

The needs of users in an NGN world

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Introduction

- Generations
- Suppliers
- Customers
 - individual
 - corporate
- Conclusions

Generations

- Useful in retrospect, looking ahead they are debased and abused by marketing
- Fixed: NGN
- Mobile: 3G, 3.5G, 3G/LTE, HSPA, 4G, 5G
- Web: 1.0, 2.0 and now 3.0
- We do not start from the same generation!

1987: Star Trek: The Next Generation

1982-92: Japan Fifth Generation Computer Systems (FGCS)

Supply-push

- Manufacturers
- Fixed incumbent operators:
 - under pressure to buy NGN
 - trying to reduce operational expenditure
 - opportunities for regulatory gaming
- But soon there will be:
 - N+1GN, N+2GN, N+3GN ...

Service-based competition

- Many countries picked service-based competition
- Heavily reliant on inputs such as:
 - Wholesale Line Rental (WLR)
 - Bitstream Access (BSA)
 - Local Loop Unbundling (LLU)
- A switch to NGN/NGA undermines or invalidates such a policy
- We need generation-neutral policies

Mobile

- In developed countries there is little growth
 - operators look to entertainment services
 - expand into larger emerging markets
- In developing countries growth remains
- 3G is expensive and is not yet delivering new revenues
- Operators are deploying:
 - HSPA and FWA
- Tendency to try to control access through walled gardens despite failure of WAP

Demand for mobile

- In LDCs seemingly unlimited demand for:
 - Voice
 - SMS
- Strong economic benefits
 - If it was cheaper there would be more use
- Social benefits
- Health (e.g., HIV/AIDS)
- Not much spending on the mobile Internet

Customers want bundles

- Traditional revenue sources are given away
- In France the Free.fr service offers:
 - Monthly fee €29.99
 - ADSL 2+ with 28Mbps down and 1Mbps up
 - free telephone calls to 70 countries (mobile networks excluded)
 - access to 200 television channels
 - residential Wi-Fi router
- Vodafone offers residential services
 - Unbundled local loops in the UK
 - Fixed wireless access in DR Congo and South Africa
- Shanghai Media Group
 - mobile television for RMB 10 per month

Socio-technical factors

- Growth of broadband is slowing in developed countries
- The technophiles have adopted
- The technophobes resist the operators

Multinational corporations

- Fixed networks are global
- MPLS-based IP-VPNs
 - Ethernet replacing leased lines
- Fully integrated voice and data
- Redundant routing
- Very high levels of performance
- Supporting outsourcing
- Now introducing telepresence

Enterprise mobility

- Expensive and poorly integrated
- GSM for voice
 - GSM/Wi-Fi devices to bypass cellular networks
- Wi-Fi and ADSL for data access
- Some support from third parties (e.g., iPass)
- Mobility merges into home working
- Drive to reduce costs:
 - of which international roaming charges are the biggest problem

Conclusions

- LTE or NGN are infrastructure issues
- There are of no interest to customers
- Enterprises want cheap seamless global services
- Consumers want cheap voice and entertainment
- NGN appears just to be ISDN 2.0

Thank you

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