Batlivala & Karani

B&K Securities

INITIATING COVERAGE

Subex Systems (BUY)

18th May 2006

Share Data

Market Cap.	Rs. 12.0 bn (US$ 266 mn)
Price	Rs. 526
Target Price	Rs. 710
BSE Sensex	12218
Reuters	SUBX.BO
Bloomberg	SUBX IN
52-week High/Low	Rs. 650/199
Issued Shares	21.8 mn

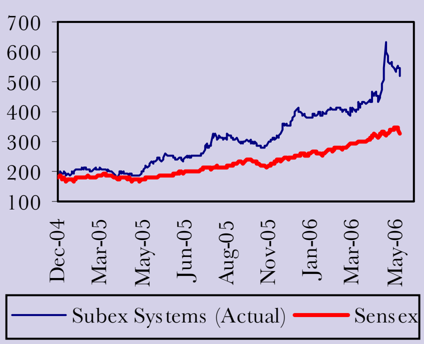
Valuation Ratios

Year to 31 Mar.	2007E	2008E
EPS (Rs.)	23.9	43.7
+/- (%)	33.1	82.7
PER (x)	22.0	12.0
PBV (x)	5.8	4.6
Dividend/Yield (%)	0.4	0.5
EV/Sales (x)	4.3	3.1
EV/EBITDA (x)	15.2	8.9

Shareholding Pattern (%)

Promoters	19
FIIs	19
MFs	24
ADRs/GDRs/Other Foreign	1
Institutions	6
Public & Others	30

Relative Performance



Attention is drawn to the disclaimer and other information on Page 2

Open blue sky

Subex Systems, the revenue maximisation solution provider to Telcos, in a latest move acquired Azure. This acquisition makes the combined entity, Subex Azure, the leader in Revenue Assurance and Fraud Management with 24% market share globally. Combined entity now has the size, enough Tier-1 reference customers and geographical reach to aggressively target revenue maximisation market and leverage relations to move into other product segments of Operations Support System (OSS). It further strengthens the long-term goal of Subex to become telecom OSS software market leader.

Year to March 31	FY05	FY06	FY07E	FY08E	CAGR (%)
P&L Data (Rs. mn)					**FY06-08E**
Revenues	1,165	1,812	3,252	5,579	75.5
Operating Profit	350	510	921	1,923	94.1
Net Profit	253	392	676	1,533	97.9
Margins (%)					
Operating Profit	30.0	28.2	28.3	34.5	–
Net Profit	21.7	21.6	20.8	27.5	–
Balance Sheet (Rs. mn)					
Total Assets	1,746	2,160	3,019	4,659	46.9
Shareholders' Funds	1,233	1,815	2,573	4,041	49.2
Per Share Data (Rs.)					
Reported EPS	28.4	18.0	23.9	43.7	55.9
Reported CEPS	36.4	22.2	29.6	50.3	50.7
Dividend	3.8	1.8	2.3	2.7	–
Returns (%)					
ROCE	22.7	26.6	35.9	52.2	–
ROE	24.9	25.7	30.8	46.4	–

- Subex is paying US$ 140 mn for Azure, up to US$ 4 mn in cash and remaining US$ 136 mn through 12.13 mn GDR issue. Equity dilution will be 54% and post dilution, promoters of Subex holding will be 12% and investors of Azure will be holding 34%.
- Third party Revenue Assurance software space is growing at 24-26% CAGR over CY05-08, third party OSS software market is expected to post 7-8% CAGR over CY05-08.
- At Rs. 526, the stock is trading at a PE multiple of 22x FY07E EPS of Rs. 23.9 and 12x FY08E EPS of Rs. 43.7. Subex's earnings CAGR is expected to be 75.5% over FY06-08E. We initiate coverage with a BUY. The target price is Rs. 710.

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Analyst Declaration: We, Sushil Sharma & Shradha Agrawal, hereby certify that the views expressed in this report accurately reflect our personal views about the subject securities and issuers. We also certify that no part of our compensation was, is, or will be, directly or indirectly, related to the specific recommendation or view expressed in this report.

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Investment arguments

Azure acquisition: Brand, Customers, Size and Reach in One Stroke.

Subex scaling new heights with Azure

The product portfolio of Subex and Azure compliment each other well. Subex has been traditionally strong in telecom fraud management systems deriving 75% of its revenues from FMS while Azure's strength is in Revenue assurance solutions. Pre-acquisition Subex market share was 6-7% in revenue maximisation market. Post acquisition, Subex Azure has revenue maximisation market share of almost 24%. This dominant position would be of great help in a highly fragmented market space.

Azure is recognised as the best brand and category leader in revenue assurance space, having 23 of top 40 Tier-1 communication service providers as clients. Gaining access to Tier-1 customers in such high lock-in product segment and fragmented market is a critical factor in growth. Subex gets instant access to these customers now.

Cross sell opportunity

Total customer base of Subex Azure is around 150 and they have only 3 overlapping customers across the combined product portfolio. Of the combined list of customers, only 45 are using some kind of fraud management system and revenue assurance system. This presents an opportunity for cross selling. Azure's interconnect and inter-party billing solutions also get added to Subex's product portfolio, enabling Subex to offer a wider range of revenue maximisation solutions.

Revenue Operation Centre (ROC) initiative

Moving beyond revenue assurance to revenue management

ROC initiative is based on the concept of providing best in suite software as services to communication service providers. The ROC approach will enable Subex to design offerings based on service oriented architecture concept. The ROC approach will help CSPs take a more holistic, enterprise-wide approach to RA, by providing integrated platforms and frameworks that include not only software but also services that can help them identify and resolve their most difficult revenue problems and modify their processes to minimise further leaks.

Market size and growth potential

Revenue leakage around 10%

Communications Fraud Control Association (CFCA), a global organisation working to combat telecommunications fraud estimates peg annual worldwide telecom fraud losses to be in the range of US$ 35-40 bn. Global telecom studies have revealed that telecom operators lose as much as 10% in revenue leakage with fraud being one of the key reasons. Currently, only about 27% of operators use any revenue maximisation solution. The revenue maximisation or revenue assurance market size is expected to grow from US$ 300 mn to US$ 800 mn over the 4 year period from 2003 to 2007 resulting in a CAGR of 28% so further opening up the windows for Subex.

Growing demand for RA products

RA growing at a CAGR of 28%

World over, telecom service provider industry is going through a churn due to changed regulatory environment (from rate-of-return monopoly status to market determined competition), technological changes and emergence of wireless and IP based services, multi-service offerings and interconnection requirements to ever increasing numbers of partners and service providers. Consolidation of the communications carriers due to the typical cycles of market maturity is another major factor for greater demand of RA solutions. This provides an opportunity to Subex to penetrate further into the market.

Moreover, the rate of growth of RA segment which is growing at a CAGR of 28% provides further evidence to the fact that there is further scope of expansion in the future.

Converged Network

Advanced technologies bring

Offering of services based on improved technology like 3G and converged IP network poses a new set of threats and frauds like IP Security issues, credit card fraud on M-Commerce, Micro Payment fraud, Copyright infringement and content sale fraud and this provides an opportunity to Subex to come up with innovating products to tackle such issues. Next Generation Networks is forecasted to grow at a rate of 42% which will drive the spending on revenue assurance by 8.5% incrementally.

Long-term goal: OSS market Leader

Operations Support Systems is a term for software that supports the telecommunications industry, but is not involved with the routine network operations of transmitting and switching data. With the acquisition of Azure, Subex gets interconnect; inter party billing and route optimisation product in its portfolio thus enabling it to further expand in the billing vertical of OSS domain. OSS software vendor space is highly fragmented with more than 400 vendors hawking their offerings and we expect more consolidation to happen in the market. OSS domain has already caught the attention of biggies like IBM (acquired Micromuse), Oracle (acquired Portal Software), etc.

Low cost country centre

Enjoying cost-quality equation

Subex Azure enjoys the benefit of having its headquarter in Bangalore which would help the combined entity to reap the benefits of rich pool of manpower at reasonable cost and moreover, shifting of Azure operations to India would further enable the combined entity to cut down on many costs.

Investment risks

Inherent risk in integration

More than 2/3rd of acquisitions fail in IT industry

Acquisition has associated risks in the form of personnel, clients and regulatory issues. Both Subex and Azure have been prolific acquirers in the last couple of years with acquisition of around 6-7 companies combined. Integrating all these companies and then merging Subex and Azure is a risky proposition. Any slip will delay the revenue growth projections.

Azure's turnaround

Trying turnaround

Azure is a loss making company. Azure was spinout of British Telecom in 2003, and is promoted by three private equity firms. Azure's financials is not revealed, so the extent of loss is not available. Turnaround of Azure will be a challenging affair, and any slippage will adversely affect the future growth plans.

Competition from established OSS solutions providers

Blurring boundaries

Subex in a bid to expand its offerings might move into other OSS verticals as well, like fulfilment, assurance where the market is already dominated by some players and the company might then face the threats of competition with the behemoths like HP, Amdocs, Convergys, IBM, Oracle, etc.

Shifting products to RevMax platform

Platform integration – a difficult task

One of the major reasons for telecom service providers to buy third party OSS software is to reduce complexity and cut down on maintenance cost. So, to provide maximum benefit from its product portfolio to its customers, Subex Azure should shift its products to the common (RevMax) platform which would give its clients an integrated view. But the different development history of Subex and Azure products makes the task of product platform integration challenging.

Highly competitive and fragmented market

The field in which Subex operates is highly competitive and the competition is bound to increase in future with players from other OSS verticals and players form other layers of telecom functionality map also shifting in to revenue maximisation. There are around 14 sub-segments within the OSS market and approx. 430 vendors supplying one or more components of OSS. In revenue assurance space alone, there are approx. 40 vendors.

Technological obsolescence

The telecom software products and services segments that Subex operates in, is subject to high levels of obsolescence and rapid technological change so Subex needs to be pro-active in coming up with advanced products to retain or exist their market pie or it might face the danger of being wiped out from this highly competitive market.

Coupled with telecom industry cycle

Knotted with telecom

Subex is fully dependent on telecom industry, so any ups and downs in this environment will have a considerable impact on the company's fortunes. Moreover, telecom is still in the transition phase and capex has just started to perk up. Subex's focus area i.e. revenue assurance market is still evolving and faces uncertainties on the size of market, opportunities.

Hiring and retaining professionals

Talent Hunt

Seeing the high rate of attrition in this field, the area of concern for Subex would be to attract new talent and create such opportunities as to retain the talent.

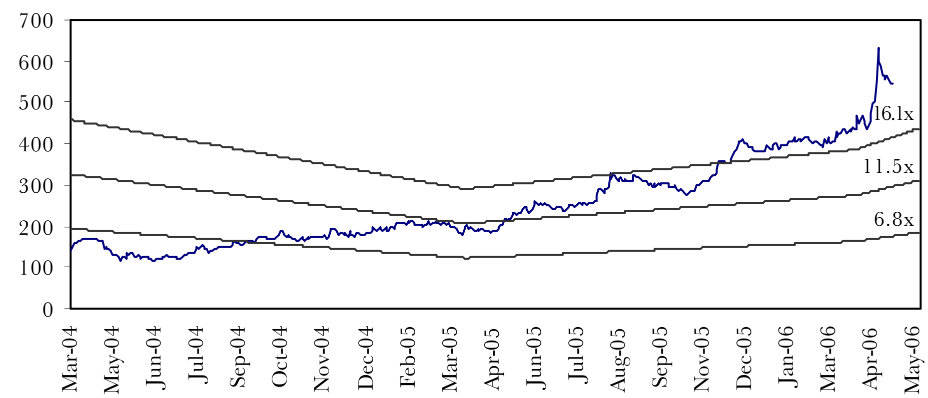
Valuations

At the current market price of Rs. 526, the stock is trading at a PE multiple of 22x FY07E and 12x FY08E. The PEG is 0.7x based on FY07E earnings and 0.4x based on FY08E earnings. The target price is Rs. 710. At this target price, Subex would be trading at PE of 16x FY08E EPS of Rs. 43.7. This gives an upside of 27% from the current price of Rs. 560.

Fundamental valuation

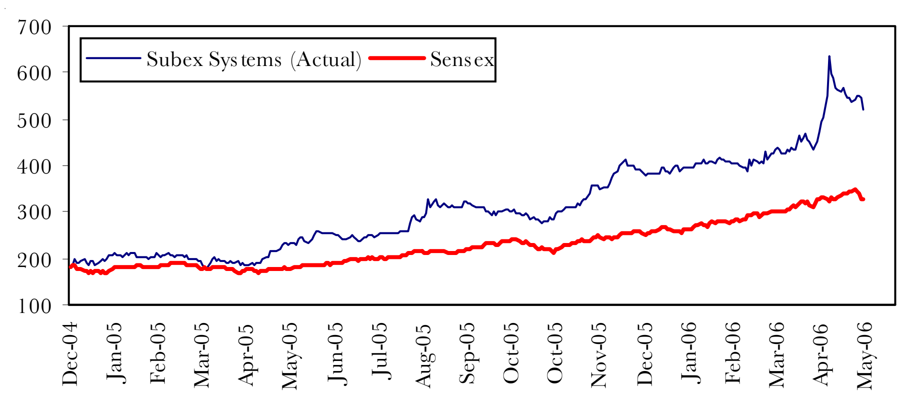
Year to 31 Mar.	2005	2006	2007E	2008E
EPS (Rs.)	28.4	18.0	23.9	43.7
+/- (%)	17.3	(36.6)	33.1	82.7
PER (x)	18.5	29.2	22.0	12.0
PBV (x)	3.8	6.3	5.8	4.6
Dividend/Yield (%)	0.7	0.3	0.4	0.5
EV/Sales (x)	4.0	6.1	4.3	3.1
EV/EBITDA (x)	13.4	21.6	15.2	8.9

PER Band



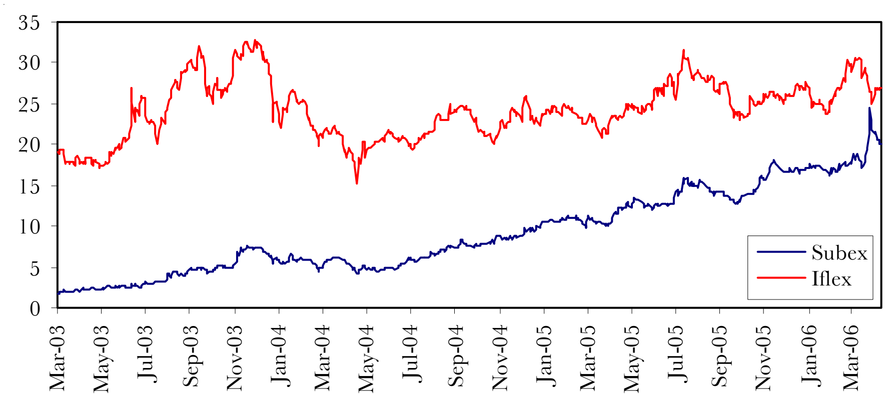
In the year 2005, Subex outperformed the Sensex and posted a return of 110% while Sensex recorded a return of 42%.

Subex PE comparison with Sensex

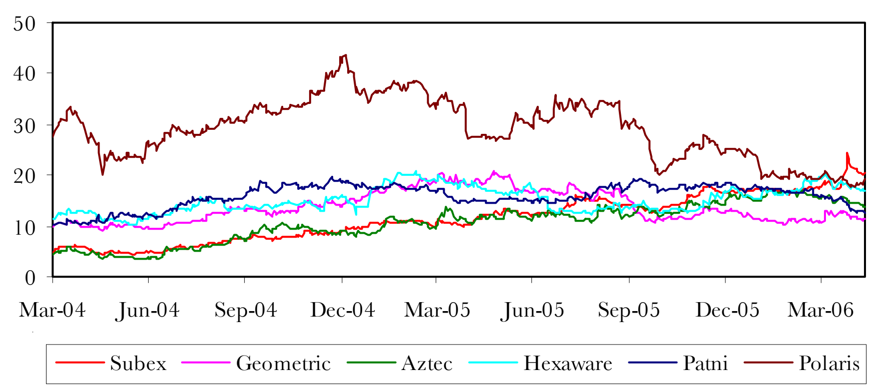


Subex derives 64% of its revenues from IT software and i-flex grosses 50% of its total revenues from software business. i-flex has always commanded premium over all other Indian IT software companies due to bigger size, better branding and wider reach and recently due to Oracle strategic investment. Going forward, we expect Subex to close gap with i-flex.

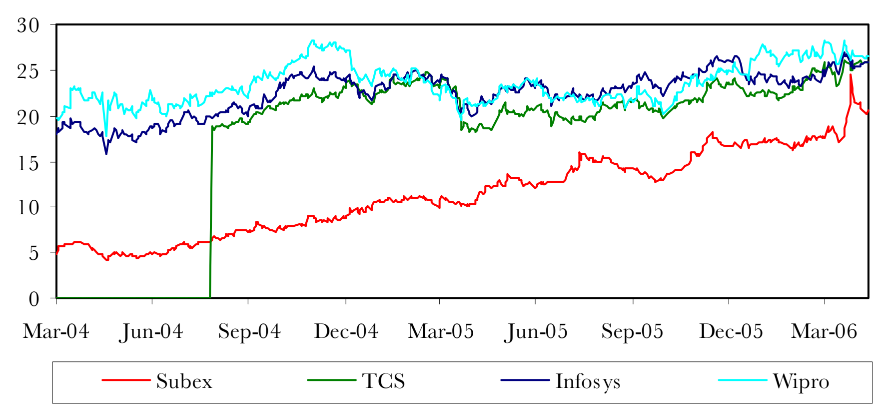
Subex vs. iflex



Subex vs. Mid cap IT companies



Subex vs. "The Big Three"



There is no major competitor of Subex System in India operating in the OSS domain but if we take a global view, there are around 400 players in the OSS segment and around 40 vendors in RA segment particularly so we believe that the market is still very fragmented and it needs further consolidation which has already started with the acquisition of Azure Solutions and two more big acquisitions recently.

Major OSS vendors

Company	Listed on	Year ending	Revenue FY05	YoY (%)	Net Income FY05	YoY (%)	Employees (Nos.)	YoY (%)
Amdocs	NYSE	Sept.	2,038.6	14.9	288.6	22.9	10,600	3.9
Convergys	NYSE	Dec.	2,582.1	3.8	122.6	10.0	66,300	17.3
Fair Isaac	NYSE	Sept.	798.7	13.1	134.5	30.8	3,058	29.9
Micromuse	–	Sept.	160.8	9.7	(3.8)	–	656	23.3
CSG Systems	NASDAQ	Dec.	377.3	(28.8)	53.2	12.7	2,549	3.2
Portal Software	–	Jan.	126.8	4.8	(40.2)	–	609	–
Ectel	NASDAQ	Dec.	23.2	84.1	(1.4)	–	–	–
Subex	BSE/NSE	March	1,165.4	32.5	253	42.4	500	–

Business background

No.1 in Fraud Management

Subex Systems is a global telecom software company that provides revenue maximisation solutions to communication service providers worldwide**.** Subex is particularly strong in the fraud management solutions of revenue maximisation space. The first product which Subex launched was Ranger – a fraud management solution. Later, Subex added INcharge – a revenue assurance solution, and ONtrack – a delinquency management solution to its portfolio.

Majority of Subex clients are small operators. Average revenue per customer (ARPC) for Subex is US$ 0.950 mn in FY06 vs. US$ 0.875 mn in FY05.

Recently, Subex acquired Azure Solutions, the world's largest revenues assurance company, in a deal worth US$ 140 mn, the largest acquisition to-date by any Indian IT company. Post acquisition, Subex will be known as Subex Azure.

Key milestones

1994	Incorporated as a Pvt. Ltd. company
1996	Converted into a Public Ltd. company
1999	IPO
2000	Acquired IVth Generation Inc.,US
	First installation of Ranger
2001	Acquired Magardi Inc., Canada
	First International installation of Ranger
2002	First installation of INcharge
	Strategic investment from Intel Capital, Toronto Dominion Bank and UTI
2004	Acquisition of Alcatel and Lightbridge FMS Business
	Luxemburg Listing
	Becomes largest FMS vendor
2005	Subex solutions on Teredata platform
2006	Acquisition of Mantas, FMS division
	Launch of ONtrack
	Acquisition of Azure Solutions

Acquisitions by Subex

Year	Company acquired	Deal size (Rs. mn)
2000	IVth generation Inc, USA	336
2001	Magardi Inc.	159
2004	Lightbridge, USA	141
	Alcatel, UK	172
2006	Mantas, US	89
	Azure, UK	6,380

Subex acquisition

Acquisition for US$ 140 mn

Subex acquired Azure for US$ 140 mn (Rs. 6,300 mn) in part cash and part stock deal. US$ 4 mn will be paid in cash and remaining US$ 136 mn would be paid by issue of 12.13 mn GDRs. At these numbers, price per GDR comes out to be US$ 11.2 or Rs. 498 (at exchange rate of Rs. 44.5/US$). After the completion of transaction, Azure investors will be holding 34% stake in Subex Azure.

Revenue assurance market is originated from collection management market for telecom companies. Revenue assurance and Telecom OSS is a highly fragmented market. Feature-wise there is not much differentiation between different vendors of RA software. There is a scramble to get access to Tier-1 customers and create brand image. Through this acquisition, Subex gets the branding, image and access to Tier-1 customers which are necessary to survive and grow in a highly fragmented revenue maximisation software market.

As the following table shows, we consider that Subex paid a going rate for Azure. All of the acquired companies (in the following table) were loss making except Micromuse, which made a quarterly profit (for first time) of US$ 4.7 mn in 4QFY05 (June-September 2005).

Acquisitions in OSS domain

Date	Acquirer	Target	Deal Size (US$ mn)	Revenue (US$ mn)	Deal Size/ Revenue
May-06	EMC	SMART	260	60	4.5
Apr-06	Subex	Azure	140	31	4.5
Apr-06	Oracle	Portal Software	220	127	1.7
Dec-05	IBM	Micromuse	865	161	5.3
May-05	Amdocs	DST Innovis	238	233	1
Dec-04	Intec	Digiquant	10.68	18.57	7.2
Aug-04	Tekelec	Steleus	56	20	2.8
Aug-04	Evolving Systems	CMS Comm	10.4	4	2.6

Headquarters in Bangalore

Subex Azure's global and Asia-Pacific headquarters will be in Bangalore, India while the EMEA and American operations will be based in London, UK and Westminster, Colorado, respectively. Subex Azure will have 23 of the world's 40 largest operators, over 150 customer installations in around 60 countries. Tier-1 customers include Bharti Tele-Ventures, BT, Cable & Wireless, Orange, O2, Rogers Wireless, TeliaSonera, T-Mobile USA, Telenor, Vodafone, Verizon, etc.

Azure spun out of BT

Azure was formed by spinning out the revenue assurance department of British Telecom (BT) in 2003. Azure is promoted by a few private equity funds like New Venture Partners, Doughty-Hansen and Intel capital.

Subex will be concentrating on the following three activities in the listed order of priority for the next two years for the combined entity Subex Azure.

1) Integration.

2) Profitability.

3) Revenue growth.

Integration

Expenditure on integration in FY06 and FY07

Subex will be incurring around Rs. 350 mn as integration cost in FY07. This amount will be paid for different acquisition related activities like payment for advisory and due diligence services, employee severance package etc. All these are one-time costs and will be expensed in FY07 itself. Azure currently has an employee base of around 190, out which around 110 will be encouraged to leave as all the development and engineering activities will be shifted to India. Around 80 existing client facing employees of Azure will be retained to avoid any discontinuity in services to clients.

Profitability

Driving at profitability in FY08

Second objective of Subex Azure will be to improve profitability. Currently, Azure is a loss making company (No specific data about profit/loss is available), but this loss is mainly attributed to significant sales and marketing spend. Operational synergy arising out of coordinating and paring down of sales & marketing activities, staff rationalisation, shifting of entire design & development tasks to India and reduced general & administrative cost for combined entity is expected to improve profitability.

Revenue growth

Management plans to see a major push in revenue growth in FY08, after a modest revenue growth in FY07 due to consolidation and integration.

We expect business to ramp-up significantly in FY08 due to deepening of relationship with existing Tier-1 clients (mostly from Azure) of Subex Azure, new clients win due to dominant position in revenue maximisation segment and reference availability of Tier-1 implementation, better brand recognition, expanded product portfolio and overall growth of the OSS market.

How Numbers add up??

Azure is a Private Equity Fund promoted company with no publicly available financial information. Subex too refused to divulge the financial details of Azure so our estimate for Subex expense is done considering Subex as a comparable firm to Azure.

Pre-acquisition, Azure's spend on SGA 3.5x that of Subex

Azure's revenue was Rs. 1,380 mn in FY06. Azure has an employee strength of 190. Post merger, 80 clients facing employees (45 for British Telecom + 35 for other clients) will be retained while remaining 110 will be laid off. No data about the amount of loss and SGA, employee expense is available for Azure but we expect its expenditure on employees' front to be around 3.5 times that of Subex's product business based on the premise that Azure is based in a high labour cost area. Subex has approximately 250 employees in products business and wage differential ratio between India and UK is almost 1:5.

Reduction in employee strength of Azure

FY06	Revenue (Rs. mn)	Emp. Exp. (Rs. mn)	% of Revenue
Subex	1,167	375	32

FY06	Revenue (Rs. mn)	Pre-merger employees (Nos.)	Post-merger employees (Nos.)	Reduction (Nos.)	Reduction (%)
Azure	1,380	190	80	110	58

Cost savings

Azure	
Total Employee Cost (%)	112
Total Employee Cost (Rs. mn)	1,551
Reduction in Employee Strength (%)	58
Savings - Emp Cost (full yr basis) (Rs. mn)	898
FY07 Subex Savings - Emp Cost (9 Months) (Rs. mn)	337

Subex incurred almost Rs. 45 mn as expense in FY06 on acquisition front. Some of these went into due diligence process and some into hiring new persons/advisors to quicken the integration process. It will be expending further Rs. 350 mn (approx.) in FY07 as integration cost, some of which would be spent on redundancy/severance package, shifting of design & development task to India, etc.

If we adjust FY06 and FY07 PAT figures for these integration costs, then PAT margin comes out to be 37% for FY06 and 41% for FY07.

Adjustment for Integration expense (Consolidated)

(Rs. mn)	FY05	FY06	FY07E	FY08E
Product Revenue	628	1,167	2,515	4,799
EBITDA	325	498	880	1,920
Margin (%)	52	43	35	40
PAT	251	390	674	1,513
Margin (%)	40	33	27	32
Integration Expense	–	45	350	–
PAT adjusted for Integration Expense	–	435	1,024	–
Margin (%)	–	37	41	–

To turn Azure profitable and bring it to Subex level, Azure has to earn around Rs. 487 mn at least. On a standalone basis, Subex is expected to clock a PAT of Rs. 537 mn in FY07. We expect employees cost savings to be around Rs. 337 mn.

Standalone

(Rs. mn)	Subex		Azure	
	FY07E	FY08E	FY07E	FY08E
Revenue	1,413	2,581	1,102	2,218
PAT	537	981	487	532
Margin (%)	38	38	44	24

Subex's spend on SG&A is just 5-6% of its revenue

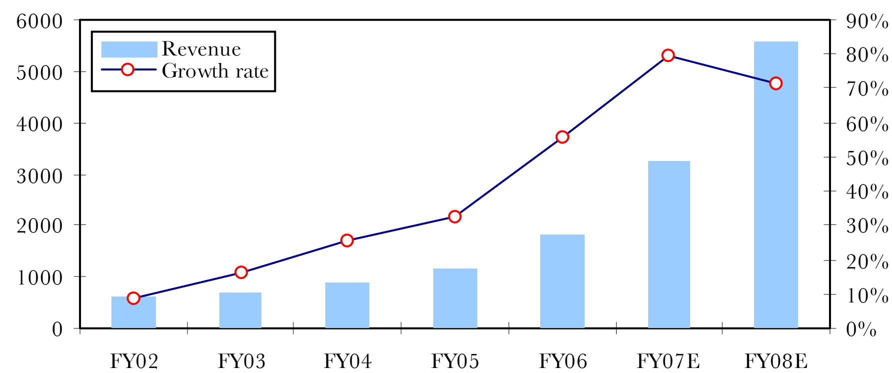
More than Rs. 190 mn cost savings has to come from reduction in the S&M effort of combined entity, shift in development base and hence some savings in general and administrative head too. Azure is considered to be a prolific spender on sales and marketing front which reflects in it being the top revenue assurance brand globally, compared to Subex which spends just 5-6% of their revenue on SGA front and has a low brand recall. Subex alone spent Rs. 223 mn under SG&A in FY06. Azure's SG&A spend is considered to higher than that of Subex.

Business analysis

Subex operates in a niche segment of revenue maximisation for communication service providers. Subex's business model consists of a mix of software and services, but the main focus area of Subex is software for telecom OSS/BSS industry. Subex Azure is the world leader in Fraud management and Revenue assurance space and 2nd largest in interconnect and inter-party billing. Contribution of services to total revenue is declining steadily over the years from 70% in FY02 to 14% in FY08E.

We expect Subex Azure to clock revenues of Rs. 3,252 mn and Rs. 5,579 mn in FY07E and FY08E, respectively. Management has given a revenue guidance of Rs. 2,400 mn for FY07 and Rs. 4,500 mn for FY08 for product business. FY06 total revenue stood at Rs. 1,812 mn with Rs. 1,167 mn coming from products business alone.

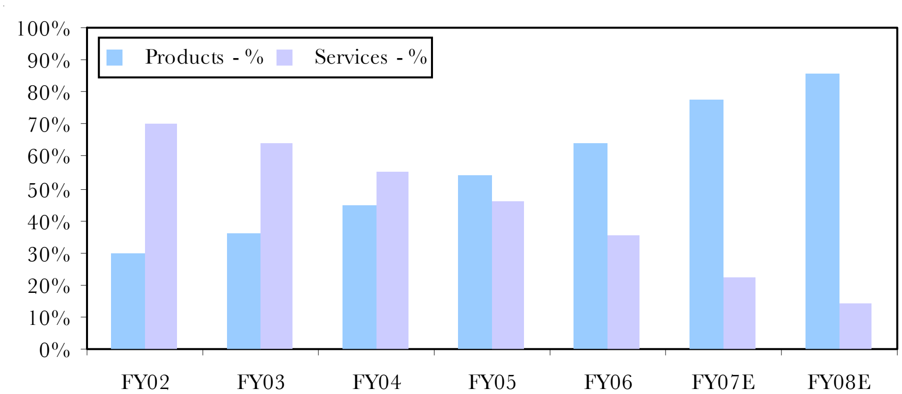
Revenue and growth



Revenue by Business Line

Subex in its initial years was predominantly a services company with major chunk of revenue contribution coming from services, accounting for 70% of its revenue in FY02 vis-à-vis product contribution of just being 30%. The picture has now changed totally with products contributing 64% and services 36%. This contribution from services is expected to come further down to 14% in FY08 and the management might sell-off its services division or convert it into a subsidiary in the near future.

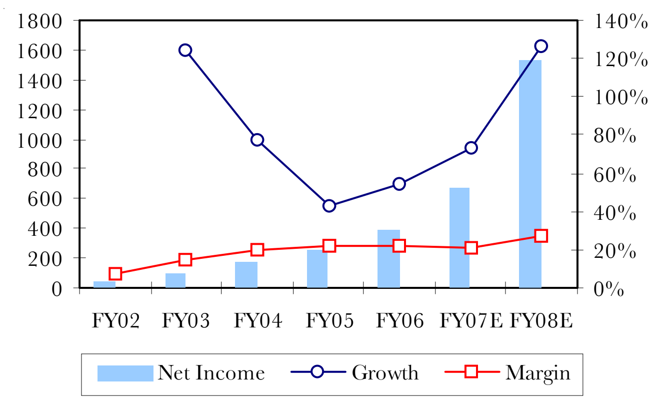
Revenue by Products & Services



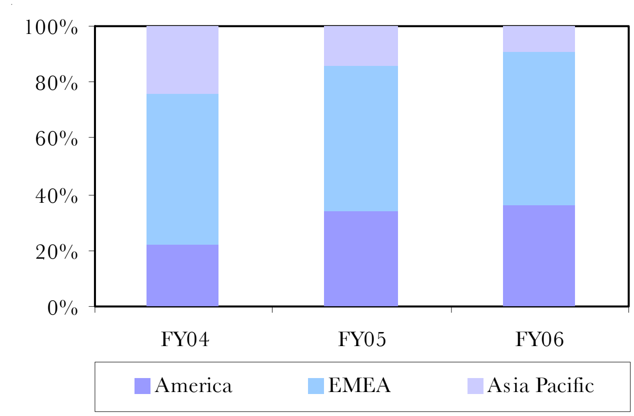
Net income, margin and growth

Net income of Subex is Rs. 391.5 mn in FY06 which is an improvement of 54.8% over FY05. In FY07, the net income expected is Rs. 675.9 mn and Rs. 1,533.2 mn in FY08 as in FY07, Subex would concentrate mainly on integration and consolidation of its operations with Azure and the company would have to expend a lot on the front of employee severance, due diligence, etc. But in FY08, Subex Azure's main focus would be to drive revenue growth of the combined entity while maintaining profitability even after increased spend on sales and marketing effort.

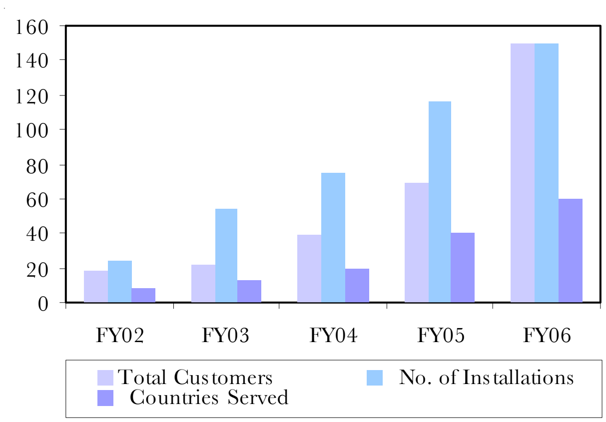
Net Income, Margin and Growth



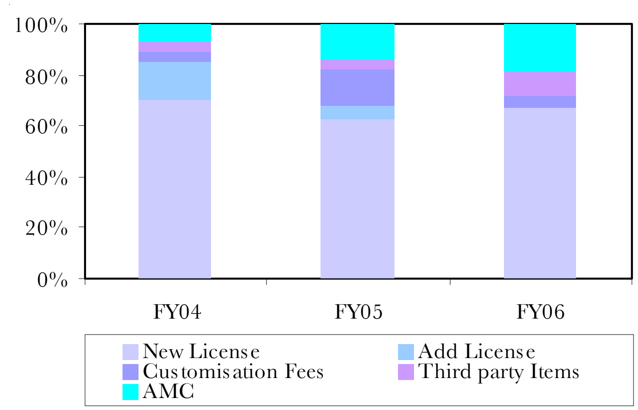
Revenue by geography



By customers, installations and countries served



By revenue stream



Business segment

Subex operates in a niche market providing revenue maximisation solutions to communications service providers worldwide. It operates in two business segments, telecom software products and telecom software consulting.

Products

Revmax, Revenue Maximisation suite

Revmax, the Revenue Maximisation suite comprising Ranger, INcharge, ONtrack offers a comprehensive range of solutions that help communication service providers maximise revenue and profits by assuring earned revenue, enhancement of revenue and cost optimisation.

Ranger, Fraud Management System

Helps Telcos improve their ROI

It combines the benefits of rule based alarm management techniques with Artificial Intelligence and neutral network Technology to provide operators with multiple points of fraud combat.

INcharge, Revenue Assurance System

Ensuring sustained profitable growth

It is an end to end Revenue Assurance solution that interfaces with a variety of support systems and network elements to enable it to process usage information, track discrepancies and identify potential revenue leakages across the entire OSS chain of a telecom operator.

ONtrack, Subscriber Risk Management Solution

Latest addition in the portfolio

ONtrack is a recent addition in Subex's portfolio of product. It helps Telcos manage subscriber risk by proactively tracking possible delinquents and also facilitating a smooth handling and exchange of information across departments and groups, thereby limiting the revenue loss that the operator could suffer.

List of Customers

America	America Tel, Global Crossing, Sprint, Teleglobe, Intelig, Porta, Vesper, ETB, Western Wireless, Telus Mobility, BellSouth, AllTEl, T-Mobile, Rogers Wireless, Bell South, ALLTEL,T-Mobile, Rogers Wireless, Claro, Centennial, US Cellular and Cincinnati Bell Wireless
EMEA	Sonatel Mobiles, Sonatel Wireline, Cora, Ikatel, Kencell, Orange Cameroon, Globacom, EconetWireless, Tiscali, EEsti, Mobiltel, Energis, Lithuania Telecom, Vodafone, Eitrcom, Colt, Thus and Telia.
AsiaPac	Bharti Mobiles, BPL Mobile, Hutch, Idea Cellular, Tata Teleservices, Indosat, Starhub, DTAC Thailand, BTB Brunei.

List of Partners

Technology/Solutions Partners	Microsoft, IBM, HP, i2, TEKELC, ORACLE, Sun, Teradata, OSIX, Intel.
Integration Partners	Alcatel, Motorola.
Channel Partners	MDS Group.

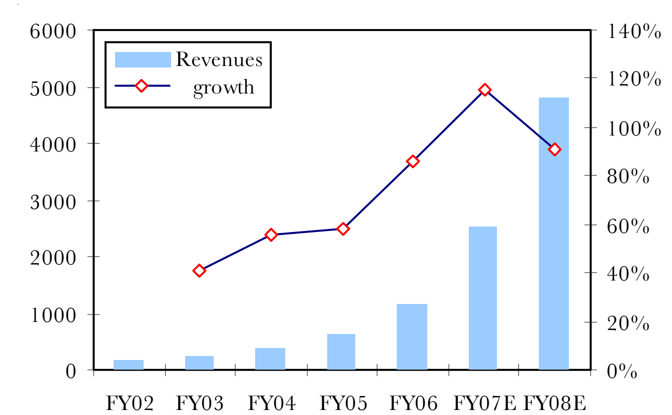
Products

In FY06, product revenues of Subex was Rs. 1,167 mn, contributing around 64% to the total revenue and product contribution is expected to increase further after integration with Azure to 77% and 86% in FY07 and FY08, respectively.

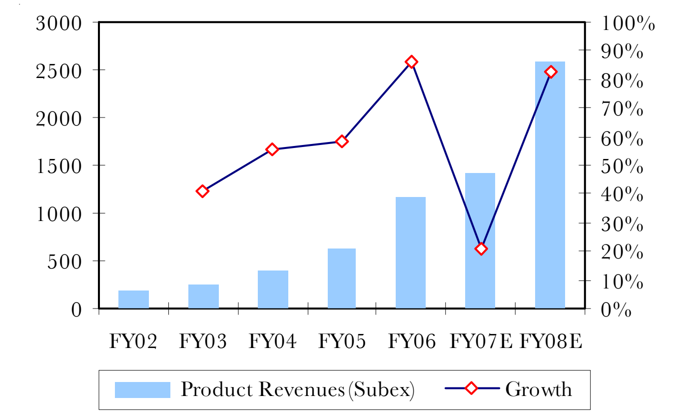
On a standalone basis, the product revenue of Subex increased by 86% over FY05. It is expected to be Rs. 1,413 mn in FY07, an increase of 21% over FY06 as Subex would mainly concentrate on integration and consolidation in FY07 with little focus on revenue growth. In FY08, product revenue is again expected to reach Rs. 2,581 mn which is a jump of 82% over FY07.

The EBITDA margin in the product business has always been hovering in the range of 40-52% which is quite good a margin and in stark contrast to this, EBITDA margin for services business is in the region of 3-10% and such a low EBITDA margin is one of the reasons why Subex is now majorly shifting to products.

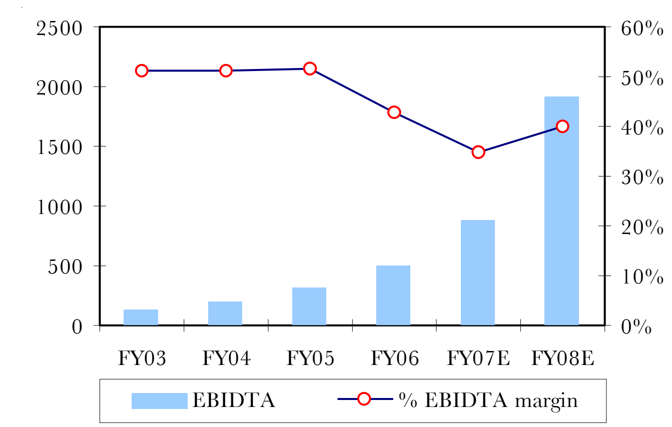
Products revenue: Subex Azure



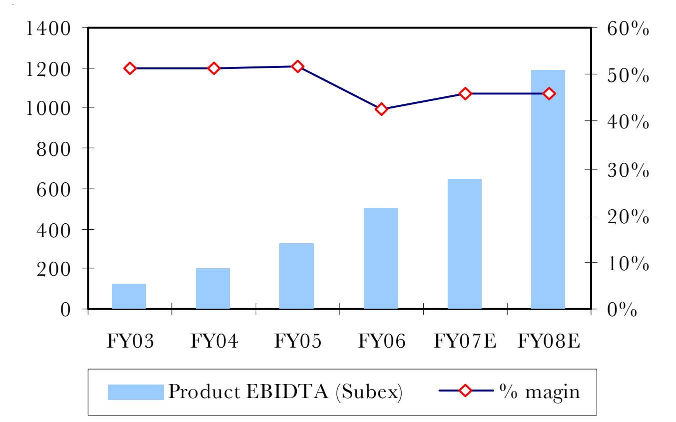
Products revenue: Subex standalone



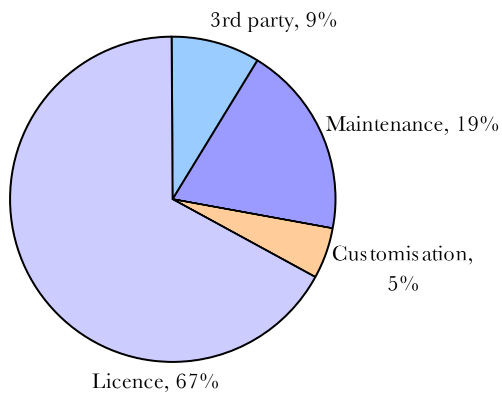
Products EBITDA margin for Subex Azure



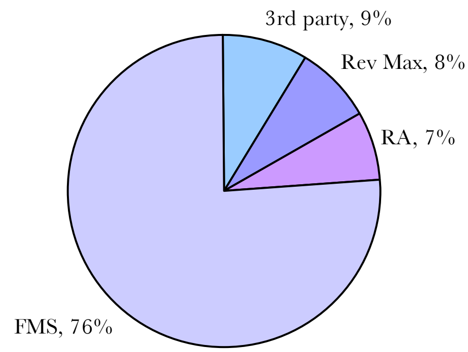
Products EBITDA margin for Subex (standalone)



Product revenue break-up: Categories (FY06)



Product revenue break-up: Products (FY06)



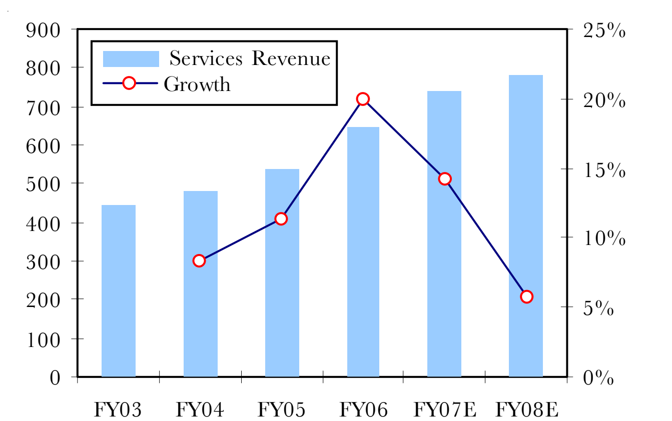
Services

Subex provides application development for billing, customer care, inventory management and performance monitoring, etc. Subex was initially predominantly into services but over the years, the business mix has tilted in favour of software products as against services due to low EBITDA margin from service business. Subex is now planning to transfer its services business into a wholly owned subsidiary. The company is now focused on the products side of the business. AT&T is the largest customer for this business unit.

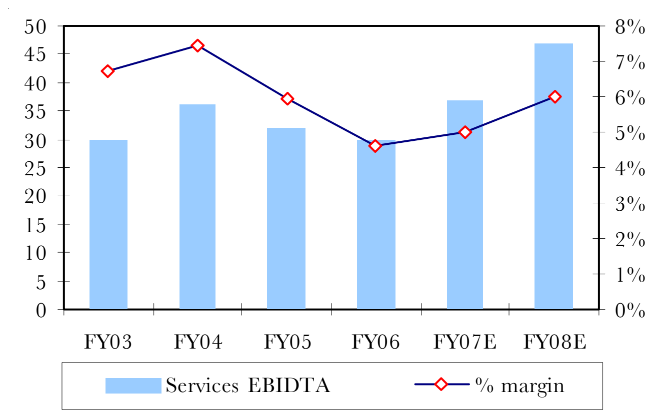
Revenue from services was Rs. 780 mn in FY08 which was just a growth of 5.8% over FY08, reiterating the fact that Subex is now moving its focus towards products which saw a growth of 86%.

The EBITDA margins from services business is in the region of 5-7%, it was 5% in FY06 and such a low EBITDA margin is one reason that Subex is planning to sell-off its service business unit as services is adding marginally to the bottomline.

Services revenue and growth



Services EBITDA margin



Telecom OSS Sector

There exists no industry wide acceptable standard definition for OSS but operations support system is the term generally used for software that supports the communications industry, but is not involved with the routine network operations of transmitting and switching data.

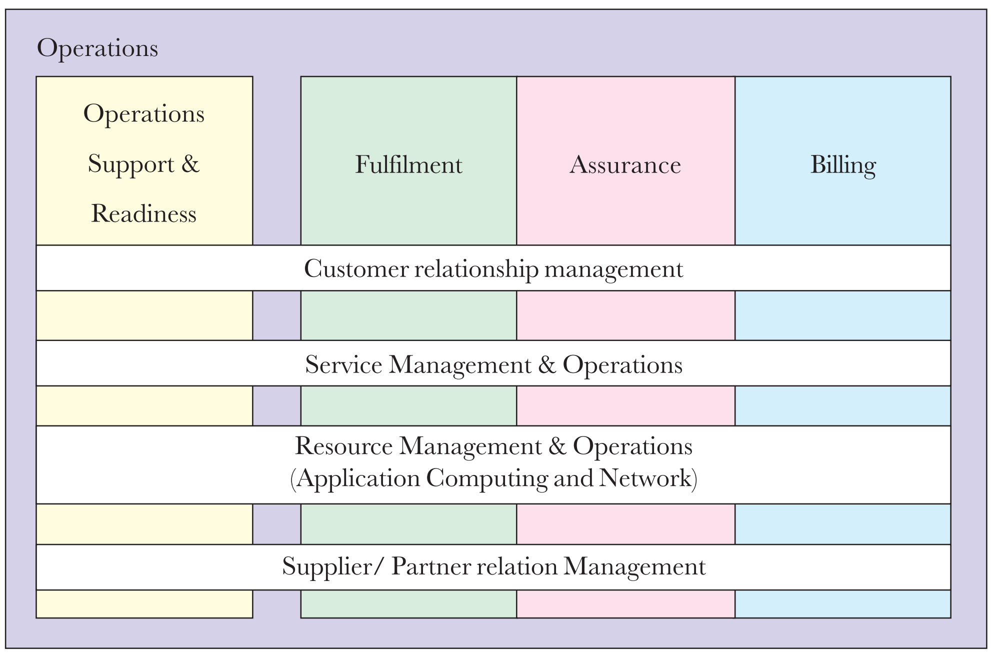
OSS components

OSS has 14 sub-categories

eTOM group (enhanced Telecom Operations Map) of TMF (Telecommunication Management Forum – a part of ITU) considers Fulfilment, Assurance and Billing (FAB) as essential components of OSS. FAB can further be sub-divided into 14 categories. These sub-categories are: Retail Billing, Billing mediation, Revenue Assurance and Fraud management, CRM, Element Management Systems, Middleware, Inventory management, Fault management, Performance monitoring, Service management, Test call & measurement, Activation, Provisioning and Partner management.

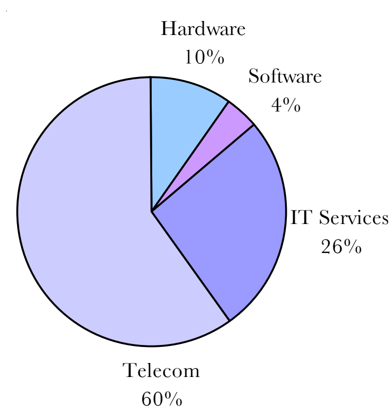
As per consultancy firm RHK Inc., there are around 400 vendors providing software solution in one or more categories of OSS. This number does not include systems integrators and customised IT service providers.

eTOM map



Source: TMF

External spending categories



Global Spending: Telecom Solutions

Telecom service providers worldwide spend around 4% of their total spending budget on procuring packaged software from outside vendors. This 4% spend translates into a market size of around US$ 9.2 bn in CY05. Most of these spend is on OSS/BSS packages. This spending is growing at a rate of 9% per year.

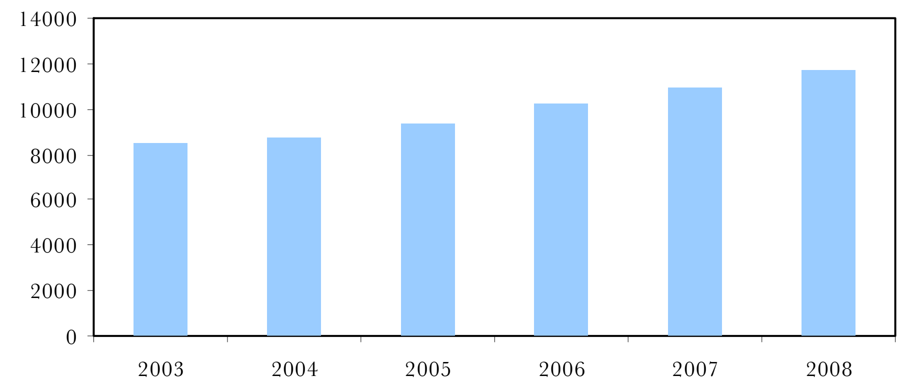
Global Spending: OSS Solutions

As per OSS Observer, OSS software market for independent software vendors is around US$ 10,955 mn in CY07. Spending on OSS is improving in reaction to launch of new services, new networks, customer care and manpower cost, etc, rather than transformation need using OSS for integrated end-to-end OSS service.

Global spending on OSS

(US$ mn)	2003	2004	2005	2006	2007	2008	CAGR 03-08 (%)
Global OSS Expenditure	8,513	8,764	9,400	10,233	10,955	11,700	6.5

Global OSS expenditutre (US$ mn)



Source: OSS Observer

Drivers of increasing OSS spending

- **Changing Competitive Landscape of Telecom Industry**

  Till late 80's/early 90's, in most of the countries, telecom companies were state-owned monopolies with guaranteed rate of return operating model. Reward for operational efficiency was limited. This has changed dramatically after opening up of telecom sector worldwide and due to intense competition. OSS is one of the critical ways of improving customer experience and operational efficiency, so some of the segments of OSS (like activation, billing, provisioning, etc.) are getting unprecedented focus from service providers.

- **Complexity, Converged Networks, and Technological Change**

  Due to technological limitations, earlier networks were built for specialised functions like circuit-switched PSTN for voice communication, packet-switched network for data communication, and cable network for carrying video to households. This simplicity in network architecture afforded simpler OSS systems. Now, same networks are being used to hawk all kinds of services. Complexity of network and new services offered, additional functionality, new pricing scheme, etc. reduces the operational efficiency of network, requiring specialised OSS software.

- **Consolidation in Telecom Services industry**

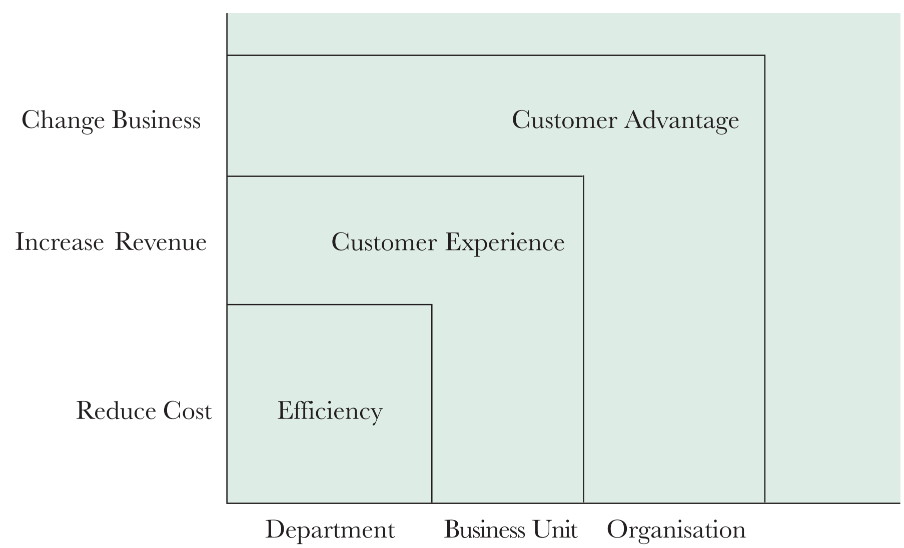
  Mergers and acquisitions in telecom industry come with the problem of integrating solutions/platforms that are utilised in customer care, mediation, billing, etc.

OSS: User and operational impact

Buying for OSS software happens at department level

Most of the OSS does not impact business units or the organisation as a whole. Most of larger communication service providers are still using in house OSS software (either developed by their own team or outsourced from IT service providers) instead of using software from independent vendors. Even when software is procured from ISVs, buying mostly happens at department levels. Data from OSS Observer indicates that in CY04, for top 100 CSPs with annual revenue of over US$ 1 bn, there were about 250 major business units with 1000 operating entities and 10,000 OSS buyer/user departments.Efficiency

OSS impact



Market structure: OSS vendors

OSS vendors market is a highly fragmented market with more than 400 vendors offering software for one or more of the categories within OSS. Fragmentation will remain a defining trait of OSS industry as long as service providers will make buying decision for OSS on individual components basis instead of going for integrated solutions. This buying decision on component basis rests the decision making power with departments (instead of moving up the business unit or corporate level), making OSS software business a cottage industry with low entry barrier and a lot of small suppliers offering specialised software in one or more geographies.

Only one OSS vendor had revenue of over US$ 1 bn in FY05

As per a survey done by Heavy Reading – a telecom industry consulting firm, the OSS industry in general lacks any clear-cut market leaders. For the 13 product categories covered in the survey, only one vendor – Micromuse – emerged as the top supplier in more than one category. Brand recognition varied widely depending on product category, even for suppliers with well-established names like HP, IBM and Lucent OSS specialist companies are getting more credit for market leadership, at the expense of bigger technology conglomerates.

As per OSS Observer survey in 2005, only one OSS vendor had revenue of over US$ 1 bn and only 4 had US$ 250+ mn in software revenue. Most of the vendors had below US$ 10 mn in revenues.

We expect that increasing role of OSS in converged network environment and M&A in telecom industry will drive OSS spending decision from individual department level to business unit/corporate level. This will cause consolidation in OSS vendor space too or lead to formation of alliances/partnership to mix-n-match best of class solution to cater to wide spectrum of OSS need of service providers.

Some recent acquisitions in OSS industry

OSS industry seeing consolidation

Oracle acquires Portal software: In April 2006, Oracle announced acquisition of Portal software in US$ 220 mn all cash deal. Portal software is a supplier of billing and revenue management solution to telecom service providers. Portal software was a loss making company with loss on US$ 40.2 mn on revenues US$ 127 mn in FY06. Oracle paid 1.7x revenues to acquire Portal.

IBM acquires Micromuse: In December 2005, IBM acquired Micromuse for US$ 865 mn. Micromuse is a supplier of network management software to telecom, banking and retail industry with over 1,800 clients' world over. In telecom industry, Micromuse is particularly strong in SIP (session initiation protocol), a must for converged networks. In CY05, Micromuse revenue was US$ 161 mn with profit of US$ 4.7 mn in October-December 2005 quarter. IBM paid 5.3x revenues to acquire Micromuse.

Subex acquires Azure: Subex acquired Azure in US$ 140 mn deal. This brought the leader (in terms of installation) in telecom fraud management solution and the leader in revenue assurance solution together. Azure's revenue was US$ 31 mn in FY06. Subex paid 4.5x revenues to acquire Azure.

Major OSS Vendors

Vendor	HQ	Major Customers	Offering
Axiom	London	TeliaSonera, Cable & Wireless, Telecom Austria, Telecom New Zealand, AOL	Pre-integrated from the start. Pure IP and packet player.
Cramer	Bath, U.K.	BellSouth, BT, Cingular, Bell Canada, Belgacom, Deutsche Telekom	Strong inventory player with a new suite of products and a lot of momentum.
MetaSolv	Plano, Texas	AT&T, BellSouth, China Telecom, VSNL, Sprint LTD, BT, Brasil Telecom	Full suite of fulfillment products and global presence.
Netcracker	Waltham, Mass.	Covad, Telstra, Time Warner Telecom, Telus, AT&T	Message getting clearer on multiple product suite and references.
Syndesis	Richmond Hill, Ontario	SBC, Telecom Italia, Bell Canada, Brazil Telecom, Verizon (MCI), Swisscom	Well-positioned with latest SBC deployment; good rep on implementation.
Telcordia	Piscataway, N.J.	Almost everyone in North America and NTT, KT, France Telecom, Deutsche Telekom, Telstra, BT	Massive footprint, leader in fulfillment

Source: OSS Observer

OSS in Telecom: Functionality map

Fortune of OSS software vendors is inalienably coupled with the fortunes of telecom industry.

Communication industry by functionality

Function							
Corporate Administration	Finance	Risk Management	Executive & Planning	HR & Payroll	Legal & Regulatory		
Business Support Systems	Directory & Publication	Billing & Records	Customer Care & Assistance Finance	S&M			
Operations Support Systems	Planning & Engineering	Provisioning	Inventory Management	Revenue maximization	Mediation	Network Management	
Other/Intelligent Network	Signaling System 7	Broadband Systems	R&D	Product/Service Trials	Others	Enhanced Services Platforms	

Network Equipment Providers: Switches/Routers – PSTN, GSM, CDMA, UMTS, GPRS, EDGE, TCP/IP

Major Telecom solution Vendors: Functionality wise

Processes	Major Solution Providers
Corporate Administration	Capgemini, Oracle, SAP, PeopleSoft ADP, West, Accenture
Business Support Systems	Amdocs, Convergys, Portal, CSG Systems, DST Innovis, Teletech, HP, Siebel, Sitel
Operations Support Systems	Metasolv, Micromuse, Telcordia, EFTIA OSS, Cramer Systems, Lucent, Fujitsu, Syndesis
Other/Intelligent Network	Verisign, HP, Radisys, Tietoenator, Artesyn, NMS Communications

Network Equipment Providers: Alcatel, Siemens, Motorola, Nortel, Ericsson, Lucent .

Source: Gartner

Revenue Assurance segment

Definition

Expanding into other processes of FAB

TMF Billing and Revenue Assurance group defines Revenue Assurance (RA) as "data quality and process improvement methods that improve profits, revenues and cash flows without influencing demand." Most RA solutions provide billing verification, dashboards, data analysis and audit. These traditional RA functionalities are expanding to include switch-to-bill reconciliation functionality, followed by interconnect auditing, business rules, data integrity management and network auditing.

RA differs from other horizontal assurance processes such as network assurance, service and quality assurance, customer assurance, and business assurance. RA is a vertical and horizontal process that originated with vertical billing process and is expanding horizontally into other adjacent vertical processes of fulfilment, assurance and billing.

RA market: Origin

More than 40 vendors of RA solution

Revenue assurance is a fairly recent market and was originally a part of collections management. It developed into a standalone market only after global telecom market melt down post 2000 tech bubble burst. More than 65% of the 40+ RA vendors, including Subex and Azure, launched their products in or after 2000. Older vendors categorised their product not as standalone RA software but only as part of wider collections management solution.

Revenue Assurance: Leakage Cause(s)

Telcos revenue loss of 3-15% due to leakage

As per Gartner, communication service providers lose around 3-15% of earned revenues due to leakages. This translates into US$ 35 to US$ 140 bn per year. Revenue leakages occur most often when data is handed off from one back-office system to the next.

Leakage usually occurs at three primary areas in a service provider network and operations systems:

- Service activation;
- Rating/billing; and
- Usage.

Greater adoptability of Mobile Content and need to integrate all the players in mobile content value chain will further put pressure on the collection management systems of the service providers.

Revenue Assurance: Market structure

Highly fragmented

RA vendor space is dominated by a lot of small specialised RA software vendors, most of whom started hawking RA software in the last five-six years (including Subex and Azure). After tech burst in 2000-01 and increased competition in mobile services space, service providers started looking at all avenues to improve efficiency and plug leakage. It is during this time that a lot of RA software vendors cropped up offering specialised solutions and some of established OSS vendors re-branded some of their existing products as RA solution after little tweaking. Due to lower cost of RA software (in FY02, average revenue per customer for Subex was just

US$ 0.2 mn) and decentralised nature of buying decision in service providers organisation, some of these startups flourished also. Still more than 40 RA vendors exist in the market.

Too small for big players

As per Gartner, the cost of RA packages start from US$ 0.3 mn to US$ 0.4 mn, plus US$ 0.3-0.4 mn for services. This additional revenue stream is too insignificant to attract bigger players in OSS field. Some industry heavy weights like Amdocs, Agilent and Alcatel introduced RA solutions two to three years ago but have put their initiative on hold because of small market size and change in priority.

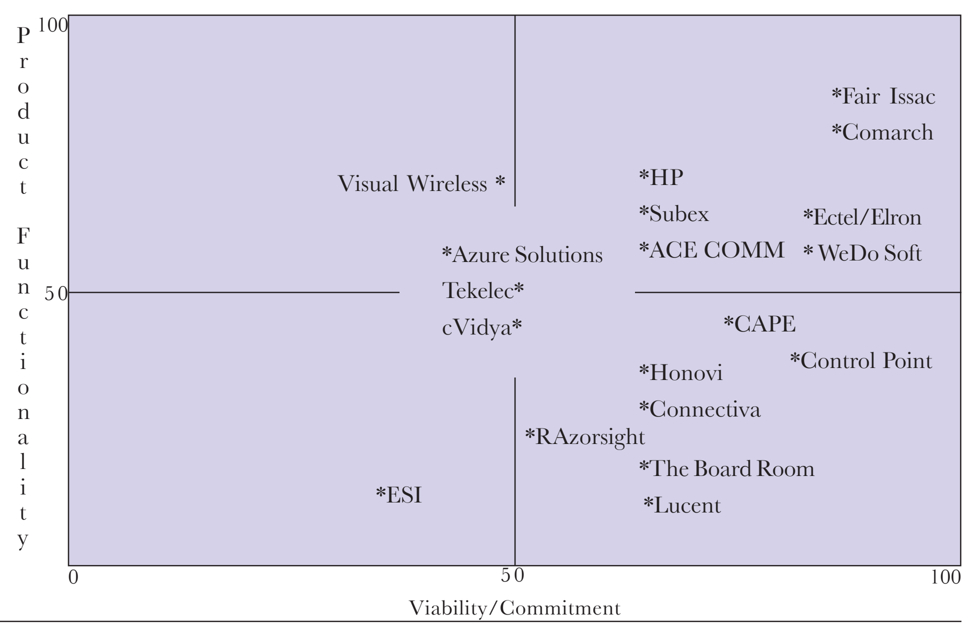
But we expect the scenario to change in the next two-three years time frame as RA functionality encroaches into other four assurance verticals, average deal size increases in RA space and buying decision moves from department level to business unit level, and overall market size growth due to increasing complexity of telecom networks.

Average deal size per contract increasing

We expect further consolidation in RA vendor market place as:

- Such a huge number (40+) of suppliers, all targeting Tier-1 operators in unsustainable,
- Migration to converged architecture will further put pressure on the limited finances of smaller players to develop and offer full range of RA solutions, and
- There exists little differentiation between the solution offerings of most of the vendors (refer to functionality/viability map below), and
- Increasing maturity of communication service providers, from fire-fighting approach to RA to a centralised organisation decision making with focus on revenue diligence.

RA vendors compared



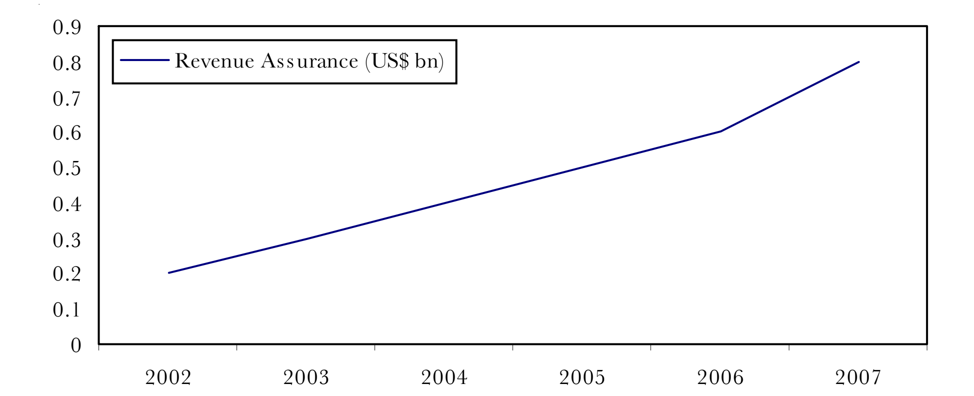
Source: Gartner

Revenue Assurance: Market size

The revenue maximisation or revenue assurance market size is expected to grow from US$ 300 mn to US$ 800 mn over the four-year period from 2003 to 2007 resulting in a CAGR of 28%.

RA market growing at a CAGR of 28%

Revenue Assurance market



Source: OSS Observer

Factors contributing to RA market growth:

- Complexity – complexity arising out of interconnect arrangements, mobile handoffs, multi-service offerings, network equipment of different versions and different vendors, etc.
- Converged services and multi service offerings – most of the in-house developed RA solutions were developed for a circuit switched voice only homogenous environment. Converged systems bring new technological challenges in generating CDRs (Call Detail Records) and RA in the absence of dedicated bearer channel.
- Interconnection: Due to demand of ubiquitous coverage mostly in mobile networks, service providers are entering into various kinds of roaming arrangements with partner/rival service providers and long distance service providers. This increases chances of leakages.

Geographical distribution of customers of few major RA vendors

Company	ACE*Comm	CAPE Tech	Coastel Tech	Ectel	Subex	Azure	The Board Room	WeDo Soft
Solution name	**NBI**	**Revenue Office**	**CMP**	**IRM, Cashview**	**Incharge**	**Certo2**	**PAT Systems**	**RAID**
Year launched	1999	2003	1996	1998	2003	2004	1991	2001
Active RA customers	10	11	2+	10	12	28	12	20
North America	3		1			11	10	
Latin America		4				1	1	3
Western Europe	5	6				6		11
Eastern Europe	1				1	3		3
Asia Pacific					2	5		2
Rest	2	1			9	2		1

Source: Gartner

RA vendors classification: Based on background

RA vendors are generally put in four categories depending on their background or basis of origination.

1) NSP background: Some vendors originate from being the back-office arm of large network service providers – e.g. Azure, The Board Room, WeDo Soft).
2) Standalone RA providers: e.g. Honovi Solutions, Visual Wireless, cVidya Networks.
3) BSS/OSS providers with RA offerings: e.g. Subex, ECtel, ACE*Comm, Coastel technologies.
4) Multi-industry presence with RA offerings: e.g. Lucent, HP, Fujitsu, Alcatel, Comarch.

Detailed financials

Income statement

Year ended 31 Mar. (Rs. mn)	FY03	FY04	FY05	FY06	FY07E	FY08E
Net sales	700	879	1,165	1,812	3,252	5,579
Growth (%)	16.3	25.6	32.5	55.5	79.4	71.6
Operating expenses	(543)	(645)	(816)	(1,302)	(2,331)	(3,656)
Operating profit	157	234	350	510	921	1,923
EBITDA	**157**	**234**	**350**	**510**	**921**	**1,923**
Growth (%)	66.0	49.3	49.3	46.0	80.5	108.7
Depreciation	(37)	(43)	(71)	(91)	(159)	(232)
Other income	8	13	7	29	29	36
EBIT	**128**	**204**	**285**	**449**	**791**	**1,727**
Interest paid	(23)	(14)	(24)	(26)	(56)	(60)
Pre-tax profit (before non-recurring)	106	189	261	422	736	1,667
Pre-tax profit (after non-recurring)	106	189	261	422	736	1,667
Tax (current + deferred)	(5)	(12)	(8)	(31)	(60)	(133)
Net profit	**100**	**178**	**253**	**392**	**676**	**1,533**
Net income	100	178	253	392	676	1,533
Adjusted net profit	**100**	**178**	**253**	**392**	**676**	**1,533**
Growth (%)	124.1	77.1	42.4	54.8	72.7	126.8

Balance Sheet

Year ended 31 Mar. (Rs. mn)	FY03	FY04	FY05	FY06	FY07E	FY08E
Cash and Marketable securities	162	34	278	406	821	1,326
Other current assets	425	635	787	1,037	1,341	2,124
Investments	329	327	309	318	345	424
Net fixed assets	78	90	368	392	504	770
Other non-current assets	4	0	4	8	8	15
Total assets	**998**	**1,086**	**1,746**	**2,160**	**3,019**	**4,659**
Current liabilities	83	116	203	332	437	618
Total debt	199	149	286	11	8	0
Other non-current liabilities	84	20	23	0	0	0
Total liabilities	**367**	**286**	**512**	**343**	**445**	**618**
Share capital	227	258	101	218	339	348
Reserves & surplus	402	541	1,132	1,598	2,234	3,692
Shareholders' funds	629	799	1,233	1,815	2,573	4,041
Total equity & liabilities	**996**	**1,085**	**1,744**	**2,159**	**3,018**	**4,659**
Capital employed	**914**	**969**	**1,543**	**1,828**	**2,582**	**4,041**

Cash flow statement

Year ended 31 Mar. (Rs. mn)	FY03	FY04	FY05	FY06	FY07E	FY08E
Pre-tax profit	106	189	261	422	736	1,667
Depreciation	37	43	71	91	159	232
Chg in working capital	(25)	(245)	(65)	(146)	(206)	(625)
Total tax paid	(4)	(4)	(10)	0	(54)	(117)
Other operating activities	2	(4)	(8)	(32)	(20)	(25)
Cash flow from operations (a)	**116**	**(21)**	**249**	**304**	**615**	**1,131**
Capital expenditure	2	(48)	(346)	(102)	(211)	(378)
Chg in investments	1	2	18	(9)	(27)	(79)
Others	(7)	(7)	(3)	(13)	(60)	(120)
Cash flow from investing (b)	**(4)**	**(53)**	**(331)**	**(124)**	**(298)**	**(577)**
Free cash flow (a+b)	**112**	**(74)**	**(82)**	**180**	**317**	**554**
Equity raised/(repaid)	18	44	244	275	202	94
Debt raised/(repaid)	32	(50)	137	(275)	(3)	(8)
Dividend (incl. tax)	(8)	(42)	(39)	(44)	(74)	(107)
Other financing activities	(12)	(5)	(17)	(6)	(26)	(30)
Cash flow from financing (c)	**29**	**(53)**	**326**	**(51)**	**100**	**(51)**
Net chg in cash (a+b+c)	**142**	**(127)**	**244**	**129**	**417**	**504**

Income Statement

Yr. ended 31 Mar. (Rs. m)	FY05	FY06	FY07E	FY08E
Net sales	1,165	1,812	3,252	5,579
Growth (%)	32.5	55.5	79.4	71.6
Operating expenses	(816)	(1,302)	(2,331)	(3,656)
Operating profit	350	510	921	1,923
EBITDA	**350**	**510**	**921**	**1,923**
Growth (%)	49.3	46.0	80.5	108.7
Depreciation	(71)	(91)	(159)	(232)
Other income	7	29	29	36
EBIT	**285**	**449**	**791**	**1,727**
Interest paid	(24)	(26)	(56)	(60)
Pre-tax profit (before non-recurring)	261	422	736	1,667
Pre-tax profit (after non-recurring)	261	422	736	1,667
Tax (current + deferred)	(8)	(31)	(60)	(133)
Net profit	**253**	**392**	**676**	**1,533**
Net income	253	392	676	1,533
Adjusted net profit	**253**	**392**	**676**	**1,533**
Growth (%)	42.4	54.8	72.7	126.8

Balance Sheet

Yr. ended 31 Mar. (Rs. m)	FY05	FY06	FY07E	FY08E
Cash and Marketable securities	278	406	821	1,326
Other current assets	787	1,037	1,341	2,124
Investments	309	318	345	424
Net fixed assets	368	392	504	770
Other non-current assets	4	8	8	15
Total assets	**1,746**	**2,160**	**3,019**	**4,659**
Current liabilities	203	332	437	618
Total debt	286	11	8	0
Other non-current liabilities	23	0	0	0
Total liabilities	**512**	**343**	**445**	**618**
Share capital	101	218	339	348
Reserves & surplus	1,132	1,598	2,234	3,692
Shareholders' funds	1,233	1,815	2,573	4,041
Total equity & liabilities	**1,744**	**2,159**	**3,018**	**4,659**
Capital employed	**1,543**	**1,828**	**2,582**	**4,041**

Cash Flow Statement

Yr. ended 31 Mar. (Rs. m)	FY05	FY06	FY07E	FY08E
Pre-tax profit	261	422	736	1,667
Depreciation	71	91	159	232
Chg in working capital	(65)	(146)	(206)	(625)
Total tax paid	(10)	0	(54)	(117)
Other operating activities	(8)	(32)	(20)	(25)
Cash flow from oper. (a)	**249**	**304**	**615**	**1,131**
Capital expenditure	(346)	(102)	(211)	(378)
Chg in investments	18	(9)	(27)	(79)
Others	(3)	(13)	(60)	(120)
Cash flow from inv. (b)	**(331)**	**(124)**	**(298)**	**(577)**
Free cash flow (a+b)	**(82)**	**180**	**317**	**554**
Equity raised/(repaid)	244	275	202	94
Debt raised/(repaid)	137	(275)	(3)	(8)
Dividend (incl. tax)	(39)	(44)	(74)	(107)
Other financing activities	(17)	(6)	(26)	(30)
Cash flow from fin. (c)	**326**	**(51)**	**100**	**(51)**
Net chg in cash (a+b+c)	**244**	**129**	**417**	**504**

Key Ratios

Yr. ended 31 Mar. (%)	FY05	FY06	FY07E	FY08E
Adjusted EPS (Rs.)	28.4	18.0	23.9	43.7
Growth	17.3	(36.6)	33.1	82.7
Book NAV/share (Rs.)	138.3	83.4	91.1	115.3
Dividend payout ratio	15.3	11.3	10.9	7.0
EBITDA margin	30.0	28.2	28.3	34.5
EBIT margin	24.5	24.8	24.3	31.0
ROCE	22.7	26.6	35.9	52.2
Net debt/Equity	0.7	(21.7)	(31.6)	(32.8)

Valuations

Yr. ended 31 Mar. (x)	FY05	FY06	FY07E	FY08E
PER	18.5	29.2	22.0	12.0
PCE	14.5	23.7	17.8	10.4
Price/Book	3.8	6.3	5.8	4.6
Yield (%)	0.7	0.3	0.4	0.5
EV/Net sales	4.0	6.1	4.3	3.1
EV/EBITDA	13.4	21.6	15.2	8.9

Du Pont Analysis – RoE

Yr. ended 31 Mar. (x)	FY05	FY06	FY07E	FY08E
Net margin (%)	21.7	21.6	20.8	27.5
Asset turnover	0.8	0.9	1.3	1.5
Leverage factor	1.4	1.3	1.2	1.2
Return on equity (%)	24.9	25.7	30.8	46.4

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