



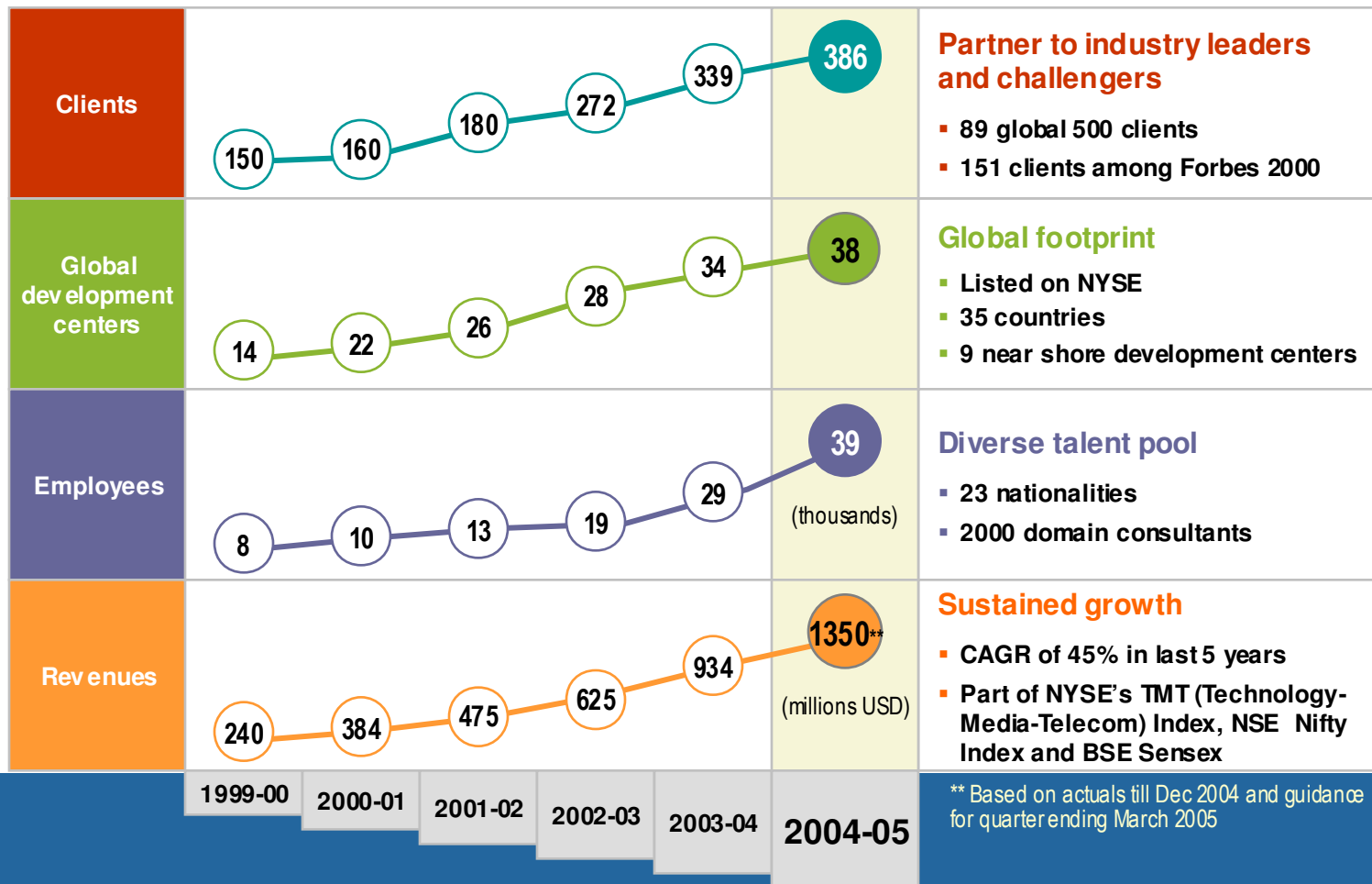
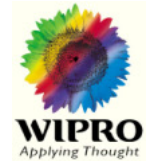
**R·O·I** RETURN  
ON IDEAS

Corporate Presentation for  
Investors

February 2005

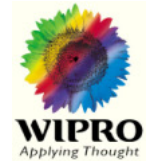
This presentation may contain certain “forward looking” statements, which involve a number of risks, uncertainties and other factors that could cause actual results to differ materially from those that may be projected by these forward looking statements. These uncertainties have been detailed in the reports filed by Wipro with the Securities and Exchange Commission and these filings are available at [www.sec.gov](http://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.

# Wipro's Global IT business – An overview



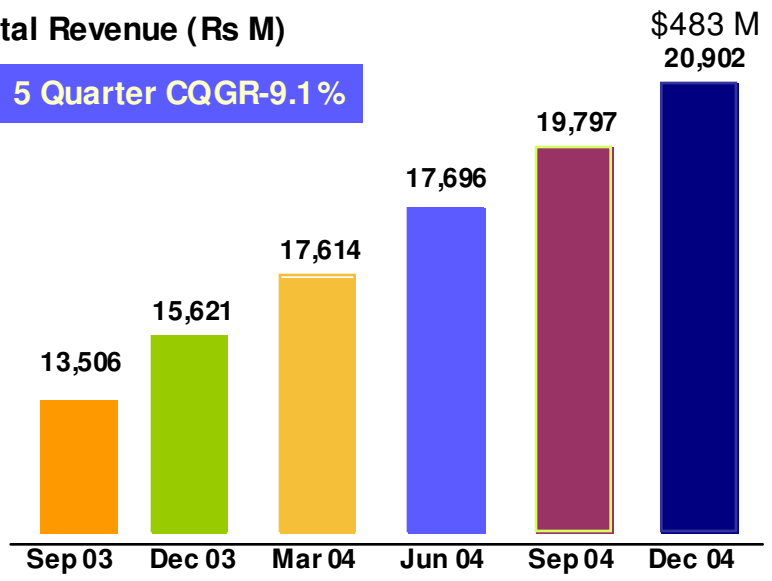
\*Ranked leader by IDC, Meta Group, Forrester – 2004  
 Awarded the highest rating in Stakeholder Value Creation & Corporate Governance by ICRA, an Associate of Moody's Investor Services

# Our Recent Performances



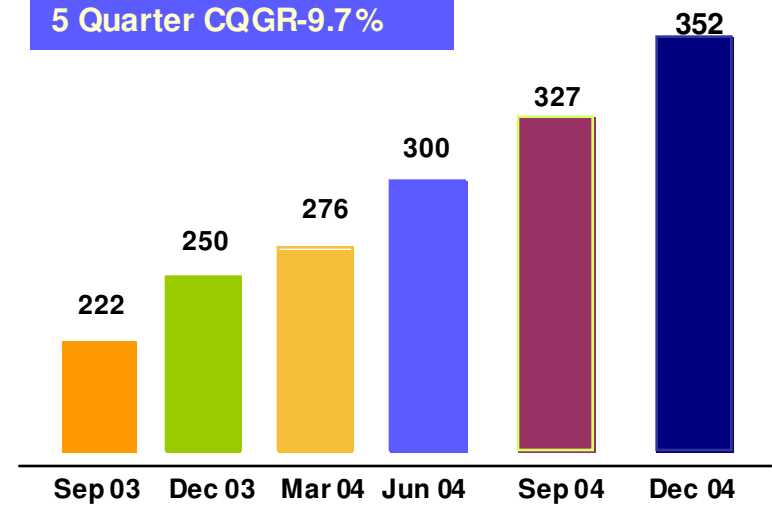
## Total Revenue (Rs M)

5 Quarter CQGR-9.1%



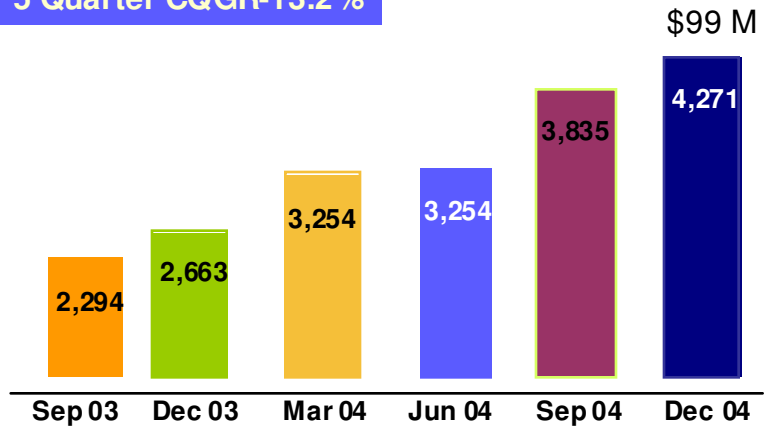
## Global IT Services Revenue (\$ M)

5 Quarter CQGR-9.7%



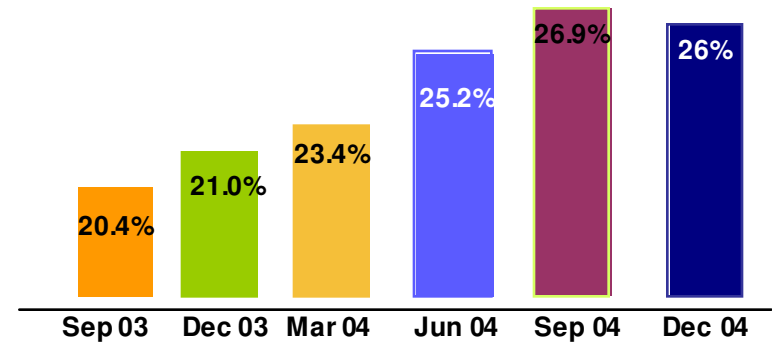
## Net Income (Rs M)

5 Quarter CQGR-13.2%



## Global IT Services Operating Margin \*

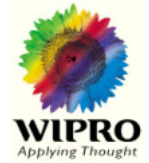
Expansion of 560 basis points over last 5 Quarters



CQGR – Compounded Quarterly Growth Rate

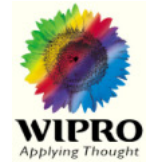
\* Operating Margin = Earnings before Interest & Taxes/ Revenue

## Highlights of the Quarter ended December 31, 2004

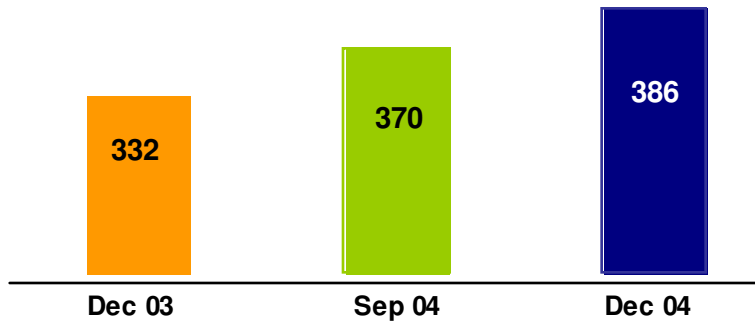


- **Net Income growth of 60%, Global IT Revenue at \$352M ahead of guidance of \$347M**
- **Broad based growth across key Verticals; Financial Services, Telecom and Manufacturing leading the pack with double digit sequential growth**
- **Our differentiated services - Technology Infrastructure Services and Testing Services sustained momentum, posting 34%seq (80%YOY) & 15%seq (79%YOY) growth respectively**
- **Europe geography grew 10%seq (66%YOY); fourth consecutive quarter of double digit sequential growth**
- **Over 30% of our top 50 customers grew double digit, indicating a broad based growth in demand**
- **Combination of customer mix, service mix and continued operational improvements led to a 1% sequential growth in price realization for Onsite as well as Offshore projects**
- **26 new customers added during the quarter including 4 Fortune 1000 / Global 500 customers**
- **Attrition came down to 12% in IT Services, a sharp decrease from previous quarters**

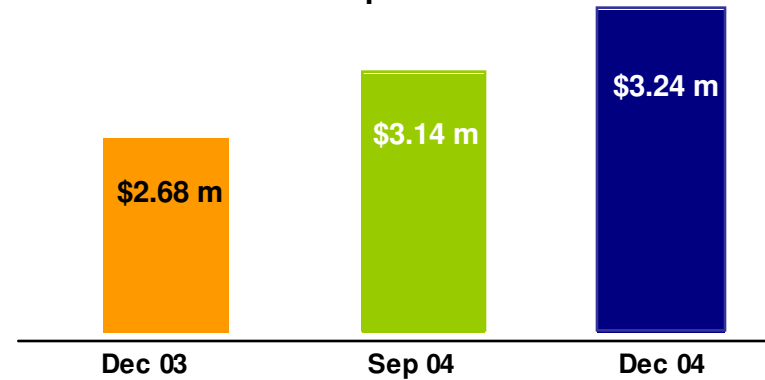
# Platform for Sustainable Growth



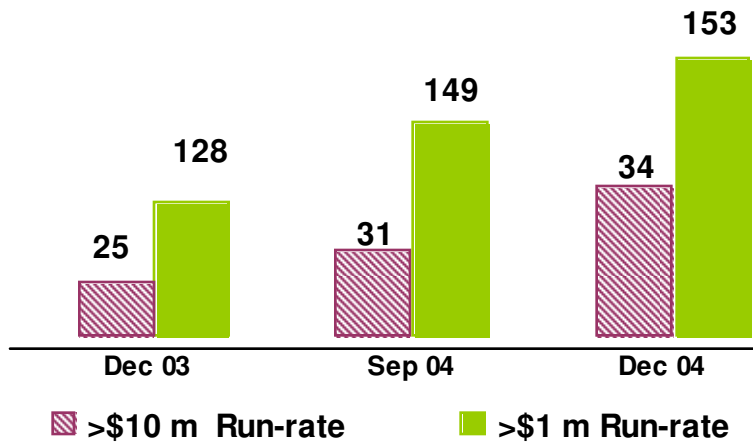
No. of Active Customers



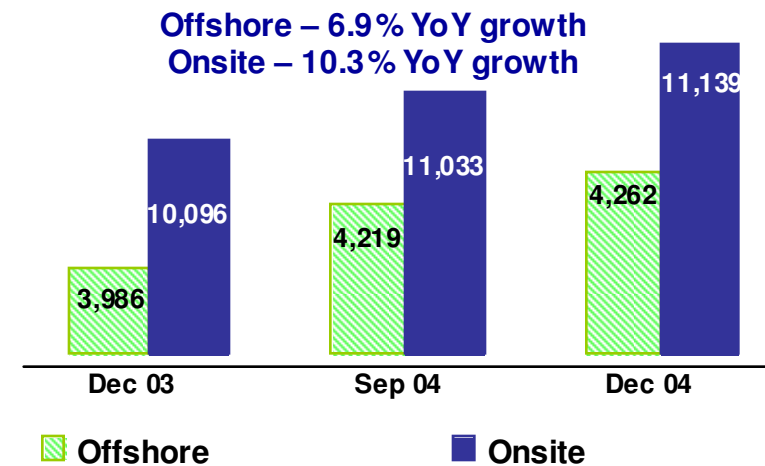
Annualized Revenue per Customer



Million dollar Revenue Customers



Price Realization

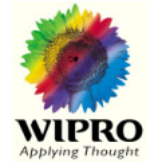


In USD per person per month

Data for quarter ended respective months  
Metrics excluding BPO

Revenues from Fortune customers – 69% for quarter ended Dec 2004

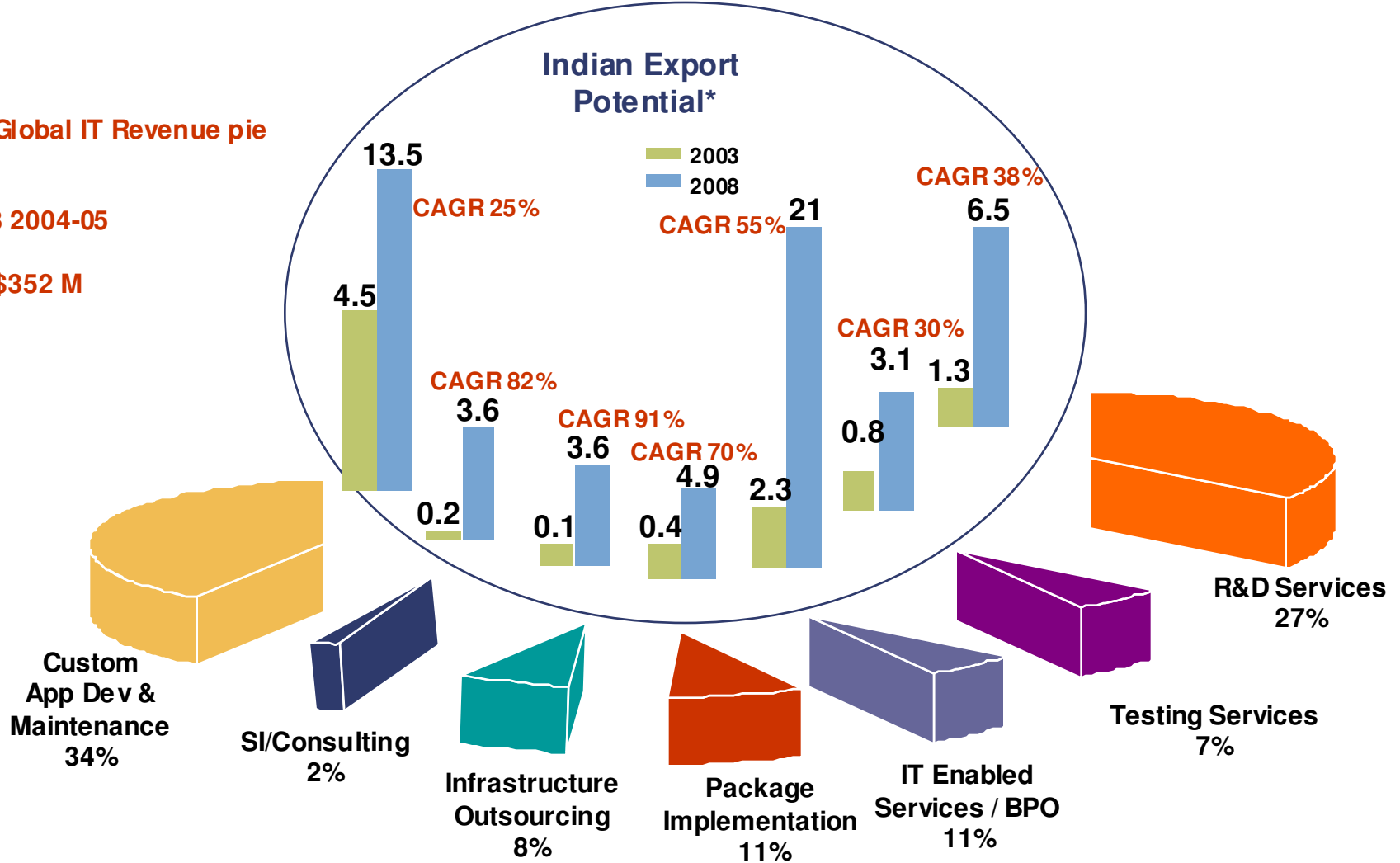
# Future Belongs to Differentiated & Broad Range of Services



Wipro's Global IT Revenue pie

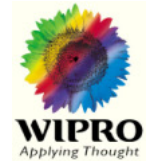
Q3 2004-05

\$352 M



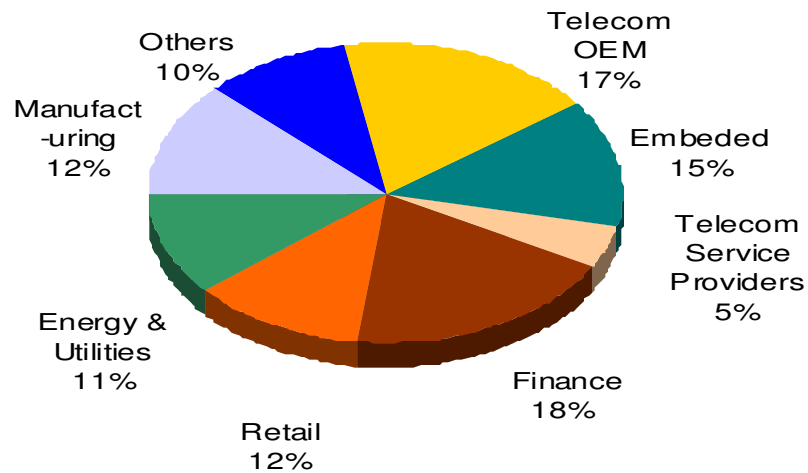
- Source: McKinsey-NASSCOM Study, NASSCOM, Company estimate (all figures in USD B)
- Percentages below the pie chart represent Wipro's distribution of Revenues for the quarter ended Dec 2004

# Strength of Business Model reflected in 3-Dimensional Growth

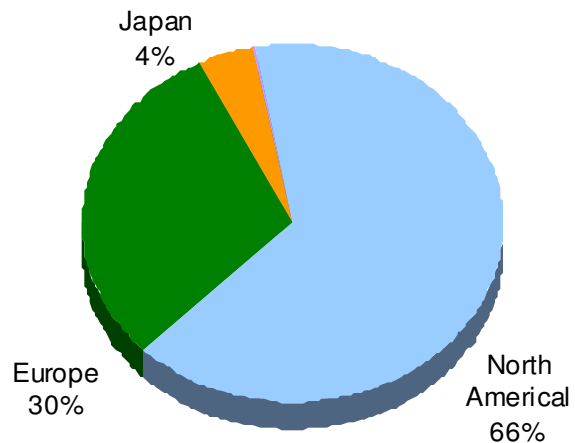


## Revenue Mix

### Vertical distribution



### Geographical distribution



## Growth rates

Service Lines	YOY Growth rates
Technology Infrastructure Services	80%
Package Implementation	43%
ADM	35%
Business Process Outsourcing	48%
Testing & Interops	79%

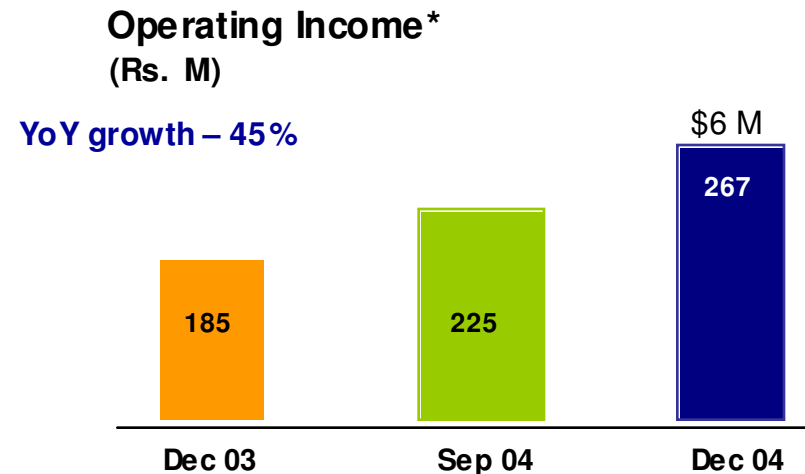
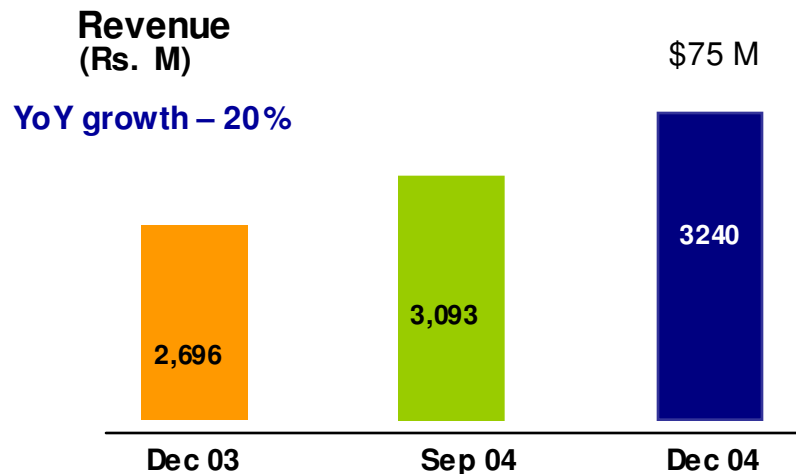
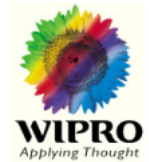
Business Lines	YOY Growth Rates
R&D Services	41%
Financial Services	52%
Enterprise Solutions	35%

Geographies	YOY Growth Rates
North America	31%
Europe	66%
Japan	34%

For Quarter ended Dec 2004 for IT Services only



# India, Middle East & Asia Pac IT Business



\* Operating Income = Earnings before Interest & Taxes

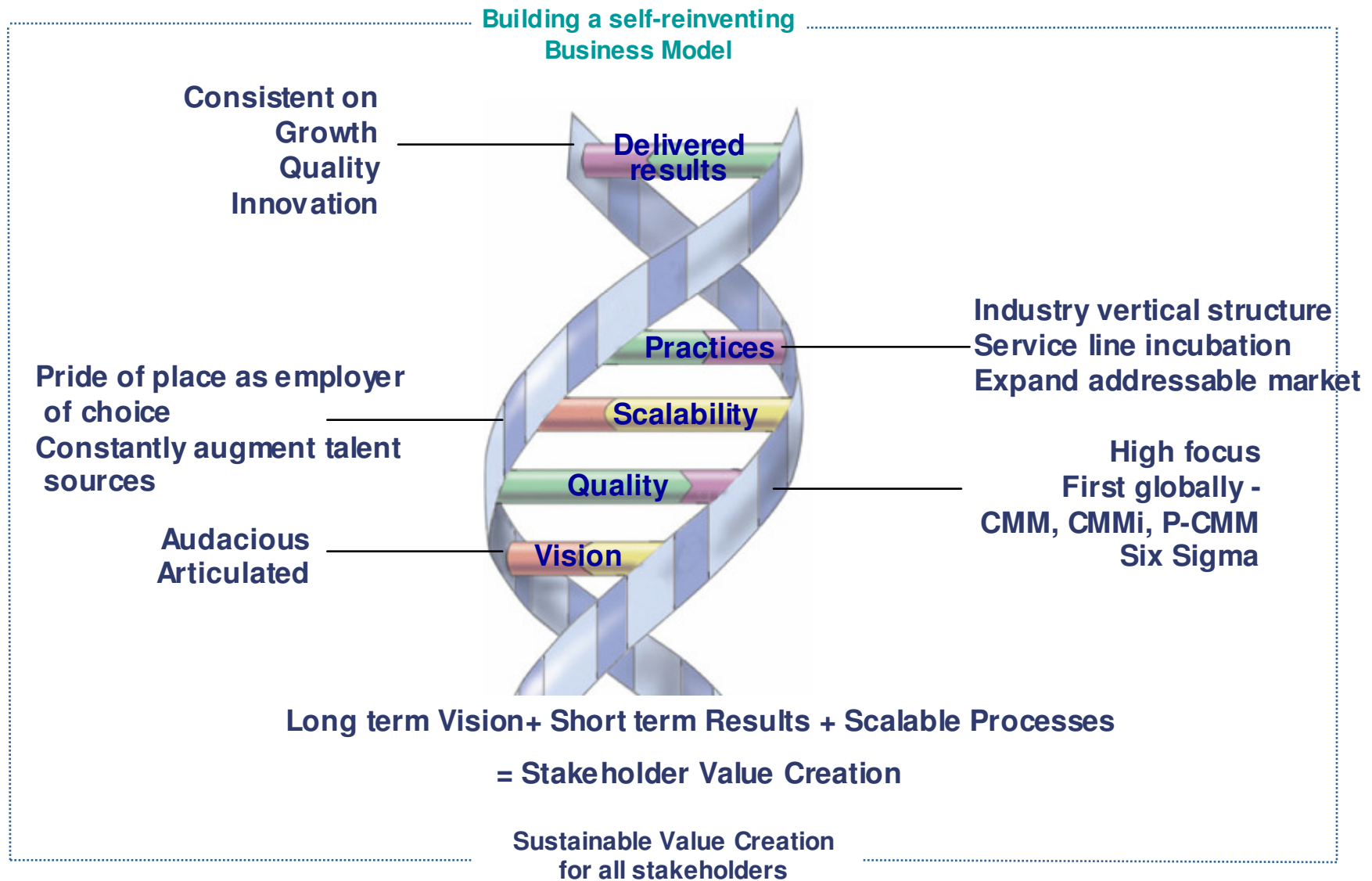
- Sustained leadership position in India as reflected by customer confidence
  - Leading Systems and Network integrator
  - Successful Total Outsourcing deals
  - Multiple end-to-end ERP rollouts
- Incubator for Global IT Services business:
  - R&D Services – 1992
  - Technology Infrastructure Services - 1998
  - Telecom Service Providers practice – 2000
  - Infrastructure Security – 2001
- Significant progress in penetrating Middle East markets

“For the quarter ending March 2005, we expect our Revenue from our Global IT Services business to be approximately \$370 million.”

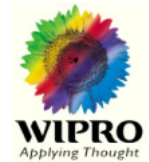
### Underlying factors:

- Sustained volume growth in IT Services
- Pricing to move in a narrow range after significant up-tick in previous quarters
- Leveraging Utilization & Onsite-Offshore mix for optimal efficiency
- Increasing campus mix to optimize cost levels
- Rupee appreciation would impact Operating Margins

# Our DNA

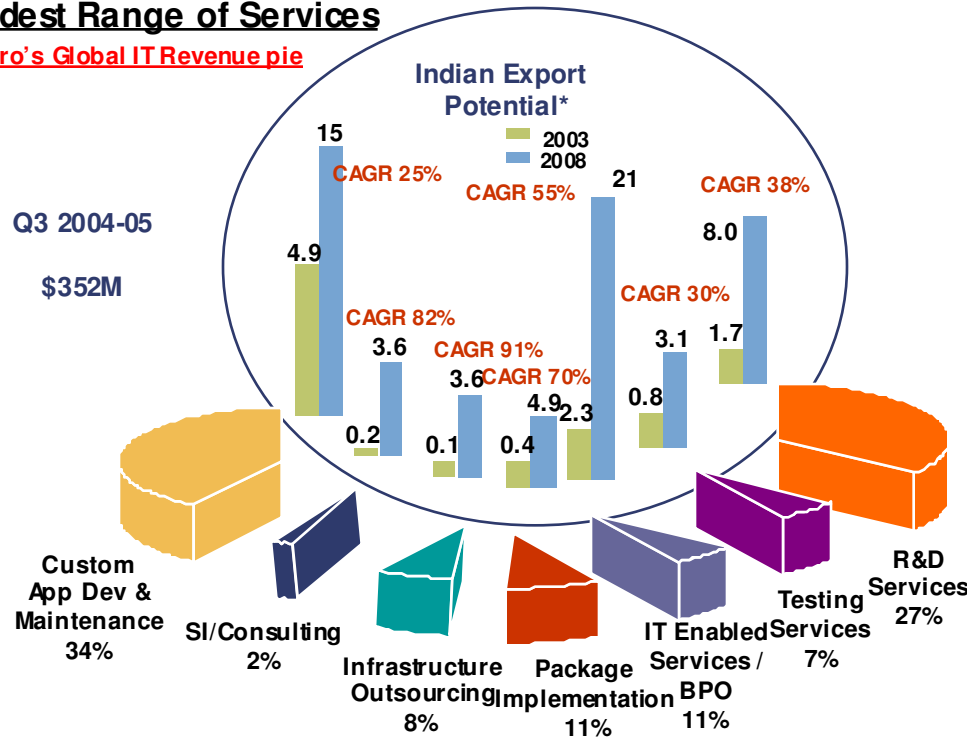


# TO SUM UP



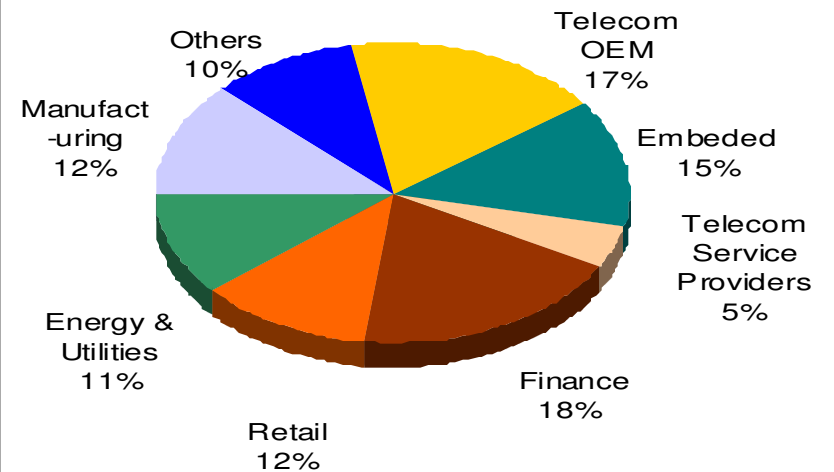
## Widest Range of Services

Wipro's Global IT Revenue pie



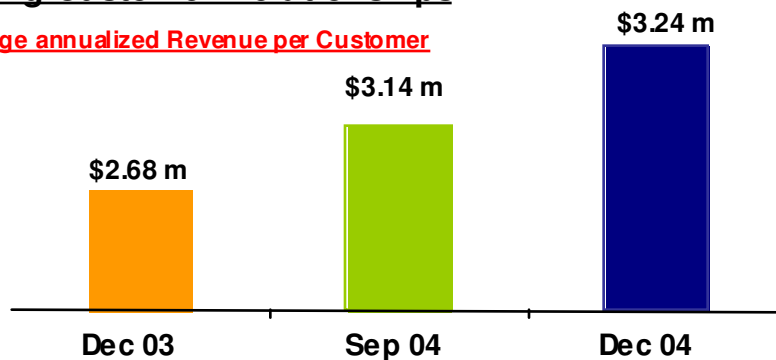
## Diversified Vertical Expertise

Vertical-wise composition (% of Revenue for quarter ended Dec 2004)



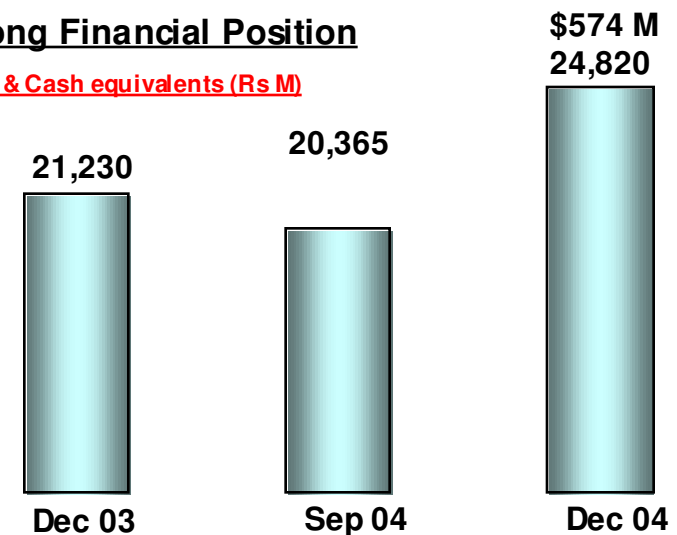
## Strong Customer Relationships

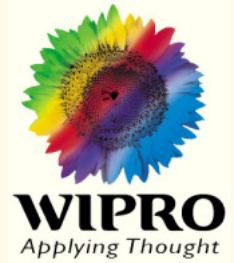
Average annualized Revenue per Customer



## Strong Financial Position

Cash & Cash equivalents (Rs M)





# Establishing global process leadership

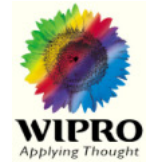
## The Wipro Q-cult journey

Sambuddha Deb

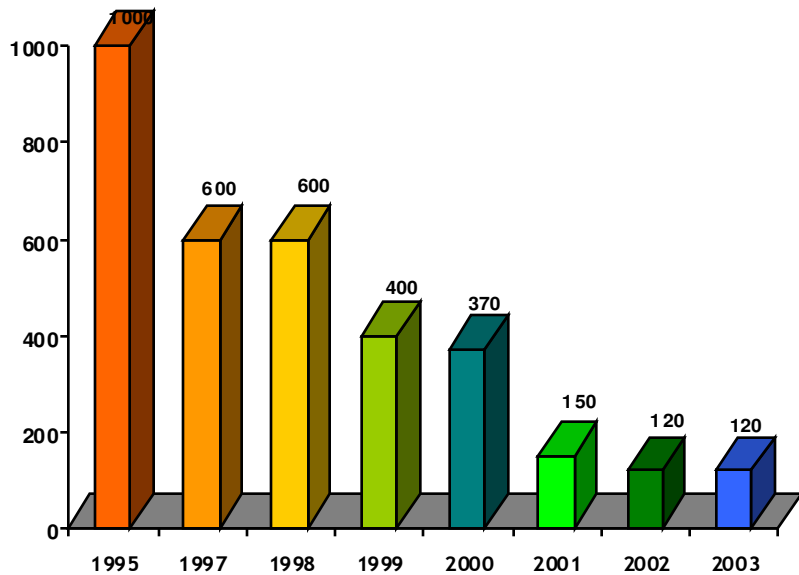
Chief Quality Officer

February 25<sup>th</sup> 2005

# Customers view of quality – Tracking critical parameters for performance improvement



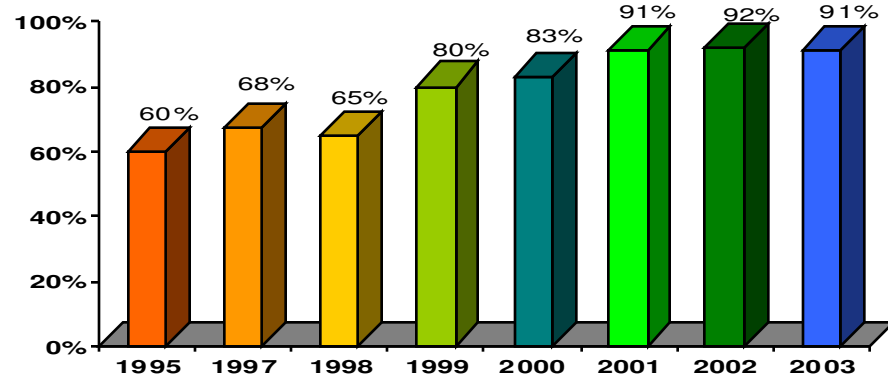
**Field Error Rate (Defects / Mloc)**



**Lower maintenance cost**

**Time**

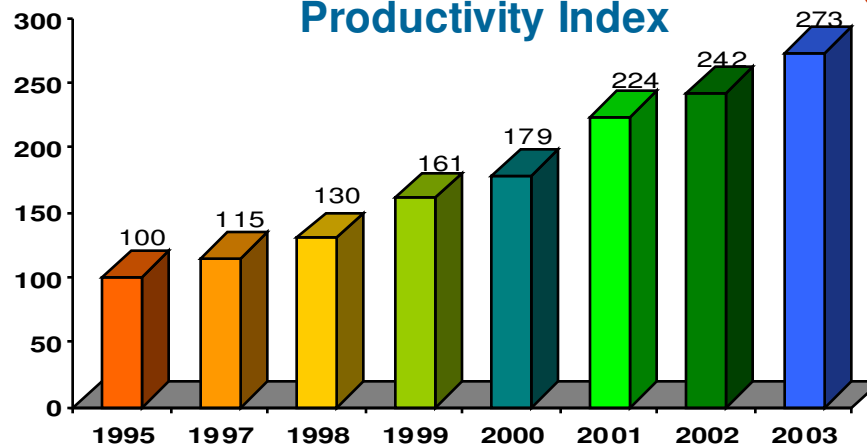
**Schedule Adherence**



**Lower schedule overrun cost**

**Cost**

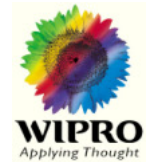
**Productivity Index**



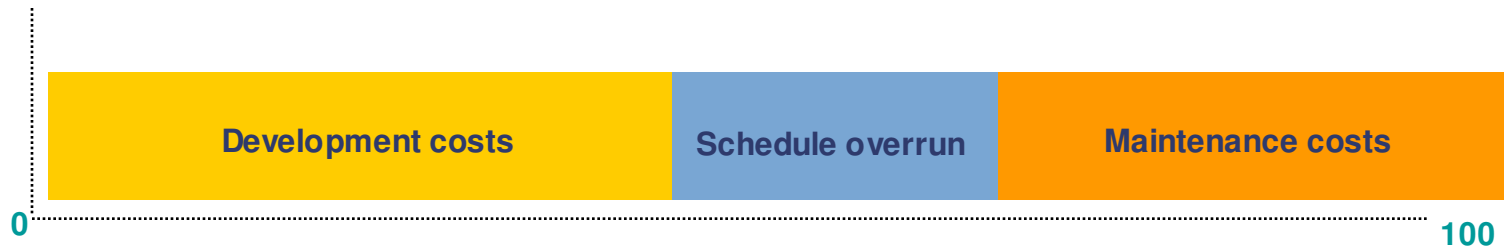
**Lower development cost**

**Defects**

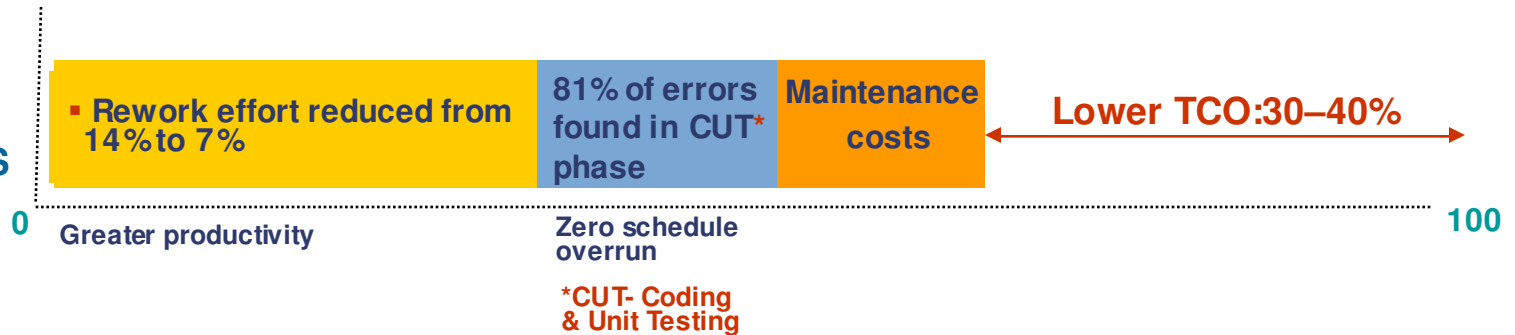
# Quality processes that ensure lower TCO



Regular development process



Wipro development process -OTIS



## Higher productivity

37 % higher productivity than industry ratio\*

**Lower costs**

## Schedule adherence

91 % projects completed on time, industry average of 76%\*

**On time delivery**

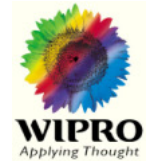
## Post delivery defect rate

120 defects/MLOC  
55% lower than industry\*

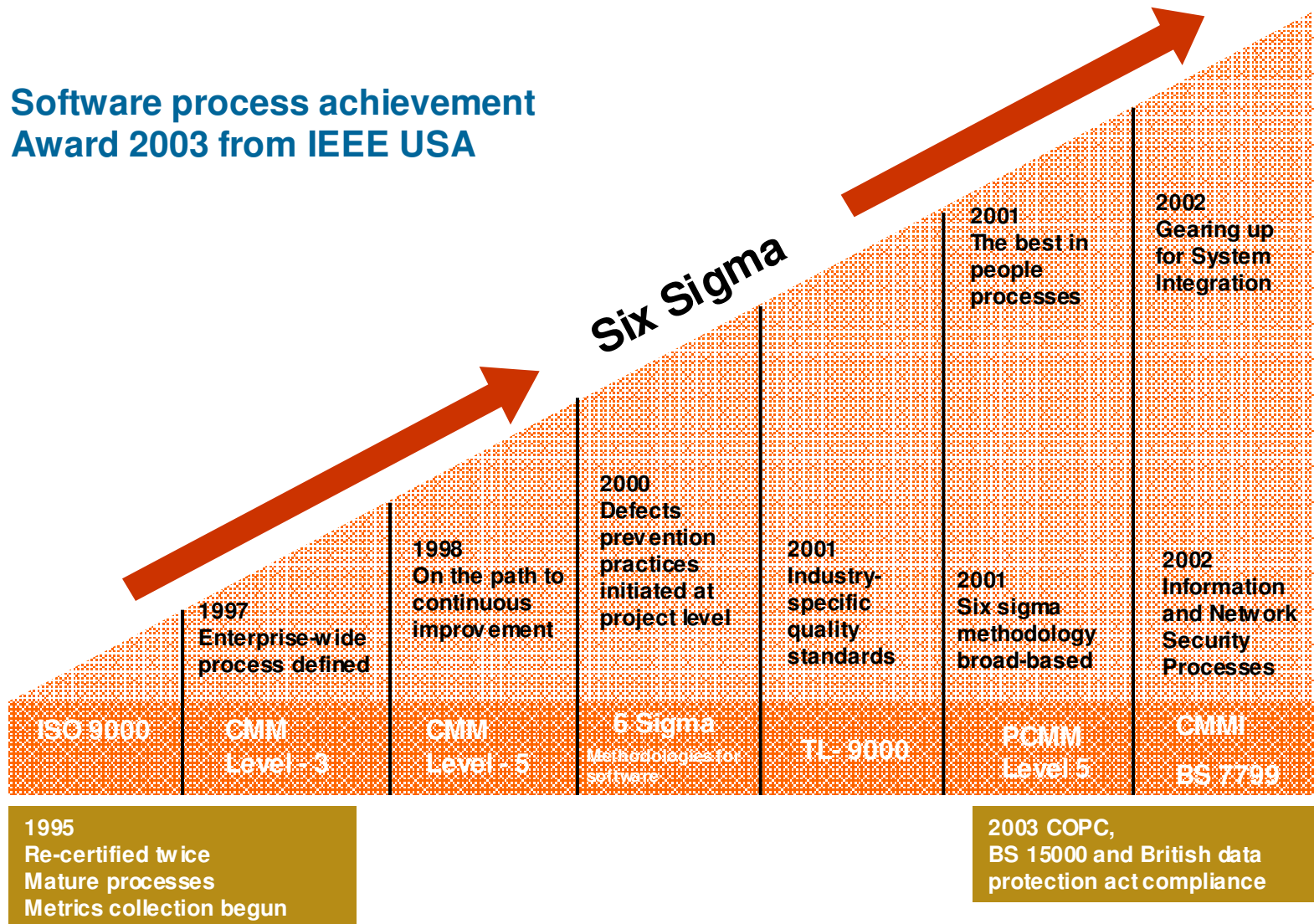
**Assured quality**

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

# Q-cult: Enterprise-wide quality culture for continuous improvement

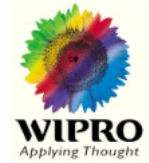


Software process achievement  
Award 2003 from IEEE USA





# Total quality framework – well defined and articulated

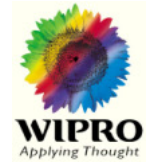


**Integrate people, processes & technologies**



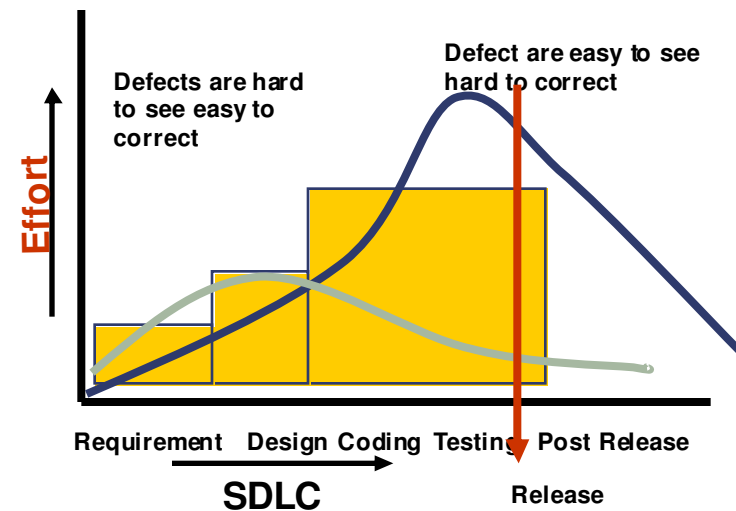
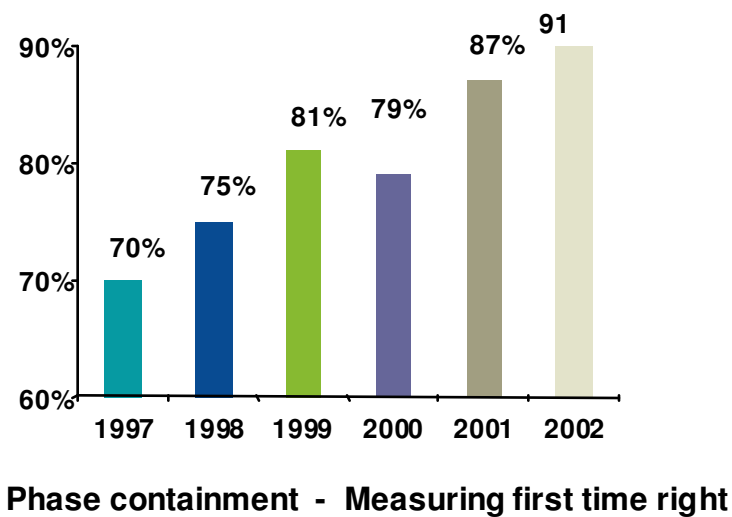
**.... To operationalize strategy and accomplish the Vision**

# Doing it right...first time



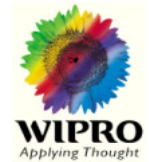
Defects cost the U.S. economy \$59.5 billion\* a year; about 0.6 percent of gross domestic product

- 2002 Report from US Dept. of Commerce  
National Institute of Standards and Technology

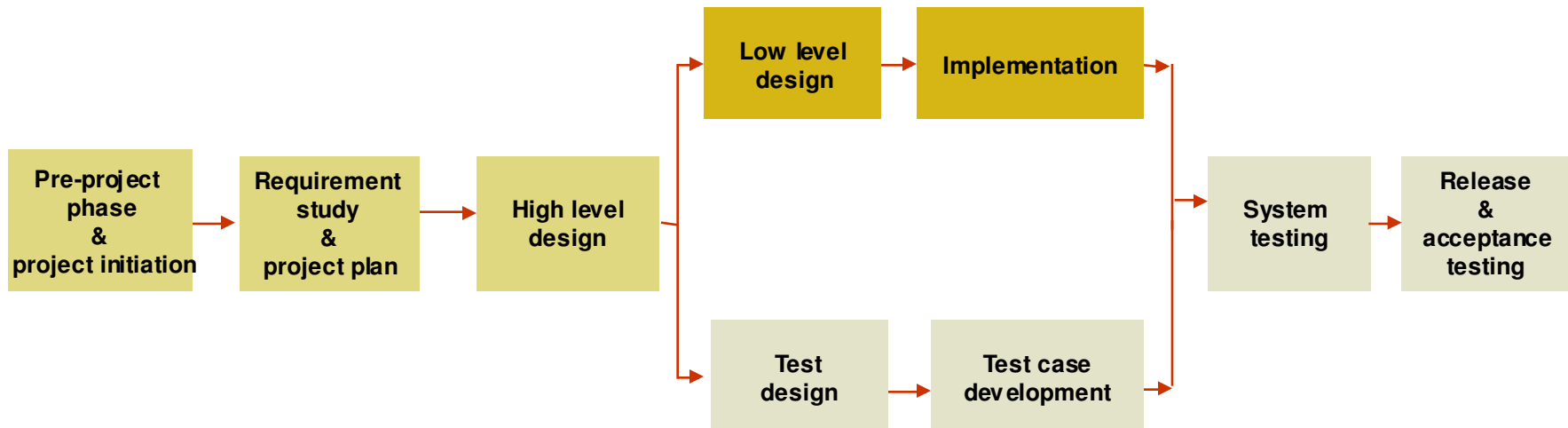


**A significant Measure -**  
**Changing requirements**  
**Manage requirements volatility**

# Integrating six sigma in software development



## Software development life cycle

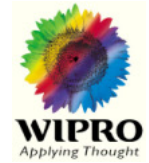


### Customer interaction

### Rigorous design & implementation

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

# 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

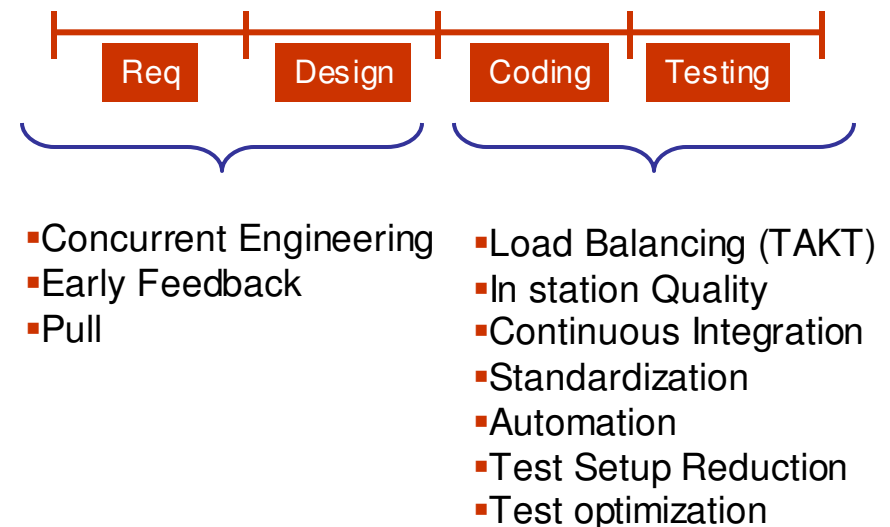
- Omnipresence of CMMI & 6S
- Customer preference of risk sharing contracts
- Shift from technical to business metrics
- Need to improve/sustain margins

## Lean in 'Wipro'

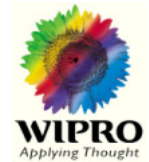
- Focuses on ***cycle time & throughput*** improvement without compromising quality
- Key principles:
  - Pull – Deliver customer value earlier
  - Flow – Wait states reductions, reducing handoffs, quick feedback
  - In station Quality – to improve defect resolutions upstream



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

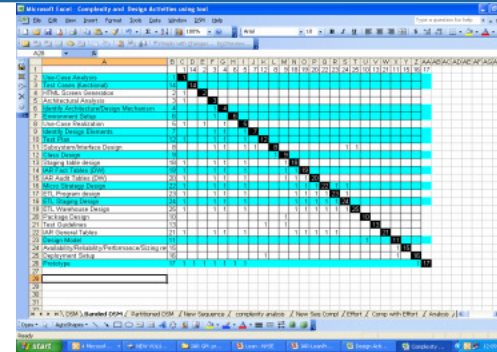


# An incentive system for a top automobile manufacturer



## Context

- Large scale software development for common repository of incentive payment data and collaborative tools
- Complex project involving cutting edge Data warehouse technology



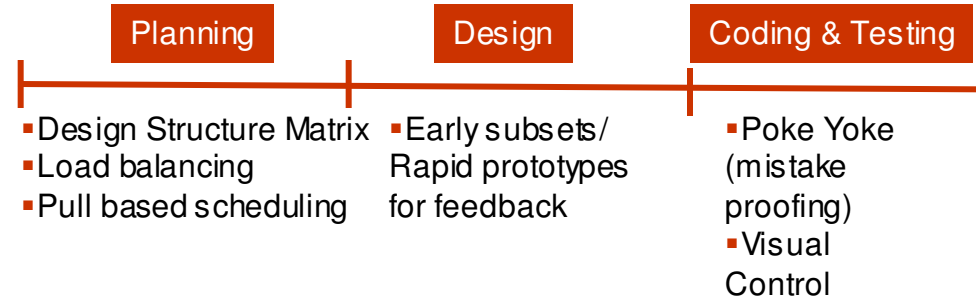
Design Structure Matrix for Project Planning

## Lean Principles Implemented

- Concurrent Engineering
- Rapid Prototyping for early feedback
- Workload balancing and customer Pull based scheduling
- Visual Charts for Control
- Poke Yoke for Quality

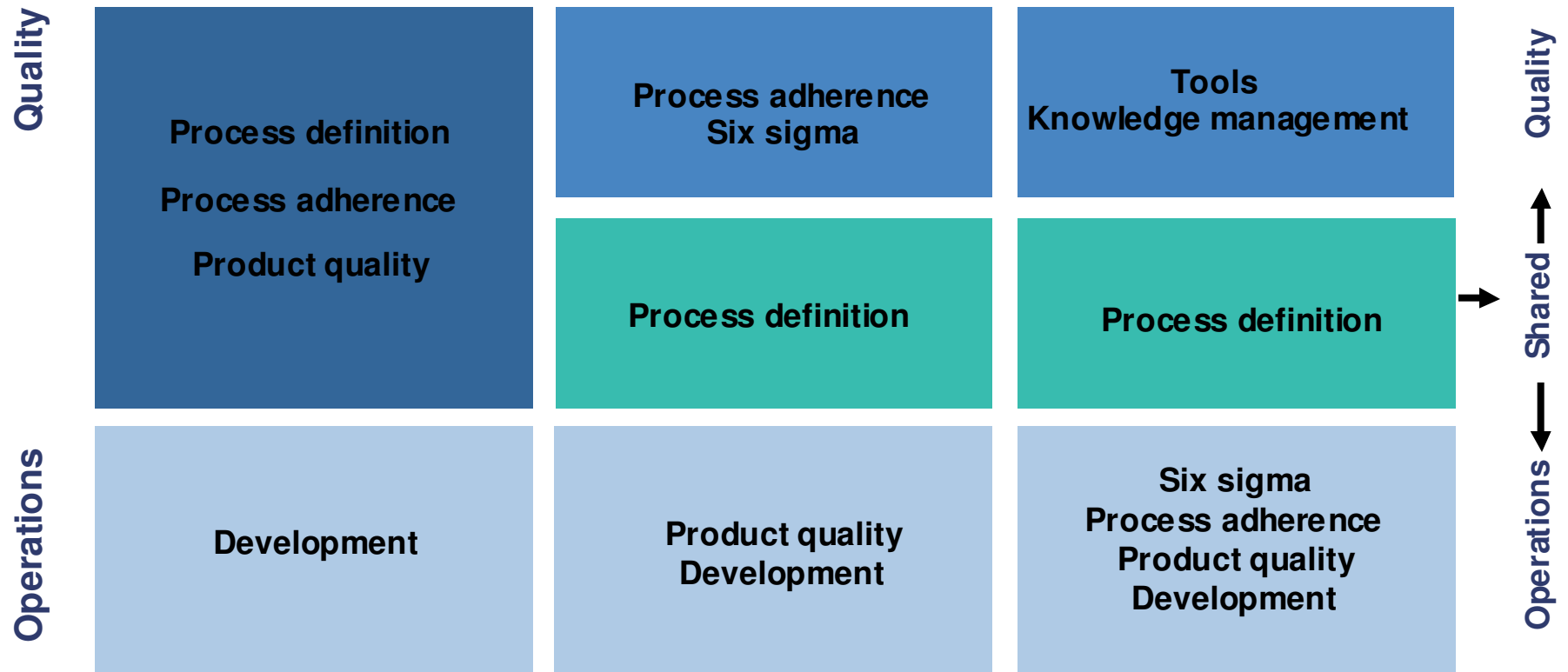
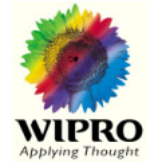
Visual Display for self-organizing project execution & tracking

Date	Praveen	Vinaya
10-Nov-04		
1-Dec-04	Plan & prepare for the architecture review sessions with the client	Updates the system design document for review comments from DJR
2-Dec-04	Plan & prepare for the Design/Architecture review sessions with the client	Plan & prepare for the Design/Architecture review sessions with the client
6-Dec-04	Validate if MSTR can create XML report	Create design for DJR
7-Dec-04	Discuss and freeze on DJR design	Review test case document User administration screen
	Review DJR design	Review test case document Logging authorization and
	Installation of new solaris machine	Create Development environment and Eclipse
		Update installation guide



**15% effort savings in software lifecycle**

# Quality journey – An organization wide participation

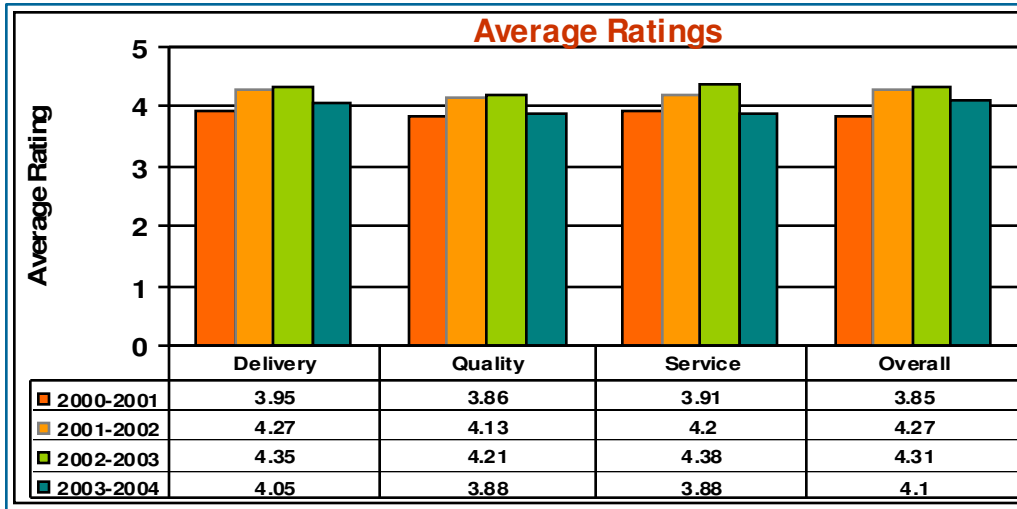
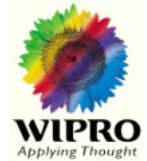


1992



2004

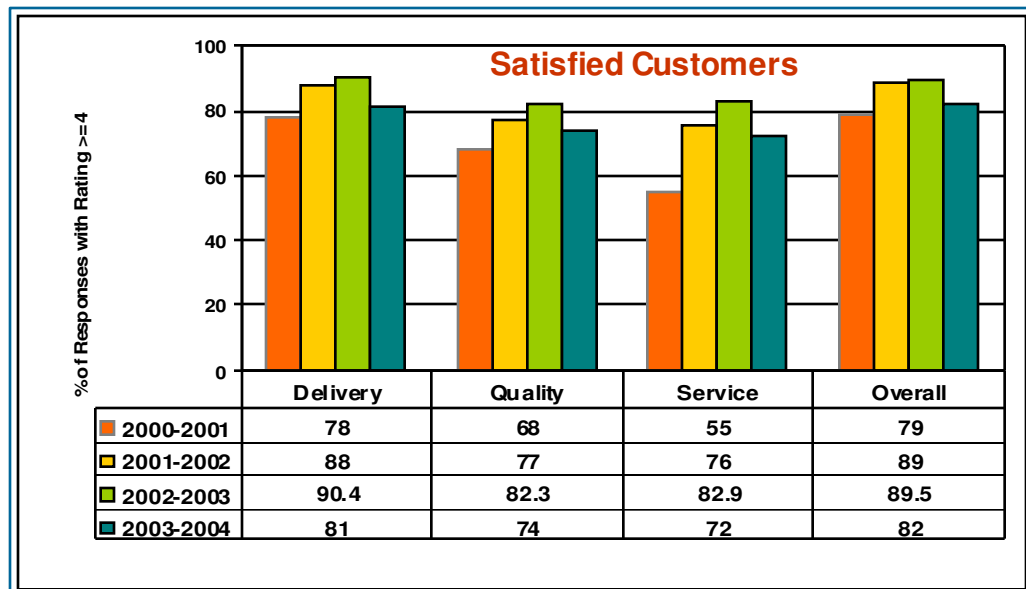
# Customer satisfaction – we are not the only ones saying it



"I was very impressed with the commitment and execution that Wipro developed in a very aggressive time frame. They stepped up to the challenge and delivered an Industry exclusive system that will benefit our Builder/Distributors."



Dan Claypool



"Wipro has consistently delivered offshore projects on time, on budget and at required levels of quality. The relationship is very cost effective for PacifiCorp, saving as much as 35%"

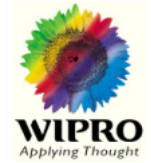


David Maudin

**2003-04 survey was done with a redesigned survey with Gallup's help**



## Providing high quality processes



**Gartner**

“ Through a single-minded but judicious emphasis on quality as a guiding principle throughout its delivery processes, Wipro has shown impressive improvements in delivery capabilities, client satisfaction, and the ability to continually reduce the cost of services.”

**Wipro: Best Practices in CMM-Based Software Delivery, Gartner 27 May 2003**

**Butler Group**

“The prime differentiator of Wipro’s service proposition was its approach to quality management and processes.”

**Scottish Parliament votes for offshore service firm, Butler Group Review, July 2003**



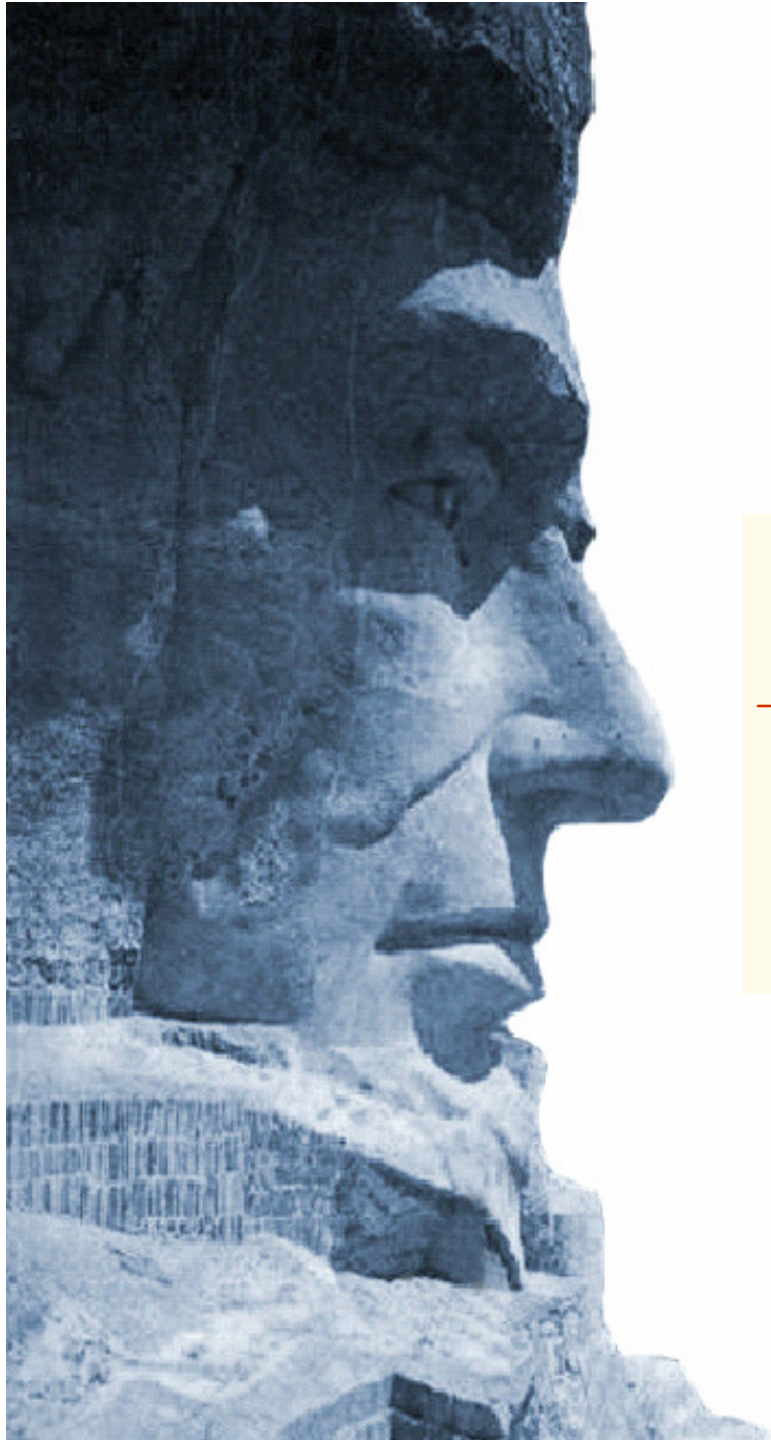
“.....With the combination of SEI Level 5 certification and Six Sigma, Wipro can offer its customers extremely high quality, low risk services.”

**Mapping offshore – A new competitive landscape, IDC, May 2004**

**FORRESTER**

“Wipro clients see additional application maintenance productivity of 10% to 15% from added familiarity with systems; another 10% to 15% raise in productivity after applying Wipro’s CMM-based methodology and consolidating redundant programs applications; and yet another 3% to 30% productivity improvement thanks to process automation and tools.”

**Offshore Outsourcing: The complete guide, Forrester, Sep 2004**



## Quality – The cutting edge

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“If I had 8 hours to chop down a tree,  
I’d spend 6 sharpening the axe.”  
- Abraham Lincoln

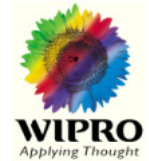


# Talent Availability 2005-06

Laxman Badiga  
Feb 25<sup>th</sup> 2005  
NYSE

- **Industry scenario and Academic alliances**
  
- **Wipro Technologies**
  - **Talent Sourcing**
  
  - **Talent Retention**
  
  - **Talent Transformation**

## Current Scenario of IT Manpower



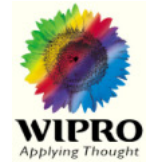
### IT MANPOWER EMPLOYED (2004 – 2005 Estimated)

- 1.05 m (203K higher than 2003-2004).
  - 697K in IT sector (Export, Domestic & Captive)
  - 348K in ITES
- Percentage growth of 24% over 2003-2004

(Data in '000)	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005E
<b>IT Software Services</b>	242	360	416	490	588	697
<b>IT Enabled Services</b>	42	70	106	180	254	348
<b>Total</b>	<b>284</b>	<b>430</b>	<b>522</b>	<b>670</b>	<b>842</b>	<b>1045</b>
<b>% increase in Total Manpower</b>		51.41	21.40	28.35	25.67	24.11
<b>IT Software Services (Break Up)</b>	242	360	416	490	588	697
<b>Software Exports Sector</b>	110	162	170	205	270	345
<b>Software Domestic sector</b>	17	20	22	25	28	30
<b>Software - captive in user organizations</b>	115	178	224	260	290	322

Source : NASSCOM

# Manpower Supply – Engineering



Engineering (Degree & Diploma) (in '000)							
Year	Annual Admission	Annual Passout (Graduates)			IT Graduates		Total IT Pool
		Total	Degree	Diploma	Degree	Diploma	
2001-02	333	234	109	125	71	44	115
2002-03	366	259	129	130	82	45	127
2003-04	303	215	112	103	95	46	141
2004-05	398	284	155	129	100	65	165
2005-06	481	348	210	138	111	70	181
2006-07	527	382	235	147	117	76	193

Source – NASSCOM

- Over 380 Universities i.e.. > 920 colleges (Engineering Degree/ Diploma) providing computer education
- Wastage Ratio is assumed as 21% for Degree & 36% for Diploma holders as per historical trends
- Actual number of IT graduates has shown an increase from the projected numbers especially diploma
- However admission to engineering and annual pass out (including Non IT) has shown a steep decline

## Total Supply Entering IT Workforce



	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
Number of Engineering Graduates	201	234	259	215	284	348	382
Degree (4 year course)	82	109	129	112	155	210	235
Diploma (3 year course)	119	125	130	103	129	138	147
IT Graduates (CSC, Elect, Telecom)	94	115	127	141	165	181	193
Graduates Degree	53	71	82	95	100	111	117
Graduates Diploma	41	44	45	46	65	70	76
Workforce Entering IT							
Engineering Degree (IT Graduates)	43	57	47	55	58	64	68
Engineering Diploma (IT Graduates)	32	34	25	25	36	39	41
Non IT Engineers	32	36	40	40	40	40	40
Other Graduates (Other Disciplines)	27	32	35	30	30	30	30
<b>Total Supply Entering IT Workforce</b>	<b>134</b>	<b>159</b>	<b>147</b>	<b>150</b>	<b>164</b>	<b>173</b>	<b>180</b>

Data in '000

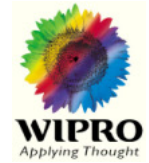
Source: Nasscom

**Total Supply Entering the workforce has increased**

**Increase in Engineering Degree Graduates is almost the same as projected earlier**

**Increase in Engineering Diploma graduates entering the workforce has been higher than projected**

## Demand – Supply Scenario



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Total Manpower in IT	522	670	842	1045	1316	1662	2110	2662
Additional Manpower required	92	148	172	203	271	346	448	552
Total Manpower in IT Services	416	490	588	697	839	1010	1215	1462
Additional Manpower Required in IT Services	56	74	98	109	142	171	205	247
Supply of IT Engineering Degree Graduates	71	81	95	100	111	117	123	129
<b>Manpower Excess</b>	<b>15</b>	<b>7</b>	<b>-3</b>	<b>-9</b>	<b>-31</b>	<b>-54</b>	<b>-82</b>	<b>-118</b>
Supply of IT Engineering Graduates (Degree & Diploma)	115	127	141	165	181	193	203	213
<b>Manpower Excess</b>	<b>59</b>	<b>53</b>	<b>43</b>	<b>56</b>	<b>39</b>	<b>22</b>	<b>-2</b>	<b>-34</b>
Total Supply Engineering (Non IT + Graduates Entering IT)	67	74	70	70	70	70	70	70
<b>Manpower Excess</b>	<b>126</b>	<b>127</b>	<b>113</b>	<b>126</b>	<b>109</b>	<b>92</b>	<b>68</b>	<b>36</b>

- Source: Nasscom
- Projection for 2009 IT growth – 50Bn
- \* 70,000 is the inflow from Non-IT streams
- Out turn of 540,000 from science streams funneled for ITES space



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Total Manpower in ITES	106	180	254	348	477	653	895	1200
Additional Manpower Required in ITES	36	74	74	94	129	176	242	305

<b>Supply of Graduates 2004 E</b>	
Arts	1150000
Science	540000
Commerce	480000
Engineering Degree (Non IT)	15000
Engineering Diploma (Non IT)	65000
absorption)	40000
<b>Total Supply (ITES)</b>	<b>2180000</b>
<b>Demand</b>	<b>128760</b>
<b>Excess Manpower</b>	<b>2051240</b>

**Source : NASSCOM, Institute of Applied Manpower Research, Ministry of Human Resources**

# WASE - An Innovation in Talent Farming

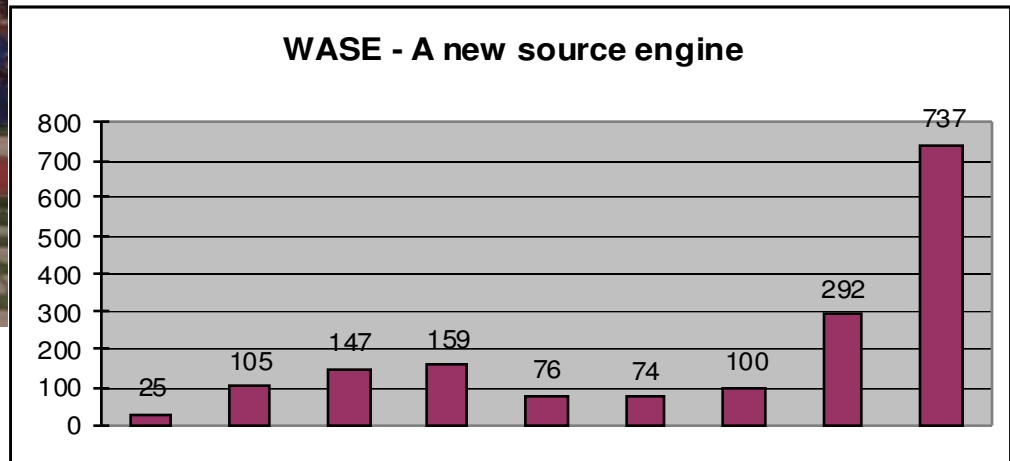


**WASE**  
Wipro Academy of  
Software Excellence

WASE program provides live project exposure and an opportunity to pursue an 8-semester (four year) Off-campus collaborative MS program from Birla Institute of Science & technology (BITS), Pilani (India)



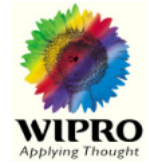
WASE - A new source engine



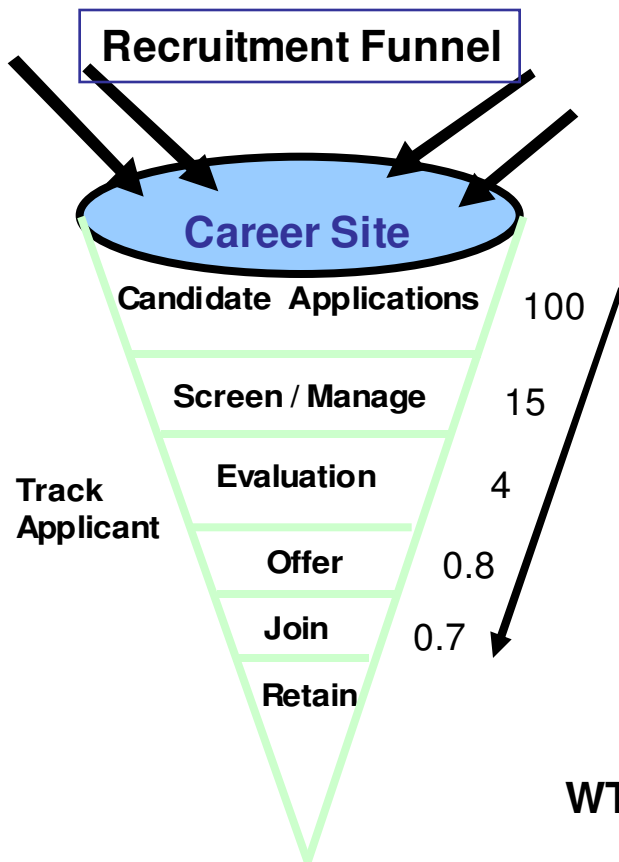
Since 1995 and growing

- 550 students have graduated through WASE so far
- 1500 intake planned for 2005-06

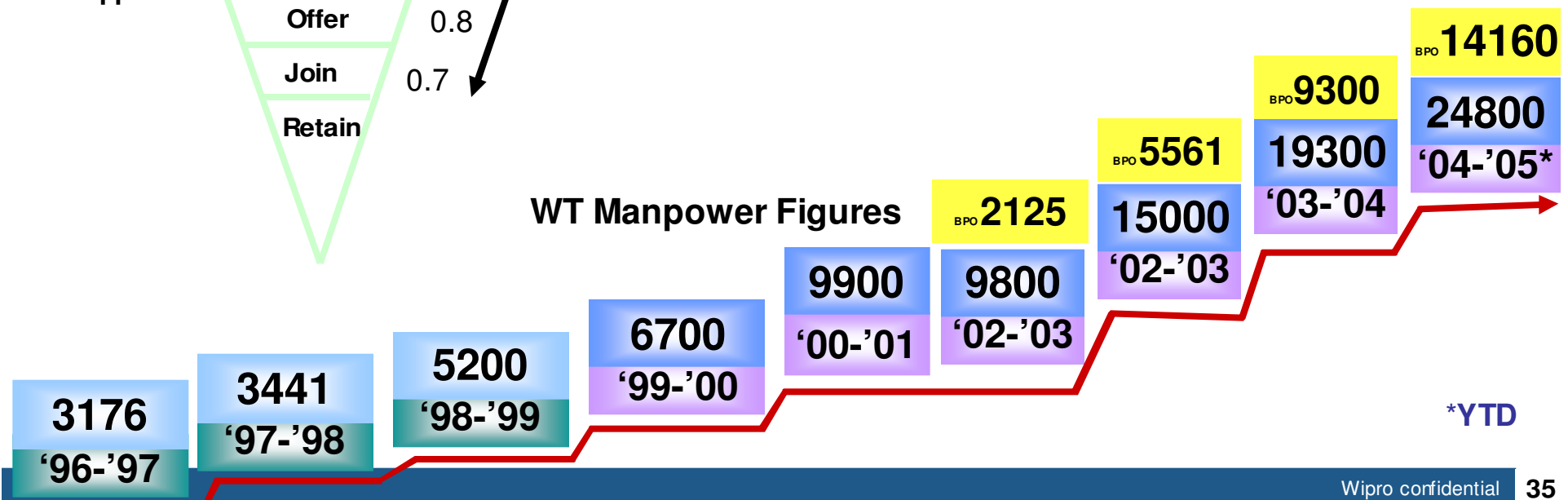
# Attracting Talent – The Wipro Way



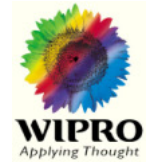
Data for year 2004-05



Wipro Database	
Active	320,000
Latent	300,000
Emp Ref / Direct	96%
Search Firms	4%
<b>YTD Joinees (IT + ITES)</b>	<b>23800</b>



## Snapshot of Wipro's Talent Pool



### Young and experienced

- Average age of employees – 28 yrs
- Average tenure of top 100 managers - 11 years

### Strong education

- 66% University graduates
- 28% Masters degree holders
- 50+ Doctorates



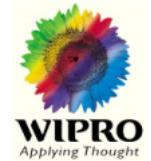
### Geographically dispersed

- 39000+ employees
- Approx. 6000 spread across North America, Europe and Japan
- Approx. 33000 working offshore in India

### Multicultural

- Workforce comprising people of 23 different nationalities

# Talent Transformation - Across all Aspects



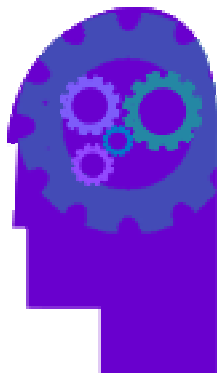
## Business skill transformation

- Leading the client – CLIP/ ACLIP programs
- 7 domain knowledge courses



## Culture transformation

- Cross cultural training programs for US, UK, Japan, India, etc.
- 9 month Japanese certification program –Shimpo
- 160-hour certification program French (Alliance Française), German (Max Mueller)



## Technology transformation

- 4 technology streams covering 78 courses
- Automated assessment center catering to 30+ technologies
- Project readiness and architect readiness program



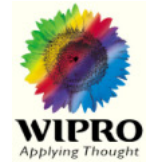
## Behavioral skill transformation

- Behavioral ladder training – FMP->GMP -> VMP
- Communication skill, Interpersonal skills, relationship management training

## Training infrastructure

- Pioneers of the web based “World Campus” initiative providing courses to 1000 employees world over at a single time
- Ability to conduct training for 1200 persons at one time
- 40 state-of-the-art training rooms
- 2,40,000 man days of training annually, 70 full time instructors

# Talent Engagement



Recruit

Induct

Train

Allocate

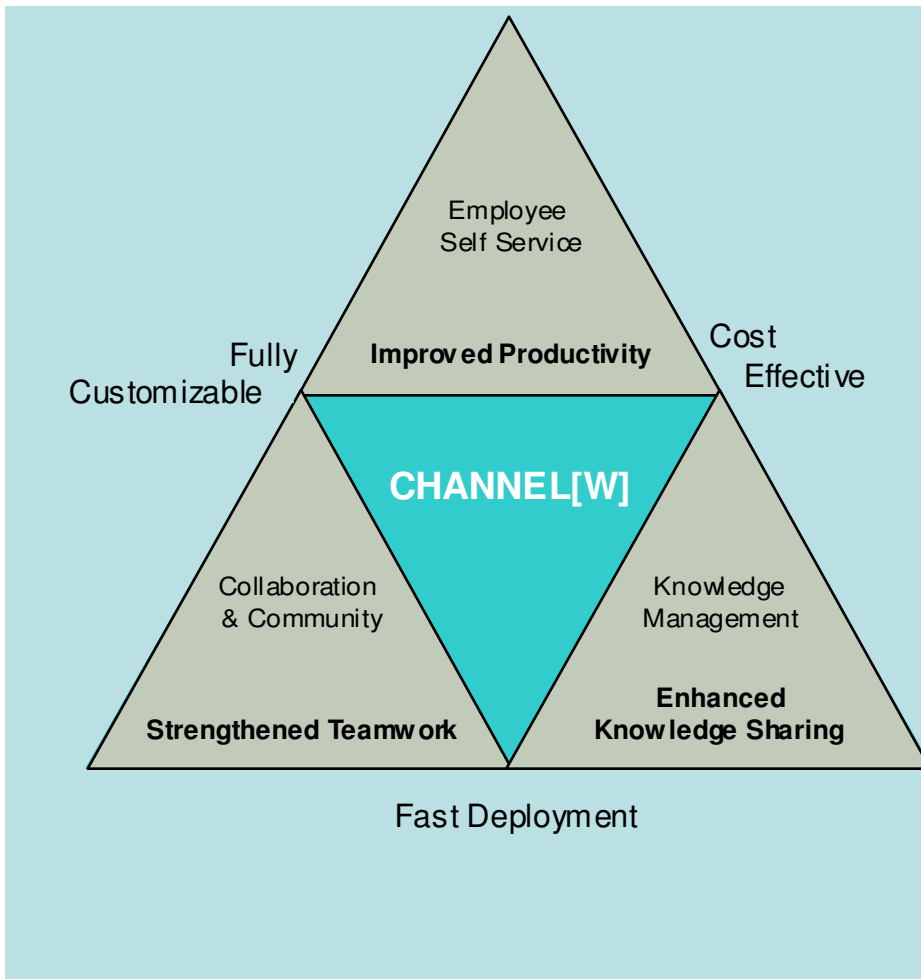
Retrain

Reallocate

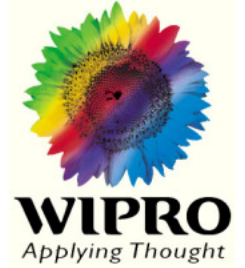
Nurture

Engage

Retain



- “Eye of an employee” for complete information updates about Wipro
- Ensure employee empowerment
- Enables employees to have a two-way communication with the company
- Bring together the growing community across the globe



R·O·I

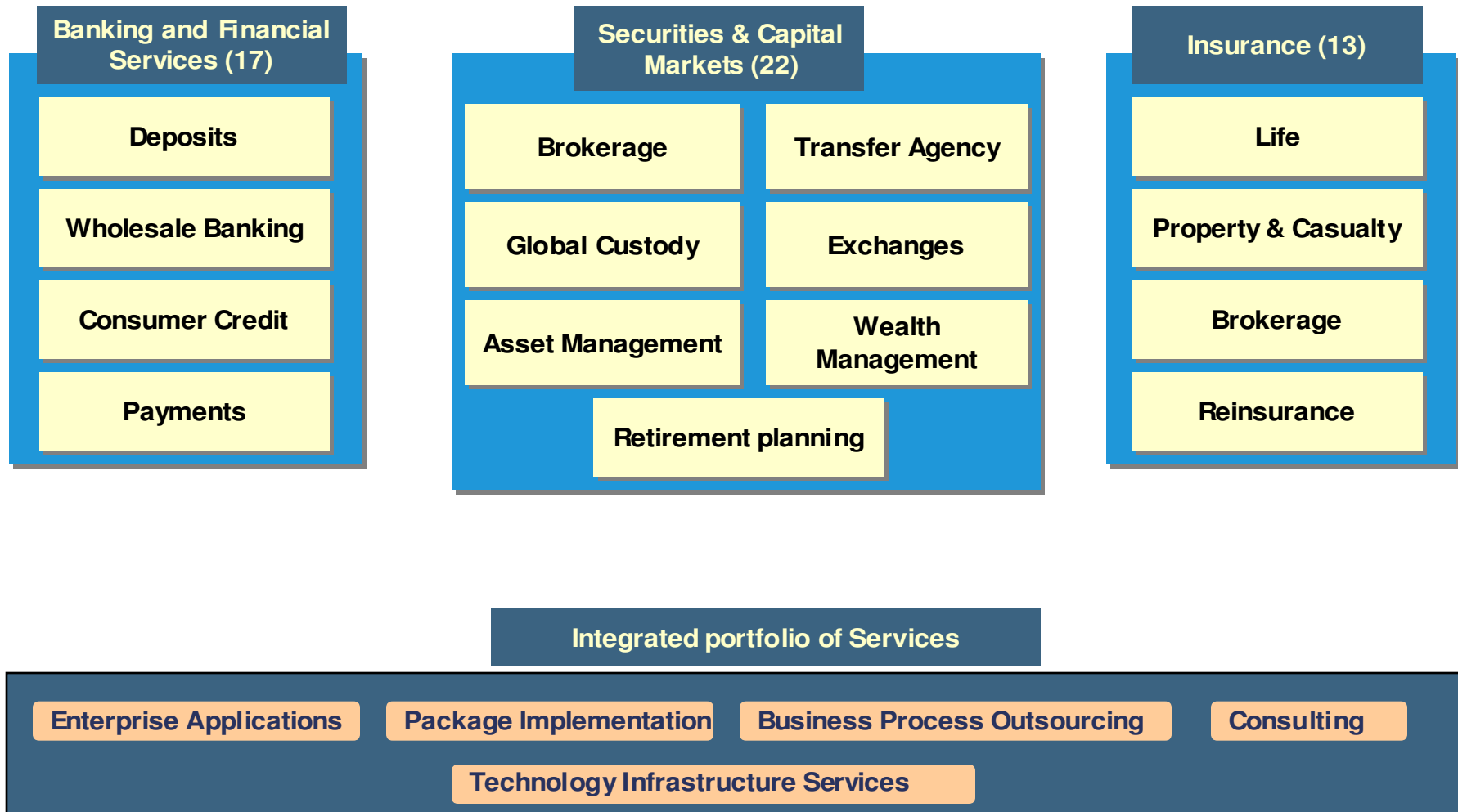
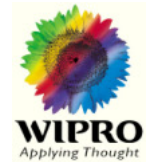
RETURN  
ON IDEAS

# FINANCE SOLUTIONS

Girish Paranjpe

President Finance Solutions

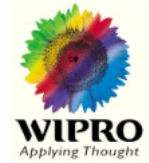
# Finance solutions



*Figures in brackets represents number of clients*



# Our idea so far

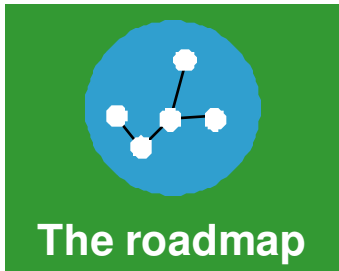


## Strategic Level

**360° service portfolio**

**Domain Competency**

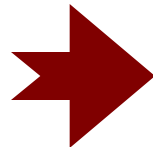
**Engagement model**



**Win new deals**

**Penetrate into key competition accounts**

**Ensure growth of accounts**

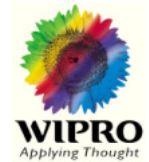


**Tactical Level**

Position as both an “integrated provider of solutions” and offering a “range of options”	Leverage business knowledge to suggest innovative solutions	Focused hunters with select target accounts supported by pre sales excellence
Leverage distinctive service lines like BPO, TIS, Quality Consulting, Testing etc	Understand business and proactively suggest solutions	Experienced hunters, consultative selling, innovative pricing models, supported by pre sales excellence
Cross sell and up sell different service lines	Business Analysts in each account to analyze pain areas and propose solutions	Dedicated client engagement managers for high potential accounts and delivery excellence

**Build on 3 axes simultaneously**

# 360° Service Portfolio: Leading Life & Annuities insurance company



## Service Portfolio

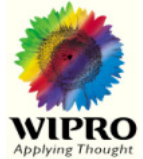
<b>Business Process Outsourcing</b>		Including Senior Underwriting	Claims Processing Inbound customer	
<b>IT Consulting &amp; Business Analysis</b>	Quotation System		In-force Quotation System	
<b>Custom Development</b>	Web Enabling			
<b>Application Enhancement</b>	Quotation System		Pension Claims	Pensions Accounting
<b>Application Maintenance</b>		New Business	Product Launches	
	Sales & Marketing	New Business / Underwriting	Policy Admin & Customer Services	Finance & Actuarials
	Life Insurance		Pensions Business	

- Dedicated ODC for mainframe support

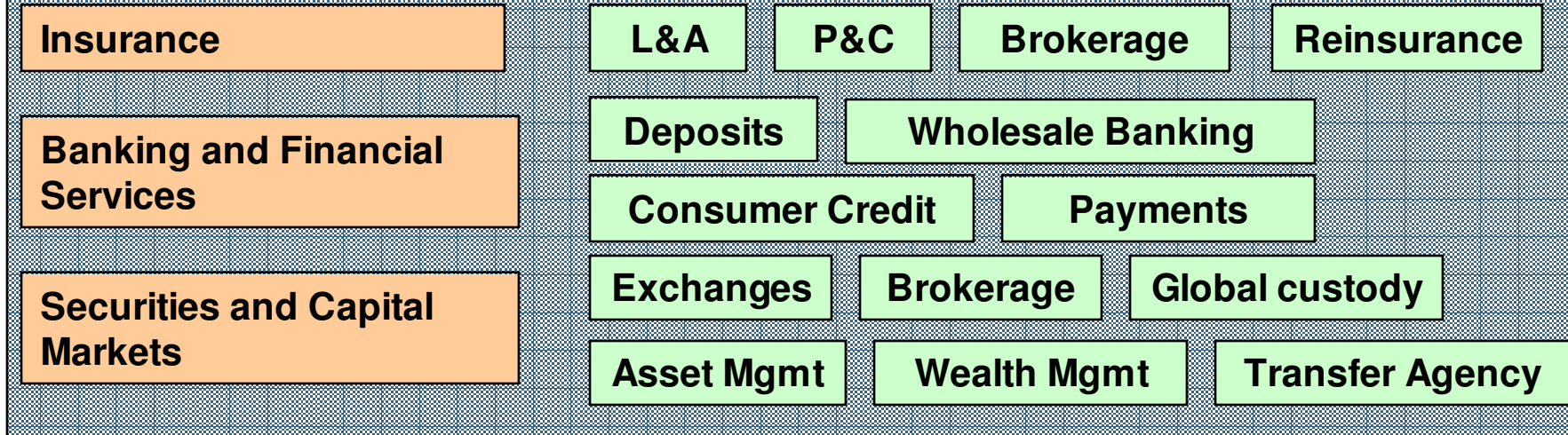
## Engagement roadmap

- February 2001: Relationship started with **ADM engagement**
- May 2001: Offshore development centre set up in Bangalore, later extended to another location
- Early 2003: **BPO of underwriting, with claims processing and customer servicing added in the middle of 2004**
- Involved in a variety of projects including:
  - **Business analysis and IT consulting**
  - Mainframe maintenance
  - Client server development and migration
  - Multiple-PC application support
  - Web enabling and maintenance of web based applications
  - Design and development of customized applications
- **IT infrastructure support**

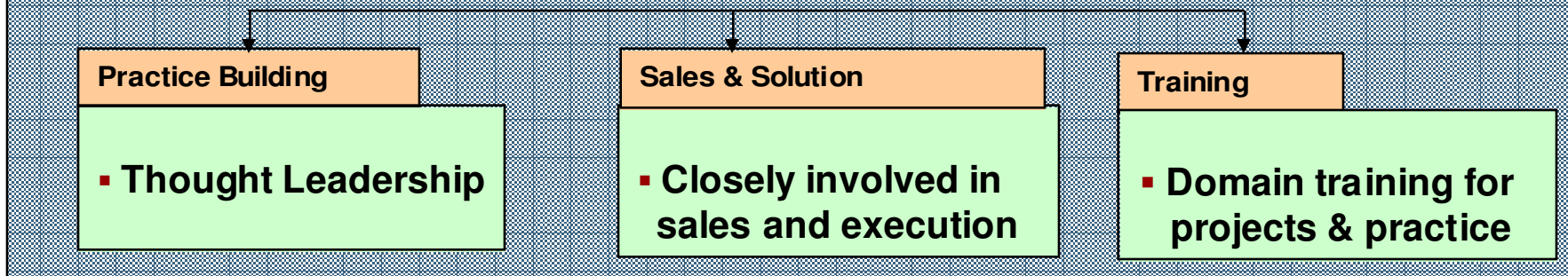
# Domain competency



## Dedicated Practice Groups of Business Consultants

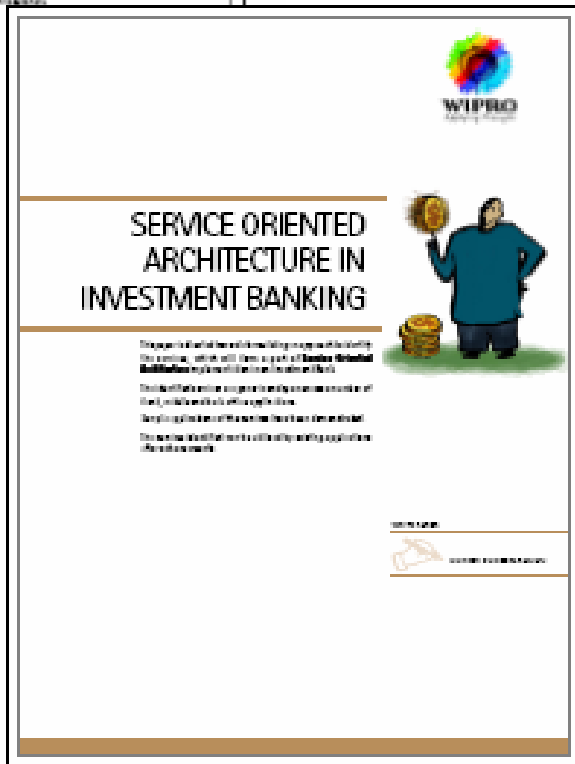
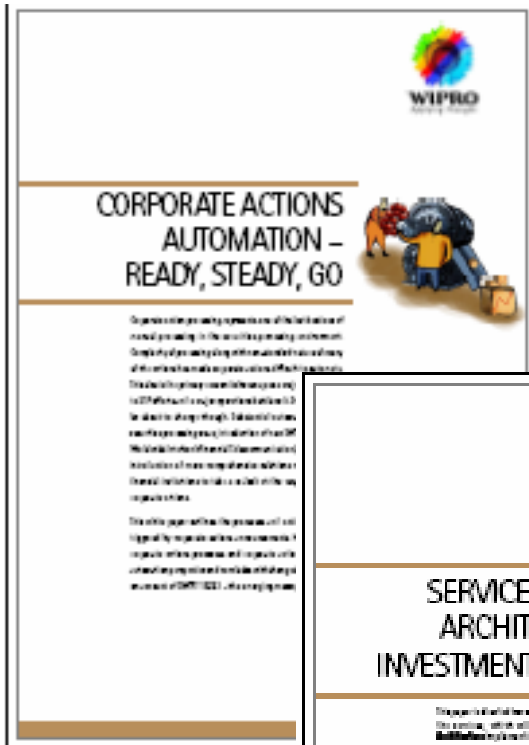
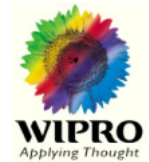


## Roles



Acquisition of NerveWire to build domain skills and move up the value chain

# Practice building: Thought leadership



## Published whitepapers

### Insurance

- Underwriting Transformation: Surviving the troubled waters
- UK Insurance Regulations: FSA and beyond

### Banking and Financial Services

- Are FSIs leveraging reference data management to cut costs and manage risk

### Securities and Capital Markets

- Regulation NMS and fast market
- The changing landscape of the US equity options market

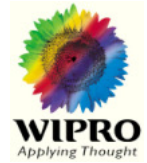
## Internal weekly magazine

- Covering region wise industry news, knowing your customers and competitor information, targeted at all the consultants in the vertical

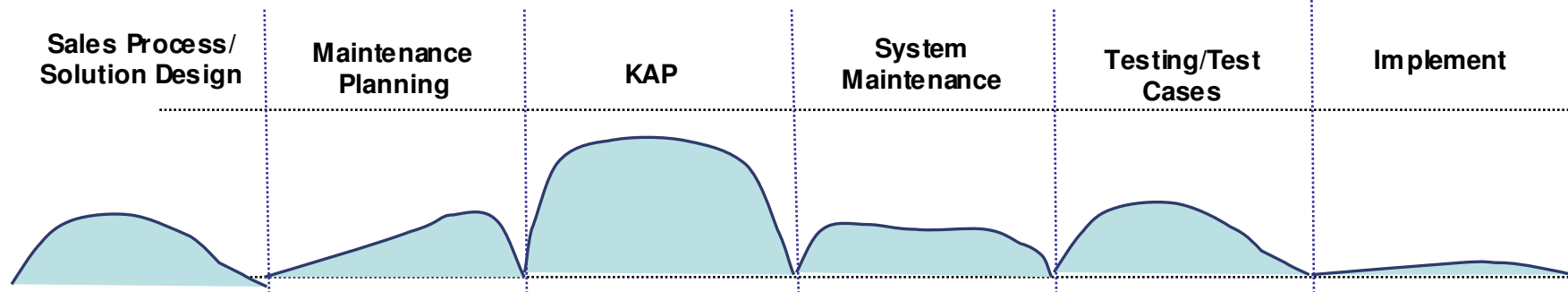
## Interaction with industry analyst groups & forums

- Close consulting and research interactions with Gartner, MetaGroup, Forrester, Celent
- Participation in industry forums

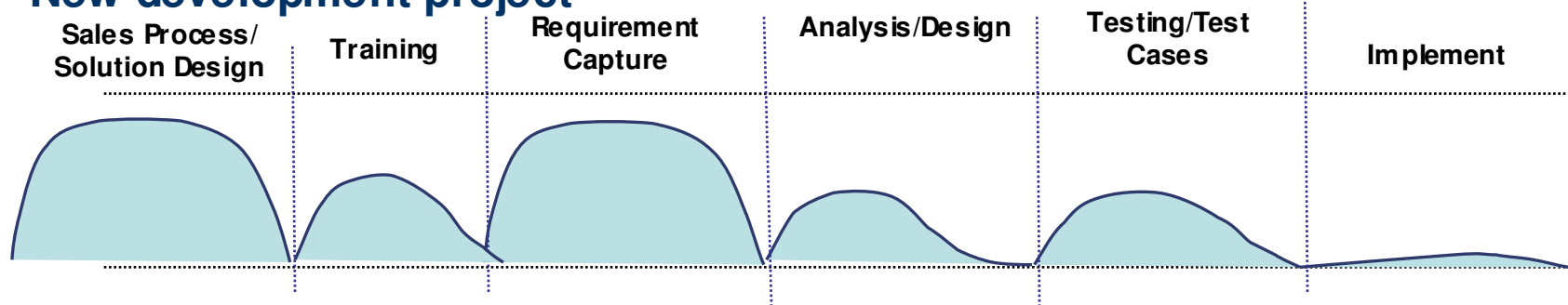
# Sales and solution: Domain involvement at every stage



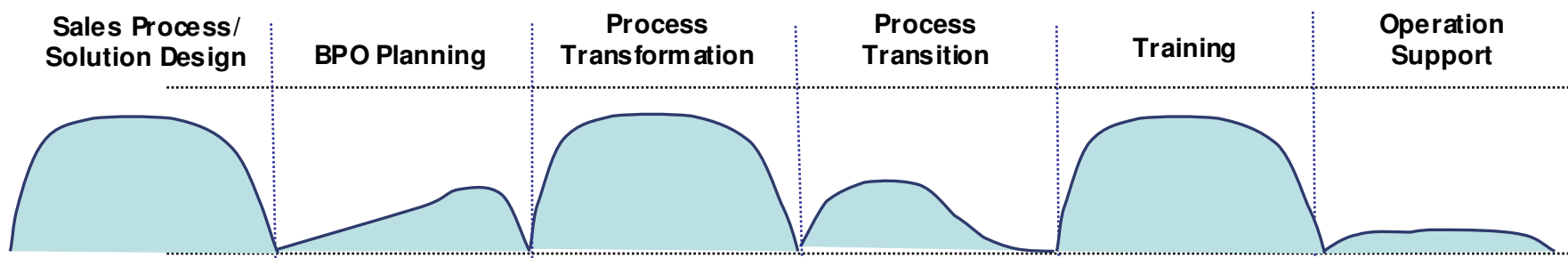
## Maintenance and enhancement project



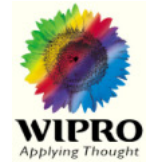
## New development project



## Business process outsourcing



# Training: “Lines of Code” to “Lines of Business”



## Course



### Insurance/ Finance 101

### Insurance/ Finance 102

### Insurance/ Finance 103

## Audience



Targeted at all Software Engineers

Targeted at Module Leaders, PMs and above

Targeted at Domain Consultants

## Coverage



Provides an overview of the insurance/finance industry.

Provides an in-depth coverage of the insurance/finance industry.

Industry qualifications

## Delivery



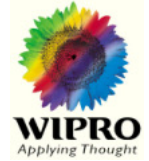
CBT based course available on Wipro Intranet

8-day course conducted by an external agency

As per syllabus of industry organizations

**Additionally, project specific training is conducted by the domain team**

## Engagement model: Front end - Dedicated sales and solution design team



**NORTH AMERICA**

**EUROPE**

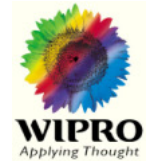
**JAPAN AND FAR EAST**

- **Dedicated Sales Team in each geography focused on Insurance, Banking & Financial Services and Securities and Capital Market accounts ONLY**
- **Select list of target accounts including those of competition**
- **Focused teams for hunting and dedicated client engagement manager for key accounts**
- **Consultative sales model through Strategy Solutions Group and Wipro NerveWire**
- **Each target account also mapped to horizontal sales team like BPO, testing, quality for joint approach**

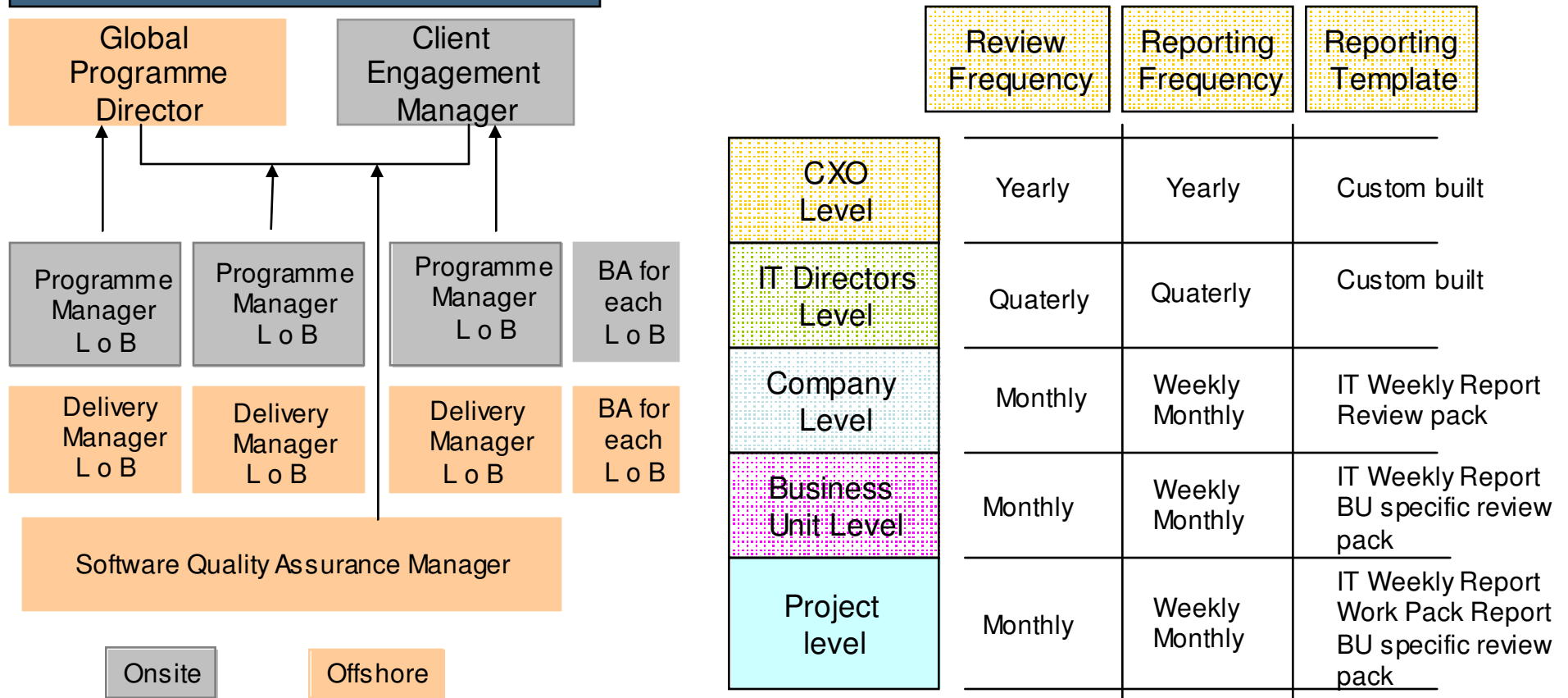


- **Dedicated Solutions Design team for Insurance, Banking & Financial Services and Securities and Capital Market**
- **Each account (prospect/existing) has a domain person/persons mapped to it**

# Engagement model: Back end – Execution through mature governance model



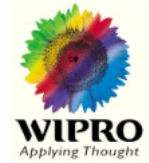
## A leading insurance company



- Dedicated Delivery team for Insurance, Banking & FS and Securities & Capital Market
- IDEA GENERATOR FORUMS consisting all hands in account to proactively suggest solutions
- Quality processes (Six Sigma, CMMI) to ensure predictable delivery



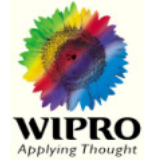
## Finance solutions 2004-05: The returns



Revenues	<b>50 million USD</b>	<b>Over 200 million USD (annualized)</b>
Clients	<b>Primarily from 2-3 mid-sized clients</b>	<b>About 15 large marquee accounts which can scale</b>
Contribution to WT revenues	<b>12%</b>	<b>18%</b>
Employees	<b>Average 700</b>	<b>3600 – November 2004</b>
Service lines	<b>Primarily application development/maintenance and e business</b>	<b>Basket of services ( EAS/TIS/ Testing/E Biz /Consulting) being provided to most key customers</b>
Domain strength	<b>Minimal</b>	<b>Significant presence</b>
	<b>2000-01</b>	<b>2004-05</b>

- CAGR: 44% - Higher than our competitors
- 50 clients: 1 client > 20 Million and 8 clients > 10 million annual run rate

## Offshoring in financial services is becoming mainstream



- Within six years (2010), more than one-fifth of the financial services industry's global cost base will have shifted offshore, resulting in an average savings of 37% per relocated process. \*
- Overall, the top 100 global financial services institutions – those with market capitalization exceeding \$10 billion – will offshore approximately \$210 billion of their cost base, with an average cost savings of more than \$700 million by the end of 2005. \*
- Celent estimates a potential to shift US\$17.5 billion in operational and technical costs overseas by 2010, only emphasizing the urgency for financial institutions to incorporate offshoring into their service delivery models
- Change in financial services mega deals: Traditional outsourcers such as IBM, CSC, and EDS will have to make increasing room for non-traditional offshore vendors – Tower Group

\* *“The Titans Take Hold”*: How offshoring has changed the competitive dynamic for global financial services institutions, May 2004 Deloitte  
Survey based on responses from 43 financial institutions based in seven countries and included 13 of the top 25 financial institutions in the world by market capitalization

### **The growth in market size ensures share for all players**

- Deloitte Research estimates overall spending on offshoring will increase to \$261 billion by 2010. The primary destination for financial services offshoring continues to be India, which receives approximately 80% of all financial services offshoring activity
- Offshoring isn't just for tier-one FIs any more. Faced with ongoing IT budget cuts and pressure to manage operating costs, mid-sized (tier-two) insurance and financial services companies are now using offshore services

### **Offshoring in financial services is moving to the “NEXT LEVEL”**

- Financial institutions will pursue more deals targeted to specific vertical and horizontal IT functions or business processes
- As offshoring acceptance and experience grows, the types of IT work performed in offshore locations may include a company's core competencies creating an element of competitive advantage
- Functional offshoring, which involves business processes, is rapidly gaining momentum. FIs are outsourcing many of their back-office and other operations overseas to cut costs

## Environment

- Backlash and increased political scrutiny in most countries, against offshoring
- Compliance with the regulations imposed by regulators and rating agencies in the new offshore locations

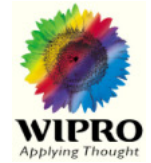
## Customer moves and concerns

- New offshoring strategies, such as captive centers in the financial space
- Intellectual property issues - More than 60 percent of respondents said management of intellectual property is important in the Deloitte survey

## Competition

- Outsourcing to US firms with offshoring capabilities.
- Competition from local Indian firms

# The pieces are in place to take advantage of the “Next Level” of financial offshoring that would require...



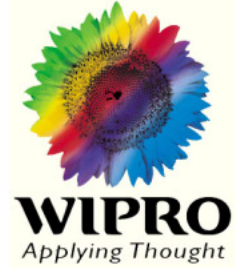
The next level

Flawless, secure and cost effective execution

Ability to suggest innovative **business** solutions

Complete knowledge of the customer and his **business**

**A STRATEGIC PARTNER to clients, focused on delivering enhanced value by offering end-to-end BUSINESS SOLUTIONS LEVERAGING TECHNOLOGY.**



R·O·I

RETURN  
ON IDEAS

R&D outsourcing

Dr. A L Rao  
President - Telecom Solutions

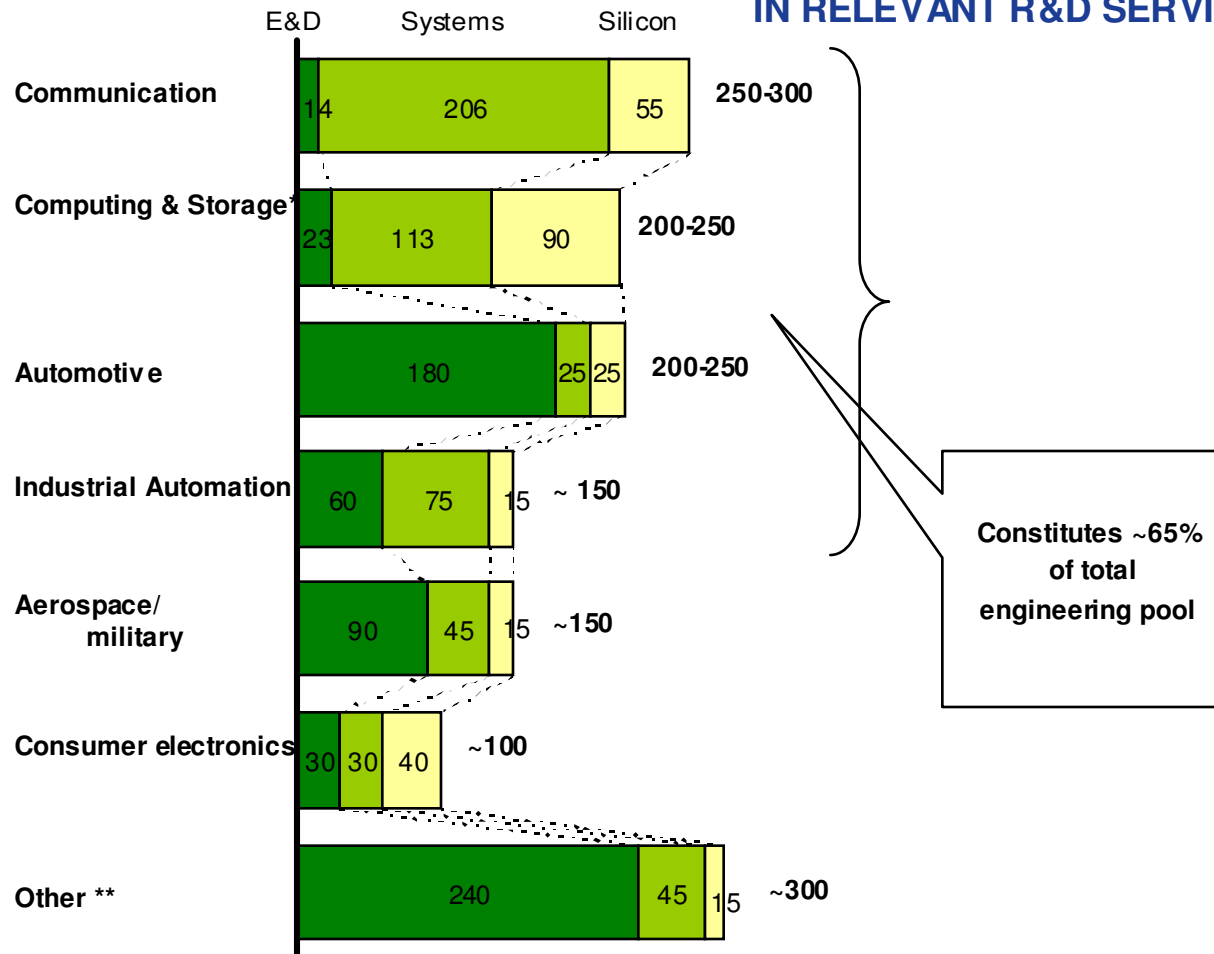
12<sup>th</sup> January, 2005

# R&D Services – Opportunity Size



Per cent; '000 of engineers

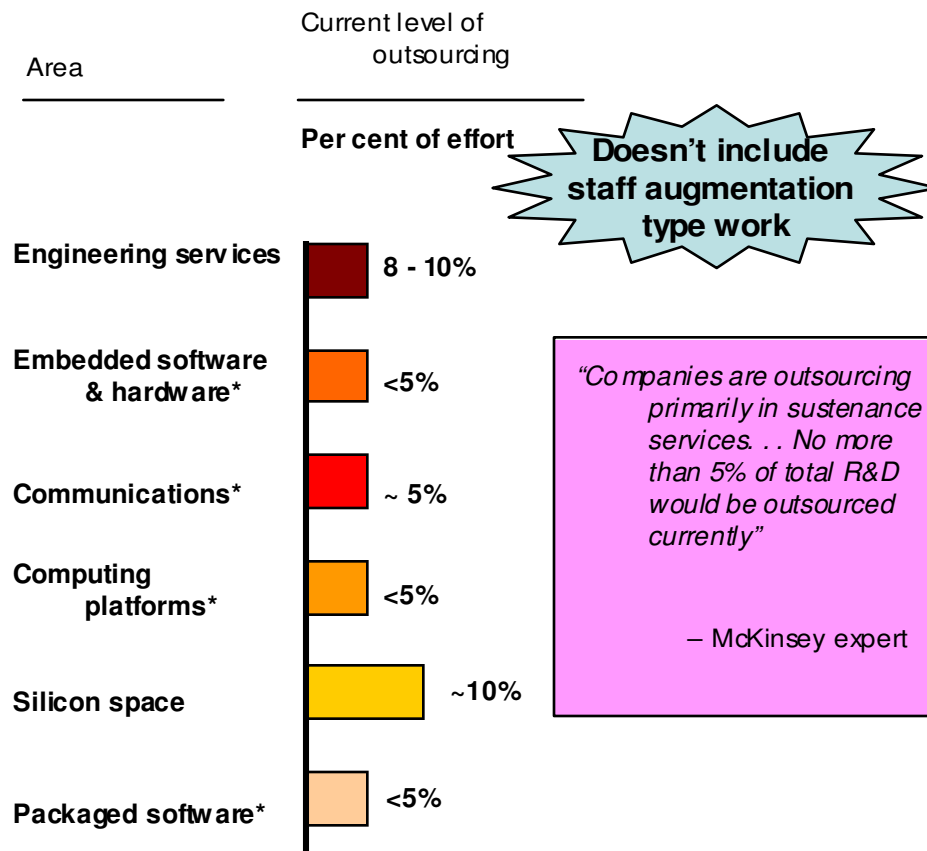
**ABOUT 1.5 - 1.8 MILLION ENGINEERS ARE DEPLOYED IN RELEVANT R&D SERVICES**



\* Includes ~85,000 engineers in Silicon space

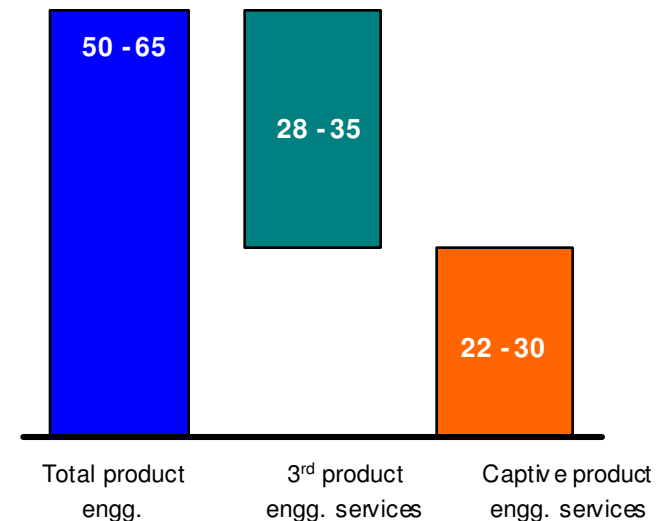
\*\* Includes Industrial machinery, metal fabrication, medical equipment, non-electronic office equipment

# Current 'true' R&D outsourcing level (without staff augmentation) is fairly low (5-10 per cent)



About 50-65 thousand design engineers are employed in the product engineering services market in India

Thousands of engineers



*"While OEMs are outsourcing 20% of their manufacturing, they are outsourcing less than 10% of their*

– Industry analyst

*"29% of the US companies with annual sales of over \$10 mn and almost 36% of the companies with sales over \$50 mn outsource"*

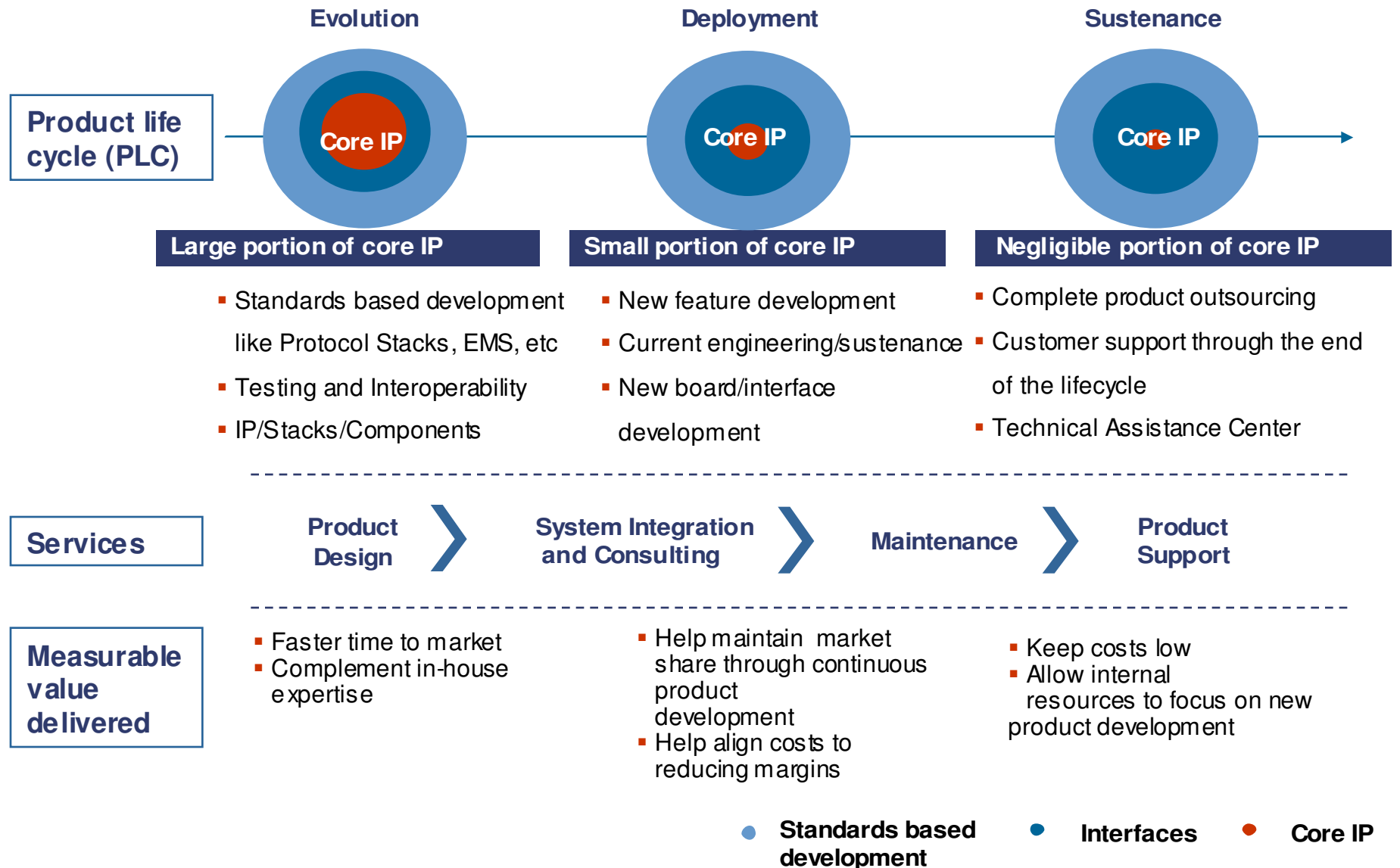
– Outsourcing institute

*"We currently outsource less than 10% of our R&D. . . But will increase this significantly"*

– Telecom equipment customer



# Outsourcing opportunities across the R&D service chain



# Wipro R&D services: Global leadership



## Proof points

- **20+ years** of R&D services experience
- World leader in independent product engineering services – **8000+** world class Product engineering workforce
- **15% market share** of outsourced product design services worldwide\*\*
- **33% share** of product design services outsourced to India\*\*
- **One of the world's largest** independent software verification & validation group in telecom space
- **One of the world's largest** independent VLSI/system design services group

## Sustained innovation

- Technology innovation through **Centre of Excellence (COEs)**
- IP & Component stack across technology/domain areas
- **Strategic outsourcing calculator** for maximizing client benefits
- **3+1 model** of technology transfer which ensures the client an optimized “return of knowledge” during product maintenance phase.
- **EagleVision** – A proven methodology for ASIC & hardware development

Wipro is the largest global R&D services provider for 'TRUE' outsourcing.

- McKinsey

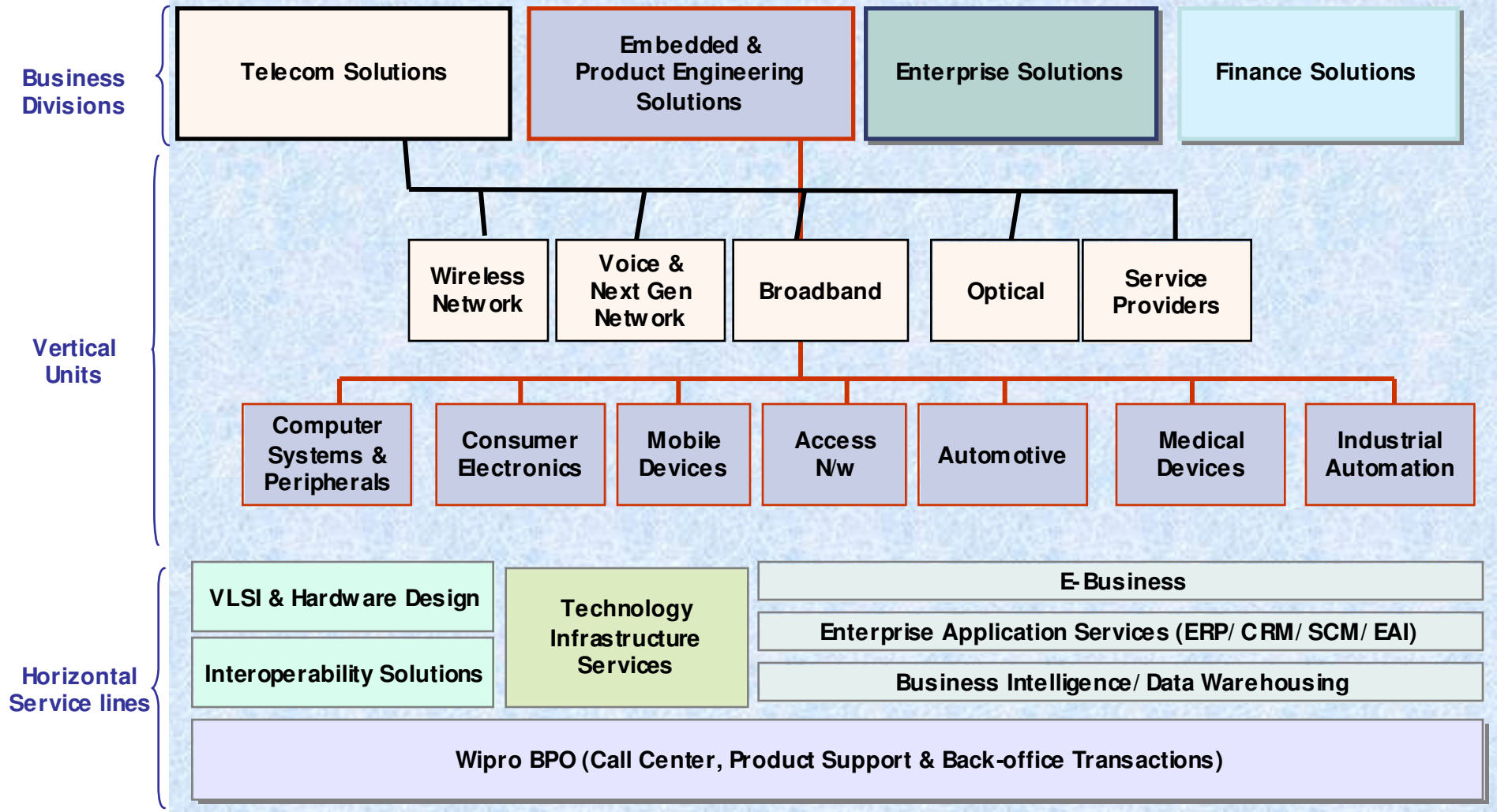
Companies, like Wipro in India, have made a sizable business supporting design services.

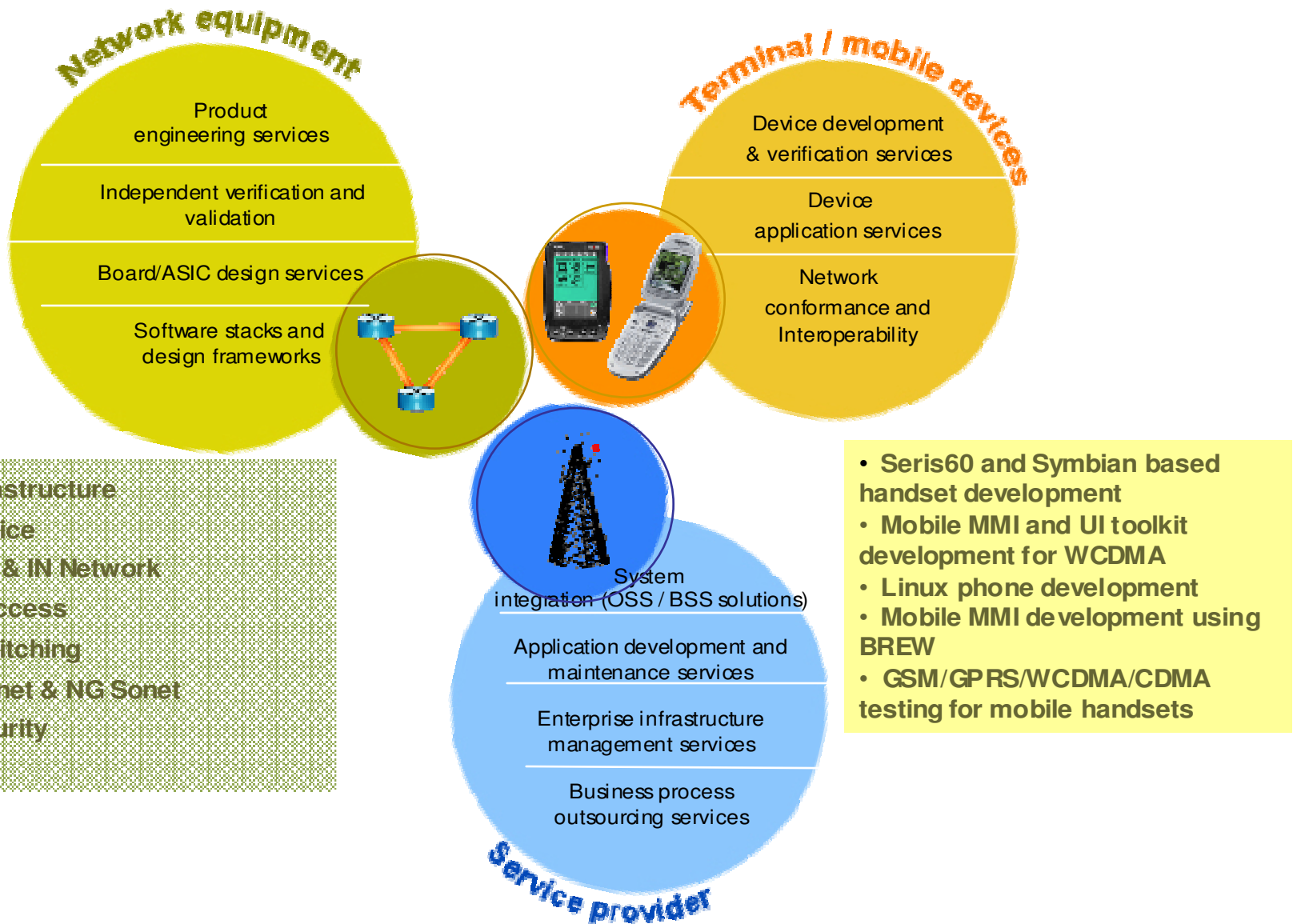
- Gartner, March 2004

World's first IT services company to be certified TL 9000.



# Our offerings







## Computing/Storage/Peripherals

- Computers/ servers
- Printer driver / firmware
- Scanners
- MFP
- Migration services
- OS engineering
- Software products
- Storage virtualization
- Fibre channel and SAN
- IP storage
- RAID systems
- NAS systems
- Storage network management



## Semiconductors

- C Modeling, Pre and Post silicon Validation, SoC Designs
- Hardware abstraction layers, Diagnostics
- Device Drivers, RTOS Porting
- Complete Reference Designs



## Automotive electronics

- Driver information systems
- Multimedia reference platforms
- Navigation systems
- Instrument clusters
- Telematics applications
- Body electronics
- Electronic power assisted steering



## Industrial automation & avionics

- SCADA/HMI
- PLC
- System integration
- Firmware development
- Software tools



## Consumer electronics

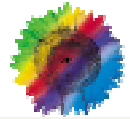
- Set top box
- Digital TV
- Residential gateway
- Media Center
- Security camera
- Portable Media Player



## Medical devices

- Diagnostic imaging
- Product realization
- Value engineering
- Data acquisition
- Connectivity solutions

# R&D BUSINESS PERFORMANCE



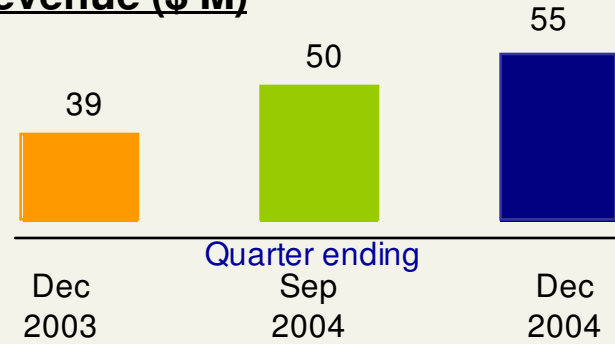
## Telecom & Inter- Networking

(Telecom Equipment Manufacturers)

YoY growth – 42%

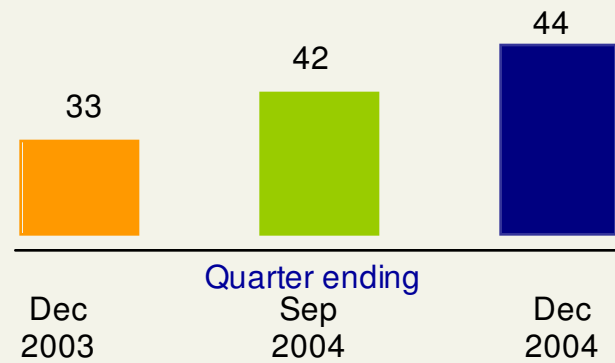


### Revenue (\$ M)



## Embedded Systems & Product Engineering

YoY growth – 33%



## Telecom Service Provider

YoY growth – 63%



# Our value proposition



## Thought leadership

- Industry understanding
  - 2 decades of experience
  - Product strategy & architecture
- Intellectual property blocks
  - WLAN, H264, 1394, USB
- Solutions
  - Telematics, Linux based Mobile framework, video-over-wireless, Set-top box



## Aggregator benefits

- Presence across various stages of the product life cycle
  - Transfer the 'development' edge of doing 500 projects a year to customers
- Full spectrum
  - Multiple services: software, hardware, verification, system integration, etc.
  - Multiple domains, multiple customer segments



## Instant organization

- Rapid changes to size of team (up and/or down)
- No negative consequences to changing size of team
- Global delivery model



## Safe hands

- Physically separate ODC's
- Financial stability of partner
- Quality certifications & expertise
  - People management expertise – PCMMI
- Disaster management – infrastructure etc

Realize new products faster

1

Maintain existing products efficiently

2

Localize existing products for new markets

3

Aim to be among the most preferred partner to clients worldwide



# Wipro's Differentiated Services

## An overview

Sanjay Joshi

25<sup>th</sup> February, 2005



## Our differentiated Services



1	Business Process Outsourcing	
2	Technology Infrastructure Services	
3	Testing Services	
4	IT Architecting & Consulting	

# Business Process Outsourcing – The India advantage



- 40%-60% cost reduction for offshored process
- Differential in wages from the US or UK parent location at approx 70%-80%.
- Purchasing Power Parity - the reason for cost savings likely to exist for next 20-30 years



- Faster turnaround time
- Time zone difference
- 24X7 service
- Learning curve effect, given increased activity across companies and increased centralization within company



- Established methodologies and processes being rapidly adopted for better performance
- Well defined quantifiable metrics for quality and process
- Access to highly qualified – skilled pool

**Opportunity for leveraging capabilities from remote location**

# Wipro's Business Process Outsourcing



## Range of Services



### Customer Relationship Management

eMail / Web / Chat  
Voice (inbound/outbound)

### Industry/Specialized Services



#### Industry Services

- Insurance claims processing
- Mortgage processing
- Health claims adjudication
- Credit card processing
- Bank reconciliation



#### Supply Chain Services

- Inventory management
- Direct procurement
- Logistics & dispatch

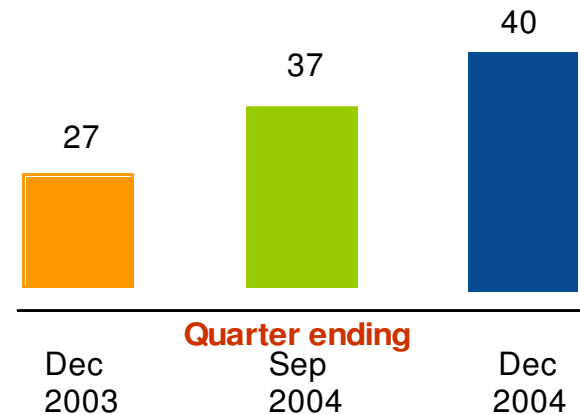
### Business Optimization Services (BOSs™)

Finance & accounting services  
Procurement services  
HR services

#### Knowledge Services

- Data analysis
- Data mining
- Data management

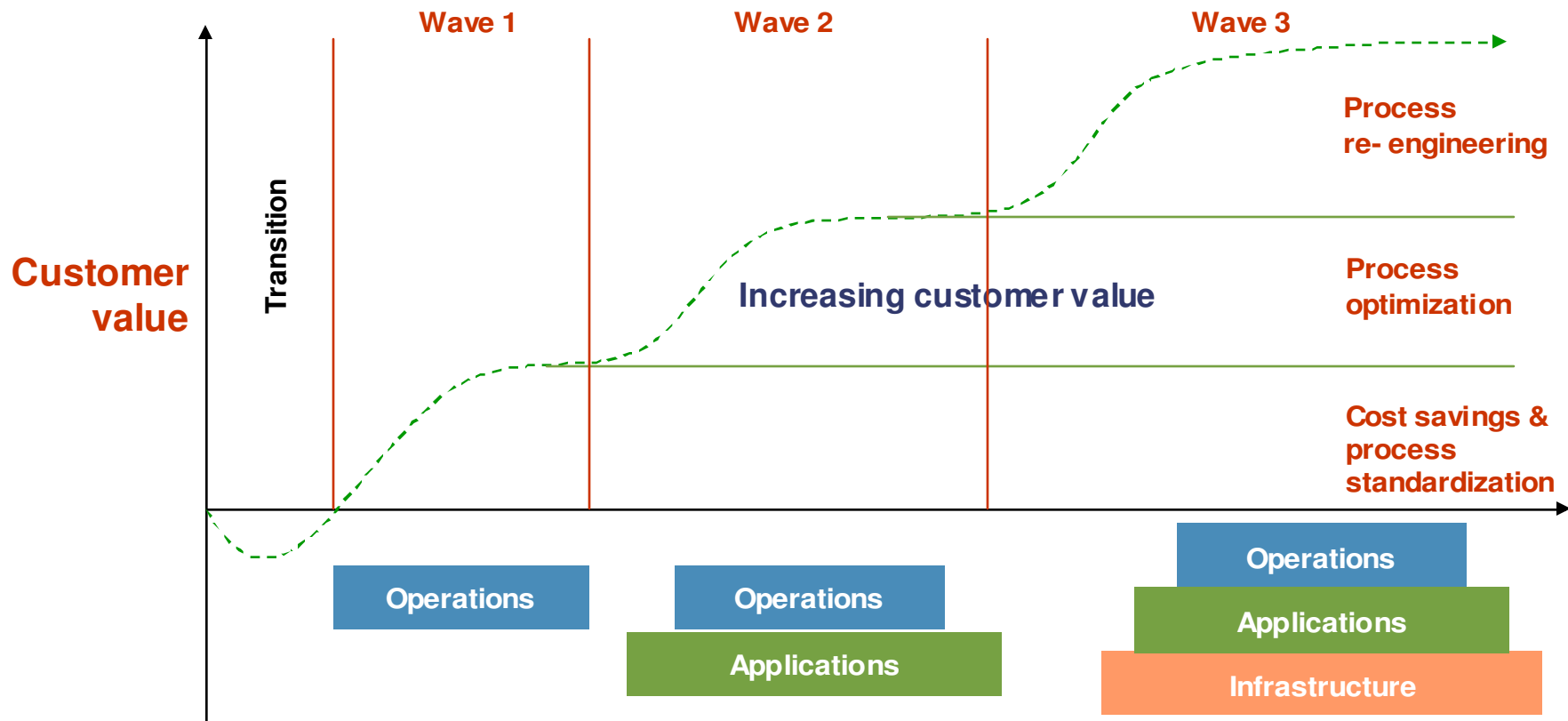
## Revenue (\$ M)



**YoY growth – 48%**

- Among largest third party BPO service provider in India
- Base of 23 active clients and 85 processes
- Voice based business generated 86.5% of Revenues
- Demonstrated track record of Revenue growth & profitability
- Clients are broad based across diverse industries like Computing, Financial Services, Retail, Telecom Service Provider etc.

# Benefits over the entire relationship lifecycle



## Process

- Test processes, prove concept
- Maintain quality
- Initial cost savings through arbitrage

## Process + applications

- Process improvement using Six Sigma and domain expertise
- Knowledge management
- Evaluate technology, automation & consolidation options

## Process + applications + infrastructure

- Best in class – process and technology optimization
- Consolidation across operations / processes
- Maximize savings through better turn-around and reduced defect rates

# Case Study - Underwriting & funding review – consumer direct lender (US)



## The client

The client is a consumer direct lender dedicated to providing borrowers across the credit spectrum with a more enjoyable and affordable way to obtain mortgage, auto and home equity loans

## The challenges

- High operational costs of running the process in house
- Client strongly felt the need to utilize a 24x7 business model and reduce cycle time for closing of loans

## Wipro solution

- The clients operations are managed out of our Chennai location which boasts of high quality talent pool with expertise in the financial domain
- The offshore team consists of senior underwriters to supervise the process
- Wipro was able to provide quick ramp up of the process.

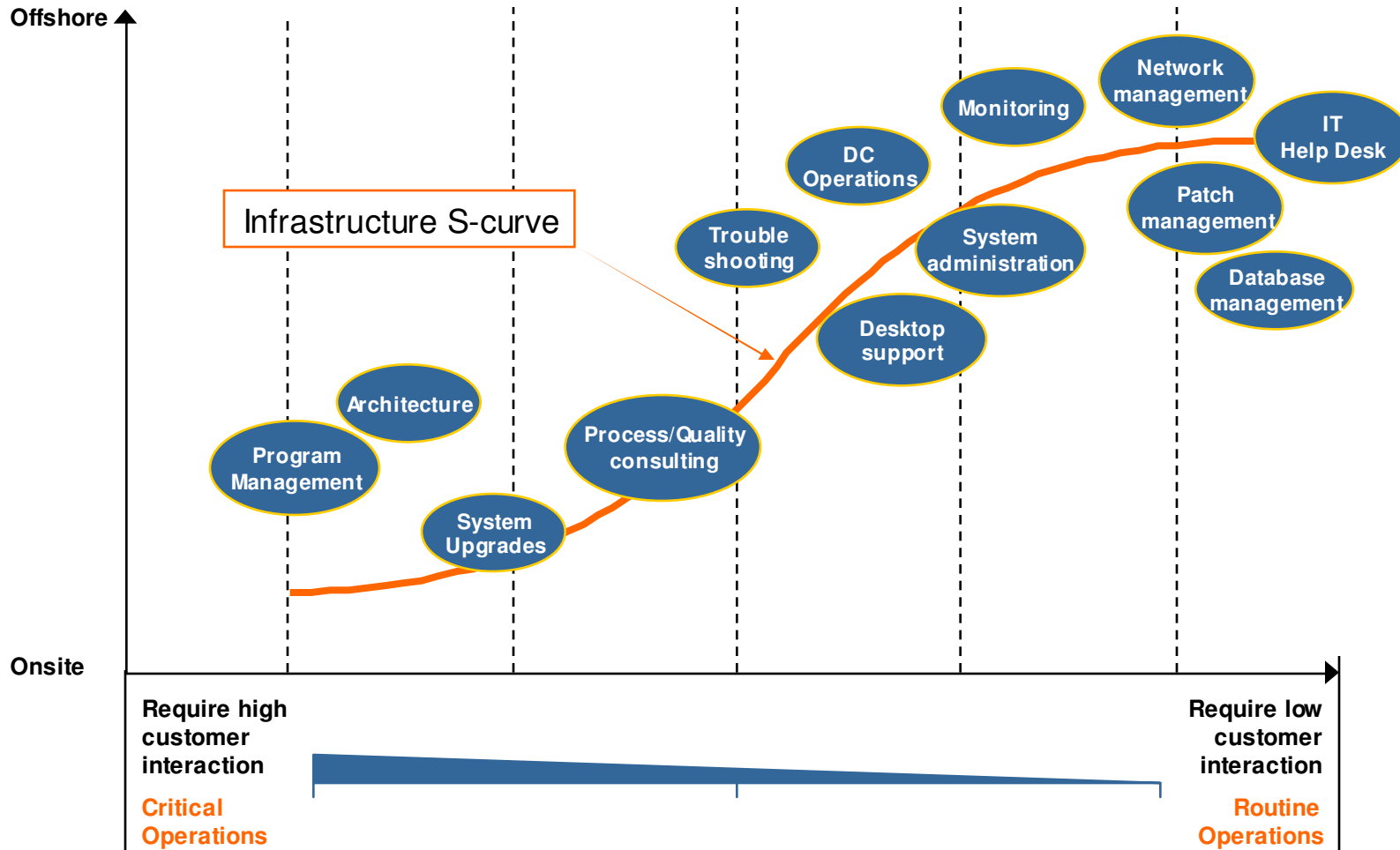
## Business benefits

- The time zone difference allows our client a faster cycle time to close the loans
- Better customer acquisition and retention performance
- The client has been able to realize the cost savings of process consolidation by merging globally repetitive processes across US, UK and Canada
- 60% savings on cost

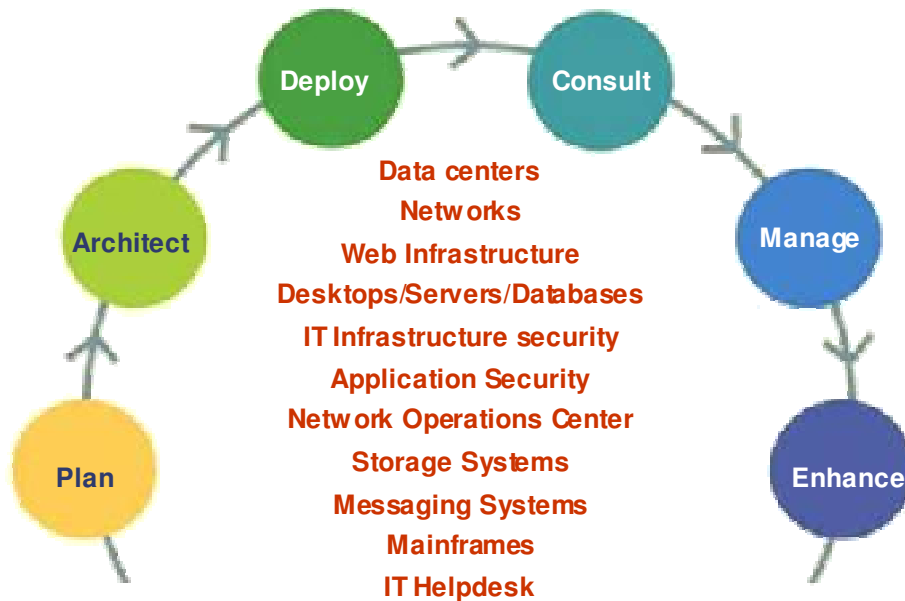


- **90% of client's customers have opted for India**
- **60% savings of client's costs**

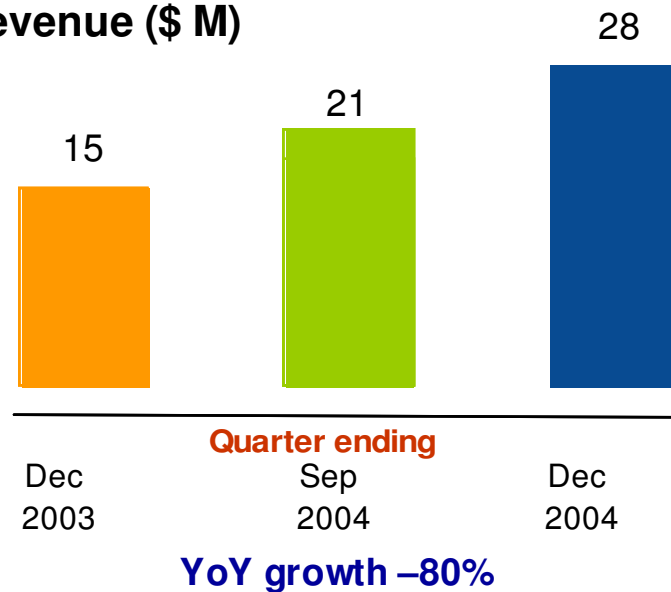
# Technology Infrastructure Services – evolving landscape



# Wipro's Technology Infrastructure Services



## Revenue (\$ M)



- More than 140+ customers across the globe and over 550 customers in India for Infrastructure Support Services
- Largest offshore IT Infrastructure Service provider in terms of revenue, people and customers
- Industry expert skills, over 5000 technical specialists
- World's first BS 15000 certified facility
- Backed by leading technology vendors and our experience of over two decades

Wipro – a clear leader in Remote Data Center Management – AMR Research.

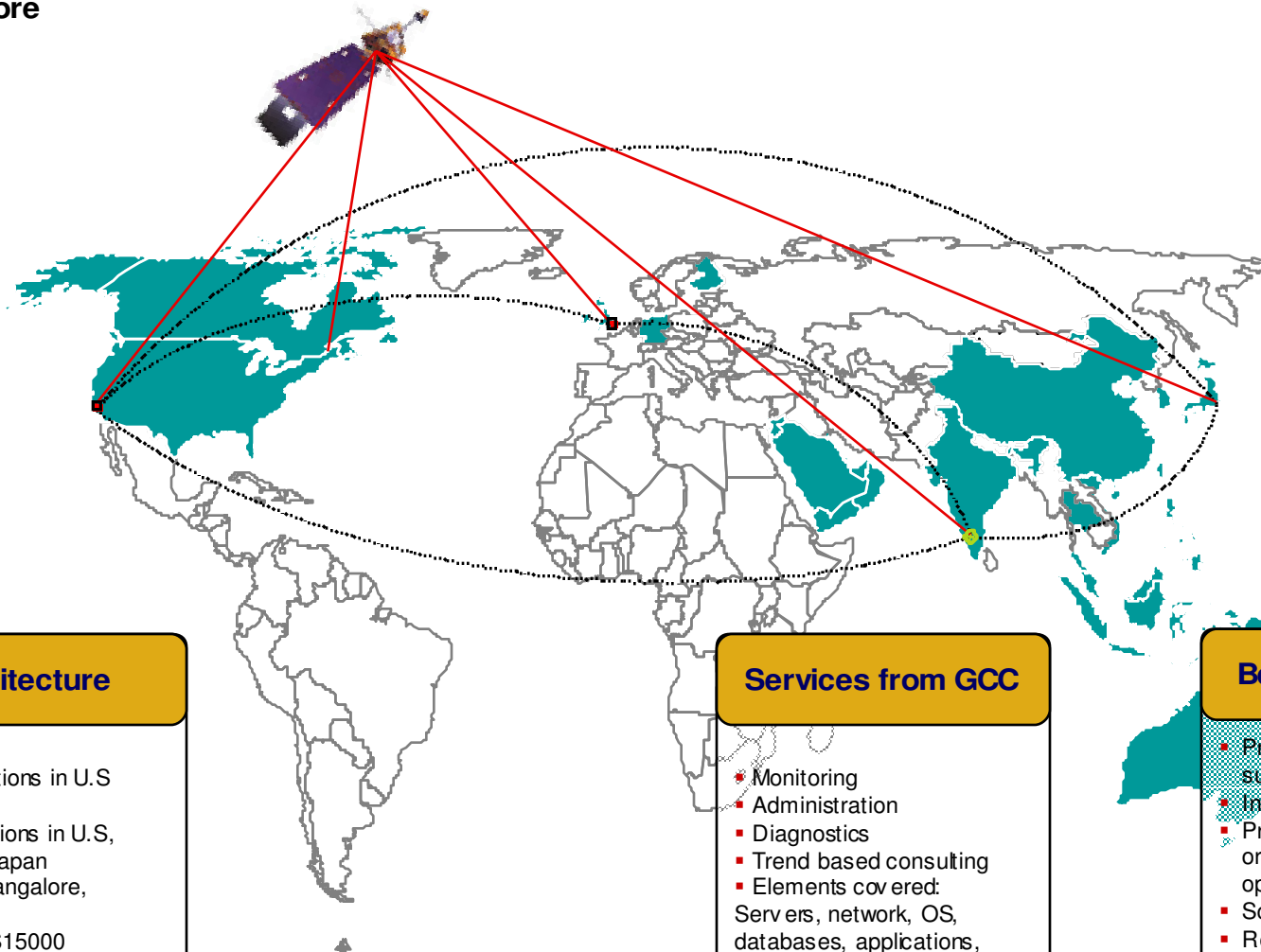
Wipro's broad competitive services portfolio is a threat to incumbents – IDC report on European Managed Services.

# Using a distributed global delivery model



Ensuring 99.95% availability of IT infrastructure spread across 118 locations in Europe by delivering remote monitoring and management services from the Global Command Center (GCC) in Bangalore

- Global Command Centre
- NOC
- POP Location
- Development Centers
- Countries Covered



## Architecture

- NOC locations in U.S and U.K
- POP locations in U.S, U.K and Japan
- GCC in Bangalore, India
- GCC – BS15000 certified site

## Services from GCC

- Monitoring
- Administration
- Diagnostics
- Trend based consulting
- Elements covered: Servers, network, OS, databases, applications, storage and security

## Benefits delivered

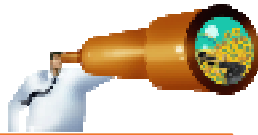
- Proactive 24X7X365 support
- Industry expert skills
- Proven process oriented service operations
- Scalable architecture
- Redundant, fail-proof architecture



# Case Study - Large oil & gas major



## Scope



- Client services
- Server support
- Messaging and active directory
- Secure access
- Problem co-ordination

## Infrastructure



- 90,000 users
- 2470 file servers
- 97,000 mail boxes and 150 mail servers
- Messaging, AD and secure access for 120,000 users

## Geographical spread



- Europe (UK & Continental Europe)
- America (North, Central, Latin)
- Middle East & Africa

## Production environment support



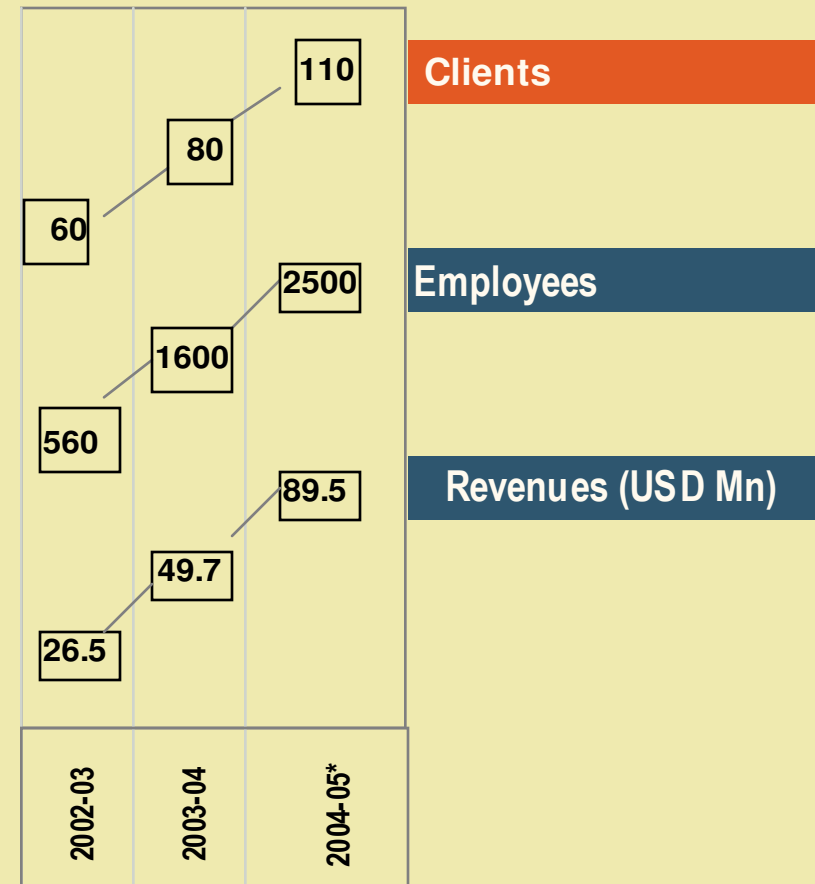
Wipro's second line technical support (offshore)

- Problem Coordination
- Non-Break fix support
- Situation Management
- On-Boarding New services
- System Administration
- Reactive Support
- User Training
- Break fix support
- Remote client services

# Wipro's Testing Services



- 8 years of experience in the independent testing services
- Largest offshore testing service provider in terms of revenue, people and customers
- End-to-end testing services offered for all industry verticals
- Strategic alliances with leading testing tools vendors : **Mercury, Rational, Compuware, TestQuest, Telelogic**
- **Testing as Managed Services (TMS)** for end-to-end testing ownership through our Global Delivery Model of Onsite, Offshore, Near-shore and Remote Testing
- Ready-to-use Point Solutions, Frameworks and industry specific Centers of Excellence (CoE)



\* Estimated

# Our Service Portfolio



## Test process consultancy

- Understanding Customer environment
- QA process implementation
- Test tools and platform recommendation
- Communication and rollout of plans

### Manual testing

- Design
- Scoping
- Execution
- Maintenance

### Life cycle testing

- Module
- Integration
- Regression
- Acceptance

### Specialized testing

- Automation
- Localization
- Performance testing
- Pre-certification

## Remote testing

- Scoping
- Environment setup
- Remote execution and collation of results
- Maintenance

## Testing as Managed Service (TMS)

- Partnership objectives sign off
- Knowledge acquisition
- Offshore test environment setup
- Complete transition
- Continuous improvement

# Wipro advantage



1	<ul style="list-style-type: none"> <li>▪ Domain specific skill sets available across all industry domains blended with the best-of-breed test processes, methodologies and frameworks</li> <li>▪ Existing relationships with global leaders in testing tools</li> </ul>
2	<ul style="list-style-type: none"> <li>▪ 8 years of experience in testing services including setting up dedicated test labs for customers and using our Global Delivery Model of Onsite, offshore, Near-shore and Remote Testing</li> <li>▪ Understand the challenges of managing an offshore center</li> </ul>
3	<ul style="list-style-type: none"> <li>▪ The Software Test Diagnosis Model [STDM] was developed based on knowledge and experience in independent verification and validation</li> <li>▪ Test processes models developed for Automaton, Remote testing and Performance testing</li> </ul>
4	<ul style="list-style-type: none"> <li>▪ Continuous Improvement using Six Sigma Projects</li> <li>▪ Specific Problem Solving Frameworks:             <ul style="list-style-type: none"> <li>➢ Orthogonal Array Technique</li> <li>➢ Field Error Prediction</li> </ul> </li> <li>▪ Lean Management for Waste Reduction</li> </ul>
5	<ul style="list-style-type: none"> <li>▪ Ability to ramp up quickly in terms of location and people as per our Global Delivery Model of Onsite, offshore, Near-shore and Remote Testing services</li> </ul>
6	<ul style="list-style-type: none"> <li>▪ Offshore delivery ensuring up to 30% ongoing savings due to process and quality improvements</li> </ul>

# Case Study



## Client profile

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A leading Wall street Investment Bank

## Wipro solution

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- Implemented Centralized QA process - ensured all business requirements are documented
- Defined and implemented a QA process with clear identification of role of development teams with respect to the QA cell
- Created several client specific artifacts and document templates to help them adopt the QA process with ease
- Rollout to all stakeholders for the need to change the process

## Challenges facing the client

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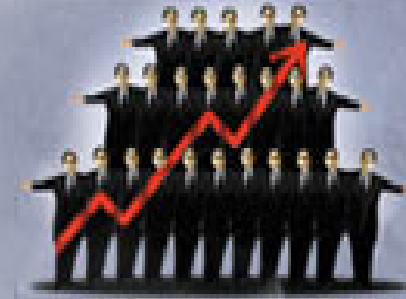
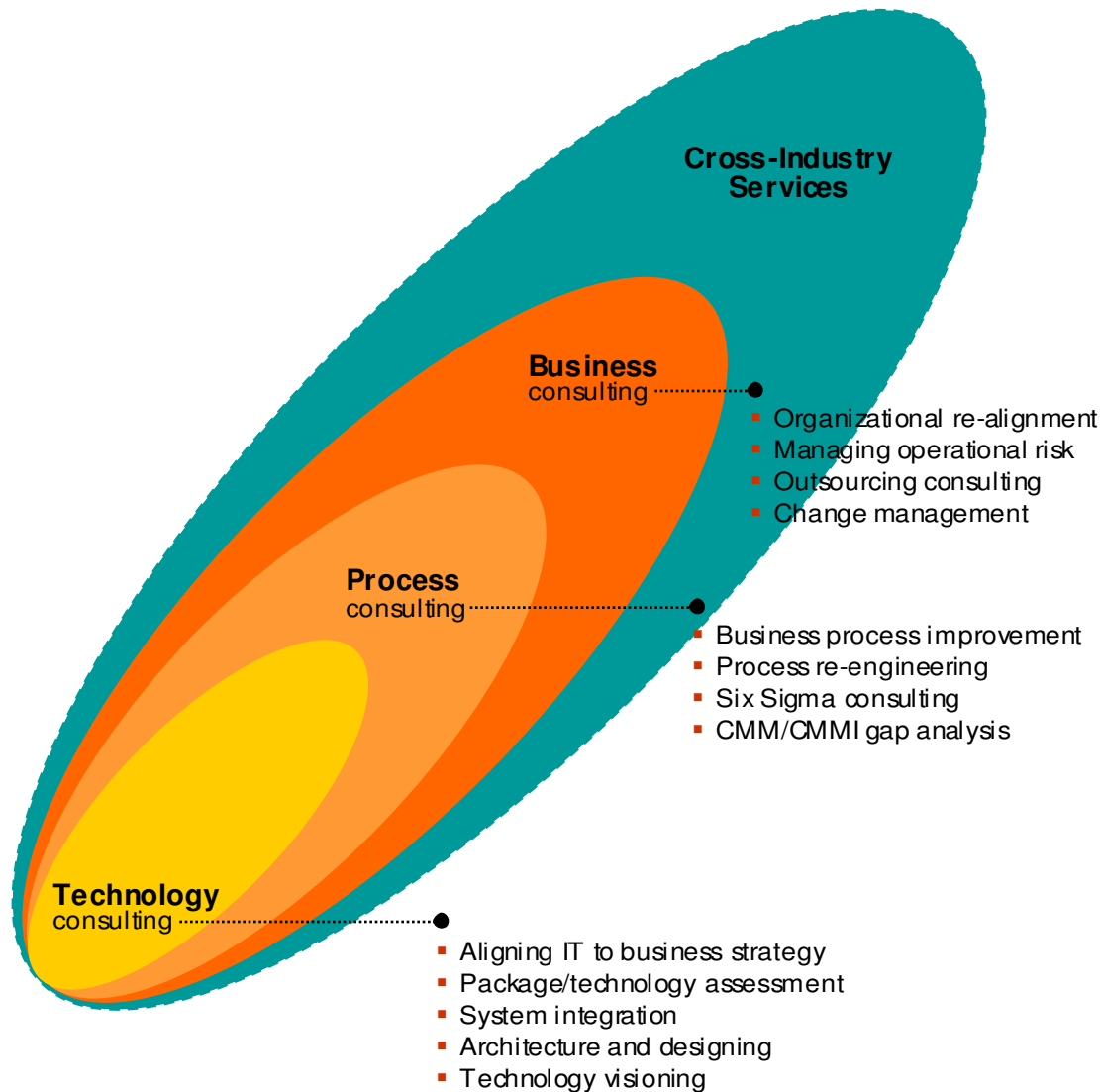
- Lack of a common organizational wide platform to ensure QA of IT initiatives
- To streamline testing efforts within organization and establish a QA cell
  - Frequent changes of requirements
  - Inadequate business application documentation
  - Lack of clear milestones for QA process.
  - Communication gap between development & QA team

## Business benefits

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- 60% of the test cases were automated
- 100% test execution and coordination from offshore
- Reduced the test cycle **from 13 hours to 4.5 hours** in some specific applications

# IT Architecting & Consulting Services



- **Business focused consulting**  
Acquisition of AMS energy division and Nervewire provide critical domain expertise

- **Process consulting** group for continuous business process improvement

- 200+ member **enterprise architecture consulting** group to help align IT with business needs

# Case Study



## The client

A leading North America based food distribution company

## The challenges

- High operational costs due to poor forecasting
- Consequent implications for Revenue predictability and inventory management

## Wipro solution

- Wipro's consulting team along with technology and domain teams designed a restructured business process
- Solution also included identification of and recommendations for IT architecture & applications
- Wipro was able to provide quick ramp up of the process.

## Business benefits- Customer

- Improved forecasting and better Revenue management
- Higher efficiency
- Significant savings on cost

## Business benefits - Wipro

- Significant follow through engagement in the areas of Data Warehousing, Business Intelligence and Application Integration
- Established strategic credibility with the customer organization



## Benefits as seen by our customers



- One stop shop for all IT Services needs
- Benefits much more than just cost savings
- Significantly higher quality of service with predictive delivery
- Remote service delivery, monitoring and management and testing  
– ALWAYS ON service
- Proactive support – a different end user experience
- Flexible model of outsourcing
- Access to best –of-breed process frameworks and talent



Thank you for your time



## Our promise

With utmost respect to **Human Values**, we promise to serve our customers with **Integrity**, through **Innovative**, **Value for Money** solutions, by Applying Thought, day after day

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