Welcome to Wipro's India Analyst/Investors' Meet 2007

Feb 09, '07
National Stock Exchange, Mumbai

Safe Harbor

This presentation may contain certain "forward looking" statements, which involve a number of risks, uncertainties and other factors that could cause actual results to differ materially from those that may be projected by these forward looking statements. These uncertainties have been detailed in the reports filed by Wipro with the Securities and Exchange Commission and these filings are available at www.sec.gov. This presentation also contains references to findings of various reports available in the public domain. Wipro makes no representation as to their accuracy or that the company subscribes to those findings.
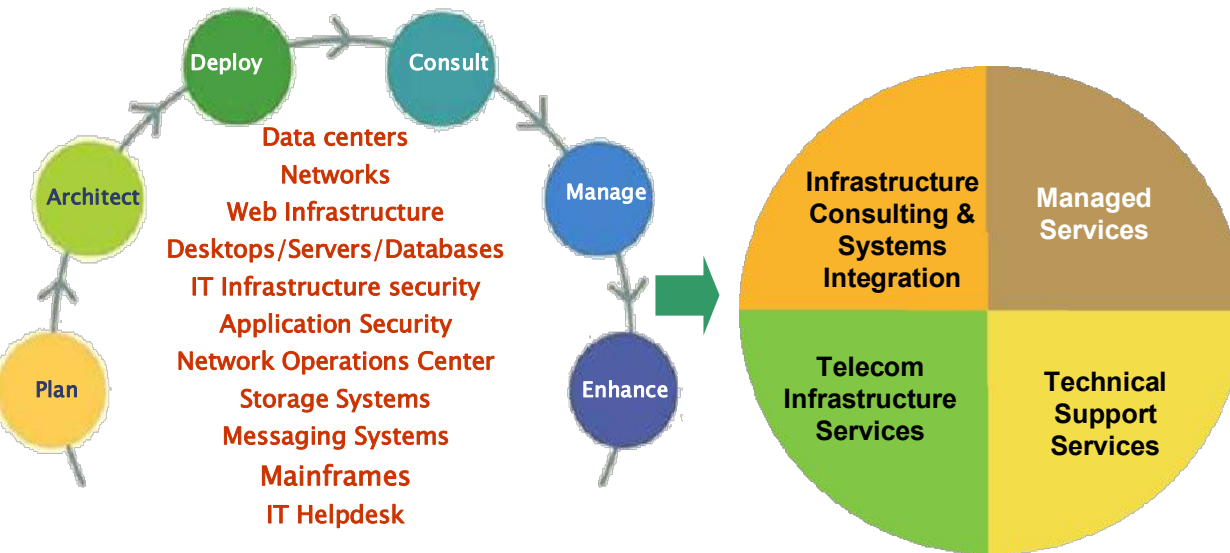
- Global IT Service Lines
- Wipro Infotech

Suresh Vaswani
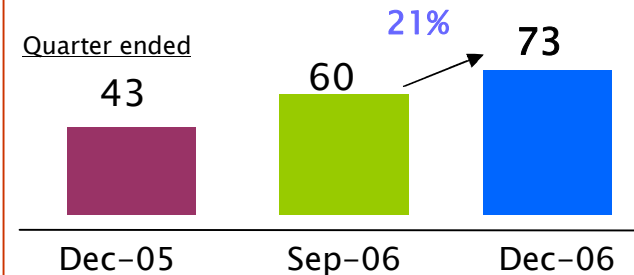President- Global IT Services Lines, Wipro Technologies
President, Wipro Infotech

Technology Infrastructure Services (TIS)

WIPRO

Deploy · Consult · Architect · Manage · Plan · Enhance

Data centers
Networks
Web Infrastructure
Desktops/Servers/Databases
IT Infrastructure security
Application Security
Network Operations Center
Storage Systems
Messaging Systems
Mainframes
IT Helpdesk

Infrastructure Consulting & Systems Integration · Managed Services · Telecom Infrastructure Services · Technical Support Services

Partner for Complete Infrastructure Life Cycle

Revenue ($ M)

Quarter ended

Dec-05	Sep-06	Dec-06
43	60	73

21%

YoY growth -81 %

• Revenue for 9 Months ended Dec 2006 -183 Mn $ - YOY growth 74%

What we do

• Pioneers in Global Delivery Model for Infrastructure Management

• Comprehensive portfolio of services spanning the complete IT Infrastructure Life Cycle

Our Leadership Position

• Largest Offshore IT Infrastructure Services player in terms of revenue, people and customers

• 4396 consultants, net addition of 608 people during the quarter

Our Differentiators

• **Global IT Outsourcing** Practice offering integrated value proposition to customers

• **Next Generation Managed Services** offering tool-agnostic, highly secure service based on business impact

Remote Management – driving next wave of Off shoring

Business trends & Strategic Directions – TIS

Business trends

- Offshore players' share in Global Infrastructure services projected to be **$9 Bn** by 2010, 2005–10 CAGR of 55%
- Landscape change: Indian vendors already winning deals ranging from TCV of $50 Mn – $100 Mn , being considered for Deals with TCV $50 Mn to $250 Mn
- Customers are increasingly looking for Business Service Management rather than only element management
- Opportunities leveraging on Advanced Technologies like transformation of Telecom Networks, Network Optimization, Convergence, IPTV, IP Telephony, etc increasing in the market
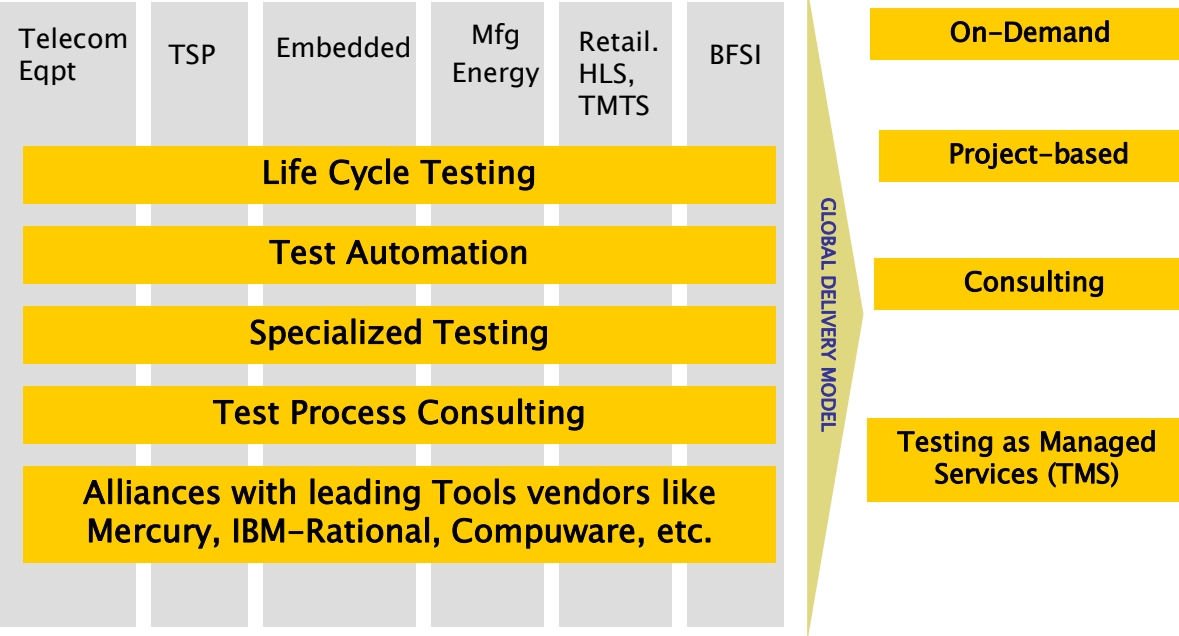- Product vendors such as CISCO / HP / EMC moving from Products to Platform Solutions

Strategic Directions

- Strengthen leadership position through Global IT Outsourcing
- Portfolio expansion strategy
- Strong alliance management
- Enhancing Program Governance
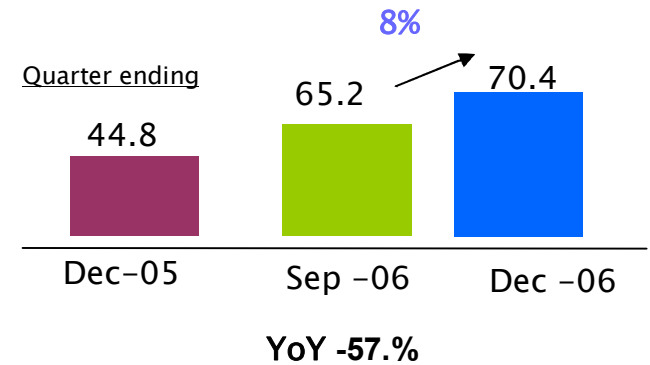- People supply chain optimization and talent transformation initiatives

Wipro Testing Services

Service Portfolio & Engagement Models

Telecom Eqpt	TSP	Embedded	Mfg Energy	Retail. HLS, TMTS	BFSI

Life Cycle Testing

Test Automation

Specialized Testing

Test Process Consulting

Alliances with leading Tools vendors like Mercury, IBM-Rational, Compuware, etc.

GLOBAL DELIVERY MODEL

On-Demand

Project-based

Consulting

Testing as Managed Services (TMS)

Revenue ($ M)

8%

Quarter ending

Dec-05	Sep -06	Dec -06
44.8	65.2	70.4

YoY -57.%

- Revenue for 9 Months ended Dec 2006 -193 Mn $ - YOY growth 71%

What we do

- Quality assurance services ranging from Life cycle testing services to specialized testing services to our customers in the Enterprise as well as technology space

Our Leadership Position

- Largest Offshore Testing Services Provider (AMR research, 2005)

- Over 5900 Employees.

- Pioneers in Product Engineering Testing space

Our Differentiators

- Test Productivity – Investments in Test frameworks, tools and point solutions, deliver productivity and time to market advantages to our customers.

- Testing as Managed Services – End-to-End Test Ownership to ensure customer delight

- Domain Centric Offerings leveraging Industry COEs and Labs

Business Trends & Strategic directions – Testing

Business Trends

1. Market opportunity for Offshore Testing companies likely to be $11 Bn by 2010

2. Test Automation & Specialization (Performance, Security testing) becoming the norm

3. Testing opportunities in Localization, Package Applications, IP migration & SOA hold promise

4. Customers demanding Domain knowledge, Test Consultancy capabilities.
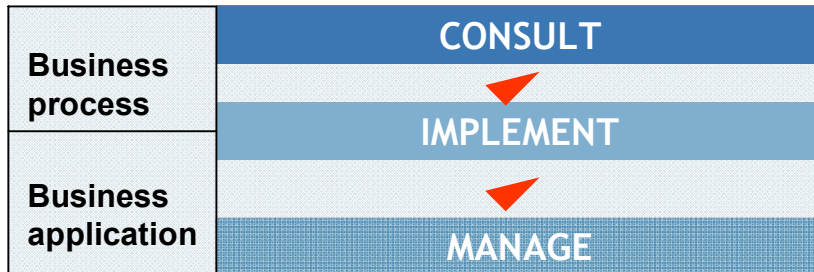
Strategic Directions

1. Differentiation through Test Consultancy, Domain Test frameworks & Specialized Testing services

2. Extend Product Engineering leadership by investing in automation frameworks, tools , Domain specific labs like Wi-Fi labs, 3G labs

3. Build on success in Enterprise, BFSI & Telecom Service provider customers – Enhance the Vertical Domain specific Testing competencies and Test Frameworks

4. Focus on Emerging areas – IP Migration, Package Application & SOA Testing
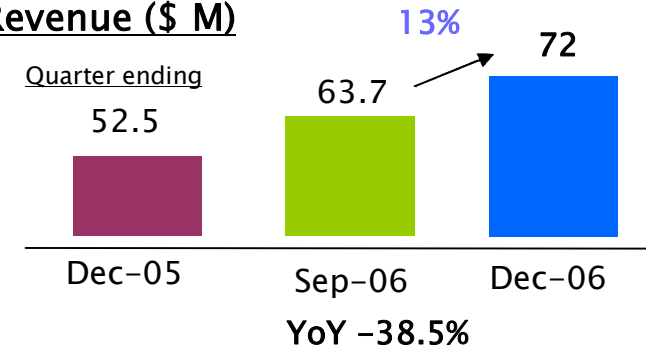
Wipro Enterprise Application Services (EAS)

CRM	SCM	Finance	HRM

Business process	CONSULT
	▼
	IMPLEMENT
Business application	▼
	MANAGE

SAP   Oracle   Siebel / Clarify   PeopleSoft   JD Edwards   I2/Ariba/ Manugistics   Microsoft

Revenue ($ M)

13%

Quarter ending

52.5   63.7   72

Dec-05   Sep-06   Dec-06

YoY -38.5%

• Revenue for 9 Months ended Dec 2006 194 Mn $ - YOY growth 35%

What we do

• We provide Process Consulting , Package Implementation and Application Management Services for CRM, SCM, ERP as well as Vertical specific processes

Analyst View

• Wipro is Best Suited for Large-Scale, Global SAP Projects Implementation: Forrester

•   Best Positioned among Indian Companies in Gartner Magic Quadrant for CRM and SCM Service Providers in North America

Our Differentiators

• Recognized capabilities for large end to end package implementations, global rollouts

• Leadership in Next Generation Solutions – SCM, CRM

▪Domain Competency in focus industries like Energy, Retail, Utilities

Business Trends & Strategic directions – EAS

Business Trends

1. By 2009-10, Market Size for ERP applications (globally) to be $40 B (AMR research)

2. SAP & ORACLE dominate the market; Focusing on Domain solutions & Services Oriented Architecture (SOA) based platforms. Microsoft making investments in ERP space

3. End Users looking at Globalization, Business Intelligence, Shared services, and Redesign of process areas

4. Traditional BPO players getting into Surround Application Enhancement and Support business
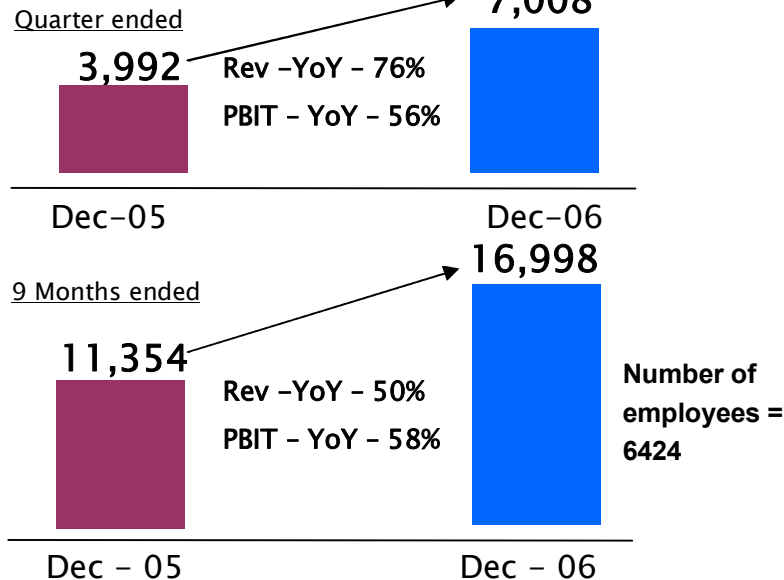
Strategic Directions

1. Transformational capabilities through Consulting & Program management expertise

2. Platform SOA technologies & Industry solutions

3. Non-linear approach to traditional Application Maintenance & Support Services

4. Capitalise on opportunity areas – Microsoft ERP solutions ; Integrated Services (Applications + BPO)

Wipro Infotech – An Overview

Comprehensive Services Lines

Consulting	Process, IT Governance, e-Governance, Security, Strategic Cost Reduction
Business Solutions	Package Application, Business Intelligence, Application Development & Management
Professional Services	System Integration, Infrastructure Management Services, Application Support
Infrastructure Products	Platforms, Networking, Storage, Enterprise Management & Security
Total Outsourcing	IT, Process Strategy Formulation and Alignment to Business

Revenue (Rs. Mn.)

Quarter ended

3,992 → 7,008

Rev –YoY – 76%
PBIT – YoY – 56%

Dec–05   Dec–06

9 Months ended

11,354 → 16,998

Rev –YoY – 50%
PBIT – YoY – 58%

Number of employees = 6424

Dec – 05   Dec – 06

Wipro Infotech – Highlights of 2006-07

1. Partner of Choice for <u>Customers</u> in India
   1. Leading IT solutions company in India
   2. Largest Technology Products player
   4. # 1 in Network Integration & Security

2. Partner of Choice for <u>Principals</u> in India
   1. Largest SI partner for Cisco, Sun, Nortel
   2. Best SAP partner across APAC
   3. Largest Enterprise partner – Microsoft
   4. Largest SI for Symantec / RSA / Checkpoint
   5. Largest partner for HP Openview

3. Domain centricity
   1. BFSI – HDFC Bank, LIC, GIC, BSE…
   2. Telecom – Bharti Airtel, Maxis…
   3. Government - CRIS, 15 State Govt's, BEL..
   4. Mfg. - Maruti, Hyundai, AV Birla, Sanmar…

4. Innovation in Service Delivery
   1. Integrated Remote Service Delivery Platform – GSMC, 50+ customers
   2. Software templates - SAP in CPG / Auto; Oracle in Real Estate; – 30+ customers

5. Strategic Investments
   1. 3D Networks / Planet PSG acquisition
   2. Joint Venture in KSA

IT Trends in India

1. Indian IT Market - $ 12 Bn (2006), Products:Services = 65:35, will grow @ 22% in 2007, 17% CAGR thru 2010 (Source: IDC)

2. Sunrise sectors - Retail, SEZ, Infrastructure, Defense.

3. All verticals to grow – Banking, Manufacturing, Telecom, ITeS, Government.

4. Large integrated IT solutions opportunities on the rise

5. Greenfield IT projects to drive growth across all IT segments

6. Emerging technologies to drive new investments

7. Progressive Mid market

8. Heavy focus of Technology owners on mid market / emerging technologies

India to remain the fastest growing IT market in the Asia Pacific region

Wipro Infotech – Directions

1. Stratified account management

2. Domain competencies

3. Emerging technologies thrust – Unified Communications, SOA, Security…

4. Stronger thrust in Middle East with Infrastructure

5. Non linearity and operational efficiencies in Services – GSMC, templates, integrated service delivery

6. Strategic alliances with partners placing big bets on India

7. Invest in people

8. Transform customer experience

9. Inorganic initiatives to build new competencies and service lines
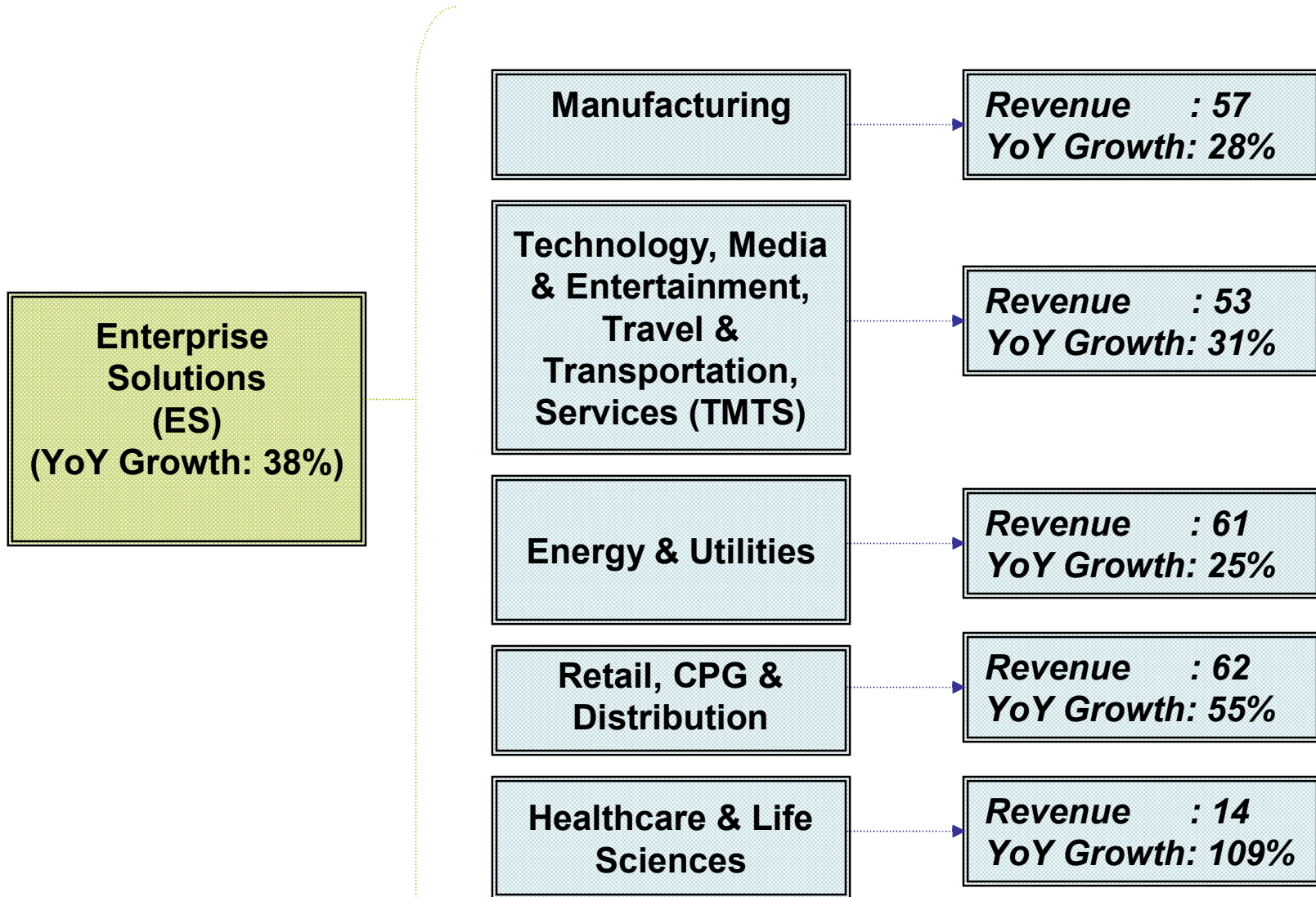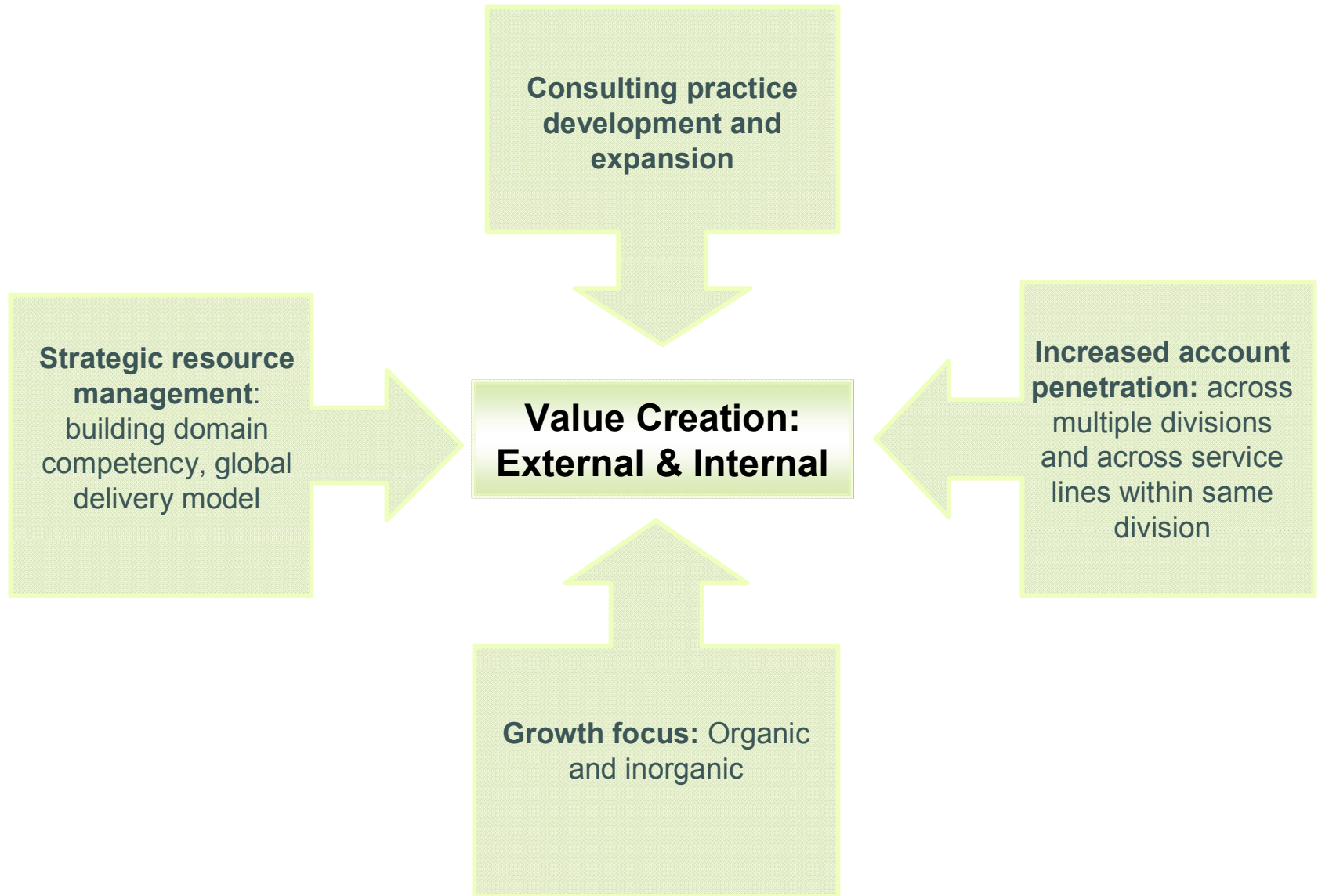
Thank You

Enterprise Solutions

Sudip Banerjee
President- Enterprise Solutions, Wipro Technologies
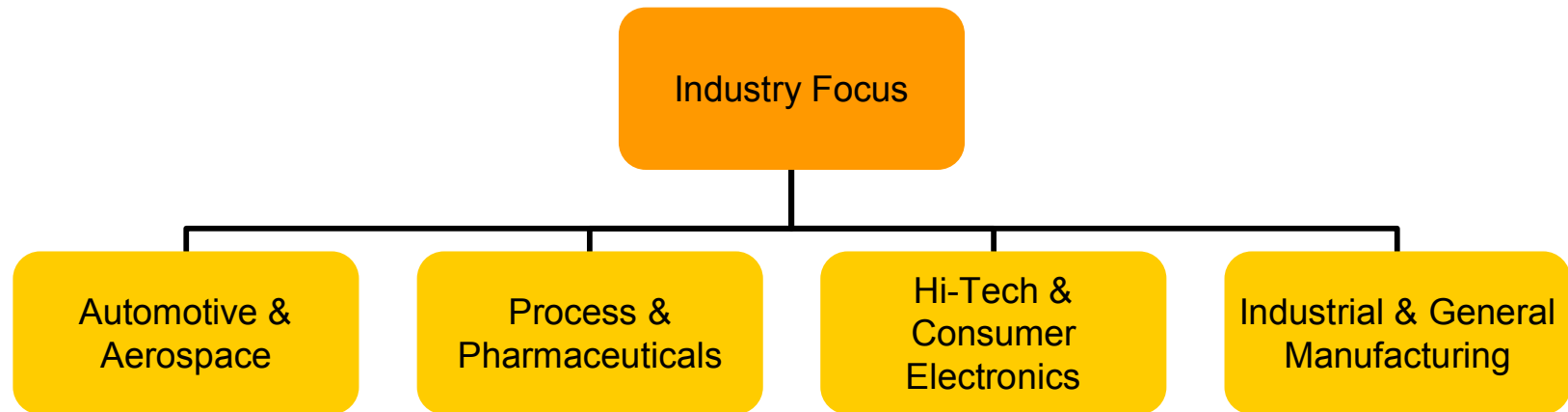
Enterprise Solutions – Performance Snapshot

Enterprise Solutions (ES) (YoY Growth: 38%)

Manufacturing	*Revenue : 57* *YoY Growth: 28%*
Technology, Media & Entertainment, Travel & Transportation, Services (TMTS)	*Revenue : 53* *YoY Growth: 31%*
Energy & Utilities	*Revenue : 61* *YoY Growth: 25%*
Retail, CPG & Distribution	*Revenue : 62* *YoY Growth: 55%*
Healthcare & Life Sciences	*Revenue : 14* *YoY Growth: 109%*

Revenue figures for Q3 FY '06-'07 in $ Mn)

ES Priorities going forward

Consulting practice development and expansion

Strategic resource management: building domain competency, global delivery model

Value Creation: External & Internal

Increased account penetration: across multiple divisions and across service lines within same division

Growth focus: Organic and inorganic

Manufacturing

Overview of Wipro in Manufacturing

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                        │    Industry Focus    │
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│  Automotive & │ │   Process &   │ │   Hi-Tech &   │ │ Industrial &  │
│   Aerospace   │ │Pharmaceuticals│ │   Consumer    │ │    General    │
│               │ │               │ │  Electronics  │ │ Manufacturing │
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Highlights

- More than 60 customers in US, Europe and Japan
- Over 3000 consultants
- Alliances with leading technology vendors
- Industry landscape: growth in Manufacturing IT spends estimated at 3%, raising industry budgets to 3.7% of revenue in 2007

Domain Highlights
- Creation of enablers for a Collaborative Real Time Enterprise
- Strength in Customer Information Management, Analytics, MES, PLM, Procurement BPO
- Rated highly in Manufacturing Operations by AMR and SCM by Gartner
- Rapid growth in Pharma and Hitech segments

Delivery Highlights
- Factory Model Innovation is a case study at Harvard Business School
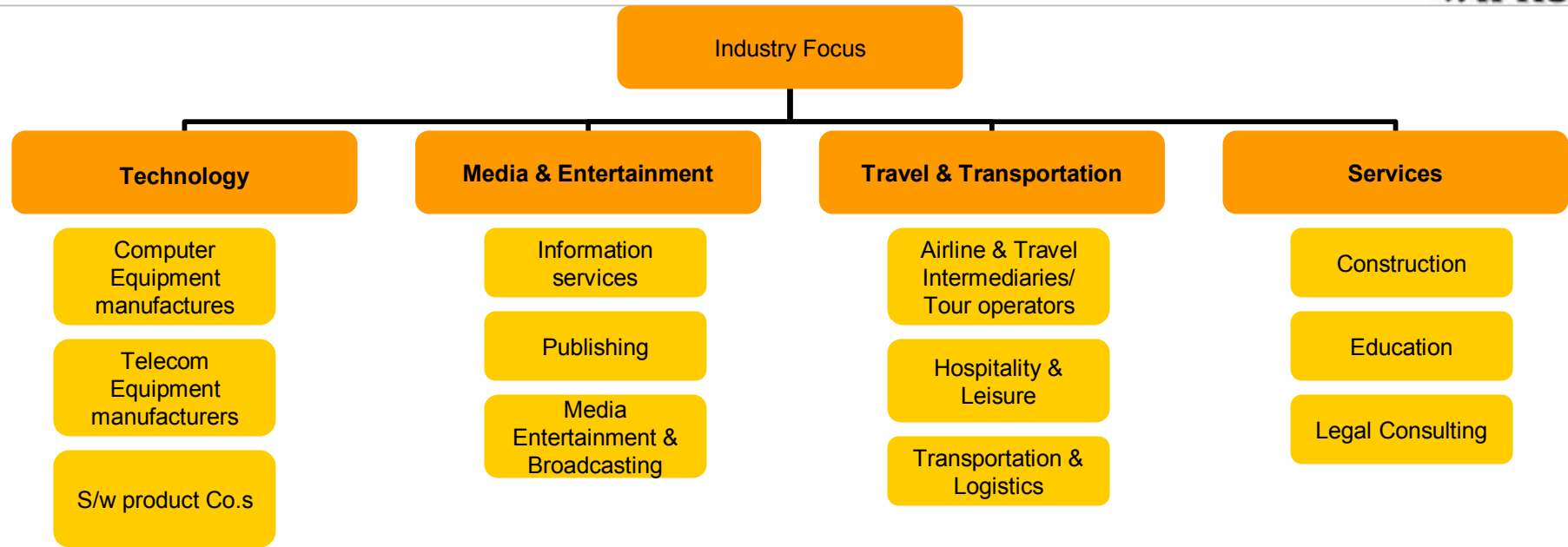- Managed Services framework to integrate applications, infrastructure and BPO

Going Forward: Investments in Domain & Service offerings

- Building Leadership in Key Client Investment Areas
  - Manufacturing Execution Systems [MES]
  - Supply Chain Consulting [SCM]
  - Integration of MES to ERP Systems

- Strategic Alliances in key focus areas
  - SCM
  - MES

- Industry solutions developed through Domain Center of Excellences [CoE's] and Alliance partners
  - Automotive, Pharma CoE's
  - '**Freeway**', a branded solution for the Automotive Industry has been rolled out

- Service Delivery Excellence
  - Factory Model for Application Development
    - Featured as a case study in Harvard Business School
  - Managed Services for Application Maintenance

TMTS

Overview of Wipro in TMTS

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│   Technology   │ │ Media &          │ │ Travel &             │ │ Services │
│                │ │ Entertainment    │ │ Transportation       │ │          │
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Technology	Media & Entertainment	Travel & Transportation	Services
Computer Equipment manufactures	Information services	Airline & Travel Intermediaries/ Tour operators	Construction
Telecom Equipment manufacturers	Publishing	Hospitality & Leisure	Education
S/w product Co.s	Media Entertainment & Broadcasting	Transportation & Logistics	Legal Consulting

Highlights

- Over 60 customers across geographies
- Skilled employee base of about 3500
- Working with Industry leaders across above sub verticals
- Industry landscape: Airlines & Media key growth areas going forward

Domain Highlights
- BPO/IT integrated services offering
- Best in Class Production support services
- Global account management

Delivery Highlights
- Business Focused Solutions : IBEX (Internet booking engine for travel industry), IPP (Integrated publishing platform for publishing industry), Pricing optimization & Enforcement engine for Hi-Tech industry, e-Freight for Air Cargo Industry
- Very large to medium size engagements with focus on Multi year outsourcing deals

Going Forward: Investments in Domain & Service offerings

- **Growth:**
  Penetration within existing large accounts and acquiring new must have accounts
  - Service line penetration through Alignment
  - Account level Partnering and acquisition
  - Global penetration and account management
  - Promote new engagement models

- **Solutions/ Services focus:** Building new solutions through:
  - Industry specific package solutions
  - Leveraging innovation E.g.. Ibex, ISBN
  - Focusing on Content BPO in media and Transaction BPO in Airlines/travel

- **Evaluation of Inorganic Growth opportunities:** Strengthen presence in transportation and media space
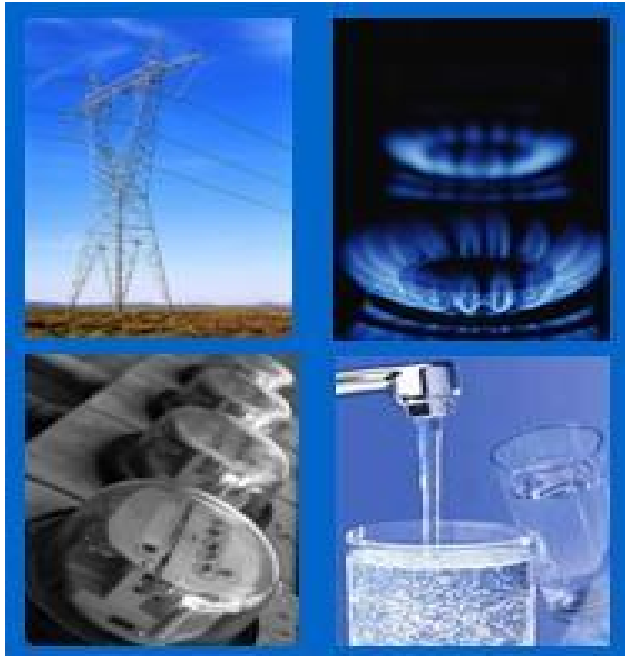
Energy & Utilities

Overview of Wipro in Energy & Utilities
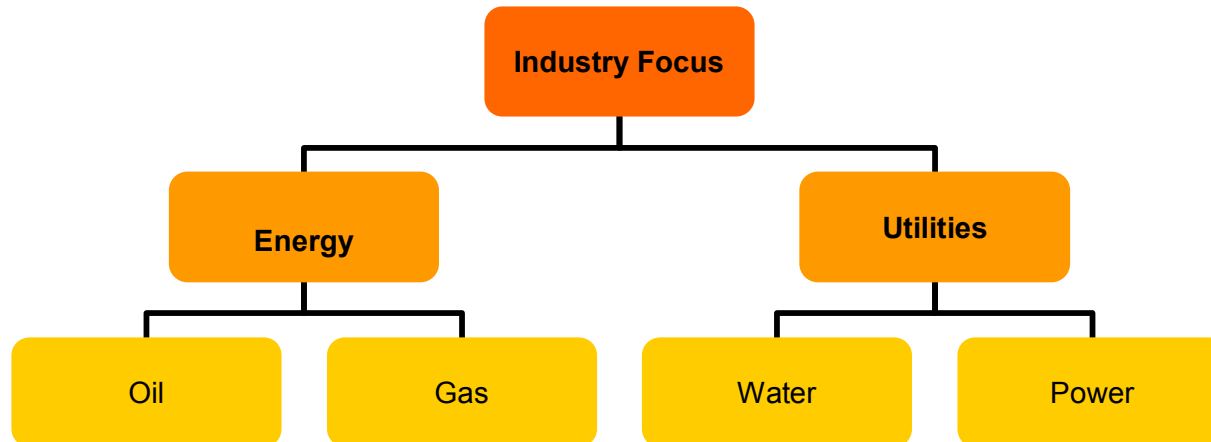
Highlights
- Largest player among the Indian IT Services Provider
- Strategic relationships with some of the best-known technology companies
- Employee base of over 3200
- Dedicated group of domain specialists
- Industry Landscape: U.S utility market opening up to outsourcing

Domain Highlights
- Focused Practise Groups to drive business growth and focus on building domain and delivery capabilities
- Centre of Excellence for specific skills and products

Delivery Highlights
- ERP, Managed services, Consulting, BPO

Going Forward: Investments in Domain & Service offerings

- Growth
  - Strengthen global presence: focus on new geographies and integration
  - Focus on new account penetration

- Build capabilities for emerging industries/ across emerging industry needs
  - Focus on Mining and Energy trading
  - Building ERP, EAM and BPO capabilities
  - Establish CoE to build competency & skill around specific products
  - Establish focused and dedicated practice groups for
    - Electricity
    - Gas
    - Water

Retail, CPG and Distribution

Wipro's Retail CPG and Distribution Practice

Industry Focus

Retail	Consumer Packaged Goods	Wholesale Distribution

Grocery Retailing	Specialty Retailing	Pharma Retailing	Food and Beverage	Home and Personal Care	Apparel and Footwear	Tobacco	Food	Non-Food
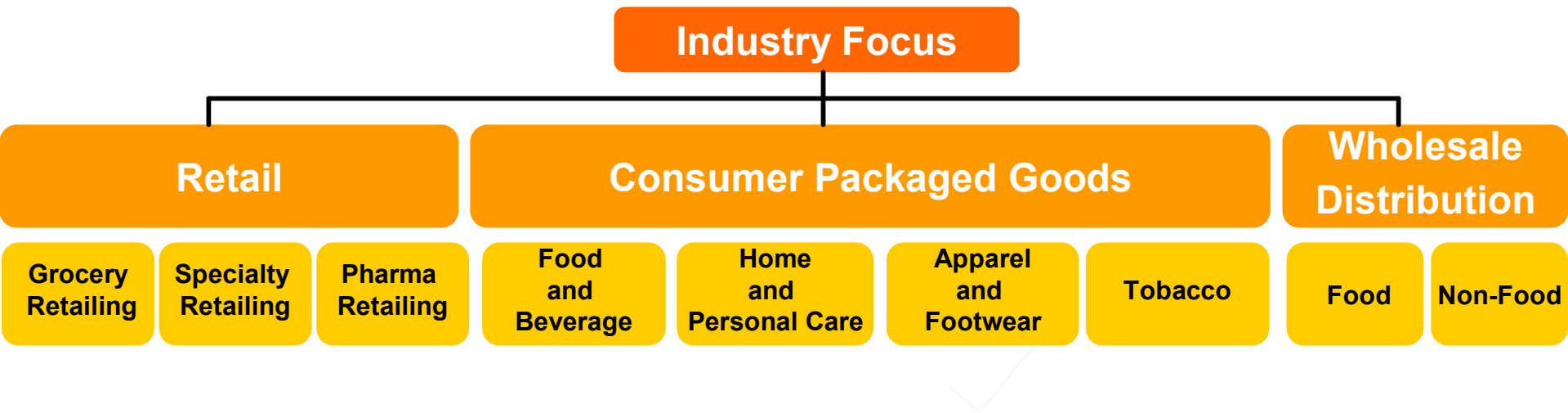
Highlights
- Acquired **enabler** SOLUTIONS FOR RETAILING in 2006
- Base of approx 3300 specialists
- Part of SAP IVN for consumer goods
- Focus on multi year multi service deals
- Deep presence in Grocery
- Strategic Partnership with the customers
- Industry landscape: Growth of emerging markets like India, China, Middle East

Domain Highlights
- Collaborative Commerce, GDS, Supply Chain, Category Management, Point of Sales, Warehouse Management systems
- Dedicated CoE for deepening domain knowledge and developing focus across industries
- Acknowledged by customers and leading analysts as a thought leader in CPG domain

Delivery Highlights
- Supply Chain, In Store, RFID, EIM, Retail Pharmacy and Merchandising and Pricing
- Point solutions offerings (kiosk based consumer care solutions / micro-site)

Going Forward: Investments in Domain & Service offerings

- Multi Channel Offering: Develop future state architecture based on point solution needs and overall strategy

- Digital Supply Chain – transforming supply chain into digital value networks by Integrating, Optimizing, Collaborating, Synchronizing, Supporting & Linking

- Real Enterprise Information Management – to improve efficiency, scalability, time to market and secure data integrity of master enterprise data. This is obtained through:
  - Cross functional business processes to manage enterprise master data
  - Logical data model for enterprise master information
  - Complete EIM solution framework
  - Data Governance framework

- Business Analytics Model: Combining domain knowledge with business intelligence and market insights

- Point of Sale CoE Labs for error free processing and reduced time to market

- RFID:
  - Store Stock management for a Leading UK apparel retailer
  - Factory/Warehouse automation for a Leading Indian apparel retailer
  - RFID data analytics and infrastructure support for a Leading American discount retailer
  - Building business case and Assessing ROI for a Leading American grocery retailer
  - Work in process tracking for a leading American high-tech maker
  - Yard management solution for a leading American Automotive maker

Healthcare & Life Sciences

Overview of Wipro in HLS

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          │   Healthcare     │   │  Pharma & Life Sciences  │
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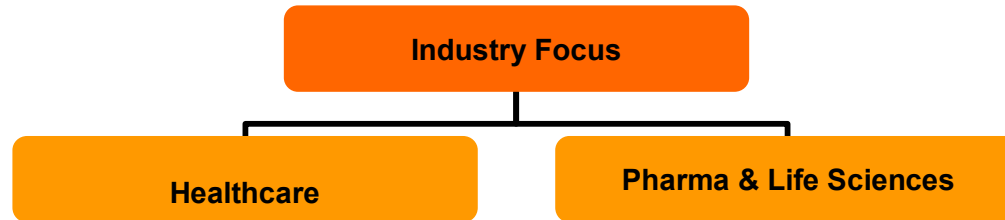
Highlights
- Resource base of approx. 1000
- Industry Landscape: Clinical trials and Disease Management emerging as growth areas going forward

Domain Highlights
- **Clinical Trial Management**
- Healthcare Application Services (HAS)
- IT/non-IT Managed Services, HCTOS
- System Integration

Delivery Highlights:
- Bio-surveillance solution for public health departments and center for disease control
- Implementation and integration of HIPAA transaction compliance system.
- Therapy management portal
- Providing voice & non voice processing

Going Forward:
- Investments in Domain & Service offerings
- Differentiating solutions – Disease management, HC Intelligence etc.
- Build domain competency by leveraging existing customer accounts & through alliances
- Broaden key customer base
- Establish strategic partnerships on GTM
- Process Excellence Initiative
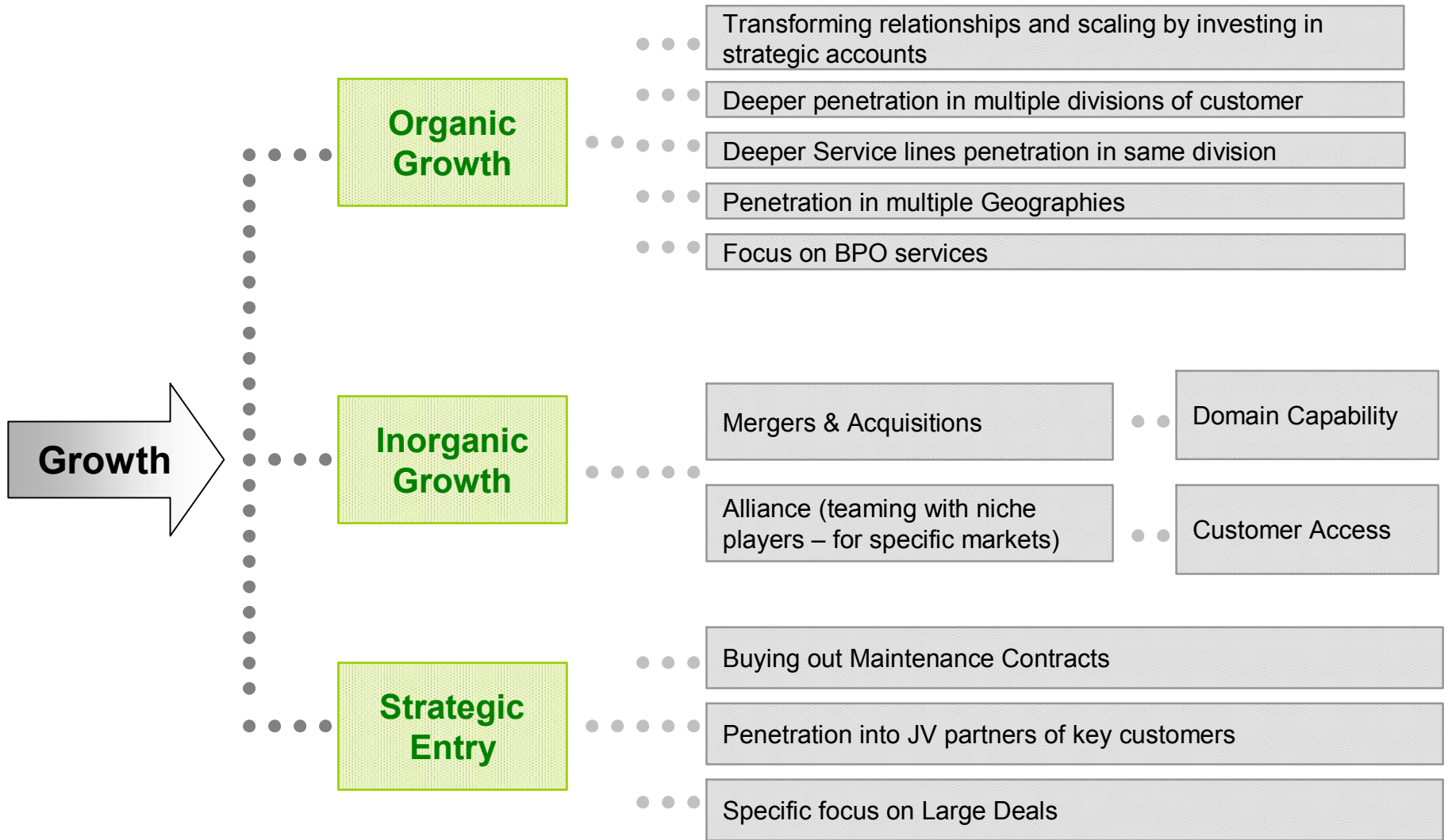
Wipro Consultancy Services

Wipro Consulting Services – Key to further growth

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                          │   Focus Areas   │
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Business Consulting:
▪Process improvement and implementation
▪Change management
▪Managing operation risk
▪Outsourcing consulting

Process consulting:
▪Business Process Improvement
▪Enterprise Application Package Selection
▪IT Strategy

Quality Consulting:
▪Point Solutions
▪SCRM Consulting
▪Metrics Consulting

Technology Consulting:
▪Enterprise Architecture Consulting
▪SOA and web services consulting

Leveraging WCS going forward:

- Leverage Consulting as a Deal Winner in Game Changing Deals
- Deploy Consulting as an "Account Penetrator"
- Project the power of consulting as a "capability integrator" across Wipro
- Orient Consulting as a "Talent Attractor"
- Drive Consulting as a Growth Business
- Integrate Transformational Consulting
- Incubate, acquire Functional Consulting
- Collaborate with Verticals in Industry Consulting
- Strengthen IT Consulting

Enterprise Solutions: Poised for Growth

Growth

Organic Growth
- Transforming relationships and scaling by investing in strategic accounts
- Deeper penetration in multiple divisions of customer
- Deeper Service lines penetration in same division
- Penetration in multiple Geographies
- Focus on BPO services

Inorganic Growth
- Mergers & Acquisitions — Domain Capability
- Alliance (teaming with niche players – for specific markets) — Customer Access

Strategic Entry
- Buying out Maintenance Contracts
- Penetration into JV partners of key customers
- Specific focus on Large Deals

Talent Management

Pratik Kumar

Executive Vice President – Human Resources

Growing talent base

Candidate applications	100%
Screen / manage	15%
Evaluation	4%
Offer	0.8%
Retain	

Track applicant
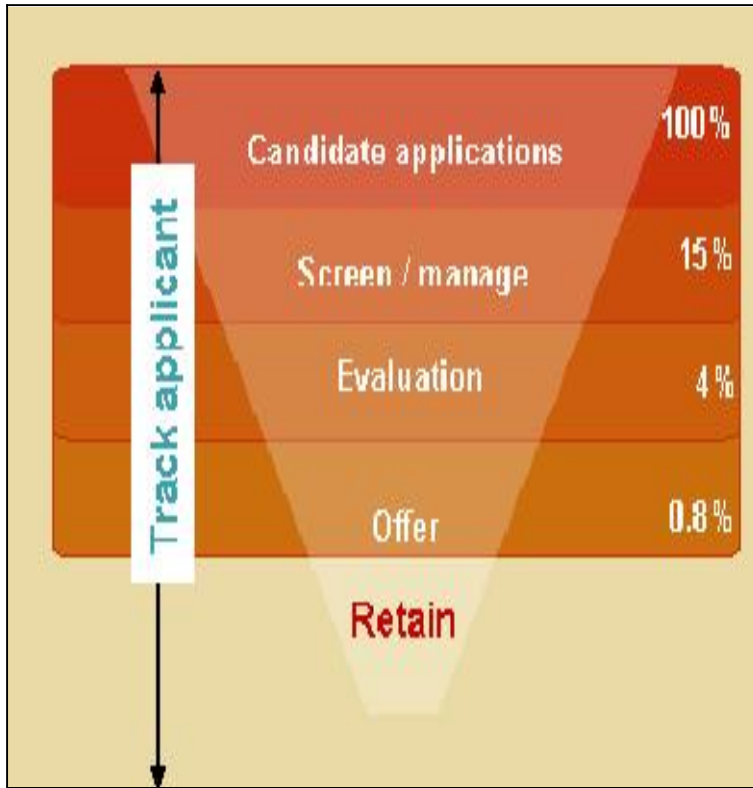
- One of the top 3 recruiters in India
- Application to Offer ratio of 0.8%
- One of the most preferred employers for the top class talent in India.
- International Campus hiring initiated across US, Europe and Asia

The growth engine :

3176	3441	5400	6700	11300	66100[*]
1996-97	1997-98	1998-99	1999-00	2002	Dec 06

The year 2006
Number of campus recruits : 6500
Number of lateral recruits: 9150
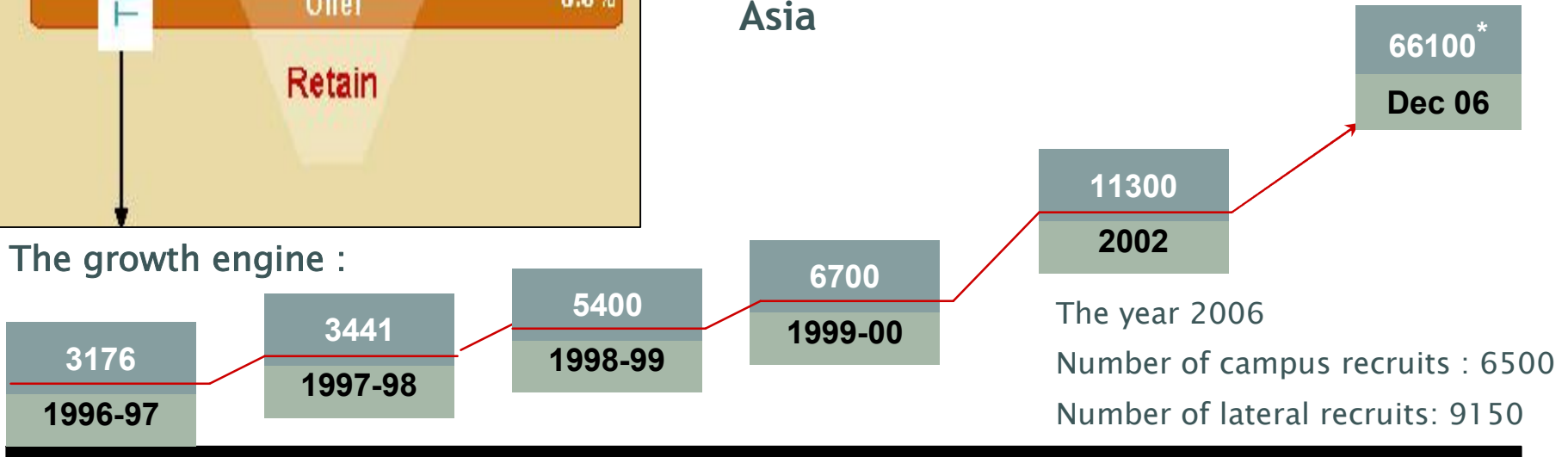
66,100 employees, ~11,000 employees onsite across Geos, 23 nationalities, Avg age of 26

Managing the Talent Pipeline

- Dynamic Recruitment Database of 600,000+ profiles (200,000+ active and 400,000+ passive candidates).
- Growing at the rate of 8000 per month
- End-2-end Automation & Integration with all sourcing partners.
- Highly automated recruitment process – 'Synergy'

SOURCE

Consultants – 15%

Database/Direct – 42%

Career Site – 09%

Employee Referrals – 18%

Job Sites – 16%

Talent Pool Availability

- India has only 7% of the total graduates with Engineering background
- India will face a shortage of 500,000 knowledge workers by 2010

***NASSCOM–McKinsey Report

Pool of talent:

Enrollment in, and number of higher education institutions in India

2005-06: 10.5 million students enrolled in 18000 HEIs

Source: University Grants Commission (UGC)

Subject-wise enrollments, 2004-05

Engineering 7%
Medicine 3%
Education 1%
Law 3%
Others 1%
Agriculture 1%
Arts, commerce and science 84%

Source: UGC
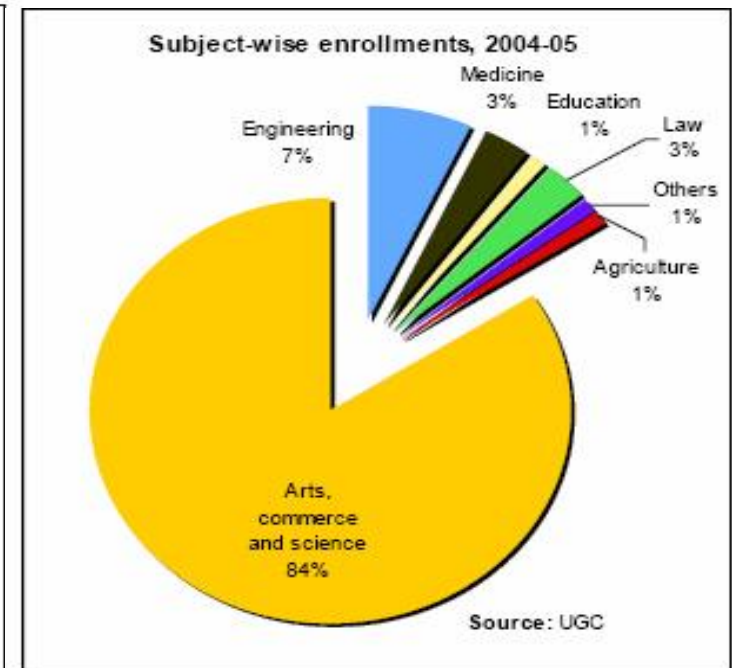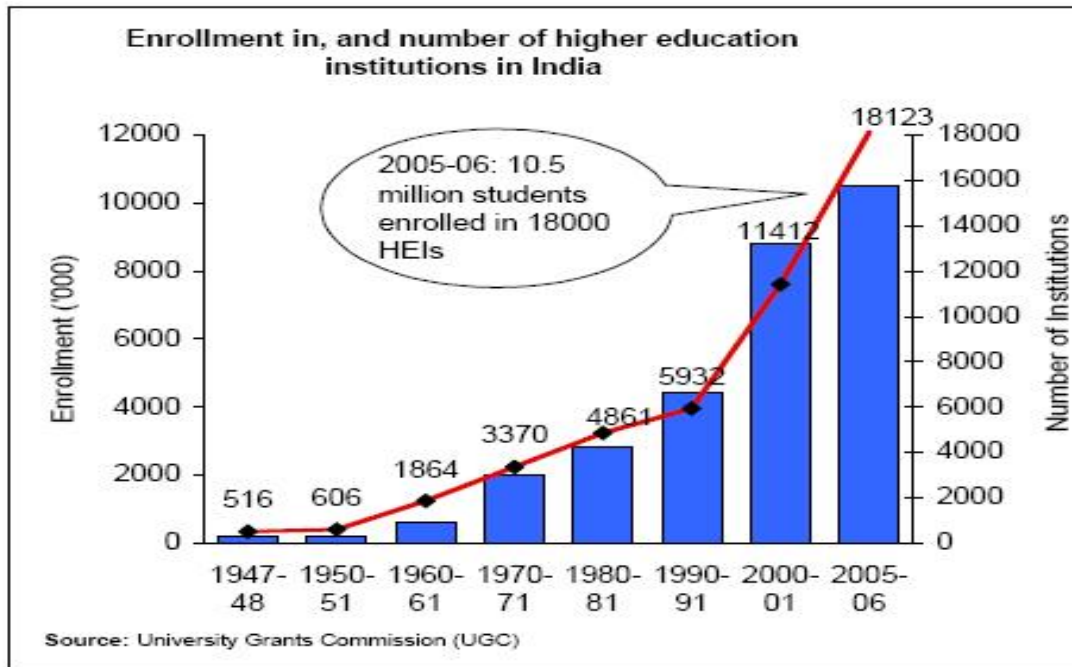
Mitigating Supply chain constrains

Non engineering graduates

• Higher intake of WASE proportion (3000-4000 in 07-08 against 1324 in 06-07)

•BSc graduates for TIS and Testing Services

• Movement from WBPO to WT in a planned way

Other Sources

• Increasing the employability of engineering graduates (i2Connect, FDP, Fast Forward)

• Geo Campus hiring

• Centers outside India with cost advantage

• Leveraging acquisitions

Hiring patterns : overall composition trend

Hiring Trend

	2003-04	2004-05	2005-06	2006-07*
Laterals	5361	5929	8542	9148
Engg Campus	2501	3160	4742	5181
Non Engg Campus	270	708	680	1324
All Campuses	2771	3868	5422	6505

Legend: Laterals, Engg Campus, Non Engg Campus, All Campuses

Bulge Mix Trend: Percentage of 0-3 years

Mar'2004 - 05	Mar'2005 - 06	Dec 2006 - 07
37%	42%	46%
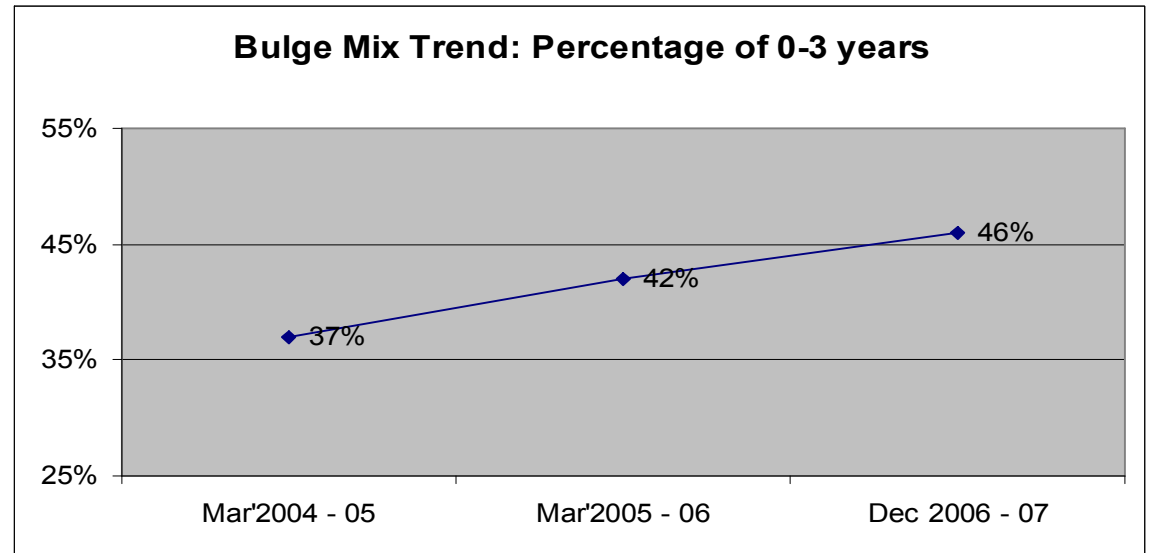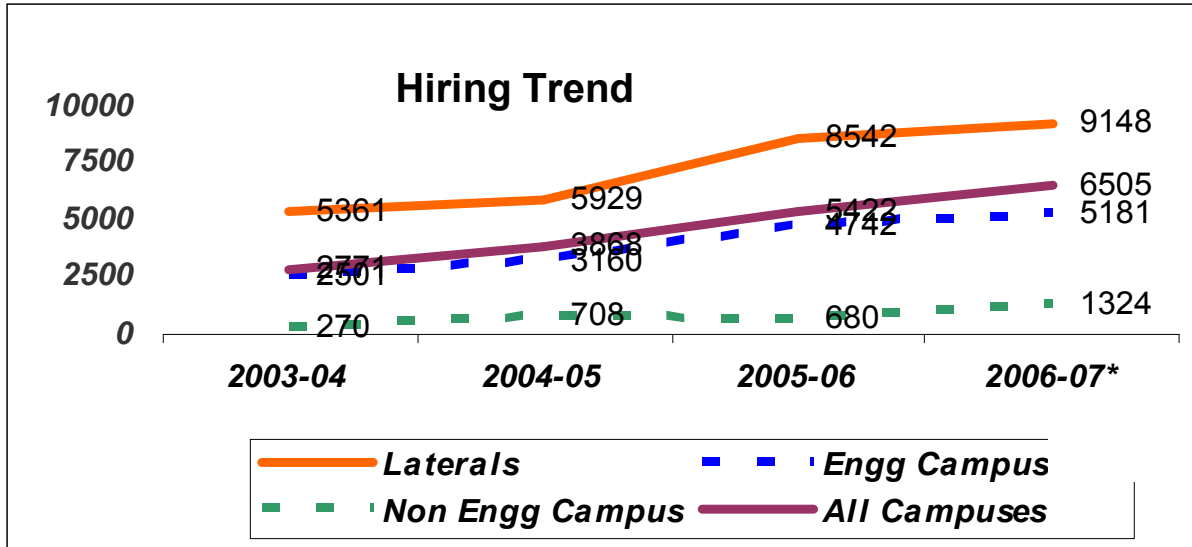
Scalability Enablers – Systems and Processes

Shared Services
1.13 Million HR
transactions
processed last yr
Processes
1127 employee
queries per day
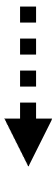
Services 66,000
Employees across
The globe

Efficiency in
Recruitment
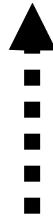
**Web-Based
Resume
Database
Synergy & Offer
Generation
System**

**Employee
Self Help
Portal
Holds 98
applications**

One stop shop
For all Employee
Needs

Making Processes
Productive

**579 No. Of Lean
Projects
520 Six Sigma
Projects in 06-
07 YTD**

Sculpting World Class " Wipro Leaders"

EARLY OPPORTUNITIES

360 degree Feedback (WLQ)

TRAINING

Cross Functional Exposure

WINGS WITHIN

Succession Planning

DALE CARNEGIE® TRAINING

20 plus CXOs
75 plus Vice Presidents
Groomed in Wipro

Winner of Dale Carnegie Leadership Award 2007

Leadership Pipeline

✓ 5000 Plus managers With Wipro for 5 – 10 yrs
✓ 600 Plus managers with Wipro for 10 – 25 yrs

Learning and Development

ASTD Award Winner for 3 consecutive Years

Enabling Talent Development

5% Billable time spent on training

**102 Full Time Faculty
50% hold Masters Degree
10 PhDs
5000 Learners per day**

20,000 E Learners with access to 2200 titles of Learning

In the last 9 months 3800 person days of behavioral training across US, Europe Japan and China.

Training in 2005-06 : 3,80,000 person days..30% thru Tech Enabled Learning

Satellite Based Management Program with IIMC Covering 200 Managers

Transforming Talent

Strategic Leadership Programs

Field Capability Enhancement: Sales School

Stanford Advanced Program Management

Lifecycle Leadership programs

PM Academy: Managing Talent Supply

Consulting Certifications

In the last three years , 5000 plus employees have gone thru Lifecycle Leadership Training in our Corporate Leadership Centre @ Bangalore

Enabling Global Process Leadership

The Wipro Q-cult Journey

Sambuddha Deb

Chief Quality Officer

Customers view of quality
AD engagements

WIPRO
Applying Thought
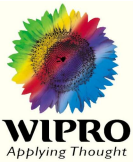
Field Error Rate (Defects / Kloc)

Time

Lower maintenance cost
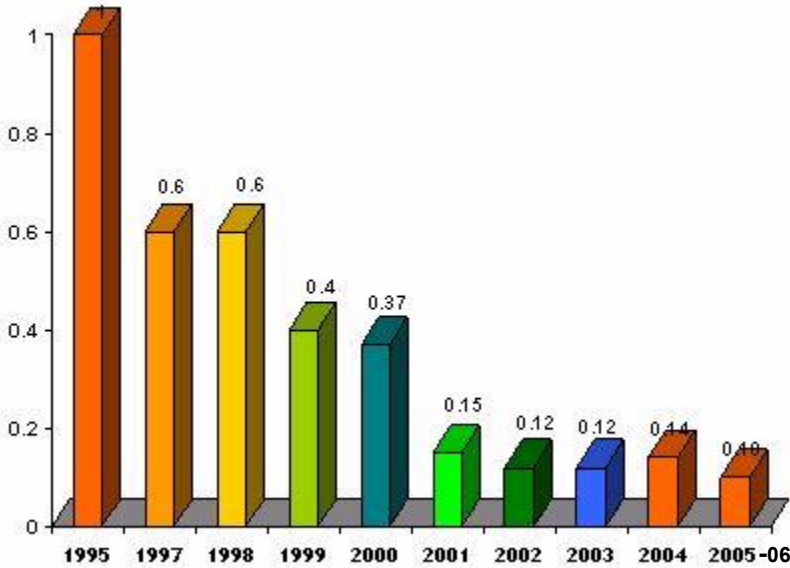
Defects

Schedule Adherence

Lower schedule overrun cost
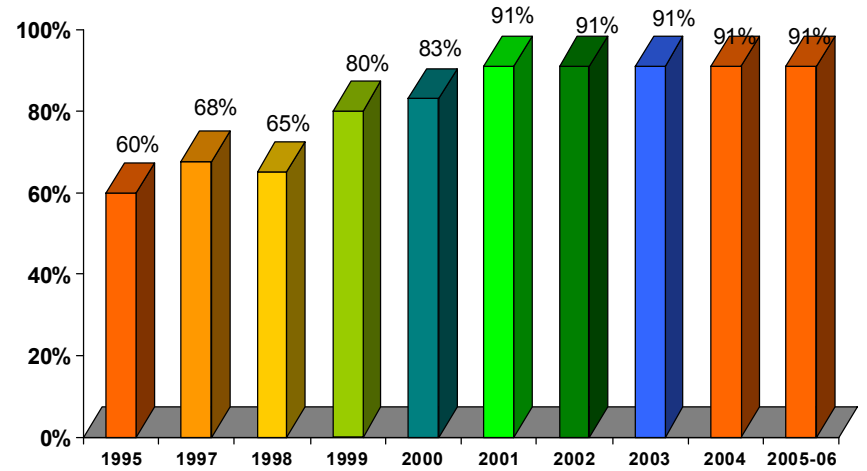
Productivity

Lower development cost

Productivity
Indexed to 1995 value
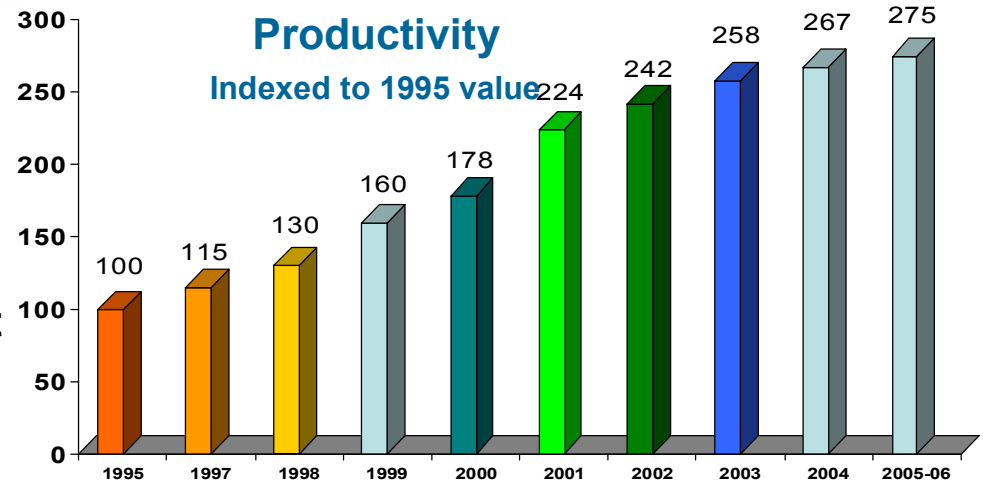
Quality processes that ensure lower TCO

WIPRO
Applying Thought
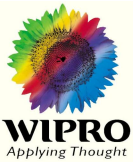
Regular development process

Development costs	Schedule overrun	Maintenance costs

0   100
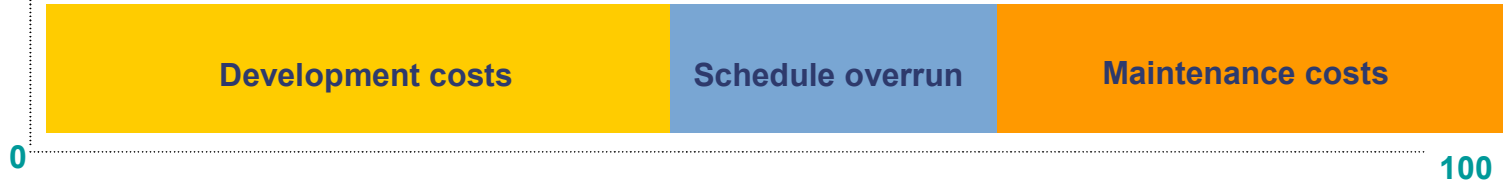
Wipro development process -OTIS

▪ Rework effort reduced from 14% to 7%	81% of errors found in CUT* phase	Maintenance costs

Lower TCO:30–40%

0   100

Greater productivity

Zero schedule overrun

*CUT- Coding & Unit Testing
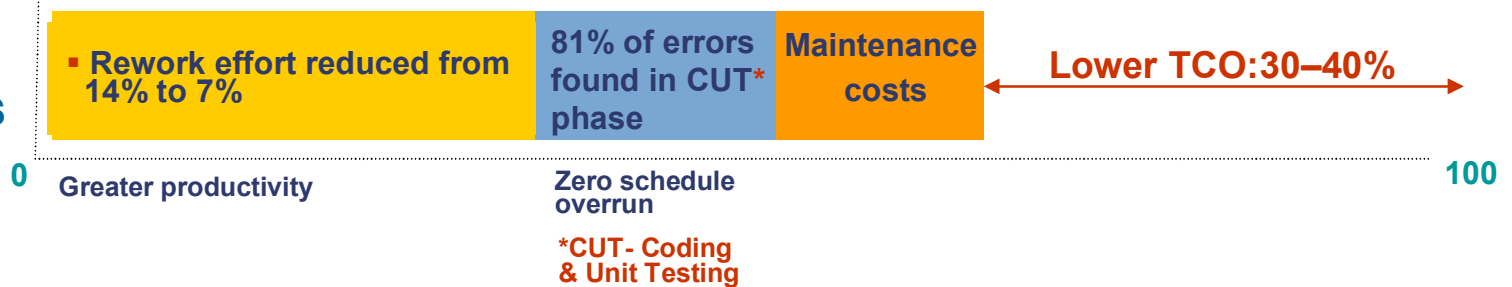
Higher productivity	**Schedule adherence**	**Post delivery defect rate**
37 % higher productivity than industry ratio*	91 % projects completed on time, industry average of 76%*	120 defects/MLOC
Lower costs	**On time delivery**	55% lower than industry*
		Assured quality

* Worldwide IT Benchmark report 2004 – META Group and Bangalore SPIN

Pioneering Quality Standards
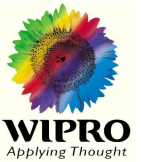
- 15,000+ **employees** trained in Six Sigma methodologies
- **204 certified black belts** and **10 master black belts**
- Over **700 PMI** certified consultants, highest in India
- **Lean techniques applied to software**
- Pioneers among Tier 1 Indian companies in establishing **Agile** capability

Among the first few organizations in the world, to be globally certified at Level 5 of SEI's CMMI V 1.2 model released in Sep 06
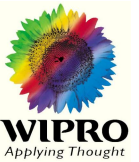
1997

On the road to continuous improvement

1998

World's fist software services company to be assessed at SEI CMM Level 5

2000

Strengthening upstream processes

2001

The best in people processes World's first PCMM Level 5 company

Industry-specific quality standards

2002

World's first at Level 5 of CMMI ver 1.1

BS 7799

2003

Infused Statistical Rigor into Management

Software process achievement Award from IEEE USA

Orthogonal Arrays

DMAIC/ DSSS+ frameworks launched

2005

Studied Toyota Manufacturing System)

Lean Pilots

Agile

2006

CMMI 1.2 Global Assessment at Level 5

Domain specific standards

· World's first Automotive SPICE

· AS9100

· SW68

| ISO 9000 | CMM Level – 3 | CMM Level – 5 | 6 Sigma Methodologies for software | TL– 9000 PCMM Level 5 | CMMI ISO 27001 | SPA Award Statistical Rigor | Lean | CMMI 1.2 Level 5 |

Integrating six sigma in software development

WIPRO
Applying Thought

Software development life cycle


```
Pre-project          Requirement                                    Low level      →    Implementation
phase            →   study           →    High level      →         design
&                    &                    design
project initiation   project plan                           ↓                                ↓
                                                          Test        →     Test case    →    System     →    Release
                                                          design            development       testing         &
                                                                                                              acceptance
                                                                                                              testing
```
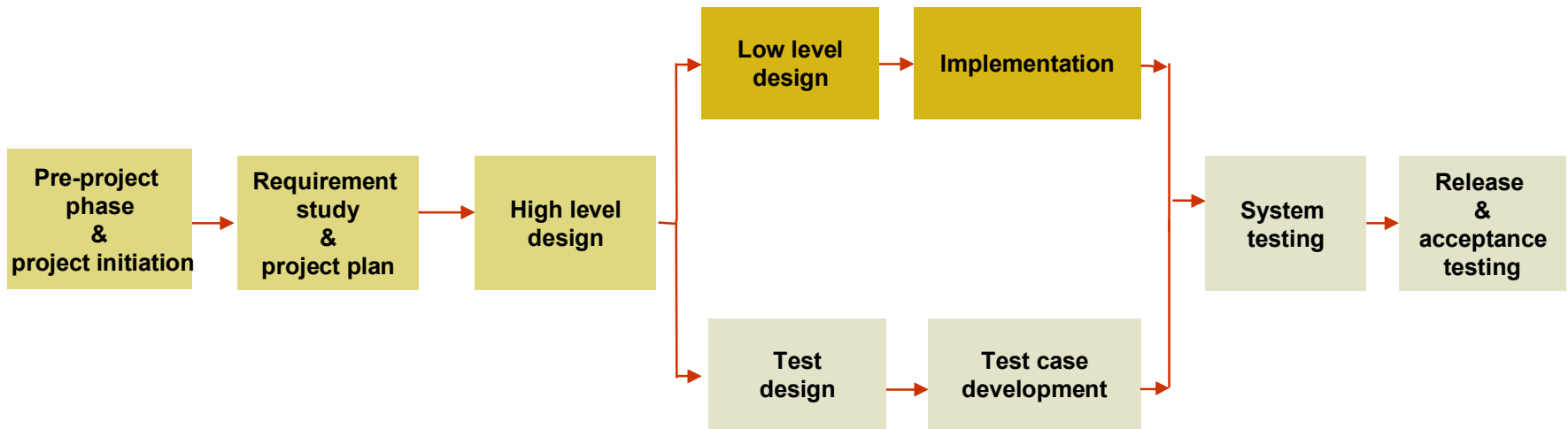
Customer interaction	Rigorous design & implementation

| **T O O L S** | ▪ VOC ▪ Kano model ▪ QFD ▪ Benchmarking | ▪ Concept generation ▪ Pugh matrix ▪ FMEA | ▪ Design FMEA ▪ Correlation ▪ Regression ▪ Hypothesis testing | ▪ DOE ▪ Orthogonal arrays |

Rigorous in-process metrics and cause analysis

OA Test result summary

Business Function	Factors	Levels	Total runs	Actual runs by OA tool
Hierarchy Library – Process	3	6, 4, 2	48	28
Hierarchy Library – Activity	3	6,4, 2	48	28
Hierarchy Library – Risk	3	9,4,4	144	43
Hierarchy Library – Control	3	9,4,5	180	45
Process Hierarchy - Process	3	4,2,4	32	23
Process Hierarchy - Activity	3	4,2,4	32	23
Process Hierarchy - Risk	3	4,2,4	32	23
Process Hierarchy - Control	3	4,2,4	32	23

236 test runs against 548 – more than 50% savings in testing

Context

- Omnipresence of CMMI & 6S
- Customer preference of risk sharing contracts
- Shift from technical to business metrics
- Need to improve/sustain margins

Lean in 'Wipro'

- Focuses on **_cycle time & throughput_** improvement without compromising quality
- Key principles:
  - Pull – Deliver customer value earlier
  - Flow – Wait states reductions, reducing handoffs, quick feedback
  - In station Quality – to improve defect resolutions upstream
  - 500 projects till date

Applying 'Lean' to move up the next S-Curve in Ops Excellence

| Req | Design | Coding | Testing |

- Concurrent Engineering
- Early Feedback
- Pull

- Load Balancing (TAKT)
- In station Quality
- Continuous Integration
- Standardization
- Automation
- Test Setup Reduction
- Test optimization

Harvard Case Study on Lean Application in Software
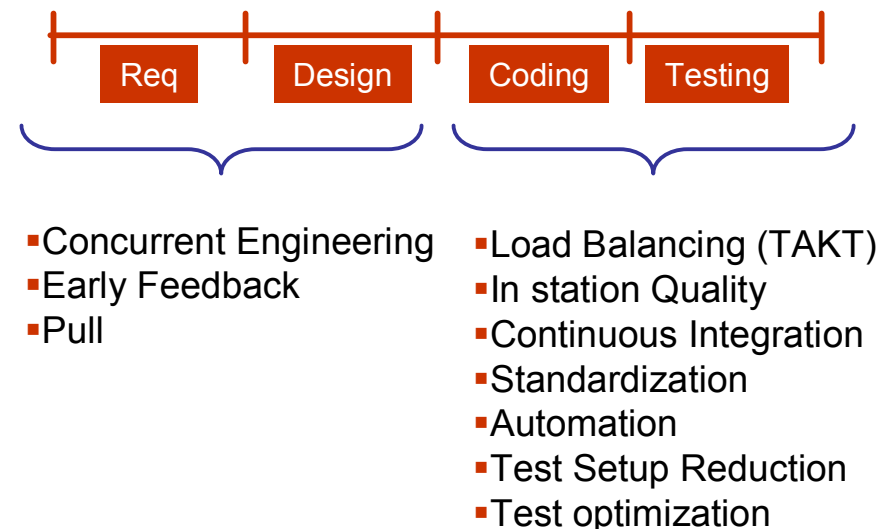
Platform migration: Legacy to J2EE

- **New Technology**
- **High application complexity, long review cycles, wait times**
- **Project already over run during High Level Design**

Large Banking Organization

Lean Tenets

- **Value Stream**
- **Information Spaghetti**
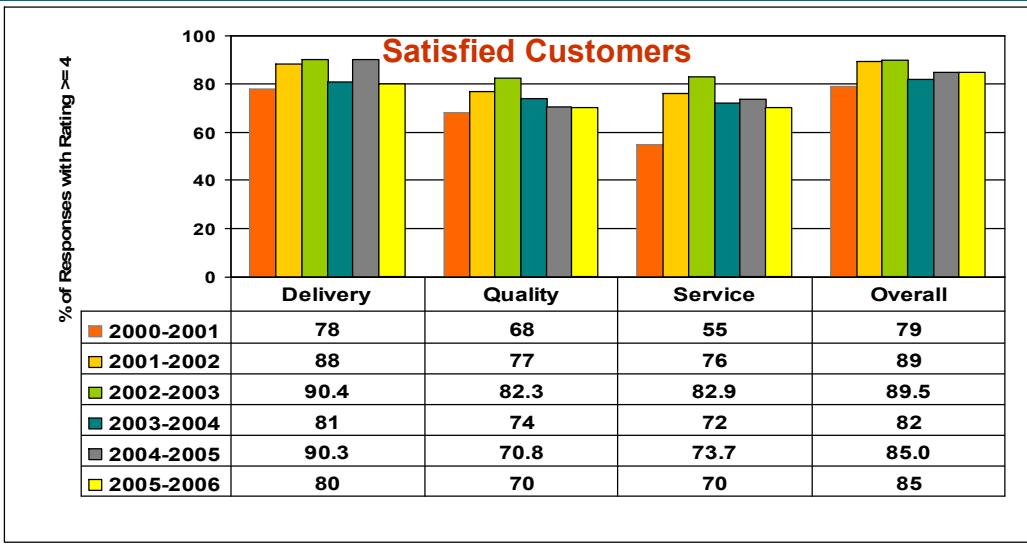- **Concurrent Engineering**
- **Resource Balancing**
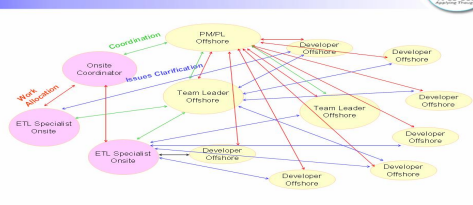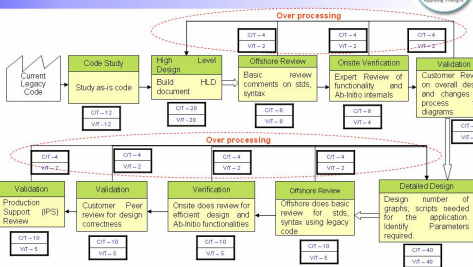
Effort Reduction:

The project was in 15% effort over run

Lean application helped in getting an underrun
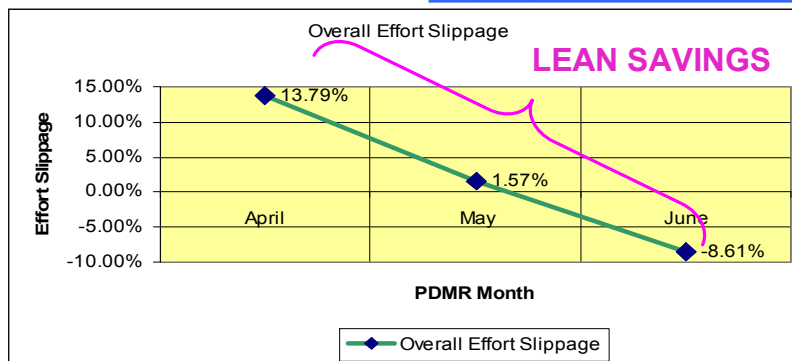
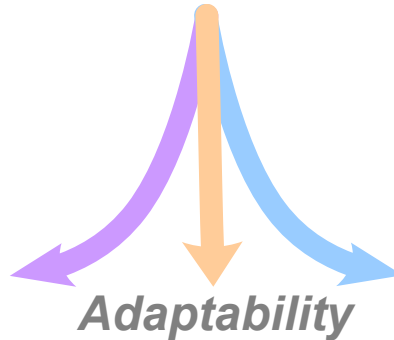# Customer satisfaction – We are not the only ones saying it

WIPRO
Applying Thought

Average Ratings

	Delivery	Quality	Service	Overall
2000-2001	3.95	3.86	3.91	3.85
2001-2002	4.27	4.13	4.20	4.27
2002-2003	4.35	4.21	4.38	4.31
2003-2004	4.05	3.88	3.88	4.10
2004-2005	4.16	3.88	3.97	4.18
2005-2006	4.09	3.88	3.91	4.18

Satisfied Customers

	Delivery	Quality	Service	Overall
2000-2001	78	68	55	79
2001-2002	88	77	76	89
2002-2003	90.4	82.3	82.9	89.5
2003-2004	81	74	72	82
2004-2005	90.3	70.8	73.7	85.0
2005-2006	80	70	70	85

Loyalty Scores

Choose Wipro: 4.10, 4.10, 4.00
Choose Competition: 3.11, 3.11, 3.12

2003-04 2004-05 2005-06

Gap between Wipro and Competition sustains

Future - The Wipro Way

The Wipro Way

Agility *Alignment*

Adaptability

•Unified solutions
•Relationship mgmt
•After sales support
•Partnering for success

Customer Centricity

Process Excellence

•Delivery engine
•Experimentation culture
•KM
•Lean
•6σ

Customer

Personal Change

People Management

•Customer focus
•Experimentation
•Skill upgrade

•Right skill mix
•High retention
•High morale
•PCMM

Wipro BPO
Action Replay–Fast Forward

T K Kurien

President, Wipro BPO

BPO: Where is the market headed?

US$ billion - Offshore

Horizontals (1.17)

Others (.78)

Pharma (0.26)

Telecom (0.52)

Manufacturing (0.65)

Travel and Hospitality (0.26)

Banking (2.08)

Insurance (1.04)

2006: 6.7

2010: -25

2010 value	Circle
4.5	38
2.5	33
0.9	35
1.7	34
2.0	32
1.3	45
7.6	37
4.8	43
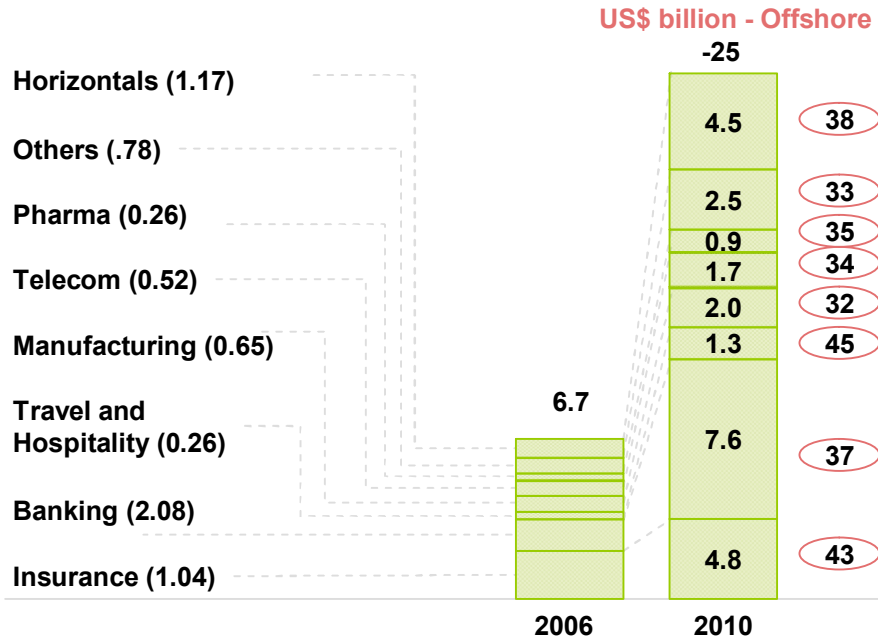
Trends

- End to End/Transformational and Platform based services are expected to constitute 60% of the pie by 2010 (up from the current 29%)
- Customers demand a Global delivery model with a "follow the sun " approach.
- BFSI and Telecom followed by manufacturing and travel are projected to be the growth drivers for the future.
- F&A market projections upto 2010 has been revised upwards by 100% from the previous year .
- Outcome based pricing will become a key reality

Market segment by Service type 2006

Platform 9%

Boutique shops 1%

Transformational services 20%

Vanilla offshoring 70%
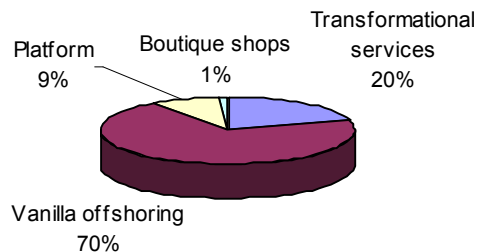
Market Realities

Market is sharply consolidating in 4 specific segments.

- Global Providers with business transformation capabilities who go after Bespoke solutions
- Industry platform players who combine both platform as well as processing capabilities
- Offshore shops with focus around volume
- Boutique players

BPO Growth will be driven Increasingly by the need for Process efficiency and Re-engineering capabilities. Transaction based model will become reality.

BPO: Strategic Implications

Strategic Implication	Strategic Implication
Go to Market	▪ Integrated Solution Capability –Customer sees a solution not a wedge ▪ Current WT Sales force became the GTM arm. Wipro BPO Sales force restructured to provide Process Solutions
Competencies & Delivery	▪ Product approach to Industry Solutions -Creating Depth and Scale in few rather than many ▪ SLA linked to final out put move from FTE based numbers to outcome based events ▪ Follow the Sun Approach to Deliver services and building a globally scalable delivery model
Globalization of Delivery	▪ Romania is the first Global Site. Baby steps taken to Globalizing not only the Romanian workforce but also the Wipro BPO workforce ▪ Plan to have one more site by March 08 in the US time zone

Focused servicing of value chain with integrated solutions, scalable operations and Global footprint to drive growth
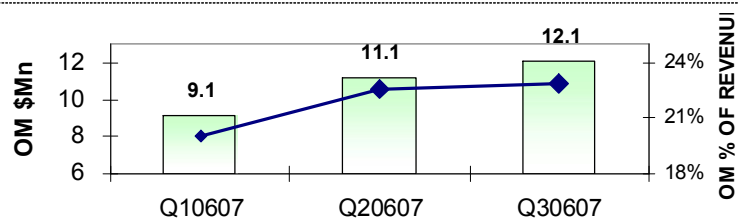
Financial Snapshot

Revenue
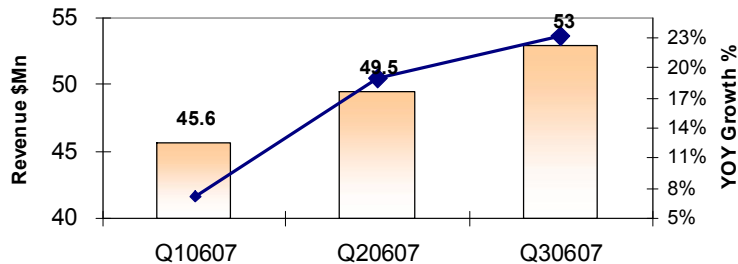
Revenue

- Revenue back on growth trajectory.
- YOY revenue growth increased from 7% in Q1 to 19% in Q2 and 23% in Q3.
- Change in mix of business from several small processes to lesser number of processes but more strategic.
- Pipeline indicates a future growth in non voice business.

Operating Margin

Operating Margin

- Quality initiatives, productivity improvement and better utilisation of resources leading to consistent profit improvement.
- YTD Q3' 06 - 07 margins 200% of YTD Q3 '05-06 margins.
- Operating margin as a percentage of revenue stabilized at healthy number of 23%.

Revenue back on growth trajectory while Operating margin stabilizing at healthy numbers after significant/consistent growth

Thank you