



bharti

**Big Transformations. Brave Actions.
A story of global telecom company**

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bharti



Our Group Businesses

Our Businesses

TELECOM SERVICES

Bharti Airtel
Telecom Services

Bharti Infratel
Passive Infra

Indus Towers
Passive Infra Sharing

FINANCIAL SERVICES

Bharti AXA Life Ins
Life Insurance

Bharti AXA Gen Ins
General Insurance

Bharti AXA Investment
Managers
Asset Management

RETAIL / WHOLESALE

Bharti Retail
Retail

Bharti Wal-Mart
Wholesale Cash & Carry

EMERGING BUSINESSES

FieldFresh Foods
Agri Exports

Beetel Teletch
Comm. & Media Devices

Bharti Realty
Real Estate

Comviva Technologies
Telecom software

Centum Learning Ltd
Training & Dev

Bharti Foundation
CSR activities



Our Partners

TELECOM
SERVICES

ERICSSON 

Nokia Siemens
Networks



NORTEL
NETWORKS™

IBM 

Alcatel·Lucent 

 **SingTel**

CISCO SYSTEMS


FINANCIAL SERVICES



RETAIL /
WHOLESALE

Walmart 

EMERGING BUSINESSES



fieldfresh 

SEQUOIA CAPITAL
The Entrepreneurs Behind the Entrepreneurs

CISCO SYSTEMS




Our Telecom Business

Our Beginnings

1976

Founded in 1976 with an initial capital of \$ 1000.
Started as a small scale manufacturing unit

1982

Imported portable power generators from Japan for
distribution in India

1985

Began manufacturing telephones in technical
collaboration with Siemens AG

*Tie-up with Takacom corp, Japan for answering machines in 1986, LG,
South Korea for cordless phones & Systema for telephone terminals in
1988*

1992

Formed Consortium with Vivendi and others to bid for
Cellular Licences

1995

Bharti Airtel started operations by launching mobile
services in Delhi

Bharti Airtel growth journey

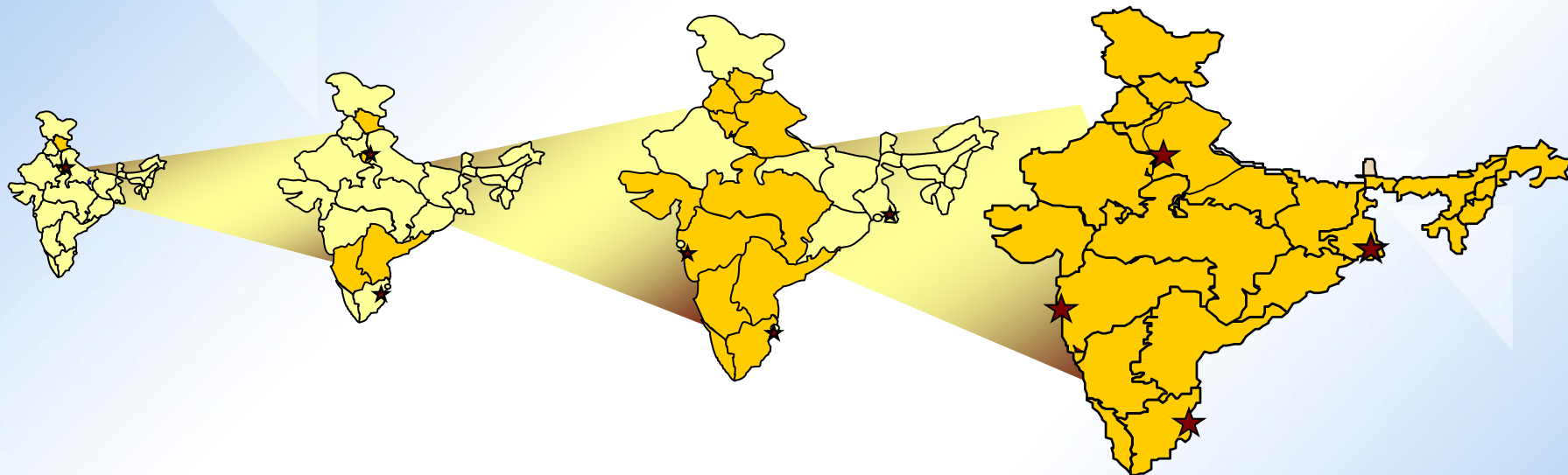
No. of circles

1

5

15

22



1996

2001

2003

2004

Bharti Airtel - An Integrated Telco

MOBILE SERVICES

- Voice
- Data

NEW
Lifetime Prepaid



TELEMEDIA SERVICES

- Fixed Line Telephony
- Broadband
- Direct-to-Home (DTH)
- IPTV



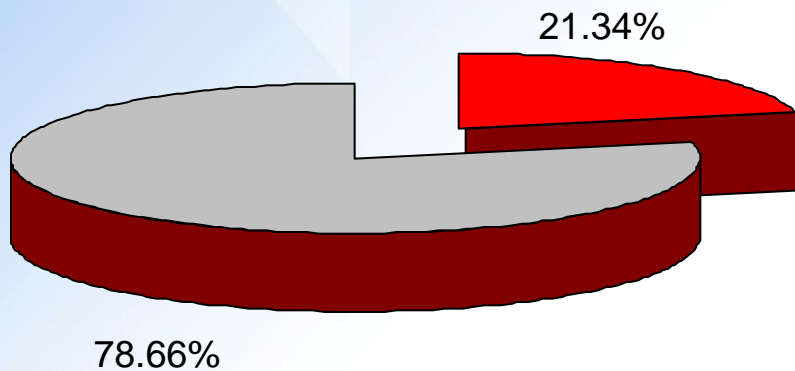
PASSIVE INFRASTRUCTURE

- 2 Separate Tower Companies for infrastructure Sharing
- World's largest tower company with > 136,000 towers



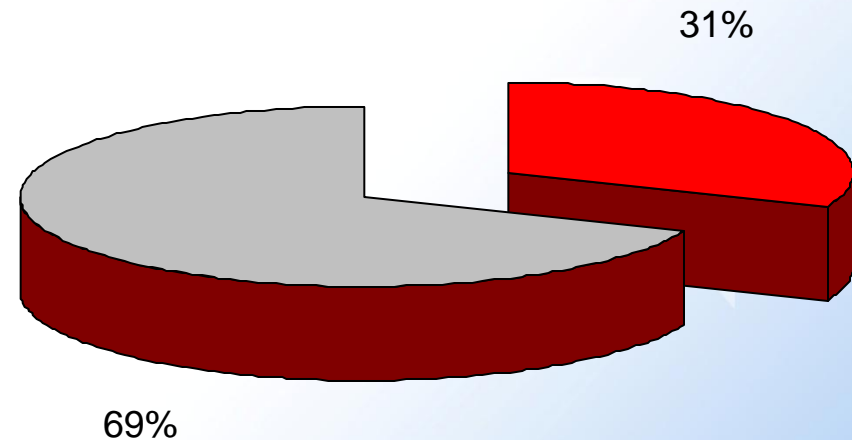
Wireless Market Structure in India

Customer Market Share (%)



 Bharti  Others

Revenue Market Share (%)



Airtel is a leader in Customer & Revenue Market Share

Challenged conservative telecom business mindset

- Over the course of our journey we challenged mindset...
 - Mobiles meant for the “classes” not for the “masses”
 - Post-paid customer is better than pre-paid customer
 - High ARPU leads to better company performance
 - High tariff implies better company performance
 - Usage must be low
 - A lower capex on sales signified capital productivity

Challenged conservative telecom business mindset

- ...and challenged business delivery model
 - **Outsourcing:** based on the following principles
 - Domain expertise
 - Attracting best human capital
 - Leveraging economies of scale...resulting in the following:
 - IT outsourcing
 - Networks – Managed capacity and services
 - BPOs
 - Passive infrastructure separation
 - **Sharing:** Let's not waste resources
 - Passive infrastructure sharing – Indus & Infratel
 - 3G sharing

Challenged conservative telecom business mindset

- ...In the process turned *vendors* into *partners*
 - IT: Comprehensive outsourcing to IBM
 - Compensation is a % of our revenue
 - Networks: Buying capacity instead of boxes
 - \$ per Erlang & \$ per Mbps
- ...and created an environment of *compete & collaborate*
 - Indus Towers
 - 3G sharing

Quest for becoming global – Emerging markets

Sri Lanka

- Launched 2G & 3G mobile services in January 2009

2008-09

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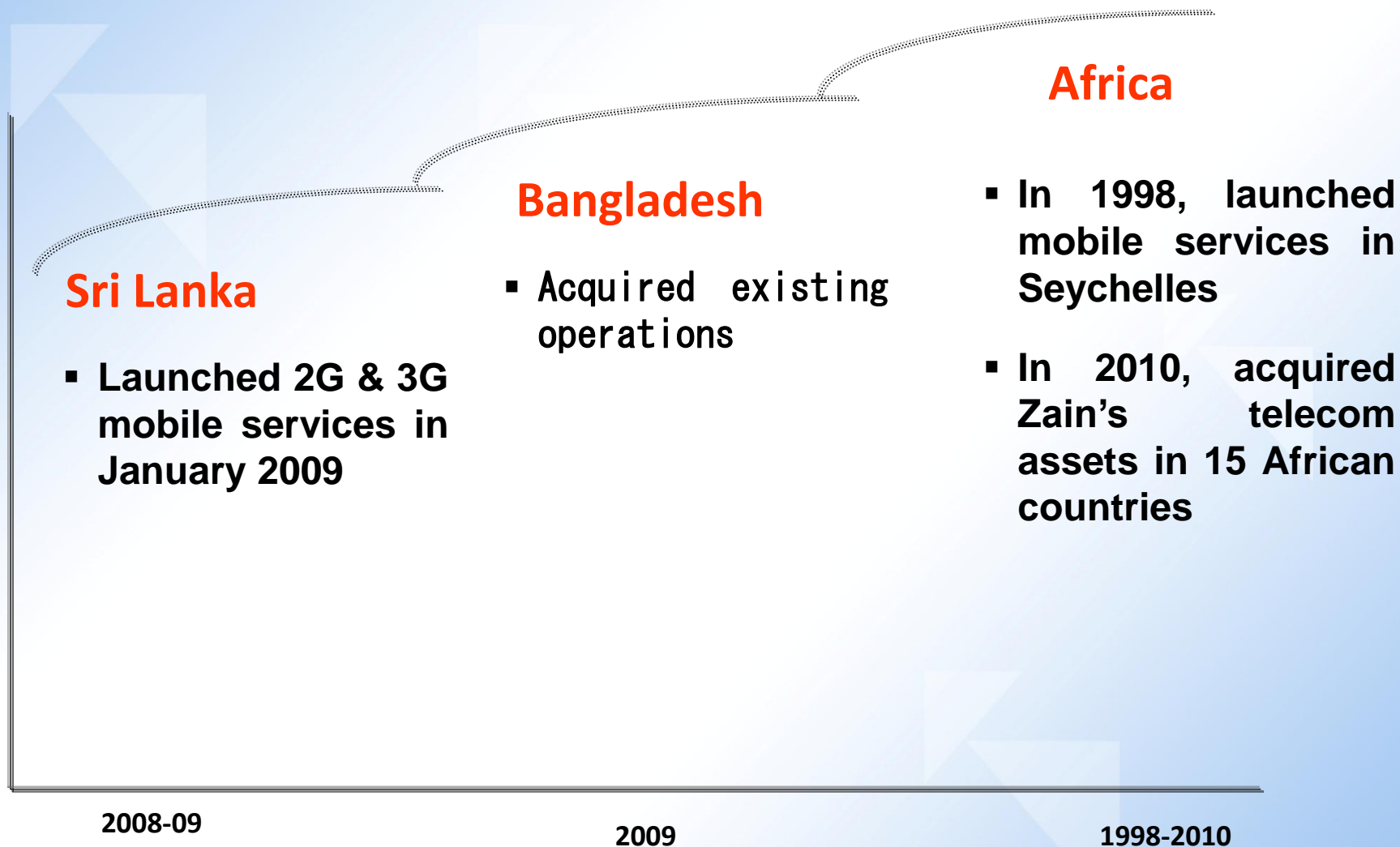
Bangladesh

- Acquired existing operations

2008-09

2009

Quest for becoming global – Emerging markets



Bharti Airtel: A Case in Point

1996	Company Profile	2010
Single Circle Operator + telephone instruments		Largest integrated private telecom operator in India
< 25k	Customers	~ 183 mn (5 th largest in the world)
~ USD 17 mn	Revenue*	~ USD 12 bn
~ USD 2.5 mn	EBITDA*	~ USD 4.4 bn
	Operating FCF*	~ USD 1.7 bn
~ USD 16 mn	Market Capitalization	~ USD 30 bn
1 (Only in Delhi)	Countries	19
~10 mn	Population Served	~1.8 bn

Continuing on our journey of Value Creation

Bharti Airtel – positioning in the world and India

3rd LARGEST wireless operator in the world¹

LARGEST private INTEGRATED telecom company in India

5th LARGEST INTEGRATED telecom operator in the world

LARGEST WIRELESS operator in India

LARGEST private FIXED LINE operator in India

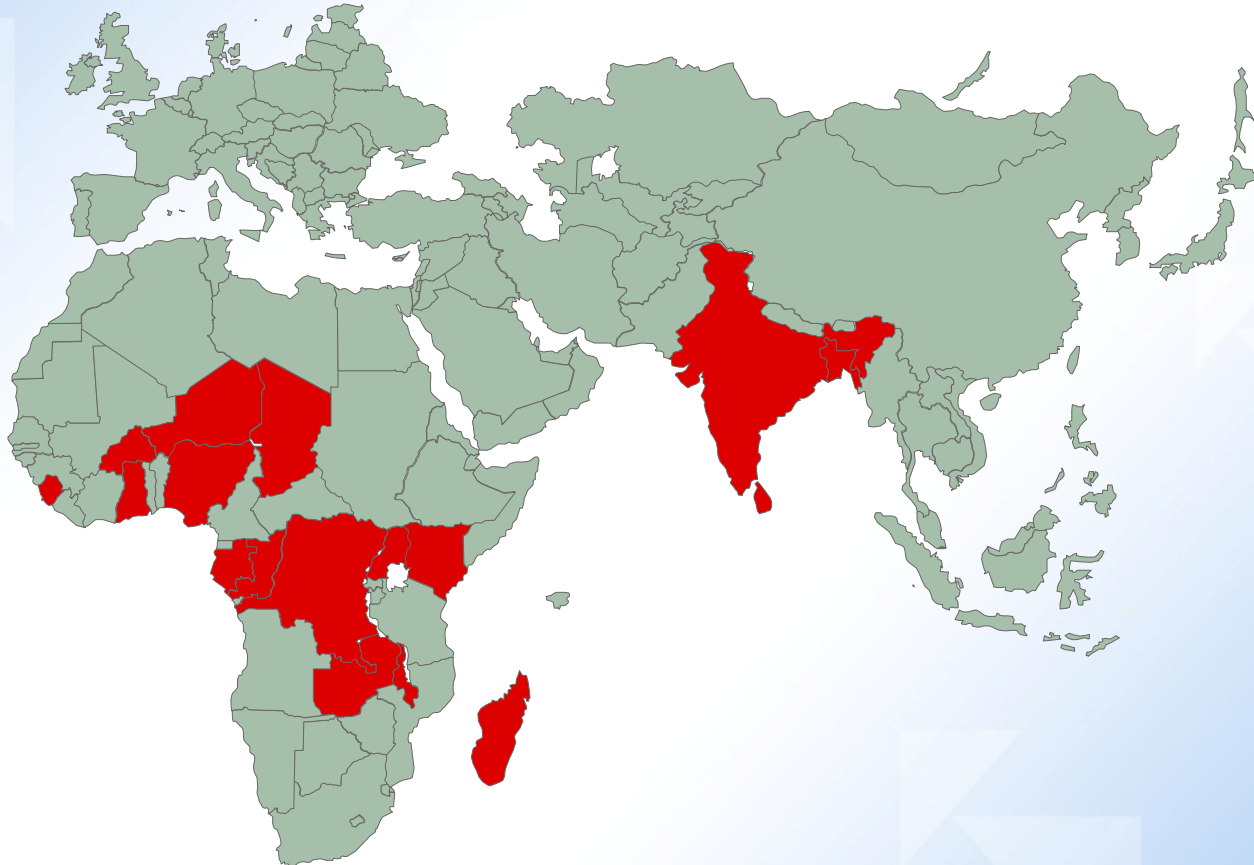
LARGEST operator in NLD, ILD and VSAT business

LARGEST TELECOM company listed on Indian Stock Exchanges

Note: (1) 3rd largest wireless operator in the world refers to in-country (single country) operator based on the number of subscribers.

Vision

To Be The Largest Emerging Markets Telecom Company in the World





Issues & Concerns Network Security And Green Telecom in India

Core areas of concern

- Physical & Logical Access
- Emerging technologies and threats
- Network Availability – Disaster / network attacks

Physical & Logical Access

Threats

- Terrorist Attacks
- Fraud
- Interruption of services
- Theft
- Physical damage
- Unauthorized disclosure



Issues / Concerns

- Inadequate physical security
- Geographical spread
- Intelligence and forensics
- Loss of confidential information
- Customer Privacy

Emerging Technologies / Threats

Threats

Malicious calls, SPAM
Supply Chain Subversion
System Backdoors
Embezzling calls



Issues / Concerns

Customer issues
Delayed detection
Financial loss

Network Availability – Disaster / Network Attacks

Threats

- Floods
- Earthquakes
- Fires
- Terrorist attacks
- DOS / DDOS attacks



Issues / Concerns

- High cost of redundancy
- Inadequate physical security
- Intelligence and forensics
- Disaster Management

Support Required

- Inputs on what has been security related experience on new technologies - 3 G , Converged networks & MNP
 - What measures were taken to mitigate new threats
 - Practical experience on security breaches and how it was tackled.
- How have some of the new threats / issues being managed
 - SPAM and SPAM related frauds
 - Supply Chain Subversion
 - System backdoors
- Cost optimization while implementing BCP / DR
- Automation of vendor agnostic centralized Intrusion / security alert management and reporting, covering entire network – GSM, GPRS, ISP, MPLS, NLD/ILD, DTH & VSAT

Present Environment of India for Green Telecom

- Poor power supply
- High quantity of Non-electrified towers
- Large number of Indoor sites where significant power is consumed
- Continuously rising fossil fuel prices – affect the Opex cost
- Complex logistics and higher cost involvements
- Increased awareness on green technologies and local state regulations in operating DG sets
- Subsidies (30%) by Ministry of New and Renewable Energy

Initiatives taken for encouraging Green Telecom

- Exploring and intensifying the applications of Green technologies such as:
 - Solar
 - Wind
 - Bio-diesel
 - Bio-mass
 - Fuel Cell
 - Hybrid (solar/wind hybrid)

Challenges for Green Telecom where support required

- Requirement of reliable service providers
- Non availability of reliable and stand alone technologies
- Capacity Limitation
- Space Limitation and Site Conditions
- Presently inadequate and service support
- Resource Limitations and Logistics
- Initial Cost for technologies is high – Solar, Wind, Fuel cell based technologies
- Inadequate quality manpower

Thank You