ITU-D REGIONAL ECONOMIC AND FINANCIAL FORUM OF TELECOMMUNICATIONS/ICTS FOR ARAB STATES

Impact of Internet and OTT on Services

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Impact of Internet on services

- Issues on evolution for voice and new services
- NGN driving services and ICT e-services
- New players and OTT services
- Strategies for evolution
Impact of Internet on services

• Issues for voice and new services
  • Voice service increase versus decrease or migration?
  • Voice revenues evolution?
  • New services substituting classical voice?
  • What impact of new services on traffic and revenues?
  • From country monopoly to … multiple country providers versus… worldwide oligopoly?
  • … and many more
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• Topics to analyze
  • Main driving services for NGN (Next Generation Networks)
  • New capabilities of NGN and web based services
  • Main e-services at national level
  • OTT (Over the Top) positioning for web based services
  • Service provider positioning on the new market
  • Economies of scale versus market fragmentation
  • Strategies recommended for the service providers
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NGN driving services

• Residential type
  • VoIP (Voice over Internet Protocol):
    • Motivation: Cost saving, integration with chat and video
    • Concerns: Cannibalization, Interconnection and QoS
  • IPTV (Internet Protocol Television):
    Wide selection, video on demand and special events
  • Content delivery:
    • Music, games, gambling
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NGN driving services

VolP positioning for a service provider

Relevant due to each solution

Revenue due to existing offer

Revenue variation due to the change of offer

Incremental revenue with the new offer

1: Decreasing by substitution
2: Volume increase by lower price
3: Revenue increase by new associated services
Typical Skype prices from smart terminals to fixed telephone

- From Spain to:
  - EU countries, Korea, Malaysia, Australia, Canada, etc: 2 cents/min
  - Morocco: 1.7
  - Iran: 4.5
  - Egypt: 7.8
  - Saudi Arabia: 8.2
  - Kuwait: 9.8
  - Algeria: 10.4
  - Oman: 14
  - United Arab Emirates: 14.1
  - Yemen: 15.6
  - Bahrain: 19
  - Qatar: 29
  - Iraq: 29
  - Syria: 29
  - Tunisia: 29.4
  - Palestine Authority: 31.9
  - Somalia: 52.8

- Ratios up to 30:1 among countries. Special discounts also apply per volume and flat tariffs per month.

- Current operators tariffs up to 100 times greater except for some highly connected countries.
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NGN Driving Services for Business

• Virtual Private Network (VPN): Customized operation

• Multimedia Conferencing: Quality increase for multiparty

• Unified messaging: Better productivity and efficiency

• ASP (Application Services Provider): Wide availability and adaptation of IT services
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NGN Driving Services for Business

Main ASP applications and projected value/revenue added

- **Value Add Services**
  - **Low**
    - Shared Web Hosting: $30 - $100 / month
    - Co-location Web Hosting: $400 to $900 per month
  - **High**
    - Dedicated Web Hosting: $15,000 per month
    - Extended Enterprise Applications: $40,000+ per month
    - Back-end Enterprise Applications: $15,000 to $40,000 per month
    - Basic Enterprise Applications: $5,000 to $15,000 per month

Source: Cherry Tree & Co
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NGN driving applications as indicated at UIT-D Q.20

- E-Government
- E-business
- E-science
- E-learning and Mobile Learning
- E-health
- E-agriculture
- E-environment
- Telecom Support to public security, catastrophe prevention and emergency aid
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New players in service provisioning and interrelations

LD: Long Distance

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Impact of Internet on Services
New players in service provisioning and interrelations

End User

Service Provider (open)
application usage

Service Provider (retail)
application brokering

Retailer
network usage

Access Provider
network subscription
package subscription
network usage
application usage

Connectivity Provider
roaming

LD Connectivity Provider

LD: Long Distance
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Players in new service definition and interrelations

End-Users

Service providers

Operators

Equipment providers

Suppliers

Residential
Small Business
Medium Business
Large Corporations

Services

Policy & Standards

Equipment & Services

Policy & Licenses

Specifications

ITU
ETSI
IETF
ANSI

ITU: International Telecommunication Union
ETSI: European Telecommunication Standards Institute
IETF: Internet Engineering Task Force
ANSI: American National Standards Institute
ISP: Internet Service Provider

ISP
ASP

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OTT players (web based)

- Skype
- Google voice
- WhatsApp*
- LINE
- Twitter
- Facebook
- Linkedin
- Paypal
- Tencent QQ
- .... And many others

* WhatsApp recently acquired by Facebook but maintaining original objectives
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OTT main services

• VoIP + videoconference
• Content delivery
• Messaging
• Chat
• Social networking
• Instagram
• Wallet
• … and many other innovations
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OTT positioning

OTT services volume*

- **Skype**: at 2013 300 million users with around 70 million connected simultaneously and with an average call holding time of 7 minutes. Around 2 billion minutes per day
- **WhatsApp**: at 3Q 2014 600 million active users with 11 billion messages send, 20 billion received and 325 million photos per day
- **Facebook**: at 1Q 2014 1200 million users (680 million on mobile), 700 billion minutes and average duration of 20 minutes

*Ref: [http://www.statisticbrain.com/](http://www.statisticbrain.com/), Telegeography and others
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OTT positioning

OTT services volume …

• **Twitter**: at 2Q 2013 555 million users and 58 million tweets per day

• **LINE**: at 1Q 2014 400 million users with highest number in Japan

• **LinkedIn**: at 4Q 2013 300 million users, 2.1 million groups and 200 conversations per minute.

• **PayPal**: at 1Q 2014 150 million active accounts with 2.8 billion payments at 2013
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Services migration flows

Highlight of voice and services migration towards other solutions, related drivers and reverse flow drivers

Overall voice traffic increases but is shared among all existing solutions

SMS: Short Message Service
MMS: Multimedia Message Service
QoS: Quality of Service

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OTT positioning

**Strengths**

- Benefit from *worldwide* coverage by internet and *quick deployment*
- Exploit of large *economies of scale*
- Exploit high broadband data capacities
- Benefit from *publicity revenues*
- High negotiation power towards suppliers

**Weakness**

- Difficulties to assure *end to end* quality control and OSS/BSS support
- Less advantage for *proximity* and consumer experience related requirements
- Lower capability for country national and local dependent services

**Differences on Regulation versus Operators**

- No constraints for OTTs derived from regulatory rules
- Lack of contribution to the Universal Services Fund and very limited contribution to national Taxes.

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Business domains and trends

Example of Value Added chain and operators movements to gain economy of scale and market

- Agreements with content providers and e-commerce
- New multi-service development
- Agreements with content and application service providers

Application Service Providers
OTT

Internet Service Providers (ISPs)

Backbone Service Providers (BSPs)

Mobile Service Providers (MSPs)

Established Service Providers (ESPs)

• Acquisition/merging of service providers
• Development of new access loops and Unbundling

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Industry Initiative for multiservice compatibility

Rich Communication Suite Initiative

- The RCS Initiative is the joint effort of leading industry players to speed up and facilitate the adoption of applications and services that provide an interoperable, convergent, rich communication experience based on IMS.

Forum multioperator and multisupplier to reinforce new IMS (Internet Protocol Multimedia Subsystem) based services compatibility and interoperability from the operator side.
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Industry Initiative for multiservice compatibility

RCS Vision - A richer experience
Freedom, control and belonging

Vision by the RCS forum for personalized services and social networks based on generic functions and affinity grouping
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Strategy on Business Migration Leaps

“staircase” for leading growing alternatives

Classic Telcos

Upgraded Telcos

Extended Telcos

Conventional voice and data services
+ Services of IN, VPN and Mobile
+ Internet and video Distribution (triple play)

IN: Intelligent Network

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Strategy on Business Migration Leaps

“staircase” for New Universal Telcos from operator and web sides

- Customers for end applications
- Customers for new services

Specific migration and timeframe to be optimized for the country context and regulatory conditions

CC or Cloud C.: Cloud Computing

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Trends on Convergence

Projected evolution of revenues with service domains

Convergence strategy is fundamental to grow in a competitive environment and compensate from voice revenue decrease (typical 7% per year)
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Current attitudes by service providers

• 1- Ignore or obstruct OTTs capabilities and offers

• 2- Replicate OTTs offers within the in-house potential service provisioning

• 3- Provide services to OTTs under demand

• 4- Create subsidiary OTT companies to compete directly with existing OTTs

• 5- Joint development of applications with carrier grade quality with selected OTTs and use of Open Operation Platforms
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Recommendations for operators actions

• 1- Analyze specific demand of new services and consumer experience per country

• 2- Develop flexible tariffs and bundle offers

• 3- Accelerate NGN multiservice deployment

• 4- Positioning of service providers for higher value added in the services chain

• 5- Define best strategy for competition versus win-win cooperation or partnership with OTT’s
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Summary of Key Factors

• Exploit **high potential** for new NGN services drives the interest in the network modernization and capture of **new revenues**

• Analyze **new business chain** from content to delivery and **watch** OTT services capabilities

• Provide attention to **Quality of Service on VoIP** and **Consumer experience**

• Define a **Specific Strategy** for new services and bundles considering consumer behavior and positioning versus OTTs
International Telecommunication Union

Committed to connecting the world