Macquarie **Equities Research**





The Asia Specialist

INDIA



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Stock Performance

(% Return)	CY09	CY10	YTD 11
Large Cap			
INFO	133%	34%	-21%
TCS	214%	58%	-8%
WPRO	191%	20%	-18%
HCLT	230%	38%	2%
New initiations			
HEXW	320%	21%	14%
MTCL	194%	19%	-37%
PSYS	na	7%	-21%
NSE IT Index	164%	29%	-18%
Sensex	74%	18%	-13%
Note: Based on stock	price as of 20 Ju	ine 2011	

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Source: Bloomberg, Macquarie Research, June 2011

21 June 2011

Macquarie Capital Securities India (Pvt) Ltd

India IT Services

Mid-cap mantra for growth

Initiate coverage on mid-caps; 3 OP ideas - HEXW top pick

- Time to play catch up. Stock returns from the mid-cap IT group have lagged those of large-cap stocks YTD, but we see an opportunity for a catch-up in performance in 2011 due to strong fundamentals (25-30% top-line growth) and positioning in selected niche value-added segments. We thus initiate on Hexaware (leverage to PeopleSoft implementation), Mindtree (Product Engineering and Testing) and Persistent (OPD) with OP ratings and TPs representing 27-33% upside potential to share prices.
- Comments from tech giants encouraging. A series of disappointing US macro data has dampened investor sentiment on demand. Even so, strength in outsourcing order backlogs at Accenture (23% increase QoQ) plus the strength in new software license sales (up 25% YoY) for both Oracle and SAP point to a healthy pipeline for the outsourcing market. More important, unlike the GFC, the deal flow has not come to a standstill, and smaller ticket size deals should be enough to provide revenue momentum for mid-cap players.

Top-line growth leads to margin expansion and a PER rerate

• We see margin expansion in FY11. With a return of growth and more normal wage hikes, we expect margins this year to expand by 100-400bp. This would represent a significant reversal from FY10, when the mid-cap IT names suffered a double challenge: growth stagnated and investment in sales and wage hikes contributed to margin pressures.

Trickle down effect to augment deal pipeline for Tier2

- Secular growth story...The FY11 performance of large-cap players and the latest sound bytes from the global tech majors have inspired confidence in the secular theme of the Indian IT outsourcing industry.
- ...not translating into broad-based stock outperformance. Despite the return to broad-based growth, mid-cap stock returns have been patchy over the last 30 months. This was due to a less sanguine demand outlook and investor scepticism about margins. We expect these concerns to be alleviated in FY12.
- Look for 3Ps Niche position/profitability/PER. Our stock selection is based on picking winners by screening them on three Ps that we believe are crucial for stock outperformance. Our detailed schematic in Fig 5 screens seven mid-cap names and attempts to answer three questions:
 - ⇒ What is so special about this company? Niche Position
 - ⇒ Margin profile and earnings growth? **Profitability**
 - ⇒ Where is the valuation? *PER* and where it stands vs. history
 - ⇒ Hexaware, Persistent, Mindtree and KPIT screen well on our analysis.

Key risks: Margin headwinds

• Margin key to our thesis. Our investment view of our OP-rated mid-cap stocks emanates from the belief that revenue growth in FY12 could trigger margin expansion vs. the FY11 level. These stocks faced wage inflation and INR appreciation last year, and with robust demand, we think they should be able to reverse the profitability trend seen last year.

Please refer to the important disclosures and analyst certification on inside back cover of this document, or on our website www.macquarie.com.au/disclosures.

India IT Services **Macquarie Research**

Mid-cap mantra for growth

• Information Technology is the way for FY12. We are presenting the Macquarie IT coverage universe spread across large-cap and mid/small-cap companies. We expect this sector to show 28%+ US\$ revenue growth for FY12, with 25-35% US\$ revenue growth for the mid-caps.

Fig 1 Macquarie IT Universe - Snapshot

Name	Ticker	Reco (In	Market Cap US\$ m)	Share price (Rs)	TP (Rs)	FY12E PER (x)	PER	Comr	nents
L arge Cap TCS	TCSIN	ОР	46,508	1069	1,360	20.3	26x		ndustry leading volume growth and excellent margin execution in the last 18 nonths
									High expectations and superb stock outperformance leaves little room for error
									On track to achieve 10% incremental revenues from non-linear initiatives by March, 12
nfosys	INFOIN	OP	34,571	2710	0.050	18.9	26x	• §	Stock has been overpenalised for weak FY12 guidance
					3,650			• F	Retain our OP call and see better returns vs. TCS over next 12 months
								- N	Management changes unlikely to dilute profitability focus
Wipro	WPROI	OP	21,951	402	540	17.2	23x	• H	Hurt by skewed revenue mix and slower response to revival
	N								op deck reshuffle could translate into financial performance with a lag – esting investor patience
								• <i>f</i>	Attrition at higher levels could pose headline risk for the company
HCLT	HCLTI	OP	7,111	465	615	13.7	18x	• (Our preferred pick to play return in discretionary spending
	N							• 9	Strength in infra management and EAS expertise – twin levers of growth
								- \	Ve are 6% and 8% ahead of Street on FY12/13 EPS, respectively
Mid/Small		LID	4.004	405	200	44.0	40		
Mphasis	MPHL IN	UP	1,984	425	380	11.0	10x		Thesis on structural margin weakness playing out
									The pain due to sluggish HP channel may continue for another two quarters
									Consensus still too aggressive; wait for estimates to reset
Rolta	RLTA	OP	440	123	195	5.9	9x	- 1	Niche India IT play with domestic revenues contributing ~60% of revenues
	IN								ndian Defense forces largest client for Rolta
New initia 1 Persistent			these na	mes or 339	า 3Ps (450	Position 10.0	ning, Pr 13x		lity and PER)
Orolotorit	IN	O.	001	000	100	10.0	10%		Niche player in Outsourced Product Development (OPD)
									Stable EBITDA margin profile of early-to-mid 20s.
									FY12 earnings base depressed as tax benefits are set to lapse; forecast 19% earnings growth in FY13
Hexaware		OP	432	66	85	10.4	14x	. §	Strength in PeopleSoft and travel and tourism domain
	IN								EBIT margins to expand from 7% lows in FY08 to 12% in FY12E
								• F	FY12E EPS 3% above Street estimate, stock available at 11x FY12E
Mindtree	MTCL IN	OP	318	355	450	9.5	12x	• 8	Solid credentials in Product Engineering services (PES), with specialization in Bluetooth technologies
								• F	Foray in handset manufacturing behind us, estimate FY13 margins to mprove by 290bps vs FY11
									At 9x FY12E, most attractively valued among peers
Note: Stock	k prices a	as of 20 Ju	ıne 2011					,	,,
Source: Blo					e 2011				

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3 new Outperform ideas: HEXW, MTCL and PSYS

- We initiate coverage on the Indian mid-cap space with OP recommendations on Hexaware, Mindtree and Persistent Systems. Our positive investment view is based on:
 - ⇒ The strength of niche service offerings of each of these players.
 - ⇒ The return of secular demand growth, as evidenced by guidance and the comments of Global Tech players.
 - ⇒ Margin improvement following a return to a normal wage hike cycle and a stable currency.
 - ⇒ Improved profitability is helping these players to narrow the stock performance gap vs. Tier 1 players.

Fig 2 Stock Performance

	Perioriliance	-				
(% Return)	CY06	CY07	CY08	CY09	CY10	YTD 11
Large Cap						
INFO	51%	-21%	-36%	133%	34%	-21%
TCS	44%	-12%	-56%	214%	58%	-8%
WPRO	31%	-13%	-56%	191%	20%	-18%
HCLT	19%	3%	-65%	230%	38%	2%
Mid/Small Cap						
MPHL	102%	2%	-52%	367%	7%	-37%
RLTA	26%	181%	-70%	63%	-21%	-21%
New initiations						
HEXW	51%	-57%	-74%	320%	21%	14%
MTCL	na	-40%	-53%	194%	19%	-37%
PSYS	na	na	na	na	7%	-21%
NSE IT Index	39%	-11%	-54%	164%	29%	-18%
Sensex	50%	46%	-50%	74%	18%	-13%
Note: Based on stock	price as of 20 Jur	ne 2011				
Source: Bloomberg, N	Macquarie Resear	ch, June 2011				

- We provide below a small snapshot of the companies on which we are initiating coverage:
 - ⇒ **Hexaware** (HEXW IN, Mkt Cap: US\$432m, trades: US\$4.1m daily): The company is a specialist in the field of PeopleSoft solutions and has more than 6,000 employees. We initiate with an OP rating and TP of Rs85, implying 28% upside potential.
 - ⇒ **Mindtree** (MTCL IN, Mkt Cap: US\$318m, trades: US\$0.6m daily): Mindtree specializes in the field of testing and Product Engineering services. It has more than 9,500 employees. We initiate with an OP rating and a TP of Rs450, implying 27% upside potential.
 - ⇒ Persistent Systems (PSYS IN, Mkt Cap: US\$301m, trades: US\$0.5m daily: Persistent is another strong player in the Product Engineering Space and has been focused on growing IP-led revenues. It employs more than 6,500 people. We launch coverage with an OP recommendation and assign a TP of Rs450, implying upside potential of 33%.

Top-line growth = >Margin ↑ = >PER re-rating

Trickle down effect. Our FY12 growth forecast for Tier 1 players is 28%+. For our preferred mid-cap picks that we highlight in this report, we are forecasting 25-35% topline US\$ revenue growth. We highlight that new software license sales, a leading indicator of IT Services demand, were up 27% YoY at Oracle and 26% YoY at SAP during the last quarter. In addition, Accenture raised its full-year revenue guidance for FY11 to 11-14% from 8-11%.

- Margin pressures not as acute as last year. Indian IT mid-cap players tightened their belts on expenditures as companies struggled to maintain profits in the face of declining revenues. When the demand tide turned, the push for talent forced these vendors to hand out attractive ~15% wage hikes to its employees. In addition, increased investment in the sales effort resulted in downward margin pressure. With renewed deal flow and a step up in the sales effort behind the companies, we expect margin improvement in FY12.
- Analysing the margin levers in the business. Top-line growth remains the best lever
 available to mid-cap players for augmenting margins. We have also presented an analysis
 of various margin levers in the business onsite/offshore mix, utilisation, pricing in the
 Profitability margin analysis and levers section of this report.

35% 30% 30% 26% 27% 24% 25% 21% 20% 20% 21% 27% 19% 17% 20% 19% 17% 16% 16% 10% 14% 13% 11% 11% 5% 0% FY2013E FY2006 FY2007 FY2008 FY2009 FY2010 FY2011 FY2012E Mindtree —Hexaware —Persistent

Fig 3 FY11 margins suffered double hit from currency and rush for talent

Note: Hexaware has Dec year end.

Source: Company data, Macquarie Research, June 2011

Tier 2 players should play catch-up

• Secular growth story The Tier 1 Indian IT stocks have shown strong, high single-digit volume growth in the past 4-6 quarters. As the IT offshoring market gathers momentum and deal flows return to normalcy, we think Tier 2 Indian vendors should benefit from their strong position in niche areas. Early signs of this are already evident, with the new deal announcements by selected mid-cap players.

Fig 4 Latest deal wins for mid-cap Indian IT companies

	Details	Value
Hexaware		
June, 10	Wins largest contract in history of company for providing IT services for 5 years.	US\$110m
June, 10	Wins contract extension for ERP services for 3 years.	US\$60m
March, 11	Wins multi-year contract from BFSI client	US\$10m per annum
May, 11	Wins IMS deal in Europe for 3 years	US\$25m
Mindtree		
Feb, 11	Wins IMS deal for Telecom client from Europe for 5 years	US\$35m
Feb, 11	Wins IMS deal for BFSI client from USA for 5 years	US\$35m
Persistent		
April,11	Enters into JV with Sprint Nextel	na
Feb, 11	Acquires OPD business in Infospectrum	US\$6m
Source: Com	pany data, Macquarie Research, June 2011	

- ... not translating into broad-based stock outperformance. Scalability of niche service
 offerings, volatile quarterly performance and high operating leverage make money making
 in mid-cap IT universe a tough proposition.
- Look for three Ps: Niche Position/Profitability/PER. Our stock selection is based on picking winners by screening them on the three Ps that we believe are crucial for stock outperformance. Our detailed schematic in Figure 5 screens seven mid-cap names on the three key parameters outlined above. Hexaware, Persistent, Mindtree and KPIT screen well.

Fig 5 Stock selection on 3 Ps – Hexaware, Persistent and Mindtree screen well over mid-cap peers

	HEXW	PSYS	MTCL	INFOE	КРІТ	POL	GEOMETRIC	NUCLEUS
Positioning - Niche offerings					İ		l l	
Service Offerings								
Past 5 year growth								
Profitability - Margin levers								
Top-line growth outlook								
Utilization								
Onsite-Offshore								
PER - Valuation								
Earnings growth								
Balance sheet strength								
Past mutiple band								
Most attractive								
Neutral								
Least attractive								

Source: Macquarie Research, June 2011

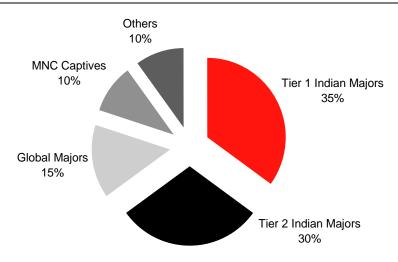
Valuation – Our TPs are based on PER methodology

- Our preferred valuation methodology for the mid-cap IT space is a PER-based approach.
 We believe the volatility in margins and the limited ability to forecast financial trends beyond three years imply that a three-stage DCF model would not be appropriate for valuing these companies.
- Target PER still at significant discount to Tier 1 players. Our target prices for the three players are at a ~50% discount to our target multiples for TCS and Infosys.
 - ⇒ **Hexaware:** We believe the company has the best earnings growth profile in FY12 and a stable management team. Hence, we assign the stock a target PER of 14x.
 - ⇒ **Mindtree:** We recognise that the market is concerned about the top-level exits last quarter. Hence, we assign the stock a target PER of 12x vs. higher multiples for peers.
 - ⇒ **Persistent:** The large jump in tax rates could result in a depressed earnings base in FY12, in our view. Even so, we remain comfortable with our target PER of 13x FY12E, as we think top-line growth should flow down to the net profit level.

Niche position: Space for Tier 2 players exists in Indian IT

Fragmented market space. The Indian IT services sector comprises over 5,000
organizations offering services across a number of verticals and service lines. The provider
landscape consists of large companies, mid-caps, captives and others. A breakdown of
revenues among these players is as follows:

Fig 6 Breakdown of Indian IT Service exports by provider



Source: NASSCOM, Macquarie Research, June 2011

- Need for Tier 2 Players: Vertical Expertise or Service Expertise. As we see it, specialization and differentiation are necessary for the business continuity of mid-sized players. The Indian IT landscape makes survival difficult for companies with generalist offerings and without any sustainable competitive advantage. Our chosen companies Hexaware, Mindtree and Persistent Systems have specializations in Enterprise Resource Planning (ERP), Hi-Tech & Testing domains and Outsourced Product Development (OPD), respectively.
 - ⇒ Vertical Expertise. Tier 2 companies have been successful in developing expertise in a specific client industry or vertical. This is the usual process of how a start-up evolves into a successful mid-sized company. BFSI has been the seed vertical for a lot of Indian IT companies, including I-Flex (later acquired by Oracle and renamed Oracle Financial Services), Polaris and Nucleus. Hi-Tech/Telecom has been the incubator for Sasken, Mindtree and Persistent.
 - ⇒ Service Expertise. Companies have developed distinctive capabilities in specific IT offerings (e.g. Analytics, Business intelligence, ERP) and technologies (e.g. Java, Unix, NET). For example, Hexaware developed competencies in PeopleSoft and ERP software during its early years. Mindtree acquired Aztecsoft in 2008, and acquired testing capabilities for Microsoft products. Persistent has acquired various companies to expand its OPD capabilities.

Role of Tier 2 vendors in a customer's buying strategy

- Traditionally speaking, enterprise buyers work with a number of IT vendors to reduce the concentration of knowledge of systems and the bargaining power of vendors in a bid to avoid overdependence on a small number of vendors. This eco-system makes space for Tier 2 players to provide niche services and offerings to enterprise buyers.
- Alternative to Tier 1 players. Through their aggressive billing rates and pricing models,
 Tier 2 IT vendors also serve as alternatives for tier 1 players due to their agility and
 flexibility arising from their smaller size. Tier 2 players typically tend to be more flexible and
 creative with engagement and contract structures.
- More suited to small/mid-sized buyers. Companies with revenues that are less than US\$5bn can be classified as small/mid-sized buyers. Mid-sized IT companies are more suited to work with these buyers since they are able to give more focus and attention to clients than the large IT service companies. This makes tier 2 IT players suitably "right sized" for mid-sized buyers.
- Tier 2 companies as providers of specialized offerings across industry, services and geographies. Mid-sized IT companies leverage their niche offerings to succeed in the marketplace, where competitors can be up to 10 times larger than they are.
- The figure below shows how global buyers utilize IT service companies in different modes.

Fig 7 Role of Tier 2 IT service companies in buyers' IT portfolios

			Ability of	Tier 2 players	to service
				Mid Size	
	Outsourcing Requirements	Characteristics	Small buyers (< US\$1bn)	buyers (US\$1-5bn)	Large buyers (>US\$5bn)
1.	Staff Augmentation Specialized Support	Mid-caps usually provide access to specific skills, e.g Persistent for OPD, Hexaware for PeopleSoft, etc. Provide flexibility to buyers in manpower management Resources work similar to internal resources Provide resources for specialized and niche skills Typically fixed, long-term contracts			
3.	End to End support	 Provides services across service lines Usually involves high-level sales and management focus 			
4.	Transformation partner	 Companies should reach a particular maturity level Shows track record of able delivery 			
Sou	rce: Everest Group,	Macquarie Research, June 2011			

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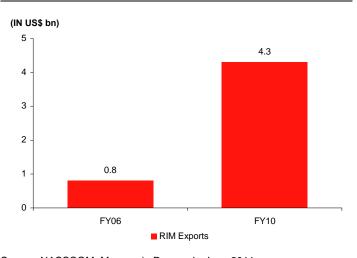
Key niche offerings for Tier 2 players

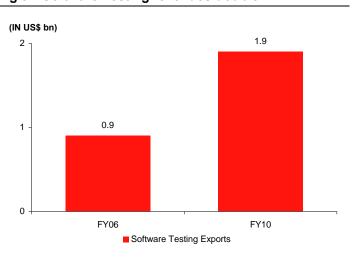
Remote Infrastructure Management (RIM). The RIM segment has emerged as the key growth engine within the IT services segment. Between 2006-10, RIM recorded the fastest growth within IT service offerings at over 50% on a CAGR basis. By 2010, RIM exports had grown by 5x since 2006 to reach US\$4.3bn.

⇒ As of 4Q FY11, Mindtree derives 8% from RIM services.

Fig 8 RIM Exports showing 5x growth since FY06

Fig 9 Software Testing revenues double...





Source: NASSCOM, Macquarie Research, June 2011

Source: NASSCOM, Macquarie Research, June 2011

- Software Testing Services provides scope for niche offerings. The Indian software testing market earned revenues of US\$2.3bn in FY11, up by 24% on a YoY basis. BFSI and Telecom are the main verticals for big players, while smaller players are offering services to niche segments like media and publishing, travel and healthcare. We see great scope for mid-cap players to develop niche, customized testing solutions.
 - ⇒ As of 4Q FY11, Mindtree and Hexaware derive 18% and 9% of revenues, respectively, from testing services.
- Business Intelligence (BI), Data Analytics and Cloud computing. As companies grow and become mature, there is a need for IT systems to lead to the next level of growth. This is provided through intelligent use of existing data to find hidden customer behaviour and to drive sales by trimming the operational cycles within a company. This is achieved by analysis of data generated in the current IT systems.
 - ⇒ As of 4Q FY11, Hexaware derived 10% of revenues from BI services. Persistent Systems plans to achieve 40% of revenues from such growth areas as Cloud computing, mobility, collaboration and analytics.

Favourable results from Tier 1 MNC companies

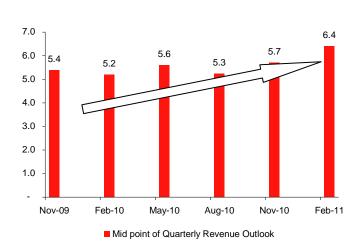
- ACN results: Double-digit growth in outsourcing contracts augurs well. Positive
 comments from Accenture's management on the conference call and a 23% QoQ increase
 in new bookings to US\$3.2bn (vs. US\$2.6bn) should have a positive read-through for the
 Indian IT players. (See Figs 10-11)
- Full year guidance raised at ACN. The company has raised its full year revenue growth target to 11-14% from 8–11%. The positive swing is due to +1% order book growth and +2% impact from currency.
- Oracle Results: Europe surprises. New licence sales were up 27% YoY (America 34% YoY), EMEA (up 20% YoY) and Asia Pac (up 23% YoY) in constant currency terms.
 Specifically, we note the strength of new license sales in Europe.
- SAP results come in strong. New licence revenues grew by 26% YoY (24% at constant currencies) and Services revenue grew by 20%. Furthermore, software and services revenues growth has been guided to increase by 10–14% at constant currencies.
- Accelerated ERP deployments to follow from rising new licence sales. Increased spending in enterprise resource planning (ERP) deployments follows a lag of 6-9 months from new licence sales. We expect a similar uptick in Enterprise Application Services revenues of Indian IT vendors in the next two quarters.

Fig 10 ACN's new outsourcing order book rises...

New orders shows 3.5 3.3 good growth 3.2 3.1 3.0 26 2.5 20 2.0 1.5 1.0 0.5 Feb-11 Nov-09 Feb-10 Aug-10 Nov-10 May-10 Outsourcing New Order Book (In US bn)

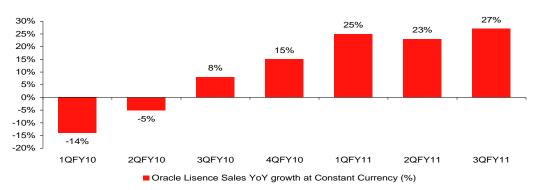
Source: Company data, Macquarie Research, June 2011

Fig 11 ... plus high conviction in next quarter growth



Source: Company data, Macquarie Research, June 2011

Fig 12 ORCL has raised the bar for new licence sales: HEXW should benefit



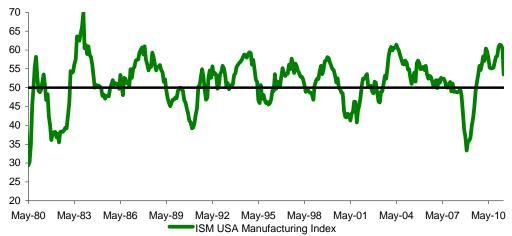
Source: Company data, Macquarie Research, June 2011

US Demand for Indian IT services to continue

• Macquarie US economist Rebecca Hiscock-Croft forecasts US GDP growth at 3.1% for next year. Recent economic data and the tax deal should add to both consumption and business investment growth in FY12, in our view, albeit with a pickup in the latter half of the year.

• ISM Manufacturing Index shows economic expansion. The ISM Manufacturing Index, a purchasing managers' survey, is one of the key measures of business conditions in the US economy. The index is based on responses from individuals within the economy who are actually purchasing goods; thus it provides an insightful view into where the economy is heading. The index is designed so that measures above 50 indicate economic expansion, while those below 50 signal contraction. The index came in at 53.5 in May. For comparison, the 10-year average stands at 51.9.

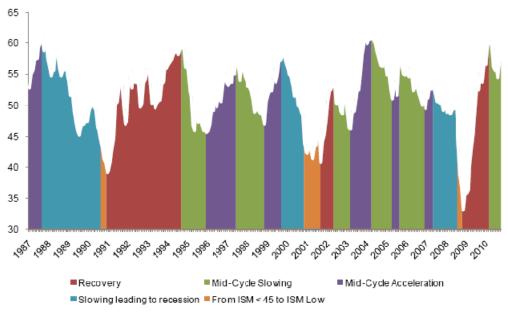
Fig 13 ISM Index at 53.5 in May 2011



Source: ISM, Macquarie Research, June 2011

Indian IT services is the winner from increased US corporate spending. Our
quantitative analysts have forecast the ISM index to be in the mid-cycle acceleration phase
next year as seen in the figure below.

Fig 14 Phases of ISM cycle



Source: ISM, Macquarie Research, June 2011

Historically, hardware and software services stocks outperform the market and are among the top five gainers during this phase (Fig 15). This stock price performance follows positive business momentum for these companies as corporates loosen purse strings to refresh aging corporate software base. This should bode well for Indian IT companies providing software services.

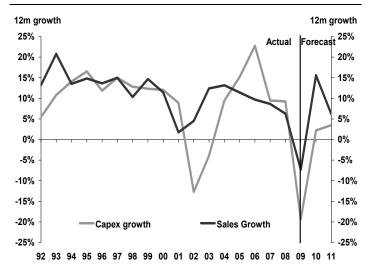
Fig 15 Performance of Russel 1000 Industry groups during ISM cycles

Industry Group	Recovery	Mid-cycle Slowing	Mid-cycle Acceleration	Slowing leading F to Recession	From ISM <45 to ISM Low
Technology Hardware & Equipment	5	9	1	16	17
Telecommunication Services	25	1	ż	14	24
Energy	17	23	3	2	23
Software & Services	11	2	4	20	19
Semiconductors	1	24	5	25	25
Diversified Financials	7	3	6	13	21
Retailing	4	14	7	22	2
Capital Goods	9	17	8	12	16
Market	15	12	9	10	15
Pharma., Blotechnology & Life Sci.	22	4	10	1	3
Transportation	16	6	11	17	18
Materials	8	19	12	11	12
Media	13	13	13	19	20
Banks	10	10	14	23	6
Automobiles & Components	2	25	15	24	22
Insurance	18	16	16	8	5
Consumer Services	3	21	17	18	14
Commercial & Professional Services	21	20	18	9	9
Household & Personal Products	19	7	19	6	11
Food & Staples Retailing	23	11	20	7	8
Health Care Equipment & Services	12	15	21	3	4
Consumer Durables & Apparel	6	22	22	21	7
Food, Beverage & Tobacco	20	18	23	4	1
Utilities	24	5	24	5	10
Real Estate	14	8	25	15	13
Courses Conited IO Manageria De		2011			

Source: Capital IQ, Macquarie Research, June 2011

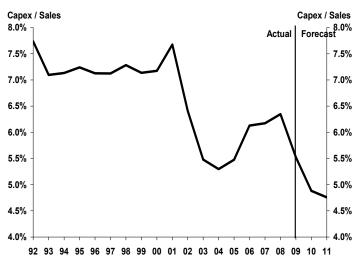
• US capex spending at historical lows. Our US economics team expects a capital expenditure 'catch-up' to provide a solid tailwind for US GDP growth in 2012. Strong US corporate revenues and earnings, increasingly available low-cost capital, depreciated capital bases and low capex/sales ratios will likely lead to increase spending on IT, in our view (Figs 16-17). US firms also have increasingly large cash positions on their balance sheets; for example, US non-financial firms' money market mutual fund holdings more than doubled from US\$300bn in 1Q03 to more than US\$700bn in 4Q08.

Fig 16 Sales growth accelerating ahead of capex forecasts in CY10 and CY11...



Source: Capital IQ, Macquarie Research, June 2011

Fig 17 ...results in forecast S&P 500 capex/sales reaching a 20-year low



Source: Capital IQ, Macquarie Research, June 2011

Profitability - Margin analysis and levers

The revival in the IT services mid-cap stocks is being driven by the twin levers of high US\$ revenue growth and improvement in EPS derived from increased margins stemming from SG&A rationalization, increased off-shoring and utilization, an increased proportion of fixed price projects and containment of employee attrition.

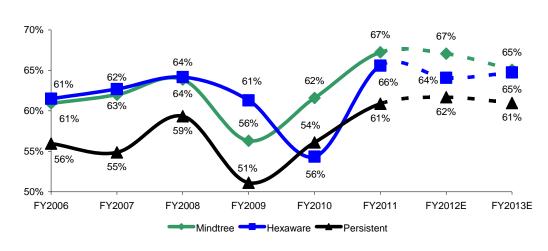
 Hexaware and Mindtree margin improvement should continue, Persistent stable. Our analysis of the margin levers in the business provides us with comfort about the margin trajectory for the companies. We tabulate the key margin levers and how our mid-cap companies fare on them in the figure below.

Fig 18 Margin levers to manage headwinds in FY12

	HCLT	MPHL	Hexaware	Mindtree	Persistent
Volume Growth					
Pricing Power					
Wage Hike Impact					
Ability to manage attrition					
Jtilization					
On-Off ratio					
Currency Impact					
Ability to manage margins					
Source: Macquarie Research,	June 2011				

 Our aggressive assumption on cost of revenues has upside risks on valuations. The largest cost for any IT services company is employee-related expenses. We have tried to have an aggressive assumption on this cost item based on previous upcycles.

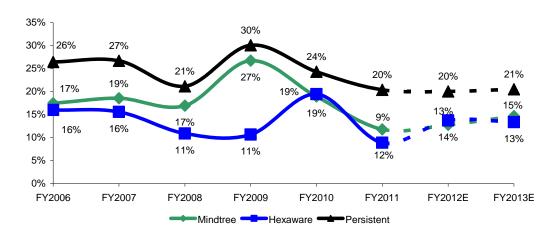
Fig 19 Employee expenses have upside risks to our estimates...



Source: Company data, Macquarie Research, June 2011

EBITDA margins to trend upwards. EBITDA margins for mid-cap companies increased strongly in FY09, due to cost optimizations and SG&A rationalizations brought about by the Global Financial crisis. This pressure from optimization led the FY10-11E margins to decline due to pressure from salary hikes and increased attrition. We expect margins to stabilize and to start inching up in FY12/13E.

Fig 20 EBITDA margin to rise in FY12/13E...



Note: Hexaware is Dec year end.

Source: Company data, Macquarie Research, June 2011

Top clients important for growth for mid-caps. Traditionally, mid-cap IT companies derive half of their revenues from their Top10 clients. These top clients have generally been associated with these companies over a long time period. They tend to view mind-cap companies as an alternative to opening their own captive operations.

Fig 21 Top client concentration

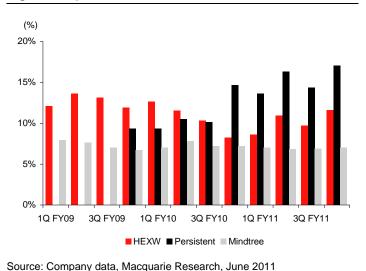
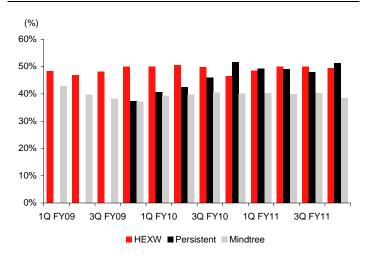


Fig 22 Top 10 client concentration



Source: Company data, Macquarie Research, June 2011

PER – Valuation commentary and PER charts

Macquarie vs. Consensus – biggest delta in Hexaware. Our top-line growth forecasts
for all three players are broadly in line with Street estimates. The difference vs. the Street
is the greatest in the case of Hexaware (8% ahead of the Street in CY11 EPS) and for
Mindtree (7% above the Street for FY13 EPS).

Fig 23 Macquarie vs consensus: Significantly ahead on Hexaware

Hexaware (Year-end December)	CY11E	CY12E
Revenues		
Macquarie	13,666	16,712
Consensus	13,578	16,065
Macq. Above Consensus	0.7%	4.0%
EBITDA		
Macquarie	1,893	2,260
Consensus	1,785	2,196
Macq. Above Consensus	6.1%	2.9%
EPS		
Macquarie	6.37	6.74
Consensus	5.92	6.56
Macq. Above Consensus	7.6%	2.9%
Mindtree (Year-end March)	FY12E	FY13E
Revenues		
Macquarie	17,970	21,548
Consensus	17,816	20,920
Macq. Above Consensus	0.9%	3.0%
EBITDA		
Macquarie	2,300	3,162
Consensus	2,561	3,034
Macq. Above Consensus	-10.2%	4.2%
EPS		
Macquarie	37.26	48.62
Consensus	38.27	45.60
Macq. Above Consensus	-2.6%	6.6%
Mindtree (Year-end March)	FY12E	FY13E
Revenues		
Macquarie	10,034	12,007
Consensus	9,977	12,294
Macq. Above Consensus	0.6%	-2.3%
EBITDA		
Macquarie	2,038	2,465
Consensus	2,047	2,540
Macq. Above Consensus	-0.5%	-2.9%
EPS		
Macquarie	33.82	40.27
Consensus	33.27	41.32
Macq. Above Consensus	1.7%	-2.5%
Source: Bloomberg, Macquarie Research, June 2011		

- Our target PERs for mid-caps still building-in deep discounts to large-caps. We
 believe the stocks could re-rate from these levels, not so much on earnings upgrades, but
 on the re-rating of stocks once the comfort about demand growth and margins increases.
- Demand upcycle to help stocks to re-rate. The mid-cap IT group has traded at an average discount of 42% to the Sensex over the past five years. Given the operating leverage in the business model, volatility in the discount to the broader market is tightly linked to the demand scenario. As a result, we believe that, while analysing the valuation trend, it is more appropriate to look at previous upcycle periods. During a positive demand scenario, the mid-cap pack has traded at an average discount of 20-25%.

Fig 24 Mid-cap PER vs Sensex PER trends

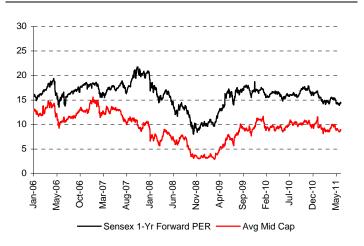
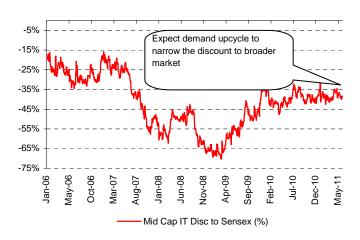


Fig 25 Robust demand and margin expansion to narrow the PER discount



Source: Bloomberg, Macquarie Research, June 2011

Source: Bloomberg, Macquarie Research, June 2011

 Superior business models stand out vs. other mid-cap plays. In analysing the individual PER trends for the mid-cap players, we note that the market seems to have rewarded companies where investors believed in the strength of the niche offerings.

Fig 26 Sensex 1-Yr Forward PER vs Indian IT mid-cap group



Note: Mindtree and Persistent have limited listing history post their IPOs since 2007 and 2010, respectively. Source: Bloomberg, Macquarie Research, June 2011

Macquarie Research

Fig 27 Valuation comparison – Indian IT services

Company name	Bloomberg Ticker	Rec	Market Cap (US\$ m)	Current Price (Icy)	Target Price (Icy)	Up/Down side(%)	EPS FY12E	EPS FY13 E	PER (x) FY12 E	PER (x) FY13 E	RoE (FY11)	EPS CAGR (FY11-13E)
Macquarie Indian IT Serv	ices Coverage	Universe			·	·	·	·				
TCS	TCS IN	OP	46,508	1,069	1,360	27%	52.6	63.4	20.3	16.9	37.6	19.6%
Infosys	INFO IN	OP	34,571	2,710	3,650	35%	143.3	177.9	18.9	15.2	27.1	22.1%
Wipro	WPRO IN	OP	21,951	402	540	34%	23.4	26.5	17.2	15.2	26.5	10.6%
HCL Tech	HCLT IN	OP	7,111	465	615	32%	33.9	42.5	13.7	10.9	21.8	32.9%
Mphasis	MPHL IN	UP	1,984	425	380	-11%	38.5	42.8	11.0	9.9	38.7	3.4%
Rolta	RLTA IN	OP	440	123	195	59%	20.8	24.3	5.9	5.1	16.7	15.8%
Hexaware	HEXW IN	OP	434	66	85	28%	6.4	6.7	10.4	9.9	18.2	53.5%
Mindtree	MTCL IN	OP	318	355	450	27%	37.3	48.6	9.5	7.3	15.3	39.9%
Persistent	PSYS IN	OP	305	339	450	33%	33.8	40.3	10.0	8.4	15.2	6.7%
Indian IT Services												
3i Infotech	III IN	NR	183	43	NR	NR	12.5	9.2	3.4	4.7	23.1	-13.3%
Aptech	APTR IN	NR	97	90	NR	NR	7.3	na	12.4	na	21.7	na
Educomp	EDSL IN	NR	846	397	NR	NR	47.9	76.2	8.3	5.2	17.6	42.1%
Everonn	EEDU IN	NR	215	509	NR	NR	45.4	59.3	11.2	8.6	17.2	32.4%
Infotech	INFTC IN	NR	337	136	NR	NR	13.8	17.4	9.9	7.9	14.3	17.3%
KPIT Cummins	KPIT IN	NR	323	165	NR	NR	14	18.1	11.5	9.1	19.1	24.7%
Mahindra Satyam	SCS IN	NR	2,165	83	NR	NR	5.1	6.6	16.3	12.6	na	50.6%
NIIT	NIIT IN	NR	207	56	NR	NR	6.6	7.8	8.5	7.2	17.4	22.0%
NIIT Tech	NITEC IN	NR	241	183	NR	NR	29.1	33.5	6.3	5.5	27.5	4.4%
Nucleus Software	NCS IN	NR	58	81	NR	NR	12.6	15.4	6.4	5.3	15.0	28.7%
Oracle Financial Services	OFSS IN	NR	4,035	2164	NR	NR	131.5	153.6	16.5	14.1	22.9	12.0%
Patni	PATNI IN	NR	980	329	NR	NR	39.1	41.7	8.4	7.9	18.3	0.3%
Polaris	POL IN	NR	362	164	NR	NR	20.8	24.4	7.9	6.7	21.3	10.7%
Tech Mahindra	TECHM IN	NR	1,878	667	NR	NR	58.1	68.1	11.5	9.8	20.7	11.2%
International IT Services												
Accenture	ACN US	NR	38,652	54	NR	NR	3.2	3.7	16.7	14.8	62.2	6.4%
iGate	IGTE US	NR	869	15	NR	NR	1.5	na	10.2	na	23.6	na
Cap Gemini	CAP FP	NR	5,829	37	NR	NR	2.5	3.0	14.8	12.5	6.6	19.4%
Cognizant	CTSH US	NR	20,662	68	NR	NR	2.9	3.5	23.6	19.5	23.5	17.9%
CSC	CSC US	NR	5,973	39	NR	NR	4.7	5.2	8.2	7.4	10.6	4.5%
Logica PLC	LOG LN	NR	2,068	128	NR	NR	14.9	16.3	8.6	7.9	7.8	16.5%
IBM GS	IBM US	NR	199,872	165	NR	NR	13.2	14.6	12.5	11.3	64.9	12.9%
ВРО												
EXL Service	EXLS US	NR	655	22	NR	NR	1.3	1.5	17.6	15.0	11.7	18.4%
Firstsource	FSOL IN	NR	162	17	NR	NR	2.8	3.6	6.0	4.7	10.6	25.7%
Genpact	G US	NR	3,472	16	NR	NR	0.9	1.0	18.5	16.0	10.6	15.1%
WNS	WNS US	NR	395	9	NR	NR	0.9	1.0	9.8	8.7	3.7	1.3%
Note: Prices as of 20 June				•				_		0.7	0.7	1.070

Note: Prices as of 20 June 2011. Data for not rated companies based on Bloomberg consensus estimates. Coverage of IBM was suspended on 28 Sept 2010.

Source: Bloomberg, Macquarie Research, June 2011

Appendix 1: Overview of Indian IT Industry

• Indian vendors have ample room to grow given their low market share of global IT industry. Indian IT vendors currently have only a 6% market share of the global IT services industry, despite posting very strong top-line growth over the last decade (IT-BPO export revenues from India have grown at a CAGR of ~29% over the last 10 years). The proven business models of these companies (leveraging offshore delivery centres) and the substantial size of the opportunity (an estimated US\$730bn industry) bode well for the growth potential of industry participants, we believe.

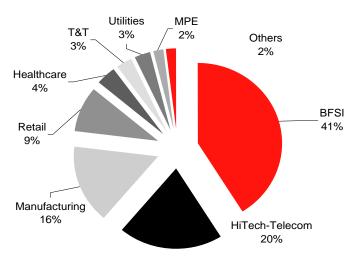
Fig 28 Indian IT service: Significant room for growth at 6% global market share

(US\$bn)	2009	2010	2011E	2012E	2013E	2014E	CAGR - 09-14
Global IT Services Revenues Indian IT Services Revenues India's Market Share	566.1 34.0 6.0%	574.1 36.2 6.3%	594.4 44.4 7.5%	5621.1	651.9	684.1	3.9% 14.3%
Global BPO Revenues Indian BPO Revenues India's Market Share	152.1 12.3 8.9%	158.2 14.7 9.3%	166.7 16.8 10.1%	177.2	188.7	201.9	5.8% 11.1%
Global Package Software, Products, R&D and Engineering Revenues Indian Package Software, Products, R&D and Engineering Revenues	1372.2 12.3	1407.1 12.9	1447.1 14.7	1515.5	1562.1	1611.5	3.3% 9.3%
India's Market Share Source: NASSCOM Strategic Review 2011,	0.9% Macquari	0.9% e Researd	1.0% h, June 2	011			

Indian IT service revenue breakdown by industry

- Banking, financial services and the insurance industry are the largest vertical markets for Indian IT-BPO exports and accounted for over 41% of export revenues in FY10.
- The BFSI segment was hurt by the financial crisis of 2008. The recession led to many banks and financial institutions merging or being amalgamated, which translated into significant merger and acquisition business for Indian IT service vendors in recent quarters.

Fig 29 Vertical breakdown of FY10 Indian IT exports



Source: NASSCOM Strategic Review 2011, Macquarie Research, June 2011

Appendix 2: Operating metrics

High US Exposure bodes well for mid-caps. The stocks initiated in this report have US
exposure in excess of 60% of revenues. This, coupled with high US demand forecast (as
discussed earlier), bodes well for top-line growth for Hexaware, Mindtree and Persistent, in
our view.

Fig 30 Geography Mix

. 19 00 000g.c	.p.i.y iiiiix											
	1Q FY09	2Q FY09	3Q FY09	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11
HEXAWARE												
Americas	62%	64%	68%	66%	65%	65%	67%	69%	66%	67%	70%	66%
Europe	32%	30%	26%	26%	28%	29%	27%	25%	29%	28%	24%	28%
ROW	6%	6%	6%	8%	7%	6%	6%	6%	5%	5%	6%	6%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MINDTREE												
Americas	61%	64%	66%	67%	67%	66%	64%	63%	65%	63%	60%	60%
Europe	24%	21%	20%	17%	20%	21%	18%	19%	17%	18%	19%	22%
India	5%	5%	7%	8%	7%	5%	6%	6%	8%	9%	8%	9%
ROW	10%	10%	7%	8%	6%	8%	11%	12%	11%	10%	12%	9%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MPHASIS												
USA	68%	69%	67%	69%	66%	64%	64%	62%	68%	65%	65%	65%
Europe	19%	19%	22%	20%	20%	20%	21%	20%	18%	18%	18%	17%
Asia Pacific	4%	4%	4%	5%	6%	9%	8%	18%	14%	17%	17%	18%
India & Middle East	9%	8%	7%	6%	8%	7%	7%	na	na	na	na	na
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PERSISTENT												
North Americas	na	na	na	87%	85%	85%	82%	87%	85%	86%	85%	86%
Europe	na	na	na	9%	10%	9%	8%	6%	7%	6%	5%	6%
Asia-Pacific	na	na	na	4%	5%	6%	10%	7%	8%	8%	9%	8%
Total	na	na	na	100%	100%	100%	100%	100%	100%	100%	100%	100%
Source: Company da	ta, Macquai	rie Resear	ch, June 2	011								

• **BFSI** continues to rule the roost. BFSI contributes 41% of the total Indian IT exports. This sector continues to dominate the revenue mix for Hexaware and Mphasis. Mindtree and Persistent are technology-oriented companies that work closely on the research and product development aspect of the technology value chain.

Fig 31 Vertical Mix

	1Q FY09	2Q FY09	3Q FY09	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11
HEXAWARE												
BFSI	40%	39%	41%	42%	40%	42%	42%	41%	37%	36%	37%	34%
TTHL	17%	15%	15%	17%	17%	17%	19%	20%	22%	25%	24%	25%
Emerging Segments	27%	31%	32%	29%	30%	29%	29%	39%	42%	40%	40%	41%
Others	15%	15%	12%	12%	12%	12%	10%	0%	0%	0%	0%	0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MINDTREE												
Manufacturing	19%	21%	21%	14%	13%	13%	12%	13%	14%	14%	15%	16%
BFSI	22%	21%	21%	17%	18%	17%	16%	18%	17%	18%	20%	20%
T & T	16%	16%	16%	11%	15%	14%	13%	14%	13%	13%	12%	12%
R&D Services (RDS)/HiTech	8%	8%	8%	18%	14%	15%	14%	14%	13%	12%	12%	12%
Software Product Engineering (SPE)	21%	21%	21%	30%	29%	30%	28%	26%	27%	26%	24%	24%
MindTree Wireless Products	0%	0%	0%	0%	0%	0%	7%	6%	6%	5%	5%	2%
Others	15%	13%	13%	11%	11%	10%	10%	9%	10%	12%	12%	14%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MPHASIS												
Banking & Financial	40%	44%	43%	39%	40%	41%	44%	39%	44%	42%	na	na
Services	000/	000/	050/	0.40/	000/	000/	4.00/	400/	400/	4.00/		
Technology & OEMs	23%	23%	25%	24%	23%	22%	18%	18%	19%	18%	na	na
Telecom	11%	11%	9%	12%	11%	12%	12%	14%	9%	13%	na	na
Manufacturing & Retail	14%	12%	13%	12%	13%	13%	13%	15%	14%	13%	na	na

Fig 31 Vertical Mix

	1Q FY09	2Q FY09	3Q FY09	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11
Transportation	6%	6%	5%	6%	5%	5%	6%	6%	6%	6%	na	na
Healthcare & Pharma	4%	4%	5%	7%	8%	7%	7%	7%	8%	8%	na	na
TOTAL	98%	100%	100%	100%	100%	100%	100%	99%	100%	100%	na	na
PERSISTENT												
Telecom	na	na	na	21%	24%	25%	23%	20%	19%	20%	23%	21%
Infrastructure and Systems	na	na	na	67%	63%	64%	66%	70%	72%	69%	65%	68%
Life Sciences	na	na	na	12%	13%	11%	11%	10%	10%	11%	12%	11%
Total	na	na	na	100%	100%	100%	100%	100%	100%	100%	100%	100%
Source: Company da	ata, Macquar	ie Researd	h, June 20	11								

• ADM and EAS stand out. Application, Development and Maintenance (ADM) is the mainstay of the Indian IT companies and usually constitutes the major part of the revenues for traditional Indian IT companies. Persistent's work comprises Outsourced Product Development (OPD), which, technically, would not be included under ADM work. We believe Enterprise Application Services (EAS) and Infrastructure Management are going to be the service offerings to watch for in the future.

Fig 32 Service Offerings

	1Q FY09	2Q FY09	3Q FY09	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11
HEXAWARE	-	,		-		,						
ADM	40%	39%	40%	44%	45%	47%	49%	49%	48%	44%	42%	39%
Enterprise	31%	34%	29%	28%	27%	26%	26%	23%	28%	30%	29%	32%
Application Services												
(EAS)												
Testing	16%	14%	16%	13%	14%	11%	10%	11%	8%	7%	9%	9%
BI & Analytics	6%	7%	7%	6%	7%	7%	7%	7%	7%	8%	9%	10%
BPO	5%	5%	6%	7%	7%	7%	7%	7%	7%	7%	6%	6%
Others	2%	1%	1%	1%	1%	2%	1%	3%	2%	4%	5%	5%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MINDTREE												
Development	50%	49%	49%	47%	47%	49%	52%	53%	51%	50%	46%	43%
Maintenance	29%	25%	23%	24%	24%	22%	21%	19%	20%	20%	22%	24%
Consulting & IP	5%	5%	3%	4%	3%	3%	3%	3%	3%	3%	4%	4%
Licensing	070	070	070	470	070	070	070	070	070	070	470	770
Package	5%	5%	4%	4%	4%	4%	4%	5%	4%	3%	3%	3%
Implementation	370	370	770	770	770	770	770	370	770	370	370	370
Testing	6%	14%	18%	19%	18%	18%	17%	17%	17%	18%	18%	18%
Infra Mgmt	5%	4%	3%	3%	4%	4%	4%	4%	5%	6%	8%	8%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MPHASIS												
Application	34%	34%	34%	33%	35%	37%	39%	39%	37%	36%	38%	36%
Maintenance												
Application	30%	30%	31%	31%	29%	27%	29%	30%	27%	28%	26%	26%
Development												
Customer Service	10%	10%	8%	8%	8%	7%	7%	6%	5%	5%	5%	6%
Service / Technical	8%	8%	8%	7%	6%	5%	6%	6%	6%	6%	4%	5%
Help Desk												
Transaction	6%	6%	5%	5%	5%	6%	6%	5%	5%	6%	6%	6%
Processing Service												
Infrastructure	7%	8%	10%	13%	14%	14%	11%	13%	18%	18%	20%	20%
Management												
Services												
Knowledge	4%	4%	4%	3%	3%	3%	2%	2%	2%	1%	1%	1%
Processes												
License Income	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
(Product)	. 70	370	370	570	370	. 70	3 70	570	370	370	370	370
TOTAL	100%	100%	100%	100%	100%	100%	100%	101%	100%	100%	100%	100%
PERSISTENT												
ADM	na	na	na	na	na	na	na	na	na	na	na	na
Others	na	na	na	na	na	na	na	na	na	na	na	na
Source: Company dat	a, Macquar	ie Researd	n, June 20	11								

• High top client concentration. On average, Indian mid-cap companies receive a ~50% contribution from their top 10 clients. This concentration is not a desired state, but it generally is due to these mid-sized companies having one big client along with a few other companies forming the nucleus of the top client list. The top client, who is usually a company that has long-term ties with the company management, contributes ~10-15% of revenues.

Fig 33 Client Metrics

1 19 00 0 110111 111011												
	1Q FY09	2Q FY09	3Q FY09	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11
HEXAWARE												
Top client	12%	14%	13%	12%	13%	12%	10%	8%	9%	11%	10%	12%
Top 5 Clients	33%	31%	33%	34%	34%	35%	35%	32%	34%	37%	38%	38%
Top 10 Clients	48%	47%	48%	50%	50%	51%	50%	47%	49%	50%	50%	50%
\$1 million clients	56	56	56	51	49	47	47	47	49	50	50	49
\$1- \$5 million clients	43	43	43	40	40	38	39	39	40	39	39	39
\$5 - \$10 million clients	9	9	9	7	6	6	4	4	5	7	7	6
\$10 - \$20 million clients	4	4	4	4	3	3	4	4	4	4	2	2
Over \$20 million clients	0	0	0	0	0	0	0	1	0	0	2	2
MINDTREE												
Top Customer	8%	8%	7%	7%	7%	8%	7%	7%	7%	7%	7%	7%
Top 5 Customers	28%	26%	26%	25%	26%	27%	28%	28%	27%	26%	26%	25%
Top 10 Customers	43%	40%	38%	37%	39%	40%	41%	40%	40%	40%	40%	39%
Fortune 500 accounts	37	41	41	37	32	37	40	40	39	45	48	48
Repeat Business	98%	99%	100%	99%	99%	99%	98%	99%	99%	99%	98%	98%
DSO	86	83	79	70	86	70	65	68	68	76	0.68	0.7
Number of active clients	196	268	260	261	239	243	253	258	261	261	269	277
New client added	20	27	22	22	18	24	35	27	31	21	30	39
Total million dollar Clients	48	60	60	64	60	59	58	60	62	64	63	67
No of \$1 million clients	8	12	13	13	12	11	13	13	13	14	14	14
No of \$5 million clients	2	4	3	3	3	4	5	5	5	5	5	6
No of \$10 million clients	0	0	0	0	0	0	0	0	0	0	0	0
	_					-			-	-		-
MPHASIS	11%	4.50/	450/	14%	4.40/	100/	12%	440/	440/	100/	4.00/	10%
Top Client Top 5 Clients	31%	15% 33%	15% 36%	31%	14% 34%	12% 30%	31%	11% 30%	11% 29%	10% 28%	10% 29%	28%
•												
Top 10 Clients	45%	48%	50%	43%	48%	45%	44%	45%	45%	45%	44%	44%
\$ 1 million Revenues Direct	96 0	94 0	95	109	106	106	105 35	106	109 34	115 37	119 39	119
	_		0	na	0	0		35		78		41 78
HP Channel	0	0 32	0	0 34	0	0	70	71	75 20		80	
\$ 5 million Revenues	32		31	_	33	39	34	37	39	38	38	39
Direct HP Channel	0	0	0	na	0	0	12 22	12	11 28	10 28	12	12
	0	0	0	0	0	0		25			26	27
\$ 10 million Revenues	17	18	21	22	23	23	22	22	22	23	22	25
Direct	0	0	0	na	0	0	9	9	9	9	8	10
HP Channel	0	0 8	0	0 6	0	0	13	13	13	14	14	15
\$ 20 million Revenues	7		7	_	9	11	9	11	13	14	14	14
Direct	0	0	0	na	0	0	2	2	3	3	4	4
HP Channel Receivables Days	0 78	0 83	0 43	0 40	0 75	0 72	7 77	9 76	10 76	11 83	10 94	10 89
ŕ	70	03	43	40	75	12	77	70	70	03	34	09
PERSISTENT												
Top 1	na	na	na	9%	9%	10%	10%	15%	14%	16%	14%	17%
Top 5	na	na	na	26%	28%	30%	34%	41%	38%	38%	37%	39%
Top 10	na	na	na	37%	41%	42%	46%	52%	49%	49%	48%	51%
Large > \$ 3Mn	na	na	na	7	7	7	8	8	9	9	9	9
Medium > \$ 1Mn, < \$ 3Mn	na	na	na	19	18	15	19	23	22	21	29	26
Small Upto \$ 1 Mn	na	na	na	271	185	174	168	164	165	171	169	194
Total	na	na	na	297	210	1961	95	195	196	201	207	229
Source: Company data, M	/lacquar	ie Researc	h, June 20	11								

 High on-off ratio. Indian mid-cap companies have a ~80% offshore ratio. This kind of skew is due to a big client driving cost efficiencies in these companies. In other words, for the large clients, the mid-cap companies act like small captive centres.

Fig 34 Onsite - Offsite concentration

	1Q FY09	2Q FY09	3Q FY09	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11
HEXAWARE				-		-						
Onsite	na	na	na	na	na	na	na	na	na	na	na	na
Offshore	na	na	na	na	na	na	na	na	na	na	na	na
Total	na	na	na	na	na	na	na	na	na	na	na	na
MINDTREE												
Onsite	13%	13%	12%	12%	13%	12%	11%	11%	11%	11%	11%	12%
Offshore	87%	87%	88%	88%	88%	88%	89%	89%	89%	89%	89%	88%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MPHASIS												
Onsite	6%	6%	6%	6%	6%	6%	6%	5%	8%	na	na	na
Offshore	95%	94%	94%	95%	94%	94%	94%	95%	92%	na	na	na
Total	101%	100%	100%	100%	100%	100%	100%	100%	100%	na	na	na
PERSISTENT												
Onsite	na	na	na	14%	9%	11%	12%	18%	19%	20%	22%	22%
Offshore	na	na	na	86%	91%	89%	88%	82%	81%	80%	78%	78%
Total	na	na	na	100%	100%	100%	100%	100%	100%	100%	100%	100%
Source: Company of	data, Macquar	rie Researc	h, June 20	11								

• **Utilization**. We expect utilization to stay at current levels for the next year.

Fig 35 Utilization

	1Q FY09	2Q FY09	3Q FY09	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY1
HEXAWARE		•		·			•				٠	
Utilization	64%	66%	74%	72%	75%	76%	75%	69%	68%	69%	72%	75%
MINDTREE												
Including Trainees	66%	70%	70%	65%	61%	65%	71%	71%	71%	70%	69%	719
Excluding Trainees	66%	71%	72%	67%	64%	66%	73%	73%	72%	73%	71%	73%
MPHASIS												
Application Services												
(Excluding trainees)												
Onsite	86%	85%	84%	86%	83%	88%	85%	87%	90%	90%	87%	89%
Offshore	75%	80%	75%	77%	77%	83%	78%	75%	72%	74%	71%	76%
Blended	77%	81%	76%	79%	78%	84%	79%	77%	75%	77%	74%	78%
(Including trainees)												
Onsite	86%	85%	84%	86%	83%	87%	85%	87%	90%	90%	87%	89%
Offshore	72%	77%	72%	73%	74%	81%	77%	73%	70%	72%	69%	73%
Blended	74%	78%	74%	75%	75%	82%	78%	75%	73%	75%	72%	76%
Utilisation - BPO												
Exc trainees	67%	68%	65%	63%	63%	70%	76%	76%	79%	82%	80%	78%
Inc trainees	57%	58%	58%	53%	55%	65%	70%	70%	71%	74%	69%	78%
Utilisation - ITO												
(Exc trainees)												
Onsite	na	na	85%	98%	98%	85%	83%	83%	90%	81%	77%	78%
Offshore	76%	78%	78%	83%	83%	85%	85%	80%	79%	71%	71%	75%
Blended	76%	78%	78%	83%	83%	85%	85%	80%	79%	71%	71%	75%
(Incl trainees)												
Onsite	0%	0%	85%	98%	98%	85%	83%	83%	90%	81%	77%	78%
Offshore	71%	73%	73%	76%	77%	80%	79%	76%	72%	66%	68%	73%
Blended	71%	73%	73%	76%	78%	80%	79%	76%	73%	66%	68%	73%
PERSISTENT												
Utilization	na	na	na	73%	69%	72%	73%	77%	77%	73%	73%	73%
Source: Company dat	ta. Macquar	ie Researc	h. June 20	11								
Course. Company du	a, maoquai	1.0000010	, 34110 20	• •								

• **Fixed-price projects' share to increase.** During the global downturn, companies found solace in increased fixed-price projects since it meant surety of revenues and costs for both the buyer and seller of services.

Fig 36 Contract Type

	1Q FY09	2Q FY09	3Q FY09	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11
HEXAWARE	•			•								
Time and Material	na	na	na	na	na	na	na	na	na	na	na	na
Fixed Price	na	na	na	na	na	na	na	na	na	na	na	na
Total	na	na	na	na	na	na	na	na	na	na	na	na
MINDTREE												
Time and Material	83%	85%	87%	79%	78%	76%	75%	69%	66%	66%	64%	66%
Fixed Price	18%	15%	13%	21%	22%	24%	25%	31%	34%	34%	36%	34%
Total	100%	100%	100%	100%	78%	100%	100%	100%	100%	100%	100%	100%
MPHASIS												
Time and Material	96%	94%	94%	92%	91%	88%	87%	90%	89%	87%	87%	87%
Fixed Price	4%	6%	6%	8%	9%	12%	13%	10%	11%	13%	13%	13%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PERSISTENT												
T&E	na	na	na	80%	76%	77%	74%	81%	81%	81%	79%	74%
FPP	na	na	na	14%	18%	17%	17%	12%	10%	11%	14%	15%
IP driven	na	na	na	5%	6%	6%	9%	8%	9%	8%	8%	10%
Total				100%	100%	100%	100%	100%	100%	100%	100%	100%
Source: Company da	ta, Macquar	ie Researc	h, June 20	11								

• **Employee metrics.** Based on the strong demand scenario, we expect FY12 to have stronger hiring than FY11 for the Indian mid-cap companies. Attrition is a key concern that needs to be controlled aggressively for the next year, we believe.

Fig 37 Employee Metrics

	1Q FY09	2Q FY09	3Q FY09	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11
HEXAWARE				-								
Total Employees	6,598	5,924	5,622	5,296	5,041	5,006	5,137	5,304	6,031	6,308	6,511	6,664
Billable Onshore	18%	19%	19%	18%	19%	19%	18%	19%	19%	19%	20%	20%
Billable Offshore	70%	69%	68%	69%	69%	68%	70%	70%	70%	71%	71%	71%
Total	88%	87%	87%	87%	88%	88%	88%	88%	90%	90%	91%	91%
Marketing Support	2%	2%	2%	2%	3%	3%	3%	3%	2%	2%	2%	2%
Others	10%	10%	11%	11%	10%	10%	10%	9%	8%	8%	7%	7%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MINDTREE												
Total MindTree Minds	5,716	7,601	7,649	7,866	7,693	7,450	8,127	8,297	9,012	9,584	9,671	9,547
Software Engnn	5,308	7,076	7,128	7,281	7,073	6,832	7,460	7,651	8,353	8,893	8,968	8,862
Sales and Support	408	525	521	585	620	618	667	646	659	691	703	685
Gross Addition	377	na	359	539	92	132	462	668	1,324	1,373	1,021	435
Net Addition	76	na	48	217	-137	-243	41	170	715	572	87	-124
Attrition (LTM)*	16%	15%	14%	14%	11%	10%	11%	14%	18%	22%	24%	25%
MPHASIS												
Total Employees	28,254	28,895	29,988	33,610	32,753	33,524	35,700	37,119	39,971	39,962	41,059	40,241
Apps	37%	37%	37%	34%	35%	36%	35%	38%	39%	40%	37%	38%
BPO	49%	48%	47%	52%	50%	49%	49%	45%	41%	39%	38%	41%
ITO	14%	15%	16%	15%	15%	15%	16%	17%	19%	22%	21%	21%
PERSISTENT												
Technical	na	na	na	3,900	3,757	3,977	4,190	4,321	4,554	4,907	5,070	5,950
Sales	na	na	na	64	68	70	67	71	79	87	94	108
Rest	na	na	na	245	256	258	261	270	278	287	296	302
Grand Total				4,209	4,081	4,305	4,518	4,662	4,911	5,281	5,460	6,360
Attrition	na	na	na	14%	12%	11%	11%	14%	16%	19%	21%	20%
Source: Company da	ta Macquar	ie Researc	h .lune 20	11								
	, maoquai	11000010	, 50110 20	• •								

INDIA



HEXW IN	Outp	erform
Price 20 Jun 11	R	s66.60
12-month target	Rs	85.00
Upside/Downside	%	27.6
Valuation - PER	Rs	85.00
GICS sector	Software 8	& Services
Market cap	Rsm	19,488
30-day avg turnover	US\$m	4.1
Market cap	US\$m	433
Number shares on iss	sue m	292.6

Investment fundamentals

Year end 31 Dec		2010A	2011E	2012E	2013E
Revenue	m	10,545	13,666	16,712	20,000
EBITDA	m	937	1,893	2,260	2,680
EBITDA growth	%	-53.7	102.1	19.4	18.6
Adjusted profit	m	852	1,889	2,000	2,383
EPS adj	Rs	2.86	6.37	6.74	8.04
EPS adj growth	%	-37.1	122.4	5.9	19.1
PER adj	Х	23.3	10.5	9.9	8.3
ROA	%	5.8	11.9	12.3	12.8
ROE	%	9.4	18.2	16.7	17.1
EV/EBITDA	Х	15.8	7.8	6.5	5.5
Net debt/equity	%	-48.1	-47.2	-52.7	-58.0
P/BV	Х	2.0	1.7	1.5	1.3

Source: FactSet, Macquarie Research, June 2011 (all figures in INR unless noted)

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21 June 2011

Macquarie Capital Securities India (Pvt) Ltd

Hexaware Technologies

Growth on a platter

Initiating coverage with Outperform rating and Rs85 TP

We initiate coverage of Hexaware Technologies with an Outperform rating and a target price of Rs85, implying 28% potential upside. We believe that 3 year CAGR US\$ 26% revenue growth and 30% net income growth should lead to the stock getting rerated. For more details, see our report, 'India IT Services - Mid Cap Mantra for growth'.

Investment Thesis: Growth on platter

- Strong client orders; large deals push top-line targets. 2010 was a major year for Hexaware where order wins included a US\$110m new deal win from a Fortune 500 corporation and a US\$60m deal renewal during the 1H2010. The revenues uplift from the same should be fully absorbed 2011 onwards. Large deals, along with the Oracle's PeopleSoft Enterprise 9.1 upgrade projects, should translate into higher order inflow for the company. Currently, EAS contributes 30% of the company revenues.
- Margins reverting back to historical levels. Hexaware margins contracted due to several reasons, including reduced top-line growth, wage increases, faster hiring and higher SG&A expenses challenged the company margins from all fronts. We expect strong top-line growth and increased utilization levels to drive margins higher in 2011 and 2012.
- Forex losses from older forex hedges to discontinue. Hexaware bore the brunt of hedges taken at a much lower exchange rate of ~Rs40 for the past six quarters. These hedges were extinguished in September 2010. The current hedge book stands at US\$133m for the next two years at ~Rs48. Thus, going forward, the forex hedges should be EPS accretive.

Superior client mix, high contribution from top 10 clients

Hexaware's client list includes ~50 of the Fortune 500 companies. This is a key differentiator for it vs other mid sized IT companies. We believe the company has done a commendable job in mining its existing client relationship. As a result, its top 10 clients have contributed 48% of total revenues and the top client alone makes up 9% of revenues for 1QCY11.

Traction in Emerging segment to diversify revenue mix

Emerging segment (comprised of Professional Services, Healthcare and Manufacturing sectors) contributed 41% of total revenues for Hexaware for FY11. Revenue mix from these sectors has increased from 29% in 2008 to 41% in 1Q2011 and sustained traction in these sectors would likely reduce the company's dependence on BFSI vertical (currently contributing 34% of revenues).

Valuation

We have arrived at our target price of Rs85 by applying 13.5x FY12 PER.
 This is broadly in line with the average historical multiple for the company of 13x and represents a 47% discount to our target multiple of 26x for TCS and Infosys.

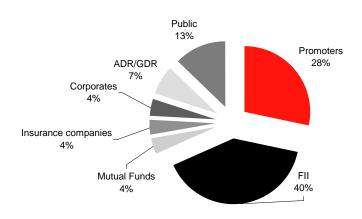
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Valuation: PER based TP of Rs85	27
Financials and Operating Metrics	30
Appendix 1: How do Tier 2 players stack	(
up?	34

Company Profile

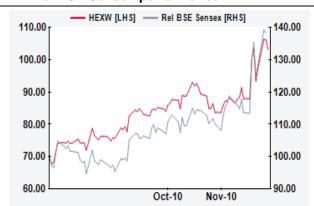
- Hexaware is a mid-sized IT vendor and is the 18th largest Indian software exporter according to NASSCOM 2010 rankings. The company offers its services across three main verticals: BFSI, TTHL (Travel, Transportation, Hospitality and Logistics) and Emerging Segments (Professional Services, Healthcare and Manufacturing). For the quarter ending 31 March 2011, revenue share from these three segments was 34%, 25% and 41%, respectively
- Hexaware was founded in 1990 and operates from seven development centres – four in India and one each in Germany, USA and Mexico. It employs over 6,000 workers globally. Hexaware's centres comply with the SEI CMMI Level 5 and BS 7799.
- Hexaware is a publicly listed company, with its shares being quoted on the Mumbai and National Stock Exchanges in India and as GDRs in the London and Luxembourg stock exchanges.

Fig 1 Shareholding pattern as of 31 March 2011



Source: BSE, Macquarie Research, June 2011

Fig 2 HEXW IN rel BSE Sensex performance



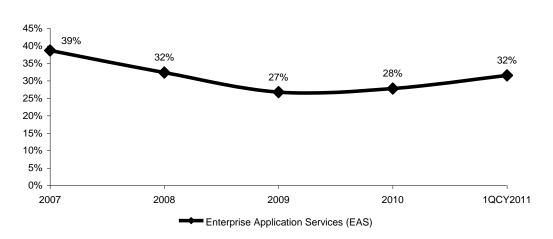
Source: FactSet, Macquarie Research, June 2011 (all figures in INR unless noted)

Growth on a platter

Enterprise Application Services (EAS) powerhouse

Hexaware has traditionally had strengths in its EAS delivery capabilities; this strength is due to Hexaware being one of the top five vendors of PeopleSoft in 2004–05 before it was acquired by Oracle in December 2004. At the time, Hexaware was working with PeopleSoft under a Build-Operate-Transfer (BOT) agreement. This history gives Hexaware a strong base in technical know-how for PeopleSoft delivery.

Fig 3 EAS contribution significant for Hexaware

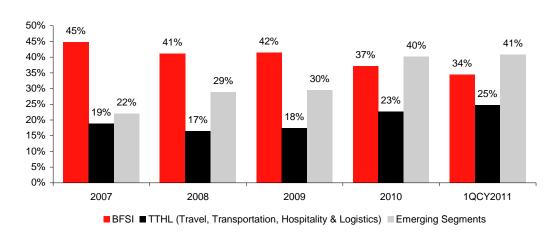


Source: Company data, Macquarie Research, June 2011

Growth in TTSL and Emerging segment fuel growth

- Hexaware has been focusing on growing its non-BFSI segment so it is not overly dependent on the BFSI sector. This strategy has been successful since the BFSI sector contribution to the top line has reduced from 45% in 2007 to 34% as of 1Q2011.
- The Emerging segment consists of the Professional Services, Healthcare and Manufacturing sectors. Its share has increased to 41% of total revenues for Hexaware.

Fig 4 Revenue by Industry Verticals



Source: Company data, Macquarie Research, June 2011

Valuation: PER based TP of Rs85

 We arrive at our target price for Hexaware by using a multiple-based valuation methodology. Our target PER multiple for Hexaware is 13.5x FY12E, which is a 47% discount to our Infosys target multiples.

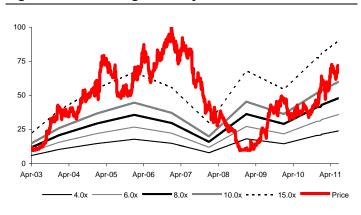
Fig 5 Hexaware target PER multiple is at 14x FY12E

(Year - end Dec)	2011E	2012E	2013E
EPS (Dec YE Qtrs) Implied multiples	6.37 13.3	6.74 12.5	8.04 10.5
	FY12E	FY13E	
EPS (Mar YE Qtrs)	6.27	6.99	
Infy Target Multiple	25.5	20.5	
Target PER Multiple	13.5	10.9	
Target PER multiple	13.5		
Implied Target Price	85		
Source: Macquarie Research, June 2011			

Hexaware trading at higher 1 yr forward PER discount vs historical average

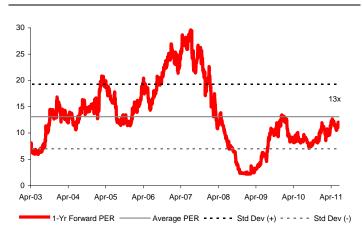
- The stock is currently trading at one-year-forward PER of 11x, which we believe undervalues the three-year 2010–13E net income CAGR of 30%.
- Historically, Hexaware stock has traded at a one-year-forward PER of approximately 13x. In our view, the current levels show potential upside for the stock in the near term. We expect increased demand environment to drive the rerating of the stock to previous upcycle levels.
- We expect increased revenue growth and better margin control to help Hexaware meet its outlined targets, driving the stock price close to our target.

Fig 6 HEXW trading at 11x 1yr forward PER...



Source: Bloomberg, Macquarie Research, June 2011

Fig 7 ... which is below its average historical 1 yr forward PER of 13x



Source: Bloomberg, Macquarie Research, June 2011

HEXW trading at higher PER discount to Infosys vs historical average

- HEXW is currently trading at a 37% discount to the one-year-forward PER for Infosys which is in line with the historical average discount with Infosys.
- In line with the previous upcycles, we expect the valuation discount to narrow as there is enhanced visibility on the revenue uplift from large deal wins and investors can shift to select mid-cap Indian IT players with high growth potential.

(%) - Average HEXW disc to 60% Infosys is in line with historical average: -37% 40% 20% 0% -20% -40% -60% -80% -100% Apr-03 Apr-04 Apr-05 Apr-06 Apr-07 Apr-08 Apr-09 Apr-10 Apr-11 HEXW 1yr fwd premuim/(disc) to INFO —— Average disc to INFO

Fig 8 HEXW one-year-forward PER premium/(discount) to INFO

Source: Bloomberg, Macquarie Research, June 2011

Key risks

• Assumed margin expansion is central to our thesis. We are 8% ahead of street for our 2011E EPS estimates. This is predicated on margin expansion from 9% in 2010 to 14% in 2011. This margin expansion is based on top-line growth of 33% in 2011E and relatively modest increase in SG&A spends of 11% YoY. If the growth is lower than our estimate or the company decides to increase its sales spend, our estimates can be at risk.

Macquarie Research

Fig 9 Valuation comparison – Indian IT services

Company name	Bloomberg Ticker	Rec	Market Cap (US\$ m)	Current Price (Icy)	Target Price (Icy)	Up/Down side(%)	EPS FY12E	EPS FY13 E	PER (x) FY12 E	PER (x) FY13 E	RoE (FY11)	EPS CAGE (FY11-13E
Macquarie Indian IT Serv	ices Coverage l	Jniverse			·	•		•		•	•	
TCS	TCS IN	OP	46,508	1,069	1,360	27%	52.6	63.4	20.3	16.9	37.6	19.6%
Infosys	INFO IN	OP	34,571	2,710	3,650	35%	143.3	177.9	18.9	15.2	27.1	22.1%
Wipro	WPRO IN	OP	21,951	402	540	34%	23.4	26.5	17.2	15.2	26.5	10.6%
HCL Tech	HCLT IN	OP	7,111	465	615	32%	33.9	42.5	13.7	10.9	21.8	32.9%
Mphasis	MPHL IN	UP	1,984	425	380	-11%	38.5	42.8	11.0	9.9	38.7	3.4%
Rolta	RLTA IN	OP	440	123	195	59%	20.8	24.3	5.9	5.1	16.7	15.8%
Hexaware	HEXW IN	OP	434	66	85	28%	6.4	6.7	10.5	9.9	18.2	53.5%
Mindtree	MTCL IN	OP	318	355	450	27%	37.3	48.6	9.5	7.3	15.3	39.9%
Persistent	PSYS IN	OP	305	339	450	33%	33.8	40.3	10.0	8.4	15.2	6.7%
Indian IT Services												
3i Infotech	III IN	NR	183	43	NR	NR	12.5	9.2	3.4	4.7	23.1	-13.3%
Aptech	APTR IN	NR	97	90	NR	NR	7.3	na	12.4	na	21.7	na
Educomp	EDSL IN	NR	846	397	NR	NR	47.9	76.2	8.3	5.2	17.6	42.1%
Everonn	EEDU IN	NR	215	509	NR	NR	45.4	59.3	11.2	8.6	17.2	32.4%
Infotech	INFTC IN	NR	337	136	NR	NR	13.8	17.4	9.9	7.9	14.3	17.3%
KPIT Cummins	KPIT IN	NR	323	165	NR	NR	14	18.1	11.5	9.1	19.1	24.7%
Mahindra Satyam	SCS IN	NR	2,165	83	NR	NR	5.1	6.6	16.3	12.6	na	50.6%
NIIT	NIIT IN	NR	207	56	NR	NR	6.6	7.8	8.5	7.2	17.4	22.0%
NIIT Tech	NITEC IN	NR	241	183	NR	NR	29.1	33.5	6.3	5.5	27.5	4.4%
Nucleus Software	NCS IN	NR	58	81	NR	NR	12.6	15.4	6.4	5.3	15.0	28.7%
Oracle Financial Services	OFSS IN	NR	4,035	2164	NR	NR	131.5	153.6	16.5	14.1	22.9	12.0%
Patni	PATNI IN	NR	980	329	NR	NR	39.1	41.7	8.4	7.9	18.3	0.3%
Polaris	POL IN	NR	362	164	NR	NR	20.8	24.4	7.9	6.7	21.3	10.7%
Tech Mahindra	TECHM IN	NR	1,878	667	NR	NR	58.1	68.1	11.5	9.8	20.7	11.2%
International IT Services												
Accenture	ACN US	NR	38,652	54	NR	NR	3.2	3.7	16.7	14.8	62.2	6.4%
Gate	IGTE US	NR	869	15	NR	NR	1.5	na	10.2	na	23.6	na
Cap Gemini	CAP FP	NR	5,829	37	NR	NR	2.5	3.0	14.8	12.5	6.6	19.4%
Cognizant	CTSH US	NR	20,662	68	NR	NR	2.9	3.5	23.6	19.5	23.5	17.9%
csč	CSC US	NR	5,973	39	NR	NR	4.7	5.2	8.2	7.4	10.6	4.5%
Logica PLC	LOG LN	NR	2,068	128	NR	NR	14.9	16.3	8.6	7.9	7.8	16.5%
IBM GS	IBM US	NR	199,872	165	NR	NR	13.2	14.6	12.5	11.3	64.9	12.9%
ВРО												
EXL Service	EXLS US	NR	655	22	NR	NR	1.3	1.5	17.6	15.0	11.7	18.4%
Firstsource	FSOL IN	NR	162	17	NR	NR	2.8	3.6	6.0	4.7	10.6	25.7%
Genpact	G US	NR	3,472	16	NR	NR	0.9	1.0	18.5	16.0	10.6	15.1%
WNS	WNS US	NR	395	9	NR	NR	0.9	1.0	9.8	8.7	3.7	1.3%

Note: Prices as of 20 June 2011. Data for not rated companies based on Bloomberg consensus estimates. Coverage of IBM was suspended on 28 Sept 2010.

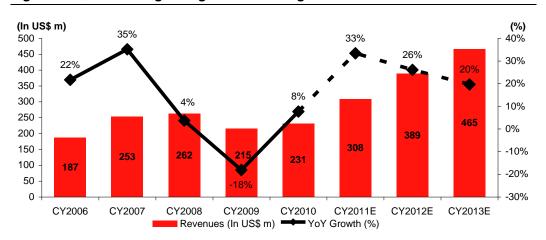
Source: Bloomberg, Macquarie Research, June 2011

Hexaware revenues growth pipeline extremely strong with US\$170m in new orders secured in 2010

Financials and Operating Metrics

Strong order pipeline, Large deals worth US\$170m kicking in from 2011 onwards. We expect Hexaware to have a turnaround year in 2011 when the revenues from the large deals won in 2010 start contributing to the top line. Significant order wins for Hexaware include a US\$110m new deal win from a Fortune 500 corporation and a US\$60m deal renewal during the 1H2010. Additionally, the management disclosed new IT initiatives and new project kick-offs with several existing clients during last quarter.

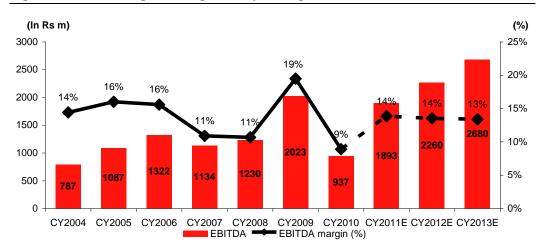
Fig 10 US\$ revenues growing on back of large order wins



Note: Hexaware has December Year End Source: Company data, Macquarie Research, June 2011

EBITDA margins to reach double digits in 2011. Historically, EBITDA margins for Hexaware have hovered in mid teens. We expect the company to finish the 2011 with margins of 13.9%. Rationalization in SG&A expenses and higher utilization should allow EBITDA margins to inch up during 2011 and 2012. We expect the company to end 2013E with margins of 13.4% showing an improvement of 450bps from 2010–13E. We see further upside risk to our margin assumptions considering the historical data for similar growth periods.

Fig 11 EBITDA margins rising steadily during 2011 and 2012



Note: Hexaware has December Year End Source: Company data, Macquarie Research, June 2011

■ Sales, General and Administration (SG&A) expenses to stabilize going forward. High growth cycles during 2004–06 saw SG&A levels of ~23%. We believe that Hexaware would be able to control its SG&A costs to 22% levels going forward. The company has already shown promise in reducing these costs by taking steps to bring down its SG&A expenses by 480bps to 23.0% in 1QCY11 from 27.8% in 1QCY10.

(In Rs m) (%) 28% 5000 30% 26% 26% 25% 4500 23% 22% 22% 25% 22% 4000 22% 3500 20% 3000 2500 15% 4396 2000 3654 3228 10% 1500 **3034** 2591 2692 1000 1842 5% 1526 500 0 0% CY2004 CY2005 CY2006 CY2007 CY2008 CY2009 CY2010 CY2011E CY2012E CY2013E SG&A Expenses As a % of Revenues

Fig 12 SG&A stabilizing over 2011–13

Source: Company data, Macquarie Research, June 2011

Profitability - Margin Analysis and Levers

• We see stable margin outlook for Hexaware. The revival in the IT services mid cap stocks is driven by the twin levers of high US\$ revenue growth and improvement in EPS derived from increased margins brought through SG&A rationalization, increased off shoring and utilization, increased proportion of fixed price projects and containment of employee attrition Our analysis of the margin levers in the business provides us with comfort in the margin trajectory for the companies. We tabulate the key margin levers and how our companies fare on them in table below.

HCLT MPHL Hexaware Mindtree Persistent Volume Growth Pricing Power Wage Hike Impact Ability to manage attrition Utilization On-Off ratio **Currency Impact** Ability to manage margins Source: Company data, Macquarie Research, June 2011

Fig 13 Margin levers to manage headwinds in FY12

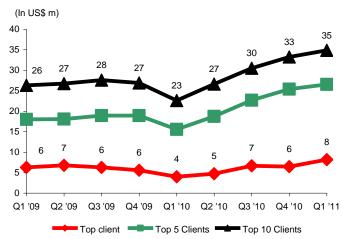
• FX hedge loss has played out, resetting the base for 30% net income growth during 2010E–13E. Hexaware booked losses worth Rs229m and Rs617m in 2008 and 2009. It booked forex losses of Rs248m in 2010. At the end of the 3Q2010, all old hedges which had been taken at Rs40.60 were extinguished and now the company will not incur any forex losses due to the older hedges. The current hedge book position of US\$133m at an average rate of Rs48.20 should be EPS accretive for the company to post robust 30% net income growth during 2010E–13E.

 Top clients showing pickup. 2010 has seen a 30% growth in revenues from the contribution of top clients for Hexaware. We expect this trend to continue with better mining of existing top accounts.

Fig 14 Contribution from top clients on the upswing

Fig 15 30%+ revenue growth in top clients for 2010...





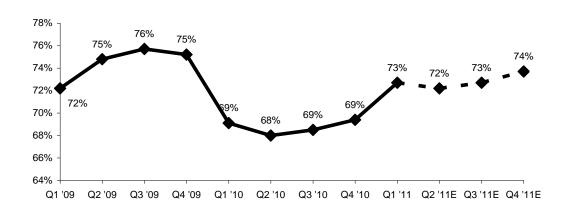
Source: Company data, Macquarie Research, June 2011

Source: Company data, Macquarie Research, June 2011

Expect Utilization levels to inch northwards in 2011

As the sector recovered from the downturn, the company has to build up its bench for taking on fresh projects. Enhancing its resource base in anticipation of revenue flow resulted in reduced utilisation levels. We expect this trend to reverse now as the investment in human resources should start yielding revenues in coming quarters. The first sign of that is already evident in 1Q2011.

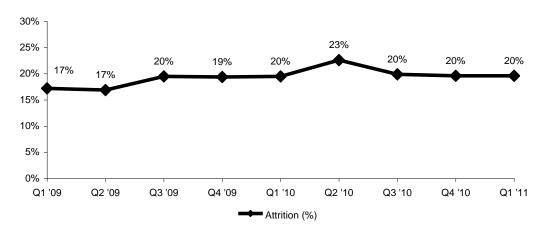
Fig 16 Utilization levels inching upwards



Source: Company data, Macquarie Research, June 2011

Rising attrition a cause of concern. We expect the rise in demand for Indian IT services to the Tier 1 companies targeting 28%+ US\$ revenue growth for FY12. This should lead to the attrition numbers remaining volatile and in the high teens for mid sized IT vendors like Hexaware. We see downside risks to margins on account for increased input costs.

Fig 17 Attrition rising in lieu of increased demand outlook



Source: Company data, Macquarie Research, June 2011

Macquarie vs consensus: 2011 EPS estimates 8% ahead of street

Our 6% differential vs the street at the EBITDA level and 8% differential vs the street at the EPS level is based on margin expansion assumption from the company. We believe the key margin lever for the company is execution on the Selling & Marketing front. We are building in a 13% YoY jump in this cost line, which we believe adequately captures the investment Hexaware would need to make over and above what we have seen last year.

Fig 18 Hexaware - Macquarie vs consensus

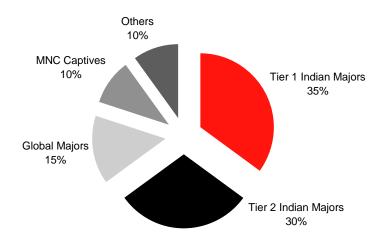
Hexaware (Year – end December, All figures in Rs m)	2011E	2012E	
Revenues			
Macquarie	13,666	16,712	
Consensus	13,578	16,065	
Macq. Above Consensus	0.7%	4.0%	
EBITDA			
Macquarie	1,893	2,260	
Consensus	1,785	2,196	
Macq. Above Consensus	6.1%	2.9%	
PAT			
Macquarie	1,889	2,000	
Consensus	1,783	1,967	
Macq. Above Consensus	6.0%	1.7%	
EPS			
Macquarie	6.37	6.74	
Consensus	5.92	6.56	
Macq. Above Consensus	7.6%	2.9%	
Source: Bloomberg, Macquarie Research, June 2011			

Appendix 1: How do Tier 2 players stack up?

Niche position: Space for Tier 2 players exists in Indian IT

Fragmented market space. The Indian IT services sector consists of over 5,000
organizations offering services across number of verticals and service lines. The provider
landscape consists of large companies, mid caps, captives and others. A breakup of the
revenues amongst these players is as follows:

Fig 19 Breakup of Indian IT Service exports by providers



Source: NASSCOM, Everest Group, Macquarie Research, June 2011

- Need for Tier 2 Players: Vertical Expertise OR Service Expertise. We see that there exists a need for specialization and differentiation as factors necessary for the business continuity of mid sized players. The Indian IT landscape makes survival difficult for companies having generalist offerings and without any sustainable competitive advantage. Our chosen companies, Hexaware, Mindtree and Persistent Systems, have specializations in Enterprise Resource Planning (ERP), Hi-Tech & Testing domains and Outsourced Product Development (OPD), respectively.
 - ⇒ Vertical Expertise. Tier 2 companies have been successful in developing expertise in a specific client industry or vertical. This is the usual process of how a start-up evolves into a successful mid sized company. BFSI has been the seed vertical for a lot of Indian IT companies including I-Flex (later acquired by Oracle and renamed Oracle Financial Services), Polaris, Nucleus, etc. Hi-Tech/Telecom has been the incubator for Sasken, Mindtree, Persistent, etc.
 - ⇒ Service Expertise. Companies have developed distinctive capabilities in specific IT offerings (eg, Analytics, Business intelligence, ERP, etc.) and technologies (eg, Java, Unix, NET). For example, Hexaware developed competencies in PeopleSoft during its early years. Mindtree acquired Aztecsoft in 2008 and acquired testing capabilities for Microsoft products. Persistent has acquired various companies to expand its OPD capabilities.

Role of Tier 2 vendors in a customer's buying strategy

- Traditionally speaking, enterprise buyers work with a number of IT vendors to reduce concentration of knowledge of systems and bargaining power of vendors in a bid to avoid over-dependence on a small number of vendors. This eco-system makes space for Tier 2 players to provide niche services and offerings to enterprise buyers.
- Alternative to Tier 1 players. They also serve as alternatives for Tier 1 players due to agility and flexibility arising from their smaller size through aggressive billing rates and pricing models. Tier 2 players typically tend to be more flexible and creative with engagement and contract structures.
- More suited for small/mid sized buyers. Companies having revenues less than US\$5bn can be classified as small/mid sized buyers. Mid sized IT companies are more suited to work with these buyers since they are able to give more focus and attention to clients than the large IT service companies. This makes Tier 2 IT players suitably "right sized" for mid sized buyers.
- Tier 2 companies as provider of specialized offerings across industry, services and geographies. Mid sized IT companies leverage their niche offerings to succeed in the marketplace with competitors that are up to 10 times larger.
- The figure below shows how global buyers utilize IT service companies in different modes.

Fig 20 Role of Tier 2 IT service companies in buyers IT portfolios

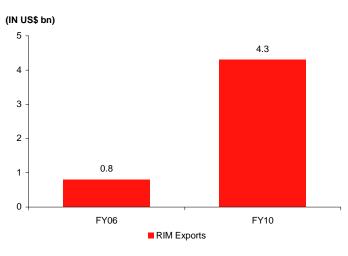
			Ability of Tier 2 players to service				
	Outsourcing Requirements	Characteristics	Small buyers (< US\$1bn)	Mid Size buyers (US\$1-5bn)	Large buyers (>US\$5bn)		
1.	Staff Augmentation	 Mid caps usually provide access to specific skills, eg, Persistent for OPD, Hexaware for PeopleSoft, etc. Provide flexibility to buyers in manpower management 					
2.	Specialized Support	 Resources work similar to internal resources Provide resources for specialized and niche skills Typically fixed, long-term contracts 					
3.	End to End support	 Provides services across service lines Usually involves high level sales and management focus 					
4.	Transformation partner	 Companies should reach a particular maturity level Shows track record of able delivery 					

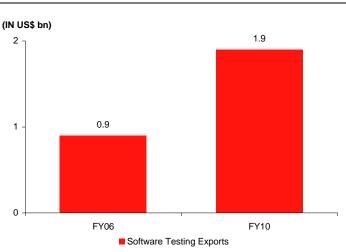
Key niche offerings for Tier 2 players

- Remote Infrastructure Management (RIM). The RIM segment has emerged as the key growth engine within the IT services segment. Between 2006–10, RIM has recorded the fastest growth within IT service offerings at over 50% on a CAGR basis. By 2010, RIM exports have grown 5x since 2006 to reach US\$4.3bn.
 - ⇒ As of 4QFY11, Mindtree derives 8% from RIM services.

Fig 21 RIM Exports showing 5x growth since FY06

Fig 22 Software Testing revenues double...





Source: NASSCOM, Macquarie Research, June 2011

Source: NASSCOM, Macquarie Research, June 2011

- Software Testing Services provides scope for niche offerings. Indian software testing market earned revenues of US\$2.3bn in FY11 growing at 24% on a YoY basis. We see that BFSI and Telecom are the main verticals for big players while smaller players are offering services to niche segments like Media and Publishing, Travel, Healthcare, etc. There is large scope for mid cap players by developing niche, customized testing solutions.
 - ⇒ As of 4QFY11, Mindtree and Hexaware derived 18% and 9% of revenues respectively from testing services.
- Business Intelligence (BI), Data Analytics and Cloud computing. As companies grow and become mature, a need is felt for the IT systems to lead to the next level of growth. This is provided through intelligent usage of existing data to find hidden customer behaviour and drive sales through trimming the operational cycles within a company. This is achieved by analysis of data generated in the current IT systems.
 - ⇒ As of 4QFY11, Hexaware derived 10% of revenues from BI services. Persistent systems plans to achieve 40% of revenues from growth areas of Cloud computing, Mobility, Collaboration and Analytics.

Hexaware Technologies (HEXW IN, Outperform, Target Price: Rs85.00)

Hexaware Technolog	ies (HE	EXW IN, C	Outperfor	m, Targe	t Price: R	(s85.00)					
Quarterly Results		1Q/11A	2Q/11E	3Q/11E	4Q/11E	Profit & Loss		2010A	2011E	2012E	2013E
Revenue	m	3,185	3,324	3,504	3,653	Revenue	m	10,545	13,666	16,712	20,000
Gross Profit	m	1,187	3,324 1,163	3,504 1,244	1,334	Gross Profit	m	3,629	4,928	5,914	7,076
Cost of Goods Sold	m	1,998	2,160	2,260	2,320	Cost of Goods Sold	m	6,916	8,739	10,798	12,923
EBITDA	m	455	416	474	549	EBITDA	m	937	1,893	2,260	2,680
Depreciation	m	62	65	66	67	Depreciation	m	242	260	273	285
Amortisation of Goodwill	m	0	0	0	0	Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0	Other Amortisation	m	0	0	0	0
EBIT	m	393	351	408	482	EBIT	m	695	1,634	1,987	2,395
Net Interest Income	m	0	0	0	0	Net Interest Income	m	0	0	0	0
Associates	m	0	0	0	0	Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	224	0	0	0
Forex Gains / Losses	m	100	95	48	48	Forex Gains / Losses	m	-248	290	96	60
Other Pre-Tax Income	m	88	83	85	92	Other Pre-Tax Income	m	497	347	417	525
Pre-Tax Profit	m	581	529	540	621	Pre-Tax Profit	m	1,168	2,271	2,501	2,979
Tax Expense	m	-44 527	-106	-108	-124	Tax Expense	m	-92	-382	-500	-596
Net Profit	m	537 0	423 0	432 0	497 0	Net Profit	m	1,076 0	1,889 0	2,000 0	2,383 0
Minority Interests	m	U	U	U	U	Minority Interests	m	U	U	U	U
Reported Earnings	m	537	423	432	497	Reported Earnings	m	1,076	1,889	2,000	2,383
Adjusted Earnings	m	537	423	432	497	Adjusted Earnings	m	852	1,889	2,000	2,383
FDC ()		4.04	4.40	4.40	4.00	EDC (****)		0.04	0.07	0.74	0.04
EPS (rep)		1.81	1.43	1.46	1.68	EPS (rep)		3.61	6.37	6.74 6.74	8.04
EPS (adj)	0/	1.81	1.43	1.46	1.68	EPS (adj)	0/	2.86	6.37	6.74	8.04
EPS Growth yoy (adj)	%	370.2	146.1	158.3	25.5	EPS Growth (adj)	%	-37.1	122.4	5.9 9.9	19.1 8.3
						PE (rep) PE (adj)	X X	18.5 23.3	10.5 10.5	9.9 9.9	8.3 8.3
						PE (auj)	Х	23.3	10.5	9.9	0.3
EBITDA Margin	%	14.3	12.5	13.5	15.0	Total DPS		1.50	1.00	1.00	1.00
EBIT Margin	%	12.3	10.6	11.6	13.2	Total Div Yield	%	2.3	1.5	1.5	1.5
Earnings Split	%	28.4	22.4	22.9	26.3	Weighted Average Shares	m	298	297	297	297
Revenue Growth	%	43.5	32.3	24.4	21.9	Period End Shares	m	290	290	290	290
EBIT Growth	%	219.5	215.9	124.0	72.8						
Profit and Loss Ratios		2010A	2011E	2012E	2013E	Cashflow Analysis		2010A	2011E	2012E	2013E
Revenue Growth	%	1.5	29.6	22.3	19.7	EBITDA	m	937	1,893	2,260	2,680
EBITDA Growth	% %	-53.7	102.1	22.3 19.4	18.6	Tax Paid	m m	135	382	500	2,000 596
EBIT Growth	%	-60.4	135.0	21.6	20.5	Chgs in Working Cap	m	563	476	-6	-13
Gross Profit Margin	%	34.4	36.1	35.4	35.4	Net Interest Paid	m	0	0	0	-13
EBITDA Margin	%	8.9	13.9	13.5	13.4	Other	m	-1,512	-1,078	-474	-581
EBIT Margin	%	6.6	12.0	11.9	12.0	Operating Cashflow	m	122	1,673	2,280	2,682
Net Profit Margin	%	10.2	13.8	12.0	11.9	Acquisitions	m	0	0	0	0
Payout Ratio	%	52.4	15.7	14.8	12.4	Capex	m	-340	-393	-468	-500
EV/EBITDA	X	15.8	7.8	6.5	5.5	Asset Sales	m	-20,020	0	0	0
EV/EBIT	X	21.3	9.1	7.4	6.2	Other	m	22,042	Ō	Ö	Ō
						Investing Cashflow	m	1,682	-393	-468	-500
Balance Sheet Ratios						Dividend (Ordinary)	m	-233	-297	-297	-297
ROE	%	9.4	18.2	16.7	17.1	Equity Raised	m	33	0	0	0
ROA	%	5.8	11.9	12.3	12.8	Debt Movements	m	-46	0	0	0
ROIC	%	14.6	27.1	27.0	31.5	Other	m	-29	0	0	0
Net Debt/Equity	%	-48.1	-47.2	-52.7	-58.0	Financing Cashflow	m	-275	-297	-297	-297
Interest Cover	Х	nmf	nmf	nmf	nmf						
Price/Book Book Value per Share	Х	2.0 33.3	1.7 38.4	1.5 44.3	1.3 51.5	Net Chg in Cash/Debt	m	1,522	984	1,515	1,885
Book value per Ghare		30.5	30.4	44.5	31.3	Free Cashflow	m	-218	1,281	1,812	2,182
						Balance Sheet		2010A	2011E	2012E	2013E
						Cash	m	4,753	5,920	7,435	9,321
						Receivables	m	1,919	2,435	2,832	3,217
						Inventories	m	0	2,433	2,032	0,217
						Investments	m	Ö	0	0	0
						Fixed Assets	m	4,079	4,327	4,522	4,736
						Intangibles	m	0	0	0	0
						Other Assets	m	1,801	2,200	2,571	2,853
						Total Assets	m	12,552	14,882	17,361	20,127
						Payables	m	0	0	0	0
						Short Term Debt	m	0	0	0	0
						Long Term Debt	m	112	658	658	658
						Provisions	m	0	0	0	0
						Other Liabilities	m	2,785	3,073	3,848	4,527
						Total Liabilities	m	2,897	3,731	4,506	5,185
						Shareholders' Funds	m	9,654	11,151	12,855	14,942
						Minority Interests	m	0	0	0	0
						Other	m	0	0	0	0
						Total S/H Equity	m	9,654	11,151	12,855	14,942
						Total Liab & S/H Funds	m	12,551	14,882	17,361	20,127
All figures in INR unless noted.											
Source: Company data, Macqua	arie Rese	arch, June 20)11								

Source: Company data, Macquarie Research, June 2011

INDIA



MTCL IN	Outp	erform
Price 20 Jun 11	Rs	353.85
12-month target	Rs	450.00
Upside/Downside	%	27.2
Valuation - PER	Rs	450.00
GICS sector	Software 8	& Services
Market cap	Rsm	14,258
30-day avg turnover	US\$m	0.6
Market cap	US\$m	318
Number shares on iss	sue m	40.29

Investment fundamentals

Year end 31 Mar		2011A	2012E	2013E	2014E
Revenue	m	15,091	17,970	21,548	25,102
EBITDA	m	1,778	2,300	3,162	3,775
EBITDA growth	%	-27.6	29.4	37.5	19.4
Reported profit	m	1,017	1,525	1,990	2,294
Adjusted profit	m	1,017	1,525	1,990	2,294
EPS adj	Rs	24.84	37.26	48.62	56.04
EPS adj growth	%	-53.4	50.0	30.5	15.3
PER adj	Х	14.2	9.5	7.3	6.3
ROA	%	10.9	13.7	17.4	18.0
ROE	%	14.1	18.0	19.6	18.9
EV/EBITDA	х	7.9	6.1	4.4	3.7
Net debt/equity	%	-5.3	-5.7	-5.6	-5.5
P/BV	Х	1.9	1.6	1.3	1.1

Source: FactSet, Macquarie Research, June 2011 (all figures in INR unless noted)

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21 June 2011

Macquarie Capital Securities India (Pvt) Ltd

MindTree

Road to recovery

Initiating coverage with Outperform rating and Rs450 TP

We initiate coverage of MindTree Limited with an Outperform rating and a target price of Rs450, implying 27% upside. Our OP rating is driven by a conviction in the company's growth potential and revenue, and EPS CAGR growth of 19% and 40% during FY11-13E. For our detailed sector report, see India IT Services – Mid-cap mantra for growth.

IT Services stable; margin recovery ahead

- NASSCOM estimates that Indian IT sector revenues would grow 16%-18% in CY11. MindTree provides services in the domains of IT Services and Product Engineering Services (PES). We believe MindTree's IT services business will show stable growth and grow faster than PES. The key parameter to keep in mind for MindTree's recovery is margin expansion, which could lead to a rerating of the stock in coming quarters.
- Core IT Services business contributes 58% of revenues and showed growth of 31% in FY11. The company is focused on achieving higher than industry average growth in this segment.
- MindTree EBITDA margins declined by ~700bps in FY11, due to losses on account of write-offs on smartphone business in comparison to FY10. But we expect margins to improve from current levels by 100bps and 190bps in FY12-13, respectively, on higher utilization levels and better management of the pyramid structure.

Exited Smartphone business; charge booked in FY11

• In April 2010, the company surprised the investor community by announcing its intention to enter into production of white labelled 3G smartphones. This was not taken positively by the market and finally in October 2010 the company announced its decision to roll back on the Smartphone business and convert the wireless segment into a pure services model. This decision cost the company a one-time restructuring charge of ~US\$3.2m in FY11 on account of resource costs, purchase order cancellations and the write-off of product prototypes.

Large deal wins, focus on profitability: Triggers for FY12

• We believe the worst is behind MindTree from the losses from smart phone business. We would look for large deals announcements, pricing improvement and increases in margins as positive triggers for the stock. In our view, MindTree has a management team with a strong pedigree that is well placed to bring the company back on track for growth.

Valuation

• We expect MindTree to deliver 2-year EPS CAGR of 40% over FY11–13E. At 10x FY3/12E PER, the stock provides an attractive entry point, in our view. In our view, the market has punished the stock enough for its business decision to venture into production of smart phone business. We expect to see a return to valuations demanding of such a pedigreed company, once the market factors in the strength of its core IT business.

Inside

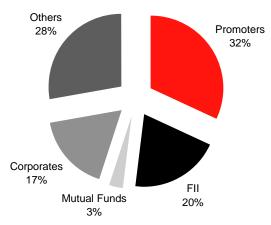
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Company profile

• MindTree was started in August 1999 by a diverse team of 10 professionals from three different nations. It is one of the Indian mid-size companies best known for its management calibre and pedigree. Its breadth of offerings include IT Services, Infrastructure Management and Technical Support (IMTS), Independent Testing, Knowledge Services and Product Engineering services.

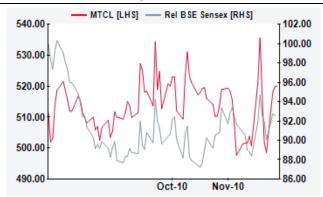
- The company is co-headquartered in Warren, New Jersey and Bangalore, India. It has 3 development centres in India and 15 offices spread across Asia, Europe and the US. The founding team was led by Ashok Soota, who was previously the vice chairman and president of Wipro, one of India's largest software companies.
- MindTree has been actively involved in the development of Bluetooth technology and has been awarded the ADM contract for India's Unique Identification (UID) project.

Fig 1 Shareholding structure as of 31 March 2011



Source: NSE, Macquarie Research, June 2011

Fig 2 MTCL IN rel BSE Sensex performance



Source: FactSet, Macquarie Research, June 2011

(all figures in INR unless noted)

Road to recovery

• Indian vendors have ample room to grow given their low market share of global IT industry. Indian IT vendors currently have only 6% market share of Global IT services industry despite posting very strong top-line growth over the last decade – IT-BPO export revenues from India have grown at a CAGR of ~29% over the last 10 years, according to NASSCOM. The proven business models of these companies (leveraging offshore delivery centres) and substantial size of the opportunity (US\$684bn in CY14E) bode well for future growth potential of industry participants.

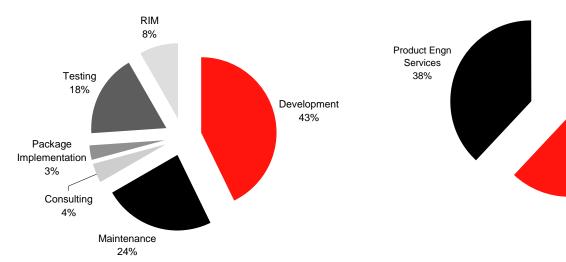
Fig 3 Indian IT Service: Significant room for growth at 6% global market share

(US\$bn)	2009	2010	2011E	2012E	2013E	2014E	CAGR - 09-14E
Global IT Services Revenues Indian IT Services Revenues India's Market Share	566.1 34.0 6.0%	574.1 36.2 6.3%	594.4 44.4 7.5%	5621.1	651.9	684.1	3.9% 14.3%
Global BPO Revenues Indian BPO Revenues India's Market Share	152.1 12.3 8.9%	158.2 14.7 9.3%	166.7 16.8 10.1%	177.2	188.7	201.9	5.8% 11.1%
Global Package Software, Products, R&D and Engineering Revenues Indian Package Software, Products, R&D and Engineering Revenues	1372.2 12.3	1407.1 12.9	1447.1 14.7	1515.5	1562.1	1611.5	3.3% 9.3%
India's Market Share Source: NASSCOM Strategic Review 2011	0.9% , Macquari	0.9% e Resear	1.0% ch, June 2	2011			

Product Engineering Services and Testing – areas of strength. MindTree has built its
credentials as a Product Engineering Services (PES) provider in the market. The company
acquired Aztec Soft in 2008 to build its Testing capabilities. The breakdown of service
offerings as well as business offerings is given in the charts below.

Fig 4 Service offerings as of 4QFY11

Fig 5 Business breakdown as of 4Q FY11



Source: Company data, Macquarie Research, June 2011

Source: Company data, Macquarie Research, June 2011

IT Services

62%

Catalysts: Deal wins should help build investor confidence

• New deal wins in infrastructure management space. Infrastructure management is an up and coming area of strength for MindTree as a result of its acquisition of 7Strata in May 2010. Currently the segment accounts for 8% of total revenues. We note that the new deal wins announced by the company have been concentrated in this segment (see Figure 6). We expect growth in this segment to remain steady as global companies continue to adapt virtualization and consolidate their global data centres.

Fig 6 Latest deal wins for mid-cap Indian IT names

	Details	Value
Hexaware		
Jun 2010 Jun 2010 Mar 2011 May 2011	Wins largest contract in company history to provide IT services for 5 years. Wins contract extension for ERP services for 3 years. Wins multi-year contract from BFSI client Wins IMS deal in Europe for 3 years	US\$110m US\$60m US\$10m per annum US\$25m
MindTree		
Feb 2011 Feb 2011	Wins IMS deal for Telecom client from Europe for 5 years Wins IMS deal for BFSI client from USA for 5 years	US\$35m US\$35m
Persistent		
Apr 2011 Feb 2011	Enters into JV with Sprint Nextel Acquires OPD business in Infospectrum	na US\$6m
Source: Com	npany data, Macquarie Research, June 2011	

Valuation: PER-based TP of Rs450

 We arrive at our target price for MindTree by using a multiple-based valuation methodology. Our target PER multiple for MindTree is 12.1x FY12E EPS, which is a 53% discount to our Infosys target multiple of 25.5x.

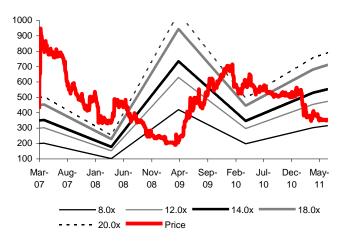
Fig 7 MindTree target PER multiple is 12x FY12E

	FY12E	FY13E	FY14E
EPS	24.85	37.26	48.62
Implied Multiple (x)	18.11	12.08	9.26
Infy Target Multiple	25.5	20.5	
Target Multiple	12.1	9.7	
Implied Target Price	450	473	
Target Price Current price (As of 20 June 2011) Implied Upside/(Downside) Source: Macquarie Research, June 2011.	450 354 27%		

MindTree trading at a higher 1-yr forward PER discount vs. historical average

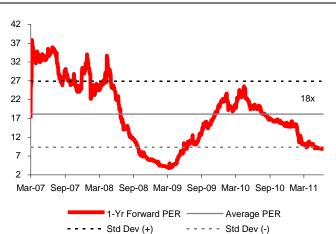
The stock is currently trading at a one-year-forward PER of 10x, clearly undervaluing the two-year CY11–13 EPS CAGR of 40% we forecast. The company historically traded at premium multiples vs. the rest of the mid-cap Indian IT group until the management decided to enter the smartphone manufacturing business in April 2010. We understand that it can take a couple of quarters of solid financial performance to win back investors' trust. But at current share price levels, we believe the market is ignoring the strength of the core IT business.

Fig 8 Quarterly financial performance should help...



Source: Bloomberg, Macquarie Research, June 2011

Fig 9 ... at least partly, to inch towards avg. multiple

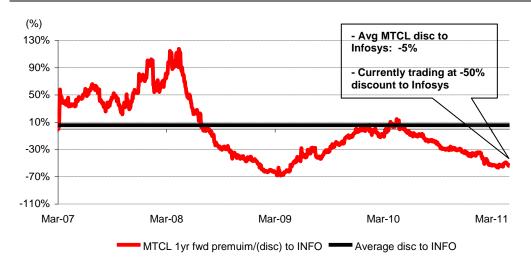


Source: Bloomberg, Macquarie Research, June 2011

MTCL trading at a higher PER discount to Infosys vs. Historical average

 MTCL is currently trading at a 50% discount to the one-year-forward PER for Infosys, in comparison to the 5% historical average discount to Infosys.

Fig 10 MTCL one-year-forward PER premium/(discount) to INFO



Note: Priced through 20 June, 2011.

Source: Bloomberg, Macquarie Research, June 2011

Key risks

- Top management exit and business diversification has shaken investor confidence. The founding chairman and 11% equity holder of the company, Mr. Ashok Soota, announced his decision to leave the company in January 2011. We note that Mr. Soota was one of ten co-founders of the company and we believe that the current management team should be able to steer the company towards growth in its core business. Potential stock sale by the co-founder is a temporary overhang, but we do not see a drastic shift in the business fundamentals of the company.
- Our estimates could be at risk if the margins come under further pressure in FY12 either due to sustained wage pressure or higher than anticipated currency appreciation.

Macquarie Research

Fig 11 Valuation comparison – Indian IT services

Company name	Bloomberg Ticker	Rec	Market Cap (US\$ m)	Current Price (Icy)	Target Price (Icy)	Up/Down side(%)	EPS FY12E	EPS FY13 E	PER (x) FY12 E	PER (x) FY13 E	RoE (FY11)	EPS CAGR (FY11-13E)
Macquarie Indian IT Ser	vices Coverage	Universe		·							·	
TCS	TCS IN	OP	46,508	1,069	1,360	27%	52.6	63.4	20.3	16.9	37.6	19.6%
Infosys	INFO IN	OP	34,571	2,710	3,650	35%	143.3	177.9	18.9	15.2	27.1	22.1%
Wipro	WPRO IN	OP	21,951	402	540	34%	23.4	26.5	17.2	15.2	26.5	10.6%
HCL Tech	HCLT IN	OP	7,111	465	615	32%	33.9	42.5	13.7	10.9	21.8	32.9%
Mphasis	MPHL IN	UP	1,984	425	380	-11%	38.5	42.8	11.0	9.9	38.7	3.4%
Rolta	RLTA IN	OP	440	123	195	59%	20.8	24.3	5.9	5.1	16.7	15.8%
Hexaware	HEXW IN	OP	434	66	85	28%	6.4	6.7	10.4	9.9	18.2	53.5%
Mindtree	MTCL IN	OP	318	355	450	27%	37.3	48.6	9.5	7.3	15.3	39.9%
Persistent	PSYS IN	OP	305	339	450	33%	33.8	40.3	10.0	8.4	15.2	6.7%
Indian IT Services												
3i Infotech	III IN	NR	183	43	NR	NR	12.5	9.2	3.4	4.7	23.1	-13.3%
Aptech	APTR IN	NR	97	90	NR	NR	7.3	na	12.4	na	21.7	na
Educomp	EDSL IN	NR	846	397	NR	NR	47.9	76.2	8.3	5.2	17.6	42.1%
Everonn	EEDU IN	NR	215	509	NR	NR	45.4	59.3	11.2	8.6	17.2	32.4%
Infotech	INFTC IN	NR	337	136	NR	NR	13.8	17.4	9.9	7.9	14.3	17.3%
KPIT Cummins	KPIT IN	NR	323	165	NR	NR	14	18.1	11.5	9.1	19.1	24.7%
Mahindra Satyam	SCS IN	NR	2,165	83	NR	NR	5.1	6.6	16.3	12.6	na	50.6%
NIIT	NIIT IN	NR	207	56	NR	NR	6.6	7.8	8.5	7.2	17.4	22.0%
NIIT Tech	NITEC IN	NR	241	183	NR	NR	29.1	33.5	6.3	5.5	27.5	4.4%
Nucleus Software	NCS IN	NR	58	81	NR	NR	12.6	15.4	6.4	5.3	15.0	28.7%
Oracle Financial Services	OFSS IN	NR	4,035	2164	NR	NR	131.5	153.6	16.5	14.1	22.9	12.0%
Patni	PATNI IN	NR	980	329	NR	NR	39.1	41.7	8.4	7.9	18.3	0.3%
Polaris	POL IN	NR	362	164	NR	NR	20.8	24.4	7.9	6.7	21.3	10.7%
Tech Mahindra	TECHM IN	NR	1,878	667	NR	NR	58.1	68.1	11.5	9.8	20.7	11.2%
International IT Service	s											
Accenture	ACN US	NR	38,652	54	NR	NR	3.2	3.7	16.7	14.8	62.2	6.4%
iGate	IGTE US	NR	869	15	NR	NR	1.5	na	10.2	na	23.6	na
Cap Gemini	CAP FP	NR	5,829	37	NR	NR	2.5	3.0	14.8	12.5	6.6	19.4%
Cognizant	CTSH US	NR	20,662	68	NR	NR	2.9	3.5	23.6	19.5	23.5	17.9%
csč	CSC US	NR	5,973	39	NR	NR	4.7	5.2	8.2	7.4	10.6	4.5%
Logica PLC	LOG LN	NR	2,068	128	NR	NR	14.9	16.3	8.6	7.9	7.8	16.5%
IBM GS	IBM US	NR	199,872	165	NR	NR	13.2	14.6	12.5	11.3	64.9	12.9%
ВРО												
EXL Service	EXLS US	NR	655	22	NR	NR	1.3	1.5	17.6	15.0	11.7	18.4%
Firstsource	FSOL IN	NR	162	17	NR	NR	2.8	3.6	6.0	4.7	10.6	25.7%
Genpact	G US	NR	3,472	16	NR	NR	0.9	1.0	18.5	16.0	10.6	15.1%
WNS	WNS US	NR	395	9	NR	NR	0.9	1.0	9.8	8.7	3.7	1.3%

Note: Prices as of 20 June 2011. Data for not rated companies based on Bloomberg consensus estimates. Coverage of IBM was suspended on 28 Sept 2010.

Source: Bloomberg, Macquarie Research, June 2011

Financials and operating metrics: Recovery path

■ Top-line growth above industry average. We forecast MindTree's total revenues will grow at a CAGR rate of 19% during FY11-13E. This is slightly higher than NASSCOM's estimate that the Indian IT services will 16%-18% for CY2011. In comparison, we are factoring in a CAGR of ~28%+ for Tier 1 Indian IT vendors. MindTree should benefit from the demand resurgence for IT services globally.

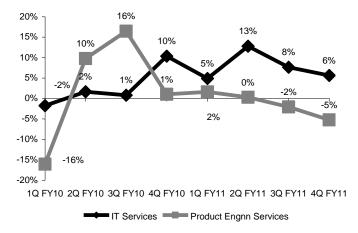
(In US\$ m) 600 ¬ 45% 50% 42% 45% 500 40% 35% 400 30% 300 25% 20% 200 15% 269 10% 100 190 5% 0 0% FY2013E FY2007 FY2008 FY2009 FY2012F FY2010 FY2011 Revenues (In US\$ m) YoY Growth (%)

Fig 12 MindTree to grow at CAGR of 19% for FY11-13E

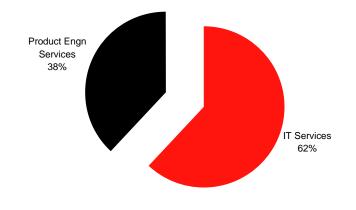
Source: Company data, Macquarie Research, June 2011

Strong IT services revenue growth to drive top line. MindTree revenues are divided into IT services and Product Engineering services (PES). Product Engineering services is further comprised of Research and Development Services (RDS), Software Product Engineering (SPE) & Next in Wireless (NIW). We expect MindTree's IT Services division to continue its higher growth trajectory in comparison to PES. This is due to PES's mix of services which saw negative growth rates in the last 2 quarters and should see slow pick up in the demand for its services in comparison to IT services in FY12.





Source: Company data, Macquarie Research, June 2011



Source: Company data, Macquarie Research, June 2011

■ EBITDA margins to struggle to reach historical levels. Historically, EBITDA margins for MindTree have hovered in the 19%-22% range. The investment in the smart phone business caused the margins to decline to ~12% in FY11. We expect the company to finish FY12 with margin of ~13% on back of cost control and higher revenue growth to flow through. We project FY13E ending with margin at 15%, showing an improvement of 290bp over the two years. Our thesis on MindTree is based on the belief that the company would be able to bring its margin to levels in line with historical precedent.

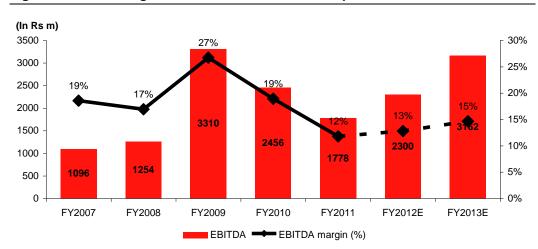


Fig 15 EBITDA margins should recover from the depressed base of FY11

Source: Company data, Macquarie Research, June 2011

Sales, General and Administration (SG&A) expenses to decline going forward. Historically, SG&A for MindTree has hovered around ~19%. Currently, the SG&A expenses stood at 21% for the year ended FY11. We believe that MindTree needs to tighten its SG&A expenses and rein in the SG&A expense to historical levels. SG&A expense rose in FY11 due to investments made in the shelved Smartphone business. We think this should be back under control going forward in FY12 and FY13.

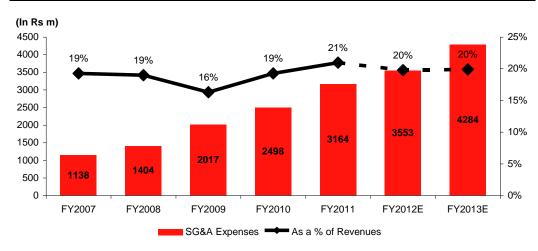


Fig 16 SG&A tapering off

Source: Company data, Macquarie Research, June 2011

• 3G Smartphone business plan shelved. In April 2010, the company surprised the investor community by announcing its intention to enter into production of white labelled 3G smart-phone. This was not taken positively by the markets and finally in October 2010 the company announced its decision to roll back on the Smartphone business and convert the wireless segment into a pure services model. This decision cost the company a restructuring charge of ~US\$3.2m in FY11 on account of resource costs, purchase order cancellations and write-off of product prototypes.

Profitability – Margin Analysis and Levers

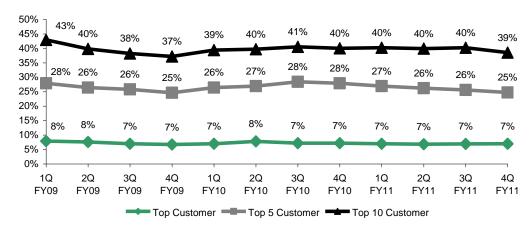
• Margins set for upward movement. The revival in the Indian IT services mid-cap stocks is driven by the twin levers of high US dollar-denominated revenue growth and improvement in EPS derived from increased EBITDA margins brought through SG&A rationalization, increased offshoring and utilization, higher proportion of fixed-price projects and containment of employee attrition. Our analysis of the margin levers in the business provides us with comfort in the margin trajectory for the companies in the space. We tabulate the key margin levers and how the companies under our coverage fare on them in Fig 17.

Fig 17 Margin levers to manage headwinds in FY12

	HCLT	MPHL	Hexaware	MindTree	Persistent
Volume Growth					
Pricing Power					
Wage Hike Impact					
Ability to manage attrition					
Jtilization					
On-Off ratio					
Currency Impact					
Ability to manage margins					
Source: Macquarie Research,	June 2011	<u>———</u>			

• **Top clients' share stagnant.** MindTree has seen the contribution from its top customer; top 5 customers and Top 10 customers remain stagnant for the past 10 quarters.

Fig 18 Top clients' revenue contribution see lack of growth



Source: Company data, Macquarie Research, June 2011

Geographic distribution – making its presence felt in the domestic market. MindTree's geographic distribution of revenues is in line with the Indian Tier 1 players' geo breakup. This is fairly consistent with the Indian IT industry. MindTree has been focusing on India as market for its products and services. We see India's share rising consistently for the past 2 years to 9% in 4QFY11 from 5.3% in 2QFY08. The company was awarded the application, development and maintenance contract for the Indian government's Unique Identification (UID) project 'Aadhaar' in June 2010. This is a prestigious project and gives the company an active role in the Indian's government's most ambitious E-Initiative project.

Fig 19 MindTree geographic distribution - India gaining focus

	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11
Americas	64.4%	64.2%	64.6%	63.1%	60.4%	60.0%
Europe	18.4%	17.3%	16.9%	18.0%	19.4%	21.9%
India	6.4%	7.0%	8.0%	8.5%	8.4%	9.0%
ROW	10.8%	11.5%	10.5%	10.4%	11.8%	9.1%
Source: Company data,	Macquarie Researc	h, June 2011				

Utilization will need to stay at current levels

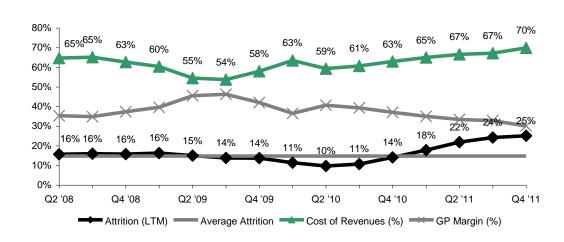
• MindTree's utilization levels (excluding trainees) stood at 73% as of 4QFY11. The company will need to sustain utilization at this level in order to ensure cost of revenue management. Indeed, higher utilization levels would help the company to come back on track achieving higher profitability growth.

Fig 20 MindTree utilization levels (excluding trainees) - Sustainability is the key

	3Q FY10	4Q FY10	1Q FY11	2Q FY11	3Q FY11	4Q FY11	Improvement (Bps)
MindTree	72.9%	72.6%	71.9%	73.0%	71.2%	72.5%	(40)
INFO	76.2%	77.3%	79.4%	82.7%	80.5%	73.4%	(280)
TCS	81.1%	81.8%	82.6%	83.8%	83.8%	82.8%	170
WPRO	84.5%	83.0%	81.6%	82.4%	79.9%	79.7%	(480)
HCLT	77.9%	79.0%	77.0%	74.1%	75.0%	76.3%	(160)
Source: Company	data, Macqu	arie Researc	h, June 2011				

 Attrition has to be controlled for margin expansion. Our analysis indicates that rising attrition and declines in gross profit are highly correlated. Thus, for MindTree to have Gross Profit margin expansion, the company needs to control attrition, in our view.

Fig 21 MindTree's rising attrition a concern for input costs



21 June 2011 48

Source: Company data, Macquarie Research, June 2011

Macquarie vs consensus: More bullish on FY13 prospects

 Our FY13 estimates for MindTree are significantly ahead of the Street for FY13E. We believe the company has put its strategic plans on handset manufacturing behind and is concentrating management focus on the core IT services business.

Fig 22 MindTree - Macquarie vs consensus

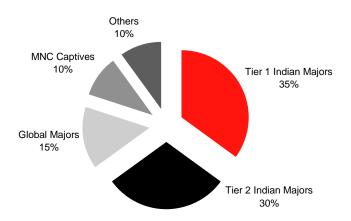
(Year – end March, All figures in Rs m)	FY12E	FY13E
Revenues		
Macquarie	17,970	21,548
Consensus	17,816	20,920
Macq. Above Consensus	0.9%	3.0%
EBITDA		
Macquarie	2,300	3,162
Consensus	2,561	3,034
Macq. Above Consensus	-10.2%	4.2%
PAT		
Macquarie	1,525	1,990
Consensus	1,552	1,863
Macq. Above Consensus	-1.7%	6.8%
EPS		
Macquarie	37.26	48.62
Consensus	38.27	45.60
Macq. Above Consensus	-2.6%	6.6%
Source: Bloomberg, Macquarie Research, June 2011		

Appendix 1: How do Tier 2 players stack up?

Niche position: Space for Tier 2 players exists in Indian IT

Fragmented market space. The Indian IT services sector comprises over 5,000
organizations offering services across a number of verticals and service lines. The provider
landscape consists of large companies, mid caps, captives and others. A breakdown of the
revenues amongst these players is as follows:

Fig 23 Breakdown of Indian IT Service exports by providers



Source: NASSCOM, Everest Group, Macquarie Research, June 2011

- Need for Tier 2 Players: Vertical Expertise OR Service Expertise. Specialization and differentiation are key factors for the business continuity of mid-sized players. The Indian IT landscape is difficult for companies having generalist offerings and without any sustainable competitive advantage. Our preferred companies, Hexaware, MindTree and Persistent Systems, have specializations in Enterprise Resource Planning (ERP), Hi-Tech & Testing domains and Outsourced Product Development (OPD), respectively.
 - ⇒ Vertical Expertise. Tier 2 companies have been successful in developing expertise in a specific client industry or vertical. This is the usual process of how a start-up evolves into a successful mid-sized company. BFSI (Banking, Financial Services and Insurance) has been the seed vertical for a lot of Indian IT companies including I-Flex (later acquired by Oracle and renamed Oracle Financial Services), Polaris, Nucleus, etc. Hi-Tech/Telecom has been the incubator for Sasken, MindTree, Persistent, etc.
 - ⇒ Service Expertise. Companies have developed distinctive capabilities in specific IT offerings (e.g., Analytics, Business intelligence, ERP, etc) and technologies (e.g., Java, Unix and .NET). For example, Hexaware developed competencies in Peoplesoft and ERP software during its early years. MindTree acquired Aztecsoft in 2008 and acquired testing capabilities for Microsoft products. Persistent has acquired various companies to expand its OPD capabilities.

Role of Tier 2 vendors in a customer's buying strategy

- Traditionally speaking, enterprise buyers work with a number of IT vendors to reduce concentration of knowledge of systems and bargaining power of vendors in a bid to avoid overdependence on a small number of vendors. This ecosystem makes space for Tier 2 players to provide niche services and offerings to enterprise buyers.
- Alternative to Tier 1 players. They also serve as alternatives for Tier 1 players due to agility and flexibility arising from their smaller size through aggressive billing rates and pricing models. Tier 2 players typically tend to be more flexible and creative with engagement and contract structures.
- More suited for small/mid-sized buyers. Companies with revenues less than US\$5bn can be classified as small/mid-sized buyers. Mid-sized IT companies are more suited to work with these buyers, since they are able to give more focus and attention to clients than the large IT service companies. This makes Tier 2 IT players suitably "right sized" for mid-sized buyers.
- Tier 2 companies as providers of specialized offerings across industry, services and geographies. Mid-sized IT companies leverage their niche offerings to succeed in the marketplace, which has competitors that are up to 10 times larger.
- Fig 24 shows how global buyers utilize IT service companies in different modes.

Fig 24 Role of Tier 2 IT service companies in buyers IT portfolios

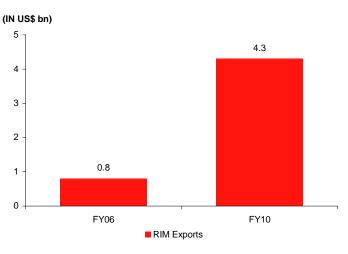
			Ability of	Tier 2 players Mid Size	to service
	Outsourcing Requirements	Characteristics	Small buyers (< US\$1bn)	buyers (US\$1-5bn)	Large buyers (>US\$5bn)
1.	Staff Augmentation Specialized Support	Mid caps usually provide access to specific skills e.g., Persistent for OPD, Hexaware for PeopleSoft, etc. Provide flexibility to buyers in manpower management Resources work similar to internal resources Provide resources for specialized and niche skills Typically fixed, long-term contracts			
3.	End to End support	 Provides services across service lines Usually involves high-level sales and management focus 			
4.	Transformation partner	 Companies should reach a particular maturity level Shows track record of able delivery 			

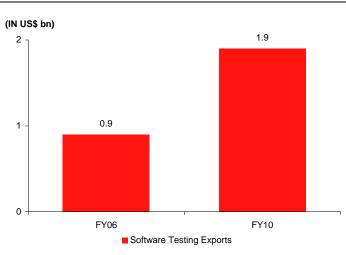
Key niche offerings for Tier 2 players

Remote Infrastructure Management (RIM). The RIM segment has emerged as the key growth engine within the IT services segment. Between 2006 and 2010, RIM recorded the fastest growth within IT service offerings at over 50% on a CAGR basis. By 2010, RIM exports have grown 5X since 2006 to reach US\$4.3bn.

⇒ As of 4QFY11, MindTree derives 8% of total revenue from RIM services.

Fig 25 RIM exports have shown 5X growth since FY06 Fig 26 Software Testing revenues have doubled...





Source: NASSCOM, Macquarie Research, June 2011

Source: NASSCOM, Macquarie Research, June 2011

- Software Testing Services provides scope for niche offerings. The Indian software testing industry earned revenues of US\$2.3bn in FY11, growing 24% on a YoY basis. BFSI and Telecom are the main verticals for big players, while smaller players offer services to niche segments like Media and Publishing, Travel and Healthcare. Thus, there is large scope for mid-cap players by developing niche, customized testing solutions.
 - ⇒ As of 4QFY11, MindTree and Hexaware derived 18% and 9% of revenues, respectively, from testing services.
- Business Intelligence (BI), Data Analytics and Cloud computing. As companies grow and become mature, they often look to IT systems to lead to the next level of growth. For example, this can be provided through intelligent usage of existing data to find hidden patterns in customer behaviour and drive sales by trimming the operational cycles within a company. This is achieved through the analysis of data generated by the current IT systems.
 - ⇒ As of 4QFY11, Hexaware derived 10% of revenues from BI services. Persistent Systems plans to achieve 40% of revenues from the growth areas of Cloud computing, Mobility, Collaboration and Analytics.

MindTree M&A History

• MindTree has stated that they are targeting to be a US\$1bn company by 2014. They had revenues of US\$272m for FY10. MindTree has a history of acquiring companies for strengthening a specific vertical or offering. Therefore, M&A has been viable option for the company.

• MindTree has shown a trend of growing its key verticals inorganically. Currently, Product Engineering Services (PES), the industry vertical that contributes the most to the company's revenues (26% in FY10), has its roots in the 2008 acquisition of Aztecsoft. Testing, which contributes 18% of revenues, was also strengthened due to the Aztecsoft acquisition.

Fig 27 M&A History

Name	Date	Offering	Value
ASAP solutions	2004	SAP	na
CoSystem (India Operations)	2004	Wireless Technology	na
Linc Software	2005	Mainframes	na
TES-Purple Vision	2007	Hi-Tech	US\$6.5m
AztecSoft	2008	OPD & Testing	US\$72m
Kyocera Wireless (India Operations)	2009	Wireless Technology	Upfront payment of US\$6m
7Strata	2010	Remote IT Infrastructure Management Services	Rs72m
Source: Macquarie Research, June 20	11		

TCS and Wipro have also strengthened their service offerings through selective inorganic growth. Standout acquisitions by the two are the acquisition of Citigroup BPO by TCS in December 2008 and Wipro's acquisition of Infocrossing for US\$600m in September 2007. Infocrossing was instrumental in strengthening Wipro's infrastructure offering (now 21% of its total revenues). Relative to its peers, Infosys has not effectively used it balance sheet to pursue inorganic growth opportunities, in our view. See Fig 28 for the M&A track record for select India IT services companies under our coverage.

Fig 28 Indian vendors' M&A track record

Target	Vertical	Date	Deal Value
TCS			
Citigroup BPO	BFSI BPO	Oct-08	USD 505m
TCS Management	Consulting	Nov-06	AUD 16.7m
TKS-Teknosoft	BFSI	Nov-06	USD 80m
Comicrom S.A., Chile	BFSI BPO	Nov-05	USD 23m
FNS	BFSI	Oct-05	USD 26m
Pearl group BPO	BFSI BPO	Oct-05	GBP 486m
SITAR	Multi Domain	May-05	INR 215m
Phoenix Soln	BFSI(Insurance)	May-04	INR 394m
AFS	Airline	May-03	na
CMC Ltd	Govt	Oct-01	51% stake for INR 1.5bn
INFO			
Expert Info. Services	Multi Domain	Jan-04	AUD 31m
WIPRO			
Citi Tech Svc	BFSI	Dec-08	USD 127m
Gallagher Fin Sys	BFSI	Jul-08	USD 6m
Infocrossing	Infrastructure	Sep-07	USD 600m
3D Networks-India	Telecom	Oct-06	USD 23m
Enabler	Multi Domain	Jun-06	USD 51m
Saraware	Telecom	Jun-06	USD 40m
Quantech Global Svc	Engineering	May-06	Na
cMango	Multi Domain	Feb -06	USD 20m
mPower and MPACT	BFSI	Dec-05	USD 28m
New Logic Tech	Telecom	Dec-05	USD 56m
NerveWire	BFSI	Apr-03	USD 19m
American Mngmt Sys	Energy	Nov-02	USD 26m
Ericsson India (R&D)	R&D	Sep-02	USD 6m
GE Med System's IT	Manufacturing	Jul-02	INR 281m
Spectramind	BPO	Oct-01	USD 93m
HCLT			
Axon Group Plc	SAP	Dec-08	659.8
Control Point Solutions Inc	Telecom	Aug-08	21.0
Liberata Financial Services Ltd	BSFI (Insurance BPO)	Jul-08	2.0
Capital Stream Inc	BSFI (FI's)	Feb-08	40.0
Answer Call Direct	Media & Transportation (BPO)	Feb-05	GBP 3.9m
Gulf Computers	Custom Apps	Jun-02	9.75 +Revenue Sharing
DSL Software Ltd	BFSI	Dec-04	160.2
Apollo Contact Center (From BT Group)	Telecom (BPO)	Dec-04	GBP 9.8 Mn
Source: Company data, Macquarie Resea	, ,		

Quarterly Results	MindTree (MTCL IN,	Outper										
Gross Profit 1,778 1,276 1,464 1,309 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	Quarterly Results		4Q/11A	1Q/12E	2Q/12E	3Q/12E	Profit & Loss		2011A	2012E	2013E	2014E
Cact of Cooks Sood m 2.754												
EBITDA m 441 479 874 586 870 Depreciation of 164 186 188 189 189 189 189 189 189 189 189 189												
Depreciation												
Amortisation of Goodwill m 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0												
Other Amoritisation m 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0												
Nel Interest Income										-		
Associates m 0 0 0 0 Associates m 0 0 0 0 0 Company Co		m	257	293	386	394		m	1,066	1,539	2,357	2,905
Exceptionals												
Forex Ganina / Losses										-	-	
Other Pre-Tax Income												
Pie-Tax Profit												
Nex Profit m 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0												
Minority Interests	Tax Expense	m	-35	-67	-84	-86		m		-335	-498	-765
Reported Earnings												
Adjusted Earnings m 321 394 381 399 Adjusted Earnings m 1,017 1,525 1,990 2,234 525 65.00	Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
EPS (arigit)												
EPS Growth yoy (adj)	EPS (rep)		7.84	7.44	9.32	9.52	EPS (rep)		24.84	37.26	48.62	56.04
Per	EPS (adj)									37.26		
PE (cigl) X 142 9.5 7.3 6.3	EPS Growth yoy (adj)	%	-41.4	92.9	64.0	27.6						
EBITDA Margin												
EBIT Margin								^				
Earnings Spirt Spi												
Revenue Growth % 13.6 18.1 13.7 20.5 Period End Shares m 41 41 41 41 41 41 41												
Forti and Loss Ratios 2011A 2012E 2013E 2014E Cashflow Analysis 2011A 2012E 2013E 2014E Cashflow Analysis 2011A 2012E 2013E 2014E Revenue Growth % 16.4 19.1 19.9 16.5 EBITDA Growth % 2.76 29.4 37.5 19.4 Tax Paid m 5.53 -335 -498 -765 EBITG Growth % 40.9 44.4 53.1 23.3 Chgs in Working Cap m 844 -282 -565 -606 Coss Profit Margin % 32.8 32.9 34.9 35.3 Nitherest Paid m 0.0 0 0 0 0 0 0 0 0	· .											
Revenue Growth % 16.4 19.1 19.9 16.5 EBITDA m 1,778 2,300 3,162 3,775 19.4 Fall To Agrowth % -27.6 29.4 37.5 19.4 May							Fellou Ellu Silales	""	41	41	41	41
EBITG Acrowth	Profit and Loss Ratios		2011A	2012E	2013E	2014E	Cashflow Analysis		2011A	2012E	2013E	2014E
EBITG Acrowth	Revenue Growth	%	16.4	19 1	19.9	16.5	FRITDA	m	1.778	2.300	3.162	3.775
EBIT Growth												
EBITDA Margin	EBIT Growth	%	-40.9	44.4	53.1	23.3	Chgs in Working Cap	m	-844	-282	-555	-605
EBIT Margin										-		
Net Profit Margin												
Payout Ratio												
EVICEIDTA X 7.9 6.1 4.4 3.7												-
Chefro												
Balance Sheet Ratios No. Special Role (10 minus) 14.1 18.0 19.6 18.9 18.9 18.0 18.9 18.0 18.9 18.0 18.0 18.0 19.6 18.9 18.0 18.0 18.0 19.6 18.9 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	EV/EBIT	х	13.2	9.1	6.0	4.8	Other	m	7,775	0		
ROE												
ROA		0/	444	40.0	40.0	40.0						
ROIC												
Net Debt/Equity % -5.3 -5.7 -5.6 -5.5 Financing Cashflow m 1 -102 -102 -102												
Interest Cover												
Book Value per Share	Interest Cover					394.7						
Balance Sheet 2011A 2012E 2013E 2014E		х						m		110	96	
Cash m 459 569 665 770 Receivables m 2,825 3,499 4,093 4,741 Inventories m 0 0 0 0 Investments m 1,112 1,916 2,881 4,135 Fixed Assets m 3,034 3,261 3,533 3,760 Intangibles m 0 0 0 0 0 Other Assets m 2,722 3,124 3,617 4,156 Total Assets m 10,152 12,369 14,790 17,562 Payables m 0 0 0 0 Short Term Debt m 0 0 0 0 Long Term Debt m 46 46 46 Provisions m 530 710 830 961 Other Liabilities m 1,814 2,429 2,841 3,290 Total Liabilities m <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Free Cashflow</td> <td>m</td> <td>-407</td> <td>1,016</td> <td>1,163</td> <td>1,462</td>							Free Cashflow	m	-407	1,016	1,163	1,462
Receivables							Balance Sheet		2011A	2012E	2013E	2014E
Inventories												
Investments												
Fixed Assets m 3,034 3,261 3,533 3,760 Intangibles m 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 14,790 17,562 7 17,562 7 17,562 7 17,562 7 17,562 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0										-		
Intangibles												
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Short Term Debt m 0 0 0 0 Long Term Debt m 46 46 46 46 46 46 46 46 46 46 46 46 46 70 20 20 20 961 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 </td <td></td>												
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Total Liabilities m 2,390 3,184 3,717 4,298 Shareholders' Funds m 7,762 9,185 11,073 13,264 Minority Interests m 0 0 0 0 Other m 0 0 0 0 Total S/H Equity m 7,762 9,185 11,073 13,264												
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Total Liab & 3/11 tulius III 10,132 12,309 14,790 17,302												
							I Otal Liab & 3/FI Fullus	""	10,132	12,303	17,130	17,302

All figures in INR unless noted. Source: Company data, Macquarie Research, June 2011

21 June 2011 55

INDIA



PS	YS IN	Outp	perform
Price	e 20 Jun 11	Rs	339.40
12-m	nonth target	Rs	450.00
Upsi	ide/Downside	%	32.6
Valu - PER	ation	Rs	450.00
GICS	S sector	Software	& Services
Mark	ket cap	Rsm	13,576
30-d	ay avg turnover	US\$m	0.5
Mark	ret cap	US\$m	302
Num	ber shares on is	sue m	40.00

Investment fundamentals

Year end 31 Mar		2011A	2012E	2013E	2014E
Revenue	m	7,758	10,034	12,007	14,062
EBITDA	m	1,583	2,038	2,465	2,853
EBITDA growth	%	8.2	28.7	21.0	15.7
Reported profit	m	1,397	1,353	1,611	1,911
Adjusted profit	m	1,397	1,353	1,611	1,911
EPS adj	Rs	34.92	33.82	40.27	47.77
EPS adj growth	%	6.4	-3.2	19.1	18.6
PER adj	Х	9.7	10.0	8.4	7.1
ROA	%	13.4	15.4	16.6	16.8
ROE	%	20.2	16.7	16.9	17.1
EV/EBITDA	Х	7.9	6.2	5.1	4.4
Net debt/equity	%	-13.4	-14.6	-14.6	-14.5
P/BV	Х	1.8	1.6	1.3	1.1

Source: FactSet, Macquarie Research, June 2011 (all figures in INR unless noted)

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21 June 2011

Macquarie Capital Securities India (Pvt) Ltd

Persistent Systems

Play on OPD

Initiating coverage with Outperform rating and Rs450 TP

We initiate coverage of Persistent Systems with an Outperform rating and a target price of Rs450, implying 33% upside. We like Persistent for its focus on the under-penetrated OPD market and strong client relations that could translate into large deal wins. For our detailed thesis please see our sector report, *India IT Services - Mid Cap Mantra for growth*.

Pure play on Outsourced Product Development (OPD)

- OPD is an emerging niche category in the Indian software industry. The
 industry body NASSCOM estimates Outsourced Product Development
 revenues grew at a CAGR of 16% for 2007-10. Persistent, with its track
 record of 20 years in this field, enjoys a formidable reputation with its clients.
- Persistent's business model is to provide services to large software product companies for reducing costs and time to market of their new products. For the smaller software product companies, Persistent provides end-to-end solutions in niche domains and technologies.

Focus on Non-Linear Revenues: Cloud and IP Strategy

- Management focused on four growth drivers. Persistent has identified four growth areas: Cloud Computing & IP led Initiatives, Business Intelligence /Analytics, Mobility and Enterprise Solutions. Of the four, we believe Cloud and IP initiatives provide an excellent opportunity to drive non-linear revenue growth.
- Engagements with leading tech names on Cloud in place. Persistent has 400+ employees working on the IBM, Amazon, and Salesforce.com platform to help develop their Cloud offerings. We are positive on the demand scenario for OPD players following rapid deployment of "Cloud Computing".

Sound Operating Metrics

- IP-driven work already contributing to revenues in FY11: Persistent has invested ~4% of its total technical time in IP development, leading to a ~9% share in revenues from non-linear revenues. This investment should lead to a larger share of revenues with no incremental effort in the coming quarters.
- Strength of client relationship. Persistent's client list includes long-term relationships with 37 companies having more than US\$1bn in revenues. This gives us confidence in their ability to attract and retain clients.
- Geo mix and client concentration. North America accounts for 86% of revenues. Contribution from Europe is minimal at 6%. Top 10 clients contribute 50% of total revenues. Though, this poses client concentration risk, this compares favourably when compared to other Tier 2 Indian IT vendors.

Valuation

■ Lapse of STPI tax benefits hurting earnings in FY12. The extinction of tax breaks for Indian IT vendors could see a big jump (30% from 7%) in Persistent's tax rate in FY12. This could be a key reason for potentially depressed earnings in FY12, but an expected ~20% earnings growth in the next two years makes us positive. Our target price of Rs450 is based on 13x FY12E PER and 11x FY13E PER.

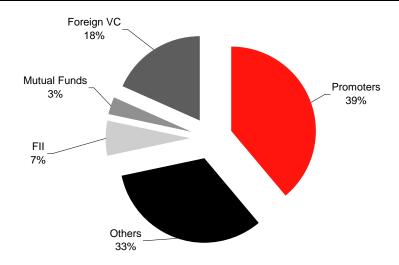
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Valuation: PER-based TP of Rs450	60
Financials and Operating Metrics: Poise	ed
for growth	62
Appendix 1: How do Tier 2 players stac	k
up?	66

Company profile

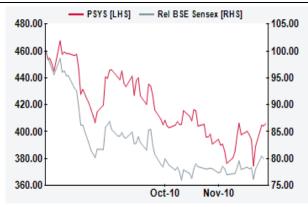
Established in 1990, Persistent Systems is a company specializing in outsourced product development (OPD). With 6,300+ employees, Persistent Systems has delivered over 3,000 software product releases in the last five years and has 300+ customers. Persistent operates from 4 development centres in India (Pune, Nagpur, Goa and Hyderabad) and over 15 offices in Americas and Europe.

Fig 1 Shareholding pattern as of 31 March 2011



Source: BSE, Macquarie Research, June 2011

Fig 2 PSYS IN rel BSE Sensex performance



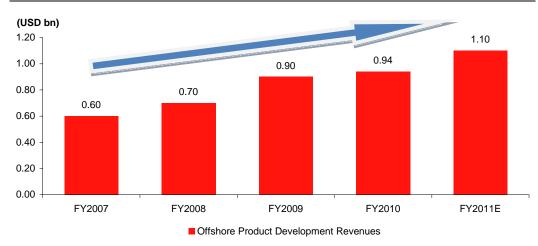
Source: FactSet, Macquarie Research, June 2011 (all figures in INR unless noted)

Play on OPD

Outsourced Product Development Business

NASSCOM estimates the Indian Outsourced Product Development (OPD) segment will
contribute US\$1.1bn in FY11. This represents a growth of 13% for the year. Going forward,
we believe technology spends will strengthen and grow at a faster rate.

Fig 3 OPD revenues growing at CAGR 16%



Source: NASSCOM, Macquarie Research, June 2011

OPD as a % of R&D Spend shows significant under-penetration

Persistent works with a focus on developing products and services of other technology vendors. NASSCOM estimates US\$1,100bn as the Global Engineering and R&D spend for 2009. This translates into India's market share of the OPD revenues as ~0.1% of global Engineering and R&D revenues. This leaves immense scope of growth for the Indian OPD vendors.

Fig 4 OPD revenues constitute a small portion of Global Engnn and R&D spend

In US\$ Bn	2009	2010E	2011E	2012E	2013E	2014E	CAGR - 09-11
Global IT services	566	574	594	621	651	684	2%
Global BPO	152	158	166	177	188	201	5%
Global Packaged Software	272	282	297	315	337	361	4%
Global Engineering & R&D	1100	1125	1150	1200	1250	1250	2%
India OPD Revenues	0.70	0.90	0.94	1.1	na	na	16%
% share of Global	0.1%	0.1%	0.1%				
Engineering and R&D							
revenues							
Source: NASSCOM, Macquari	ie Research	n, June 201	1				

Blue Chip Client Focus

Persistent has an impressive client list including 37 companies having more than US\$1bn in revenues. The top 10 clients account for 51% of the total revenues. Some of their top clients include:

Fig 5 Strong Client List leading to revenue growth

Vertical	% Revenue Contribution	Client List
Telecom	21%	Enterprise Software: Amdocs,
		 Handset Makers: Samsung, Research in Motion(RIM), Nokia
Infrastructure and Systems	69%	 Infrastructure Software : Oracle, IBM, Microsoft E-Commerce: Amazon, LinkedIn, Yahoo Independent Software Vendors: Adobe, Symantec
Life Sciences	11%	Agilent, Cardinal Health
Source: Company data, I	Macquarie Research,	June 2011

Non-linear Revenues growing

■ The non-linear revenues for Persistent have grown to US\$15m in FY11 from US\$7m in FY09. This represents a CAGR growth of 46% for the said period. The company has been focusing on four areas for driving non-linear revenues including Cloud Computing & IP led Initiatives, Business Intelligence /Analytics, Mobility and Enterprise Solutions.

Fig 6 Non linear revenues grew at a 46% CAGR vs company CAGR of 15%

				CAGR
	FY2009	FY2010	FY2011	(FY09-11)
Total Revenues (US\$ m) IP as a % of revenues	127.9 5.2%	127.3 7.2%	170.2 8.76%	15%
IP Revenues (US\$ m)	6.7	9.2	14.9	46%
Source: Company data, Macqua	rie Research, June	2011		

 Cloud Computing Engagements with leading tech names in place. Persistent has 400+ employees working on the IBM, Amazon, and Salesforce.com platform to help develop their Cloud offerings. We are positive on the demand scenario for OPD players following rapid deployment of "Cloud Computing".

Inorganic growth: An option for Persistent

- With Rs3.5bn (US\$77m) on its Balance sheet as of FY11, Persistent could consider achieving growth through inorganic means. The company has already shown acquisition intent to enhance its capabilities and address gaps in their industry and technical expertise map. Persistent has made the following acquisitions in the recent past including:
 - ⇒ October, 2005 ControlNet (Embedded systems expertise)
 - ⇒ July, 2007 Metrikus (India) (Bought IP Assets)
 - ⇒ October, 2009 PaxPro (Packaging management software)
 - ⇒ Feb, 2011 OPD business of Infospectrum
 - ⇒ May, 2011 Acquires software marketing and development business of Agilent Technologies

Valuation: PER-based TP of Rs450

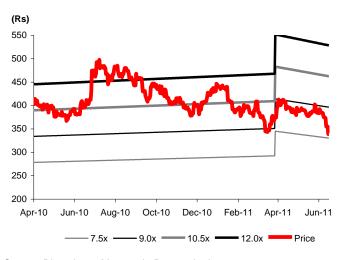
 We arrive at our target price for Persistent by using a multiple-based valuation methodology. Our target PER multiple for Persistent is 13x FY12E, which is a 48% discount to our Infosys target multiples.

Fig 7 Persistent target PER multiple is at 13x FY12E

(Year - end March)	FY12E	FY13E	FY14E
EPS	33.82	40.27	47.77
Implied multiples	13.31	11.18	9.42
Infy Target Multiple	25.5		
Target PER Multiple	13.3		
Implied Target Price	450		
Source: Macquarie Research June 2011	400		

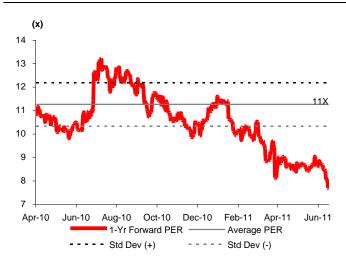
Persistent was listed in April 2010 and has a limited trading history. As such, a comparison with past trends is difficult. The company is also facing a significant tax headwind depressing its FY12 earnings base. We believe as investors' focus moves towards FY13, an expected 20% earnings growth for an 11x FY13E PER valuation would make it an attractive investment opportunity.

Fig 8 Limited trading history...



Source: Bloomberg, Macquarie Research, June 2011

Fig 9 ...makes historical trend analysis less relevant



Source: Bloomberg, Macquarie Research, June 2011

Key risks

• Margin risks from wage hike and currency appreciation. Persistent has given midcycle wage hikes to its employees in January 2011. Management maintains that this was pre-emptive in nature to arrest attrition. Our estimates could be at risk if the margins come under further pressure in FY12 either due to sustained wage pressure or higher than anticipated currency appreciation.

Macquarie Research

Fig 10 Valuation comparison – Indian IT services

Company name	Bloomberg Ticker	Rec	Market Cap (US\$ m)	Current Price (Icy)	Target Price (lcy)	Up/Down side(%)	EPS FY12E	EPS FY13 E	PER (x) FY12 E	PER (x) FY13 E	RoE (FY11)	EPS CAGR (FY11-13E)
Macquarie Indian IT Servi		Universe				•		•	•			
TCS	TCS IN	OP	46,508	1,069	1,360	27%	52.6	63.4	20.3	16.9	37.6	19.6%
Infosys	INFO IN	OP	34,571	2,710	3,650	35%	143.3	177.9	18.9	15.2	27.1	22.1%
Wipro	WPRO IN	OP	21,951	402	540	34%	23.4	26.5	17.2	15.2	26.5	10.6%
HCL Tech	HCLT IN	OP	7,111	465	615	32%	33.9	42.5	13.7	10.9	21.8	32.9%
Mphasis	MPHL IN	UP	1,984	425	380	-11%	38.5	42.8	11.0	9.9	38.7	3.4%
Rolta	RLTA IN	OP	440	123	195	59%	20.8	24.3	5.9	5.1	16.7	15.8%
Hexaware	HEXW IN	OP	434	66	85	28%	6.4	6.7	10.4	9.9	18.2	53.5%
Mindtree	MTCL IN	OP	318	355	450	27%	37.3	48.6	9.5	7.3	15.3	39.9%
Persistent	PSYS IN	OP	305	339	450	33%	33.8	40.3	10.0	8.4	15.2	6.7%
Indian IT Services												
3i Infotech	III IN	NR	183	43	NR	NR	12.5	9.2	3.4	4.7	23.1	-13.3%
Aptech	APTR IN	NR	97	90	NR	NR	7.3	na	12.4	na	21.7	na
Educomp	EDSL IN	NR	846	397	NR	NR	47.9	76.2	8.3	5.2	17.6	42.1%
Everonn	EEDU IN	NR	215	509	NR	NR	45.4	59.3	11.2	8.6	17.2	32.4%
Infotech	INFTC IN	NR	337	136	NR	NR	13.8	17.4	9.9	7.9	14.3	17.3%
KPIT Cummins	KPIT IN	NR	323	165	NR	NR	14	18.1	11.5	9.1	19.1	24.7%
Mahindra Satyam	SCS IN	NR	2,165	83	NR	NR	5.1	6.6	16.3	12.6	na	50.6%
NIIT	NIIT IN	NR	207	56	NR	NR	6.6	7.8	8.5	7.2	17.4	22.0%
NIIT Tech	NITEC IN	NR	241	183	NR	NR	29.1	33.5	6.3	5.5	27.5	4.4%
Nucleus Software	NCS IN	NR	58	81	NR	NR	12.6	15.4	6.4	5.3	15.0	28.7%
Oracle Financial Services	OFSS IN	NR	4,035	2164	NR	NR	131.5	153.6	16.5	14.1	22.9	12.0%
Patni	PATNI IN	NR	980	329	NR	NR	39.1	41.7	8.4	7.9	18.3	0.3%
Polaris	POL IN	NR	362	164	NR	NR	20.8	24.4	7.9	6.7	21.3	10.7%
Tech Mahindra	TECHM IN	NR	1,878	667	NR	NR	58.1	68.1	11.5	9.8	20.7	11.2%
International IT Services												
Accenture	ACN US	NR	38,652	54	NR	NR	3.2	3.7	16.7	14.8	62.2	6.4%
iGate	IGTE US	NR	869	15	NR	NR	1.5	na	10.2	na	23.6	na
Cap Gemini	CAP FP	NR	5,829	37	NR	NR	2.5	3.0	14.8	12.5	6.6	19.4%
Cognizant	CTSH US	NR	20,662	68	NR	NR	2.9	3.5	23.6	19.5	23.5	17.9%
CSC	CSC US	NR	5,973	39	NR	NR	4.7	5.2	8.2	7.4	10.6	4.5%
Logica PLC	LOG LN	NR	2,068	128	NR	NR	14.9	16.3	8.6	7.9	7.8	16.5%
IBM GS	IBM US	NR	199,872	165	NR	NR	13.2	14.6	12.5	11.3	64.9	12.9%
ВРО												
EXL Service	EXLS US	NR	655	22	NR	NR	1.3	1.5	17.6	15.0	11.7	18.4%
Firstsource	FSOL IN	NR	162	17	NR	NR	2.8	3.6	6.0	4.7	10.6	25.7%
Genpact	G US	NR	3,472	16	NR	NR	0.9	1.0	18.5	16.0	10.6	15.1%
WNS	WNS US	NR	395	9	NR	NR	0.9	1.0	9.8	8.7	3.7	1.3%
Note: Prices as of 20 June				_						· · · ·	3. ,	

Note: Prices as of 20 June 2011. Data for not rated companies based on Bloomberg consensus estimates. Coverage of IBM was suspended on 28 Sept 2010.

Source: Bloomberg, Macquarie Research, June 2011

Financials and Operating Metrics: Poised for growth

• Growth Engine running smoothly; US\$170m sales achieved in FY11. The company has guided for US\$220m sales for FY12. This comes on back of US\$170m sales for FY11. This translates into growth of 29% on a yearly basis. We believe that the company is on track for higher growth rates of 35% and 22% for FY12 and FY13. This seems reasonable to us given their marquee client list and uptick in US demand for software services.

(In US\$ m) (%) 300 60% 51% 44% 50% 250 34% 40% 200 30% 150 20% 229 100 10% 128 106 50 0% 70 0 -10% FY2006 FY2007 FY2008 FY2009 FY2010 FY2011 FY2012E FY2013E Revenues (In US\$ m) YoY Growth (%)

Fig 11 We expect 35%+ Top-line growth for FY12...

Source: Company data, Macquarie Research, June 2011

Margin profile stable in FY12 and FY13. Currently, the company derives 9% of its total
revenues from non-linear initiatives. We believe that this could be a big driver resulting in a
positive surprise in EBITDA margins for upcoming years. We are building in flat margins
during FY12 and FY13 for the company to be on the conservative side.

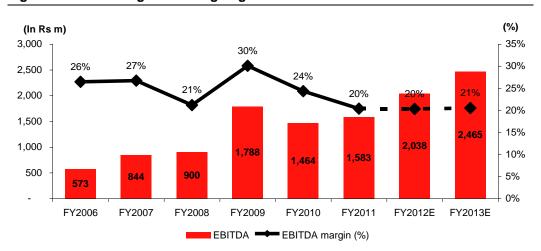


Fig 12 EBITDA Margins stable going forward

Source: Company data, Macquarie Research, June 2011

Profitability analysis: Margin Analysis and Levers

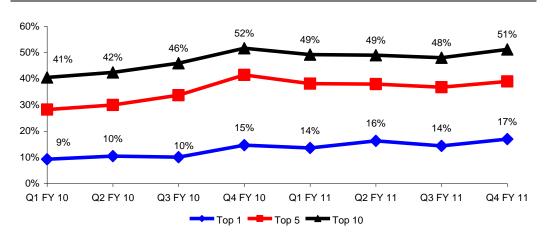
See stable margin outlook for Persistent. The revival in the IT services mid-cap stocks is driven by the twin levers of high US\$ revenue growth and improvement in EPS derived from increased margins brought through SG&A rationalization, increased off-shoring and utilization, increased proportion of fixed price projects and containment of employee attrition. Our analysis of the margin levers in the business provides us with comfort in the margin trajectory for the companies. We tabulate the key margin levers and how our companies fare on them in table below.

Fig 13 Margin levers to manage headwinds in FY12

	HCLT	MPHL	Hexaware	Mindtree	Persistent
Volume Growth					
Pricing Power					
Wage Hike Impact					
Ability to manage attrition					
Utilization					
On-Off ratio					
Currency Impact					
Ability to manage margins					
Source: Macquarie Research,	June 2011				

• Contribution from Top 10 Clients rise. Persistent's client list includes long-term relationships with 37 companies having more than US\$1bn in revenues. Its top client is the Global IT giant, IBM, whose share has increased to 17% of total revenues in 4QFY11 from 9% of total revenues in 1QFY10. The contribution of the top 10 clients has risen to 51% of total revenues in 4QFY11 from 41% of total revenues in 1QFY10. Though this poses client concentration risk, this is a barometer of the client mining abilities and the confidence shown in the company by its clients. Additionally, the ratio is inline when compared to other Tier 2 Indian IT vendors.

Fig 14 Rising contribution in revenues from Top Clients



Source: Macquarie Research, June 2011

US-focused, Offshore heavy model. The US contributed 86% to company revenues as
of 4QFY11. This geographic concentration bodes well for FY12 considering the US
demand resurgence. Currently, Persistent derives 79% of its revenues from offshore
activities and 21% from onsite activities. This showcases the nature of outsourced product
development which the company engages in.

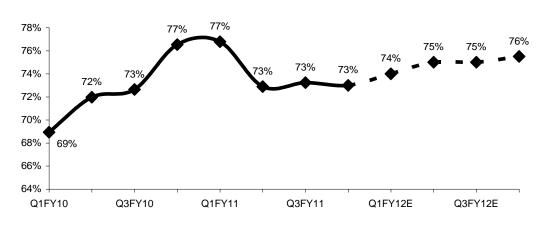
Fig 15 Geographic Breakup of Revenues: US-focused sales

%	Q1 FY 10	Q2 FY 10	Q3 FY 10	Q4 FY 10	Q1 FY 11	Q2 FY 11	Q3 FY 11	Q4 FY 11	
North Americas	84.9%	85.1%	82.0%	87.0%	85.1%	85.5%	85.4%	86.3%	
Europe	10.4%	8.5%	8.2%	6.4%	6.5%	6.0%	5.3%	5.8%	
Asia-Pacific	4.7%	6.3%	9.8%	6.6%	8.4%	8.5%	9.3%	7.9%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Source: Company data, Macquarie Research, June 2011									

Expect Utilization levels to stabilize

 Persistent managed to increase its utilization levels by 410bps to 73% in FY11 from 69% in FY10. This helped manage margins in the year. With demand picking up further, we expect the utilization levels to stabilize at ~75% in FY12. We expect this will rise further to 76% in FY13.

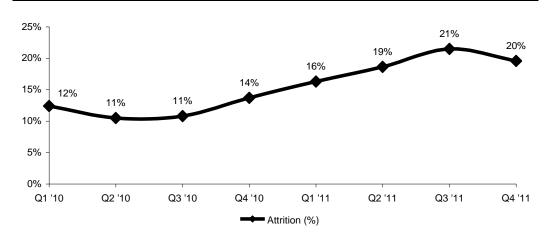
Fig 16 Utilization levels inching upwards



Source: Company data, Macquarie Research, June 2011

Rising attrition a cause of concern. We expect a rise in demand for Indian IT services to the Tier 1 companies targeting 25%+ US\$ revenue growth for FY12. This should lead to the attrition numbers remaining volatile and in the high teens for mid-sized IT vendors like Persistent. If attrition is not brought under control, then there could be downside risks to margins on account for increased input costs.

Fig 17 Attrition rising in lieu of increased demand outlook



Source: Company data, Macquarie Research, June 2011

Macquarie vs. Consensus: US\$ Revenue growth to drive valuations

 We believe the company will be able to exceed its target growth this year by delivering 30%+ YoY growth. Our EBITDA and earnings estimates for the company are broadly inline with street estimates.

Fig 18 Persistent - Macquarie vs consensus

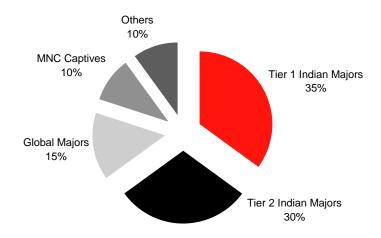
(Year End – March, All figures in Rs m)	FY12E	FY13E	
Revenues			
Macquarie	10,034	12,007	
Consensus	9,977	12,294	
Macq. Above Consensus	0.6%	-2.3%	
EBITDA			
Macquarie	2,038	2,465	
Consensus	2,047	2,540	
Macq. Above Consensus	-0.5%	-2.9%	
PAT			
Macquarie	1,353	1,611	
Consensus	1,329	1,649	
Macq. Above Consensus	1.8%	-2.3%	
EPS			
Macquarie	33.82	40.27	
Consensus	33.27	41.32	
Macq. Above Consensus	1.7%	-2.5%	
Source: Bloomberg, Macquarie Research, June 2011			

Appendix 1: How do Tier 2 players stack up?

Niche position: Space for Tier 2 players exists in Indian IT

Fragmented market space. The Indian IT services sector is comprised of over 5,000 organizations offering services across a number of verticals and service lines. The provider landscape consists of large companies, mid-caps, captives and others. A breakup of revenues amongst these players is as follows.

Fig 19 Breakup of Indian IT Service exports by Providers



Source: NASSCOM, Everest Group, Macquarie Research, June 2011

- Need for Tier 2 Players: Vertical Expertise OR Service Expertise. We see that there exists a need for specialization and differentiation as factors necessary for the business continuity of mid-sized players. The Indian IT landscape makes survival difficult for companies having generalist offerings and without any sustainable competitive advantage. Our chosen companies, Hexaware, Mindtree and Persistent Systems, have specializations in Enterprise Resource Planning (ERP), Hi-Tech & Testing domains and Outsourced Product Development (OPD), respectively.
 - ⇒ Vertical Expertise. Tier 2 companies have been successful in developing expertise in a specific client industry or vertical. This is the usual process of how a start-up evolves into a successful mid-sized company. BFSI has been the seed vertical for a lot of Indian IT companies including I-Flex (later acquired by Oracle and renamed Oracle Financial Services), Polaris, Nucleus etc. Hi-Tech/Telecom has been the incubator for Sasken, Mindtree, Persistent etc.
 - ⇒ Service Expertise. Companies have developed distinctive capabilities in specific IT offerings (e.g. Analytics, Business intelligence, ERP etc) and technologies (e.g. Java, Unix, .NET). For example Hexaware developed competencies in Peoplesoft, ERP software during its early years. Mindtree acquired Aztecsoft in 2008 and acquired testing capabilities for Microsoft products. Persistent has acquired various companies to expand its OPD capabilities.

Role of Tier 2 vendors in a customer's buying strategy

- Traditionally speaking, enterprise buyers work with a number of IT vendors to reduce concentration of the knowledge of systems and bargaining power of vendors in a bid to avoid over-dependence on a small number of vendors. This eco-system makes space for Tier 2 players to provide niche services and offerings to enterprise buyers.
- Alternative to Tier 1 players. They also serve as alternatives for tier 1 players due to agility and flexibility arising from their smaller size through aggressive billing rates and pricing models. Tier 2 players typically tend to be more flexible and creative with engagement and contract structures.
- More suited for small/mid-sized buyers. Companies that have revenues less than US\$5bn can be classified as small/mid-sized buyers. Mid-sized IT companies are more suited to work with these buyers since they are able to give more focus and attention to clients than the large IT service companies. This makes tier 2 IT players suitably "right-sized" for mid-sized buyers.
- Tier 2 companies as provider of specialized offerings across industry, services and geographies. Mid-sized IT companies leverage their niche offerings to succeed in the marketplace which has competitors that are up to 10 times larger than their own size.
- The figure below shows how global buyers utilize IT service companies in different modes.

Fig 20 Role of Tier 2 IT service companies in buyers' IT portfolios

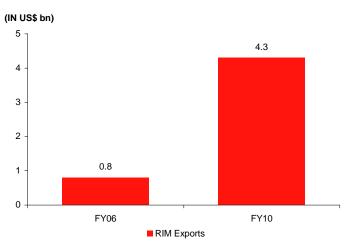
			Ability of Tier 2 players to service Mid Size			
	Outsourcing Requirements	Characteristics	Small buyers (< US\$1bn)	buyers (US\$1-5bn)	Large buyers (>US\$5bn)	
1.	Staff Augmentation Specialized Support	Mid-caps usually provide access to specific skills e.g. Persistent for OPD, Hexaware for PeopleSoft etc. Provide flexibility to buyers in manpower management Resources work similar to internal resources Provide resources for specialized and niche skills Typically fixed, long-term contracts				
3.	End to End support	 Provides services across service lines Usually involves high level sales and management focus 				
4.	Transformation partner	 Companies should reach a particular maturity level Shows track record of able delivery 				

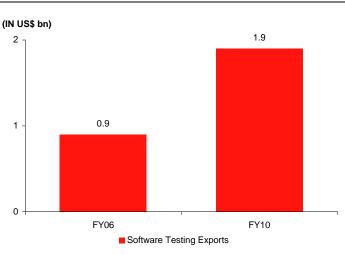
Key niche offerings for Tier 2 players

- Remote Infrastructure Management (RIM). The RIM segment has emerged as the key growth engine within the IT services segment. Between 2006-10 RIM recorded the fastest growth within IT service offerings at over 50% on a CAGR basis. By 2010, RIM exports grew 5X since 2006 to reach US\$4.3bn.
 - ⇒ As of 4QFY11, Mindtree derives 8% from RIM services.

Fig 21 RIM Exports showing 5X growth since FY06

Fig 22 Software Testing revenues double...





Source: NASSCOM, Macquarie Research, June 2011

Source: NASSCOM, Macquarie Research, June 2011

- Software Testing Services provide scope for niche offerings. The Indian software testing market earned revenues of US\$2.3bn in FY11 growing at 24% on a YoY basis. We see that BFSI and Telecom are the main verticals for big players while smaller players are offering services to niche segments like Media and Publishing, Travel, Healthcare etc. There is large scope for mid-cap players by developing niche, customized testing solutions.
 - ⇒ As of 4QFY11, Mindtree and Hexaware derived 18% and 9% of revenues, respectively, from testing services.
- Business Intelligence (BI), Data Analytics and Cloud computing. As companies grow and become mature, a need is felt for the IT systems to lead to the next level of growth. This is provided through intelligent usage of existing data to find hidden customer behaviour and drive sales through trimming the operational cycles within a company. This is achieved by analysis of data generated in the current IT systems.
 - ⇒ As of 4QFY11, Hexaware derived 10% of revenues from BI services. Persistent systems plans to achieve 40% of revenues from growth areas of Cloud computing, Mobility, Collaboration and Analytics.

Persistent Systems (PSYS IN, Outperform, Target Price: Rs450.00)

Persistent Systems (F	25 Y S I	N, Outper	rtorm, Ta	rget Pric	e: KS450.	00)					
Quarterly Results		4Q/11A	1Q/12E	2Q/12E	3Q/12E	Profit & Loss		2011A	2012E	2013E	2014E
Revenue	m	2,128	2,285	2,437	2,587	Revenue	m	7,758	10,034	12,007	14,062
Gross Profit	m	795	868	889	996	Gross Profit	m	3,036	3,844	4,686	5,454
Cost of Goods Sold	m	1,333	1,416	1,547	1,591	Cost of Goods Sold	m	4,723	6,190	7,321	8,607
EBITDA	m	381	457	451	530	EBITDA	m	1,583	2,038	2,465	2,853
Depreciation	m	119	123	129	133	Depreciation	m	424	518	547	567
Amortisation of Goodwill	m	0	0	0	0	Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0	Other Amortisation	m	0	0	0	0
EBIT	m	262	334	322	398	EBIT	m	1,159	1,519	1,918	2,286
Net Interest Income	m	0	0	0	0	Net Interest Income	m	0	0	0	0
Associates	m	0	0	0	0	Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	29	48	48	48	Forex Gains / Losses	m	173	192	160	160
Other Pre-Tax Income	m	58 348	53 434	54 424	56 502	Other Pre-Tax Income Pre-Tax Profit	m	171	221	223	284
Pre-Tax Profit	m	-17	-130		-151	Tax Expense	m	1,504	1,933 -580	2,301	2,730
Tax Expense Net Profit	m m	331	304	-127 297	351	Net Profit	m m	-108 1,395	1,353	-690 1,611	-819 1,911
Minority Interests	m	0	0	0	0	Minority Interests	m	2	0	0	0
Reported Earnings Adjusted Earnings	m m	331 331	304 304	297 297	351 351	Reported Earnings Adjusted Earnings	m m	1,397 1,397	1,353 1,353	1,611 1,611	1,911 1,911
EPS (rep)		8.28	7.60	7.42	8.78	EPS (rep)		34.92	33.82	40.27	47.77
EPS (adi)		8.28	7.60	7.42 7.42	8.78	EPS (lep)		34.92 34.92	33.82	40.27	47.77
EPS Growth yoy (adj)	%	-26.8	-12.0	-17.2	-3.1	EPS (adj) EPS Growth (adj)	%	34.92 6.4	-3.2	19.1	18.6
E. S Glowal yoy (auj)	/0	-20.0	-12.0	-11.2	-5.1	PE (rep)	76 X	9.7	10.0	8.4	7.1
						PE (adj)	X	9.7	10.0	8.4	7.1
EBITDA Margin	%	17.9	20.0	18.5	20.5	Total DPS		5.50	2.00	2.00	2.00
EBIT Margin	%	12.3	14.6	13.2	15.4	Total Dr3	%	1.6	0.6	0.6	0.6
Earnings Split	%	23.7	22.5	21.9	26.0	Weighted Average Shares	m	40	40	40	40
Revenue Growth	%	23.9	26.2	30.3	32.7	Period End Shares	m	40	40	40	40
EBIT Growth	%	-11.4	35.3	-2.3	23.8	1 chod End ondies		40	40	40	40
Profit and Loss Ratios		2011A	2012E	2013E	2014E	Cashflow Analysis		2011A	2012E	2013E	2014E
Revenue Growth	%	29.1	29.3	19.7	17.1	EBITDA	m	1,583	2,038	2,465	2,853
EBITDA Growth	%	8.2	28.7	21.0	15.7	Tax Paid	m	-342	-580	-690	-819
EBIT Growth	%	2.7	31.1	26.2	19.2	Chgs in Working Cap	m	48	-425	-194	-282
Gross Profit Margin	%	39.1	38.3	39.0	38.8	Net Interest Paid	m	0	0	0	0
EBITDA Margin	%	20.4	20.3	20.5	20.3	Other	m	286	413	383	444
EBIT Margin	%	14.9	15.1	16.0	16.3	Operating Cashflow	m	1,575	1,446	1,964	2,197
Net Profit Margin	%	18.0	13.5	13.4	13.6	Acquisitions	m	0	0	0	0
Payout Ratio	%	15.7	5.9	5.0	4.2	Capex	m	-972	-655	-660	-675
EV/EBITDA	Х	7.9	6.2	5.1	4.4	Asset Sales	m	-15,528	-401	-1,002	-1,192
EV/EBIT	X	10.8	8.3	6.6	5.5	Other	m	13,971	0	0	0
						Investing Cashflow	m	-2,529	-1,056	-1,662	-1,867
Balance Sheet Ratios						Dividend (Ordinary)	m	-240	-80	-80	-80
ROE	%	20.2	16.7	16.9	17.1	Equity Raised	m	0	0	0	0
ROA	%	13.4	15.4	16.6	16.8	Debt Movements	m	0	0	0	0
ROIC	%	24.1	16.4	18.0	18.2	Other	m	-473	0	0	0
Net Debt/Equity	%	-13.4	-14.6	-14.6	-14.5	Financing Cashflow	m	-712	-80	-80	-80
Interest Cover Price/Book	X X	nmf 1.8	nmf 1.6	nmf 1.3	nmf 1.1	Net Chg in Cash/Debt	m	-1,666	310	222	250
Book Value per Share		186.8	218.6	256.9	302.6	Free Cashflow	m	604	791	1,304	1,522
						Balance Sheet		2011A	2012E	2013E	2014E
						Cash	m	1,000	1,280	1,502	1,752
						Receivables	m m	1,582	1,260	2,131	2,485
						Inventories	m	1,362	0	2,131	2,465
						Investments	m	2,500	2,901	3,903	5,095
						Fixed Assets	m	2,866	3,003	3,117	3,224
						Intangibles		,	3,003	3,117	3,224
							m	()			
						Other Assets	m m	0 1.155	•		2.113
							m m m	1,155 9,103	1,560 10,620	1,820 12,473	2,113 14,669
						Other Assets	m	1,155	1,560	1,820	
						Other Assets Total Assets	m m	1,155 9,103	1,560 10,620	1,820 12,473	14,669
						Other Assets Total Assets Payables	m m m	1,155 9,103 0	1,560 10,620 0	1,820 12,473 0	14,669 0
						Other Assets Total Assets Payables Short Term Debt	m m m m	1,155 9,103 0 0	1,560 10,620 0	1,820 12,473 0 0	14,669 0 0
						Other Assets Total Assets Payables Short Term Debt Long Term Debt	m m m m m	1,155 9,103 0 0	1,560 10,620 0 0	1,820 12,473 0 0	14,669 0 0
						Other Assets Total Assets Payables Short Term Debt Long Term Debt Provisions	m m m m m	1,155 9,103 0 0 0 0 1,602	1,560 10,620 0 0 0 1,877	1,820 12,473 0 0 0 0 2,198	14,669 0 0
						Other Assets Total Assets Payables Short Term Debt Long Term Debt Provisions Other Liabilities	m m m m m m	1,155 9,103 0 0 0 1,602 30	1,560 10,620 0 0 0 1,877	1,820 12,473 0 0 0 2,198	14,669 0 0 0 2,564 0
						Other Assets Total Assets Payables Short Term Debt Long Term Debt Provisions Other Liabilities Total Liabilities	m m m m m m	1,155 9,103 0 0 0 1,602 30 1,632	1,560 10,620 0 0 0 1,877 0 1,877	1,820 12,473 0 0 0 2,198 0 2,198	14,669 0 0 2,564 0 2,564
						Other Assets Total Assets Payables Short Term Debt Long Term Debt Provisions Other Liabilities Total Liabilities Shareholders' Funds Minority Interests Other	m m m m m m m	1,155 9,103 0 0 1,602 30 1,632 7,436 0 35	1,560 10,620 0 0 0 1,877 0 1,877 8,709 0 35	1,820 12,473 0 0 0 2,198 0 2,198 10,240 0 35	14,669 0 0 0 2,564 0 2,564 12,071 0 35
						Other Assets Total Assets Payables Short Term Debt Long Term Debt Provisions Other Liabilities Total Liabilities Shareholders' Funds Minority Interests	m m m m m m m m	1,155 9,103 0 0 1,602 30 1,632 7,436 0	1,560 10,620 0 0 0 1,877 0 1,877 8,709 0	1,820 12,473 0 0 0 2,198 0 2,198 10,240 0	14,669 0 0 2,564 0 2,564 12,071 0

Source: Company data, Macquarie Research, June 2011

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INDIA

KPIT IN		Not rated
Stock price as of 20/06/2011	Rs	165
GICS sector		IT Services
Market cap	US\$m	323
Avg Value Traded (3m)	US\$m	1.5
12m high/low	Rs	193/88
PER FY12E	х	11.5
P/BV FY 12E	X	2.1

Historical financials

YE Dec (Rs m)	2009A	2010A	2011A			
Revenue	7,932	7,316	10,230			
% growth	36%	-8%	40%			
EBITDA	1,834	1,614	1,522			
% growth	150%	-17%	-6%			
EPS	8.41	10.80	11.37			
% growth	28%	28%	6%			
EBIT Margin	18%	18%	11%			
Source: Company data FactSet June 2011						

Historical business risk/reward*



Source: Macquarie Research, June 2011

Share Price Driver



Source: Macquarie Research, June 2011

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21 June 2011 Macquarie Capital Securities India (Pvt) Ltd

MacVisit

KPIT Cummins

Mid-sized IT vendor levered to manufacturing sector

- We met with the management of KPIT Cummins (KPIT IN) to understand the outlook for the company and manufacturing sector and their positioning vs. the offerings of the larger Indian IT vendors.
- KPIT is a mid-cap company that offers solutions in the manufacturing vertical.
 Its portfolio of offerings is spread across Enterprise solutions, Auto &
 Engineering and SAP solutions, contributing 38%, 27% and 32% respectively.

Challenge of increasing margins in FY12

EBITDA margins declined to 15% in FY11 (vs 22% in FY10). Based on management comments, margin pressure is likely this year as a result of wage inflation from a 12-14% salary increase in April and the tax rate shooting up to ~25% this year from 14% in FY11. For the company to maintain or increase margins, the levers of fixed-price projects, pricing, revenue growth, and fresher-lateral pyramid structure would have to be fully utilized in FY12.

High concentration poses risk due to top clients and sector

The top client, Cummins, contributes 23% of revenue, and the top 5 and 10 clients contribute 42% and 52% of revenues, respectively. KPIT's manufacturing sector focus and the strong client list is a key differentiating factor vs. other mid-sized IT companies. This also leads to it being highly levered to the manufacturing sector, which contributes 77% of revenues.

Recent M&As, Revolo to boost revenues going forward

- KPIT expects FY12 to see the full benefit of its inorganic growth strategy, having made the following acquisitions recently:
 - ⇒ In2Soft Gmbh, a German vehicle diagnostics and telematics specialist, in Oct 2010.
 - ⇒ CPG Solutions, provider of premium Oracle consulting services to manufacturing & supply chain companies, in Sept 2010 for Rs600m.
 - ⇒ 50:50 JV with Bharat Forge to manufacture and market 'Revolo', a hybrid technology to increase fuel efficiency and engine performance, in June 2010.
 - ⇒ Sparta Consulting, a SAP solutions and consulting company in the USA, in Sept 2009 for US\$38m.

Time for cherry picking mid caps

- We have a positive view on the Indian IT Services sector. Our preference is for mid-cap companies that are seeing strong demand conditions and increasing margin profiles, resulting in better earnings in FY12-13E.
- Among mid caps, we prefer Hexaware and Mindtree on the back of their better valuations and earnings growth in FY12E. Among large caps, we like Infosys and TCS.

Ownership

Shareholding of Promoter Group – 27%

Top Shareholders:

- Mutual Funds 11%
- FII 21%
- Insurance Companies 7%

Source: Company data, NSE (As of 31 March, 2011)

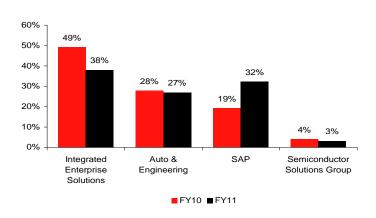
Balance sheet data and refinancing (FY11)

- Cash and Cash Equivalents: Rs2.5bn
- Debt: Rs1.1bn (Comprising Rs0.8bn of working capital loans)
- Debt to Equity Ratio: 18%

Latest results highlights (4QFY11)

- Revenue: Rs3,082m (Up 13% QoQ)
- EBITDA: Rs433m (Up 12% QoQ)
- PAT: Rs264m (Up 4% QoQ)
- Diluted EPS: Rs3.00 (Down 2% QoQ)
- Offshore Utilization (Incl Trainees): 70% (vs 68% QoQ)
- DSO: 65 days (vs 64 days in 3QFY11)

Fig 1 Revenue by service lines



Source: Company data, Macquarie Research, June 2011

History and corporate governance

- KPIT was incorporated in 1990 and had its IPO in 1999. The company's lineage is from Kirtane & Pandit, Chartered Accountants (KPCA), which were in business for 50+ yrs.
- The company is headquartered in Pune and has over 6,500 employees.
- Auditors: Deloitte Haskins & Sells
- 6 independent board members out of 15 directors on the board

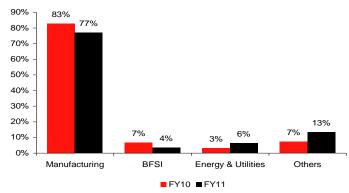
Management and directors' background

- Mr. Ravi Pandit Chairman and Group CEO. Over 3 decades of experience in IT, strategy and consulting. He is a gold medallist CA and ICWA.
- Mr Kishor Patil Founder, CEO & Managing Director.
 Over 20yrs of experience in finance and corporates. He leads the overall management of the firm. He is a qualified CA and ICWA.
- Mr. Pankaj Sathe Head, Global Sales. Over 15yrs' experience in IT companies working at HCL, Ranbaxy and Godrej.
- Mr. Anup Sable Head, Automotive & Engineering SBU.
 Over 15yrs' experience in KPIT and automotive vertical. An engineer by qualification.

Annual results highlights (FY11)

- USD Revenues: US\$224m (Up 46% YoY)
- Revenue: Rs10,230m (Up 40% YoY)
- EBITDA: Rs1522 (Down 6% YoY)
- PAT: Rs948m (Up 11% YoY)
- Diluted EPS: Rs11.37 (vs Rs10.80 in FY10)
- Offshore Utilization (Incl Trainees): 68% (vs 71% YoY)

Fig 2 Revenue by vertical



Source: Company data, Macquarie Research, June 2011

The growth proposition

- Revolo, the JV with Bharat Forge, could be a major contributor to growth when the product is launched.
- The manufacturing sector is looking to grow out of the recession in FY12. Any upswing in the sector could be a major positive for KPIT's growth.
- Focus on deepening select customer relationships with future M&A and complementing existing service offering.

The value propositon

Bloomberg estimates for FY3/12:

Revenue: Rs13,204mEBITDA: Rs1,978m

PAT: Rs1,223mEPS: Rs14.35

FY12 PER(x) – 11.5x

The business model

- KPIT Cummins is a specialist in manufacturing, with a concentration on automotive and industrial solutions and services.
- The company focuses on the 3 areas of Enterprise solutions, Auto & Engineering and SAP. These contribute 38%, 27% and 32% of revenue, respectively. These areas give KPIT a diversified offering for its target market.

The main risks

- Client concentration. As of March 2011, the top client contributed 25% of revenue, and the top 10 clients contributed 52% of revenues.
- Margin pressure. The company's margins are lower than other IT service players' (net profit margin was 9% for FY11). Further pricing pressure from the competition could hurt the company's margins.

Strengths

- Proven R&D record with IP generation pipeline contributing ~2% of revenues.
- Partnerships with Cummins a major positive for KPIT for new client acquisition.
- Strong client relationships with key accounts.

Weaknesses

 Due to its limited size, the cost levers can only provide a certain level of leverage for management in managing its input costs.

Opportunities

- Revolo. KPIT has entered into a 50:50 JV with Bharat
 Forge to create an auto car kit that would lead to reduced
 emissions and higher mileage for users. The company is
 targeting Rs3bn-Rs5bn sales from this JV from FY13
 onwards.
- SAP offering growth fuelled by M&A. The recent Sparta consulting acquisition could fuel increased SAP revenues from the US.
- Low ratio of fixed price projects. The fixed price projects' 31% contribution to revenues is lower than peers'. This has room to grow.

Threats

- Pricing pressure. Competition from other mid-sized players could limit the scope for a price uptick.
- Currency volatility is a high risk for mid cap Indian IT companies.
- Cummins, the largest customer, contributes 25% revenues, which could lead to pricing or volume pressure if the account does not grow as expected.

Macquarie Research

Fig 3 Valuation comparison – Indian IT services

Company name	Bloomberg Ticker	Rec	Market Cap (US\$ m)	Current Price (Icy)	Target Price (lcy)	Up/Down side(%)	EPS FY12E	EPS FY13 E	PER (x) FY12 E	PER (x) FY13 E	RoE (FY11)	EPS CAGR (FY11-13E)
Macquarie Indian IT Servi	ices Coverage l	Jniverse			·				•			
TCS	TCS IN	OP	46,508	1,069	1,360	27%	52.6	63.4	20.3	16.9	37.6	19.6%
Infosys	INFO IN	OP	34,571	2,710	3,650	35%	143.3	177.9	18.9	15.2	27.1	22.1%
Wipro	WPRO IN	OP	21,951	402	540	34%	23.4	26.5	17.2	15.2	26.5	10.6%
HCL Tech	HCLT IN	OP	7,111	465	615	32%	33.9	42.5	13.7	10.9	21.8	32.9%
Mphasis	MPHL IN	UP	1,984	425	380	-11%	38.5	42.8	11.0	9.9	38.7	3.4%
Rolta	RLTA IN	OP	440	123	195	59%	20.8	24.3	5.9	5.1	16.7	15.8%
Hexaware	HEXW IN	OP	432	66	85	28%	6.4	6.7	10.4	9.9	18.2	53.5%
Mindtree	MTCL IN	OP	318	355	450	27%	37.3	48.6	9.5	7.3	15.3	39.9%
Persistent	PSYS IN	OP	301	339	450	33%	33.8	40.3	10.0	8.4	15.2	6.7%
Indian IT Services												
3i Infotech	III IN	NR	183	43	NR	NR	12.5	9.2	3.4	4.7	23.1	-13.3%
Aptech	APTR IN	NR	97	90	NR	NR	7.3	na	12.4	na	21.7	na
Educomp	EDSL IN	NR	846	397	NR	NR	47.9	76.2	8.3	5.2	17.6	42.1%
Everonn	EEDU IN	NR	215	509	NR	NR	45.4	59.3	11.2	8.6	17.2	32.4%
Infotech	INFTC IN	NR	337	136	NR	NR	13.8	17.4	9.9	7.9	14.3	17.3%
KPIT Cummins	KPIT IN	NR	323	165	NR	NR	14	18.1	11.5	9.1	19.1	24.7%
Mahindra Satyam	SCS IN	NR	2,165	83	NR	NR	5.1	6.6	16.3	12.6	na	50.6%
NIIT	NIIT IN	NR	207	56	NR	NR	6.6	7.8	8.5	7.2	17.4	22.0%
NIIT Tech	NITEC IN	NR	241	183	NR	NR	29.1	33.5	6.3	5.5	27.5	4.4%
Nucleus Software	NCS IN	NR	58	81	NR	NR	12.6	15.4	6.4	5.3	15.0	28.7%
Oracle Financial Services	OFSS IN	NR	4,035	2164	NR	NR	131.5	153.6	16.5	14.1	22.9	12.0%
Patni	PATNI IN	NR	980	329	NR	NR	39.1	41.7	8.4	7.9	18.3	0.3%
Polaris	POL IN	NR	362	164	NR	NR	20.8	24.4	7.9	6.7	21.3	10.7%
Tech Mahindra	TECHM IN	NR	1,878	667	NR	NR	58.1	68.1	11.5	9.8	20.7	11.2%
International IT Services												
Accenture	ACN US	NR	38,652	54	NR	NR	3.2	3.7	16.7	14.8	62.2	6.4%
iGate	IGTE US	NR	869	15	NR	NR	1.5	na	10.2	na	23.6	na
Cap Gemini	CAP FP	NR	5,829	37	NR	NR	2.5	3.0	14.8	12.5	6.6	19.4%
Cognizant	CTSH US	NR	20,662	68	NR	NR	2.9	3.5	23.6	19.5	23.5	17.9%
CSC	CSC US	NR	5,973	39	NR	NR	4.7	5.2	8.2	7.4	10.6	4.5%
Logica PLC	LOG LN	NR	2,068	128	NR	NR	14.9	16.3	8.6	7.9	7.8	16.5%
IBM GS	IBM US	NR	199,872	165	NR	NR	13.2	14.6	12.5	11.3	64.9	12.9%
ВРО												
EXL Service	EXLS US	NR	655	22	NR	NR	1.3	1.5	17.6	15.0	11.7	18.4%
Firstsource	FSOL IN	NR	162	17	NR	NR	2.8	3.6	6.0	4.7	10.6	25.7%
Genpact	G US	NR	3,472	16	NR	NR	0.9	1.0	18.5	16.0	10.6	15.1%
WNS	WNS US	NR	395	9	NR	NR	0.9	1.0	9.8	8.7	3.7	1.3%
Note: Prices as of 20 June										0.7	5.1	1.

Note: Prices as of 20 June 2011. Data for not rated companies based on Bloomberg consensus estimates. Coverage of IBM was suspended on 28 Sept 2010.

Source: Bloomberg, Macquarie Research, June 2011

Fig 4 KPIT Technologies – Financial Statements (Rs m)

INCOME STATEMENT					BALANCE SHEET				
Year Ending March 31	2007	2008	2009	2010	Period Ending	2007	2008	2009	2010
Total Revenue	4,637	5,835	7,932	7,316	ASSETS				
COGS	2,906	3,761	4,530	4,142	Cash And Equivalents	625	740	1671	1052
Gross Profit	1,731	2,073	3,401	3,174	Short Term Investments	73	83	79	812
SG&A	1,014	1,340	1,565	1,556	Total Cash & ST Investments	698	822	1750	1864
Provision for Bad Debts	8	1	3	4	Total Receivables	1105	1435	1785	1390
Depreciation	121	255	436	308	Prepaid Exp.	43	49	58	56
Operating Income	587	478	1,397	1,306	Other Current Assets	226	396	304	553
Net Interest Exp.	(42)	(75)	(46)	(16)	Total Current Assets	2072	2703	3896	3864
Forex Gains (Loss)	10	190 5	(574)	(269)	Cross Bronarty, Blant & Equipment	1635	1732	1896	1980
Others EBT	555	598	(0) 778	1 026	Gross Property, Plant & Equipment Accumulated Depreciation	-315	-492	-653	-788
Income Tax Expense	52	76	120	1,026 169	Net Property, Plant & Equipment	1319	1240	1243	1193
Net Income	503	512	658	857	Net Froperty, Flant & Equipment	1319	1240	1243	1193
Minority Int	2	1	000	-	Long-term Investments	49	_	_	_
Net Income	505	513	659	857	Goodwill	375	168	339	989
	000	0.0	000		Other Intangibles	77	272	213	290
					Deferred Charges, LT	0	0	0	0
Per Share Items					Other Long-Term Assets	-	-	-	-
Basic EPS	6.8	6.7	8.4	11.0	Total Assets	3893	4383	5691	6336
Diluted EPS	5.5	6.5	8.4	10.8					
Dividends per Share	0.7	0.7	0.6	0.7	LIABILITIES				
Payout Ratio%	5.8%	11.9%	9.7%	5.5%	Accounts Payable	210	186	497	269
Supplemental Items					Accrued Exp.	213	247	388	496
EBITDA	708	733	1,834	1,528	Short-term Borrowings	484	271	432	617
EBIT	587	478	1,397	1,306	Curr. Port. of LT Debt	94	118	290	203
CASH FLOW	2007	2008	2009	2010	Curr. Income Taxes Payable Unearned Revenue, Current	76 15	177 -	15 8	50 51
					·				
Net Income	505	513	659	857	Other Current Liabilities	152	224	1905	440
Depreciation	121	255	436	222	Total Current Liabilities	1244	1222	3537	2128
Other Amortization Sale Of Assets	0 4	0 (3)	0 10	86 18	Long-Term Debt	638	469	458	285
Provisions	4	(3)	-	12	Capital Leases	6	469 7	436	200
Stock-Based Compensation	_	_	_	17	Def. Tax Liability, Non-Curr.	10	42	60	51
Provision of Bad debts	12	7	43	3	Total Liabilities	1898	1740	4058	2465
Other Operating Activities	44	61	(70)	30					
Change in AR	(246)	(339)	(335)	488	Common Stock	150	156	156	157
Change in Acc. Payable	262	133	-	-	Additional Paid In Capital	706	717	726	751
Change in Other Net Operating	97	(184)	448	(657)	Retained Earnings	1066	1684	2278	3061
Assets									
Cash from Ops.	801	441	1,191	1,076	Treasury Stock	-	-	-	-
One State Francis (Plane)	(040)	(000)	(400)	(000)	Comprehensive Inc. and Other	69	81	-1529	-98
Capital Expenditure Sale of PPE	(918)	(360) 4	(496)	(238)	Total Common Equity	1990	2638	1631	3871
Cash Acquisitions	3	4	-	1 (668)	Minority Interest	5	5	3	
Investments	(49)	34	(197)	(588)	Willionty interest	5	3	3	-
Other Investing Activities	24	19	24	58	Total Equity	1995	2643	1634	3871
Cash from Investing	(940)	(302)	(669)	(1,435)	Total Equity	1000	2040	100-1	0071
	(0.0)	(002)	(000)	(1,100)	Total Liabilities And Equity	3893	4383	5691	6336
Total Debt Issued	475	1	322	203	, , ,				
Total Debt Repaid	(127)	(280)	(3)	(239)					
Equity Issuance	131	393	0	27					
Total Dividends Paid	(29)	(61)	(64)	(47)					
Other Financing Activities	(96)	(76)	(74)	(76)					
Cash from Financing	354	(22)	182	(133)					
Forex Adj.	(1)	(2)	16	/27\					
Misc. Cash Flow Adj.	(1) 0	(3)	16 0	(37) 69					
Net Change in Cash	214	114	720	(459)					
			. 20	(100)					

The company is yet to release it FY11 Annual Report and hence certain financial information is not available. Source: Company data, Capital IQ, NSE Website, June 2011

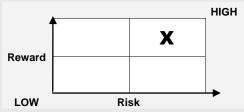
INDIA

Not rated		INFTC IN
136	Rs	Stock price as of 20/06/2011
IT Services		GICS sector
337	US\$m	Market cap
0.2	US\$m	Avg Value Traded (3m)
202/131	Rs	12m high/low
9.9	х	PER FY12E
1.3	Χ	P/BV FY 12E

Historical financials

YE Dec (Rs m)	2009A	2010A	2011A
Revenue	8,898	9,531	11,880
% growth	32%	7%	25%
EBIT	1,785	2,083	1,803
% growth	46%	17%	-9%
EPS	8.37	15.39	12.57
% growth	2%	84%	-18%
EBIT Margin	20%	22%	15%
Source: Company data.	FactSet,June	2011	

Historical business risk/reward*



*Relative to the market. Source: Macquarie Research, June 2011

Share Price Driver



Source: Macquarie Research, June 2011

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21 June 2011 Macquarie Capital Securities India (Pvt) Ltd

MacVisit

Infotech Enterprises

Mid sized IT vendor levered on Engineering and GIS

- We spoke with the management of Infotech Enterprises (INFTC IN) to understand the outlook for the company and Engineering service offerings and their positioning vs. offerings of the larger Indian IT vendors.
- Infotech is a mid-cap company which offers solutions in the GIS and Engineering domain with focus on Aerospace, Rail, Hi-tech etc. Its portfolio of offerings comprises Network & Content Engineering (NC&E) contributing 31% of revenue, and Engineering, Manufacturing and Industrial Products contributing 69% of revenue.

Margins look under pressure going forward

Operating margins declined to 15% in FY11 (vs 22% in FY10). Based on our interactions, we feel that margin pressure would be evident from: (1) Wage inflation from a ~10% salary increment to staff in April-11, (2) Tax rate shooting to ~30% in current year from 17% in FY11. We believe that high utilisation rates, 1,500+ net additions in FY12 would make it difficult to control margins.

High client concentration risk

The top 5 and 10 clients of Infotech Enterprises contribute 23% of total company revenues and the top 5 and 10 clients contribute 38% and 57%, respectively. The company focuses on Aerospace Engineering which contributed ~40% of revenues in FY11.

Recent M&A would help top-line growth

- Infotech Enterprises saw a spate of M&A activity in CY2010. These should help drive revenue growth. But cross border acquisitions tend to stress margins due to high cost base and integration costs. A list of M&A done by the company includes:
 - ⇒ Acquired Wellsco, Inc, USA in Aug, 10. The company focuses on telecom and employed 180 people.
 - ⇒ Acquired Daxcon Engineering, USA in Jan, 10. The company focuses on Heavy equipment and employed 150 people
 - ⇒ Long-term multi-year contracts with Hamilton Sundstrand Corporation, Westinghouse Electric Company and Seawell AS of Norway during 2010.

Time for cherry picking selective mid caps

- We have positive investment views on Indian IT Services sector. Our preference is for mid-cap companies which are seeing strong demand conditions and a rising margin profile resulting in better earnings in FY12-13.
- Among the mid caps, we prefer owning Hexaware and Mindtree on back of better valuations and earnings growth in FY12. Among large caps, we like Infosys and TCS.

Ownership

Shareholding of Promoter Group – 23%

Top Shareholders:

■ Mutual Funds – 7%

■ FII - 23%

Corporate Bodies – 8%

Source: Company Data, NSE (As of 31st March, 2011)

Balance sheet data and refinancing (FY11)

Cash and Cash Equivalents: Rs3,836bn

Debt: Rs6m

Debt to Equity Ratio: 1%

Latest results highlights (4QFY11)

Revenue: Rs3,258m (Up 4% QoQ)

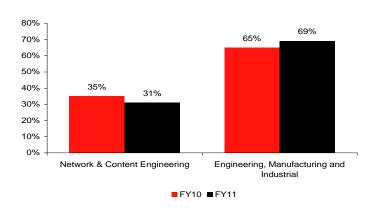
EBIT: Rs467m(Down 2% QoQ)

PAT: Rs370m(Flat QoQ)

Diluted EPS: Rs3.32 (Flat QoQ)

DSO: 96 days (vs 89 days in 3QFY11)

Fig 1 Revenue by Vertical



Source: Company Data, Macquarie Research, June 2011

History and corporate governance

- Infotech was incorporated in 1991 and had its IPO in 1997. It is headquartered in Hyderabad and has over 8,000 associates. Its client list includes 22 'Fortune 500' and 27 'Global 500' blue chip organizations.
- External Auditors: Deloitte Haskins & Sells
- Internal Auditors: M. Bhaskara Rao and Co
- Risk Auditors: KPMG
- 6 independent directors, 2 non executive directors out of 10 directors on Board.

Management and Directors background

- Mr. B.V.R. Mohan Reddy, Founder, Chairman and MD.
 Over 30yr of experience. Worked in DCM, HCL, BOSCH etc. He is an IIT Kanpur alumnus.
- Mr, Ajay Aggarwal, CFO. He is a FCS, FICWA and an Engineer from BITS, Pilani. Previous experience includes Reliance Industries, Tata Chemicals etc.
- Mr. S.A.Lakshminarayanan, COO-N&CE. Over 22yrs of industry experience. Manages GIS team end to end.
- Mr. Rajeev Lal, CEO Infotech Enterprises. Over 28yrs exp in M&M, MICO, Union Carbide, TISCO etc.

Annual Results Highlights (FY11)

USD Revenues: US\$261m (Up 30% YoY)

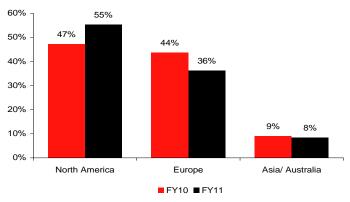
Revenue: Rs11,880m (Up 25% YoY)

EBIT: Rs1,804 (Down 15% YoY)

PAT: Rs1397m (Down 22% YoY)

Diluted EPS: Rs12.54 (vs Rs15.50 in FY10)

Fig 2 Revenue by Geography



Source: Company Data, Macquarie Research, June 2011

The growth proposition

- Focus on deepening select customer relationships with future M&A and complementing existing service offering.
- The engineering sector is looking to grow out of the recession going forward in FY12. Any upswing in the sector would be a big positive for Infotech's growth.

The value propositon

Bloomberg estimates for FY12:

Revenue: Rs14,552m

■ EBITDA: Rs2,288m

PAT: Rs1,554m

■ EPS: Rs13.92

■ FY12 PER(x) – 9.9x

The business model

- Infotech Enterprises is a specialist in the domain of engineering solutions concentrating in areas of Aerospace, Heavy equipment, Rail and Hi-tech.
- The company focuses on 2 offerings of Network & Content Engineering (NC&E) contributing 31% and Engineering, Manufacturing and Industrial Products contributing 69%.

The main risks

- Client Concentration. As of March, 11, the top 5 and top 10 clients contribute 38% and 57% respectively of the total company revenues.
- Margin Pressure. The company margins are on the lower side in comparison to other IT service players. (Note: Net Profit Margin of 12% for FY11 vs 17% in FY10). Further pricing pressure from competition can hurt the company on that front.

Strengths

- Proven track record in GIS arena.
- Strong client relationships with key accounts

Weaknesses

 Due to its limited size, there is only a certain level of leverage that the cost levers can provide to the management for managing its input costs.

Opportunities

 Focusing on key operating levers like improving utilisation and productivity, organisational resizing, onshore / offshore mix etc. to improve margins which are on the higher side due to recent M&A activity.

Threats

- Pricing pressure. Competition from other mid-sized players to take client business can limit the scope for price uptick.
- Currency volatility is a high risk for mid-cap Indian IT companies.

Macquarie Research

Fig 3 Valuation comparison – Indian IT services

Company name	Bloomberg Ticker	Rec	Market Cap (US\$ m)	Current Price (Icy)	Target Price (Icy)	Up/Down side(%)	EPS FY12E	EPS FY13 E	PER (x) FY12 E	PER (x) FY13 E	RoE (FY11)	EPS CAGR (FY11-13E)
Macquarie Indian IT Servi	ices Coverage		·			•			•		-	
TCS	TCS IN	OP	46,508	1,069	1,360	27%	52.6	63.4	20.3	16.9	37.6	19.6%
Infosys	INFO IN	OP	34,571	2,710	3,650	35%	143.3	177.9	18.9	15.2	27.1	22.1%
Wipro	WPRO IN	OP	21,951	402	540	34%	23.4	26.5	17.2	15.2	26.5	10.6%
HCL Tech	HCLT IN	OP	7,111	465	615	32%	33.9	42.5	13.7	10.9	21.8	32.9%
Mphasis	MPHL IN	UP	1,984	425	380	-11%	38.5	42.8	11.0	9.9	38.7	3.4%
Rolta	RLTA IN	OP	440	123	195	59%	20.8	24.3	5.9	5.1	16.7	15.8%
Hexaware	HEXW IN	OP	432	66	85	28%	6.4	6.7	10.4	9.9	18.2	53.5%
Mindtree	MTCL IN	OP	318	355	450	27%	37.3	48.6	9.5	7.3	15.3	39.9%
Persistent	PSYS IN	OP	301	339	450	33%	33.8	40.3	10.0	8.4	15.2	6.7%
Indian IT Services												
3i Infotech	III IN	NR	183	43	NR	NR	12.5	9.2	3.4	4.7	23.1	-13.3%
Aptech	APTR IN	NR	97	90	NR	NR	7.3	na	12.4	na	21.7	na
Educomp	EDSL IN	NR	846	397	NR	NR	47.9	76.2	8.3	5.2	17.6	42.1%
Everonn	EEDU IN	NR	215	509	NR	NR	45.4	59.3	11.2	8.6	17.2	32.4%
Infotech	INFTC IN	NR	337	136	NR	NR	13.8	17.4	9.9	7.9	14.3	17.3%
KPIT Cummins	KPIT IN	NR	323	165	NR	NR	14	18.1	11.5	9.1	19.1	24.7%
Mahindra Satyam	SCS IN	NR	2,165	83	NR	NR	5.1	6.6	16.3	12.6	na	50.6%
NIIT	NIIT IN	NR	207	56	NR	NR	6.6	7.8	8.5	7.2	17.4	22.0%
NIIT Tech	NITEC IN	NR	241	183	NR	NR	29.1	33.5	6.3	5.5	27.5	4.4%
Nucleus Software	NCS IN	NR	58	81	NR	NR	12.6	15.4	6.4	5.3	15.0	28.7%
Oracle Financial Services	OFSS IN	NR	4,035	2164	NR	NR	131.5	153.6	16.5	14.1	22.9	12.0%
Patni	PATNI IN	NR	980	329	NR	NR	39.1	41.7	8.4	7.9	18.3	0.3%
Polaris	POL IN	NR	362	164	NR	NR	20.8	24.4	7.9	6.7	21.3	10.7%
Tech Mahindra	TECHM IN	NR	1,878	667	NR	NR	58.1	68.1	11.5	9.8	20.7	11.2%
International IT Services												
Accenture	ACN US	NR	38,652	54	NR	NR	3.2	3.7	16.7	14.8	62.2	6.4%
iGate	IGTE US	NR	869	15	NR	NR	1.5	na	10.2	na	23.6	na
Cap Gemini	CAP FP	NR	5,829	37	NR	NR	2.5	3.0	14.8	12.5	6.6	19.4%
Cognizant	CTSH US	NR	20,662	68	NR	NR	2.9	3.5	23.6	19.5	23.5	17.9%
CSC	CSC US	NR	5,973	39	NR	NR	4.7	5.2	8.2	7.4	10.6	4.5%
Logica PLC	LOG LN	NR	2,068	128	NR	NR	14.9	16.3	8.6	7.9	7.8	16.5%
IBM GS	IBM US	NR	199,872	165	NR	NR	13.2	14.6	12.5	11.3	64.9	12.9%
ВРО												
EXL Service	EXLS US	NR	655	22	NR	NR	1.3	1.5	17.6	15.0	11.7	18.4%
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Genpact	G US	NR	3,472	16	NR	NR	0.9	1.0	18.5	16.0	10.6	15.1%
WNS	WNS US	NR	395	9	NR	NR	0.9	1.0	9.8	8.7	3.7	1.3%
	0044 Data (ama	INIX	393	9	INIX		0.9	1.0		0.7	5.7	1.3/0

Note: Prices as of 20 June 2011. Data for not rated companies based on Bloomberg consensus estimates. Coverage of IBM was suspended on 28 Sept 2010.

Source: Bloomberg, Macquarie Research, June 2011

Fig 4 KPIT Technologies – Financial Statements (Rs m)

INCOME STATEMENT					BALANCE SHEET				
Year Ending March 31	2007	2008	2009	2010	Period Ending ASSETS	2007	2008	2009	2010
Total Revenue	5,425	6,741	8,898	9,531	Cash And Equivalents	736	1,193	3,334	2,337
Cost Of Goods Sold	3,339	4,362	5,507	6,092	Short Term Investments	60	1,953	35	1,528
Gross Profit	2,086	2,380	3,391	3,439	Total Cash & Investments	796	3,146	3,368	3,865
SG&A	867	1,073	1,446	1,259					
Provision for Bad Debts	19	19	40	25	Accounts Receivable	1,603	2,170	2,628	2,389
Depreciation & Amort.	257	365	466	436	Other Receivables	1	9	39	17
Other Operating	51	69	107	24	Notes Receivable	-	-	=	73
Expense/(Income) Operating Income	893	854	1,331	1,696	Total Receivables	1,604	2,179	2,667	2,479
Interest Expense	(10)	(32)	(32)	(2)	Total Necelvables	1,004	2,179	2,007	2,413
Interest and Invest. Income	13	147	203	151	Other Current Assets	181	367	899	1,222
Net Interest Exp.	2	115	171	149	Total Current Assets	2,581	5,692	6,934	7,567
Income/(Loss) from Affiliates	93	70	80	129		,	-,	-,	,
Currency Exchange Gains	29	39	(536)	242	Gross PPE	2,396	3,799	4,690	5,083
(Loss)									
Other Non-Operating Inc.	6	15	11	1	Accumulated Depreciation	(1,229)	(1,582)	(1,954)	(2,391)
(Exp.)									
EBT Excl. Unusual Items	1,022	1,094	1,058	2,217	Net PPE	1,167	2,218	2,736	2,692
Other Unusual Items	4 000	-	4 005	-		0.50	407	100	
EBT Incl. Unusual Items	1,023	1,111	1,065	2,209	Long-term Investments	259	407	402	520
Income Tax Expense	186	258 854	140	505	Goodwill	91 22	77	272 165	463 29
Earnings from Cont. Ops. Minority Int. in Earnings	837	2	925 0	1,704 5	Deferred Tax Assets, LT Total Assets	4,119	(16) 8,377	10,509	11,270
Net Income	837	856	925	1,709	Total Assets	4,113	0,377	10,509	11,210
Net income	007	000	323	1,703	LIABILITIES				
Per Share Items					Accounts Payable	445	506	822	658
Basic EPS	9.1	8.5	8.7	15.4	Accrued Exp.	177	260	295	377
Diluted EPS	8.9	8.3	8.7	15.4	Short-term Borrowings	109	140	193	5
Dividends per Share	0.6	0.6	0.8	1.0	Curr. Income Taxes Payable	-	-	370	497
Payout Ratio %	4.7%	8.4%	8.5%	5.7%	Unearned Revenue, Current	88	151	6	-
					Other Current Liabilities	203	308	1,115	631
Supplemental Items					Total Current Liabilities	1,027	1,366	2,801	2,168
EBITDA	1,149	1,219	1,797	2,132		450	00.4		
EBIT	893	854	1,331	1,696	Long-Term Debt	152	284	1	39
CASH FLOW					Total Liabilities	1,179	1,650	2,803	2,207
Net Income	837	856	925	1,709		•	,	•	•
Depreciation	257	365	466	436	Pref. Stock, Convertible	-	981	=	-
Other Opex	(83)	(191)	(428)	(352)	Total Pref. Equity	-	981	-	-
Change in AR	(380)	(548)	(425)	159					
Change in other assets	217	125	977	(729)	Common Stock	231	261	276	277
Cash from Ops.	847	590	1,548	1,259	Additional Paid In Capital	590	2,605	3,601	3,628
0 " 1 5 1"	(700)	(4.400)	(0.40)	(054)	Retained Earnings	2,004	2,772	3,552	5,069
Capital Expenditure	(706)	(1,400)	(949)	(351)	Carranahanaina laa and Othan	445	400	074	00
Cash Acquisitions Equity Invest	- 11	(1,865)	(334) 2,013	(367) (2,824)	Comprehensive Inc. and Other Total Common Equity	115	106 5,743	274	89
Other Investing Activities	14 10	(1,003)	118	139	Total Common Equity	2,940	5,745	7,703	9,063
Cash from Investing	(681)	(3,212)	853	(3,399)	Minority Interest	_	3	3	_
oush from investing	(001)	(3,212)	000	(3,333)	Willionty Interest		3	3	
Total Debt Issued	196	252	87	-	Total Equity	2,940	6,728	7,707	9,063
Total Debt Repaid	(1)	(100)	(308)	(128)					
Equity Issuance	34	3,025	32	28	Total Liabilities And Equity	4,119	8,377	10,509	11,270
Dividends Paid	(39)	(72)	(79)	(97)					
Other Financing Activities	(15)	(34)	(40)	(31)					
Cash from Financing	176	3,071	(309)	(228)					
Forex Adj.	9	6	32	18					
Net Change in Cash	351	455	2,130	(2,350)					
			,	,,_,,					

The company is yet to release it FY11 Annual Report and hence certain financial information is not available.

Source: Company data, Capital IQ, NSE Website, June 2011

INDIA

GEO IN		Not rated
Stock price as of 20/06/2011	INR	54
GICS sector		IT Services
Market cap	US\$m	75
Avg Value Traded (3m)	US\$m	0.2
12m high/low	INR	87/53
PER FY12E	X	6.8
P/BV FY12E	x	1.2

Historical financials

YE Mar (Rs m)	2009A	2010A	2011A
Revenue	5,981	5,116	6,206
% growth	23%	(14%)	21%
EBITDA	785	865	947
% growth	50%	10%	9%
EPS	(1.26)	7.51	9.24
% growth	Na	Na	23%
EBITDA Margin	13%	15%	15%
Source: Company data	, FactSet, Jur	ne 2011	

Historical business risk/reward*



*Relative to the market. Source: Macquarie Research, June 2011

Share Price Driver



Source: Macquarie Research, June 2011

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21 June 2011 Macquarie Capital Securities India (Pvt) Ltd

MacVisit

Geometric

Mid-sized IT vendor specialising in engineering solutions

- We met with the management of Geometric (GEO IN) to understand the outlook for the Indian mid-sized IT services players and the business drivers for the company and their positioning vs the offerings of the larger Indian IT vendors.
- Geometric is a mid-cap company that offers engineering solutions, services and technologies. Its portfolio of offerings addresses the needs of top Product Lifecycle Management (PLM) vendors across the world including Microsoft, Oracle Siemens and PLM, etc.
- It has a 70:30 partnership with Dassault Systèmes named 3DPLM which operates with a team of 800 people. The partnership contributes 23% to the company's revenues.

Margins to remain under pressure in FY12

- Operating margins declined to 7.8% in FY11 (vs 11.6% in FY10). Based on our meetings with management, margin pressure appears likely to persist due to wage inflation as a result of a 12-14% salary increase in April 2011 and the tax rate shooting up to ~29% this year from 3% in FY11.
- We note that the company has appointed Mr. Manu Parpia as MD and CEO after the departure of its previous CEO in April. Mr Parpia is the founder and promoter of Geometric and in the current scenario his challenge remains to achieve healthy growth and manage the margin headwinds.

Superior client mix but high concentration poses risk

• According to management, its niche focus and client list is a key differentiating factor vs. other mid-sized IT companies. The company has mined its existing client relationships well, with the result that the top 10 clients now contribute 70% to revenues and the top 5 clients comprise 55% of revenues. However, this revenue concentration among select clients poses some risk if the clients were to reduce their pricing or shelve their IT budgets.

Traction in industrial sector to boost revenues

The direct industrial sector contributes 61% to revenues for Geometric. In addition, software vendors and products contribute 31% and 8%, respectively. Macquarie US economist Rebecca Hiscock-Croft's US GDP growth forecast of 3.1% for FY12 augurs well for the company's demand pipeline.

Time for cherry picking mid caps

- We have a positive view on the Indian IT services sector. Our preference is for mid cap companies that are seeing strong demand conditions and increasing margin profiles, resulting in better earnings in FY12-13E.
- Among mid caps, we prefer Hexaware and Mindtree on the back of their better valuations and earnings growth in FY12E. Among large caps, we like Infosys and TCS.

Ownership

Shareholding of Promoter Group – 38%

Top Shareholders:

■ Mutual Funds – 2%

■ FII - 12%

Insurance Companies – 2%

Source: Company data, NSE (As of 31 March, 2011)

Balance sheet data and refinancing (FY11)

Cash and Cash Equivalents: Rs247m

Debt: Rs45m

Debt to Equity Ratio: 2%

Latest results highlights (4QFY11)

Revenue: Rs1,700m (Up 4% QoQ)

EBITDA: Rs283m (Up 15% QoQ)

PAT: Rs178m (Up 4% QoQ)

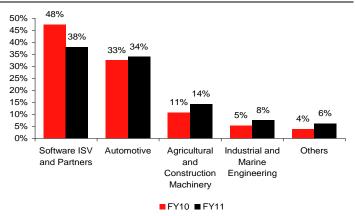
Diluted EPS: Rs2.84 (Up 17% QoQ)

Attrition: 14.2% (vs 19.8% in 3QFY11)

Utilization Levels (Incl Trainees): 86% (vs 90% QoQ)

Utilization Levels (Excl Trainees): 91% (vs 92% QoQ)

Fig 1 Revenue by vertical



Source: Company data, Macquarie Research, June 2011

History and corporate governance

- Geometric began as a part of the Godrej group in 1984, one
 of the oldest and largest business conglomerates in India
 with expertise in engineering and consumer products.
- Geometric made its IPO offering in February 2000 and was listed on the NSE and BSE. It is headquartered in Mumbai (India). Geometric has over 20 offices worldwide.
- Auditors: Kalyaniwalla & Mistry Chartered Accountants
- 2 non-executive directors out of 8 directors on the board

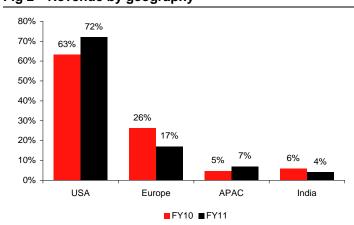
Management and directors' background

- Jamshyd N. Godrej, Chairman. Was conferred Padma Bhushan in 2003. Director of over 20+ companies.
- Manu M. Parpia, MD & CEO. MBA from Harvard University.
 Was CEO of Geometric from 1994-2006
- Dr. K. A. Palia, Director. He is a CA and ICWA. Serving as a director in 6 other Godrej companies.
- Mr. Milind S. Sarwate, Director. Over 27yrs of experience in Aventis, Godrej and Marico. Earlier headed Finance, HR and Strategy in Marico.
- Ms. Anita Ramachandran, Director. Over 30yrs' experience in HR and strategy. MBA from JBIMS, Mumbai.

Annual results highlights (FY11)

- USD Revenues: US\$136m (Up 26% YoY)
- Revenue: Rs6,206m (Up 21% YoY)
- EBITDA: Rs947m (Up 9% YoY)
- PAT: Rs575m (Up 23% YoY)
- Diluted EPS: Rs9.24 (vs Rs7.51 in FY10)
- DSO improvement to 68 days from 71 days on YoY basis.
- Attrition: 19.1% (vs 10.3% in FY10)

Fig 2 Revenue by geography



Source: Company data, Macquarie Research, June 2011

The growth proposition

- Focus on deepening select customer relationships with larger service offerings
- Focus on Industrial vertical and developing products in a mid-term time frame
- Use of Geometric Intellectual Property (IP) to provide non linear benefits to clients along with a differentiated value proposition

The value propositon

Bloomberg estimates for FY3/12:

Revenue: Rs7,706mEBITDA: Rs1,017m

PAT: Rs479mEPS: Rs8.42

■ FY12 PER (x) - 6.8x

The business model

- Geometric is a specialist in the domain of engineering solutions, services and technologies.
- Its portfolio of Global Engineering services and Digital Technology solutions for Product Lifecycle Management (PLM) enables companies to formulate, implement, and execute global engineering and manufacturing strategies.

The main risks

- Client concentration: As of March 2011 the top client contributed 25% of revenue and the top 10 clients contributed 70% to revenues.
- Margin pressure: The company's margins are than other IT service players' (net profit margin was 9% for FY11).
 Further pricing pressure from the competition could hurt the company's margins.
- Vertical concentration: Direct industrial accounts for 61% of revenue and software ISV contribute 31% of revenues.

Strengths

- Strong client relationships with key accounts.
- Strategic alliances with global PLM giants including Dassault Systèmes, Siemens PLM Software and PTC have further strengthened its position.
- Strong balance sheet with Rs247m cash reserves and minimal debt of Rs45m as of 31 March 2011.

Weaknesses

 Due to its limited size, the cost levers can only provide a certain level of leverage for management to manage its input costs.

Opportunities

- Strong balance sheet makes growth possible inorganically through select M&A.
- Strength in US demand is likely to continue in FY12, which would be beneficial for the company since 72% of its revenue comes from the US.

Threats

- Pricing pressure: Competition from other mid-sized players could limit the scope for a price uptick
- High competitive intensity from Captives of Fortune 500 Global Tech majors, <500 member niche companies and other OPD players like Mindtree, Symphony, etc.

Macquarie Research

Fig 3 Valuation comparison – Indian IT services

Company name	Bloomberg Ticker	Rec	Market Cap (US\$ m)	Current Price (Icy)	Target Price (Icy)	Up/Down side(%)	EPS FY12E	EPS FY13 E	PER (x) FY12 E	PER (x) FY13 E	RoE (FY11)	EPS CAGR (FY11-13E)
Macquarie Indian IT Serv	ices Coverage	Universe						•				
TCS	TCS IN	OP	46,508	1,069	1,360	27%	52.6	63.4	20.3	16.9	37.6	19.6%
Infosys	INFO IN	OP	34,571	2,710	3,650	35%	143.3	177.9	18.9	15.2	27.1	22.1%
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Genpaci WNS	WNS US	NR NR	3,472	9	NR NR	NR NR	0.9	1.0	9.8	8.7	3.7	13.1%
CNINO			395 nnanies hased on	-				_		0.7	3.7	1.3%

Note: Prices as of 20 June 2011. Data for non-rated companies based on Bloomberg consensus estimates. Coverage of IBM was suspended on 28 Sept 2010.

Source: Bloomberg, Macquarie Research, June 2011

Fig 4 Geometric Technologies - Financial Statements (Rsm)

INCOME STATEMENT					BALANCE SHEET				
Year Ending March 31	2007	2008	2009	2010	Period Ending	2007	2008	2009	2010
Total Revenue	3,831	4,858	5,981	5,116	ASSETS				
Cost Of Goods Sold	2,728	3,650	4,119	3,442	Total Cash & ST Investments	147	234	587	174
Gross Profit	1,103	1,208	1,862	1,673	Total Receivables	747	788	1304	1156
SG&A	402	574	846	736	Other Current Assets	689	612	464	803
Provision for Bad Debts	4	5	93	(3)	Total Current Assets	1583	1635	2355	2133
Depreciation & Amort.	212	198	210	232					
Other Operating	13	106	138	84	PPE	1565	1484	1442	1595
Expense/(Income)									
Operating Income	471	326	575	624	Accumulated Depreciation	-681	-720	-742	-888
Net Interest Exp.	(14)	(48)	(27)	(10)	Net PPE	885	764	700	707
Forex Gains (Loss)	39	158	(484)	(20)	Lance to the Lance to the Lance to	400	470	000	407
Other	11	7	(5)	(1)	Long-term Investments	120	179	200	167
EBT Excl. Unusual Items	507	443	60	593	Goodwill	1241	1301	74	61
Sale Of Assets	1	0	11	6	Other Intangibles	83	131	118	89
Sale Of Assets	(2)	(1) 442	(1) 70	1	Total Assets	3913	4009	3448	3157
EBT Incl. Unusual Items Income Tax Expense	506 68	442 66	70 54	600 6	LIABILITIES				
Earnings from Cont. Ops.	439	376	16	594	Accounts Payable	114	13	52	95
Extraord. Item	439	3/0	147	-	Accounts Fayable Accrued Exp.	29	28	110	57
Net Income	439	376	163	594	Short-term Borrowings	313	-	1169	185
Minority Int. in Earnings	(64)	(55)	(94)	(127)	Income Taxes Payable	8	8	8	14
Net Income	374	321	69	467	Unearned Revenue	-	-	42	70
Tiot moonio	0, 1	02.	00	101	Other Current Liabilities	483	591	817	589
NI to Common Incl Extra Items	374	321	69	467	Total Current Liabilities	948	640	2198	1009
NI to Common Excl. Extra	374	321	(79)	467	Long-Term Debt	606	794		-
Items			(- /	-	3 3		-		
					Def. Tax Liability, Non-Curr.	44	41	54	30
					Total Liabilities	1598	1475	2252	1040
CASH FLOW STATEMENT									
Net Income	374	321	69	467	Common Stock	124	124	124	124
Depreciation	212	198	210	167	Additional Paid In Capital	633	641	5	5
Other Amortization	-	-	-	65	Retained Earnings	1480	1700	1011	1395
Sale Of Invest.	-1	0	-11	-6	Comprehensive Inc.	0	-20	-102	256
Other Operating Activities	87	90	-61	26	Total Common Equity	2237	2445	1038	1779
Change in AR.	-324	-40	-292	154	Minority Interest	78	89	157	338
Change in Other Net Operating	-295	76	202	-51	Total Equity	2315	2534	1195	2117
Assets Cash from Ops.	57	645	117	820	Total Liabilities And Equity	3913	4009	3448	3157
cush from ops.	31	043	117	020	Total Elabilities Alla Equity	3313	4005	3440	3137
Capital Expenditure	-219	-193	-807	-218					
Sale of PPE	19	68	841	10	Per Share Items				
Cash Acquisitions	-1114	-77	-	-	Basic EPS	6.2	5.18	1.11	7.51
Investments	94	-59	-41	39	Diluted EPS	6.08	5.14	1.11	7.51
Other Investing Activities	17	5	11	20	Dividends per Share	0.8	0.8	8.0	0.8
Cash from Investing	-1203	-256	4	-149	Payout Ratio %	26.0%	29.4%	114.3%	11.7%
Total Debt Issued	882	438	610	_	Supplemental Items				
Total Debt Repaid	-	-563	-235	-984	EBITDA	684	524	785	791
Equity Issuance	516	9	4	-	EBIT	471	326	575	624
Common Dividends Paid	-97	-95	-79	-55					
Total Dividends Paid	-97	-95	-79	-55					
Other Financing Activities	-64	-92	-68	-46					
Cash from Financing	1236	-302	232	-1084					
Forex Adj.	_	_	19	0					
Net Change in Cash	90	87	371	-413					
onango m ouom	50	0,	57 1	710					

The company is yet to release it FY11 Annual Report and hence certain financial information is not available. Source: Company data, Capital IQ, NSE Website, June 2011

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >3% in excess of benchmark return Neutral – return within 3% of benchmark return Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield

Macquarie - Asia/Europe

Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%

Macquarie First South - South Africa

Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%

Macquarie - Canada

Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) – return >5% in excess of Russell 3000 index return

Neutral (Hold) – return within 5% of Russell 3000 index return

Underperform (Sell)– return >5% below Russell 3000 index return

Volatility index definition*

This is calculated from the volatility of historical price movements.

Very high-highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low-medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Australian/NZ/Canada stocks only

Recommendations - 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa*

ROA = adjusted ebit / average total assets ROA Banks/Insurance = adjusted net profit /average total assets

ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions - For quarter ending 31 March 2011

	AU/NZ	Asia	RSA	USA	CA	EUR
Outperform	45.65%	65.72%	59.70%	43.02%	68.91%	51.16% (for US coverage by MCUSA, 14.36% of stocks covered are investment banking clients)
Neutral	39.49%	19.00%	29.85%	53.09%	26.43%	35.73% (for US coverage by MCUSA, 17.55% of stocks covered are investment banking clients)
Underperform	14.86%	15.28%	10.45%	3.89%	4.66%	13.11% (for US coverage by MCUSA, 0.00% of stocks covered are investment banking clients)

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Miki Edelman (Taiwan)	(8862) 2734 7580
Angus Kent (Thailand)	(662) 694 7601
Michael Newman (Tokyo)	(813) 3512 7920
Angus Innes (UK/Europe)	(44) 20 3037 4841
Rob Fabbro (UK/Europe)	(44) 20 3037 4865
Sean Alexander (Generalist)	(852) 3922 2101

(852) 3922 2065

Regional Head of Distribution

Justin Crawford (Asia)

2) 3922 2002
2) 3922 2028
3) 3512 7837
2) 3705 8601
6601 0288

Sales Trading cont'd

Mike Keen (Europe)	(44) 20 3037 4905
Chris Reale (New York)	(1 212) 231 2555
Marc Rosa (New York)	(1 212) 231 2555
Stanley Dunda (Indonesia)	(6221) 515 1555
Kenneth Cheung (Malaysia)	(603) 2059 8888
Michael Santos (Philippines)	(632) 857 0813
Isaac Huang (Taiwan)	(8862) 2734 7582
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Alternative Strategies

Convertibles - Roland Sharman	(852) 3922 2095
Depository Receipts - Seung-Jin Lee	(65) 6601 0203
Derivatives – Mark Holland	(852) 3922 2081
Structured Products - Andrew Terlich	(852) 3922 2013