

Building Greenfield Networks

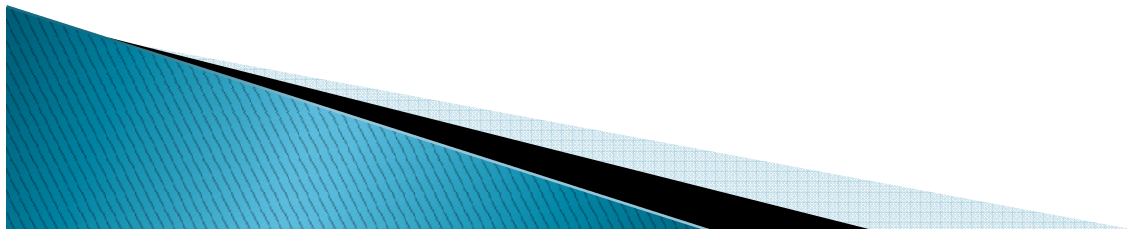


www.Telecom-Cloud.net

Harish Vadada

Steps

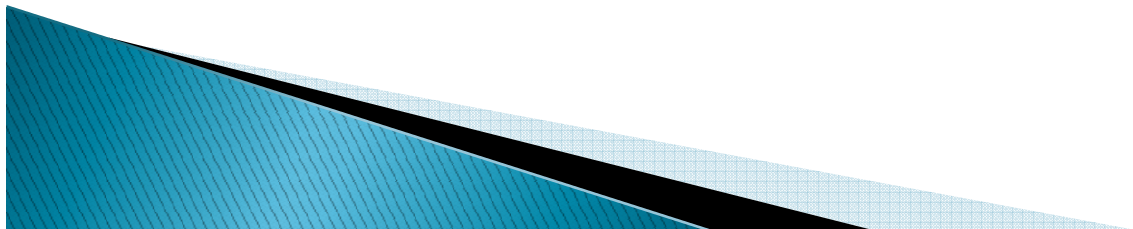
- ❑ Network Design, Development, and Maintenance
- ❑ Optimization
- ❑ How the network works



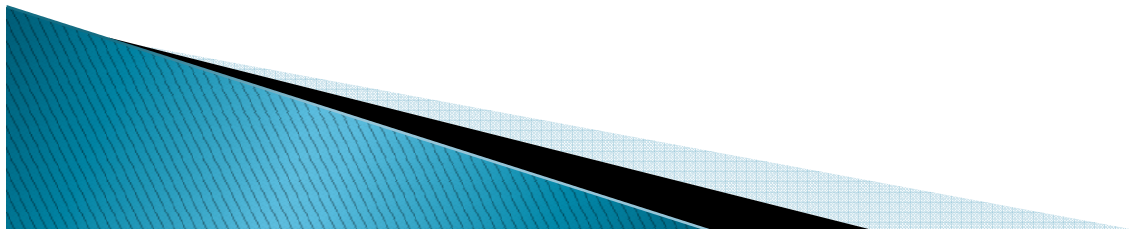
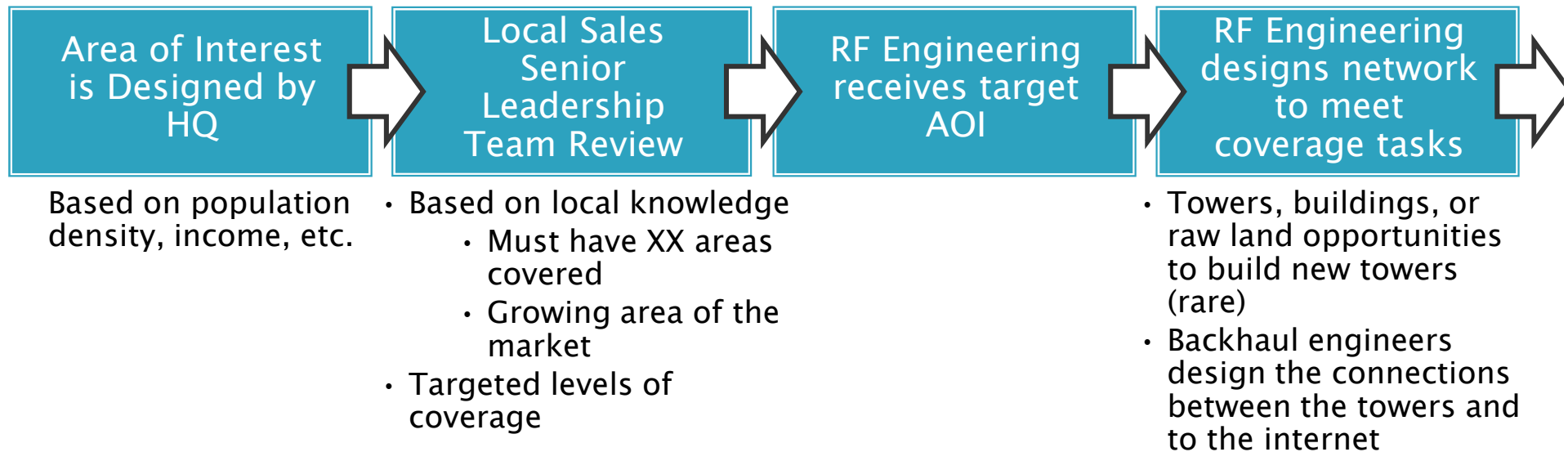
Million Dollar Question

Why do I lose the signal in the building?

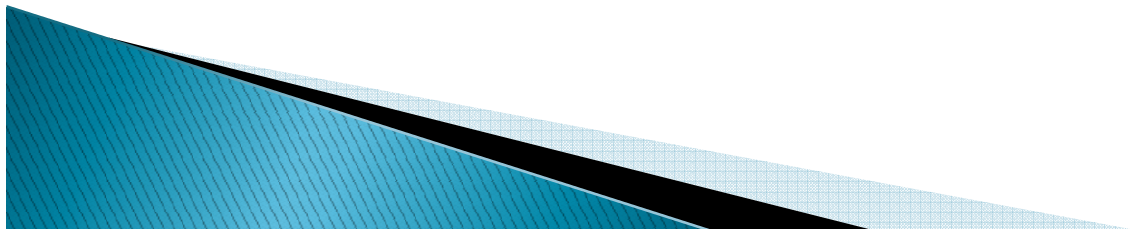
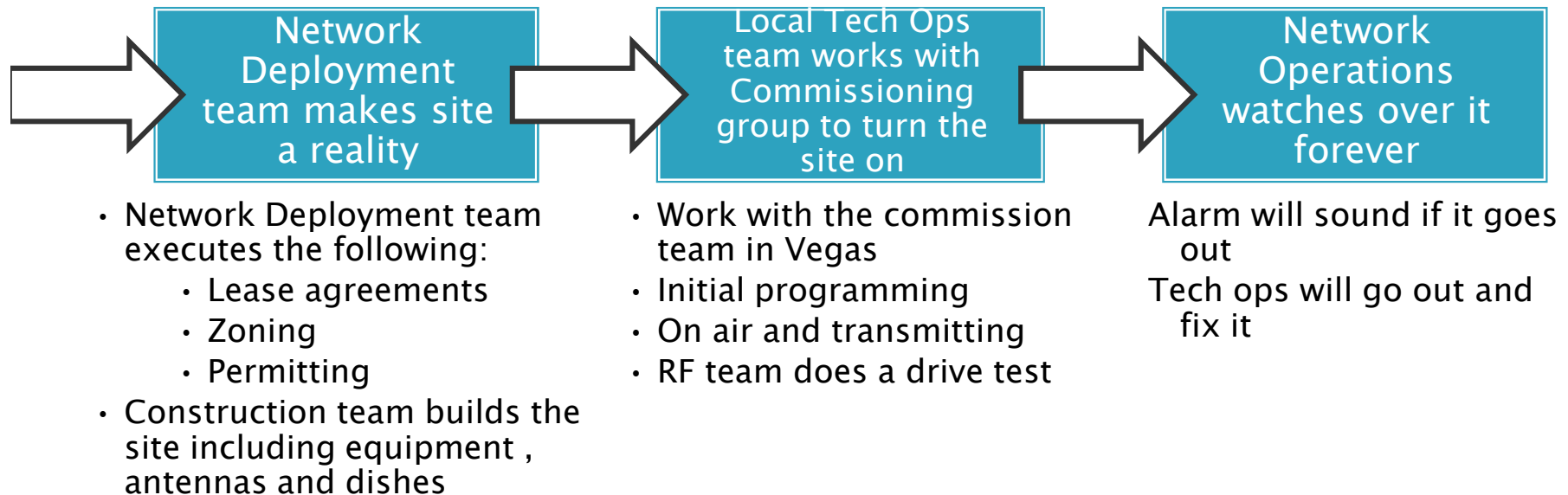
- Going through simple walls like wood or drywall we lose up to 90% signal
- However, devices can compensate to a point by amplifying our signal many times over – that is how we are still able to receive the signal that we do
- Indoor coverage is Gold!



Network Buildout



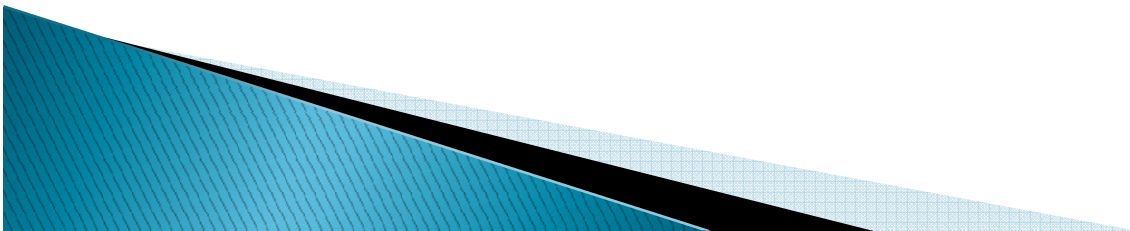
Network Buildout



Million Dollar Question

How much does it cost to build one tower?

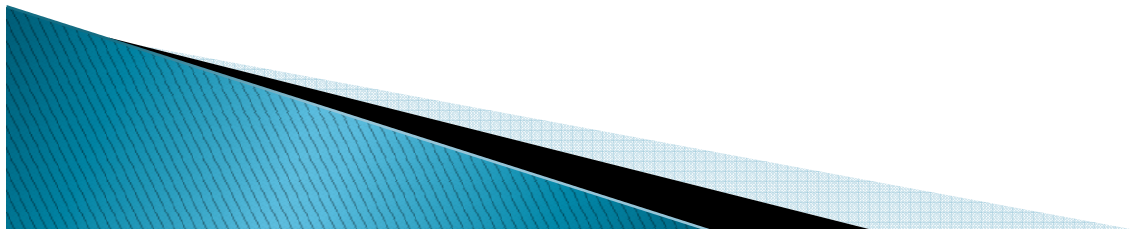
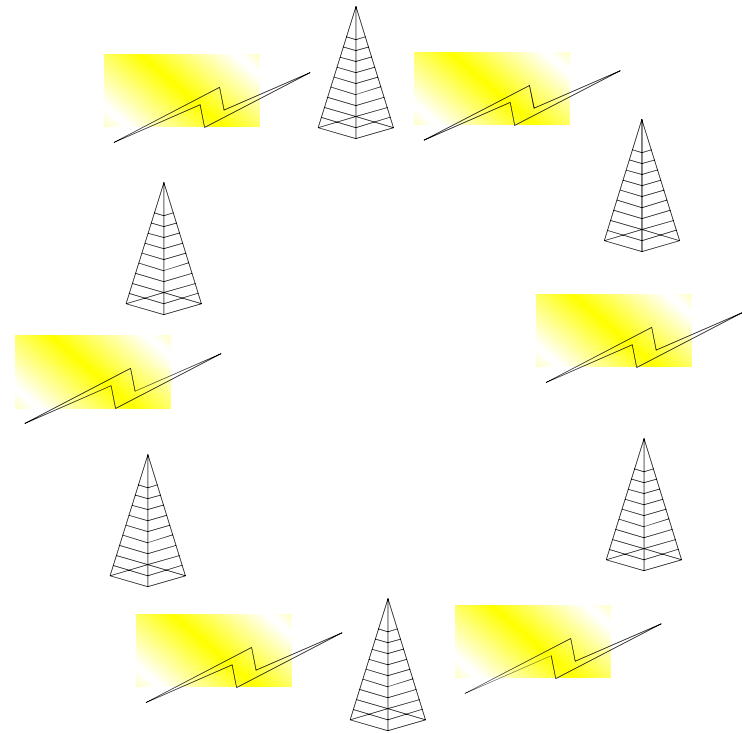
\$100 – \$150k



Optimization

Facts:

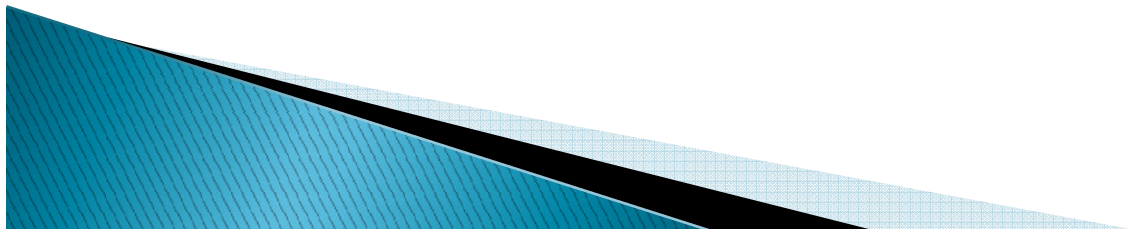
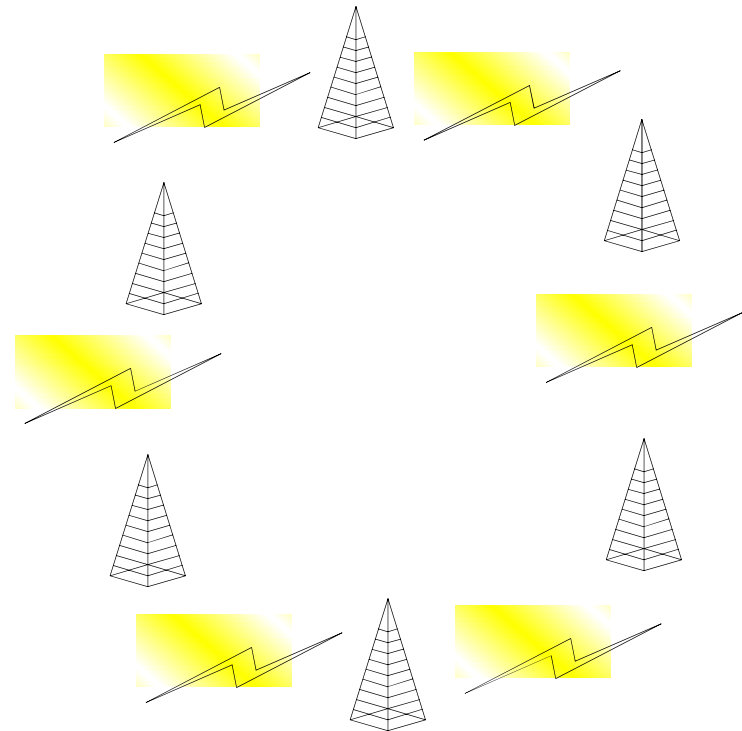
- Have 6–12 channels per market
- Site has 3 antennas
- Each site needs 3 channels to get started
- Need an additional channel for every 100 users in a sector
- Sites typically covers from .7 – 1 mile



Optimization

Challenges:

- If two towers are using the same channel and overlapping then it causes interference. It reduces coverage.
- Optimization is like picking your neighbors. We have to make sure that the RF signal goes far enough, not too far so that it interferes with the next tower.
- Each additional channel requires optimization to make sure that it serves only its intended area



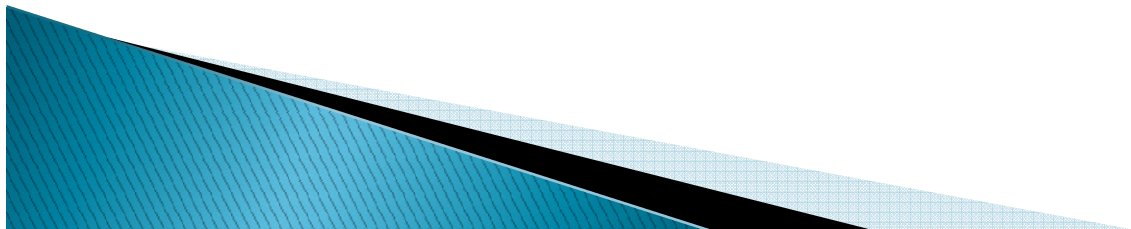
Million Dollar Question

What makes a NETWORK different?

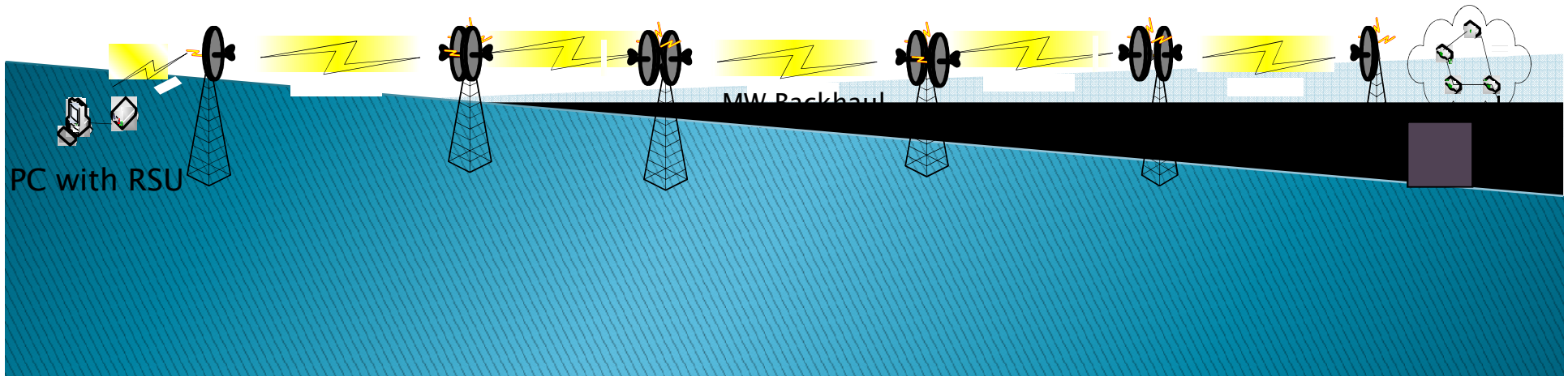
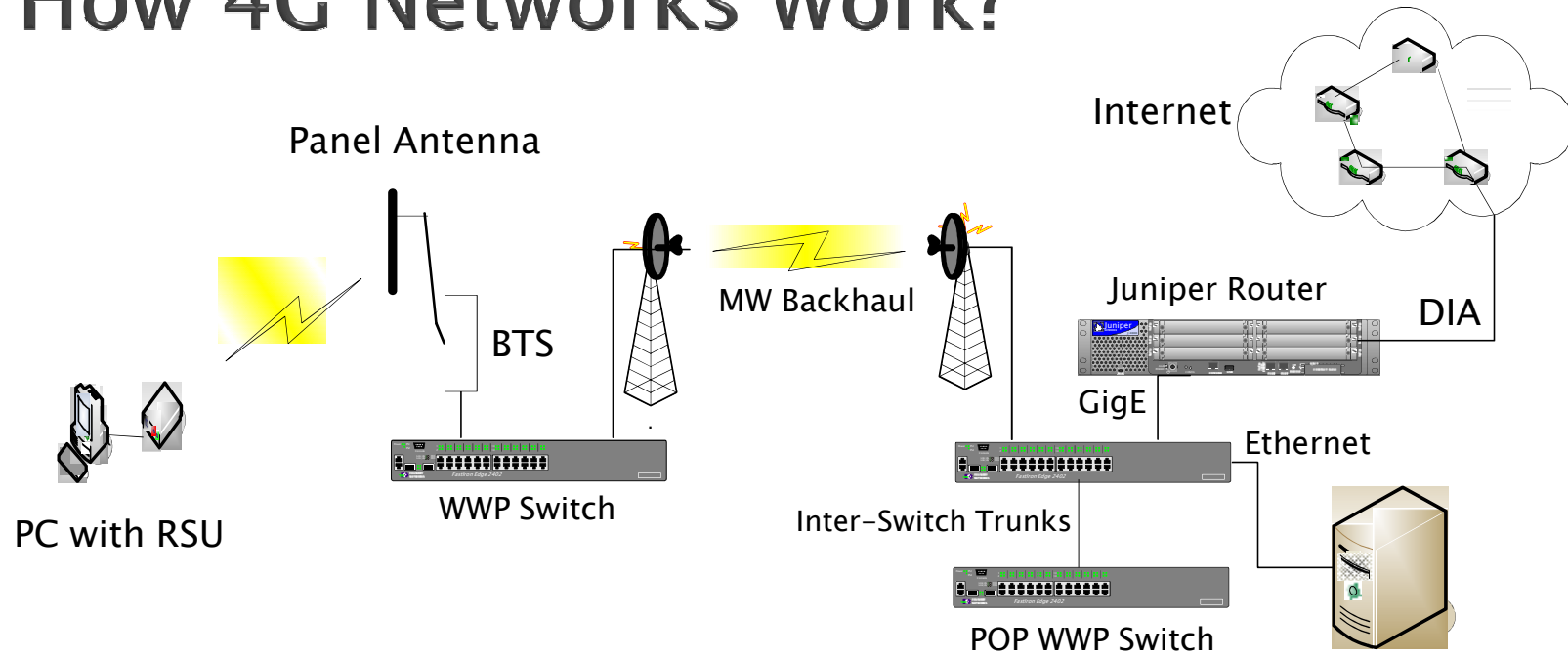
One of our main competitive advantages is that we own our own backhaul from the sites – this is our way of getting the signal back to the internet

3G is currently using copper wire “T1” type lines at most sites, whereas GREENFIELD Wireless companies can have predominantly microwave backhaul –bypassing expensive fiber

We can effectively build a T1 bandwidth for \$5 a month – which helps keep prices down for you to sell



How 4G Networks Work?

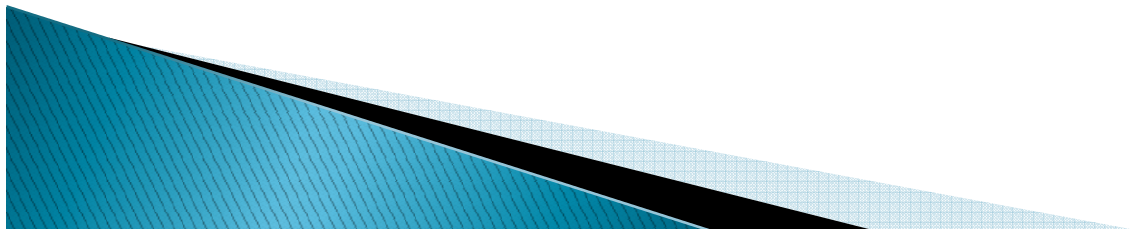


Million Dollar Questions

How long does it take to build a network?

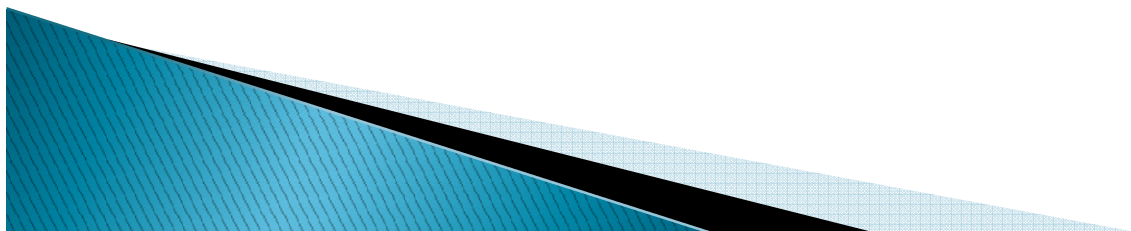
Sites can come on-air anywhere from 6 months to 2 years

If and when our customers demand more bandwidth, there is the flexibility to change



Market Differentiator?

- ▶ Understanding how the network is designed, built, and maintained helps you:
 - Sell in the right areas
 - Set the right customer expectations
 - Have more happy customers that send referrals
 - Have less customers that pullback
 - Make more money!



Questions?

