Five considerations when constructing your world class African network

BRADLEY HEMPHILL
AGENDA

1. You need to think like a utility to scale.
2. You will find it difficult to scale if you are not standards based.
3. You should be thinking of rapid deployment design and technologies.
4. In Africa a low skill requirement is a necessity.
5. Can I maintain this network properly while live?
Do you think like a utility

• A utility is an organization that maintains infrastructure for a public service.
• A fibre utility organization may or may not provide a service using that infrastructure.
• A fibre utility normally allows many organizations to provide a range of services for benefit of private and public consumers.
Do you think like a service provider

• A utility is a completely different model and way of thinking from that of a traditional communications service provider who normally owns the infrastructure, operates the network and provides the services thereon.

• A typical telecoms service provider is only interested in the telecoms, entertainment/media and internet/web services, and often only specializes in a single service in the ultra competitive global market place.

• A good test to see if a mature service provider has changed thinking is to test if they can distinguish and separate the asset from the service.
Do you think like a utility

• Service examples include FTTH operators, security companies, other public utilities for meter reading service like power, water and gas.
• The infrastructure must be all encompassing - it must cover the entire spatial development framework of a local authority.
Standards based?

- Type 1 – A standard way
- In complex environments at scale we need simplicity.
- We create simplicity by always doing things a standard way.
- Have you developed your own standard way?
Standards based?

• Type 2 – Global standards based systems

• When we discuss standard we must be specific.
• Is it a materials standard, a manufacturing standard, a test standard, a network standard, or even a standards body?
• If I am standards based I am not locked into a vendor of material or product or solution.
• The value of my asset is enhanced
Rapid Deployment

• Lets be clear – the sooner the service provider can provide a service to a consumer, the sooner your infrastructure investment works for you.
• Design – GIS tools, pre-connectorised
• Deployment – micro-trench, one/two duct type
• Supply chain – minimal componentry, minimal suppliers.
• Home drop – done by electrician/any reasonable artisan
Low skills

- Fibre Mapping GIS based documentation
- Preconnectorised – splice at convergence only
- Homedrop – electrician, self install
- Field based low cost offline smart phones capture asset correctly
Live Maintenance

- Re-entrable enclosures
- Cross patching in CO eliminates field technician error
- Re-entrable Patch panels
- Preconnectorised module at home drop interface
Closing

• Fibre Mapping software will help you to standardize your design, product, supply chain, deployment and asset management
• Go pre-connectorised for rapid deployment, low skill and live maintenance asset
• Think like a utility to maximise your infrastructure investment