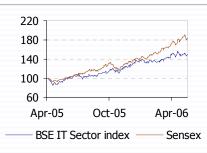


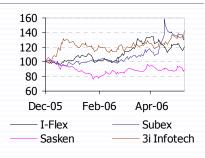
BSE IT Index vs BSE Sensex



India: IT Products Sector

Source: ENAM Research, Bloomberg

Relative Performance



Source: ENAM Research, Bloomberg

The scale effect ...

Financial summary

Company	Price	Mkt cap	EP:	S (Rs.)	P,	/E (x)	RoE (%)	EV/EBITD	A (x)	Target	Relative
	(Rs.)	(USD mn)	FY07E	FY08E	FY07E	FY08E	FY07E F	Y08E	FY07E FY	08E	Price (Rs.)	to Sector
i- Flex	1,227	2,066	44	55	28	22	22	23	18	14	1,466	Outperformer
Sasken	345	212	16	22	21	16	11	13	10	8	-	Not Rated
Subex	521	263	26	38	20	14	25	26	14	10	-	Under Review

Source: Company data, ENAM Research. Note: Subex is on standalone basis. FY07 and FY08 average INR / USD rate assumed at Rs44.8 and Rs43.4 respectively

Analyst: Priya Rohira

Associate: Krishna R. Agarwala

krishna.agarwala@enam.com (+91 22 5554 7627)



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 Companies i-flex Sasken Subex 	25-32 33-37 38-42
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Investment Summary

Global market share play

- India's market share in IT products stood at less than 1% in 2005, but expected to leapfrog owing to:
 - ▶ Global Transition To open source systems/ platforms
 - ▶ Scale Via acquisitions and alliances by Indian product vendors
 - ▶ Brand Quality and cost of Indian engineering talent driving International ISVs to India
 - Innovation Improving ecosystem eg. domestic market as a catalyst; Improvements required in funding, govt amenities/ support etc.
 - ▶ Demonstrated success in the global arena i-Flex Solutions, Subex Systems
 - Selective prescription Companies with consistent risk appetite, strong core engg design team and innovative aptitude

Earnings visibility to increase

- Revenue Model Improvement in license fee adds stability via AMC predictability
- Higher RoI on Product Investments
- Investor Challenges Lumpy Financials, Earnings predictability low compared to services

Event drivers - Increasing momentum

- Re-rating Valuation multiples eg. i-flex Solutions (post Oracle acquisition and ↑ client access)
- Business drivers New product development and launches, Test phase completion, Funding, Commercial roll-out etc.

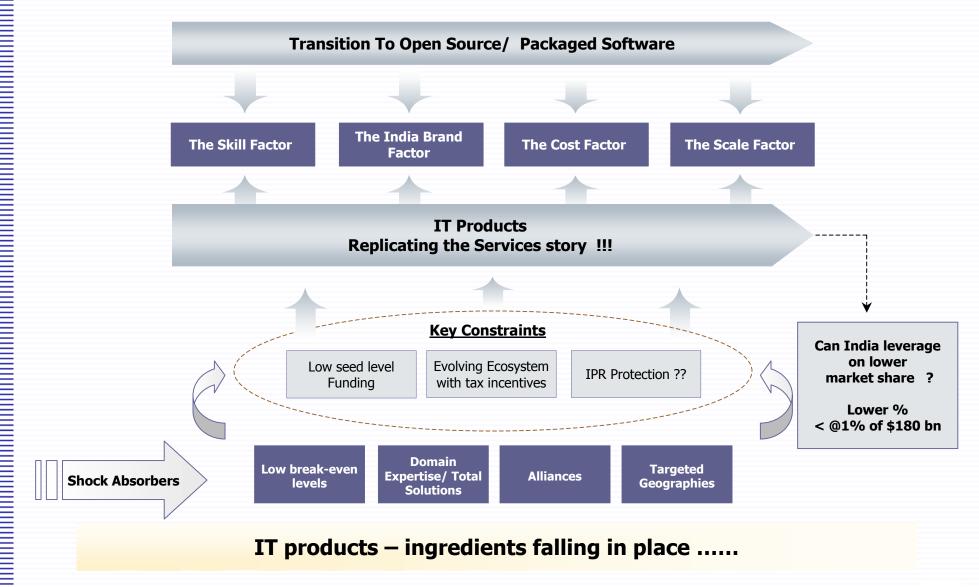
⇒ Bet on Application Product Companies (APC) v/s Technology and Enterprise Product companies — On the back of a larger addressable market, higher profitability, faster payback period in APCs

Recommendations

■ Sector Outperformer – i-flex Solutions



Indian IT Product Story ... taking off





Valuations: Comparative assessment

(x)	Space	Country	Price	М Сар	P	P/E	M cap/	sales	EV/ EB	ITDA	RoE (%)
				(USD mn)	2007E	2008E	2007E	2008E	2007E	2008E	2007E	2008E
Indian IT Product Cos												
I-Flex Solutions Ltd	BFSI	INDIA	1,227	2,061	28	22	5	4	18	14	22	23
Sasken	TELECOM	INDIA	345	212	21	16	2	2	10	8	11	13
Subex Systems Ltd	TELECOM	INDIA	521	263	20	14	5	4	14	10	25	26
Global IT Product Cos												
Temenos	BFSI	SWITZ.	13	616	25	18	3	3	15	12	22	23
Misys Plc	BFSI	BRITAIN	2	1,866	12	11	1	1	8	8	NM	NM
Sap AG	ERP	GERMAN	167	68,130	28	23	5	5	18	15	28	28
Oracle Corp	ERP	US	14	75,699	16	14	5	4	11	9	28	25
Indian IT Svcs Cos												
Infosys Technologies Ltd		INDIA	3,144	19,044	27	22	6	5	19	15	39	36
Tata Consultancy Svs Ltd		INDIA	1,979	21,335	26	20	5	4	21	16	54	44
Wipro Ltd		INDIA	535	16,786	29	23	6	5	24	19	29	29
Satyam Computer		INDIA	746	5,344	20	17	4	3	14	11	26	25
HCL Technologies Ltd		INDIA	543	3,863	18	14	3	3	12	10	24	28
Patni Computer Systems		INDIA	395	1,205	19	15	2	2	13	10	16	14

Source: ENAM Research, Company Websites, Bloomberg, Prices in local currency, Figures for International Companies are for CY06E & CY07E, Mkt. Cap/ EBITDA substituted for EV/ EBITDA for international companies; Note: TCS EV/ EBITDA on standalone basis. Subex on standalone basis, excluding Azure Solutions.

Indian IT products premium valuations justified in select companies

- Indian Products V/s International ISVs Incumbent v/s Challenger: Valuations driven by nascent stage of Indian product story
- Indian Products v/s Indian Services Nascent v/s Proven : Can the products space replicate the success story of IT services ?

Unleashing the Indian Product Story



Different Models, differing profitability matrices

Technology Product Companies

- Products On Open standards/ source
- Success Factors Influenced by changing standards and not marketing alliances
- Key Markets US and Japan
- Remarks
 - Penetration Strategy Domestic market
 - Risk Technological obsolescence high
 - Space Mostly in the IP/ telecom vertical
 - ► Target clientele largely OEM vendors
 - **Exits** Represent good acquisition targets

Enterprise Product Companies

- Products Enterprise space (CRM/ SCM), Data Warehousing, Analytics
- Success Factors Deep Pockets necessary
- Growth Rates Now stagnating at 9-12% YoY for International enterprise product companies
- Remarks
 - Penetration Strategy Services used as a complementary offering
 - ► Target clientele Typically Middle East, Africa and Asia
 - ▶ Market Concentration High, top 2 players cornering 30% market share, below Top 2 markets fragmented

Application Product Companies

- Products Generally towards industry verticals – BFSI, Health etc.
- Success Factors Product functionality should be high with respect to process specific knowledge
- Remarks Success rate high because of :
 - modular approach
 - higher version launches (consistency)
 - being push products in nature, marketability high through cross-selling of services, etc.
 - lower sales cycle especially in developing countries
 - tangible benefits accrue faster unlike enterprise products ... leading to quicker revenue accretion

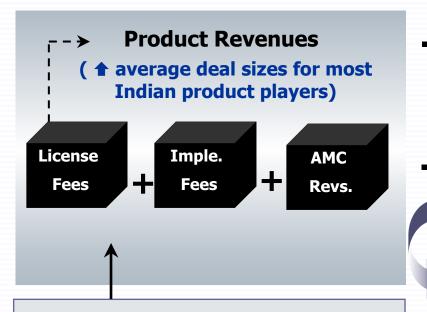
Adamya Impulsesoft Tejas Networks Voice Products Ramco Systems,
Pramati, Newgen
Software, Mithi
Software, Prologicfirst,
Sankhya.co

i-Flex, Polaris, Srishti Soft, Subex, Talisma

Bet on Application Product companies, Technology Product companies – Selective prescription



Unleashing the Indian Product Story



Revenue Dynamics:

- Package Software Market Uptrend
- ↑ India brand ISVs source new product development / existing product sustenance from India
- ↑ Deal size Higher penetration in developed markets, N. America & Europe
- Penetration Services as penetration strategy paysoff
- Product Map Clarity on new version launches & investments
- Scale Inorganic initiatives gathers steam

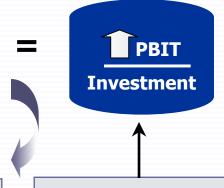
Cost of Revenues

Indian Cost
40-60%
lower than
comparable
peers

Cost Dynamics:

- Asset Input
 – Employee quality, availability and cost
- Break-even levels Low v/s international standards
- Cross subsidisation -Services revenues to product development costs especially in earlier stages

Product EBITDA



RoI Dynamics:

- Growth Non-linear
- Operating leverage
- Increased risk-taking ability
- Venture Funding Pressure high for generating high returns on investment/USD

Improving RoI: fn (International transition, ↑ Average deal sizes, ↓ Break-even levels)



Ingredients in place: Demand dynamics

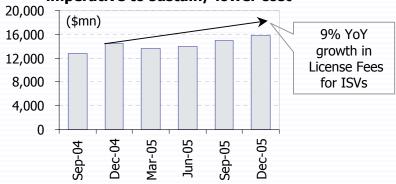
- **⇒** IT products space set to replicate India's success in IT services space ...
- India can score over other preferred offshore destinations, even for product development as in services:
 - India accounts for 28% of total suitable labour pool for offshorisation (China 11%, Russia 10%)
 - Indian engineering talent ranks at 7.4/ 10 (USA 7.2) with availability per 10,000 being at no: 2
- ⇒ ISVs (60% of Major ISVs)/ Systems

 Integrators: Establishing India as a nucleus for product development and engineering services

 ...strengthening India's brand equity
- Development of Patents from India Texas Instruments (200 patents), Intel (62 patents)
- Increased investments in S&M and brand building by Indian product vendors
- **○** Rub-off Effect : Oracle buy-out of i-Flex

The Demand Dynamics

Time-to-market shrinking with imperative to sustain/ lower cost



India ranks highest in country competitiveness

Country	Total
India	6.9
China	6.1
Malaysia	6.1
Philippines	5.8
Singapore	5.7
Thailand	5.7
Czech Republic	5.6
Brazil	5.5
United States	5.5

Source: ENAM Research, Company Websites, NASSCOM, AT Kearney Study

ISVs and SIs have increased outsourcing from India

	India base % of Total
Microsoft	5%
Oracle	17%
Novell	6%
CA	3%
Adobe	11%
SAP	2%
Symantec	5%
PTC	17%
Cadence	12%
i2	88%

Demand Dynamics: fn (T2M, Brand India)



...the supply dynamics

Supply dynamics

India's engineering pool

(in 000's)	Degree- Engg Grads	Degree- IT Professionals (Comp. Electronics etc)
FY06E	222	133
FY07E	270	162
FY08E	290	180



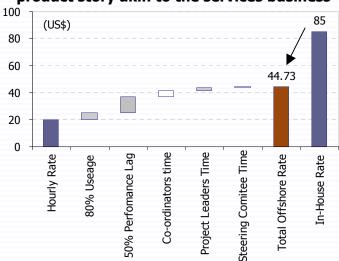
ISVs 22 12 34 Indian Product Companies 16 7 23

Overhead Cost advantage (excl S&M)

Source: ENAM Research, Company Websites, Indian Product Companies include i-Flex, Subex, Sasken. ISVs include Top 10 global

Indian Software Product Managers (@~US\$ 26,000/ p.a) are still over 50% cheaper than their US and European counterparts and less than 2/3rd the cost in countries like Singapore

20-50% cost savings can be replicated in product story akin to the services business



Dual Advantage: Supply dynamics (quality + cost + support services) favour India -

- Exposure: Indian IT professionals exposed to latest/ state-of-art technologies/ platforms
- Availability: FY08E to have supply of 0.54 mn engineering graduates (degree + diploma holders) with 57% from IT/ Computers/ Electronics field
- Cost: In comparison to global ISVs, Indian product vendors enjoy cost advantage of 40-50%
- Overheads: Though S&M investments are similar,
 Indian vendors enjoy G&A cost advantage of an average of 400-600 bps

Source: ENAM Research, Company Websites, NASSCOM, Booz Allen & Hamilton

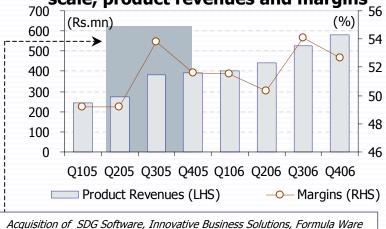
Supply Dynamics: fn (Talent, Costs)



Scale Factor: Acquisitions & Alliances

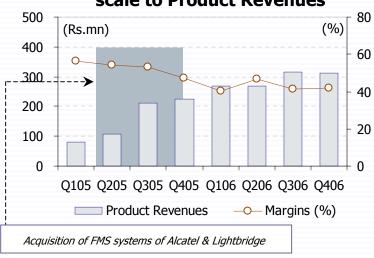
Company	Strategic Alliance /Strategic Buy-out/ Acquisition
i-Flex	 Strategic Buy-out - Oracle acquiring equity stake in i-Flex Alliance / JV- IBM, Capco, HDFC Bank, Intel Asia Electronics, Fujitsu, Castek Acquisition - SuperSolutions, IPR rights of Capco's Operational Risk Tool- ORTOS, Equinox Corporation, Login SA (33% stake), Castek (option to become largest shareholder in Castek)
Subex	Acq: FMS systems of Lightbridge, Alcatel, Mantas Inc and Azure Solutions
3i Infotech	Acq :SDG Software, Innovative Business Solutions, Formula Ware, Command Systems, Ajax Systems, Insyst





Revenue guidance increased from 25-30% to 40-45% YoY growth

Subex : Acquisitions add scale to Product Revenues



Alliances/ Acquisitions

- Third party Indian product companies consolidate their market share through alliances and acquisitions
- Acquisitions: Enabled access to certain functionalities/ markets
- Key players: Subex, 3i Infotech etc. have demonstrated higher scalability through inorganic strategy
- Size of acquisition: Instrumental for scale, ex:
 Though i-Flex undertook acquisitions, organic revenues > inorganic initiatives

Source: ENAM Research, Company

Scale Dynamics: fn (↑ Product Scalability/ Functionality, Market Reach)



Market share: The predominant factor

The presence of 4 key ingredients

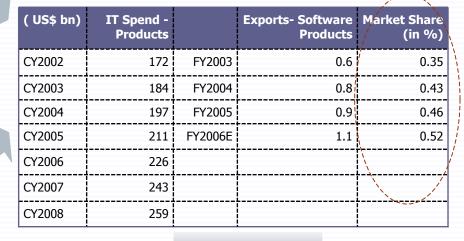
Customer-centric development approach Domain expertise Strong Front-end team Offshore development team with onsite consonance

The Off-shoring Effect

In the Product Engineering services

Emergence of Third Party Product Vendors ... with defined product roadmap

i-Flex, Subex, Financial Technologies





Improving Revenue Profile

The Deal Effect
The Oracle buyout

Higher license fee paves way for stable AMC revenues

R & D Svcs (\$Bn)	Spend	Offshoring Potential	Offshorable Cost Base	Savings	Addressable Market
)))
New Product Development	9	75-80%			
Maintenance	8	75-80%			
System Testing	3	60-70%	\$28	40-50%	∕ ₀ } \$14-17
Porting/ Variants	7	75-80%			
Localization	5	100%		J	J
Documentation	3	90-100%			

Source: ENAM Research, NASSCOM

Apt Marketing Strategy

Emerging Markets as the

entry point

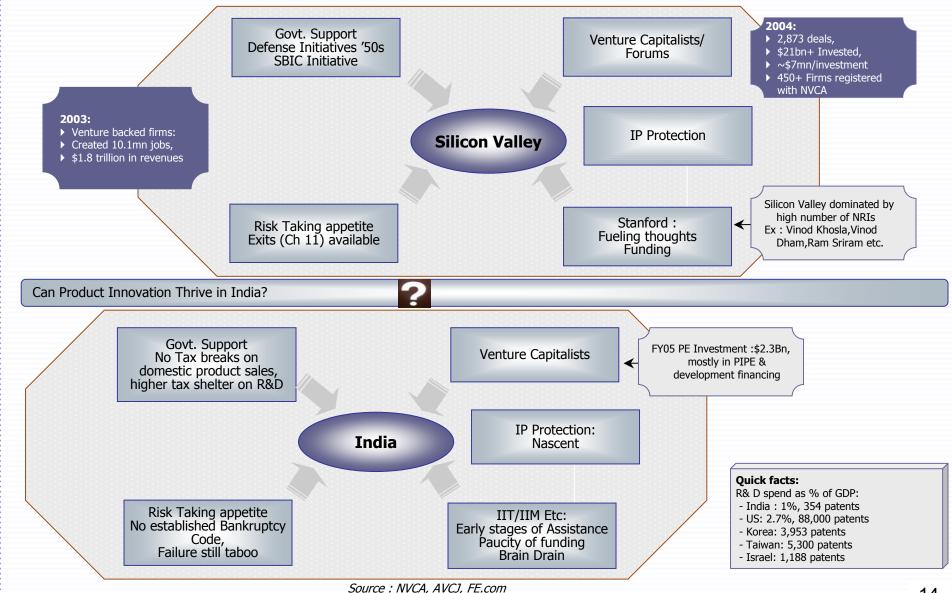
Market Share at Nascent Stage.... can they deliver?

Positive trends, but challenges remain

- Enduring Ecosystem
- Funding Mechanism
- Distribution Strategy
- Brand Building + Market Reach
 - **⇒** Tax Sops
- Domestic Market....the changing factor



Product Innovation: Driven by engaging Ecosystem

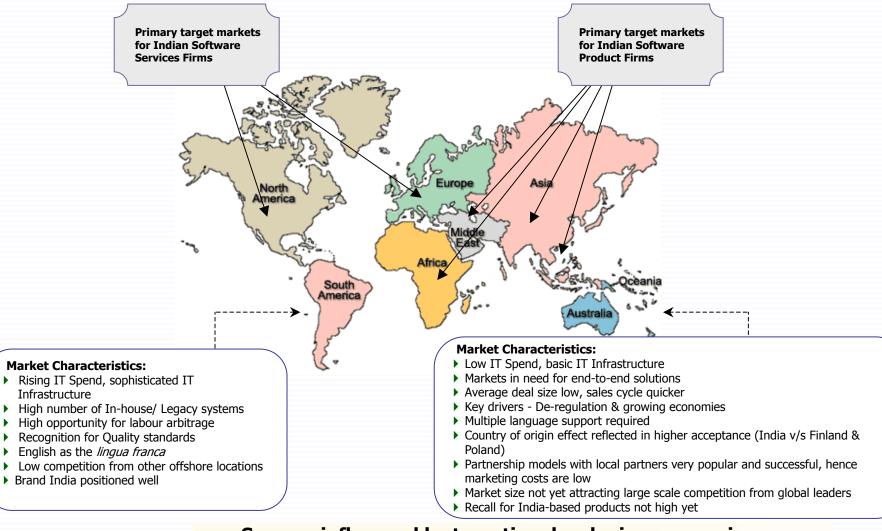


14



Go to Market strategy...

Pay-off observed in BFSI space



Success influenced by targeting developing economies



Distribution

- **○** Product companies : "Promotion" predominates the other Ps namely Price, Place and Product
-success for Internationally successful product companies has evolved through aggressive/
 wide distribution network

	Sales (US\$mn)	S&M (%)	Distribution Strategy	Remarks
Microsoft	39,788	22	27,895 Sales with 102 Subsidiaries, Deep Partner & Vendor Development Program, E-Procurement, Web Downloads, Certified Partners, Product Support Centres, Third Party Support Service Providers, Issue of Free Software Licences	Strong Sales Team of 27,895 personnel
Oracle	11,799	21	Strategic Acquisitions for \uparrow market share, Financing / leasing packages, Partnership strategy with ISVs, Hardware & Infrastructure Partners, System Integrators	58% Staff Overseas with 15,000+ partners
Novell	1,198	33	3,200 Solution Provider Partners, 800 Technology Partners, and 900 Training Partners in PartnerNet leading to > than 5,600 partners	50% staff outside US with 365,000 individual certified professionals
Computer Associates	3,530	25	Strategic Acquisitions and Brand-building through alliances with ISVs, Independent Platform Vendors, Global System Integrators	
Adobe	1,966	30	Online purchase, resellers, developers, solutions providers, ISVs, print service providers, and trainer programs	
SAP	8,513	21	120 country presence & 6,670 sales team with partnership strategy with SIs, ISVs, OEMs, resellers & partners	Indirect Business Volume > Direct sales
Symantec	1,149	38	Acquisitions, Alliances & Partner Approach (Multi Partner Model)	Alliances with all Major ISVs

Source : Company Websites



Distribution Model: An Evaluation

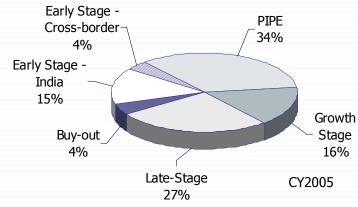
Evaluation: Indian Product Companies

Entry Mode	Capital Investment/ Commitment	Brand Building Investment	Local Market Understan ding	Expansion Pace Offered	Observation	Examples
Direct	High	High	Low - Initially	Slow	Best for key markets due to high investments Payback duration long	i-Flex - 22 Global OfficesSubex - 5 Global Offices
Joint Venture	Medium	Medium	High	Medium	Suitable for markets where Local market understanding is vital, Risk shared, Concerns over partner relations, bookkeeping etc.	■ i-Flex - JV with HDFC Bank
Channel/ Re-seller/ Partner	Low	High	Limited to Feedback from Channel	Fastest	Best when Brand is established, product customization low. Concerns over IP and limited feedback from end customers	 i-Flex - Partners with leading SI's - 120 Country presence Subex - partners with Leading ISVs & MDS, Siemens, Alcatel etc
Acquisition	High	Low	High	Fast	Apt for rapidly increasing scale & synergy. Offers immediate market presence at a reasonable/ higher valuation, Issues on integration and synergy value to be addressed	 Subex - Azure , FMS (Alcatel) & Lightbridge i-Flex - Equinox, Castek etc



The retarding factors

Early/ Seed Stage Funding by no: of Deals - Low



India: Scores lower -

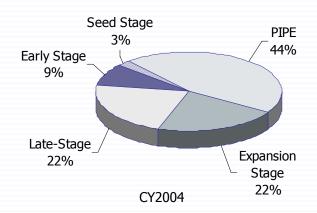
VC professionals/ 1,000 engineers, Investment Portfolio

	2001	2002	2003	2004	2005E
No. of VC firms	77	78	81	86	89
Est. VC professionals	267	270	278	289	292
Invst. during the yr (\$ mn)	1,135	1,050	865	1,363	665
Invst. Portfolio (Dec 31)	2,343	3,188	3,120	4,739	4,304

Source: NASSCOM, Venture Intelligence India

- Factors retarding growth in product segment :
 - Nascent structure of venture capital industry
 - Attraction and retention of techno-pool
 - Alliance management
 - IPR related risks and Patent protection
 - Pricing mechanism

Early/ Seed Stage Funding by Value - Low



Government initiatives for high growth in IT product space

- Rising spending on Education especially at IITs, IISCs etc.
- ⇒ Higher Tax sops/ incentives for development and market expansion for India-based products (eg: higher tax eligibility at greater than 1x for expenditure on R&D/ product development, overseas marketing costs etc.)
- Creation of stimulating environment for eg. permitting test and development facilities at Defense, Govt banks/ departments, Nation-Level Scientific organisations

Source : Venture Intelligence India, CY2005, ENAM Research, NASSCOM

Low funding and systemic mechanics retard leveraging



Enablers : Domestic market & shock absorbers

Domestic market becoming conducive to product development:

- FY06 domestic market growth expected at 23%
 YoY, on a higher growth of 32% YoY in FY05.
- 34% of increased IT spend, earmarked for innovation and process refinement
- Key growth driver Enterprise application products
- Key verticals instrumental for IT products exhibit strong growth - BFSI, Telecom, Govt and Manufacturing
- Customisation of products by MNCs/ certain Indian organisations (CDAC)
- Success in price-sensitive Indian market could ensure higher success in global markets

Domestic Market Size

Source: NASSCOM

(US\$bn)	2002	2003	2004	2005	2006E
Exports	7.6	9.8	13.4	18.2	23.9
- Software Products- Exports	0.3	0.6	0.8	0.9	1.1
Domestic	5.8	6.3	8.3	10.2	12.4
- Software Products- Domestic	0.4	0.4	0.5	0.7	0.9
- Domestic - Hardware	3.2	3.3	4.4	5.4	6.4

The Shock Absorbers ...

Low-Break Even Levels

- Average Cost per employee for Indian product companies is at 40-50 % to International product companies.
- Overhead G&A savings are 4-6%
- Ensures low-break even levels to achieve faster profitability

Target Geography – Developing Markets

- Developing markets as target geographies ensured better earnings, with cushion from recurring AMC revenues.
- Fair share of services revenues cross-subsidize product development

Alliance / M&A Approach / Distribution Strategy

Alliances / acquisitions aid scalability

Domain Expertise

 Expertise in BFSI and Telecom vertical instrumental in developing better product functionalities

Source: ENAM Research

Domestic market, shock absorbers build hope for Indian product story



Indian BFSI Experience ... reflects buoyancy

	2000 RBS	2000 IBS	2001 RBS	2001 IBS	2002	2003	2004	2005
Total Additions - nos	170	161	147	162	315	306	320	334
Share - Top 3 Players (%)	37	58	38	53	28	29	25	26
Top 3 Players	ERI Bancaire, Sanchez, i-Flex, Kindle, Infosys	Temenos, i-flex, MKI- Frustum	ERI Bancaire, i-Flex, Infosys	Temenos, i-Flex, Misys	i-Flex, Temenos, Sunguard	i-Flex, Reuters, Temenos	i-flex, Temenos, Summit	i-flex, Temenos, Misys
Indian Additions (%)	15	19	20	21	23	20	26	27
i-Flex Experience (%)	9	19	13	18	12	12	12	12

IBS : International Banking System, RBS : Retail Banking System. Consolidated from 2002 onwards

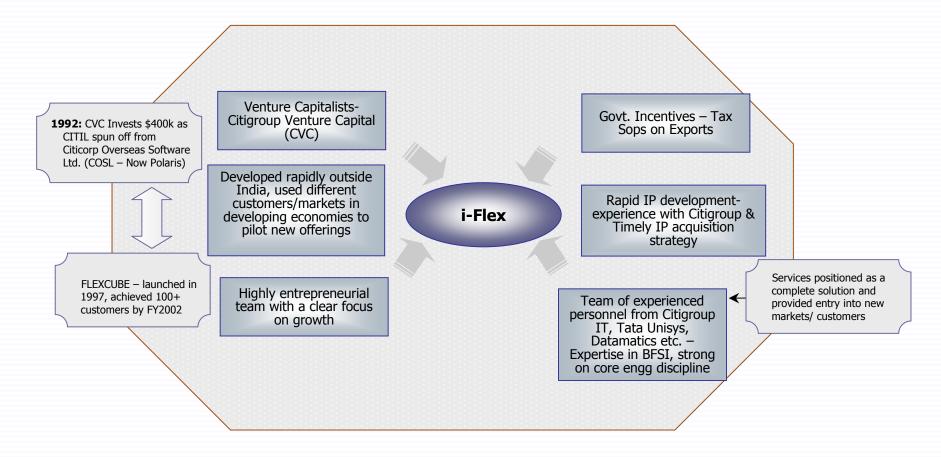
India's success in BFSI product space has been the highest as compared to other verticals:

- Domain expertise in BFSI vertical (legacy from services)
- Higher venture fund investments in BFSI space
- Test Beds driven by BFSI parent (Citigroup, ICICI etc.)
- Success in selection of target markets (developing economies)
- Risk taking ability of promoters in BFSI product space
- Adoption of Alliance strategy v/s complete reliance on direct selling

Source: ENAM Research, www.ibspublishing.com



i-Flex: A confluence of catalysts



Can Product Innovation be replicated in other companies?



Factors instrumental for success of i-Flex: Passion for products at core of engg design team, entreprenial drive with risk appetite and venture-based funding from a BFSI parent

Source: ENAM Research, Company Website

Valuation perspectives



Key event triggers

Companies

i-Flex Solutions

Subex Systems

Event Triggers

- Replication of FLEXCUBE success in Revelus ??
- Yearly sales target assignment for Oracle sales team
- Higher share of Tier 1 and Tier II banks
- Higher license fee bookings
- Improvement in GPM
- Financial Leverage from Oracle parentage
- Assimilation of Azure Solutions, the recent acquisition
- Increase in third party Outsourcing for FMS and Revenue Assurance services
- Consolidation in the industry
- Inorganic initiatives
- New product launches / concept acceptance eg. RoC that targets the CFO / COO

Momentum maintained by product-related events ... in addition to valuations

Companies Section



Stock Data

No. of shares : 76.2 mn Market cap : Rs.97bn

52 week high/low : Rs.1,475 / Rs.650 Avg. daily vol. (6mth) : 368,700 shares Bloomberg code : IFLEX IN Reuters code : IFLX.BO

Shareholding (%) Mar-06 QoQ chg

Promoters		47.7	47.7
FIIs		18.3	1.3
MFs / UTI	- :	3.5	(3.7)
Banks / FIs		0.3	(0.5)
Others	- :	30.2	(44.8)

Relative Performance



Source: ENAM Research, Bloomberg

i-flex Solutions

Relative to Sector: Outperformer

Rs. 1,227 Target Price: Rs.1,466

Potential Upside: 19%

An apt opportunity

Financial summary

Y/E Mar	Sales (Rs. mn)	PAT (Rs. mn)	Cons. EPS* (Rs.)	EPS (Rs.)	Chng.YoY (%)	P/E (x)	RoE (%)	EV/EBIDTA (x)	P/BV (X)	Debtor Days
2005	11,404	2,033	-	27	19	22	20	14	4	119
2006	14,835	2,190	-	29	6	46	18	32	7	130
2007E	20,110	3,372	42	44	54	28	22	18	6	120
2008E	25,491	4,174	51	55	24	22	23	14	5	118

Source: *Consensus broker estimates, Company, ENAM estimates

Analyst: Priya Rohira



Investment Summary

Strong business momentum: fn (Macro up trend + Oracle parentage)

- Expect higher deal sizes especially Tier 1 banks
- Leverage Factor Oracle parentage
 (17/20 Top banks & 23/25 Top North American banks use
 Oracle, Oracle has 8,500+ bank clientele)
- Revelus represents a good business proposition and entry opportunity

Revenue and earnings expectations

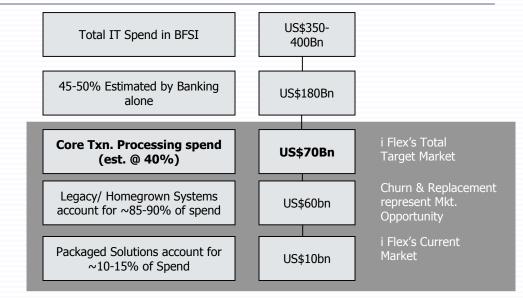
- Higher product tank (US\$ 65 mn in Q4FY06) and high momentum in tank size additions (USD 25 mn for i-flex v/s USD 28 mn for Temenos in Dec 2005 quarter) to reflect in financials and higher Gross Margins for the product segment in coming quarters. In March 2006 quarter, licensing revenues for i-Flex was \$ 15 mn v/s \$ 11 mn for Temenos
- In products space, we expect revenues and PBIT to record CAGR growth of 38% and 49% respectively between FY06 and FY08E
- RoE to improve from 18% in FY06 to 23% in FY08E

Concerns

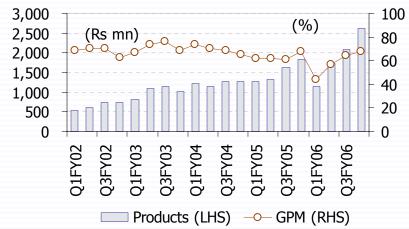
- Slow implementation, if any, with respect to roll-outs v/s market expectations on revenues from Tier 1 bank space
- Strategic placement of Services business post Oracle buyout (41% share to topline & 21% share to consolidated PBT in Q4FY06)
- Services business has lower margins (Q4FY06 OPM at 17%)

Valuations

- Current valuations at 28x FY07E and 22x FY08E earnings though rich v/s services leader, are justified given the size of the addressable market
- Price upside of ~19% to our price target of Rs.1,466



Products: Revenues v/s GPM



Source: ENAM Research, Company



i-flex Solutions: A profile

i-Flex Solutions - The most successful BFSI product story from India :

- Expected revenues of ~ US\$ 450 mn in FY07 on consolidated basis
- FY07E product revenues share of ~ @ US\$240 mn
- Well defined and chartered product road-map

Key beneficiary of macro-improvement (w.r.t replacement of legacy systems by Tier I banks):

- US\$ 70 bn market with higher deal sizes (> US\$ 5mn license fess from Tier I / Tier II banks
- Lower penetration only 15% of Tier I banks have replaced legacy systems
- Internal & External Factors driving growth :
 - Internal Factors: Legacy > Modular; System consolidation driven by M & A; Batch Processing > Continuous Processing; Data Integrity
 - External Pressures: Regulation (Basel II etc.);
 Integration/ Interoperability (SEPA); Increasing
 Competition, Commoditization of basic services

Challenges

- Lower cycle Slow sales/ execution cycle v/s market expectations (esp on roll-outs wrt Tier I banks) to impact price performance
- Product Margins would be impacted due to higher investments in S&M/ account management with respect to Tier 1 banks .
- Strategy with respect to service business

Parametric Evaluation: Products

Revenue Growth	PAT Growth
30% (FY02-FY06)	23% (FY02-FY06)

	Parametric Evaluation
R& D Spend	20-25% of product revenues, 13-14% of consolidated revenues
Revenue Break-up (%)	Q4FY06: Products –57, Services –41, KPO – 2
PBIT Margins (%)	Q4FY06 – Products –41 %
Product Tank Size (PTS)	\$ 65 mn
Addition to PTS last qtr	Absolute addition was \$22 mn
Product Revenue Break-Up, Category wise	Q4FY06 – License Fees- 50%, Maintenance- 37%, AMC –13%
Product Revenue Break-Up, by products	Majority FLEXCUBE, > 90% Revelus expected to show scale
Products, Geographical Break- Up	USA-22%, Middle East & Africa-25%,APAC – 20%, Europe- 32%
Products – Country presence	123+
Client Base	600+
No : of Tier 1 BFSI	10% share v/s 3% 3 years back (Q3FY06)
Products – Avg Deal Size	> \$ 1.6-1.7 mn (www.ibspublishing.com)
Employee Base	Products - 2018, Total Employee Base - 6858
Client Concentration in Products	Top – 6%, Top 5 – 22%, Top 10 – 33%, Citigroup & its Entities – 18 %
Receivable Days	117

Source: ENAM Research, Company

Evaluation: Product roadmap v/s competitive landscape



Years	Implications	Evaluation
1996-2000	 Microbanker adjudged no: 1 in wholesale back-office system FLEXCUBE incorporates various functionalities – Retail, Investor Services, ASP, CRM e-services Management adopts JV / partnership strategy 	FLEXCUBE milestone – Ranked among the Top 10 bkg solns within 4yrs of conceptualization, with a 66 country presence
2000-2002	 FLEXCUBE, Functionalities introduced – Payment, Insurance, Investment, WM etc Different geography strategy – Japan, Africa Alliances to strengthen presence – IBM India, Fujitsu, Intel Asia Electronics 	FLEXCUBE achieves 50+client base within 5 yrs of launch with presence in 84 countries & marquee client wins – Shinsei, UBS, Citibank (100 country roll-out deal)
2002-2004	 Acquisition of SuperSolutions (consumer finance foray) Functionalities incorporated – Web-enablement, Virtual Banks Launch of Revelus within 6 yrs of FLEXCUBE launch Global Alliance with IBM 	93 country presence, 100+ client base & ↑ in marquee client wins. In performance, it demonstrated scalability with > 4500 TPS*
2004-2005	 Functionalities Incorporated – Linux, Islamic Banking Alliances – Capco, FRS agreement, Castek Acquisitions – Equinox, 33% stake in Login SA, IPR acquisition of ORTOS (Capco), option to become largest shareholder in Castek 	112 country presence with substantial ↑ in marquee bank wins. Acquisitions approach was aggressive and adds to skill sets,
2005-2006+	 Acquisition of Oracle's majority interest in i-flex, MOA with Oracle for Revelus Basel II 	Tier share ↑ to 10% (3% 3 yrs ago – Q3FY06), Favourable macro-environment,

- Defined product map has served a competitive tool to i-flex: EBITDA margins better (39%) v/s Temenos (27%), Misys (22%)
 - FLEXCUBE functionalities / features improved. High on TPS functionalities
 - Average deal sizes lower v/s Temenos, expected to improve as share of Tier 1 banks increase. Ex. Dec 2005 quarter ILF signings by i-flex was US\$ 25 mn v/s US\$ 28 mn by Temenos. Share of Tier 1 at 10% v/s 47% ILF signings by Temenos from Tier I & II (Base: Dec 2005 quarter)
 - Quarterly run-rate better than Temenos, lower than Misys. AMC share at 17% v/s 21% for Temenos and 47% for Misys
 - Country spread lower v/s Misys

* TPS – Transactions per Second

leveraging of Oracle parentage expected



Competitive Evaluation

Products	i-Flex	Temenos	Misys	Fidelity	SAP	Fiserv	Infosys
Client Base	> 617	600 client sites	1200+ with annualized revenues @ USD 471 mn	7800	550	17000+ with annualized revenues @ USD 524 mn	87 with annualized revenues @ USD 86 mn
Country Spread	123 with > \$1.6 mn Average Deal Size	100 with \$3.1 mn Average Deal Size	134	60+	60+	60+	47
Last quarterly run-rate	\$ 59 mn	\$ 37 mn	H1FY05 - \$218 mn				\$ 22 mn
Banking Functions Addressed	core, retail, corporate, investment, internet banking, asset management and investor servicing	Private, Wholesale, Universal, Retail with R&D costs At 17% of Sales	retail banking, wholesale banking, treasury and capital markets and risk management.	Automotive Fin., Banking, Card Services, Check servicing, Comm. lending, Community Banking, Credit Unions, E payments, gaming, Mortgage Financing, Real estate, wealth mgmt with R&D costs @11%	Basel II, Deposits Mgmt, Loans Mgmt, Leasing, Fin Database, Core Banking etc.	banking, credit union, lending, insurance, securities, and investment products	core banking, e banking, treasury, wealth mgmt, CRM, &cash mgmt of universal, retail, corporate, community and private banks
Profile of Client base	Tier Share – around 10%	2005 Signings : Tier 1&2 - 47%, Tier 3 - 12%, Tier 4 - 41%	Top 49 / 50 Banks	7800 Financial Institutions ; Top 35/50 Banks	33 of top 50 largest Europe banks	5000 (10000 Financial Institutions)	Credit Suisse is core customer
Revenue Break-Up (%)	Licensing – 50 AMC – 13 Services – 37 EBITDA @ 44%	Licensing – 30 AMC – 35 Services – 35 EBITDA @ 14%	Licensing – 34 AMC – 47 Services – 19 EBITDA @ 18%			EBITDA at 22%	

Source: ENAM Research, Company



Milestone Required for 50% + price ↑

Bottom-up Exercise

	FY08E
Target Price - 50% +	1,841
P/E (x)	30
EPS (in Rs)	61
Existing EPS estimate (Rs.)	55
Incremental EPS required (Rs.)	6.4
Incremental PAT (Rs.mn)	482
PBT margins in Products (%)	36
Incremental Sales in Products (Rs mn)	1,774
Existing Product Sales in FY08 (Rs.mn)	14,461
Incremental Sales / Existing Product Sales (%)	12
Additional License Fee (Rs.mn)	532
Incremental Product Tank Size @45	12
Required Product Tank in FY07	97
Required Additions to Product Tank Size (USD mn)	32
No: of Tier deals assumed @ USD 3 mn per Tier 1 (USD	mn) 4

Source: ENAM Research, Company Data

Our estimates indicate :

- i-Flex Solutions would require license fee of US\$ 109 - 114 mn in FY07 for 50% upside in price performance
- Thus, quarterly additions to product tank size should average at US\$27 – 28mn
- Our assumed rate of license fee booking is 25% of accumulated tank size and license fees to constitute 30% of product sales
- i-Flex added US\$25 mn in Q3FY06 and US\$22mn as additional license fees in Q4FY06

Sensitivity

Pass-through to Oracle for Client Penetration	5%	10%	15%	20%	25%
Required Product Sales (Rs mn)	16,235	16,235	16,235	16,235	16,235
Pass-through to Oracle (Rs mn) - assumed @ 20% of Sales by Oracle	162	325	487	649	812
Gross Sales	16,397	16,560	16,722	16,884	17,047
Required License Fee (Rs mn)	4,919	4,968	5,017	5,065	5,114
Required License Fee (USD) - @ 45	109	110	111	113	114

Source: ENAM Research, Company Data



i-flex Solutions: Company Financials

Income statement

Y/E March (Rs. mn)	2005	2006	2007E	2008E
Net Sales	11,404	14,835	20,110	25,491
Total Income	11,404	14,835	20,110	25,491
Cost of Goods Sold Contribution (%) Sales & GA	5,948 47.8 2,686	8,148 45.1 3,738	10,818 46.2 4,654	13,636 46.5 6,084
Operating Profit Other Income	2,770 277	2,950 275	4,638 215	5,771 226
PBDIT Depreciation	3,047 337	3,225 505	4,853 538	5,997 610
Pre-tax Profit Tax Provision Equity In loss of Assoc	2,710 627 iate -	2,720 535 5	4,316 943	5,387 1,213
Profit After Tax	2,033	2,190	3,372	4,174

Key ratios

Y/E March (%)	2005	2006	2007E	2008E
Sales growth	42	30	36	27
ОРМ	24	20	23	23
Oper. profit growth	23	6	57	24
Empl. cost / Net sales	52	55	54	53
Overheads/Net sales	24	25	23	24
Depreciation / G. block	16	16	14	14
Net w.cap / Net sales (x)	0.7	0.6	0.6	0.6
Net sales / Gr. Block (x)	5	5	5	6
RoE	20	18	22	23
RoCE	26	22	29	29
EPS (Rs.)	27	29	44	55
EPS Growth	19.2	6.3	54.0	23.8
CEPS (Rs.)	32	36	52	63

Source: Company, ENAM Research



i-flex Solutions: Company Financials

Balance sheet

Y/E March (Rs. mn)	2005	2006	2007E	2008E
Total Assets	11,315	13,716	16,648	20,223
Gross Block	2,103	3,130	3,745	4,432
Net Fixed Assets	1,285	2,124	2,515	2,936
Investments	66	59	59	59
Goodwill & Intangible As	ssets 970	995	995	995
Other Non-Current Asse	ts 719	1,217	1,503	1,914
Deferred Tax Asset	1	71	71	71
Net Current Assets	8,274	9,250	11,507	14,248
Canital Employed	11 215	12 716	16 640	20 222
Capital Employed	11,315	13,716	16,648	20,223
Equity Capital	374	392	392	392
Reserves	10,917	13,170	16,103	19,678
Other Non Current Lia.	22	152	151	151
Deferred Tax liability	2	2	2	2

Cash flow

Y/E March (Rs.mn)	2005	2006	2007E	2008E
Sources Retained earnings Add: depreciation Issue of Equity Others	1,931 1,821 125 1 (16)	2,588 2,253 188 17 129	3,158 2,933 225 -	3,841 3,575 266 -
Applications Capital Expenditure Investments Net Current Assets Others Change in cash	1,931 722 (45) 92 318 844	2,588 1,051 (7) 641 568 335	3,158 615 - 339 286 1,918	3,841 687 - 569 412 2,173

Source: Company, ENAM Research



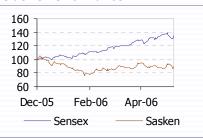
Stock Data

No. of shares : 27.9m
Market cap : Rs.10bn
52 week high/low : Rs.575/ Rs.260
Avg. daily vol. (6mth) : 124,300 shares
Bloomberg code : SACT IN
Reuters code : SKCT.BO

Shareholding (%) Mar-06 QoQ chg

Promoters		25.8	(0.2)
FIIs		9.7	0.5
MFs / UTI	:	2.0	1.0
Banks / FIs		0.0	(0.0)
Others		62.5	(1.3)

Relative Performance



Source: ENAM Research, Bloomberg

Sasken Communication Technologies

Rs.345

Relative to Sector: Not-Rated

Financial summary

Y/E Mar	Sales (Rs. mn)	PAT (Rs. mn)	Cons. EPS* (Rs.)	EPS (Rs.)	Chng.YoY (%)	P/E (x)	RoE (%)	EV/EBIDTA (x)	P/BV (X)	Debtor Days
2005	2,418	228	-	8	35	-	18	-	-	82
2006 #	3,081	297	-	11	30	32	11	19	2	77
2007E	4,233	453	16	16	53	21	11	10	2	65
2008E	5,354	610	20	22	35	16	13	8	2	60

Source: *Consensus broker estimates, Company, ENAM estimates, Note: # Prior to Extra Ordinary items

Analyst: Priya Rohira



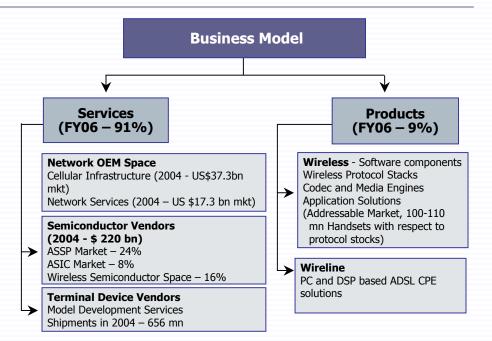
Sasken: A profile

- Player in the embedded communication segment between Network OEMs, semiconductor Vendors and mobile terminal vendors
- Hybrid Model Presence in products and services
- Product and service offerings substantiated by following subsidiaries
 - SNSL provision of OSS solutions to NEMs and independent OSS software vendors
 - SNEL Services include planning, deployment & management of wireless networks

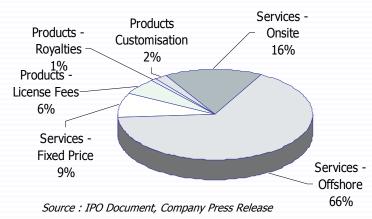
Parametric Evaluation

Revenue Growth	PAT Growth				
36% (FY04-FY06)	45% (FY04-FY06)				
consolidated as revenue model of products undergoes a change in FY05					

R& D Spend (including PES)	~ 10%
Revenue Break-up (%)	FY06: Products – 9%, Services – 91%
PBIT Share (%)	FY06 : Products – negative, Services – 136%
Product Revenue Break-Up, Category wise	License Fees – 66%, Royalties – 10%, Customization – 24%
Consolidated Geographical Break-Up	FY06 – North America (35%), Europe (37%), India (22%), APAC (7%)
Active Client Base	Q4FY06 - 39
> US \$ 1 mn accounts	18
> US \$ 10 mn accounts	2
Employee Base (Consolidated)	Q4FY06 - 2575



Revenue breakup (FY06 – Rs. 3,081 mn)





Product Roadmap v/s Competitive Landscape

1994-1995

1994 - Initiatives in DSP and multimedia space 1995 — Investments in multimedia technology

Participation in standardization bodies

1996-2000

1997 – licensing of DSL reference design 1998- Investments in terminal space – handset-side UMTS protocol stack 1999 – Development & integration of standalone stacks into a dual-mode protocol stack 2000- Licensing of W-CDMA protocol

2003

Subsidiaries established to : 1) Provide OSS & BSS and 2) Provide services to Network OEMs
Application partner for Ericsson Mobile Platforms
Launch of handset model that carried its
multimedia applications

2004

Acquisition of Blue Broadband Technologies Pvt Royalty based engagement for 1st handset

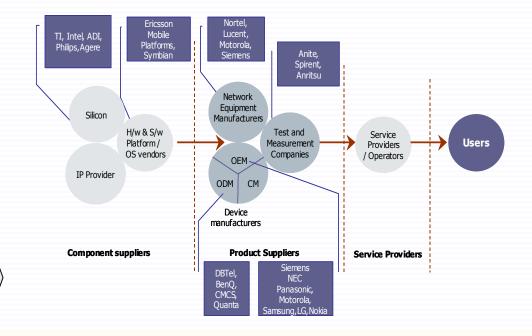
2005

Joins initiative for promotion of software flexibility in mobile phones

Dev. Partner for Philips Nexperia mobile prdts Joins the Symbian Competence Center Program

2006

NTT DoCoMo releases FOMA N902i mobile that has Sasken's Multimedia Solutions



Sasken v/s nearest competitor, TTPCom

- Cost of revenues as a % of Sales at 69% (Q4FY06) v/s 89.4% (H1) for TTPCom. TTPCom has negative EBITDA and is targeting 15% margins within 3 yrs
- ⇒ Royalty fees (Sasken at 5% v/s TTPCom at 26%)
- APAC share (Sasken at 3% v/s TTPCom at 51%)



Sasken: Company Financials (US GAAP)

Income statement

Y/E March (Rs. mn)	2005	2006	2007E	2008E
Net Sales	2,418	3,081	4,233	5,354
Total Income	2,418	3,081	4,233	5,354
Cost of Goods Sold Contribution (%) Sales & GA	1,638 32.3 559	2,188 29.0 581	2,951 30.3 785	3,707 30.8 960
Operating Profit ESOPS amortization exp Other Income	221 27 37	312 9 63	497 12 71	687 15 83
P B D T Interest	250 5	366 1	556	754
Pre-tax Profit Tax Provision	245 17	365 69	556 103	754 144
Profit After Tax	228	297	453	610
Extra-ord expenses Reported PAT	- 228	68 229	- 453	- 610

Note: PAT prior to Non Cash Charge for issue of shares to Nortel And prior to amortisation of capitalised software development expenses

Key ratios

Y/E March (%)	2005	2006	2007E	2008E
Sales Growth	46	27	37	26
OPM Oper. Profit Growth COGS / Net Sales	9 39 68 23	10 42 71 19	12 59 70 19	13 37 69 18
SG&A/Net Sales Net W.Cap / Net Sales (x) Net Sales / Gross Block (x)	0.2	0.2	0.1 1.8	0.1 1.8
Effective Tax Rate	7	19	18	19
ROE	18	11	11	13
RoCE	20	14	14	16
Adj. E.P.S. (Rs) EPS Growth	8 35	11 30	16 53	22 35

Source: Company, ENAM Research



Company Financials

Balance sheet

Y/E March (Rs. mn)	2005	2006	2007E	2008E
Total Assets	1,434	3,860	4,479	4,890
Gross Block	1,603	1,895	2,350	2,942
Net Fixed Assets	870	977	1,189	1,463
CWIP	8	34	-	-
Investments	6	1,865	-	-
Wkg. Cap. (excl cash)	442	690	577	682
Cash / Bank Balance	109	151	2,313	2,345
Capitalized soft dev exp	enses 0	141	400	400
Capital Employed	1,434	3,860	4,479	4,890
Equity Capital	168	279	279	279
Reserves	1,251	3,569	4,200	4,611
Borrowings	15	12	-	-

Cash flow

Y/E March (Rs. mn)	2005	2006	2007E	2008E
Sources Retained earnings Add: depreciation Issue of Equity Borrowings	434 176 142 105 10	2,611 37 185 2,391 (3)	862 350 243 281 (12)	729 411 318
Applications Capital Expenditure Investments Net Current Assets Change in cash	434 227 (21) 146 81	2,611 461 1,860 248 43	862 679 (1,865) (113) 2,161	729 592 - 105 32

Source: Company, ENAM Research



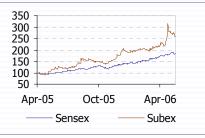
Stock Data

No. of shares : 21.8m
Market cap : Rs.12bn
52 week high/low : Rs.650/ Rs.199
Avg. daily vol. (6mth) : 85,100 shares
Bloomberg code : SUBX IN
Reuters code : SUBX.BO

Shareholding (%) Mar-06 QoQ chg

Promoters	:	18.6	(0.0)
FIIs		19.2	4.1
MFs / UTI	:	30.1	1.4
Banks / FIs	:	0.8	0.5
Others		31.4	(5.8)

Relative Performance



Source: ENAM Research, Bloomberg

Subex Systems

Rs.521

Relative to Sector: Under Review

An outsourcing play

Financial summary (Standalone basis)

Y/E Mar	Sales (Rs. mn)	PAT (Rs. mn)	Cons. EPS* (Rs.)	EPS (Rs.)	Chng.YoY (%)	P/E (x)	EV/EBIDTA (x)	M Cap/ Sales (x)	P/ BV (Rs.)	RoE (%)	Debtor Days
2005	1,166	257	-	13	45	31	23	10	6	28	229
2006	1,814	379	-	19	47	23	17	6	5	25	194
2007E	2,319	553	27	26	38	20	14	5	4	25	180
2008E	2,990	802	39	38	45	14	10	4	3	26	160

Source: *Consensus broker estimates, Company, ENAM estimates. The above estimates are on standalone basis. Refer Slide 39 for a consolidated review

Analyst: Priya Rohira



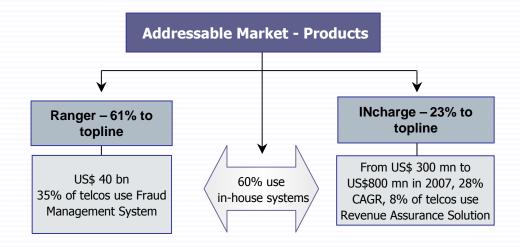
Investment Summary

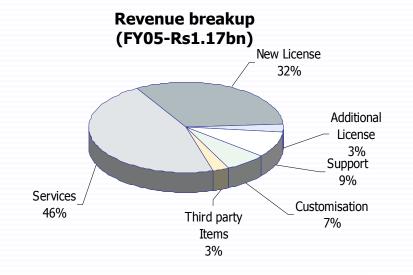
Product business to stage strong growth

- Market share Expected to rise from 7% in FY05 to 10-11% in FY07E with ↑ in average deal sizes from US\$0.9 mn in FY05 to US\$1.2 mn in FY08 (on standalone basis). With Azure Solutions, market share target by company stands at 25-30% by FY08
- Client base Increase in share of Tier 1 telcos
- Geographies Higher penetration in development markets, Americas and EMEA
- Growth strategy Key beneficiary from outsourcing of revenue maximization functions, articulated product road-map, inorganic initiatives
- State of the market 4% of revenues lost due to fraud, telcos targeting to reduce to 1.5%, penetration lower at 35% of telcos

Concerns

- Debtor days High(FY05 229,↓ to 194 in FY06)
- Services business Drag on consolidated profits;
 topline & PBDIT share at 37% & 3% in Q4FY06







Evaluation: Product Roadmap v/s Competition

Years & ADS	Implications	Evaluation
1998-2000	 Development and Launch of Ranger FMS Acquisition strategy given an impetus – acquired IVth Generation Inc 	N.A.
2000-2002 2002 ADS - \$0.2 mn	 Commercial-roll-out of Ranger FMS Acquisition of Magardi Inc Launch & first installation of INcharge (2002) New Product launch within 2 yrs of first product launch	 Subex took only 6 yrs v/s 8 yrs for the industry for product development with commercial roll-out in 3rd yr Avg deal size @\$0.2 mn in 2002
2002-2004 2004 ADS - \$0.8 mn	 Subex – becomes 2nd largest FMS vendor Launch of Chinese operations Launch of RevMax suite 	N.A.
2004-2005 2005 ADS - \$0.9 mn	 Acquisition of FMS of Alcatel and Lightbridge Acquisitions placed Subex as the largest player in FMS segment 	Acquisitions enabled faster penetration into Americas where ADS is higher
2005-2006+ 2006 ADS -> \$ 1mn 2008 ADS -> \$ 1.2 mn (on standalone basis)	 Industry Dynamics positive – Investments in convergence/3G/NGN ,Consolidation Acquisition of FMS of Mantas Inc Growth through inorganic initiatives – Azure Solutions, new product launches especially that address developed markets, promotion of RoC concept 	Faster penetration into Tier 1 telcos (aimed at 80-100 Tier 1 from 15 currently) to lead to better annuity revenues. Nonetheless, S&M investments would be higher

Defined product map with a fair share of inorganic initiatives :

- Subex scores over competition on installation base and country presence
- Highest Market share in FMS (7% in FY05), expected to reach 10-11% in FY07. With Azure Solutions, market share targeted by management stands at 25-30% by FY08
- Core competence in real-time fraud management, revenue assurance tool and event integrity. Azure Solutions its
 acquired competitor, exhibits core competence in real-time fraud management and revenue assurance with limited
 capability in event integrity



Earnings... post acquisition of Azure

- Strategic acquisition @ US\$140 mn ... 4.5x Sales
 - Subex market leader in the Fraud Management space
 - Azure Solutions its competitor in the revenue assurance space is leader in revenue assurance market
 - Acquisition strengthens its presence in developed markets with improvement in its client quality (23 Tier I telcos) and client base of 150 (Subex client base \sim 70+)
- The acquisition scales its leadership in both fraud management and revenue assurance space.
- Acquisition positive for introduction of its "RoC" based product strategy that addresses IT spend by telcos at CFO level
- The acquisition would be consummated within 10 months
- **Equity dilution of 50-52%**

Acquisition Analysis

	Standalone			Consolidated Guidance (fo	or products)
	FY06	FY07E	FY08E	FY07E	FY08E
PAT (Rs mn)	379	553	802	650	1,500
No: of shares	23	23	23	35	35
EPS	17	24	35	19	43
Incremental EPS	-	-	-	-	22.3
Increment to PAT	-	-	-	-	698
Acquisition P/E Multiple @ Rs 45 exchange rate	-	-	-	-	9.0

Source: Company, ENAM Research



Market Analysis v/s Growth Strategy

Market Dynamics

Growth strategy and business/ financial insights

Fraud Management System

INcharge

OnTrack

Services Consulting

Combination of organic and inorganic growth strategy -

- Ranger (with 5+ versions) with 7 years of development
- Inorganic Initiative through acquisition of Azure Solutions, FM business of Alcatel (25 client additions) at US\$ 3 mn and Lightbridge (14 client additions). Payback period in these acquisitions was 12-18 months
- \blacksquare Combination of organic and inorganic initiatives led to revenue growth rate at \sim 10 times between 2001 (commercial rollout) and 2005, 77% CAGR
- Demonstrated scalability by handling 15 Tier 1 clients (with 15-20 mn subscriber base)
- Targeting client base of 200 within next 3 years (Current client base of ~ 80) with higher Tier 1 composition (v/s 15 currently)
- \bullet High growth potential Market share in Revenue Assurance market < 1% (~0.8%)
- Progress till date Within 3 years of launch, 12 network installations in FY05, revenues of Rs.151 mn (~40% of Ranger's revenue base of Rs.384 mn that has 115 installation base)
- Growth strategy Acquisitions and cross-selling through Ranger client base to be instrumental for growth
- Current state Beta testing with telcos
- Functionality Addressing a complementary segment to 2 earlier products (Ranger & INcharge) this includes proactive delinquency detection and information flow within departments.
- Targeted Audience Aimed at CFO level rather than CTO level
- Services operates in the ADM space encompassing areas of billing, customer care, inventory management, performance monitoring etc.
- Current strategy To be defocused from products segment
- Largest client AT&T
- Margins meager PBIDT margins in FY06 at 5%



Stock Data

No. of shares : 53mn
Market cap : Rs.11.2bn
52 week high/low : Rs.217/ Rs.88
Avg. daily vol. (6mth) : 935,500 shares
Bloomberg code : III IN

Bloomberg code : III IN Reuters code : III.BO

Shareholding (%) Mar-06 QoQ chg

Promoters		54.0	(0.2)
FIIs		3.5	(0.1)
MFs / UTI	- :	2.3	(0.3)
Banks / FIs	:	7.0	0.1
Others	:	33.1	0.5

Relative Performance



Source: ENAM Research, Bloomberg

3i Infotech

Relative to Sector: Not Rated

BFSI Product Story.....

Financial summary

Y/E Mar	Sales (Rs. mn)	PAT (Rs.mn)	EPS (Rs.)	Chng.YoY (%)	P/E (x)	RoE (%)	Mkt. Cap/ Sales (x)	Mkt Cap/ EBITDA
2003	2,196	(88)	-	-	-	-	-	-
2004	2,292	(118)	-	-	-	-	-	-
2005	2,892	320	6.0	-	-	17	-	-
2006	4,178	574	9.5	58	21	21	2	11

Source: Company, ENAM estimates, Note: 3i Infotech was listed in FY06

Analyst: Priya Rohira

Rs.196



Investment Summary

BFSI product wins key for performance

- 3i's strategy of penetrating the MEA, CIS States / C & E Europe and Asia Pacific for its BFSI offerings has so far been successful
- It has a strong presence in MEA, especially for the Insurance product, which is witnessing strong traction even in the US.
- The Banking product offerings have also been consolidated under the KASTLE name and now features regularly in IBS league tables
- ERP software is also growing steadily with sales picking up in the US and emerging markets

Acquisition led Growth, New geographies Targeted

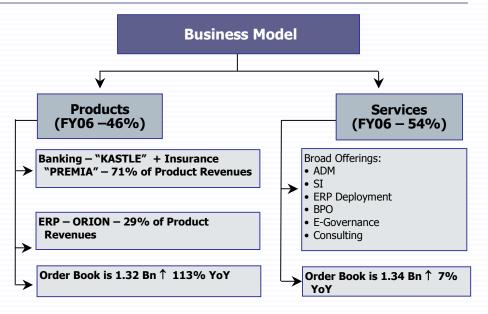
- 4 Acquisitions in FY06
 - Innovative Business Solutions USA Niche IT Consulting
 - ▶ Formulaware USA ERP Solutions
 - ▶ SDG Anti Money Laundering Software
 - Datacons India Mutual Fund Solutions
- Inorganic growth has accelerated scale and scope with ~12-13% addition to FY06 topline, however EBITDA (21%) and PAT margin (14%) vs. i-flex's 39% EBITDA margin leave scope for improvement
- Post Acquisitions, Revenue guidance at @25-30% for FY07E and EPS of Rs.13.0-13.5 (↑ 37-42% YoY)
- Acquisitions will remain a cornerstone of 3i's growth strategy and current guidance does not factor any future inorganic initiatives
- 3i is also planning a deeper penetration in Russia with a partner

Concerns

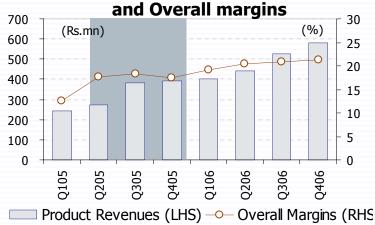
- ICICI group concentration still high at 18%
- Integration of all 4 acquisitions and realizing their synergy value

Valuations

■ 3i is currently trading at 21x FY06 trailing earnings and ~15x FY07E guided earnings

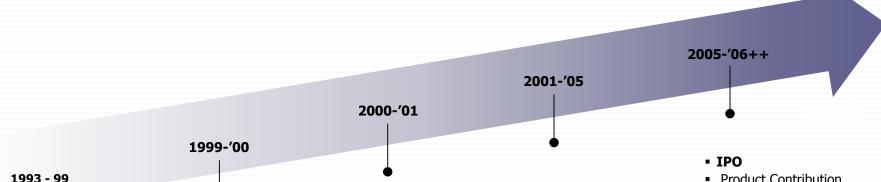


Acquisitions add to Product revenues and Overall margins





3i Infotech .. another BFSI success..



- 50 employees from ICICI Back Office
 50 Employees
 Spun off into ICICI Infotech
- 200 BFSI focussed employees inducted from ICICI IT dept

- Earnings suffered due to 9/11
- Targeted developing countries for growth
- Acquired Rohan Software, Ivory Int'l (USA) and Object Experts (USA)
- Expansion in Service offerings

FY '00 Rev: Rs.418mn

- Established Beachhead in several countries largely through Acquisitions & alliances
- Obtained Product IP
- FY '01 Rev: Rs. 1.08bn after consolidation of acquisitions
- Consolidation of Offerings -BFSI Products, ERP Products and Software

Consolidation Phase

- Svcs & BPO
 Acquisition of Command Systems (Insurance),
 Ajax Systems (BF) and
- Insyst (ERP)
 2,000+Employees
- Strong Presence in MEA
- ICICI still largest customer
- FY 05 Rev. Rs. 2.9bn, 28% CAGR inclusive of inorganic initiatives

- Product Contribution 45%+
- 2,300+Employees
- Wide Presence globally
- 500+ Clients, 30 Countries
- Acquires SDG Software, Innovative Biz Solns, Formula ware (Adding 12-13% to FY06E topline)
- FY 06 Rev. Rs. 4.2bn
- Revenue guidance increased of 25-30%
 YoY growth for FY07E

Source: ENAM Research, Company Website



Financial Performance

Quarter ended							months ende	d
(Rs. mn)	Q4FY06	Q4FY05	% Chg	Q3FY06	% Chg	Mar-06	Mar-05	% Chg
Net Sales	1,200	809	48.4	1,120	7.1	4,178	2,892	44.5
EBITDA	255	142	80.4	234	9.3	858	480	78.6
PBDIT	272	151	79.6	257	5.5	920	509	80.9
PBT	182	72	153.9	172	5.8	580	212	173.2
Tax	6	(3)	-	7	(16.5)	3	(108)	-
Adjusted PAT	176	75	134.2	165	6.8	577	320	79.9
Minority Interest	1	0	-	2	-	2	0	-!
Reported PAT	175	75	133.5	163	7.6	574	320	79.2
No. of shares (mn)	53	31	-	53	-	53	53	-
EBIDTA margins (%)	21.3	17.5	-	20.9	-	20.5	16.6	-
PBIDT margins (%)	22.6	18.7	-	23.0	-	22.0	17.6	-
EPS - annualized (Rs.)	13.2	9.7	36.5	12.3	7.3	9.5	6.0	57.3
Segmental Performance	ce							
Revenues								
Products	580	392	47.9	528	10.0	1,952	1,288	51.5
Services	636	426	49.2	616	3.2	2,289	1,632	40.2
Gross profit								
Products	306	203	50.8	286	7.0	1,022	661	54.7
Services	243	149	62.9	229	6.3	867	604	43.6
GPM (%)								
Products	52.7	51.7	-	54.1	-	52.4	51.3	-
Services	38.2	35.0	-	37.1	-	37.9	37.0	-

Source : Company, ENAM Research





Market factor: T-2-M cycle shortening

	Product Revenues : Slowing Growth Rates						
	Sep-04	Dec-04	Mar-05	Jun-05	Sep-05	Dec-05	YoY Grwth
Aggregate Product Revenues (\$mn) (License Fees Product	12,738	14,480	13,554	13,976	14,882	15,840	9%
Revenues)							



ISV's include: Oracle, SAP, PTC, TI, Intel, Adobe & Novell

Market factors driving growth in R&D outsourcing :

- Lower growth in new license signings
- Transition to open-source applications
- Higher growth in packaged software industry
- Rapid changes in end-user expectations
- Faster new product launches
- Necessity to lower Sustenance/ Maintenance expenses for existing products

Anecdotal evidences support the above :

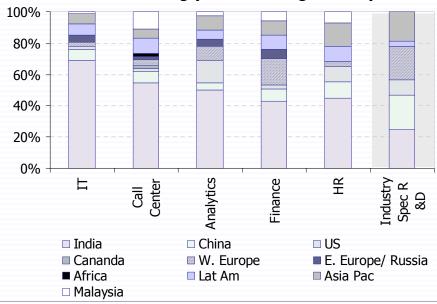
- Telecom Space has seen faster product launches driven by higher growth in Asia Pac Markets (China, India)
- AMR Research 45% of clients attributed time-tomarket as a factor for outsourcing



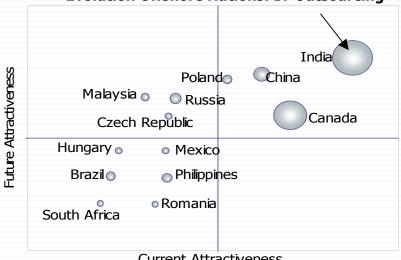
Place Factor: Country competitiveness

Country	Fin. Structure	People & Skill Avail	Business Environ.	Total
India	3.47	2.14	1.3	6.87
China	3.21	1.76	1.2	6.14
Malaysia	2.95	1.12	2.0	6.07
Philippines	3.58	1.16	1.1	5.79
Singapore	1.62	1.44	2.7	5.73
Thailand	3.27	0.94	1.51	5.72
Czech Repub	olic 2.57	1.12	1.90	5.58
Brazil	2.91	1.36	1.23	5.50
United State	s 0.54	2.74	2.22	5.49

McKinsey Survey- India a key destination for **R&D** outsourcing (Manufacturing Domain)



Evolution Offshore Nations: IT Outsourcing



Current Attractiveness

- **India: Most preferred offshore** destination (even for product development, as in services)
 - India accounts for 28% of total suitable pool for offshorisation (next China: 11%, Russia: 10%)
 - India's ranking in engineering talent:
 - No:2 per 10,000 people
 - Scale 7.4 / 10 (USA 7.2 /10)

Source: NASSCOM, Global Competitiveness Report



Brand Factor: India is THE destination

ISVs: Employee Ramp Ups in India

	India employees	Total Employee	India base % of Total
Microsoft	3,000 curr (MIDC 1300) Targeting 4,000 in 2006.	63,564	5%
Oracle	8,600	49,872	17%
Novell	325 in the ODC	5,066	6%
CA	400 at ODC	15,300	3%
Adobe	650 incl. Macromedia's 150	5,734	11%
SAP	3,000	32,000	2%
Symantec	1,100	14,000	5%
PTC	400	3,928	17%
Cadence	600	4,900	12%
i2	1,100	1,257	88%

Source: ENAM Research, Company websites

India - Top destination for offshore product **Development (OPD)**

- Sourcing: ISVs (60% of majors ISVs) and System Integrators have leveraged India through captives and third-party Indian vendors
- India captive share: Accounts for Employees for 5% to as high as 17% of total base (excl. i2)
- Patents: Product Engineering companies pursued patent work from India (Texas Instruments – 200 patents, Intel – 62 patents)

Source: ENAM Research

Table for Employee Scale Up

		India employees	Total Employee	India base % of Total	Patents/
hour out of T flow	Honeywell Industrial Control	1600	100,000	2%	-
buy-out of I-flex be instrumental	Rockwell Automation	180	21,000	1%	-
ing attention to	Delphi	1300	185,000	1%	-
hird party	Texas Instruments	1300	35,200	4%	200 Patents
duct vendors	Siemens	12,000	468,000	3%	-
	Intel	-	-	-	62 patents

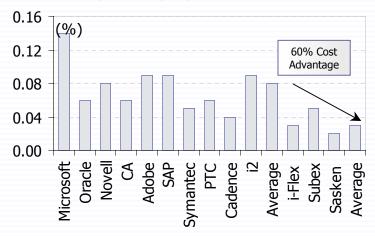
Source: ENAM Research, Company websites





The India Value Proposition

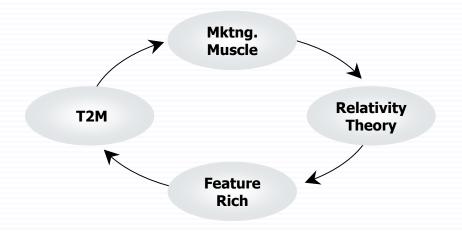
Average Cost per employee : ISVs v/s Indian Players



India's Competitive Advantage on Key Product Paradigms:

Cost, Features, Time-to-market/ Delivery, Presence/ Mindshare

- Associated costs in product segment are lower in India:
 - Average cost pre employee for third party product vendors like i-Flex stand is 40-50% of that of leading ISVs and product engineering companies
 - Overhead Advantage: G&A expenses for Indian product are lower by 400-600 bps of Sales than ISVs



Cost Comparison : ISVs v/s India

	R& D Cost % of sales	Patents/ Achievements	HR/ Cost	Avg. cost /employee (000)
Microsoft	13%		2239	35
Oracle	14%	Oracle Student System	757	15
Novell	17%	17 patents	108	21
CA	18%	-	69	5
Adobe	19%	Palm Pilot version of Adobe acrobat	113	20
SAP	12%	Notebook Applications	813	25
Symantec	18%	-	184	13
PTC	18%	-	62	16
Cadence	25%	-	54	11
i2	8%	-	27	22

Source: ENAM Research



.. the right ingredients, supply dynamics

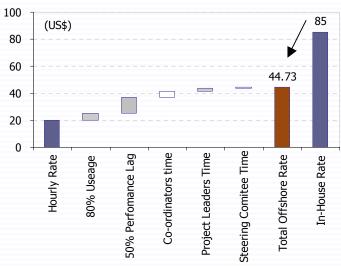
The Supply Dynamics

India's engg pool...

(in 000's)	Engg	Grads	IT Professio	onals(Comp. cronics etc)
	Abs	Deg(%)	Abs	Deg(%)
FY06E	441	50.3	246	54.1
FY07E	501	53.9	280	57.9
FY08E	536	54.1	303	59.4

Indian Software Product Managers (@~US\$ 26,000/ p.a) are still over 50% cheaper than their US and European counterparts and less than 2/3rd the cost in countries like Singapore

20-50% cost savings would be replicated in product story as observed in services business



The Overhead Cost advantage (excl S&M)

	S&M (%)	G&A (%)	Overheads
Microsoft	21.8	10.5	32.3
Oracle	21.3	4.7	25.9
Novell	32.5	10.2	42.7
Computer Associates		37.0	37.0
Adobe	30.2	8.5	38.6
SAP	20.5	5.1	25.6
Symantec	28.0	4.0	32.0
PTC	33.8	4.0	37.8
Cadence	26.8	8.8	35.6
i2	15.4	18.1	33.5
Average	22.3	12.0	34.1
i-Flex (products segment)	20.79	6.24	27.0
Subex	5.43	6.71	12.1
Sasken	10.3	12,82_	23.1
Average	16.3	6.5	22.8
Geodesic	n.a	9.83	-

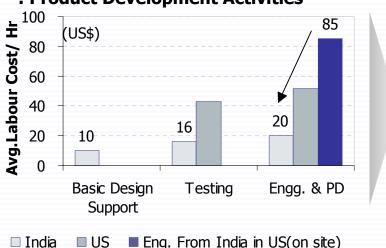
Dual Advantage : Supply dynamics (quality +cost + support) favour India -

- Exposure: Indian IT professionals exposed to latest / state-ofart technologies / platforms
- Availability: FY08E to have supply of 0.54 mn engineering graduates with 56% from IT / Computers / Electronics field
- Cost: In comparison to global ISVs, India products vendors enjoy cost advantage of 40-50.%
- Overheads: Though S&M investments are similar, Indian vendors enjoy G&A cost advantage by average of 400-600 bps

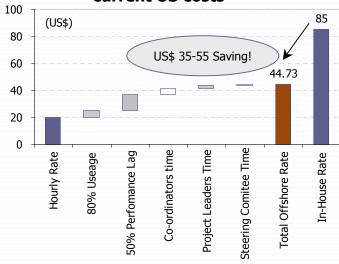


The Human Factor: Comparative advantage (Cost)





Offshore Vendor (worst case cost scenario) v/s current US costs



Source: NASSCOM

Cost savings through offshorisation would be a function of :

- Labour Cost Savings: In comparison to current billing rate in US at US\$85 per hour, offshore billing rates at US\$ 20 per hour offer pure labour arbitrage
- After adjustments of other factors (utilization rates, reviews by projects leaders and steering committees, timeframe etc), minimum cost savings of 35-40% to accrue

Fall-out factor:

- Low break-even levels for Indian product companies ensures faster attainment of profitability
- Nonetheless supply-side constraints could emerge as observed in ADM space



... human Factor: Comparative advantage (Supply)

Knowledge Professionals Employed (000's)

	2000	2001	2002	2003	2004	2005	2006
IT,Engg. & R&D,Software product exports	110	162	170	205	296	390	513
ITES	42	70	106	180	216	316	409
Domestic	132	198	246	285	318	352	365
Total	284	430	522	670	830	1,058	1,287

Source: NASSCOM

Indian talent pool - highlights :

- Abundance advantage v/s other offshore destinations, India corners 28% of total available suitable labour pool for off-shoring
- Demographic advantage 60% of population in the 15-59 age group
- Skill advantage: Production of ~ 441,000 technical graduates every year (Engg, Diploma holders, MCAs)

IT Labour Supply (000's)

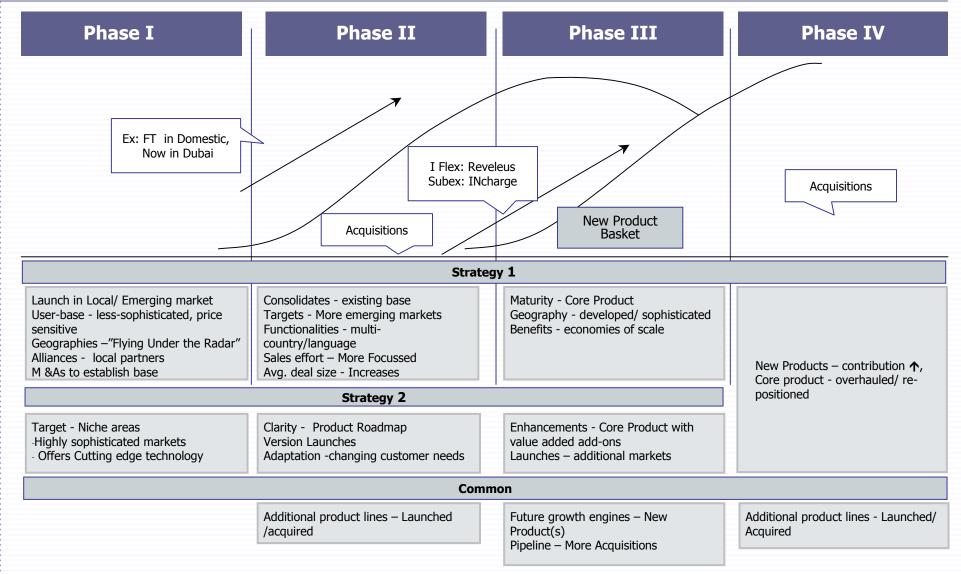
	2004	2005	2006E	2007E	2008E
No. of Engg. Grads.	316	365	441	501	536
- Degree (4 yrs)	139	170	222	270	290-
- Diploma/ MCA (3 yrs)	177	195	219	231	246
No. of IT professionals	179	201	246	280	303
- Engg. IT Grads (Degree)	84	102	133	162	180
- (%) of Total	60	60	60	60	62
- Engg. IT Grads (Diploma)	95	99	113	118	123
-(%) of Total	<i>53</i>	49	46	42	41

Source: NASSCOM

Product Evaluation Phase



Product Evolution... redefining the "S" Curve"



IT Service offerings – complementary as complete solution, entry strategy , performance stabilizer



The BFSI Experiencereflects success



The experience in the BFSI vertical...

i-Flex Experience - Market Share in Net Additions

Total Additions by Indians

Indian Players

2000 RBS

8.8%

15.3%

i-Flex (+15), Infosys (+11) 2000 IBS

18.6%

18.6%

i -Flex (+30)

2001 RBS

12.9%

20.4%

i-Flex (+19), Infosys (+11) Focused go-to-market strategy in Africa & Asia led to increase in

India's market share

2001 IBS

17.9%

21%

i-Flex (+15), Infosys (+11) Improvement in developed markets for i-Flex observed, though low on multi-site deals

> Diverse geography presence pertinent for growth as reflected with

Industry Characteristics

Total Additions	170	161	147	162 Temenos
Share -Top 3 Players	37%	58%	38%	53%
Top 3 Players	ERI Bancaire, Sanchez, i-Flex, Kindle, Infosys	Temenos, i-flex, MKI- Frustum	ERI Bancaire, i-Flex, Infosys	Temenos, i-Flex, Misys
Deal Sizes / Wins	Big Value deals low	n.a	Scattered deal sizes	Multi-site deals yet absent
Other Dynamics	Most signings were single country basis, Evaluation phase by top-end of market	Suppliers did better than last year	Presence of smaller players	Improvement post 2001 slump, Replacement market better, No tangible action by large banks
Geographical Characteristics	Markets in North America & Europe , Africa not Healthy, Central & Eastern Europe depressed	Signings were high in Western Europe & Africa	Slump-in established markets especially US & Western Europe	Europe (27%), Africa (18%), APAC (17%), Central Asia (9%), Central Europe (8%), Middle East (6%), Australia (4%) Central & South America (2%), North America (9%)



...Contd.

i-Flex Experience - Market Share in Net Additions

Total Additions by Indians

Indian Players

2002

11.7% (i-Flex progresses in W. & C.Europe and US)

23.2%

i-Flex (+37), Infosys (9), Nucleus (+7),TCS (+6), Polaris (+5), CMC (+3), Credence Analytics (+6) i-Flex defeats Temenos in client wins, however value-wise lower 2003

12.4%

19.9%

i-Flex (+38), Infosys (11), TCS (+4), Polaris (+2), CMC (+1), Credence Analytics (+5) 2004

11.9%

26.3%

i- Flex (+38), Infosys (+14), Nucleus (+9), TCS (+5), 3i Infotech (+6), Polaris (+3), Credence Analytics (+9) 2005

12.0%

26.9%

i- Flex (+40), Infosys (+13), Nucleus (+11), TCS (+5), 3i Infotech (+3), Polaris (+2), Credence Analytics (+6)

Industry Characteristics

Total Additions	315	306	320	334
Share -Top 3 Players	28%	29%	25%	26%
Top 3 Players	i-Flex, Temenos, Sunguard	i-Flex, Reuters, Temenos	i-flex, Temenos, Summit	i-flex, Temenos, Misys
Deal Sizes / Wins		Avg deal sizes lower YoY, Industry ILF signings lower 9% YoY	Big Value deals low, Industry avg deal size at \$1 -1.1 mn	Temenos - \$ 2.7 mn i-Flex - \$ 1.6 –1.7 mn
Other Dynamics	Polarization among players, Retail banking healthy with gloomy market for wholesale	Private banking market flat	Multi-site deals scarce. Core & wholesale banking+ treasury saw traction	Pick up in treasury and capital market space
Geographical Characteristics	Investments in developing markets, Economic Factors impacted sales	APAC slow than 2002, Europe slightly down	Japan exhibits system overhaul, Better traction in Europe (37%)and Asia Pac. APAC & Australia at 30%, Middle-East (11%) Africa (11%), America (11%)	-

ENAM Securities Pvt. Ltd.

109-112, Dalamal Tower, Free Press Journal Marg, Nariman Point, Mumbai - 400 021, India.

Tel:- Board +91-22 5554 7500; Dealing +91-22 2280 0167 **Fax:-** Research +91-22 5554 7579; Dealing +91-22 5554 7575

ENAM Research			
Lead Analyst	Sector Coverage	E-mail	Tel. (Direct)
Nandan Chakraborty	Head-Research	nandan@enam.com	+91 22 5554 7601
Chirag Negandhi	Media /Retail /Property	chirag.negandhi@enam.com	+91 22 5554 7618
Hemant Patel	FMCG/ Textiles/ Transportation	hemantp@enam.com	+91 22 5554 7617
Jagdishwar Toppo	Metals & Materials	jagdishwar@enam.com	+91 22 5554 7605
Kamlesh Ratadia	Power/ Engineering	kamlesh@enam.com	+91 22 5554 7607
Pankaj Choksy	Oil & Gas/ Petro/ Paints	pankajc@enam.com	+91 22 5554 7603
Priya Rohira	IT-Services	priya@enam.com	+91 22 5554 7611
Punit Srivastava	Banking & Finance	punit@enam.com	+91 22 5554 7609
Srinivas Rao	Auto/ Telecom	srinivas@enam.com	+91 22 5554 7613
Vihari Purushothaman	Pharmaceuticals	vihari@enam.com	+91 22 5554 7615
Analyst	Sector Coverage	E-mail	Tel. (Direct)
Ajay Shethiya	Automobiles	ajay.shethiya@enam.com	+91 22 5554 7621
Bhavin Vithlani	Power/ Engineering	bhavin@enam.com	+91 22 5554 7634
Harshvardhan Dole	Oil & Gas/ Petro/ Paints	harsh@enam.com	+91 22 5554 7677
Sachchidanand Shukla	Economist & Editor	sachins@enam.com	+91 22 5554 7648
Zameer Khan	Database Officer	zameer@enam.com	+91 22 5554 7649
ENAM Sales			
Sales	E-mail	Mobile	Tel. (Direct)
Dharmesh Mehta	dharmesh@enam.com	+91 98200 40245	+91 22 5554 7777
Himanshu Negandhi	himanshu@enam.com	+91 98202 14223	+91 22 5554 7755
Jateen Doshi	jateen@enam.com	+91 98201 27207	+91 22 5554 7766
Tushar Chandra	tushar@enam.com	+91 98203 42708	+91 22 5554 7757
Vimesh Zaveri	vimesh@enam.com	+91 98201 22254	+91-22 5554 7717
Alok Chokhani	alok@enam.com	+91 98213 56777	+91-22 5554 7719

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Disclosure of interest statement (As on 16th May, 2006)	i-Flex	Sasken	Subex	3iInfotech
1. Analyst ownership of the stock	No	No	No	No
2. Firm ownership of the stock	No	No	No	No
3. Directors ownership of the stock	No	Yes	Yes	No
4. Investment Banking mandate	No	No	No	No
5. Broking relationship	No	No	No	No

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