

The Mobile Revolution and the Cellphone as an Antipoverty Vaccine

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Agenda

- **The Cellphone and the Bottom Billions**
- Challenges
- Planning for Connected Opportunities Revolution (Disruptive Innovation → Paradigm Shift)



Cellphone Socio-Economic Impacts

- Location-Independent Access to Just-in-Time "Services"
- Cellphone changed the affluent societies behaviour: the way we interact, work and play
- Increased the GDP of every nation
- Increased the producitivity of every class of users from bankers to bakers to rickshaw pullers in the third world cities

Making cellphone services available to bottom billions will:

- be a quantum step in alleviating poverty depravation
- > give voice to the voiceless and
- open up unprecedented opportunities



Status of Bottom Billions

Despite \$2.5 Trillion in aid since 1950

- Billions of people below \$1/day poverty level
- High level of illiteracy
- The Millennium Declaration 9 years afterwards...
- More than 70 countries in need of fundamental socio-economic re-structuring

Demands Disruptive Innovation



Disruptive Innovation

- A radical departure from current thinking
- A quantum jump from status quo
- Establishes new platforms with significant impacts:
 - Technology
 - > Economic
 - Social
 - Leadership (industrial, political, etc)

Massively affordable just-in-time "citizen services" for self-empowerment out of poverty



Citizen Services & the Bottom Billions





Agenda

- **■** The Cellphone and the Bottom Billions
- Challenges
 - > Technology
 - > Implementation
 - > Political, social and financial
- Planning for Connected Opportunities Revolution (Disruptive Innovation → Paradigm Shift)



Technology Imperatives

Services Paradigm Shift

"Citizen Services" for the largely illiterate bottom billions

■ Key Imperatives for Massive Adoption

- > Anywhere & Anytime: Cellular Wireless
- Affordability
- > Power thrift
- ➤ User interfaces for the illiterate
- Scalability for tens of millions and more
- National/Regional adaptability

Technology largely exists for pilot programs...

Needs evolution for massive accessibility & affordability



Services Platform Technology Needs

- Capacity for (tens and hundreds of) millions of users
- High speed
- Security & personal identification
- Local service adaptability
- Easy development and deployment of targeted services
- Interfaces to Government/Agencies' Systems & Services
- Iconic interaction



Network Infrastructure Technology Needs

- Capacity for hundreds of millions of users
- Variety of services
- User localization capabilities
- Affordable & power thrifty for sparse remote locations
 - > Local non-grid power for remote base stations (10% present)
 - Low operating expenses
 - > Ruggedized & self-deployable (almost) base stations
- Facilities for local entrepreneurship



Personal Devices Technology Needs

- Rugged (shock, waterproof, dirt, etc...)
- Affordable
- Appropriate power modalities (solar, dynamo, etc...)
- Appropriate service interfaces
 - ➤ Iconic (with potential iconic → audible transcription)
 - Language choice translation (possibly Services Platform)
- Localization
- User-identification capabilities

A market of a few billion users warrants such devices... eventually.

But it needs a jump start to shorten its development!



Economic, Social and Political Challenges

- Bottom billions are too poor to be treated as consumers
- Traditional aid emphasis on survival rather than selfempowerment
- Governance failure
- Paucity of public services & impaired access to them
- Obstacles to private initiative development



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Jump Starting the Process

Provision of meaningful and cost effective services to the huge, dispersed and diverse markets characteristic for poverty stricken regions requires a departure from traditional ways to deploy viable services:

- Comprehensive & concerted undertaking by all key players
- Phased development and deployment
- > Bank of free minutes
- > Core organization to manage program



Comprehensive Concerted Undertaking



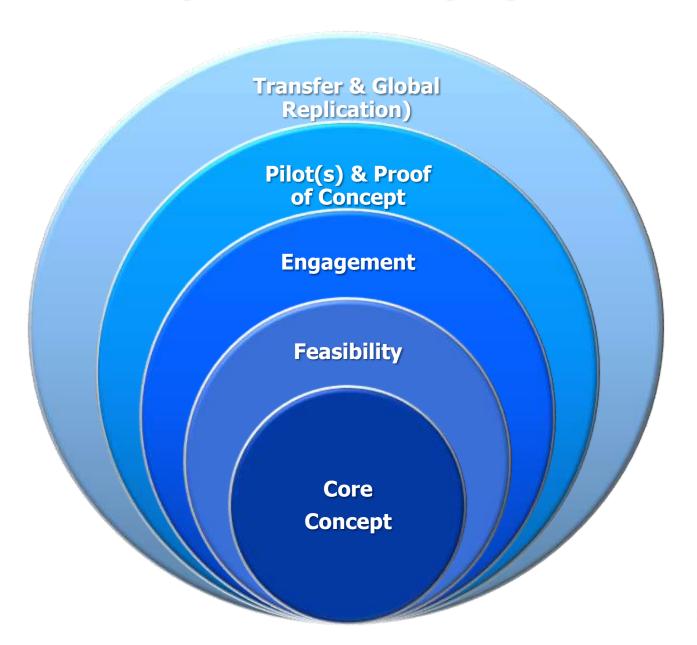


Citizen c-Services Imperatives

- Local priority
 - > Services designed with/for local authorities and needs
 - Not a simple transplant of developed world services
- Coupling with Government/Agency resources
- Conducive to self-empowerment & entrepreneurship
- Personal identification & localization
- Effective monitoring and feedback means
- Adaptability to other regions



Phase Development and Deployment





Connected Opportunities Revolution

- The "Green Revolution" in the 2nd half of the 20th Century to eliminate famine
- The Connected Opportunities Revolution in the 1st half of the 21st Century to eradicate poverty
 - ➤ Networks = fields
 - Cellphones = tools
 - > Free minutes = seeds
 - Citizen services = irrigation systems





VISION IS THE ART OF SEEING THINGS INVISIBLE

Thank You

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