable IT services market (as can be seen in the chart given below).

“  
**India's share in offshore IT services market increased to 65% in FY06 from 62% in FY01**  
”



(Source: NASSCOM)

Dominance of India in offshore market is because of financial attractiveness (i.e. cost competitiveness) as well as availability of abundant suitable talent pool.

In terms of compensation cost for human resources, India has a sizeable advantage, as its costs are around 4 times lower than that in the US (which is the main client destination) and also one of the most cost competitive destinations among low cost destinations (as can be seen from the table given here under).

**IT managers salary p.a.: - Top 10 paying countries**

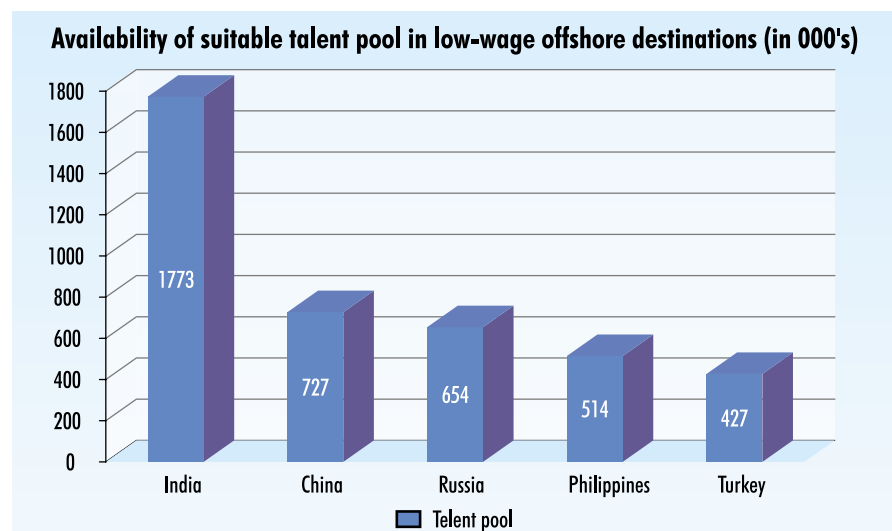
Ranking	Countries	USD
1	Switzerland	140,960
2	Denmark	123,080
3	Belgium	121,170
4	UK	118,190
5	Ireland	108,230
6	US	107,500
7	Germany	106,730
8	Canada	93,860
9	Hong Kong (China)	90,340
10	Australia	88,850

**IT managers salary p.a.: Lowest 10 paying countries**

Ranking	Countries	USD
1	Vietnam	15470
2	Bulgaria	22240
3	Philippines	22280
4	India	25000
5	Indonesia	31720
6	China (Shanghai)	33770
7	Malaysia	35260
8	Czech Republic	35880
9	China (Beijing)	36220
10	Argentina	43180

(Source: Mercer (2007))

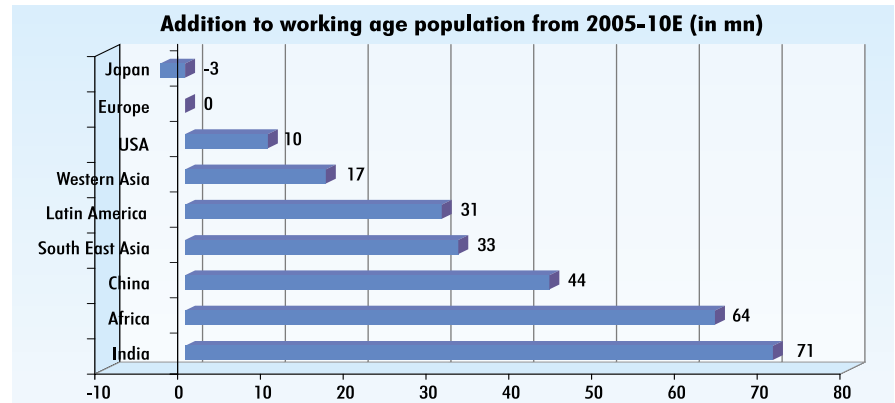
In terms of availability of talent pool, India has the largest pool of suitable offshore talent – accounting for 28 per cent of the total employable pool available across all offshore destinations outpacing the share of the next closest destination by a factor of 2.4 (Source: -NASSCOM).



(Source: NASSCOM)

Going forward India is expected to be the largest contributor to the growth in the worldwide working population (as can be seen in the table given below). This will enable India to maintain the lead in offshore IT market. Also, education skills wise India is ranked highest by AT Kearney (Global Services Location Index 2007).

“  
Exports account for more than  
3/4th of Indian IT services  
industry  
”



(Source: NASSCOM)

### Indian IT Services market size

The domestic IT market is at a nascent stage (compared with the global IT industry), as most users in India are in the initial stages of IT development. Hence, Indian IT service industry is dependent on export for more than 3/4th of its total revenue (as can be seen in the table given below).

#### Size of Indian IT services industry

(USD in Bn)	Exports	Domestic	Total	CAGR %
FY03	5.5	2.4	7.9	
FY07	18.1	5.6	23.7	31.6%
FY11E	40	10	50	20.5%

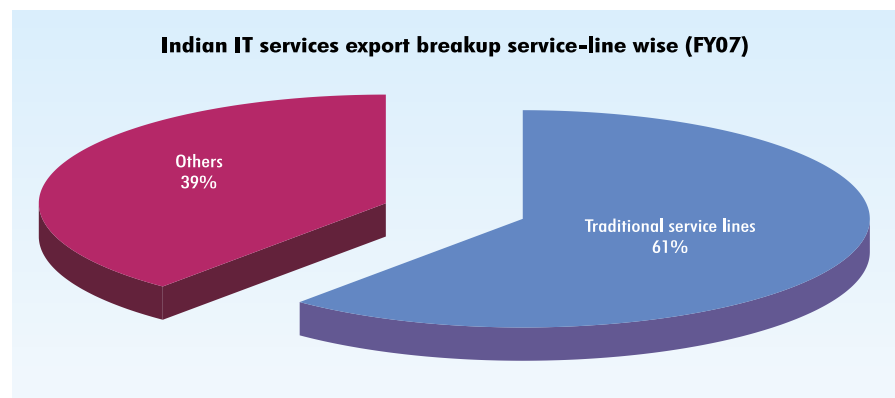
(Source: NASSCOM, CRIS INFAC)

With higher penetration level reached by Indian IT services industry in total Offshore market and increase in competition from other emerging offshore destinations (because of diversification by clients to reduce country risk), IT services export is expected to grow at a rate slower than that in the past (refer table given above).

### Indian IT Services Exports

#### • Service line wise: -

Indian IT companies are dependent on application development and maintenance services (like traditional service lines) for major portion of their revenues (as can be seen in the chart given below). One of the main reasons for the same is, the cost benefit realized by delivering traditional services from Indian development centers, is higher than other service lines. In other words, traditional service lines being relatively more labor-intensive services, the benefit realized from delivering the same from low cost countries (such as India) is higher.



(Source: NASSCOM)

“  
**Growth is expected to come  
 from non-traditional  
 service lines**  
 ”

As higher penetration level is reached in application development space, in terms of share of worldwide IT services (refer table here under), the traditional service lines are expected to grow at slower rate than the industry and consequently its share is expected to come down to 52% in FY11P from 61% in FY06 (Source: CRIS INFAC). Whereas, with the increase in confidence of clients on Indian IT players to carry out complex projects, share of other service lines in total IT services export is expected to increase from 39% in FY06 to 48% in FY11P (Source: CRIS INFAC).

### Global IT industry and share of India in global IT spend -by service lines

Service-lines	Worldwide IT services		India IT services export		
	(USD Bn)	(USD Bn)	% of World	Growth rate %	
				2003-06	2006-11P
Custom application development	24.4	8.9	36.4%	29.4%	20.4%
IT consulting	25.6	0.5	1.8%	63.2%	34.6%
System integration	81.1	0.5	0.6%	55.2%	34.8%
Network consulting and integration	30.7	0.2	0.7%	76.9%	24.4%
Application management	22.5	2.2	9.6%	-	19.8%
IS outsourcing	92.4	1.1	1.2%	110.5%	40.0%
Others	55.6	3.0	5.4%	-	26.4%
Support and training	137.8	1.7	1.2%	49.4%	24.1%
Total	470.1	18.1	3.8%	33.9%	24.3%

(Source: NASSCOM, CRISINFAC)

- **Geography wise: -**

India is dependent on English-speaking countries for major portion of its export revenue i.e. ~82% of total exports (67% from U.S. and 15% from U.K.), on account of India's large English-speaking labor force and dominance of the U.S. in total IT spend in the world (as can be seen in the table given below).

### Share of key markets in total IT spending (2006)

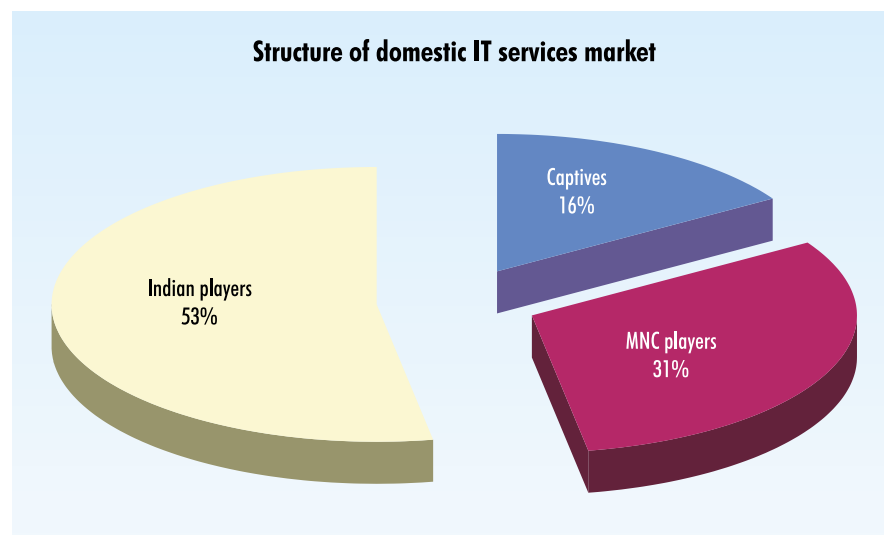
Geography-wise	World wide IT services	Indian IT services export			
		FY03	FY04	FY05	FY06
Americas	52%	69%	69%	68%	67%
Europe	30%	22%	23%	23%	25%
Others	18%	9%	8%	9%	8%
Total	100%	100%	100%	100%	100%

(Source-NASSCOM, CRIS INFAC)

However Indian IT companies are expanding their presence in geographies beside U.S., by hiring local talent, as a result share of the U.S. in India's IT services export has come down marginally by 2%.

### Domestic IT Services market

Besides the smaller size of domestic IT market, as compared to export market for IT services (around 1/3rd of export IT market), Indian players are facing stiff competition from MNC players. For instance, TCS and Infosys's revenue from India was 8% and 2% of their respective total revenues in FY07.



(Source: NASSCOM)

One of the main reasons for strong competition from MNC players in India is larger share of higher end service lines such as consulting and system integration in total domestic IT services (as can be seen in the table given below). Whereas share of traditional service lines (strength of Indian IT companies) is 26% of total domestic IT services (FY07).

#### Breakup of domestic IT services market Service- lines wise (FY07)

Service lines	(USD Mn)	% Share
IT consulting	1193	23.0%
Systems integration	1156	22.3%
Custom application development	468	9.0%
Application management	852	16.5%
IS outsourcing	322	6.2%
Support and Training	288	5.6%
Captive IT	900	17.4%
Total domestic IT services	5179	100%

(Source: NASSCOM)

## Indian IT Services market structure

NASSCOM has segmented Indian IT market into five categories i.e. Tier 1 companies, Tier 2 companies, Offshore Global Service Companies, Multinational Captive Units and Emerging companies. Within IT Services, Tier I players control around half of the market.

### Segment wise break up of Indian IT and BPO market for the year 2006-07

Category	% of IT Services
Tier 1 Players	45-48%
Tier 2 Players	20-25%
Offshore Global Service Providers (e.g. IBM, EDS)	15%
MNC Captives (in-house)	2-3%
Emerging Companies	15%

(Source: NASSCOM)

The share of top four Indian IT players in Indian IT industry (excluding hardware) has increased over the years (as can be seen in the table given below). The reason for the same is their ability to scale up employee base and offering of end-to-end IT solutions. Going forward also, this will continue to provide them an edge over other players.

“  
**Market share of Top Tier IT companies has increased to 30% in FY07 from 25% in FY03**  
 ”

### Share of top 4 Indian IT players in Indian IT industry (excluding hardware)

(In USD bn)	FY03	FY04	FY05	FY06	FY07	CAGR (%)
Top 4 Indian IT players	3.1	4.5	6.3	8.6	11.8	39.8%
Share (%)	24.7%	26.5%	28.2%	28.3%	29.8%	
Others	9.4	12.3	16.2	21.7	27.8	31.1%
Share (%)	75.3%	73.5%	71.8%	71.7%	70.2%	
Indian IT Industry (excl. hardware)	12.5	16.8	22.5	30.3	39.6	33.4%

(Source: CRIS INFAC)

“  
**For 9M FY08, revenue of top 4 players, in USD terms, has increased by 39% Y-o-Y**  
 ”

We have analyzed top four Indian IT players to understand the impact of rising employee cost and INR (Indian Rupee) appreciation against USD (U.S. Dollar) on profitability of IT companies.

As can be seen in the table, revenues have increased by 38% over period of FY05 to FY07; however in 9M FY08 due to unprecedented appreciation of INR against USD i.e. by 13% (on Y-o-Y basis) revenue increased only by 26% (in INR terms) on Y-o-Y basis. Whereas, in USD the revenue for 9M FY08 grew by 39% on Y-o-Y basis.

The Operating Profit Margins (OPM) of these companies have marginally come down over period of FY05 to FY07, as increase in employee cost outpaced the growth in revenue.

There was limited impact because of the change in exchange rate of INR against USD from FY05 to FY07. However, in FY08 due to unprecedented appreciation in INR against USD, operating profit margin (OPM) for 9M FY08 came down by 180 bps as compared to 9M FY07.



Cost structure of top four Indian IT companies					(Rs. In Mn)
	FY05	FY06	FY07	*9M FY08	CAGR % (FY05-FY07)
<b>Revenue</b>	<b>284,259.8</b>	<b>379,846.5</b>	<b>537,645.3</b>	<b>490,498.8</b>	<b>37.5%</b>
Y-o-Y % Change		33.6%	41.5%	26.4%	
Cost of revenue	134,830.7	197,403.0	293,035.3	264,241.7	47.4%
Selling, General & Administration expenses	72,538.6	82,709.5	106,524.0	109,213.9	21.2%
<b>Total Expenses</b>	<b>207,369.4</b>	<b>280,112.5</b>	<b>399,559.3</b>	<b>373,455.6</b>	<b>38.8%</b>
<b>Operating Profit</b>	<b>76,890.4</b>	<b>99,734.0</b>	<b>138,086.0</b>	<b>117,043.2</b>	<b>34.0%</b>
Y-o-Y % Change		29.7%	38.5%	18%	
<b>OPM %</b>	<b>27.0%</b>	<b>26.3%</b>	<b>25.7%</b>	<b>23.9%</b>	
Other income	4,014.4	7,396.9	10,575.3	15,071.5	62.3%
As % of revenue	1.4%	1.9%	2.0%	3.1%	
<b>Exchange gain</b>	<b>198.7</b>	<b>-521.1</b>	<b>728.7</b>	<b>3,207.5</b>	
As % of revenue	0.07%	-0.14%	0.14%	0.65%	
<b>Exchange rate movement (depreciation)/ appreciation (INR/USD)</b>	<b>2.2%</b>	<b>1.5%</b>	<b>-2.2%</b>	<b>13.0%</b>	

(Source: Company)

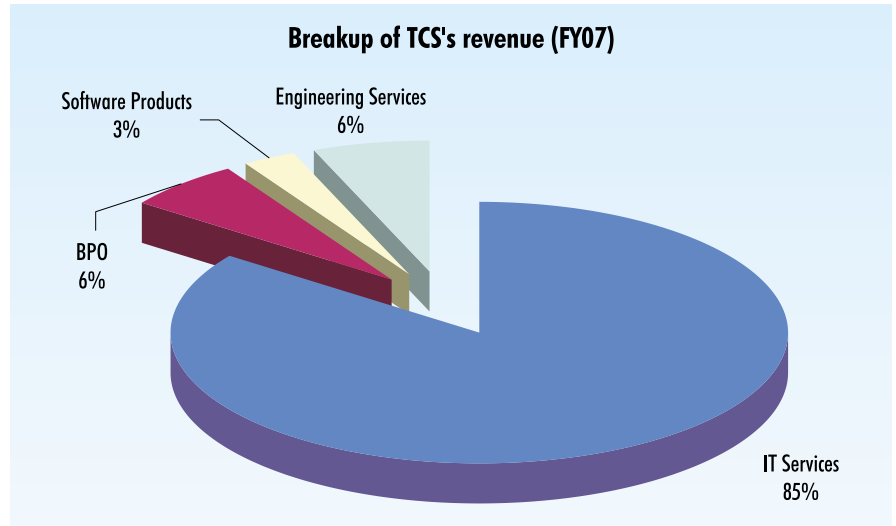
Top 4 companies include TCS, Infosys, Wipro and Satyam

\*In comparison with 9M FY07

**TCS**

**Business model**

TCS derives major portion of the revenue from IT services followed by BPO, EIS and Software Products. However the share of IT services is coming down (from ~98% in FY02 to 85% in FY07) because of relatively higher growth in other segments, especially BPO (which grew from 0.3% of total revenue in FY02 to 6% in FY07).



(Source: Company)

“  
**TCS has ~20% market share of Indian IT services exports**  
”

TCS has relatively higher share of IT services, in percent terms of Indian IT exports (as can be seen in the table given below), reason being higher share of captive units in total Indian BPO exports (which is around 45% to 50%), whereas in case of total Indian IT services export, share of captive unit is only 2% to 3%.

**TCS's share in Indian IT exports (FY07)**

(In USD Bn)	Indian IT exports	TCS	TCS's share in Indian IT exports (%)
IT services	18.1	3.7	20.3%
BPO	8.3	0.2	3.0%
Software Products & Engineering Services	4.9	0.4	7.6%

(Source: NASSCOM, Company)

“  
**Share of non-traditional service lines in revenue is increasing**  
”

**IT Services**

Within IT services, share of Traditional service lines (ADM) in revenue is more than 50%, however with increase in focus on other service lines (Testing services, Infrastructure Structure outsourcing and Consulting services) the share of traditional service line in IT services has come down to 61% in FY07 from 65% in FY06 (inspite of 30% growth on Y-o-Y basis).

## Breakup of revenue from IT services

Service-lines	TCS		
	% of IT services		Growth (%)
	FY 06	FY 07	Y-o-Y
Application Development and Maintenance (ADM)	65.2%	61.0%	29.9%
Enterprise Solutions	15.5%	14.3%	28.0%
Business Intelligence	9.5%	11.1%	61.8%
Assurance Services (i.e. testing services)	1.7%	2.7%	122.0%
Infrastructure Services (IS)	4.9%	7.0%	97.4%
Consulting	3.2%	4.0%	69.7%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>38.8%</b>

(Source: Company)

### 1. Traditional service line (ADM): -

#### OFFSHORE PLAYERS V/S MNC

In spite of the concern of Indian players losing cost advantage in traditional service lines against global service providers (IBM, EDS) because of the high wage inflation of around 12%-15% in India, as compared to 3% in the U.S., Indian players have maintained their edge by providing quality services (as can be seen in the table given below). However, the main area where Indian players are lagging behind the global service providers is domain capability. Tier I Indian IT companies are planning to get over this shortcoming by increasing their consulting capability.

## Offshore service providers versus MNCs in ADM space

Category (On a of scale of 5)	Offshore players	MNCs
<b>Price competitiveness</b>	<b>4.2</b>	<b>3.7</b>
Cultural fit	4.1	4.2
Performance against budget	4.3	4.2
Performance against SLAs	4.3	4.5
<b>Accuracy of project estimation</b>	<b>3.9</b>	<b>3.5</b>
Effectiveness of work order processes	4.1	3.8
Quality of release management skills	4.1	4
Expectations management "something missing?"	3.8	3.8
Governance	4.1	4.2
Transition management	4.1	4.1
<b>Flexible contract terms</b>	<b>4.5</b>	<b>4.1</b>
Technical competency	3.9	4.1
<b>Vertical industry/business domain competencies</b>	<b>3.4</b>	<b>4</b>
Account management	4	4.2
Responsiveness	4.3	4
<b>Quality of SLAs</b>	<b>4.2</b>	<b>3.9</b>
Ability to capture knowledge	4	3.8
Ability to improve quality of apps under management	3.8	3.7
Ability to delivery year-over-year improvements	3.7	4
<b>Scalability of resources</b>	<b>4.2</b>	<b>3.9</b>

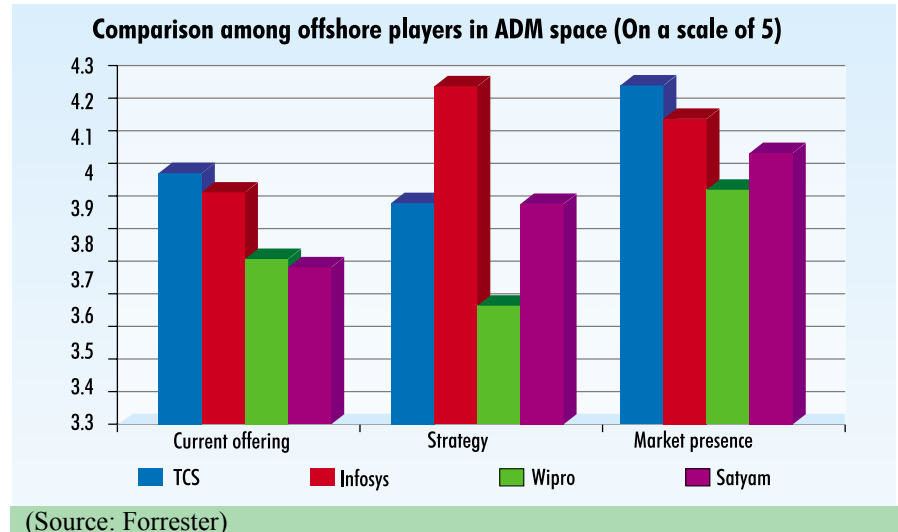
(Source: Forrester)

“  
TCS leads offerings and market presence in traditional IT space  
”

“  
TCS is the only offshore player considered to be at par with top notch global players in BI space  
”

### TCS V/S OTHER OFFSHORE PLAYERS

Among the top four Indian IT companies, Infosys has highest total score in ADM space (on the back of very high score in strategy), followed by TCS -having highest score in current offering and market presence (as can be seen in the table given below). Considering its strengths in ADM space TCS is expected to maintain the lead among offshore players going forward.



\*For more details refer Annexure 2

#### 2. Enterprise Solutions: -

Enterprise solutions are ready made software packages (such as SAP), which are implemented by IT service providers after certain modifications as per the requirements of clients. The level of customization done by IT companies is around 20% of total efforts level. Hence being less labor intensive the cost benefit provided by offshoring companies is relatively less as compared to other service lines. Further, global service providers such as IBM, Accenture and CSC having superior industry/business domain competencies have an edge over offshore players. Due to this above-mentioned global service providers are classified in leaders quadrant (refer Annexure 4), whereas TCS, Infosys, Wipro and Satyam are classified in challengers quadrant (refer Annexure 4) by Gartner in its report of ‘Magic Quadrant for ERP Service Providers, 2007’.

#### 3. Business Intelligence (BI): -

Business intelligence is high-end service, as it requires a diverse set of technology skills, best practices and frameworks, as well as knowledge of multiple functional areas to implement and optimize an enterprise’s BI processes and applications. Being a high-end job, there are limited numbers of players in this space. TCS is only Indian player, which is classified in leaders’ quadrant (beside IBM and Accenture) by Gartner. The offshorable market for this service is expected to be \$20 bn by 2010 (Source: Gartner), offering TCS huge opportunity as it is well placed in ‘Business Intelligence’ space. The strength of TCS in this segment is also reflected in its strong performance. Business Intelligence segment for TCS grew by 62% in FY07, as compared to 39% for India.

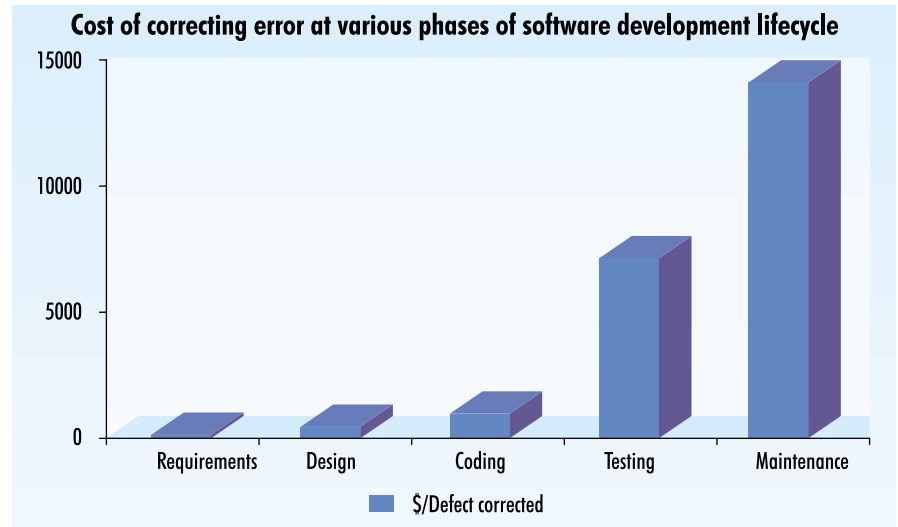
#### 4. Emerging services: -

Within IT services, TCS has identified Assurance Services (like testing), Infrastructure Outsourcing (IS) and consulting as its future growth areas considering the current market needs.

**i) Testing services: -**

**NEED FOR OUTSOURCING TESTING SERVICES**

Testing is an independent function that verifies software developed by third parties or client himself. In other words, it involves identification and correction of flaws and bugs in software. Growth in testing business will be driven by the fact that it costs company 100 times more to find and fix bugs at maintenance stage of software development lifecycle than during the requirement and design stage (as can be seen in the chart given below).



(Source: Software defect reduction top 10 list-NEEE Computer)

“  
**Market potential for India in IT testing services is \$4.2 Bn**  
”

“  
**TCS has ~16% market share of testing services exports**  
”

“  
**Market potential for offshore players in IS is \$50 Bn**  
”

**MARKET POTENTIAL**

The worldwide software testing market will reach \$13 billion by 2010, out of which 45-50 percent (approximately \$6 billion) will be outsourced (Source: Gartner). India has the potential to corner 70% share of the outsourced testing market, as per the industry estimates. In FY06, India’s export revenue from testing was about \$280 Mn (Source: NASSCOM).

**EMERGING AREA FOR TCS**

In testing segment, TCS’s share is around 16% of total export from India (in FY06). In FY07, TCS has registered growth of 122% in testing business, which is more than 3 times the growth in IT service segment as a whole.

**ii) Infrastructure outsourcing (IS): -**

**NEED FOR INFRASTRUCTURE OUTSOURCING**

In today’s business environment, IT infrastructure is becoming increasingly complex and needs constant attention. Outsourcing this domain can enable enterprises to focus on their core business. Besides, in-house competencies are difficult to build and retain, which increases the need to outsource IT infrastructure.

**MARKET POTENTIAL**

In 2006, the global infrastructure outsourcing market is estimated at around \$92 billion. The global spend on infrastructure outsourcing is expected to rise at a stable rate of around 6 per cent over the next 5 years. On an average, 50-60 per cent of infrastructure outsourcing activities can be carried out from remote locations. This translates into a market potential of around \$50 billion for offshore players (Source: CRIS INFAC).

“  
Offshore players enjoy cost  
advantage of upto 40%  
”

“  
TCS plans to triple its revenue  
from consulting space in next  
3 years  
”

### OFFSHORE PLAYERS VERSUS MNCs

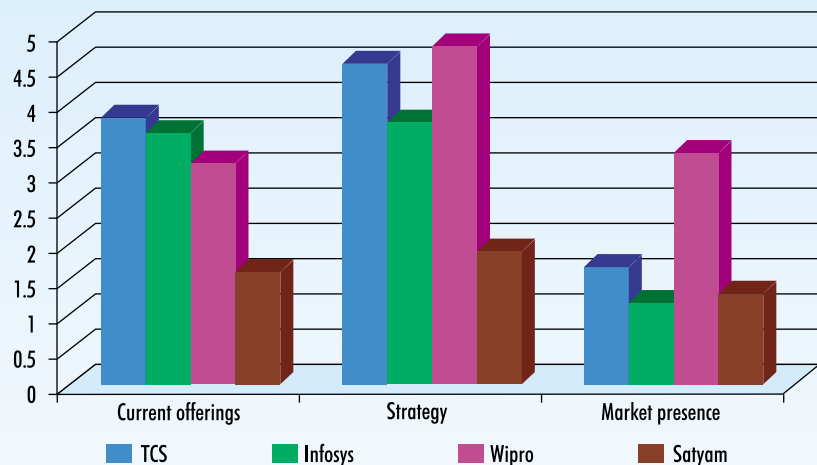
With the increase in size of offshore players, they are capable to take the IT assets of the clients on their balance sheets. Further extension of development centers by offshore players has enabled them to move up to the leadership position (TCS, Infosys, Wipro and HCL are included in the list) in infrastructure management space (Source: Forrester).

As per CRIS INFAC, by providing services from offshore location there is direct saving of cost by 30% to 40% to clients, which can be increased with maturity of the relationship. This provides offshore players cost competitiveness against global service providers.

### TCS V/S OTHER OFFSHORE PLAYERS

Among the top four Indian IT companies, Wipro has highest total score in infrastructure management space (on the back of very high score in strategy and market presence), followed by TCS -having highest score in current offering because of its successful adoption of the global delivery model among all the offshore players. Considering its strengths in infrastructure outsourcing space, TCS is expected to maintain its lead going forward.

Comparison among offshore players in IS outsourcing space (On a scale of 5)



(Source: Forrester)

\*For more details refer Annexure 3

### iii) Consulting: -

IT consulting involves formulation and execution of IT strategy on behalf of corporates. Since it involves participation with the clients from the stage of formulation of IT strategy and interaction with the top-level management of client organization, it provides IT consulting company a chance to obtain contracts for other IT related work such as implementation and maintenance. Hence, most players are increasingly trying to expand their presence in IT consulting.

Traditionally Indian players did not have a large presence in IT consulting. For instance, share in IT services export of consulting was just 1%, however over a period of time tier I companies have built their expertise and increased their presence in IT consulting.

TCS, at present employs around 800 consultants. Besides these 800 consultants, consulting work is also done by same number of people from outside the consulting department. TCS plans to increase the number of consultants to 2,500 in next

three years. Also, it expects revenue from consulting services to more than triple to \$650 million by FY10, from \$146 million in FY07. To strengthen its presence in IT consulting TCS has also made acquisition or entered into alliances, which are as follows: -

- **TCS Management Pty Limited, Australia**

TCS Management Pty Limited (TCSM), a privately owned consulting company in Australia, was acquired by TCS in FY07. TCSM provides consulting services to clients in banking, telecommunication, media, retail and government sector in Australia. With this acquisition, TCS added 35 senior consultants of TCSM to its team.

- **C-Edge Technologies Limited**

In FY06, TCS entered into a Joint Venture Agreement with the State Bank of India (SBI), pursuant to which a subsidiary company named C-Edge Technologies Limited (C-Edge) has been set up in India with equity participation from TCS and SBI. C-Edge will provide advanced technology solutions and domain consulting for the banking and financial services sector.

### Asset leverage solutions (Software Products)

**I.** Market potential: -Software products export from India is expected to grow from size of US\$2 billion in 2006 to US\$7 billion by 2010 i.e. at a CAGR of 36.8% (Source: NASSCOM). Geography wise the U.S. and Europe are the main markets. Whereas industry wise, Banking Financial Services and Insurance (BFSI) is the mainstay.

**II.** In order to capture the market opportunity in software product space, TCS has adopted the inorganic route. In previous two financial years, TCS has made following acquisitions: -

- **Financial Network Services (Holdings) Pty Limited, Australia (FNS)**

In FY06, TCS acquired Sydney-based FNS, to strengthen TCS' portfolio of banking and financial services products by adding 'BANCS', a Core Banking Solution with an established customer base of over 115 banks spread over 35 countries.

- **TKS-Teknosoft S.A., Switzerland**

In FY07, TCS acquired Switzerland-based TKS-Teknosoft S.A. (TKS) to expand its product portfolio in the banking and financial services space in Switzerland and France, by acquiring marketing and distribution rights of 'QUARTZ®' platform for wholesale banks and also by adding new products in the private banking and wealth management space.

These two acquisitions have enabled TCS to move to number two spot in Indian software product's players list in FY07 (in terms of revenue). Further, FNS with TCS being its parent, moved to number one spot globally (for retail banking solution) in terms of number of wins in CY06 (Source: IBS 2006). In addition, 'QUARTZ' was at fourth spot (for wholesale banking solution) in terms of number of wins in CY06. In order to leverage these two acquisitions and consolidate its suite of financial products, TCS has launched new business unit - 'TCS Financial Solutions'.

“  
Through inorganic route, TCS  
has moved to 2nd spot in Indian  
software product space  
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## Business Process Outsourcing (BPO)

- I. Market potential: -BPO industry is one of the fastest growing segments of Indian IT industry. It grew at a CAGR of 37%, as compared to 31% for industry as a whole over a period of FY03 to FY07. Going forward, also it is expected to maintain the high growth rate, led by platform-based BPO offerings (Refer Terminology in Annexure). As per NASSCOM, platform-based BPO will gain tractions as firms combine expertise in process management and implementation technologies (such as business intelligence, data warehousing) to deliver a solution oriented towards business delivery.

(In USD Bn)	2005	Share %	2010P	Share %	CAGR %
Indian BPO industry	5.2	45.6%	25	45.5%	36.9%
Global offshore BPO industry	11.4	100%	55	100%	37.0%

(Source: NASSCOM-McKinsey Report)

- II. TCS had limited presence in BPO till FY05, hence to increase its presence in BPO space TCS has made couple of acquisition and alliances: -

- **Phoenix Global Solutions**

In FY05, TCS acquired Phoenix Global Solutions Private Ltd. (PGS) from PM Holdings Inc. PGS provides business process outsourcing and customer care services to support business transactions of insurance companies.

- **Comicrom S.A., Chile**

In FY06, TCS acquired Comicrom S.A., to enhance its presence in Latin American BPO market. Comicrom is a leading BPO organization in Chile having 57% market share in the cheque processing business.

- **Diligenta Limited**

In FY06, TCS entered into a contract with the UK-based Pearl Assurance Group (Pearl) under which the business processing activities of the Pearl were taken over by TCS along with its 950 employees as part of the deal.

- III. TCS has developed its own BPO platforms and has started delivering services to clients from these platforms (for e.g. Pearl Group is served from platform developed for insurance companies). Further it is planning to launch two more new platforms in next couple of months. One platform is in area of Human Resource Outsourcing (HRO) and another in area of Finance and Accounting (F&A).

## Engineering Services

- I. Market potential: -Engineering Services Outsourcing (ESO) includes product design, research and development and other technical services across sectors like automotive, aerospace, hi-tech/telecom, utilities and construction/industrial machinery.

As per the NASSCOM and Booz Allen's study, global spending on engineering services in 2004 was \$750 billion, which is projected to increase to \$1.1 trillion by 2020. Out of which today only miniscule portion i.e. \$10-15 billion of engineering services is off shored, which is expected to grow to \$150 -225 billion by 2020.

The market share of India in offshore engineering is currently 12%, which is projected to increase to 25% by 2020 i.e. potential engineering market in India could exceed \$38 bn by 2020 (Source: NASSCOM and Booz Allen). The primary reason for increase in share of India in offshore engineering is its

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TCS is planning to add 2 BPO-  
platforms in next couple of  
months  
”



“  
**TCS is well placed to take  
advantage of offset contracts**  
”

cost attractiveness and talent pool size in relation to that of other countries. For instance, if the cost of automotive design in Europe cost \$800 per hour, which is even higher in the US, costs in India (when put on an hourly basis) are as low as \$60 per hour for equivalent quality (Source: NASSCOM and Booz Allen).

- II. To expand and take the opportunity in ESO space, TCS set up a separate business unit for ESO in FY05. However TCS has entered this space in 1987 by starting a J.V. with Westinghouse Electric Corporation and International Finance Corporation.
- III. TCS offers ESO services to clients in the verticals (industries) like -automotive, hi-tech & telecom, aerospace, industrial, oil & gas, and utilities. However, among all the verticals focus area for TCS is aviation industry. In India, TCS is the first company to be AS 9100: Rev B certified for design of airframe structures. Further, TCS has been accredited with certification from Indian Airworthiness Authorities. The scope of the certificate covers design and development of airframe structures, provision for engineering services/analysis along with design, development/ maintenance of support software.

As per industry, Indian companies are expected to get offset orders (refer Annexure 5) from global military equipment makers of nearly Rs.1,200 billion up to 2011 and the biggest orders will come from local sourcing in a purchase of 126 fighter aircraft, which is estimated to cost Rs.420 billion. Considering its first mover advantage and its past track record (execution of projects for clients such as Airbus, Bombardier, Honeywell, Martin Baker, HAL, ISRO, IAF and DRDO), TCS is well placed to participate in such defense-offset deals.

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**GDM combines the benefits of onsite and multi location offshore centers**  
 ”

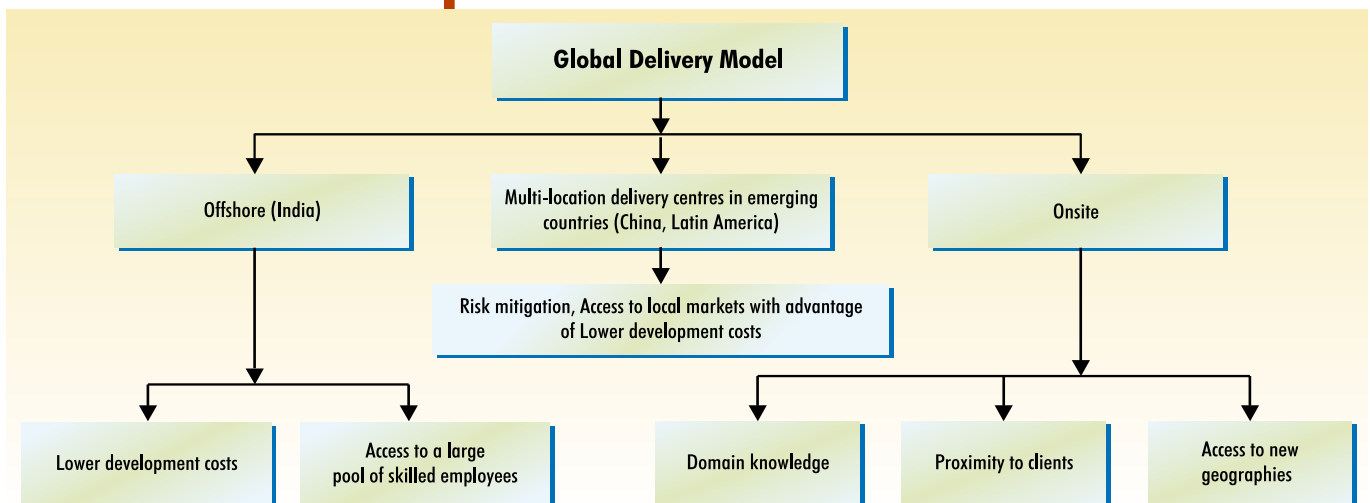
### Global Delivery Model (GDM)

‘GDM’ means the delivery of IT services using multiple locations in such a manner that cost-effectiveness and quality are optimized. GDM tries to achieve a perfect balance of quality, cost savings and localization by executing components of an IT project in various parts of the world.

The essential functions of GDM include:

- **Onsite** - these are operations performed at the site of the client
- **Offshore** - these include operations performed away from the client’s site, generally from low-cost countries
- **Multi-location delivery centers** - it is important to have a multi-location offshore presence in order to mitigate risks associated with a single location delivery center and to ensure continuity of the business process.
- **Front end** - these include marketing and sales functions carried out in the client’s country in order to obtain repeat business orders and to seek new clients.

For a GDM to be successful it is important to establish the right structure and thus have the right mix of onsite, front-end and offshore components. Delivery centers and their role in TCS’s GDM are depicted below: -



“  
**Growth in World-wide IT spend is expected to be led by emerging countries**  
 ”

### Expansion in emerging offshore destinations

- Among all the geographies, Asia-Pacific is estimated to lead the growth in IT spending followed by America and Europe, Middle East & Africa (EMEA). Within Asia-Pacific, the growth is expected to come from India and China and in America growth will come from Latin American countries.

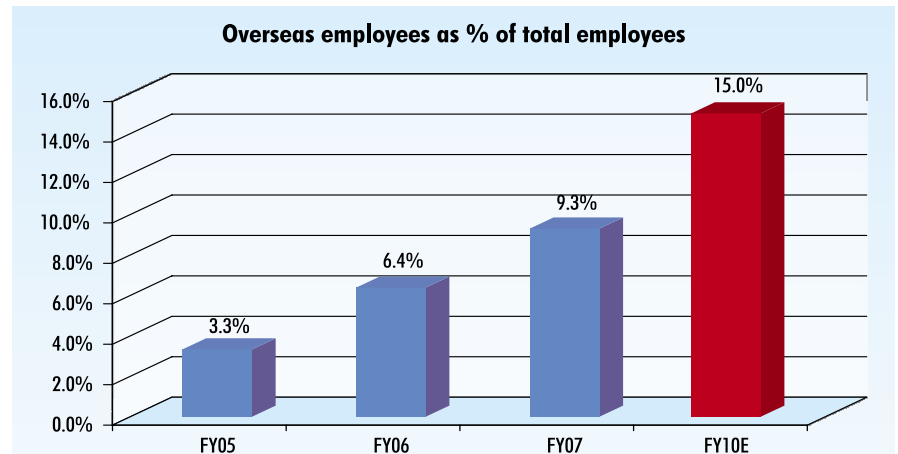
Worldwide ITES and IT services spend region wise							
(USD Bn)	2004	2005	2006	2007	2008E	2009E	CAGR
America	455	491	531	575	623	680	8.3%
EMEA	241	256	274	293	314	337	6.9%
Asia-Pacific	105	117	131	145	162	182	11.6%
World Total	801	863	936	1013	1100	1198	8.4%

(Source: CRIS INFAC, IDC)

- To take twin advantage of relatively higher growth in developing countries and benefits of global delivery model, TCS is expanding its employee base in delivery centers in other emerging offshore destinations such as China and Latin American countries. About 9.3% of TCS’s workforce is non-Indian. This is expected to go up to 15 per cent over the next three years.

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TCS plans to increase its overseas employee base to 15% in next 3 years to take advantage of GDM  
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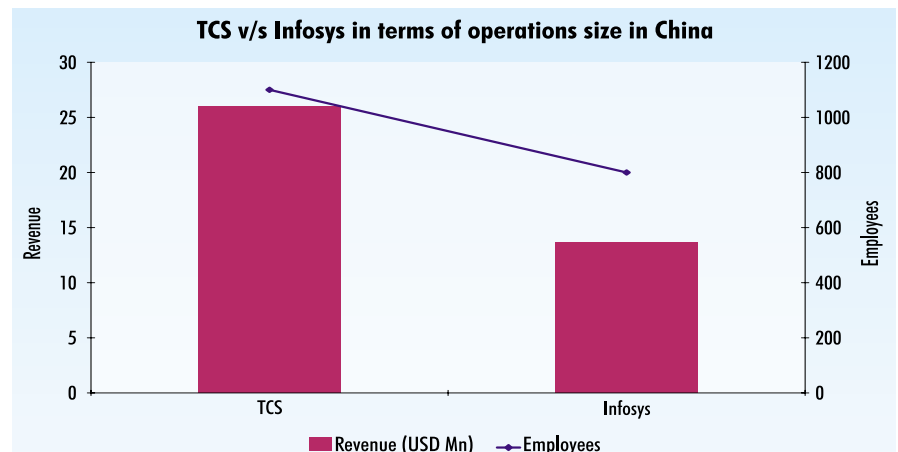
“  
Among peers, TCS has first mover advantage in Chinese IT market  
”



(Source: Company)

- In China, TCS has entered into Joint Venture (JV) with 3 Chinese parties (Beijing Zhongguancun Software Park Development Company, Uniware Company and Tianjin Huayuan Software Area Construction and Development Company), which are supported by National Development and Reforms Commission (NDRC)- a Chinese government organization. TCS stake in JV is 72.22%, whereas that of Chinese parties is 27.78%. JV has entered into agreement with Microsoft, as a result Microsoft will join the JV by March 2008 and its stake will be 10%. The share of TCS will come down to 65% after the entry of Microsoft in JV.

At present the employee strength of the JV is 1,100 plus (92% local recruits), which it plans to increase to 5,000 people by FY11. Whereas in revenue terms, the Company expects to touch \$ 35 mn in FY08. TCS has headstart against other Indian IT players in China, in terms of both revenues and employee strength.



(Source: Company)

Company's Chinese operations serve both local customers (i.e. Chinese companies) as well as global clients, share of which is 50:50. Some of its major win from Chinese market includes \$100 mn deal from Bank of China- to provide IT solutions.

- Other emerging destinations where TCS is expanding its delivery centers include Latin American countries. At present, in Latin America, its employee strength is 5,000 (95% is local recruit), which TCS plans to increase to 10,000 people in next 3 years.

Most of the clients served from these centers are local customers (~70% of the total client served). Local presence has enabled it to win some of the large deals that are: -

“  
**Strong presence in Latin America has enabled TCS to win some key local contracts**  
 ”

1. Bank of Pichincha- \$140 mn.
2. Social Security Institute of Mexico-\$200 mn.
3. Civil registry for Chile’s Department of Justice-\$69 mn.

### Focus on Indian market

Indian IT market is one of the fastest growing markets in the world in terms of IT spend. Going forward, also it is estimated to outpace the growth in worldwide IT spends by around 3 times.

(In USD Bn)	FY03	FY07	CAGR % (FY03-FY07)	FY11E	CAGR % (FY07-FY011E)
Indian IT services spend	2.4	5.6	23.6%	10	15.6%
World-wide IT services spend	350	470	7.6%	588.9	5.8%

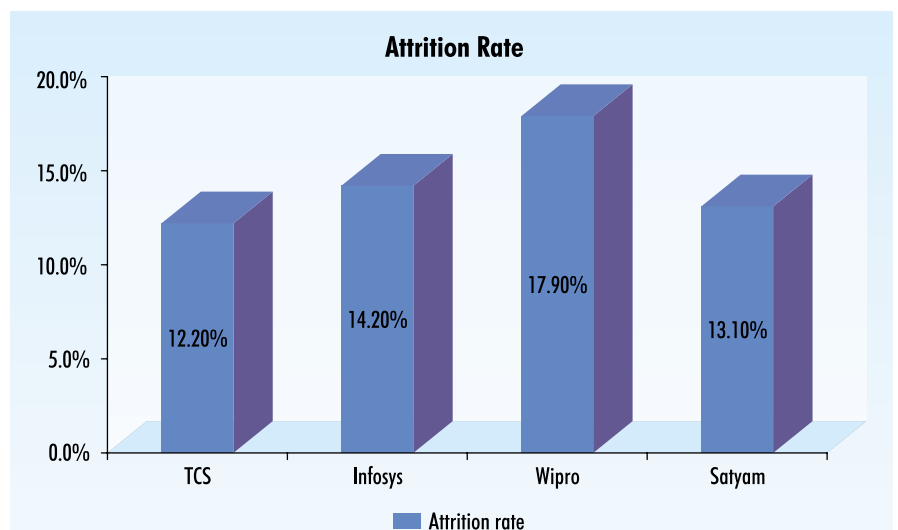
(Source: CRIS INFAC)

TCS’s revenue from India is 9% of its total revenue (9M FY08). With the increase in total size of Indian IT market, which is growing at a faster rate than that of Global market, TCS is targeting to double its revenue from India within next 18 months. TCS expects growth to come from government and BFSI verticals where it enjoys leadership position. In government vertical it commands 32% market share and in BFSI, it is serving India’s largest bank i.e. SBI and its associates.

### Talent pool management

IT service industry being human resource intensive; ability of company to attract, retain and impart training in new technologies to employees, are key factors as it provides the certainty in respect of delivering the agreed level of services (in terms of quality) to clients.

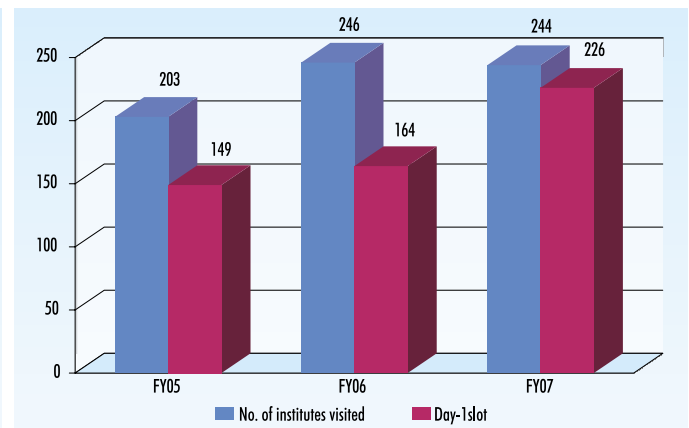
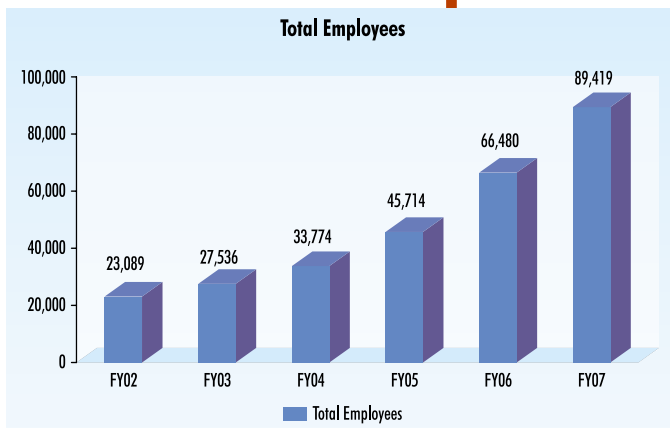
TCS is considered to have one of the best human resources policies in Indian IT industry enabling it to win for four consecutive years i.e. from 2004 to 2007 the Dataquest award for the ‘Best Employer in the Indian IT industry’. This is also reflected from the lowest attrition rate of employees of TCS among tier I Indian IT companies.



(Source: Company)

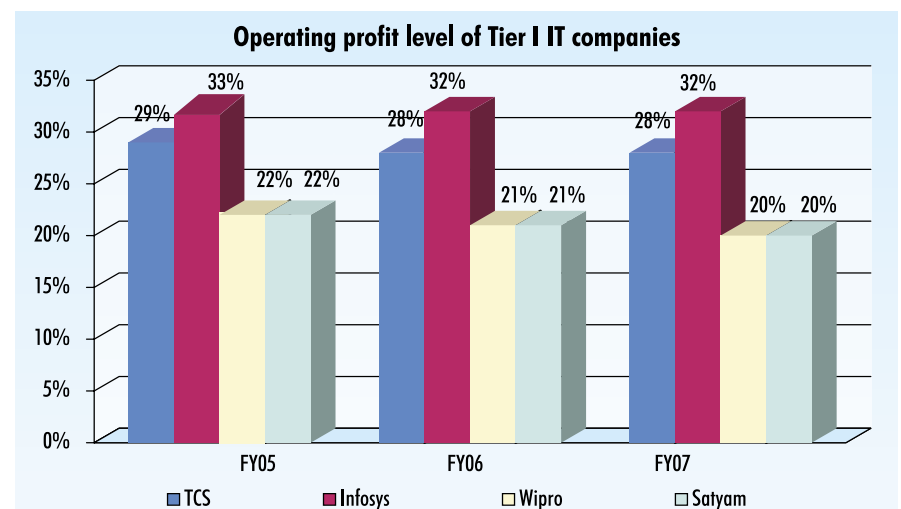
TCS has set up training facility in India as well as outside India (U.S., China, Hungary and Uruguay), having the capacity to train 20,000 plus employees per annum. This enables it to recruit the talent from higher number of institutions to meet its need of

talent pool, while ensuring the required skill level of employees by providing initial learning and induction program. The quality of its training program can be gauged from the fact that TCS has tied up with Vietnamese government for training the students in Vietnam and it's in talk with Singapore government for the same purpose. Along with the increase in number of institute TCS visits, the number of institutes in which it has able to fill its slot on day one itself has increased -corroborating its status as preferred employer on campuses.



(Source: Company)

TCS has been able to manage the talent pool efficiently, which can be seen from its operating profit level as compared to other tier I IT players in the chart given below. One of the reasons for its higher margins is its ability to retain the people leading to lower recruitment & training cost and number of people required on the bench (i.e. not assigned any project) to face attrition problem.



(Source: Company)

### Innovation

TCS has setup around 20 labs globally that are dedicated to R&D in diverse areas. These include software engineering, bio-informatics, business systems, embedded systems, convergence technologies, mobile computing, security and technologies like grid computing and flexible software. Till date, TCS has 100 patents registered in its name. In its Feb 2008-Analyst meet, management unveiled a new automation tool which automates code generation to the extent of ¾ in case of simple projects and in case of complex projects (such as MCA-21 for Government of India) to the extent of 1/5. For this tool, TCS has been granted provisional patent. Besides TCS, no other

“  
Till date, TCS has 100 patents  
registered in its name  
”

company globally has such tool, however companies such as Coghead, Jotspot and Salesforce.com are working on beta version of the same. TCS has worked on this project for around 3 years and expects that this will provide it competitive advantage in bidding projects going forward.

### Foreign exchange risk hedging policy

Indian Rupee (INR) has gained against US Dollar (USD) by 11.5% in 9M FY08 against 9M FY07 (on daily average basis). The same has impacted the revenue of IT companies, which depends on the U.S. geography for more than 50% of its revenue. In order to hedge the risk of volatility in foreign exchange and resultant impact on earnings, IT companies use derivative instrument such as forwards and futures.

TCS covers its net exposure in foreign exchange i.e. difference between foreign exchange earnings and expenses for 12 months and also part of the net exposure for next couple of years. At end of Q3 FY08, TCS had \$3.1 billion outstanding in hedges.

### Hedges outstanding as on 31-Dec-2007-currency wise

Currency	Amount (In Mn)
US Dollar	2,739
British Pound	80
Euro	122

(Source: Company)

Among the tier I IT companies TCS has been benefited the most in 9M FY08 from its hedging policy for foreign exchange earnings. Hedging has resulted in an income of Rs. 2378 Mn in 9M FY08 that is 1.4% of the revenue in the same period.

### Benefits resulting from foreign exchange risk hedging for Tier I IT companies

(Rs. In Mn)	Exchange gain		Exchange gain as % of revenue	
	9 Mths FY07	9 Mths FY08	9 Mths FY07	9 Mths FY08
TCS	441.1	2377.9	0.33%	1.42%
Infosys	430	570	0.42%	0.47%
Wipro	-198	-67	-0.19%	-0.05%
Satyam	78.9	326.6	0.18%	0.56%
Exchange rate movement (depreciation)/appreciation (INR/USD)	-3.1%	11.5%		

(Source: Company)

“  
Value of deals currently in pipeline, is 2.5 times of Q3 FY07  
”

### Project pipeline

The positive impact of its global delivery model, focus on emerging service lines and R&D efforts have led to the significant increase in number of large deals (\$50 mn plus) and overall value of deals in pipeline (deals that are in final negotiation stage). The value of deals in pipeline at the end of Q3 FY08 is 2.5 times more than that of at the end of Q3 FY07. For the U.S. geography, the value of deal in pipeline has increased by ~1.8 times, whereas that for Europe and Rest of World (ROW) is more than the Company's average of 2.5 times (Source:- Company).

Pipeline	Current	End of Q3 FY08	End of Q3 FY07
Number of deals (\$50 Mn plus)	30	25	19

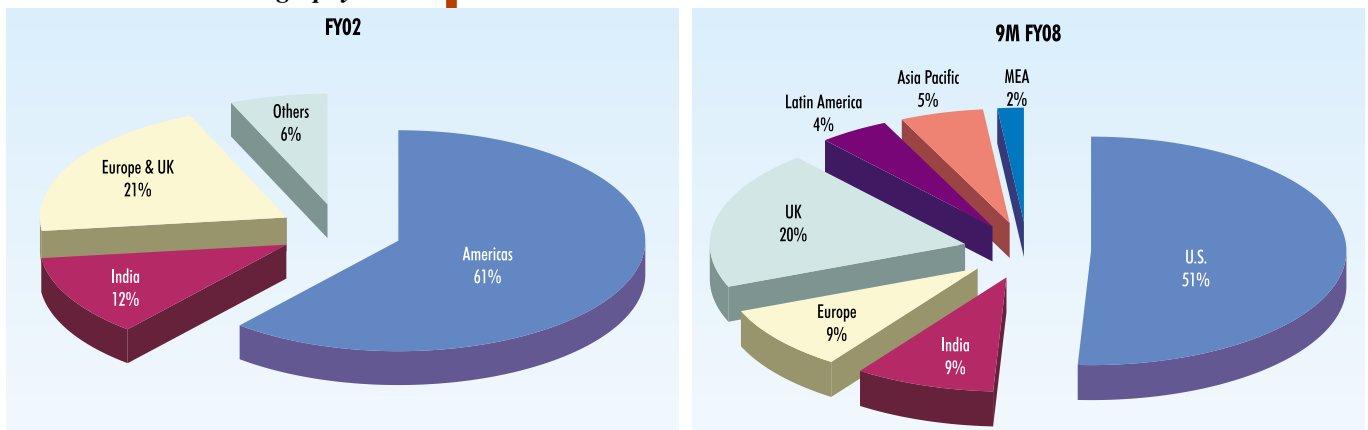
(Source: Company)

### Concerns

#### 1. Geography concentration

Geography wise, major portion of the total revenue for TCS comes from the U.S. i.e. 49.5% in Q3 FY08. Although among the top 4 Indian IT companies, share of America in total revenues is lowest for TCS, it is susceptible to adverse economic conditions and events that may unfold in the U.S. However to counter this, management is actively pursuing clients in Continental Europe, UK, Asia Pacific, Middle East & Africa (MEA) and Latin America and thereby share of the US based customers has reduced from 61.1% in FY02 (including revenue from Latin American countries) to 50.9% in 9M FY08.

TCS's Revenue-Geography wise

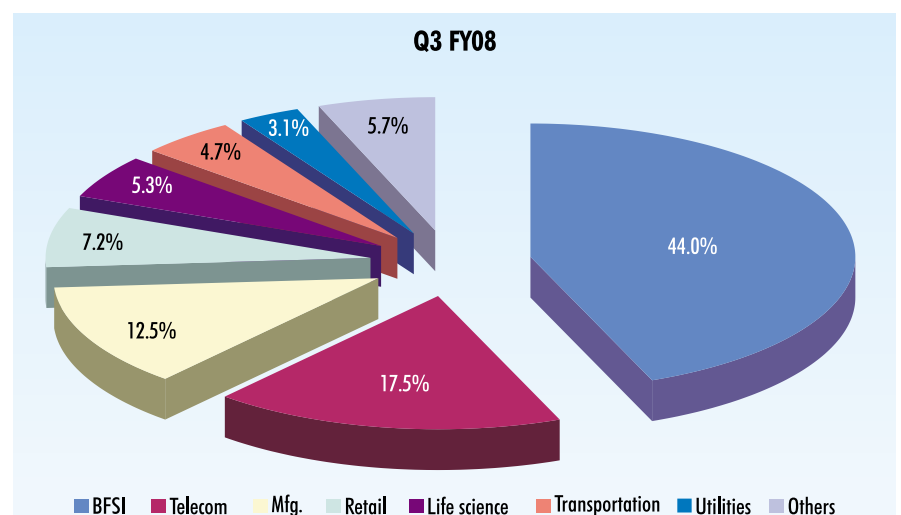


(Source: Company)

#### 2. Vertical concentration

Vertically (i.e. industry-wise), TCS is dependent on Banking, Financial Services & Insurance (BFSI) sector for major portion of its total revenue, followed by Telecom, manufacturing, retail, life science, transportation, utilities and others.

TCS's Revenue-Industry wise



(Source: Company)

Due to credit market losses in U.S., there is growing apprehension that financial companies will cut IT spending in CY08. TCS also has reported that its two wall-street based clients have indicated reduction in IT budget for 2008. Considering these two BFSI clients, as per TCS's management 1/3rd of total revenue from BFSI segment is subject to discretion of client and rest is non-discretionary type of revenue.

### 3. Wage inflation

Due to mismatch between the demand and supply for skilled IT professionals, the competition for hiring and retaining IT personnel is intense. Therefore in order to attract and retain such personnel, management may have to offer higher incentives as compared to its competitors, which will directly impact its profitability.

### 4. Foreign exchange fluctuation risk

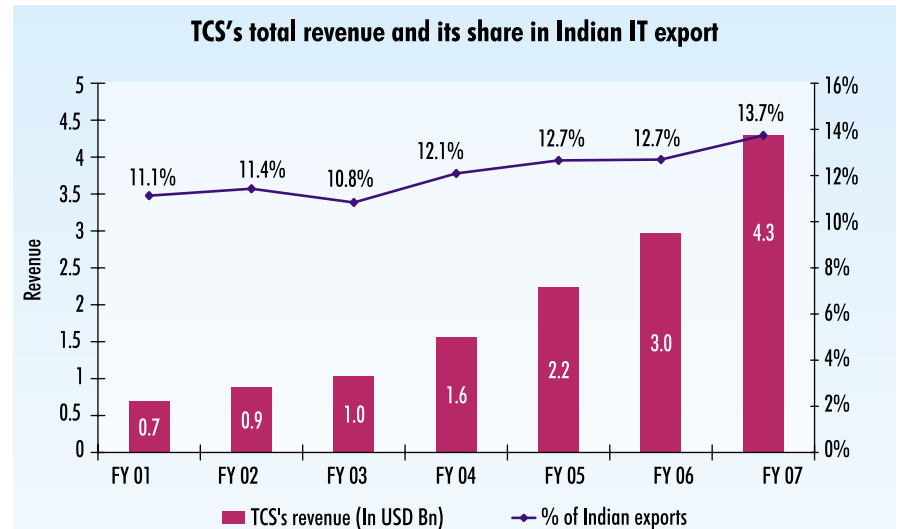
As over 91% of TCS's revenue comes from export, it is exposed to currency fluctuations, which directly impacts its profit margin to the extent of 35 bps for each percentage appreciation of the rupee. In current fiscal year, inspite of unprecedented appreciation of INR against major global currency management has been able to moderate the negative impact of INR appreciation through hedging. However, if INR continues to appreciate significantly going forward, it will have negative impact on company's performance.

Foreign exchange gain/ (losses) in 9M FY08	
Effect of Currency Fluctuations	(INR Mn)
On Operating Profit	-1,982
On Other Income	-487
Total	-2,469
Gains from Hedging	
In Operating Profit	900
In Other Income	2,378
Total	3,278
Net Impact	809
(Source: Company)	



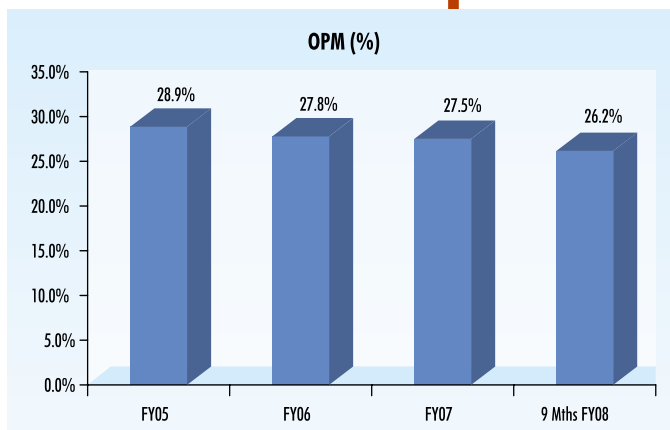
### FINANCIALS

- TCS's revenue grew at a CAGR of 35.7% whereas Indian IT-BPO export grew at a CAGR of 31% over the period of FY01 to FY07. As a result, TCS's share in Indian IT-BPO export grew from 11.1% in FY01 to 13.7% in FY07.

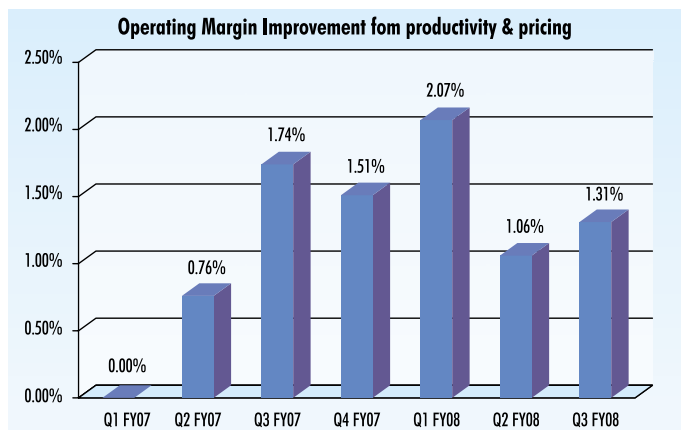


(Source: Company)

- In spite of the unprecedented appreciation of INR against USD in 9M FY08, which had a negative impact of ~300 bps on Operating Profit Margin (OPM), TCS's operating margin has come down only by 100 bps on Y-o-Y basis (including the impact of wage inflation). The major operating levers that came to its aid are increase in productivity & pricing.



(Source: Company)



- Going forward, we have assumed that INR will appreciate by 3% on Y-o-Y basis against USD. Considering the same we expect TCS's revenue to grow at a CAGR of 24% over the period of FY07 - FY10E, on the back of expansion and resultant strong growth in emerging markets and increase in flow of contract to Indian vendors from continental Europe. Whereas, the net profit is expected to grow at a CAGR of 15.2% over the period of FY07 - FY10E mainly due to decline in net margin led by hike of around 10% p.a. in offshore wages and completion of STPI scheme in FY09.

### VALUATION AND RECOMMENDATION

We expect, TCS's revenue to grow at a CAGR of 24% over the period of FY07 - FY10E, considering the strong deal pipeline and high growth in emerging markets. Whereas, net profit is expected to grow at a CAGR of 15.2% over the same period, considering the impact of completion of STPI scheme in FY09. At Current Market Price of Rs. 880 the stock trades at PER of 14.8x and 13.4x its FY09E and FY10E EPS of Rs.59.3 and Rs.65.8, respectively. Considering the trend towards gradual offshore shift in IT budget allocation and TCS's positioning as a leading offshore player, we recommend BUY rating on the stock with a target price of Rs.1053 based on 16x FY10E EPS of Rs 65.8.

Profit and loss statement				INR mn	
	FY06	FY07	FY08E	FY09E	FY10E
<b>Income from Operations</b>					
Information Technology and Consultancy services	124086.8	178066.0	217100.3	268543.1	342315.0
Sale of equipment and software licenses	8553.1	8786.1	11342.4	13724.4	16606.5
<b>Sub-Total</b>	<b>132639.9</b>	<b>186852.1</b>	<b>228442.8</b>	<b>282267.5</b>	<b>358921.4</b>
Other Income (Net)	1138.9	2290.5	4546.5	4485.3	6413.6
<b>Total Income</b>	<b>133778.8</b>	<b>189142.6</b>	<b>232989.3</b>	<b>286752.8</b>	<b>365335.0</b>
<b>Expenditure</b>					
Total Employee Cost	67726.0	99299.0	122583.5	156811.7	206207.5
Other operating expenses	28070.9	36164.6	45343.5	54467.2	66911.1
<b>Total Expenditure</b>	<b>95796.9</b>	<b>135463.6</b>	<b>167927.0</b>	<b>211279.0</b>	<b>273118.7</b>
<b>EBITDA</b>	<b>37981.9</b>	<b>53679.0</b>	<b>65062.2</b>	<b>75473.8</b>	<b>92216.3</b>
Interest	91.4	94.5	307.0	307.0	307.0
Depreciation	2824.3	4401.7	5556.3	6933.1	8805.7
<b>Profit before Taxes</b>	<b>35066.2</b>	<b>49182.8</b>	<b>59199.0</b>	<b>68233.7</b>	<b>83103.7</b>
<b>Provision for Taxes</b>					
Income tax expense	4872.5	6441.0	7344.1	9627.7	18102.4
Fringe benefit tax	223.2	198.6	242.6	279.0	320.8
Profit before minority Interest and share of profit of associate	29970.5	42543.2	51612.3	58327.0	64680.4
<b>Net Profit</b>	<b>29667.4</b>	<b>42126.3</b>	<b>51314.1</b>	<b>58028.8</b>	<b>64382.2</b>

(Source: ACMIL Research, Company)

## Ratios

Particulars	FY06	FY07	FY08E	FY09E	FY10E
<b>Profitability Ratios</b>					
Operating profit margin (%)	27.8%	27.5%	26.5%	25.1%	23.9%
EBITDA Margin (%)	28.6%	28.7%	28.5%	26.7%	25.7%
PAT Margin (%)	22.4%	22.5%	22.5%	20.6%	17.9%
RONW (%)	49.5%	47.6%	41.1%	34.5%	29.6%
ROCE (%)	57.5%	52.7%	46.0%	39.7%	37.6%
<b>Per Share</b>					
Adjusted Earnings (Rs.)	30.3	43.0	52.4	59.3	65.8
<b>Capital Structure Ratios</b>					
Debt/Equity	0.02	0.06	0.04	0.03	0.02
Current Ratio	2.2	2.2	2.5	2.5	2.7
<b>Turnover Ratios</b>					
Debtors Turnover (x)	4.1	4.3	4.4	4.4	4.4
Fixed Asset Turnover (x)	2.1	1.9	1.7	1.6	1.6
<b>Growth Ratios</b>					
Revenue	36.1%	40.9%	22.3%	23.6%	27.2%
EBITDA	35.3%	41.3%	21.2%	16.0%	22.2%
Net profit	33.1%	42.0%	21.8%	13.1%	10.9%

(Source: ACMIL Research, Company)

Balance sheet				INR mn	
	FY06	FY07	FY08E	FY09E	FY10E
<b>SOURCES OF FUNDS:</b>					
Share Capital	489.3	978.6	978.6	978.6	978.6
Reserves and Surplus	59498.8	87522.4	123952.6	167097.5	216595.9
<b>Shareholders fund</b>	<b>59988.1</b>	<b>88501.0</b>	<b>124931.2</b>	<b>168076.1</b>	<b>217574.5</b>
<b>Minority interest</b>	<b>1647.2</b>	<b>2118</b>	<b>2010.1</b>	<b>2041.1</b>	<b>2072.2</b>
<b>LOAN FUNDS</b>					
Secured Loans	860.7	630.9	222.3	222.3	222.3
Unsecured Loans	306.2	4436.6	4225.7	4225.7	4225.7
<b>Total debt</b>	<b>1166.9</b>	<b>5067.5</b>	<b>4448.0</b>	<b>4448.0</b>	<b>4448.0</b>
<b>Deferred tax liability (net)</b>	<b>472.6</b>	<b>717</b>	<b>1141.3</b>	<b>1141.3</b>	<b>1141.3</b>
<b>FUNDS EMPLOYED</b>	<b>63274.8</b>	<b>96403.5</b>	<b>132530.6</b>	<b>175706.5</b>	<b>225235.9</b>
<b>APPLICATION OF FUNDS:</b>					
<b>ASSETS</b>					
Gross Block	19510.4	31977.1	39529.0	49749.8	63186.6
Less: - Accumulated Depreciation	6619.1	10791.6	16347.8	23280.9	32086.6
<b>Net Block</b>	<b>12891.3</b>	<b>21185.5</b>	<b>23181.2</b>	<b>26468.8</b>	<b>31100.0</b>
Capital Work-in-Progress	7089.6	7930.4	9865.1	13436.86	12093.1
	<b>19980.9</b>	<b>29115.9</b>	<b>33046.3</b>	<b>39905.7</b>	<b>43193.2</b>
Goodwill	7339.0	10683.4	11971.4	11971.4	11971.4
Investments	7046.2	12568.7	25684.5	46742.0	64071.3
Deferred tax asset (net)	236.9	724.4	1285.6	1285.6	1285.6
<b>Current assets</b>	<b>51652.8</b>	<b>78769.1</b>	<b>101722.6</b>	<b>126239.2</b>	<b>167708.9</b>
Current Liabilities & provisions	22981.0	35458.0	41179.8	50437.4	62994.5
<b>Net current asset</b>	<b>28671.8</b>	<b>43311.1</b>	<b>60542.8</b>	<b>75801.7</b>	<b>104714.3</b>
<b>FUNDS UTILIZED</b>	<b>63274.8</b>	<b>96403.5</b>	<b>132530.6</b>	<b>175706.5</b>	<b>225235.9</b>

(Source: ACMIIL Research, Company)

Cash flow statement				INR mn	
	FY06	FY07	FY08E	FY09E	FY10E
Profit before taxes	35066.2	49182.8	59199	68233.7	83103.6
Operating Profit before working capital changes	37726.2	51754.4	60208.7	70681.5	85495.7
Cash generated from operations	30851	41138.4	46090.0	60909.0	72240.3
Taxes paid	-5968.5	-6419.7	-7760.0	-9906.7	-18423.2
<b>Net cash provided by operating activities</b>	<b>24882.5</b>	<b>34718.7</b>	<b>38330.1</b>	<b>51002.2</b>	<b>53817.1</b>
Net cash used in investing activities	-14357.0	-18136.0	-19288.0	-30341	-22984.7
Net cash used in financing activities	-9167.5	-6868.2	-15934.0	-15175	-15175.2
Net increase in cash and cash equivalents	1358.1	9714.1	3108.3	5486.4	15657.2
<b>Cash and cash equivalents at beginning of the year</b>	<b>2746.9</b>	<b>4323.8</b>	<b>13964.5</b>	<b>17072.8</b>	<b>22559.2</b>
Adjustment as on April 1, 2005 consequent to amalgamation of Tata Infotech	181.6	-	-	-	-
Exchange difference on translation of foreign currency cash and cash equivalents	37.2	-73.4	-	-	-
<b>Cash and cash equivalents at end of the year</b>	<b>4323.8</b>	<b>13964.5</b>	<b>17072.8</b>	<b>22559.2</b>	<b>38216.4</b>

(Source: ACMIIL Research, Company)

## Annexure

### 1. Terminology's meaning

#### Service lines

Service lines are the categorization of the various services that fall under the gamut of IT services. Commonly referred to service lines, they include custom application development, systems integration, IT consulting and IS outsourcing.

#### Application

An application or an application program is a technology, system, or product in information technology. It is designed to perform a specific function for the user or, in some cases, for other programs.

#### Business Intelligence (BI)

BI services include development, integration and deployment offerings to implement and optimize an enterprise's BI processes and applications and to integrate related technology applications and platforms.

#### Enterprise Solutions or Enterprise Resource Planning (ERP)

ERP is a term for the broad set of activities supported by multi product application software that helps a manufacturer or other business to manage the important parts of its business including product planning, parts purchasing, maintaining inventories, interaction with suppliers, providing customer service and tracking orders.

#### Platform-based BPO

Platform-based BPO is an underlying application on which transactions (such as claims and mortgage) are processed to deliver the desired benefit for the customer's clientele.

### 2. Evaluation criteria-For Application Outsourcing (Source: Forrester)

CURRENT OFFERING	MARKET PRESENCE	STRATEGY
Technical approach	Customer base	Solution strategy
Engagement approach	Financial performance	Corporate strategy
Functional approach	Engagement profile	
Client reference score		
Complementary capabilities		

### 3. Evaluation criteria-For Infrastructure Outsourcing (Source: Forrester)

CURRENT OFFERING	
Global delivery model	What are the provider's global delivery capabilities? How does the provider's global delivery capability differentiate against competitors'? How does the provider deliver value to clients by leveraging the onshore/near shore/offshore global delivery model?
Geographic staffing distribution	How well distributed is the provider's global infrastructure management workforce?
Staff transfer experience	What is the number of organizations for which the provider has taken over more than 20 employees over the past three years?
Implementation capability	What is the firm's vision, approach, and methodology for implementation and transformation in infrastructure management deals?
Clients on implementation	How do reference clients perceive the provider's ability to implement the deal according to plan and without major disruption?
Clients on account management	How well does the infrastructure management provider manage the business and account management aspects of a sourcing deal?
Clients on service quality	For the services contracted, in general, how well do the provider deliver?
Clients on general satisfaction	How satisfied are clients with the provider's ability to implement deals and transform the delivery environment?

## STRATEGY

Client value proposition and vision	What is the provider's value proposition associated with infrastructure management? How is infrastructure management differentiated against competitors?
Planned enhancements	What new intellectual property (e.g., tools, content, or methods) will the provider develop or implement to improve its infrastructure management capability in the next 24 months? How do these enhancements position the firm for market leadership?
Plans for geographic growth	What are the provider's plans for geographic growth acquisitions, organic growth, and others over the next 24 months that will expand and support the infrastructure management line of business?
Investment to support strategy	What is the estimated percentage of total business unit revenue spent on improvements to improve transition/implementation and transformation capability in the past calendar or fiscal year?

## MARKET PRESENCE

Service market presence	What is the provider's relative overall presence in core infrastructure management lines of service for desktop management, on-site support, data center, managed network, help desk, and mainframe services?
Financial strength	How strong is the provider's overall relative financial position, including revenue and profitability? How strong is the financial performance related to infrastructure outsourcing services?
Client base	What was the total number of IT sourcing clients (separate logo) that the provider had at the end of 2006?
Employees dedicated to infrastructure management	What was the number of employees dedicated to IT infrastructure management services at the end of 2006?
Total employees	What was the total number of employees in the firm at the end of 2006?

#### 4. Classification of ERP service providers (Source: Gartner)

##### Leaders-

Leaders are performing well today, have a clear vision of market direction and are actively building competencies to sustain their leadership position in the market. Leaders can clearly demonstrate and communicate the business value that is added to enterprise client projects. A leader's ability to provide a market-leading vision and applied innovation that lead clients to economically viable competitive advantages with differentiated business values are attributes.

##### Challengers-

Challengers execute well today for the portfolio of work selected, but they have a less-defined view of market direction. Consequently, these service providers may be the 'up and comers' of the future, or they may not be aggressive and proactive enough in preparing for the future. Challengers appear systematically and often compete head-to-head with established brands for deals, but they approach ERP market differently and also apply innovation, therefore challenging established thinking.

#### 5. Offset contracts

India's defence offset policy mandates that foreign contractors source components and systems from local vendors for at least 30% of the value of orders of more than Rs3 billion that they get from the Indian military.

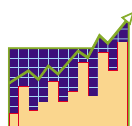
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