

Impact of Ebola on Digital Infrastructure

Objectives of presentation

- Highlight challenges within the ICT sector due to the impact of EVD
 - Human, financial, systems
- Highlight current and potential opportunities;
- Note lessons learnt for future emergency response situations.

Overall economic impact of Ebola

- Increased risk profile and uncertainties for sub-region:
 - Affected the sub region as a whole – not just Liberia, Sierra Leone and Guinea;
 - Knock on effects for sub-regional economies in general – effects on business, tourism even outside of the sub-region;
- Increased risk profile and uncertainties for Liberia:
 - 5 major airlines to 2 major airlines;
 - Major transport routes including shipping affected;
 - Dramatic shortfall in business in general;
 - Projected decrease in annual GDP and projected growth.

Overall economic impact of Ebola

- Traditional sectors hard hit, hardest :
 - Health, agriculture, education;
 - Wider socio-economic impact on general population;
 - Closure of several small businesses
- Economic impact on telecoms sector perhaps less visible to wider public (as compared to others) **but** just as severe.

Impact on Digital Infrastructure - Human

- Distraction of Management Focus:
- Fall in employee focus and productivity - distracted by situation, directly affected, fear;
- Corporate leaders and decision makers overwhelmed by an unprecedented crisis;
- International suppliers of services unwilling to deploy personnel;
- Development plans e.g. roll out of telecom/digital goods and services halted during the crisis.

Impact on Digital Infrastructure - Financial

- Drastic reduction in revenue:
 - Flight of high value customers
 - Flight of expat/technical experts – including those within the telecoms sector
 - Shut down of multi-national corporations e.g. ArcelorMittal, Chevron, etc.

Impact on Digital Infrastructure - Financial

- Increased cost of operations, loss of revenue and inability to increase cost of services
 - Access to remote facilities for refueling and maintenance difficult : travel checkpoints and quarantines, fear, unwillingness and inability of staff to travel etc.
 - Unreliable supply and increased fuel costs;
 - Supply chain links broken – difficult to get maintenance, resources due to reduction in transportation options

Impact on Digital Infrastructure - Systems

- Strain on current infrastructure:
 - Poor voice quality, latency in SMS
 - Many Liberians used Facebook, Twitter, WhatsApp, and other social networking sites to communicate during crisis

Opportunities – current and potential

- Digital services essential backbone for any **coordinated emergency response** service to support awareness, community mobilization, outreach etc.
- Robust telecom network needed to support partners
 - Internal : GOL, development agencies
 - External : CDC, WHO, US Government , for example US Military bandwidth requirement equivalent to 50% of Liberia's total bandwidth usage

Opportunities – current and potential

- Digital services used to :
 - Communicate accurate information and relevant material amongst communities e.g. EOC, mHero
 - Facilitate communication between family members restricted by quarantine, travel or even illness
 - Map the spread of the disease to allow for better coordinated medical response
 - Create networks for professionals and others dealing with Ebola

Opportunities – current and potential

- Digital services used to :
 - Provide mechanisms for funding and crowd sourcing for resourcing support efforts
 - Provide access to news and social media websites for news and information

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Lessons...

- Revealed weakness in telecoms/digital infrastructure
- Emphasized the need for a better/fully digitized Liberia
- Heightened the need for more investments in the sector to allow for better crisis management

Lessons...

- Potential priorities:
 - Expansion of services to under served areas
 - Expand digital services to include resources and support for health, education, community awareness, access to government services
 - Expand trained human capacity (higher education)
 - Address legal and regulatory environments to support a digitized Liberia