



# Adaptrum

## Panel 1

# Wireless Broadband Technologies

USTDA South Africa Connectivity Standards Workshop

## Panel 1 – Wireless Broadband Technologies

1:00 –  
2:15

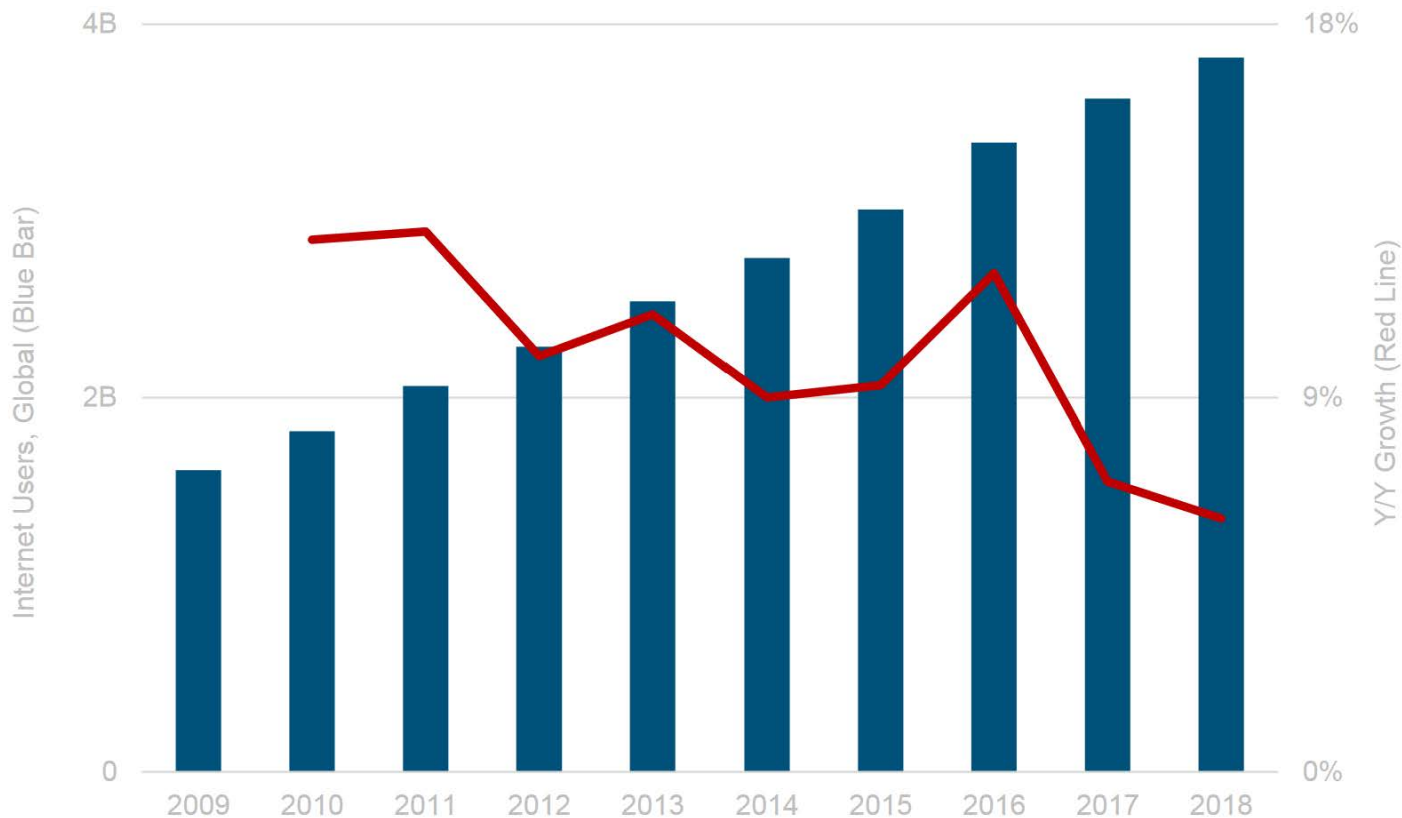
*Panelists to discuss the future of connectivity in areas such as 5G, Wi-Fi 6, TV White Space, and High Altitude Platforms*

Moderator: Mark Rotter, Adaptrum

Panelists:

- Clayton Naidoo, Cisco (Wi-Fi 6)
- Marco de Ru, Miro
- Dr. Bienvenu Agbokponto Soglo, Intel
- Johan Smit, Telkom (Spectrum)

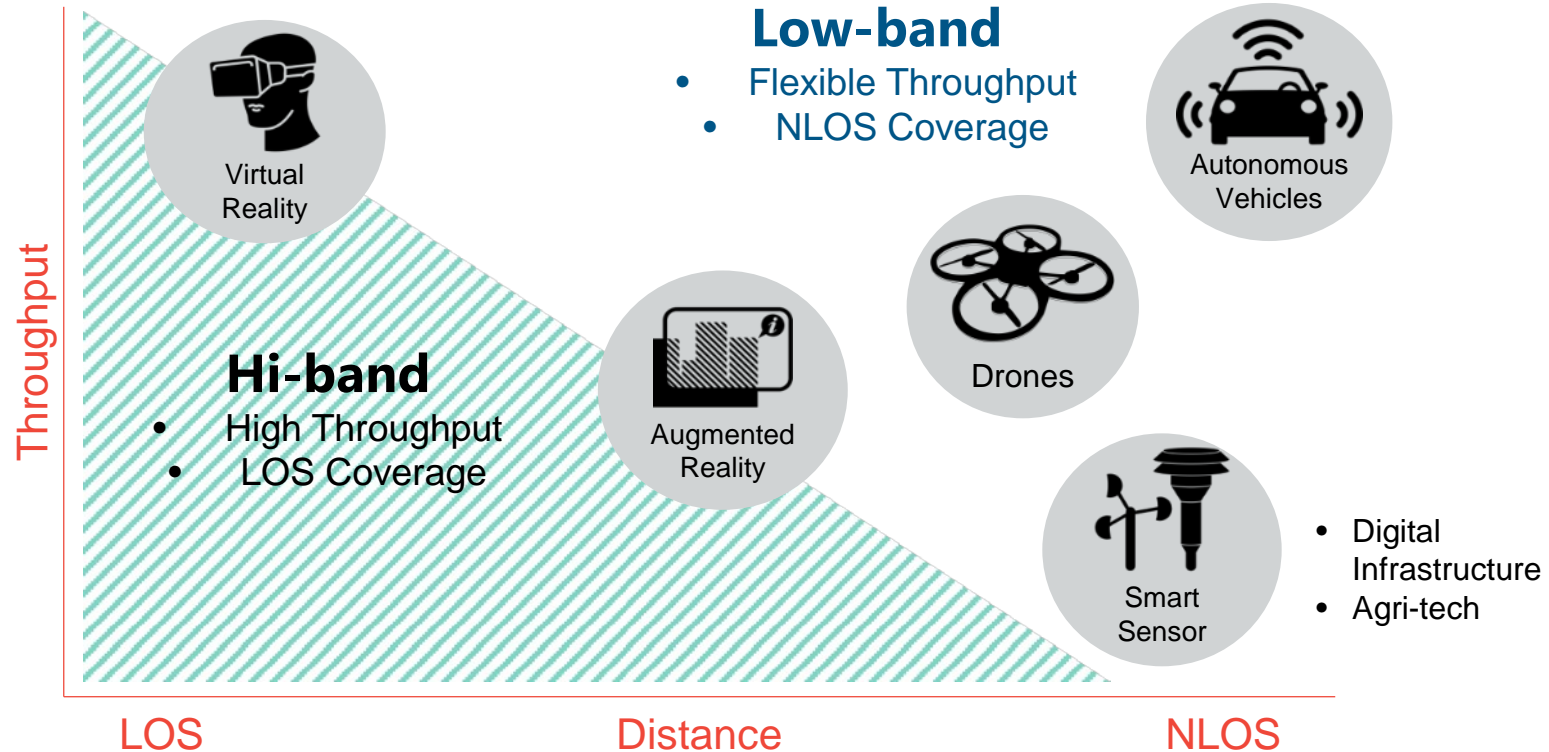
# Internet for people



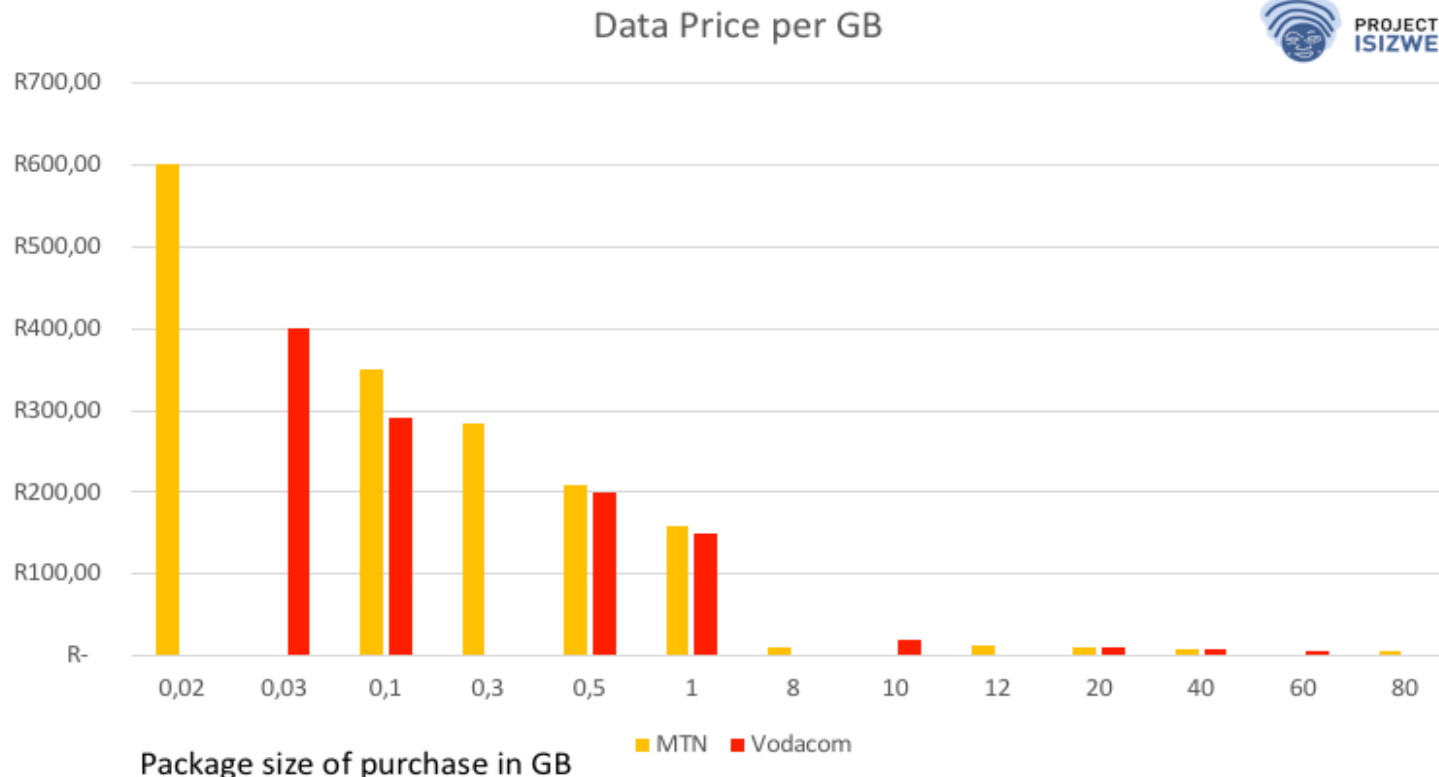
Source : Mary Meeker Internet trends 2019 [https://www.bondcap.com/pdf/Internet\\_Trends\\_2019.pdf](https://www.bondcap.com/pdf/Internet_Trends_2019.pdf)

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# Internet for devices



# Affordability in South Africa



Pre paid Data bundles

24 month data contracts

# 4IR Implications

- New economics
  - Hybrid Social-Commercial models & financing
  - Reality e.g.  $LTV > CAV^*$
- Complexity
  - Scale vs SCALE
  - Standards & Regulations
  - Intended & unintended consequences
- Skills Reinvented



*\* Mary Meeker Internet trends 2019*



# Wireless Standards 5G, Wi-Fi 6, HAPS

By 2022, 5G connections and devices will be 3% of global mobile devices and connections and will account for 12% (9.2 EBs/month) of mobile data traffic.

Source: Cisco VNI Global Mobile Data Traffic Forecast, 2017–2022



Globally, 59% of mobile data traffic will be offloaded to WiFi by 2022 (compared to 54% in 2017).

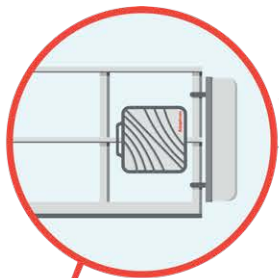
Source: Cisco VNI Global Mobile Data Traffic Forecast, 2017–2022



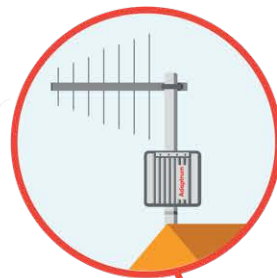
# Dynamic Spectrum and TVWS

Long-Range  
Non-Line-of-Sight  
Great Penetration  
trees, building, etc.

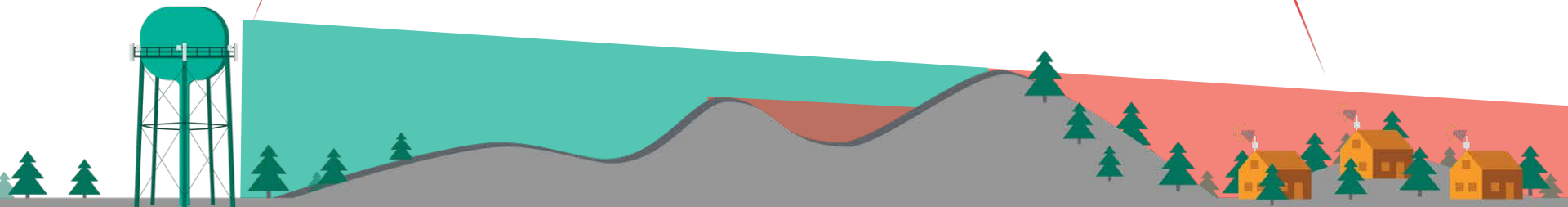
TVWS  
Base



TVWS  
Client(s)



6 mi / 10 km







# Adaptrum

## Internet. Everywhere.

THANK YOU!

*Mark Rotter*

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