The demand and the challenges
# of speech offerings in emerging markets

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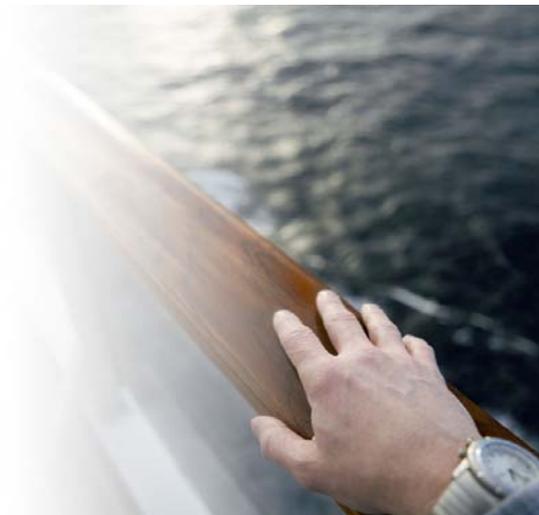
Overview

- Demographics that make speech offerings compelling in India
- Spoken Web, and sample services
- Offering trends in India
  - Customer uptake; revenue issues
- Some unique differences, launching a speech business in India

World Demographics

IT Usage

> $20,000

$1500-$20000

$1500

< $1500

Population

75-100M

1.5-1.7B

4B
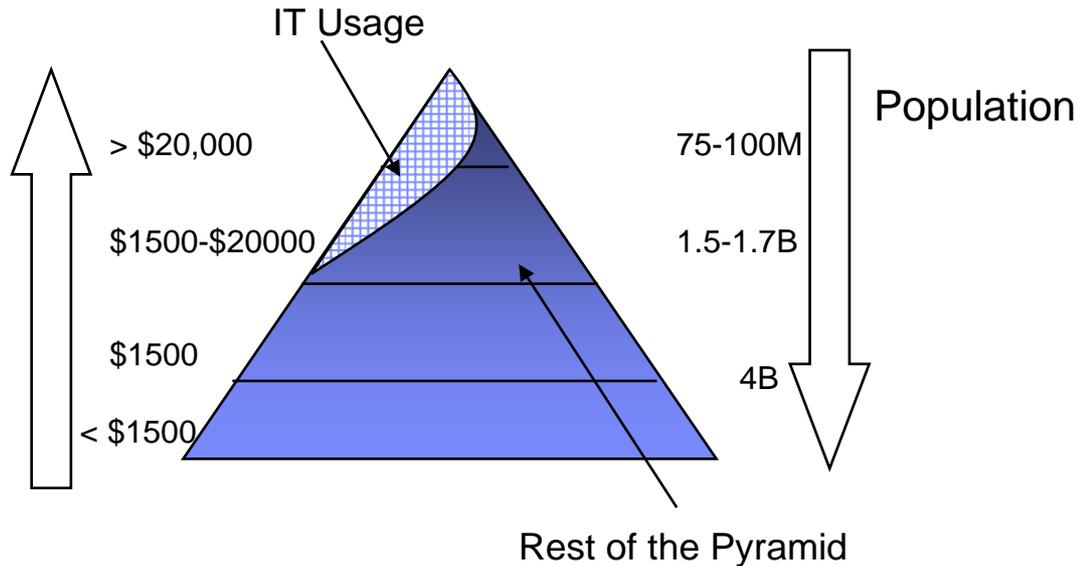
Rest of the Pyramid

Adapted from *The Fortune At The Bottom Of The Pyramid* by C.K. Prahalad.

- Of the total world population of 7 billion, 91% live in less-developed geographies
  - No electricity in many remote areas
- Internet penetration in these geographies was 15% and PC penetration was 18% in 2010
- 53% of the world population lives below USD $2 per day
- Current IT systems cater to people at the top of the economic pyramid
- Internet penetration: 2.2 Billion Internet users

Mobile Technology Growth

Mobile vs. Internet subscriptions per 100 inhabitants, 2001-2011*

Legend:
- Developed
- World
- Developing
- Developed-internet
- World-internet
- Developing-internet

Y-axis: Per 100 inhabitants (0, 20, 40, 60, 80, 100, 120, 140)

X-axis: 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011*
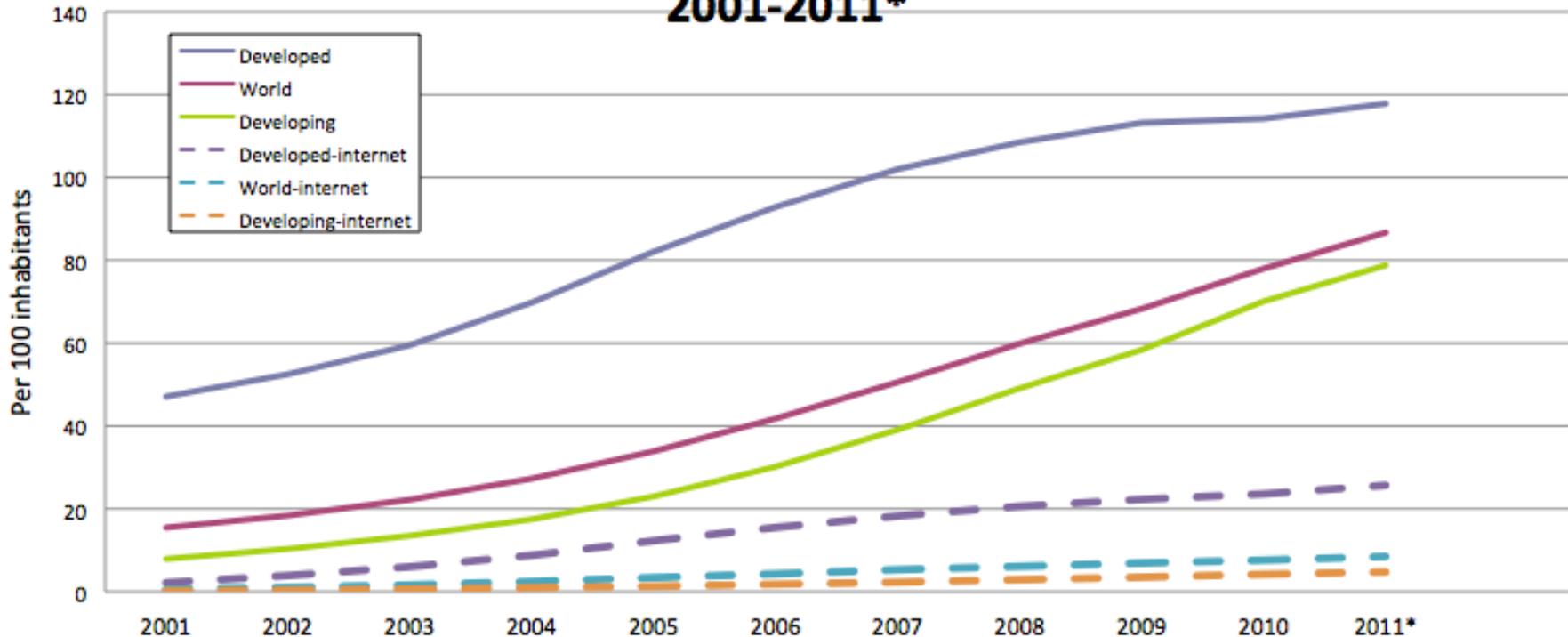
- Mobile penetration: 5.9 Billion Mobile phone subscriptions in 2011
- Growth every minute: 388 users in Asia Pacific; 94 users in Africa; 46 users in North America

- *Given mobile penetration, the phone is a promising platform.*
- *Considering literacy issues, speech is a compelling medium.*

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Information Availability

- Basic human needs related to healthcare, education, poverty, sanitation are still not addressed in these regions

- The ICTD (Information and Communication Technologies and Development) community believes that some of these life-critical problems can be solved by Information Technology

- An average person on the street does not need a PC, but needs access to information
  – Fisherman needs weather info before heading out to sea
  – Farmer needs to look up commodity prices
  – Milkman needs to know if the homeowner is in town

- Such locally relevant information is not available for the majority of world population

Spoken Web Description

Spoken Web
- Employs an easy-to-use voice interface
  - over the already in-use phone system
  - to create dynamic content in local language
- Enables access for local communities to surf a web of localized information through phone

- **Key Features**
  - User-created CONTENT ("~Web 2.0")
  - Linking with CONTEXT
  - NAVIGATION features, like "bookmarking"
  - SEARCH capability

– **Business Value:**
  - Can enable multiple voice-based applications including Information dissemination & collection, social networking, etc.

★ **A VoiceSite is:**

✦ A voice driven application *hosted* in the network and *created by subscribers* themselves

✦ Consists of a set of interconnected *VoicePages (eg vxml files)*

✦ Accessed by calling up the associated phone number and interacting with its underlying application flow through a telephony interface

✦ Analogous to Websites in the World Wide Web

Public Service: Two-Way Message delivery to large communities

- With Spoken Web, messages to large communities can be customized and delivered.

  For example, farmers in a particular region can all be notified about general issues related to planting, or when busses will be arriving or leaving. They can also post their own queries or comments, which can be made available to others in the community to review and answer.

- Users can create a voice FAQ, a Q&A voice forum. Users can post questions, and a designated expert can reply, or other users with more expertise than the poster can reply.

Sambhali

Business Value :
Governments and NGOs need an efficient method to communicate with large communities. Availability of Spoken Web will increase reach and access to these communities. This can translate into better health, better work practices, and easier commute options for residents in these communities.
The ability of customers/citizens to post their own queries and comments reduces the need of governments/enterprises to hire as many "experts," since local expertise in the communities themselves will emerge and be accessible. This will reduce costs for the government/enterprise.

Healthcare

- Spoken Web can create a portal for health advisory information.

- Doctor schedules and availability information can be posted to the site.

- Health professionals without internet access can post updates about particular patient care, patients they have seen, and trends they are noticing.

- People can receive reminders for taking medicines; get alerts and notifications about an upcoming wellness camp

- People can get expert answers to their health queries

Business Model:

Increased accuracy and timeliness of information will result in better health outcomes.

Improved tracking of medications and other supplies, reducing costs associated with misuse and wastage.

Reduced time and cost for health providers to submit administrative "paperwork," they can instead provide the data quickly and in situ.

Reduced overhead for healthcare agency providers as fewer people will be needed to input health data.

Social Networking and Celebrity Blogs

- Social networking, using voice

- Users can create Voice Sites for other interested parties to call into

- Callers can link to other Voice Sites of interest

- Caller can create his/her own voice site, and become part of the ecosystem

- Celebrity voice sites can include:
  - Shows/Events being attended by the celebrity
  - Celebrity personal updates
  - Option for fans to ask questions to be answered personally by the celebrity
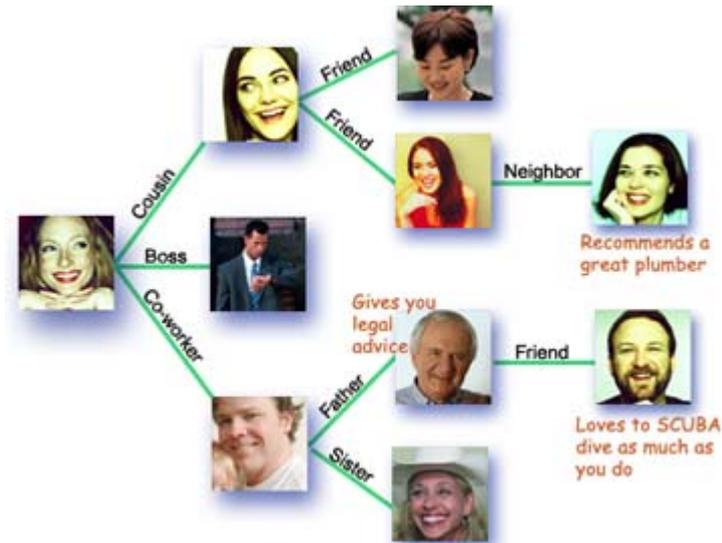
Business Value:
Callers can pay "premium fees" to call celebrity voice sites.
Advertisements can be interjected.
Site creators can pay "hosting fee" to post their sites.

Voice offerings in the Indian market: Evolving Phases

- **PHASE 1**: Infotainment Provision from central source
  - Limited to urban areas
  - Limited to English and perhaps Hindi
  - Paid subscribers
  - Access news, sports information

SATURATION - - Urban population is ~40% of the total – how to connect with the rest?

- **PHASE 2:** "Voice 2.0" - Interactivity
  - People contribute content
  - Multiple languages
  - Hyperlinking
  - Search capability

Shaadi.com launches its voice-based services on Vodafone network

23 February, 2009

Matrimony portal Shaadi.com has partnered with Vodafone to launch Shaadi.com on Mobile voice-based service that will enable Shaadi.com members to search and listen to other members profiles, express or decline interest in them, and also to connect and chat with an interested member by calling 57007 on their Vodafone mobile phone.

According to Shaadi.com, the new voice-based service is currently available in nine different

Aircel India

Facebook Voice Updates on Aircel

Express emotions that words can't. Dial 51555.

Explore the features of Facebook Voice Updates on Aircel.

Voice status   Friends' status   Post notifications

Event alerts   Find friends

Click here to check out how Facebook Voice Updates works!

Posting Facebook status in your own voice can be so much fun!

bubblemotion

HOME   ABOUT US   BUBBLY   OUR PARTNERS   NEW

BUBBLY - It's like Twitter with a voice

Bubbly™ is a **social messaging service** where people share SMS and voice updates with friends, family, fans and followers. Bubbly is like 'Twitter with a voice' and brings social networking to mobile phones.

Why Do People Love Bubbly?

It's Fun to Share
Share your updates in your own voice and with feeling and emotion. Let your followers hear what you have to say - anytime, and from anywhere.

It's Fun to Listen
Follow your friends, family members, and favorite celebrities. As a follower, you'll get notified via SMS whenever someone you follow records a new update. You can listen in, whenever you want.

It's Easy to Use
To post your update, simply dial a short-code (for example *7...

Uniphore
voice of the web

Heard of the Internet?
Let's talk to it!

Home •
About Us •
Careers •
Contact Us •

About Us

The next growth in information delivery channels will be served using mobile phones rather than conventional means (PC).

This is clearly evident from the high penetration of the mobile subscriber base not only in India but throughout the world compared to the number of comupter users.

Uniphore aims to provide "Relevant Information" with nothing more than voice as the primary interaction medium and leveraging mobiles as the access channels.

SEND VOICE SMS
VOICE SMS, OUTBOUND CALLS, INBOUND CALLS, IVR SYSTEM, PROMO

Home

Send Voice SMS in your own voice (or any pre-recorded audio message, including music) or use our Text-to-Speech engine and Send Voice SMS (IVR based) to landline & mobile phones in **India**.

We also provide menu driven advanced IVR system. (e.g.: Press 1 for sales, Press 2 for promos, Press 5 to talk to an executive, etc.) You can use this for outbound calls & inbound calls.

Send Bulk SMS to   (old style)

Send Bulk Voice SMS   to   +

Customer "uptake" for voice VAS (Value Added Services) in India

Average VAS charges are between $0.05 to $0.07 per min , average call charges are between $0.01 to $0.02 per min

Some Representative VAS voice services and their price ranges

IVR Charges of "Hello Tunes": revised to Rs.6/min from Rs. 3/min – Airtel site

Download ringtones, dedicate songs, check cricket scores etc at Rs. 6/min

Information on Railways at Rs.6/min

Friends Chat -Subscription: Rs 30/Month Call Charges: Rs 2/min

Download ringtones, wallpapers, logos and a lot more through SMS at Rs. 3/SMS sent

Source : Cellular operators association of India

Revenue Share for voice-based telephone offerings in India

Entity	Revenue Distribution
Mobile Operator	60-80%
Technology Enabler	10-20%
Content Aggregator	5-10%

Source: IMRB VAS report 2008

- **In India, Operators have the highest bargaining power: This can be disincentive for new service innovators**
  - Industry Justification: The onus of services lies on telcos, and not on aggregators…. Regulation is going to penalize telcos for any service gaps; regulators don't chase the content aggregators. Telcos market the service and also incur cost of resolving customer care
- **Key issue with revenue share model**….Technology enabler doesn't have good visibility about usage; there are discrepancies between what operator claims as usage and what technology enabler claims as usage….
- **In the Indian market the revenue for all-but-the operator is low**… but it is a good place to try out services, perfect them and then take them to other markets - -
  - In OTHER geographies, percentage for content aggregators can be up to 40%; in Japan, mobile operators get only 15%.

Doing business with speech offerings in India: Some of the differences

- Managing to a different business model:
  - Challenge of government investment for a "premium offering" to the general population
  - "Up front" investment vs "revenue share"
  - Challenge of selling to consumers, when end-users of target service are poor, illiterate…
  - Churn and the telecom companies in a growth market, vs. "stealing share" in the developed world
- Languages: *"In India the water changes every kilometre and language changes every 5 kilometres"*
      From Wikipedia: Individual <u>mother tongues</u> *in India number several hundred; the 1961 census recognized 1,652*
- Automating human-offered service is a less attractive feature:
  - Price; Reducing employment opportunities for the population
- *Expense of the provisioning infrastructure*
- Chicken-and-egg….services interesting when they are well-populated by content; user subscription not attractive until there is a lot of content…
- Need creative and different business models…can't be "premium services" for majority of population
  - Hybrid models
  - Advertising models

- ***BUT IF YOU GET IT RIGHT:***
  - Enormous customer base
  - Changing the world

Dhanyavad!