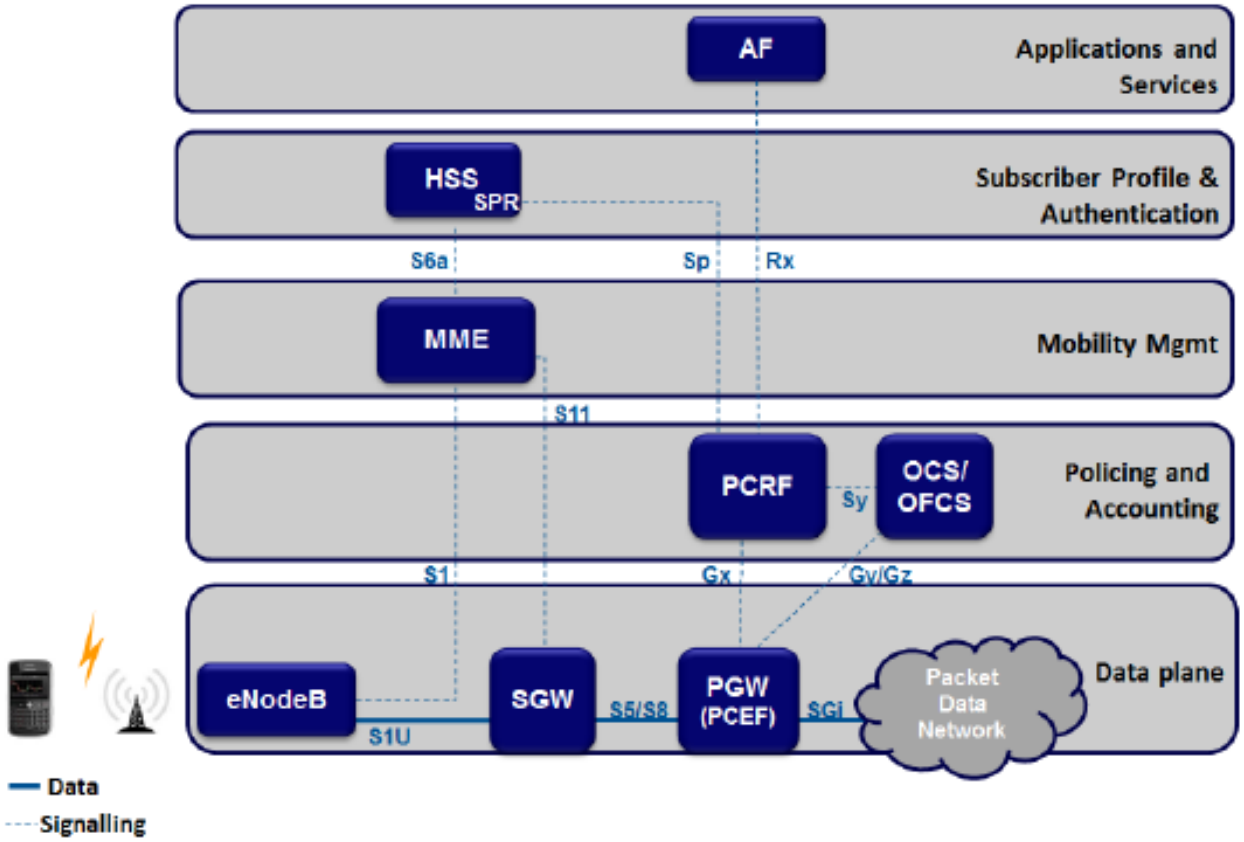
Conference Review
Network Transformation

Roberto Minerva – Telecom Italia Future Centre

Agenda

- Network Transformation
  - Two noticeable architectural paths
  - A Question …

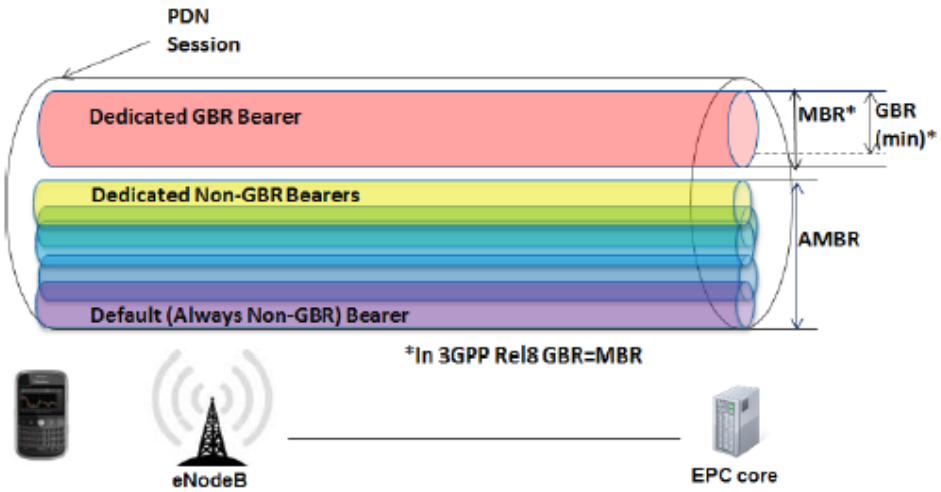
Traditional Path



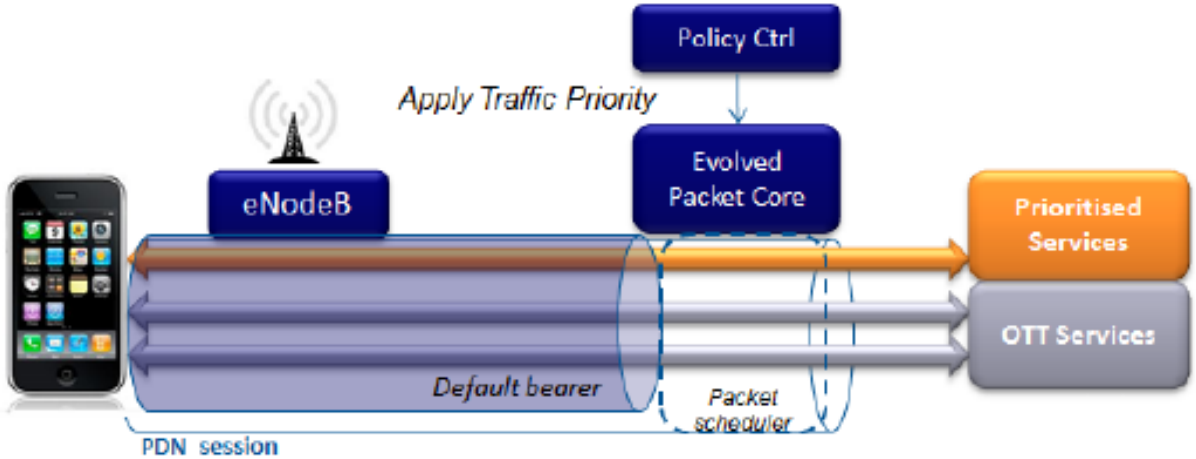
Standard Architecture

Please note that the technological basis of IMS have been laid down in the '90

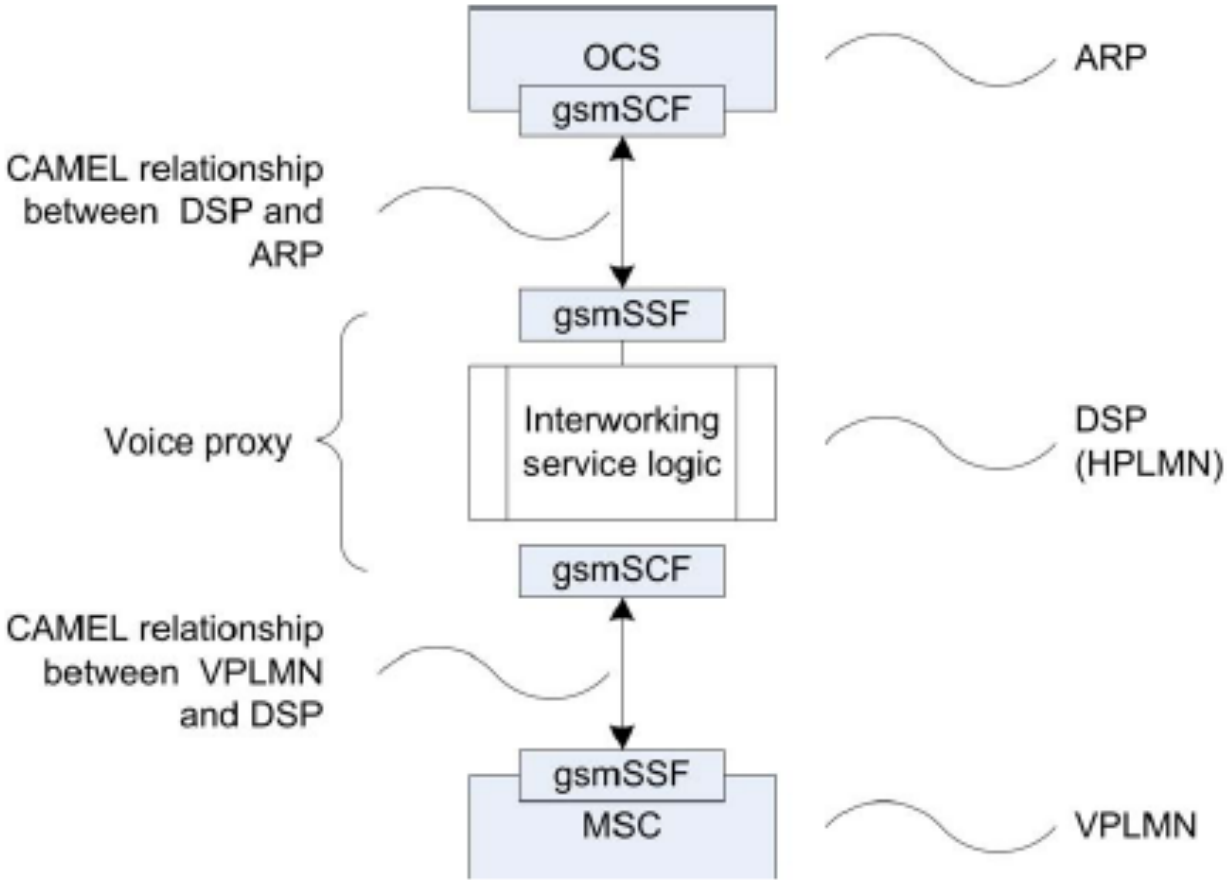
Traditional Path: usual problems



A kind of obsession for Quality of Service as a function that the users want to pay for



Traditional Path: preserving the business



Traditional Path: new opportunities in developing countries (Village Phone Model)

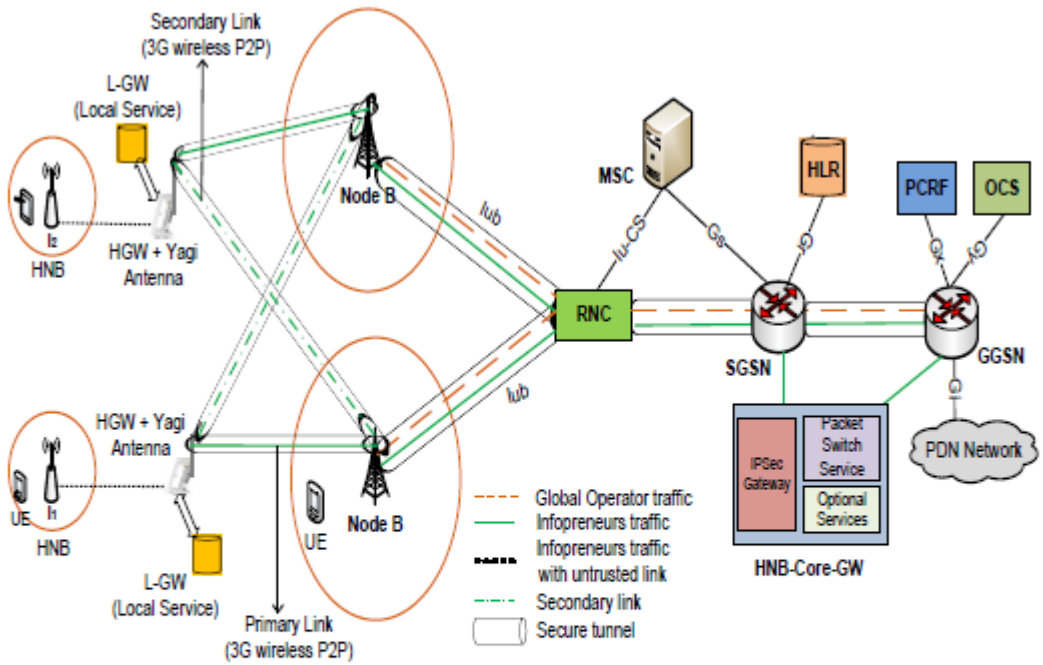
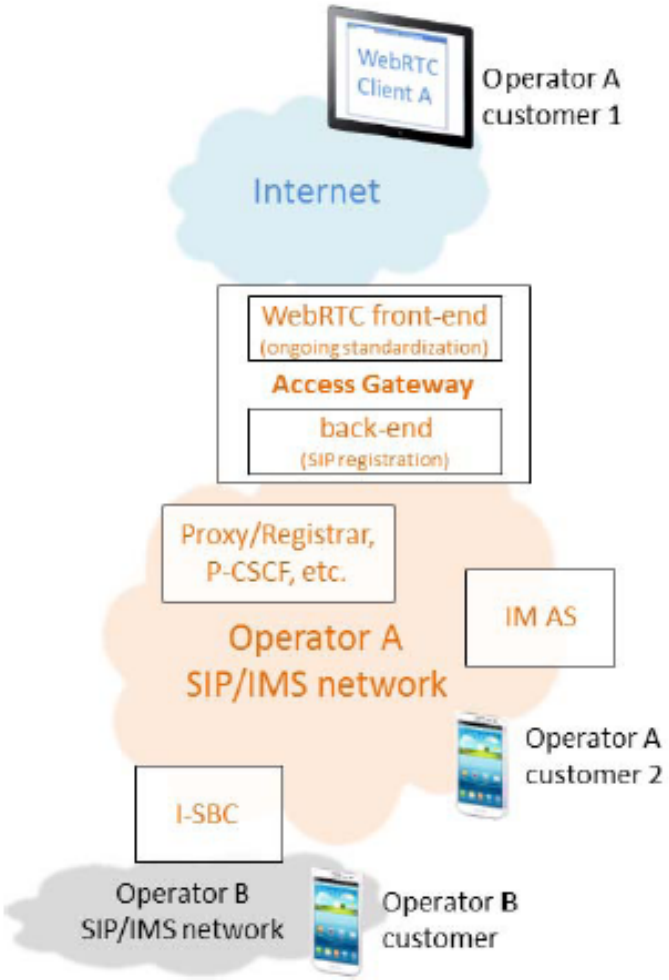


Fig. 3. Proposed architecture; green colored links represent the traffic coming from infopreneur's HNB with a secure tunnel set up between the HGW and the core network; orange colored links represents the traffic of traditional devices connected to the global operator.

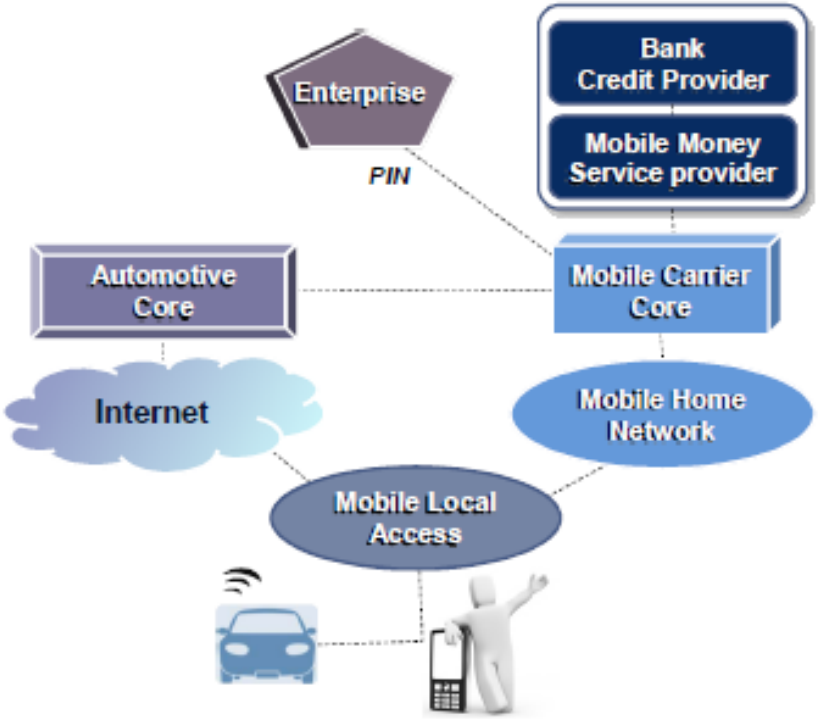
Traditional Path: same old services

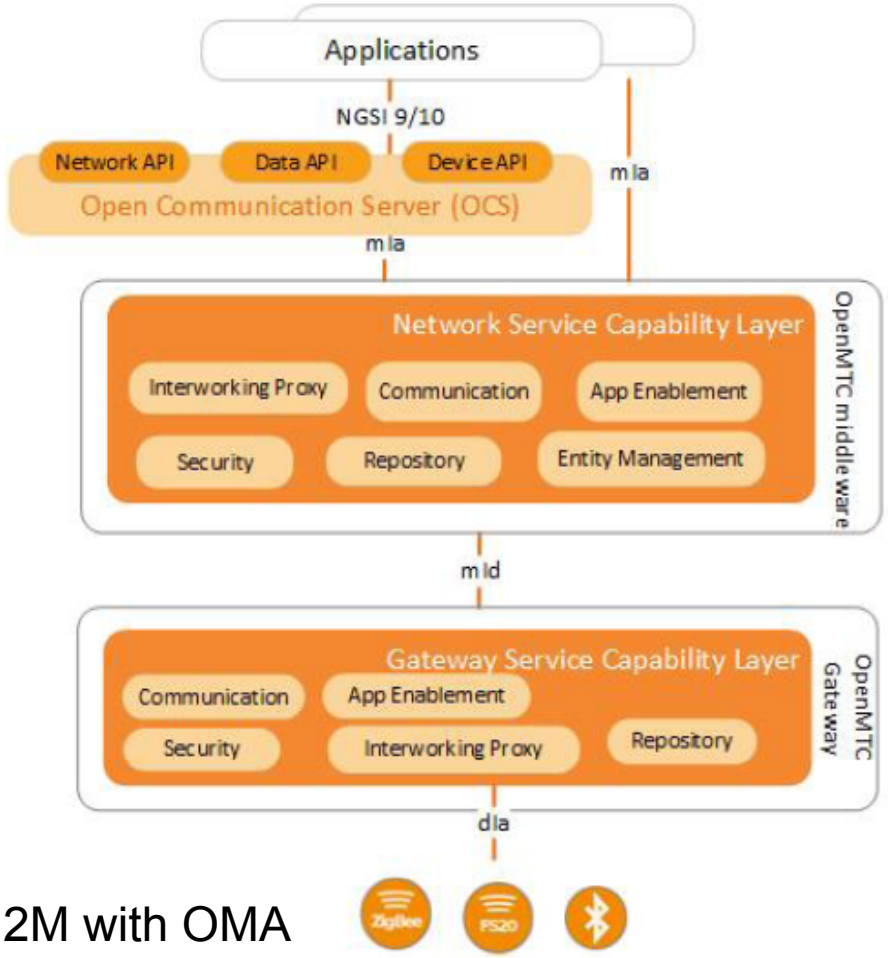


«new» technologies for making a phone call ☺

Same attitude/need for Interworking

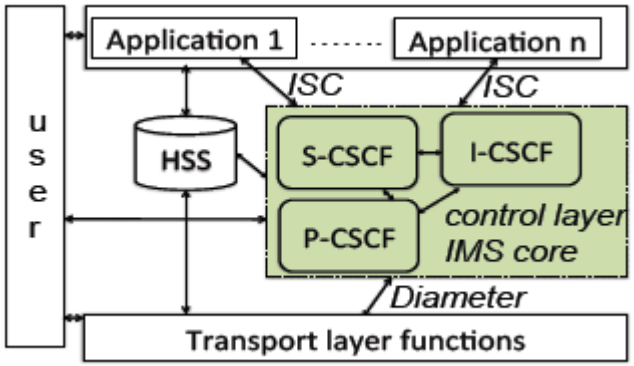
Leveraging the Network for newer services



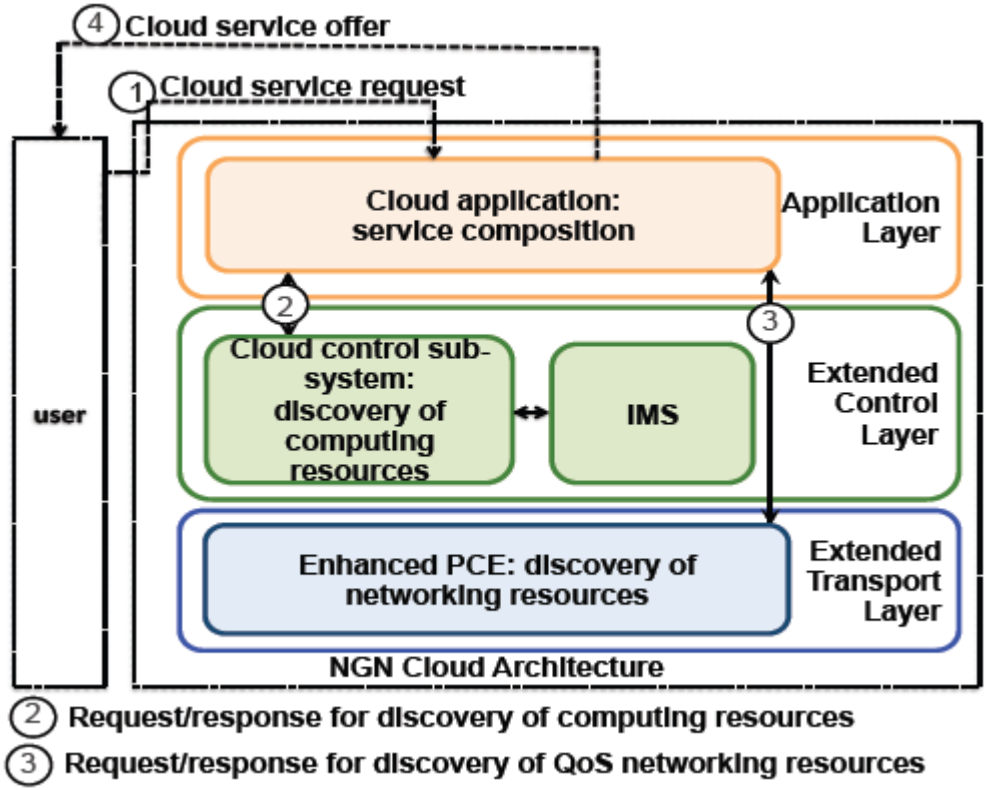


M2M with OMA

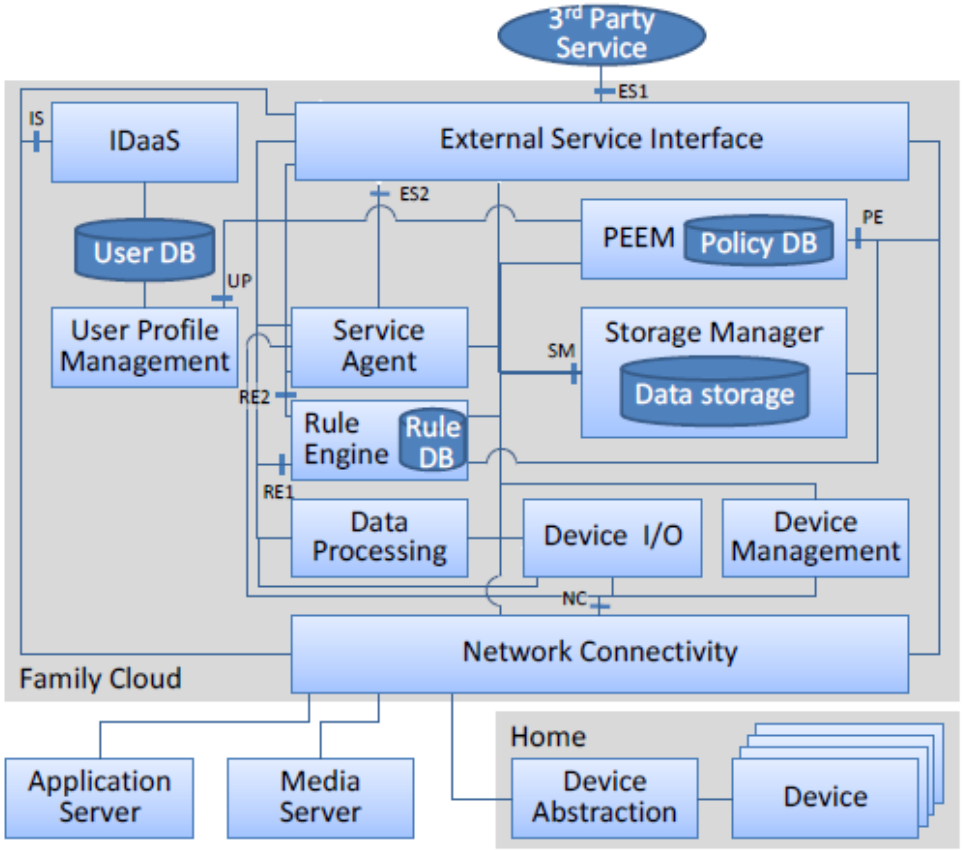
The Cloud as a means of transformation

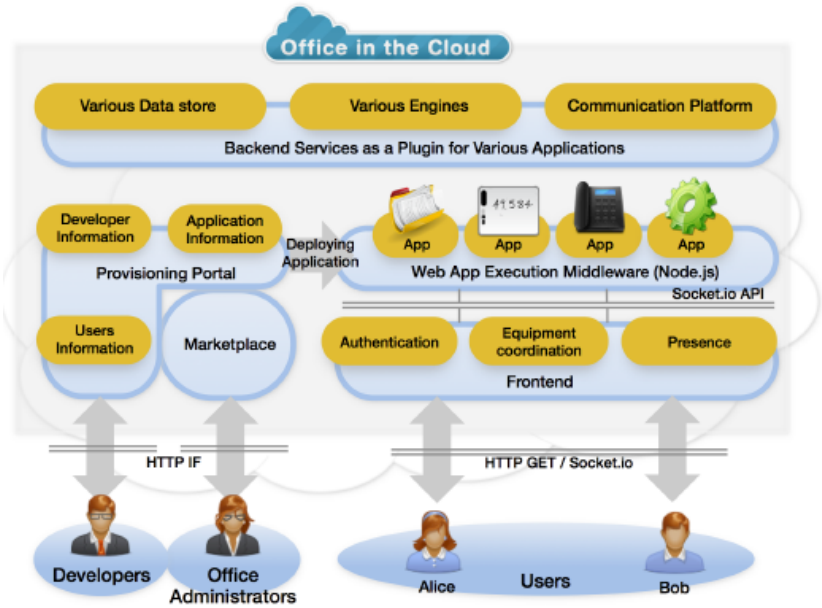


Traditional … an extension of IMS



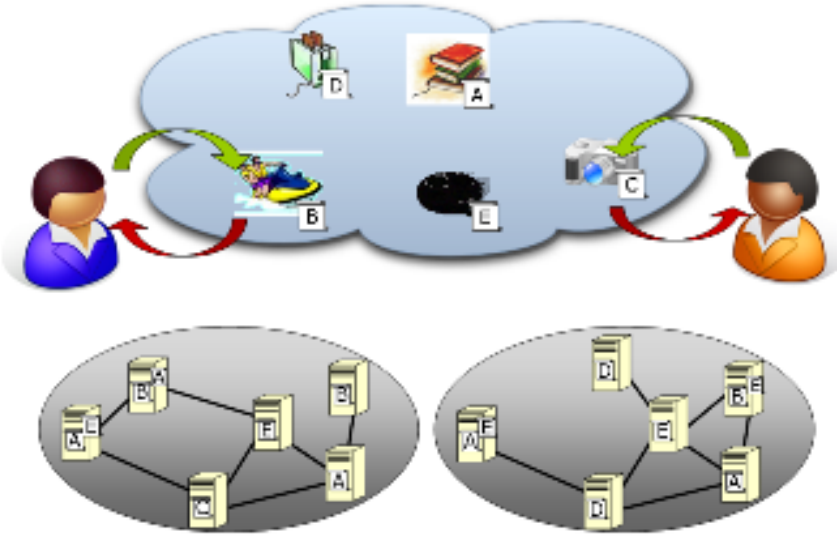
The Cloud as a means of transformation





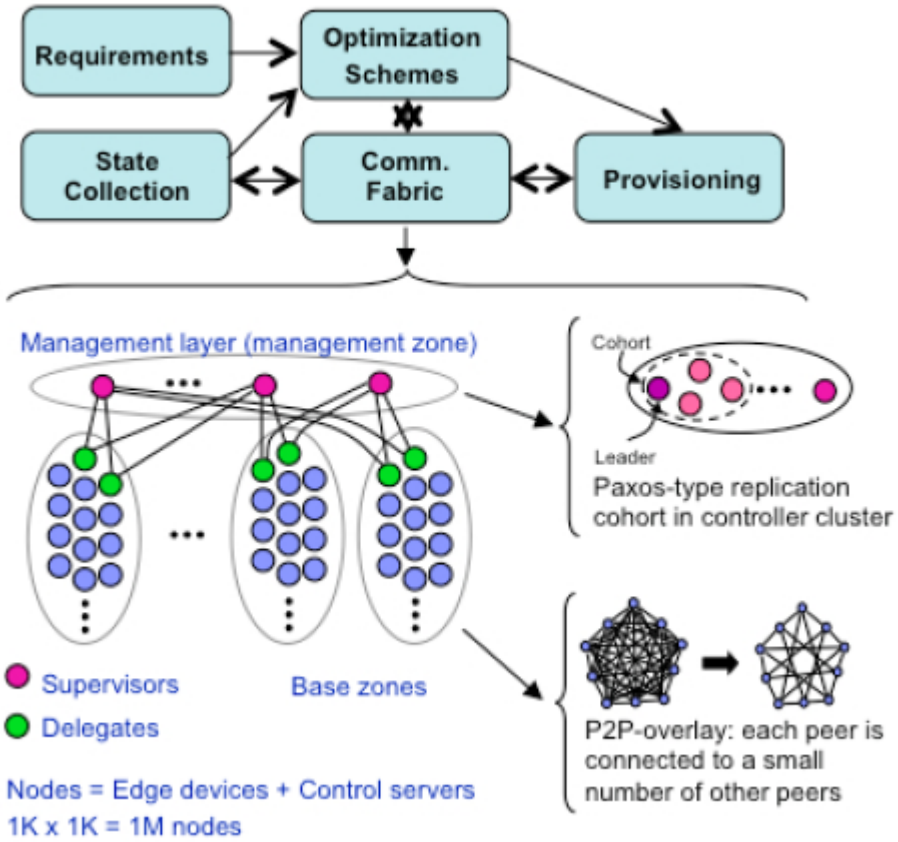
Data in the network, but near to users

Moving to new architectures (e.g., ISP → CDN → Content Centered Network CCN)

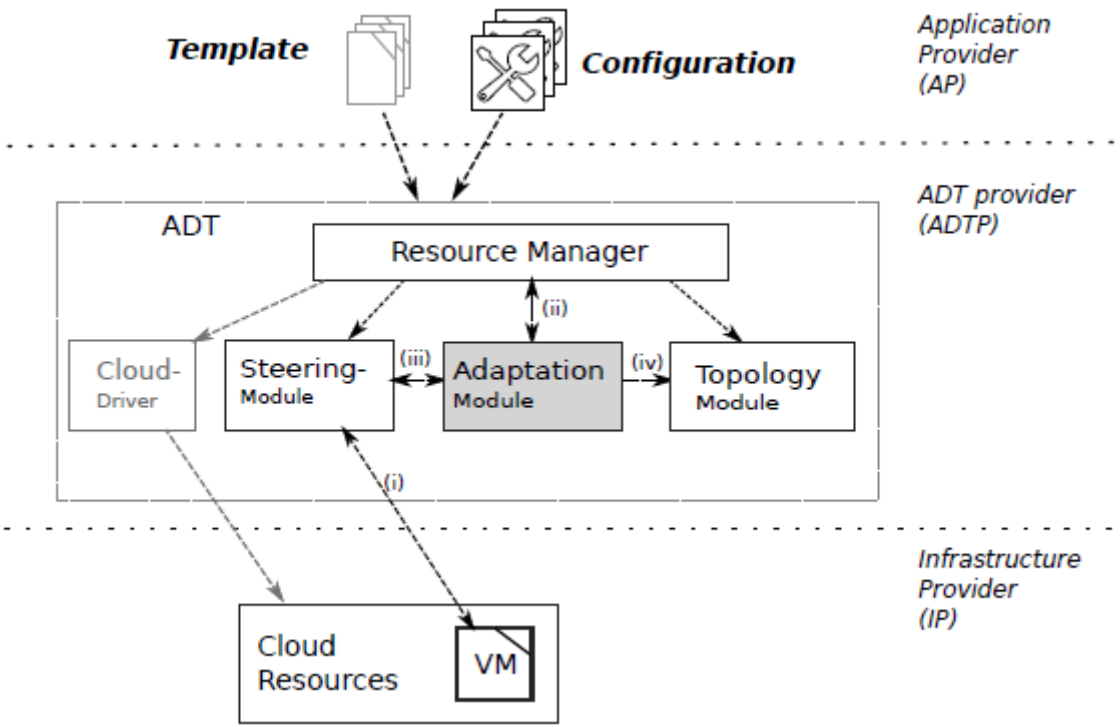


An incremental approach to deploying CCN is probably the
most beneficial at this stage: CCN can be implemented as an
overlay network on top of existing IP infrastructure, which is
the approach adopted by the CCNx consortium

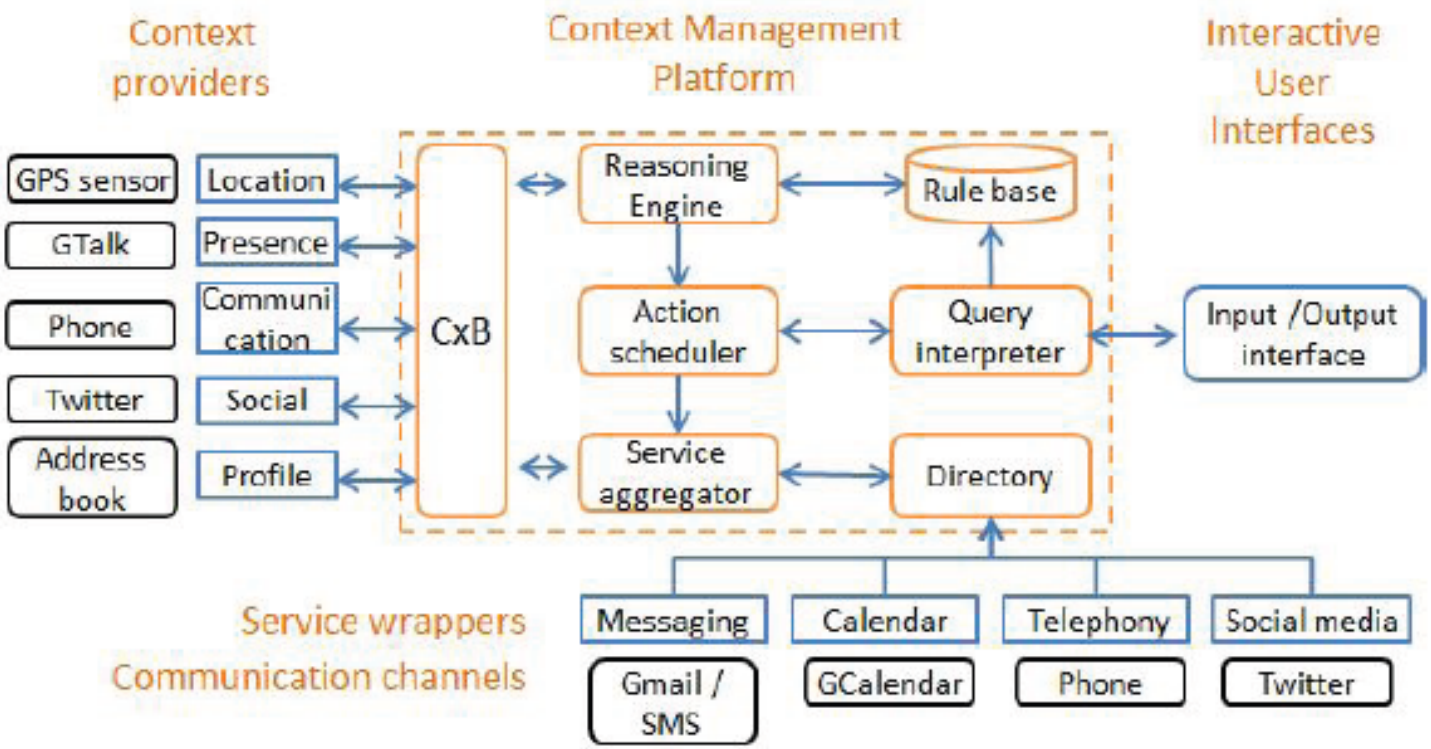
A different path: value to the Edge



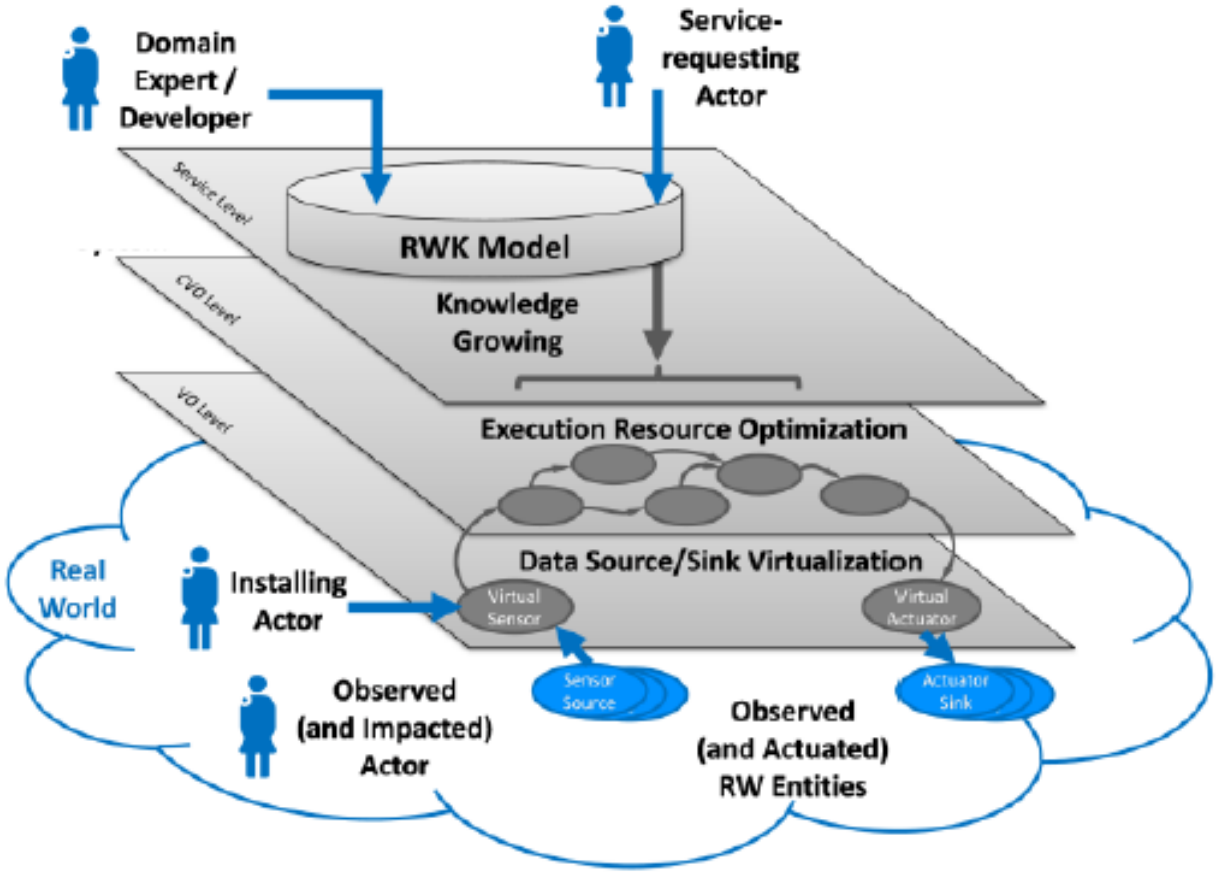
A different path: Virtualization, Topology-Aware Adaptive Deployment Framework



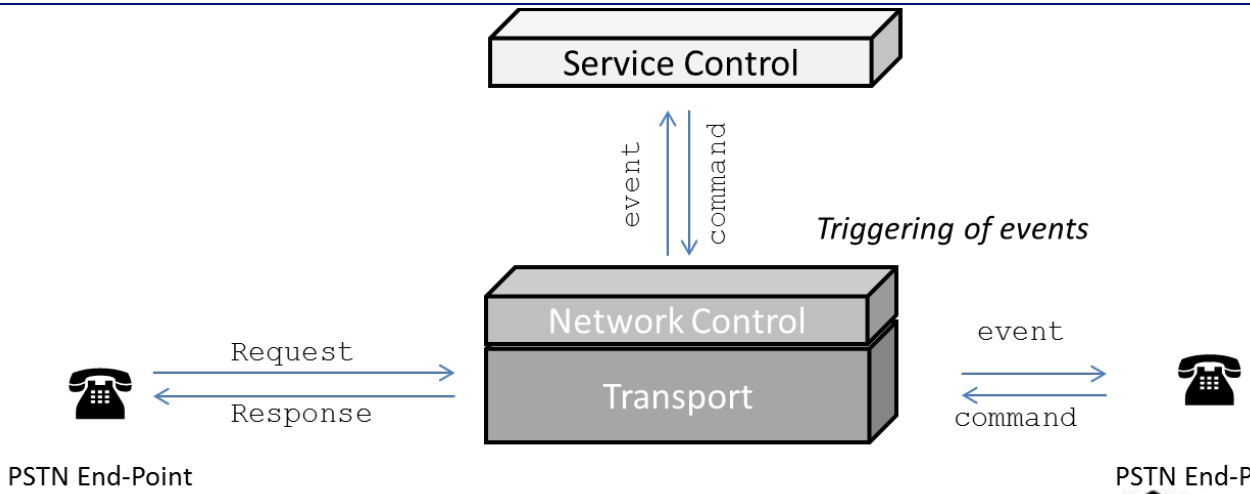
A different path: Context awareness



A different path: cognitive IoT



A misinterpretation of the web

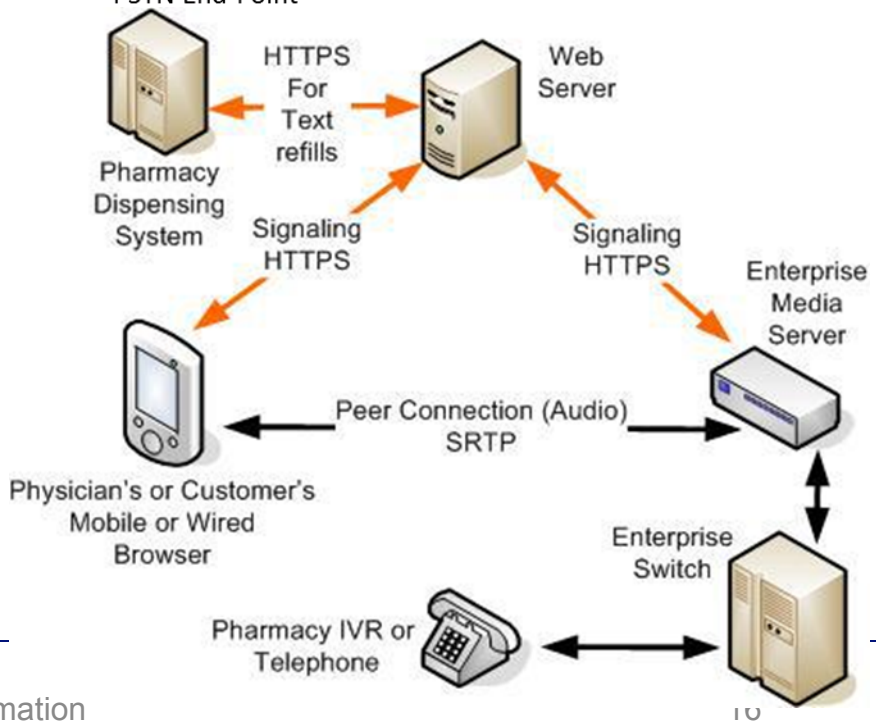


Psychiatric Clinics of North America, Volume 12, Number 2,
Pages 389-411,
June 1989.

The Compulsion to Repeat the Trauma

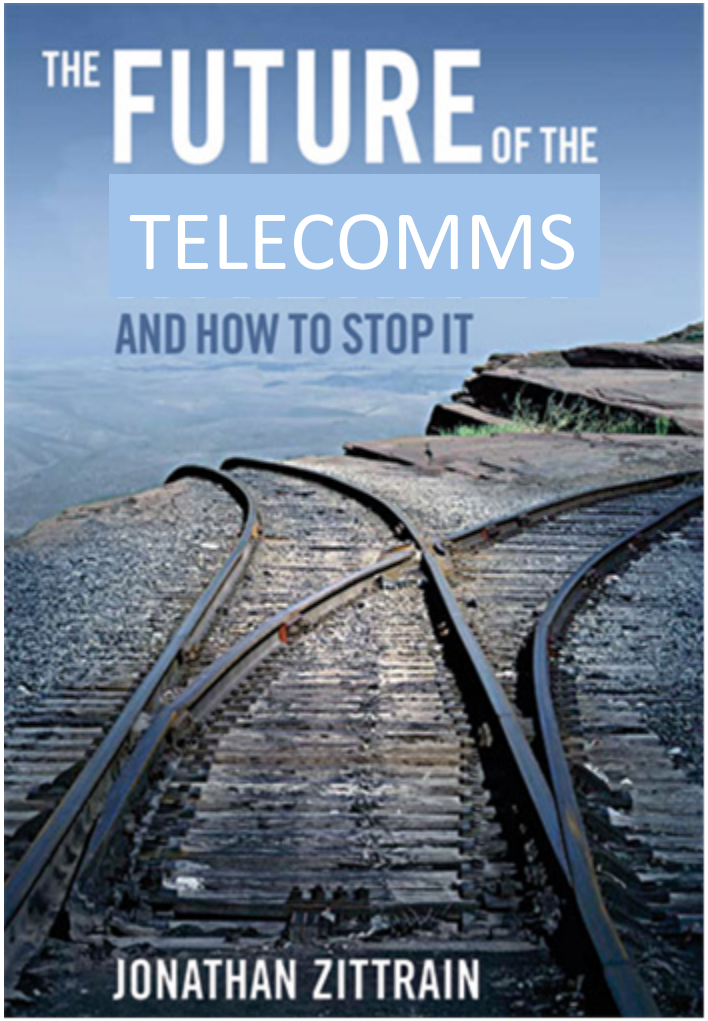
Re-enactment, Revictimization, and Masochism

*Bessel A. van der Kolk, MD**



A cogent question we need to answer

- What Operators want to be !
  - A traditional Telco
    - Pay attention at the fact that if the Telecomms industry is in this status, a major reason is because we are not able to renew our approach
  - A bit carrier
  - A service provider
- A different architecture will be needed if you want to play one of these roles!
  - The architecture is a means to play a specific role, so individual Telcos have to choose well



Thanks