





#### **Mobile Industry - Strategic Considerations**

#### **Chetan Sharma**

ITU ASP COE Senior Management Training
On
Telecom Strategy for the Pacific - Next Five Years

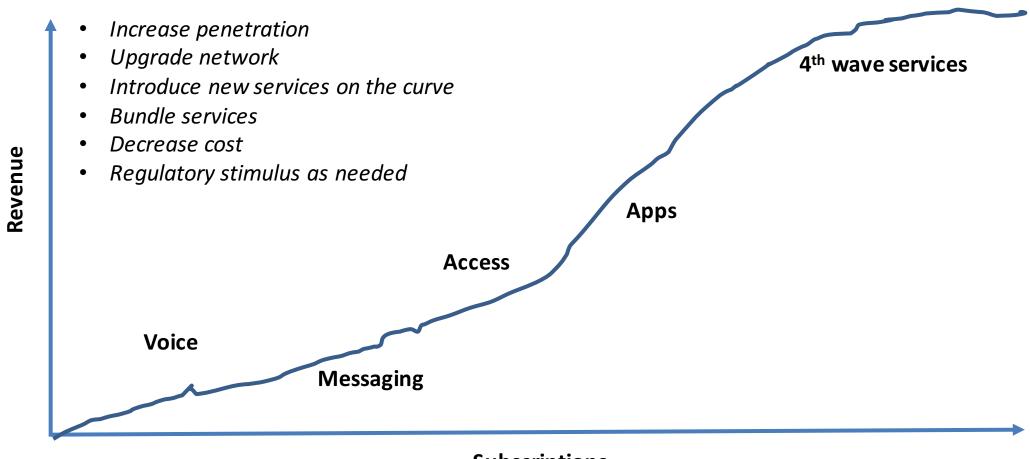
16-18 November 2015 Nadi, Fiji



### FRAMEWORK FOR 4<sup>TH</sup> THINKING

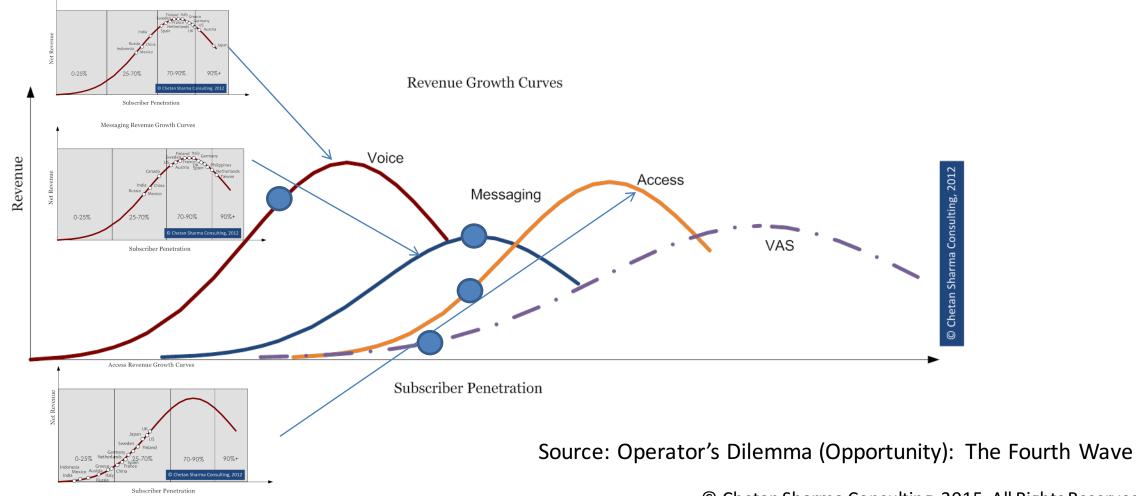


#### **Growth in telecom services**



# Mobile Operators: Strategic Imperatives

Voice Revenue Growth Curves



#### **VOICE: GROW** → HARVEST



- Infrastructure
  - Cable
  - Cellular Deployment
    - Complimented by WiFi
  - Remote Island coverage
  - Satellite Services
  - Network Sharing
  - Government incentives
- Improve Affordability
  - Increase Reach
  - Cheaper devices
  - Granular Plans
  - More choices, bundles (devices, services)
  - Competition
    - MVNOs
  - Government incentives

#### **VOICE: HARVEST** → **MAINTAIN**



- Affordability
  - Increase Reach
  - Cheaper devices
  - Granular Plans
  - More choices, bundles
  - Competition
  - Government incentives
- Alternate OTT models



#### **VOICE: MAINTAIN** → TRANSITION

- Voice is bundled in with data services
- IP based OTT services dominate



#### DATA & DIGITAL: Where is your growth team?

- All leading OTT players have growth teams who focus on
  - Acquiring new subs
  - Introducing existing subs to new services
  - Converting latent subs into active subs
  - Build offers, strategies, marketing around adding new customers as their sole focus
- Similar discipline is required at the operator level to focus on growth and new areas

#### **DATA: GROW** → **HARVEST**



#### Infrastructure

- Cable
- Cellular Deployment
  - WiFi
  - Move from 2G to 3G to 4G
- Satellite Services
- Remote Islands
- Network Sharing
- Government incentives

#### Affordability

- Increase Reach
- Cheaper devices
- Granular Plans
- More choices, bundles
- Competition
  - MVNOs
  - Access Regulations
  - Wholesale regulations
- Government incentives
- OTT framework to do granular services (e.g. Lotusflare)

#### **DIGITAL: Creating Demand**



- Prioritize application areas
  - Govt-2-Citizens
  - Operator-2-Consumers
  - OTT-2-Consumers
- Main application areas will mirror existing industries
  - Govt Services
    - Emergency Management
    - Financial Services
    - Education
    - Agriculture
    - Mining
    - Health
  - Commercial Services
    - Mining
    - Agriculture
    - Tourism
    - Fishing
    - Entertainment
    - Communications
    - Data services



# Case Studies: Leading 4<sup>th</sup> wave mobile operators

### 15 1865

# **Application Areas**

Application Area	Activity Type	E.g. operator
Health	Remote patient monitoring, Compliance management	AT&T, Verizon
	Counterfeit detection	African Operators
	Telemedicine	Bharti, Telefonica
Connected Car	Send diagnostics to the OEM, dealer	AT&T, Telefonica, Verizon
	Build consumer services – navigation, apps, entertainment	AT&T, Sprint
Cloud	Hosting, Storage, Applications	Verizon
Content	Video	Verizon, Telefonica
Security	End-to-end enterprise offering across multiple countries	AT&T, Verizon
	Consumer security offering for devices, Home security	AT&T
Payments	B2B	Vodafone, Telefonica
	B2C	Vodacom, Smart



# **Application Areas**

Application Area	Activity Type	E.g. operator
M2M	Connectivity, Roaming	Vodafone, Telefonica, AT&T, Verizon
Environmental	Sensors in the phone collecting data and providing info	NTT DoCoMo
Consumer	Digital services like music (service built and operated)	China Mobile
Agriculture	Commodity pricing, disease info	Developing nation operators
Smart City	Working with cities to install sensors to manage traffic, env, info to citizens	Telefonica
Industrial Automation	Putting sensors in jet engines, turbines, operations	AT&T
Education	Language courses	Bharti
Analytics	Analytics as a service	Telefonica, AT&T, Sprint

#### How can you participate on the 4<sup>th</sup> wave?

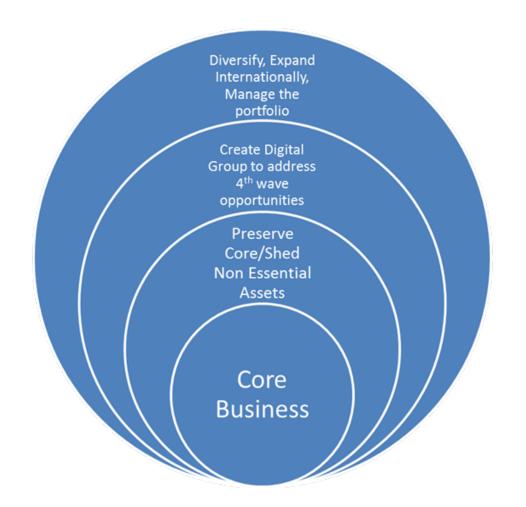


- Collaboration is the only way to go
  - To have a shot at any of the vertical areas, one has to have scale
  - Just like collaborating on handset procurement gives some scale, working together on a platform that can be jointly rolled out is essential
    - Individual corporate strategy is generally not in sync
    - Work with partners who have developed vertical expertise to help you address the market opportunities
    - Collaborate/Resell Regional Operator solutions in your markets
- What's your platform for innovation?
  - Using a combination of LTE and WiFi provides better ROI and quicker time-to-market
  - An all-IP network enables new and/or enhanced services voice, messaging, content, enterprise
  - Modular network components to launch new services



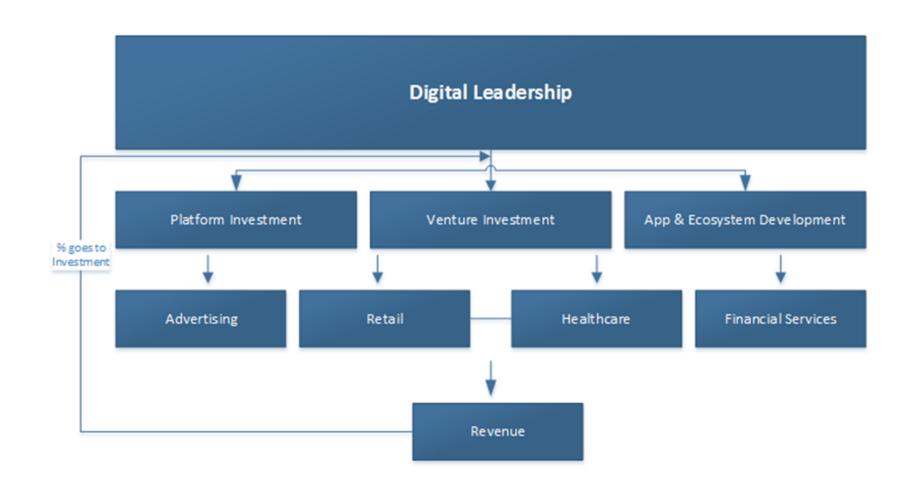
#### **Transformation Challenges**

- Acknowledgement
- Organization/Realignment
- Rethink Platform
- Communication
- Execution





### **Organizing for success**



#### 15@ 1865 2015

# Setting up the Digital Practice

- Setup a digital group separate from core operations
  - Digital group director's charter is to
    - Identify resources
    - Secure investment
    - Build the platform
    - Identify 2-5 services that can be launched in short-term
    - Engage partners and collaborators
- Failures should be embraced and considered a stepping stone to success
- Build local capability

# Setting up the Digital Practice



- Some obvious services for collaboration seem to be:
  - Emergency Management
  - Mobile Money
  - Industry Sector Applications
    - Tourism
    - Agriculture
    - Fishing
    - Mining
    - Health
- Involve all relevant stake holders for input
- Involve actual users in pilots to iterate on design and functionality
- Recruit champions and trainers of apps in the community



# How to go about building apps

- Solutions have to "always" focus on a specific need that needs addressing
  - How can efficiency, simplicity, and ubiquity be introduced into the design of the solution set?
  - Solution should try to be platform and device agnostic
  - Mobile should be part of a broader ICT initiative
  - There should be a clear path from pilot, initial testing to broad deployment and adoption
  - Initiatives across various verticals agriculture, finance, health, etc. should be connected

### **Apps**



- Pilots galore! Migration from pilot to implementation often tough
- Pilots need to be part of a longer roadmap for assessing progress and funding
- Citizens need to be actively involved in the design phase

# **15** 1865 2015

# **Policy Questions**

- Security
- Privacy
- Data Collection
- Ubiquity of Solutions/Apps
- Device Support
- Liability
- Other

# **Privacy**



- How is data collected opt-in/opt-out
- How is data used
- How is the data shared
- Where is the data stored
- How are violations dealt with
- How long is the data stored



## Regulatory framework

- Developed
  - Europe: Strictest privacy policies
  - North America: Regulatory bodies are starting to get involved w/ privacy violations. Approved smartphones to be used for medical purposes
- Developing
  - Lax policies, not enforced

# Incentives to develop for rural areas

- Physical Isolation, poor infrastructure, few assets, weak IT access, weak information flow
- Great need for timely information and response
- Integration of local, regional, and international supply and value chains
- Volatility of commodity markets and food security challenges
- Wide availability and affordability of mobile
- SMS as low tech but powerful mobile technology

#### **New Business Models**



- Granular tiered pricing
- Shared data pricing
- Personalized pricing
- Equipment leasing (Smartphones and other devices)
- Solution packaging
- QoS based pricing/solutions
- Customized OTT services

#### **Private-Public Collaboration**



- Funding
- Technical Collaboration
- Regulations and Policy
- Developer Ecosystem
- Consumer Education and awareness



# **Challenge for Regulators**

- Promote Competition
  - New operators
  - New MVNOs
  - Access Regulations
- Ensure that the whole value-chain is benefitting from the mobile apps explosion
- Local developer community should be developed

# **15** 1865 2015

# **Strategic Factors**

- Broadband deployment
- Availability of affordable devices
- Policy and regulations to protect consumer
- Policy and regulations to promote competition
- Track industry KPIs
- Investment in key areas infrastructure, cloud, security
- Clear G2C initiatives and roadmap
  - Collaborative approach between ministries
- Local capacity building
- Localization
- Leverage existing synergies and frameworks
- Platform approach for collaboration and reduce time-to-market
- Data collection, privacy, and security



#### **Collaborative Framework**

# For Digital Services

- For digital services to thrive, a collaborative framework is needed in the pacific islands
  - A central coordinating authority (perhaps PITA)
    - Work on the basic roadmap of the platform
    - Requirements for the key applications
      - Agriculture, Tourism, Mining, Fishing
    - Capacity building
  - Technical representation from each interested party to feed in the requirements for the roadmap
  - Allow customization as needed on the UX and app design
  - Backend runs on a cloud service that everyone can take advantage of

### In Summary



- More change in the next 10 years than the previous 100
- Mobile will transform every industry
- Opportunities abound.
  - New Service Areas Commerce, Remittance, Games, Health,
     Retail, Advertising, Energy, etc.



### Thank You. Questions?

#### **Chetan Sharma**

chetan@chetansharma.com

TW: @chetansharma

http://www.chetansharma.com

#### **Mobile Future Forward**

info@mobilefutureforward.com

TW: @mfutureforward

http://www.mobilefutureforward.com



Research. Technology. Strategy. Intellectual Property. Thought Leadership Summits.