Digital World Forum
Synthesis

May 5th, 2009

Fostering R&D in Africa

- R&D works in a difficult context (scarcity of resources, obsolete equipments, difficult access to scientific literature…)

- African labs need to get ready to make a better use of European subsidies for R&D : work together, find partners, promote their projects, identify R&D programs meeting African specific needs…

- Partnerships with private companies have to be built up

- Universal and Telecom funds should invest part of their subsidies into R&D (not only infrastructure)

- Africa should build its own requirements for broadband standards and for handsets configurations

- Mobilise students to build new projects, that can spin off once their studies are finished

- R&D has to be done locally, either on new programs, or focusing on transferring and customizing programs which have been started in western countries

- Possible topics :
    - Software upgradable infrastructures (and not hardware)
    - Energy low consumption handsets and routing protocols to enhance networks performance

➔ Necessity to have an inclusive pan African policy, beyond the diversity and different situations among countries

Orange Labs – Research & Development

Infrastructure sharing

- Different possible levels of sharing:

    – Backbone
    – Core network
    – Backhaul
    – Access network
    – Towers
    – Power stations

- Different paths towards infrastructure sharing:

    – Self organised through agreements in between privagte actors (eg: orange ouganda sharing towers with Warid Telecom)
    – Intervention of the regulator or the government (ex: Angola, government forcing the incubator to open its core networks to new entrants)
    – Public fundings of shared heavy infrastructure (eg: backbones) which will help offering public services (eg: health,education…)

- Role of the public bodies in spectrum allocation : When allocating spectrum, regulation bodies could sell the licences for a lower fee or no fee, being more demanding in terms of coverage (geographical redistribution)

➔ Necessity to build an R&D program gathering economists, engineers and sustainable development academics to study the expected revenues generated by shared infrastructures business models in order to convince the actors to enter into strategic partnerships.

Local contents

- Necessity to encourage development of local contents and localisation of pre existing contents

- Regulators can encourage a bottom-up approach to promote local contents and capacity building to foster new usages

- 2 sources :

  – Provided by private companies => they need to sea a early gain for small business (ex: data reports, coaching for exams...). Those contents have to be available on current technologies with low broadband (GPRS/EDGE)

  – UGC : User generated contents. As soon as people have a proper access to the Web, they can provide lots of contents (eg: music, local news…)

- Technologies like local language voice recognition and human language technologies (text to speech and speech to text) could be useful as some languages are hardly writeable.

thank you!