

# Cross-Border Partnering in Asia

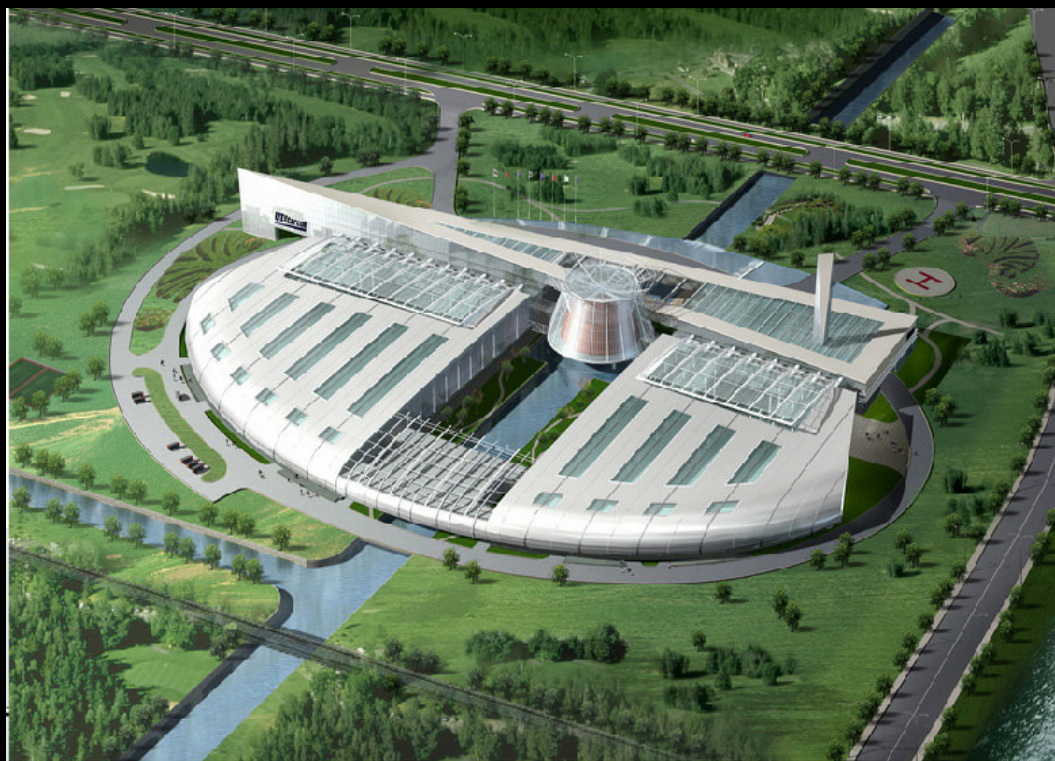
Globalization challenges for high-tech  
industries



Jeff Paine, Vice President, Strategic Marketing  
UTStarcom

# Who We Are

The Industry Leader in Developing Integrated, End-to-End IP–Based Broadband and Mobile Solutions for Carriers around the World.



10/18/2004

# Who is UTStarcom?

**Technology  
Innovator**

**Growing Global  
Presence**

**Strong Financial  
Performance**

**Successful Product  
Diversification**

**High-Growth End  
Markets**

**2003 Revenue - \$1.964 Billion  
2008 Revenue Target - \$10 Billion**

# In the Beginning

- Company founded in the United States
- Initial target market – developing countries
  - ◆ E.g., China, India, Vietnam. . .
- Selected IP for core access technology
  - ◆ Ubiquitous, designed for next-gen services, open standards
  - ◆ Inexpensive (compared to alternatives)
- Front-loaded manufacturing & R&D in China
  - ◆ To achieve target market price points
- Over 40 million – and growing – live subscribers shows the model's success
  - ◆ Key customers: YahooBB (Japan), China Telecom, China Netcom

# In the Beginning

- Initial technology was PHS wireless local loop
  - ◆ Japanese-market standard
  - ◆ Analogous to wireless ISDN
  - ◆ Sleek handsets look/act like mobile phones
  - ◆ All driven by an IP-based softswitch core
- Required complex set of alliances in Japan to drive to China market
  - ◆ Licenses, component mfg agreements. . .
  - ◆ With Sanyo, Toshiba, Matsushita and NEC
- Was it successful?

■ China Netcom ■ China Telecom ▲ PAS Deployment

**Shen Yang**  
• Population: 7M  
• Subscribers: 313K\*  
• PAS Capacity: 900K

**Chong Qing**  
• Population: 31M  
• Subscribers: 634K\*  
• PAS Capacity: 1M

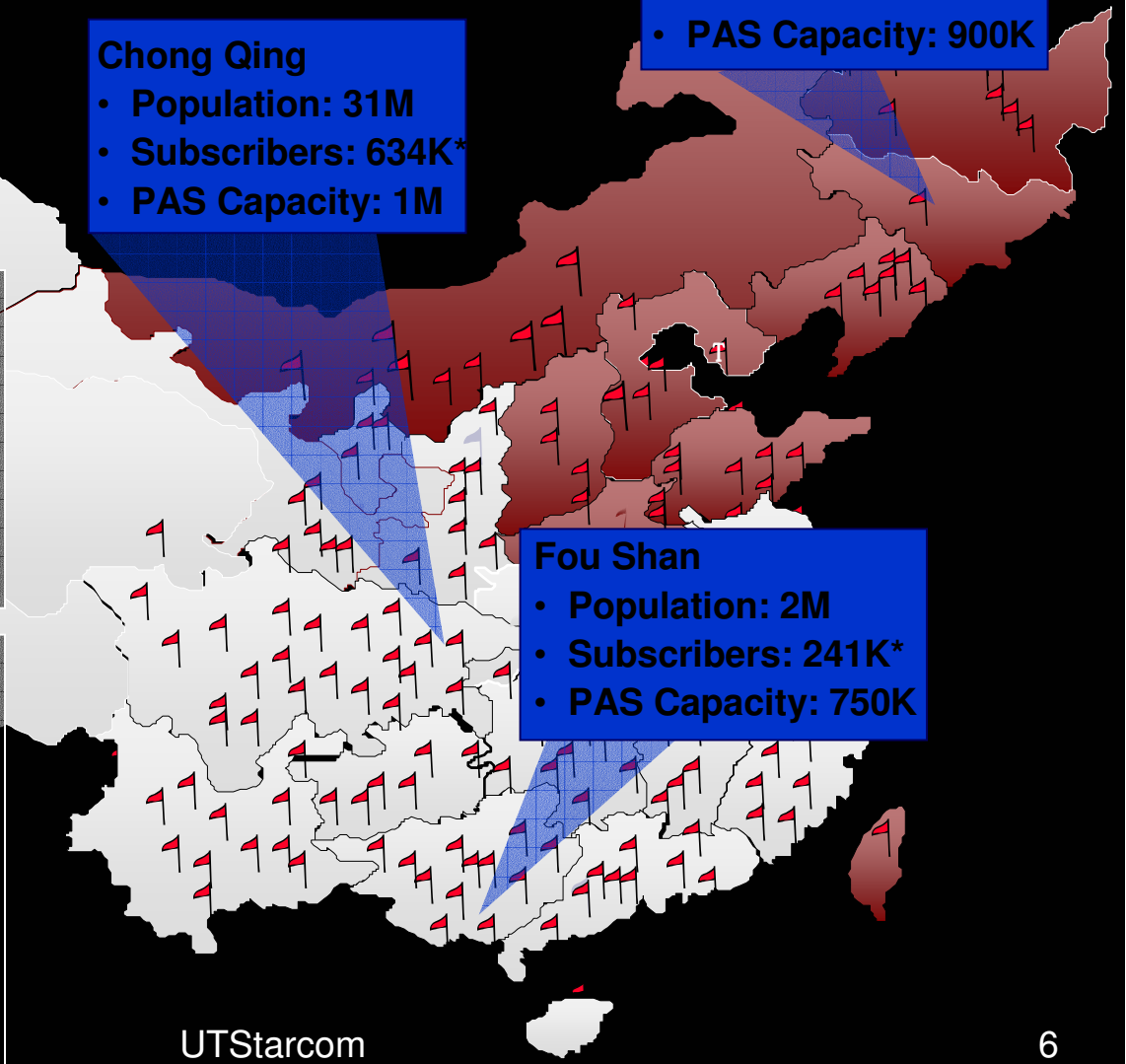
**Fou Shan**  
• Population: 2M  
• Subscribers: 241K\*  
• PAS Capacity: 750K

**China Advantages**

- Largest and Fast-Growing Telecommunications Market
- Low Teledensity Rate of Approx. 32%
- 9% GDP Growth in 2003

**UTStarcom Advantages**

- Widespread PAS Deployment (26M Subscribers)
- Extensive Sales, Service and R&D Infrastructure
- Successful Incumbent for Future Contracts
- Platform for Global Expansion



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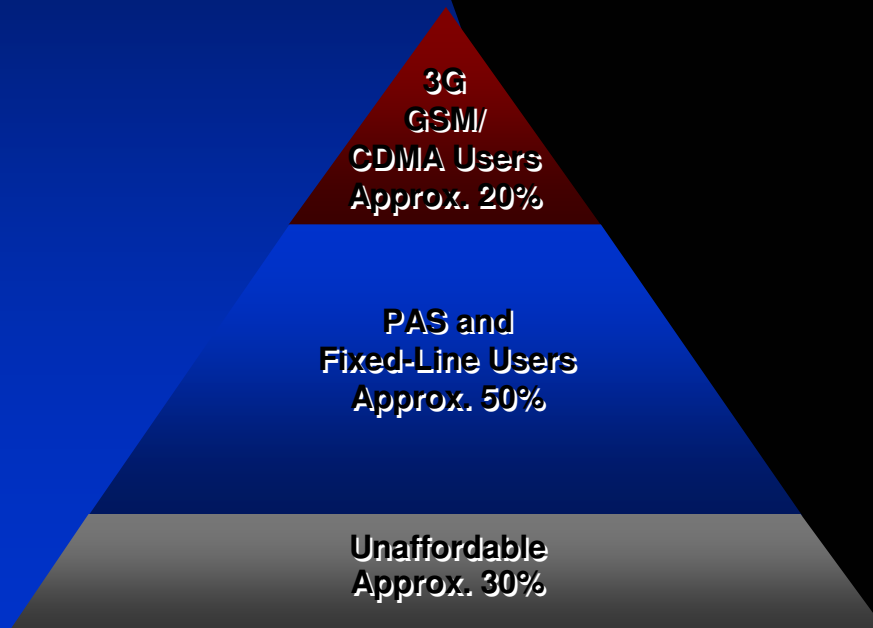
\*Subscriber and capacity numbers as of December 31, 2003



## Advantages to Service Providers

- Low Cost, Rapid Deployment and Revenue Generation: 2-3 Year ROI
- IP-Based Network
- Over 60% of fixed-line additions are now on PAS

## PAS Target Market (1)



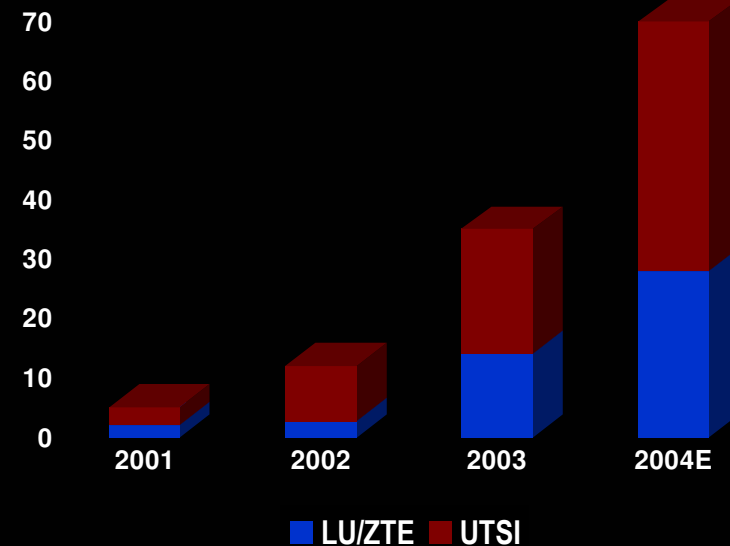
(1) China's Population by Income and Affordability (Source: Company data)

## Advantages to End Users

- Citywide Mobility Satisfying 90% of the Population
- Fast Mobile Internet (64kbps)
- Cost Advantage of Approximately 5x Over Cellular

## Total PAS Subscribers in China (2)

In Millions



(2) Source: China Telecom, China Netcom, Ministry of Information Industry, China

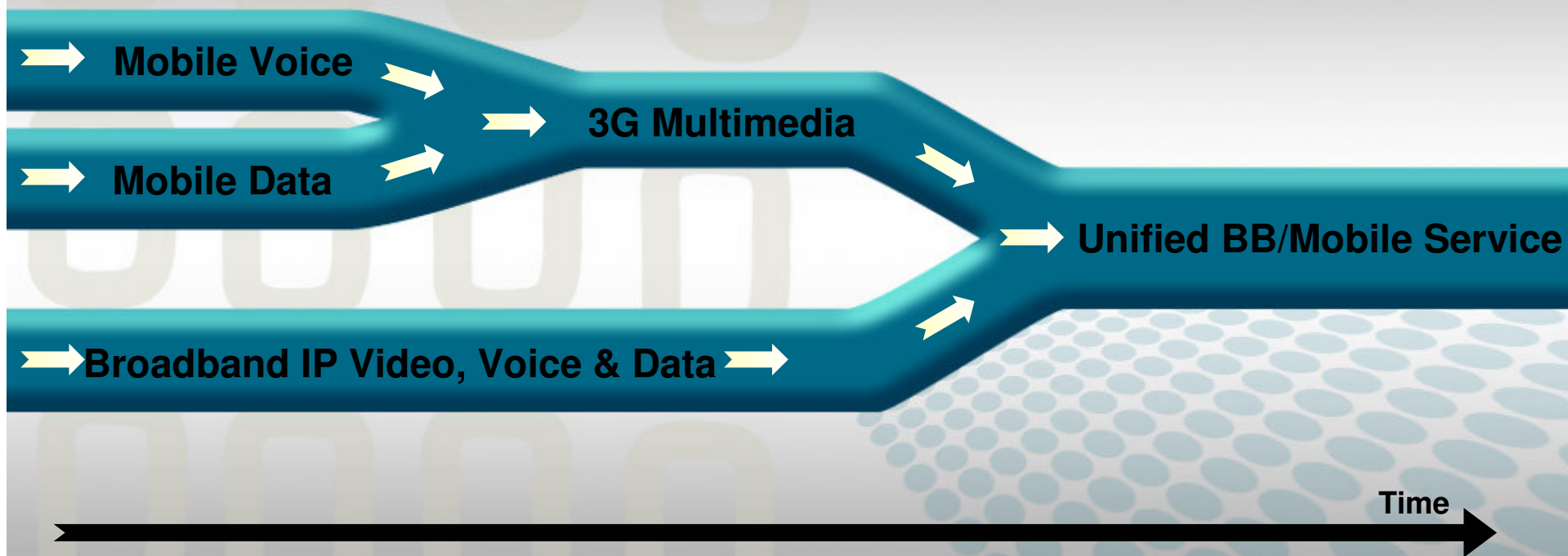
# Example PHS Handset



- Phonebook with Search
- SMS
- 4-note Polyphonic Melodies
- Call Forward
- Animation
- Calculator
- Calendar
- Memo
- Games



# UTStarcom Market Vision



# TVoIP Applications Coming to You

- Broadcast TV
- Near VOD (n-VOD)
- VOD
- Network PVR (Time-Shifted-TV)
- Internet Access (Operator Portal Only)
- Music on Demand
- Internet e-mail
- Gaming
- Karaoke on Demand
- Video Conferencing
- Information Services
- Advertising Insertion
- Mobile applications

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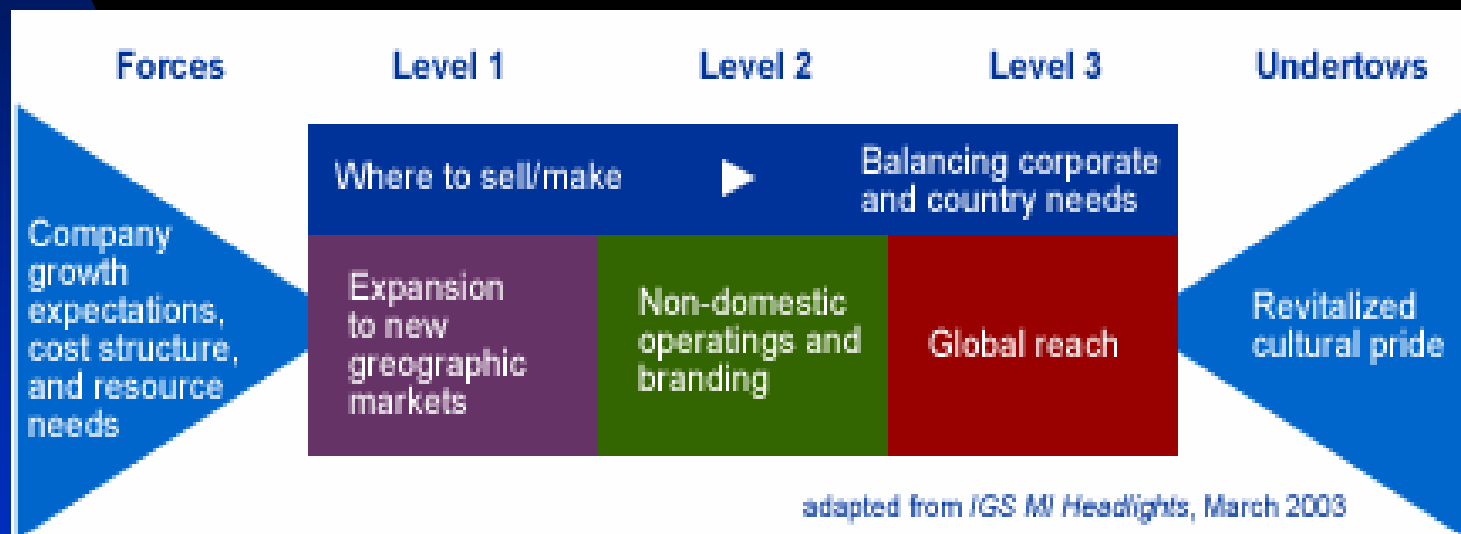
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# Globalization

- Globalization for an on-demand world integrates people, cultures, business processes and technologies
- Driving forces
  - ◆ Low-cost labor
  - ◆ Global market share
  - ◆ Environmental concerns
  - ◆ Internet, VPN, VoIP technologies

# Balancing the Driving Forces



# Challenges

- Operation Challenges
  - ◆ operate cohesively vs. multi-domestically
  - ◆ collaborate effectively with employees, partners, suppliers, and customers in any language, and with cultural respect
  - ◆ create global ecosystems
  - ◆ reduce costs and expenses with business objectives on a global basis
  - ◆ improve asset utilization and minimize operational risks
- Marketplace Challenges
  - ◆ quickly reach new multilingual/multicultural markets
  - ◆ minimize local exposure while growing global revenues
  - ◆ control corporate and product branding and build worldwide loyalty



# APAC Market

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# APAC Market Overview

- APAC Market
- China and India are both fast growing counties
  - ◆ Good educational systems
  - ◆ High-quality engineers
  - ◆ Cost-effective labor force
  - ◆ Both governments set up new policies and tax benefits to attract foreign investors to start businesses with them

# Asian Economy-GDP Growth

## *The Large Economies – FY2003 GDP*



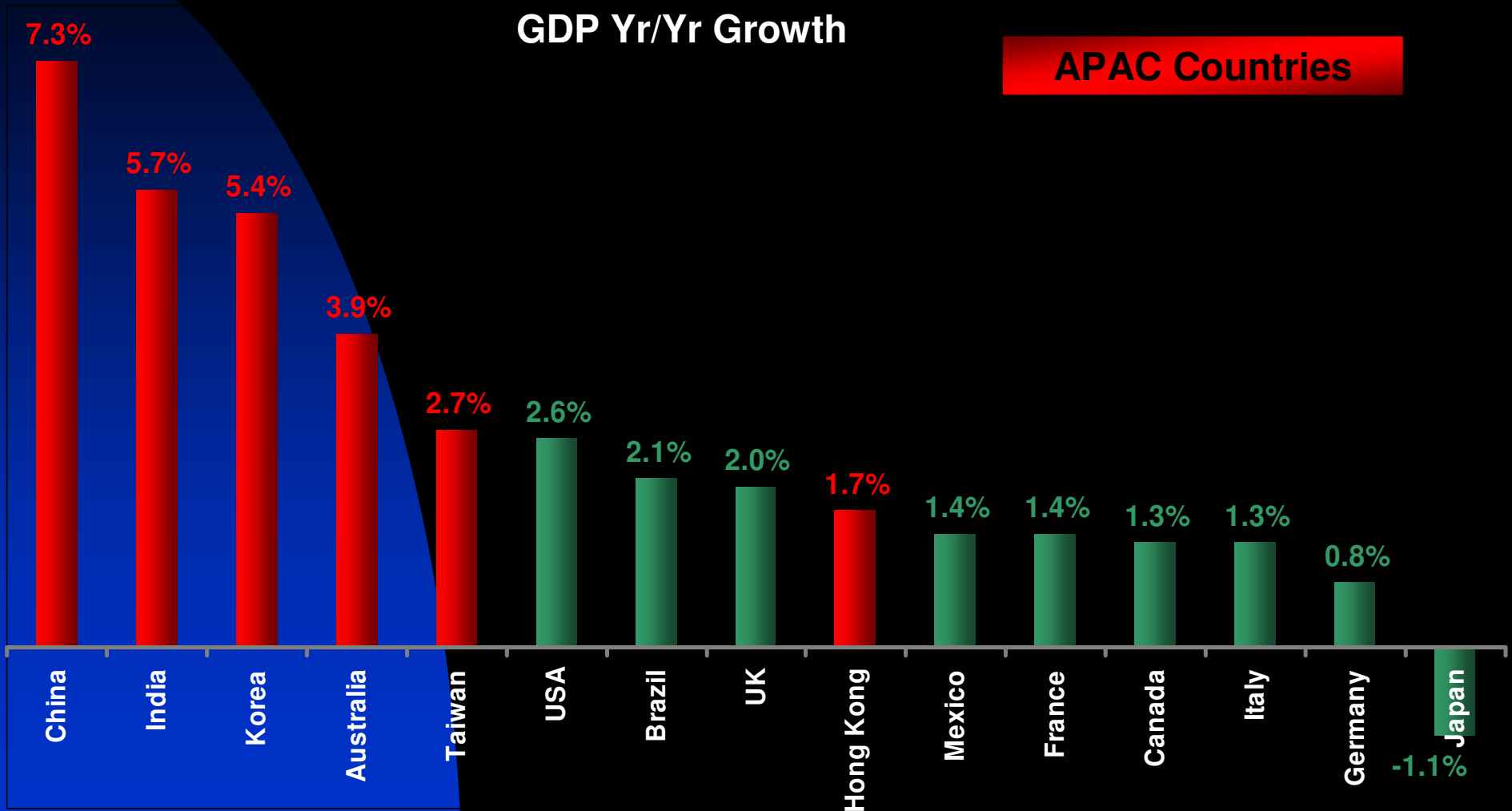
GDP Growth Forecasts		
Country	GDP 2002F	GDP 2003F
Australia	3.9%	3.9%
China	7.3%	6.5%
Korea	5.4%	6.0%
Taiwan	2.7%	3.8%
Singapore	3.9%	5.7%
Hong Kong	1.7%	3.9%
India	5.7%	6.0%
Indonesia	3.4%	4.2%
Malaysia	3.7%	5.4%
New Zealand	2.8%	3.2%
Philippines	3.6%	4.1%
Thailand	3.4%	4.0%

Source: US Commerce Dept, World Bank, Consensus Economics, Economist, April 2002

# APAC Economies & Worldwide 2002 Outlook

## GDP Yr/Yr Growth

APAC Countries



Source: US Commerce Dept, World Bank, Consensus Economics, Economist, April 2002

# State of the Market in China



## 2000

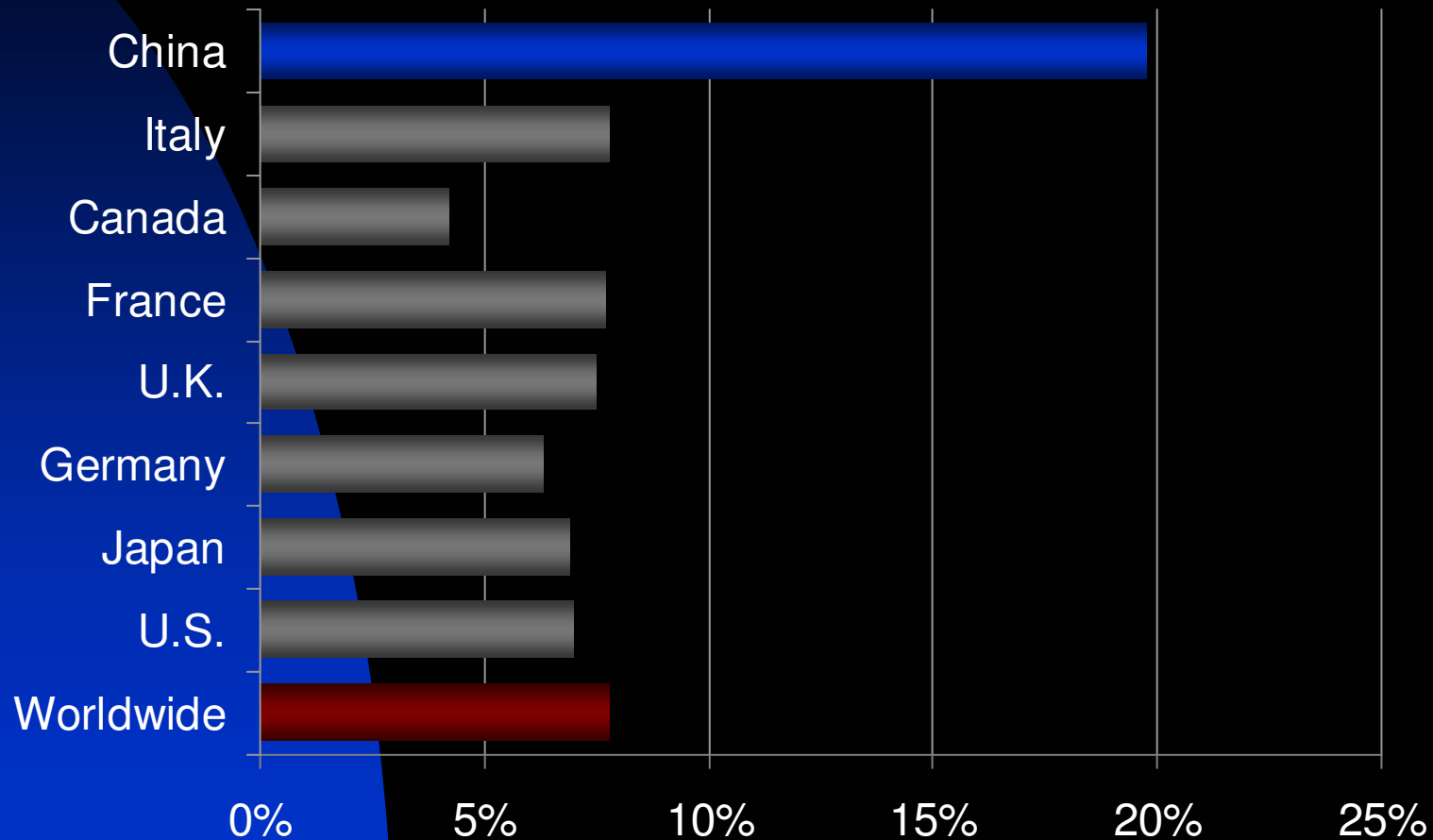
- 1.26B population
- 30M PCs
- 70M mobile subscribers
- 320M TVs
- 80M cable subscribers
- 20M Internet users

## 2005

- 1.31B population
- 80M PCs
- 210M Mobile subscribers
- 330M TVs
- 200M cable subscribers
- 80M Internet users

# Forecast: China and the World — IT Spending

2001–2006 CAGR

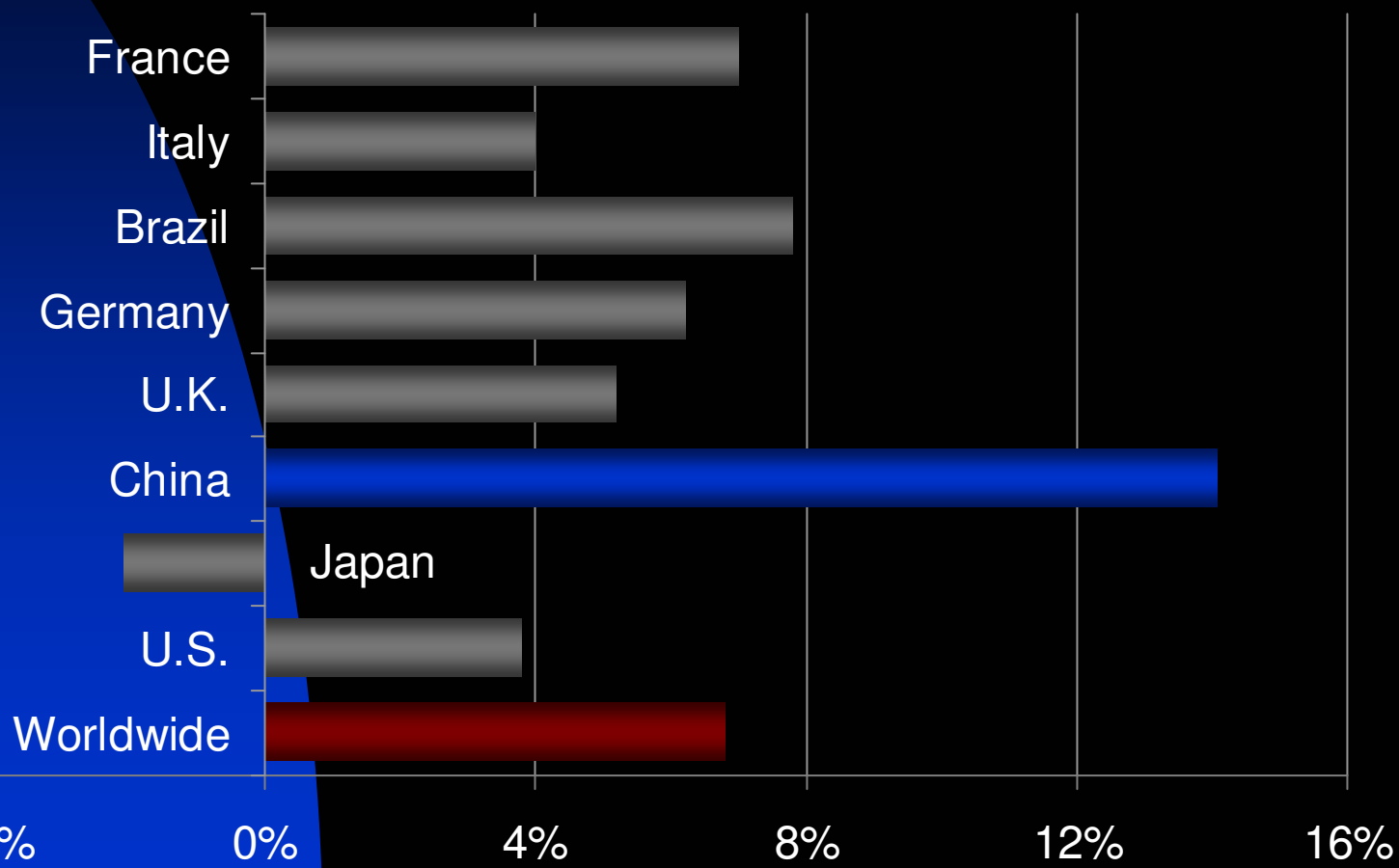


By 2006, China will rank #6 (from #8 today)



# Forecast: China and the World — Telecom Services

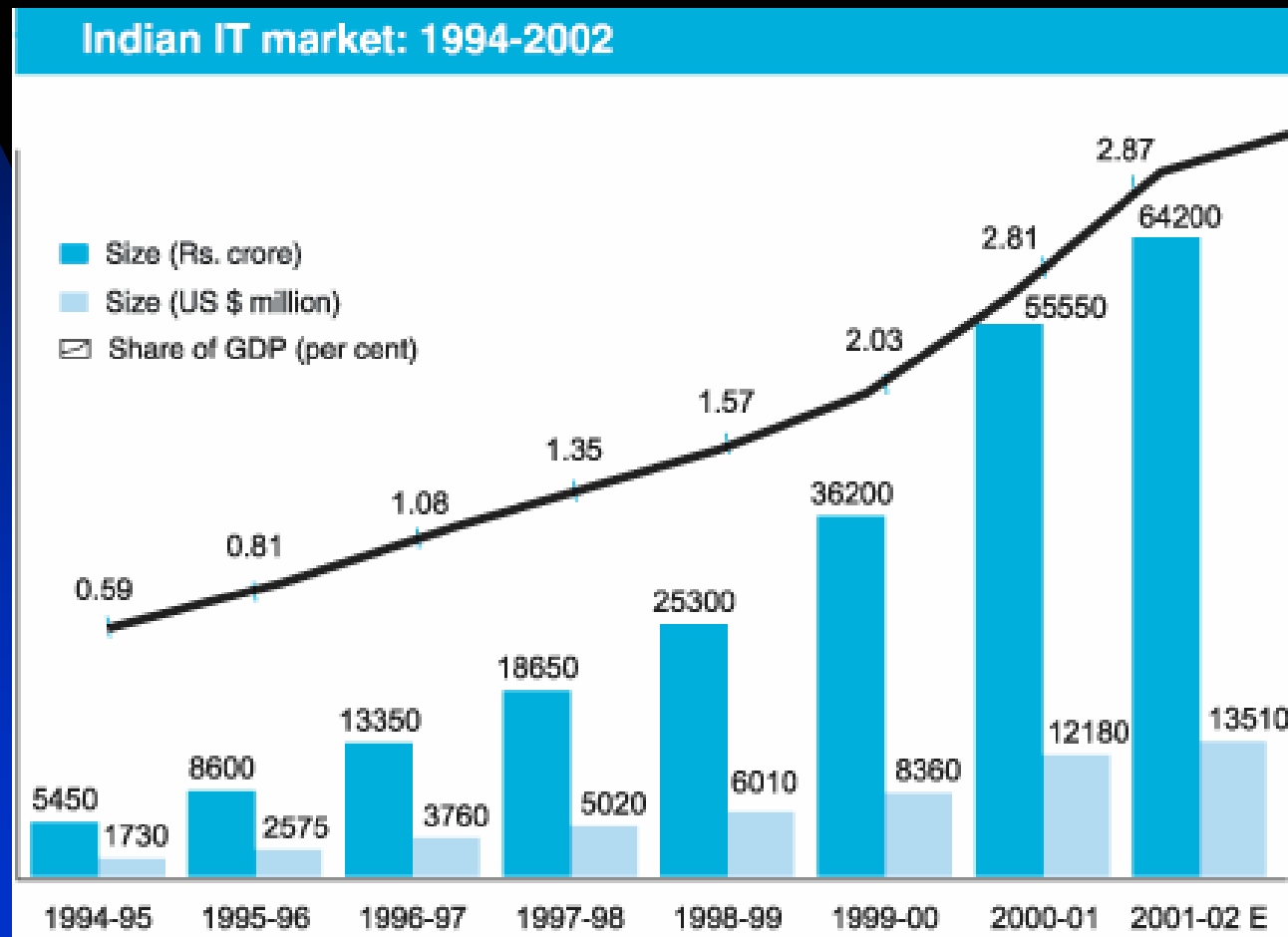
2001–2006 CAGR



# Growth Drivers for the China Market

- Renewed efforts on the policy of “reform and open-door”
- Accession to WTO
  - ★ Most anticipated event
  - ★ More transparent and predictable business environment
  - ★ Dramatically expand market access for goods/services
- 2008 Olympiad in Beijing
  - E-Government
  - “West Region Mega Development” strategy by the central government
  - Steady economic growth

# India IT Market



# India Market

- The Indian IT industry has grown from Rs. 5,450 crore (US\$1.73 billion) in 1994-95 to Rs. 64,200 crore (US\$13.5 billion) in 2001-02.
- In terms of a share of GDP, the IT industry figures have risen from 0.59 percent in 1994-95 to 2.87 percent in 2001-02.

# Cross-border Partnering with China and India

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# Chinese Firms

- Chinese High-tech industry's strong domestic market orientation
- China has flexible policies for opening up Chinese market for foreign partners and investors
- Chinese emphasis on packages/OEM means China has more product-oriented firms than India
- Chinese firms have strong support from government on Taxes and Policies to favor foreign partners and investors
- Have copyright concerns



# Indian Firms

- India's emphasis on services
- India's export orientation
- Indian firms have more IT and software management skills and good understanding about North America's development processes
- Corporate culture in India is closer to North American and engineers, in general, have better English skills
- Lower copyright concerns for strategic alliances with India firms

# The Roots of Chinese High-tech Firms and “Models”

- Spin offs from the government-funded research institutes in Chinese Academy of Science – typified by Legend, a PC language card maker that became a full-fledged PC manufacturer
- University-research technologies being commercialized by private enterprises funded partly by universities and partly by other agents. Founder, for example, starting as a developer of electronic publishing systems but is now also a major PC maker
- Spin offs from state-run firms – such as Great Wall
- Greenfield start ups – such as Stone (its first product was a word processing system)
- PC and Telecom integrators like Digital China, Asia Telecom, Yi-Yang; later on became channel partners for American firms

# The Roots of Indian Firms

- Many Indian companies have roots in the Indian defense industry, especially around Bangalore
- Most did not have same level of government support as in the Chinese High-tech industry
- Strong on software export and services
- Relatively weak on hardware, equipment and manufacture

# Strategies

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# Strategies for Chinese Market Development and Partnership

- It's the PPP in North America
  - ◆ Product
  - ◆ Promotion
  - ◆ Pricing
- But it's the PRC in China
  - ◆ Product -- simple functionalities
  - ◆ Relationships -- key/critical
  - ◆ Cost-effective -- pricing
- Chinese and APAC market share focus
- Strong product orientation, OEM, manufacture outsourcing
- Channel partnership
- IP and copyright improvement

# Strategies for Indian Market Development and Partnership

- More service oriented (generally)
- Long-term alliance with North American Market focus
- PPP
- Easy to adapt to company culture and communications advantages
- Fewer IP and copyright concerns
- High-tech management and processes
- Strong for software and IT service outsourcing



# The Three “Traditional” Market Entry and Expansion Strategies

- Joint ventures with domestic companies
  - ◆ Leverages extant distribution, reputation and market position
  - ◆ Dangers: lack of accurate partner info, prominence of SOEs, IP issues
- Acquisition of a domestic company
  - ◆ Facilitates entry, often requires restructuring
- Internal development of a second-tier brand
  - ◆ Allows firms to cater to different quality/price-level submarkets

# A Look at UTStarcom's Approach

- Earlier JV with China PTT
  - ◆ Lower entry-point product
  - ◆ Seized open stds for early major products
  - ◆ Disruptive innovation (PAS, iPAS that created PAS (PHS) handset business
  - ◆ IP DSLAM, 3G Softswitch, GEAPON, TVoIP, end-to-end product strategy
- New, global business model
  - ◆ Leverage US & China resources
  - ◆ US high-tech + China R&D, mfg

# A Look at UTStarcom's Approach

- Pick the right partners
  - ◆ Follow guidelines of Clayton Christensen (Innovator's Dilemma)
    - ★ Find customers & partners willing to participate in changing businesses & new technologies
- Spin a web of relationships as a WOFE
  - ◆ Essentially create an ecosystem
- Flexible approach to available tactics
  - ◆ JVs, distributor, direct, R&D government grants. . . Experiment!
  - ◆ Traditional competition often fails here
- Took a low-cost, Dell-like approach 9 years ago because of low teledensity

# A Word on Other Considerations for Telecom Equipment Suppliers

- Can you meet global – US/EU standards and directives on
  - ◆ Human dignity (workforce conditions)
  - ◆ Restrictions on hazardous substances
  - ◆ Disposal of electrical/electronic gear
  - ◆ ISO14001, EMAS Registration. . .
- If manufacturing is outsourced, you may have to monitor/manage above conditions

# Top Potential Partners for the Indian and Chinese Markets

Top India Companies in sales	FY02 \$ millions	Top Chinese Companies in sales	FY00 sales
TCS	809	Founder	438
Infosys	532	Putian	186
Wipro	749	Legend	175
Satyam	355	DongFang	134
HCK	275	ChongRan	126
Patni	153	ChangTian	125
Silverline	126	TsingHua DongFang	115
Mahindra	113	YianTai	107
Pentasoftware	96	CVIC	94
HCL	94	Top	93

Thank You!  
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