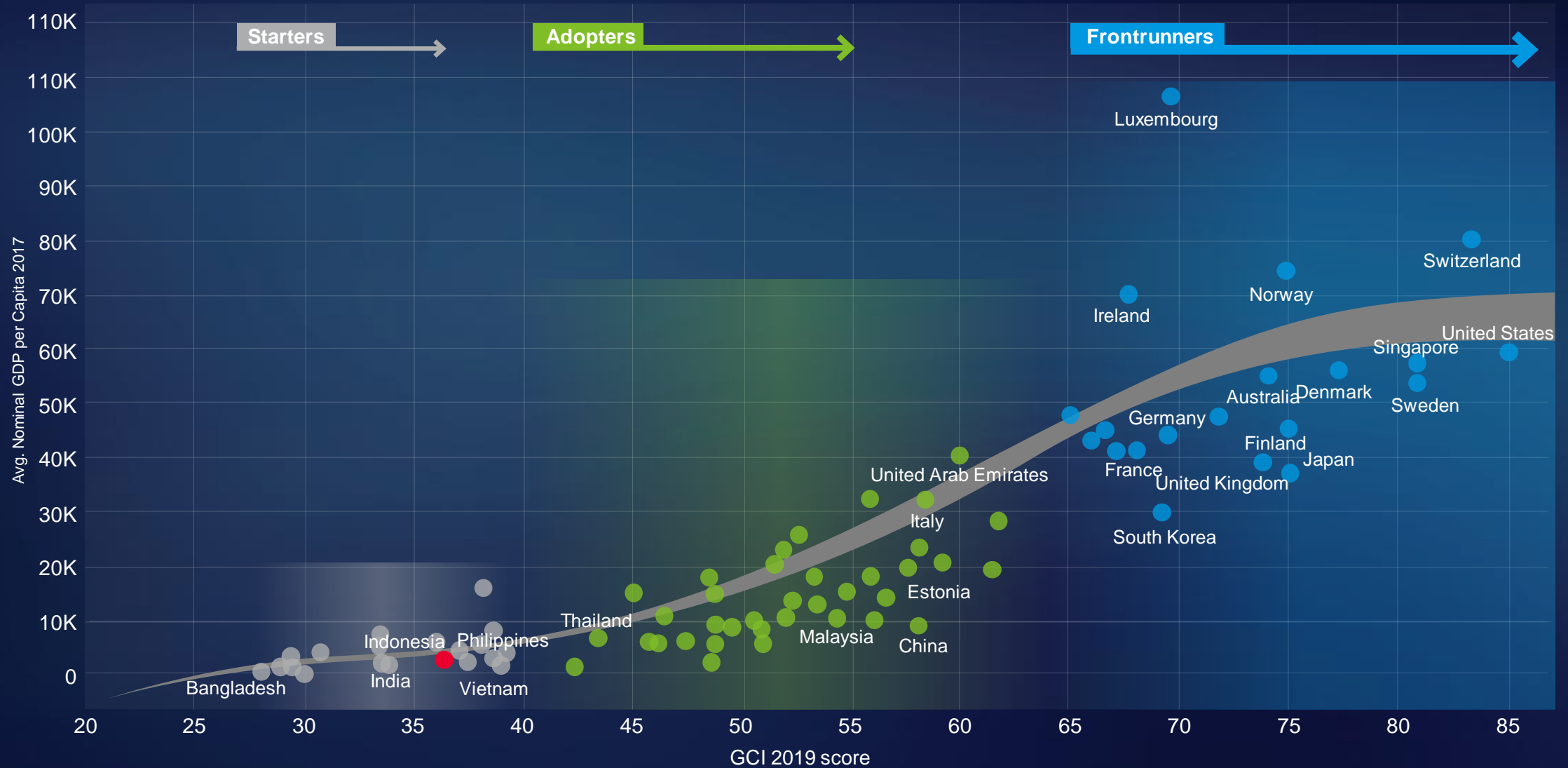


# **Sinergy on ICT Infrastructure Development and Digital Services Acceleration**

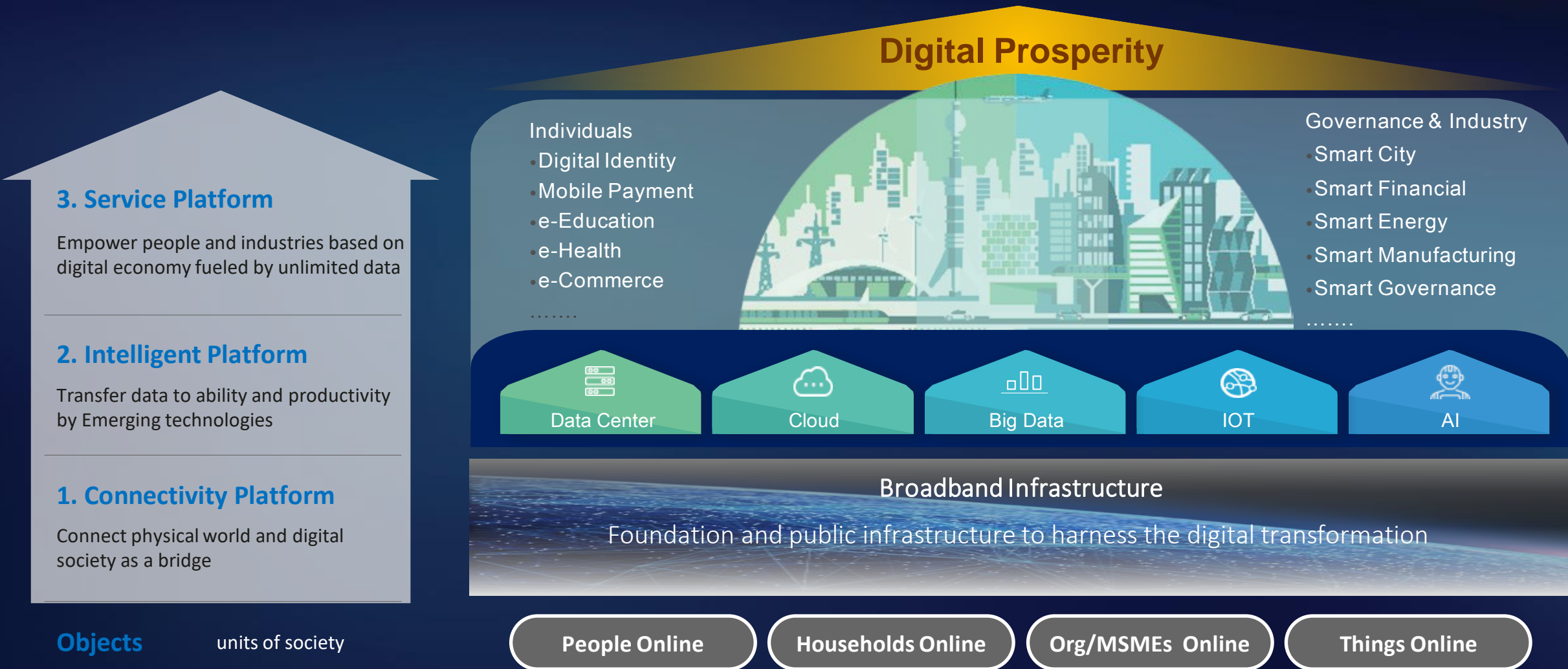
**FGD, 13 August 2020**

**Mohamad Rosidi**  
**ICT Strategy & Business**

# Most countries have embarked on the road to a digital economy, but they are at different stages



# A 3-tier structure of digitalization and spillover effect



# Synergy of three factors drives Digital Transformation



## 80-year-old 'Grandma Apricot' boosts online fruit sales through livestreams



# ICT Helps Economy Recovery, Enlarge SME's Sales Via Digital Channels during Covid-19



Among the reported Indonesia SMEs hit by COVID-19, 87.4% are Micro-scaled Businesses

## Challenges

56%

Sales Decline

22%

Lack of Fund

15%

Distribution issue

Current

E-Commerce Platform



BUKALAPAK



Lazada

JD.ID  
Online Shopping

Digitalization

Live Streaming as Sales Channel



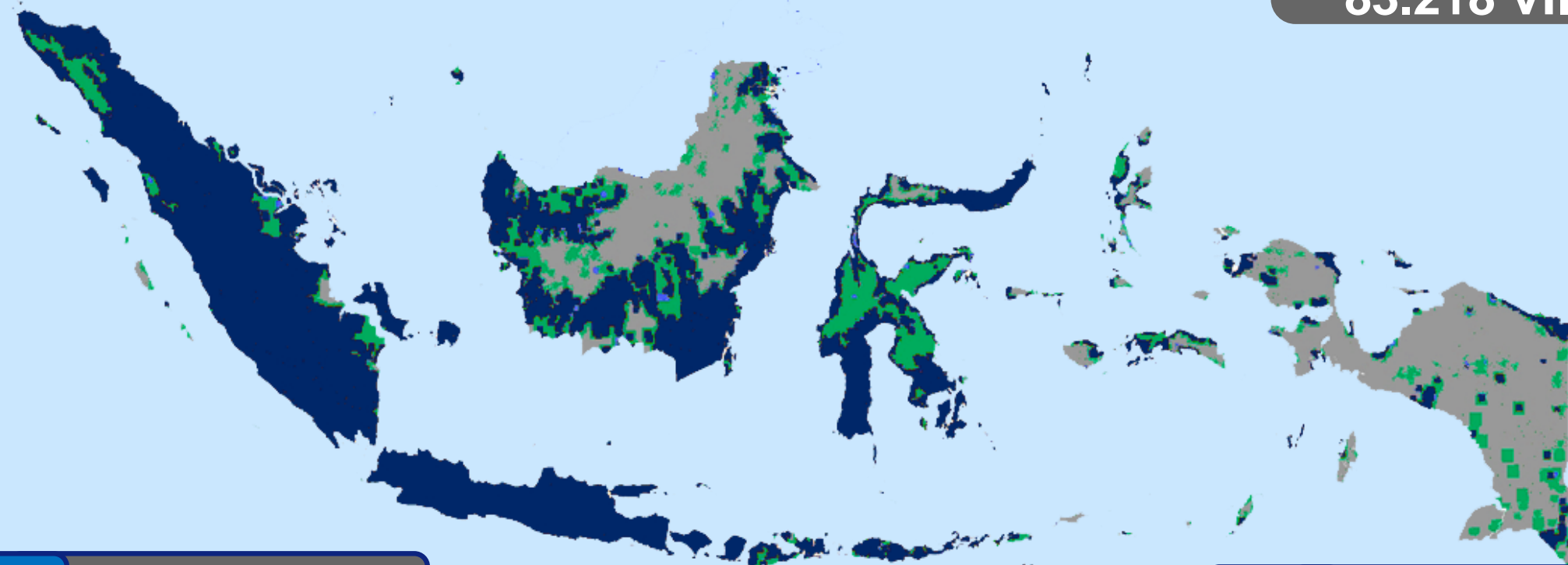
- In 2020, live streaming sales is expected to be 526 million CNY, accounting for 8.7% of China's online retail scale
- Q1,2020: More than 100 mayors walked into the live broadcast room to "endorse" local products;

# Uncovered Villages: A Great Move to Improve Equality in Remote Areas



## MOBILE BROADBAND COVERAGE (Q4 2019)

Number of villages in total:  
**83.218 villages**



**2G**  
Covered\* villages: 76.428  
Uncovered villages: 6.790  
3T\*\* 5.639 villages  
Non-3T 1.151 villages

**3G**  
Covered villages : 67.006  
Uncovered villages: 6.212  
3T 1.909 villages  
Non 3T 5.303 villages

**4G**  
Covered villages : 70.670  
Uncovered villages: 12.548  
3T 9.113 villages  
Non 3T 3.435 villages

\*Covered = Administrative area or residential area covered by 100% signal

\*\*3T = terdepan, terluar, tertinggal (frontier, outermost and least developed regions)

Source: Dukcapil (2016), BIG (2016), Data site & coverage Cellular operator Q3 2019 (2019)

# Rural Coverage Challenges



## Less E2E Project Management (Planning, Design, Deployment, & operational)



### High CAPEX

Civil work and Power site construction cost high

➤ Traditional D.G. site cost :

**115000\$~150000\$** , civil work **51%** ,  
power **30%**

Source: North Africa Sudan



### High OPEX

Difficult to make site visit, high fuel fee and  
transmission rental fee

➤ Satellite transmission **>3000\$/Mbps**, fuel fee  
**>12000\$/year**

Source: Pakistan



### Long TTM

> 1 month to build Macro site

➤ Remote site ,and logistic difficult

➤Lack of machines for tower installation

Source: Indonesia



### Long ROI

low ARPU

➤ The ARPU is around **2~3\$** , Traditional site  
**ROI >6 years**

Source: Pakistan



## Cost Efficiency





# Solution- RuralStar: 110+ Networks, 50+ Country, 50M+ Users' Choice



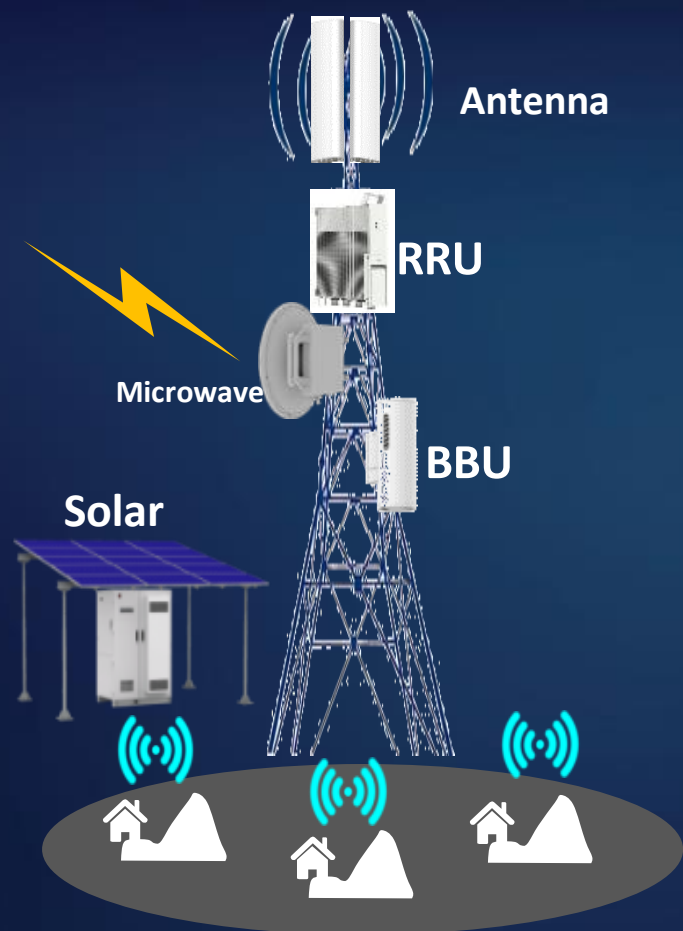
"Best Mobile Innovation for Emerging Markets" award @MWC 2018.



GSMA judges: The RuralStar solution features

- *simple site deployment,*
- *easy installation,*
- *low power design,*
- *cutting-edge battery technologies*

# A Quick Overview of 'RuralStar' Solution and its Highlights



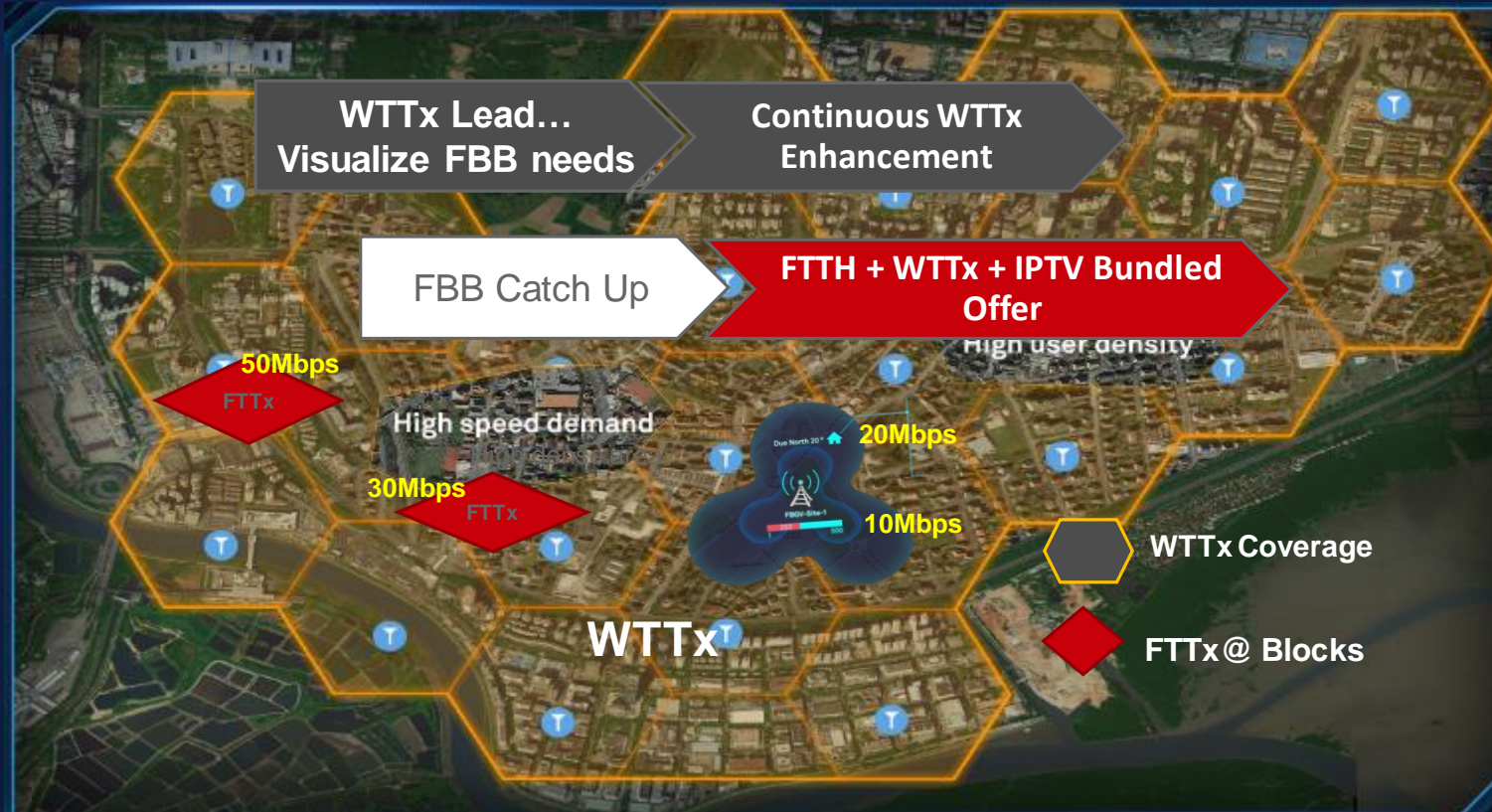
## Challenges

- 1 Isolated Area**  
Long distance
- 2 Power Supply**  
Lack of electricity
- 3 Transportation**  
Poor road conditions,  
expensive logistics

## Huawei Solution

- Wide Coverage**  
16.5dBi high gain Antennas  
One High-power RRU, **7KM Radius**
- Low Power Consumption**  
Site power saving 27%,  
Single Site **242W**
- Easy Deployment, Easy O&M**  
Fully Outdoor **IP65**,  
Nature cooling  
RRU 12L/15kg, BBU 8L/10kg

# Home Broadband Strategy : WTTx and FBB Synergy



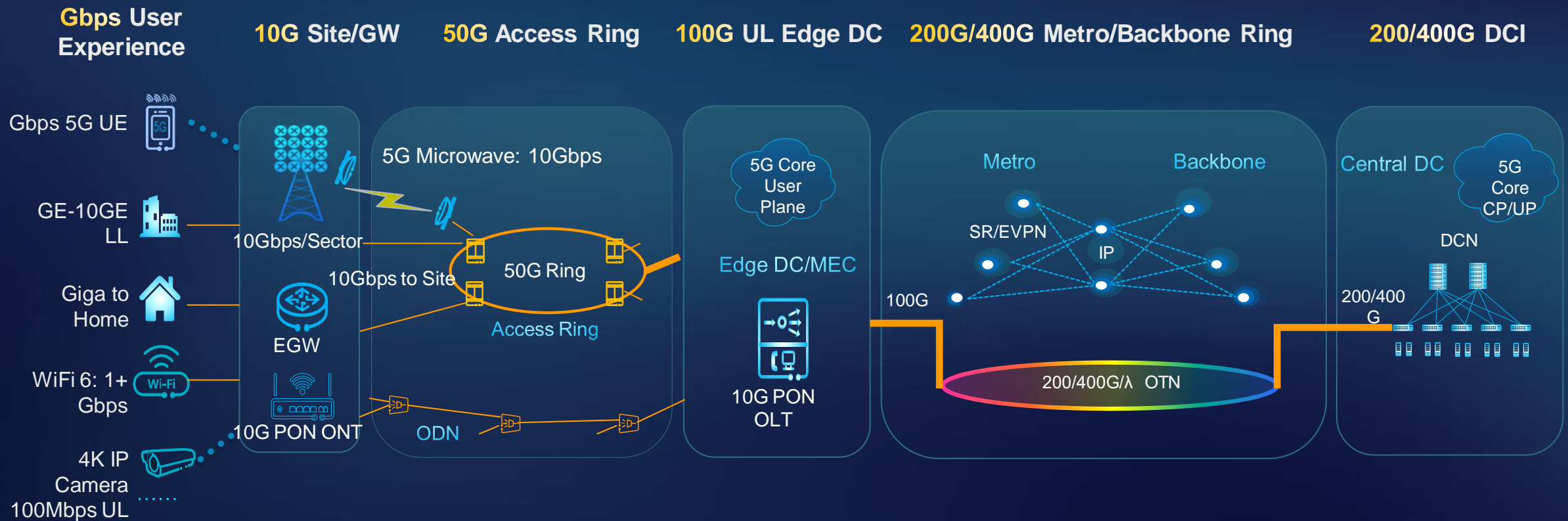
- WTTx for universal coverage
- FTTx for high speed/density blocks

- Quick Subscriber development
- Increase FTTx take-up rate
- Reuse MBB Network or develop dedicated WTTX to achieve up to 30 Mbps

# Connectivity is key important factor of Digital inclusion



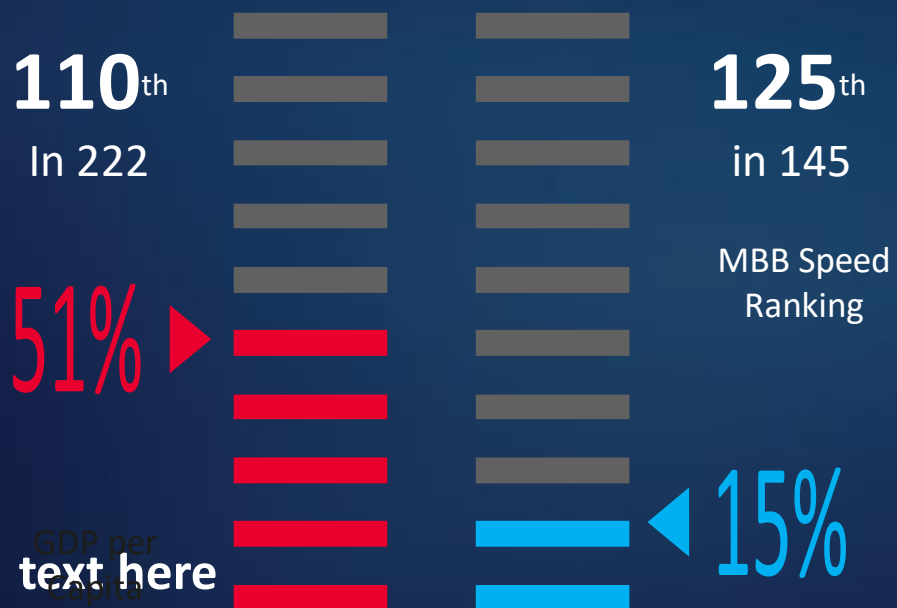
## FMC (Fixed Mobile Convergence) is the most suitable approach



# The ICT Infrastructure Service Standard Need To Improve



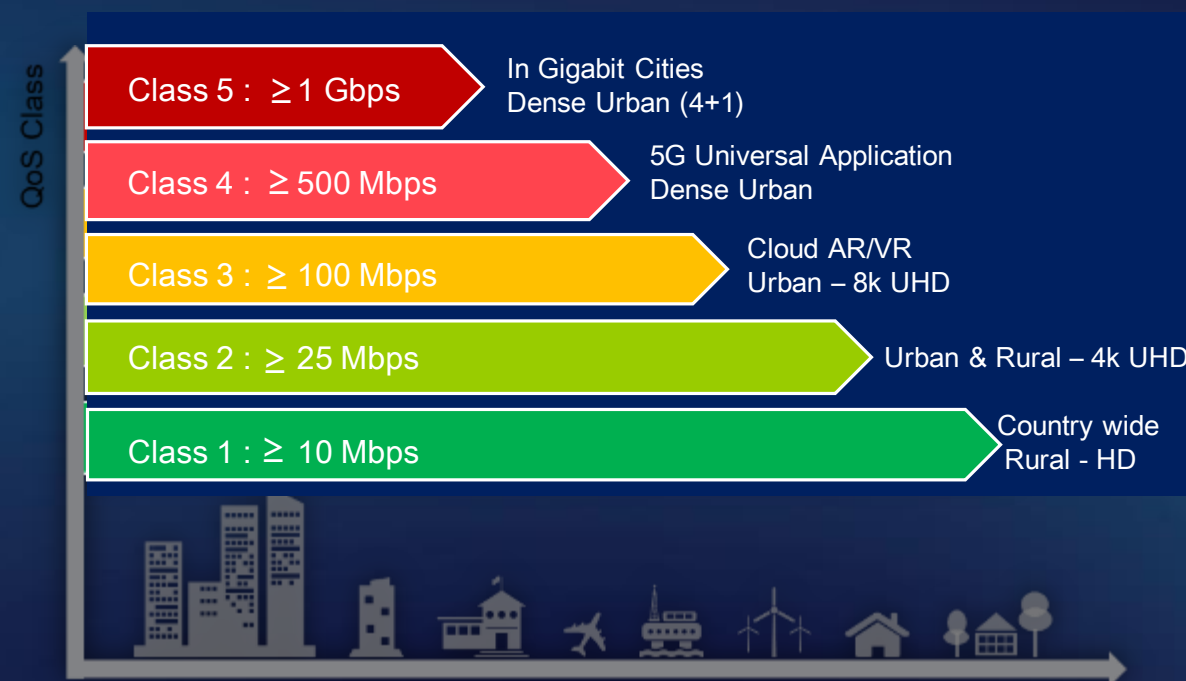
## To Fill Up the Unmatched ICT GAP



Source : [https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD?most\\_recent\\_value\\_desc=true&view=chart](https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD?most_recent_value_desc=true&view=chart)

Source : <https://www.speedtest.net/global-index>

## Indonesia 5 Years ICT Developments Targets



Source : Digital Indonesia White Paper (2020 – 2024)

# Philippines: Government Reduced Site Permit Period from 200 days to 20 days, to improve Network Quality during the Pandemic



*"If you don't improve the services, I will hang you on one of your towers"*

*"President, Sorry you cannot do that because there is no tower available. It takes 8 months to build one."*

*"Local governments need to issue the telco permits within 20 days."*



President Duterte



Globe Telecom CEO



President Duterte

Source:

<https://newsinfo.inquirer.net/1313097/duterte-warns-smart-globe-of-expropriation>

<https://www.gizguide.com/2020/07/globe-urges-government-get-permits-faster.html>

# Huawei Delivery Capability & Logistics Networks Make a Key Differentiation



- Agile and Digitized Project Management Empower yearly 100K+ site delivery capability;

## Global Experience and Local Delivery Expert

- ✓ 1700+ Delivery employees
- ✓ 18 offices in Indonesia
- ✓ 3 layer resource center

## Best Telecom Ecosystem

- ✓ 40+ Tier-1 subcon partners
- ✓ 2500+ installation team

## Advanced Material Supply

- ✓ 8+7 warehouses
- ✓ 4 major logistic partners

## Digitalized & Intelligent Project Management

- ✓ ISDP (Integrated Service Deliver Platform)
- ✓ AI for Survey & Quality Mgmt.

## Quality Assurance & Safety Delivery

- ✓ 1800+ Huawei Certificate
- ✓ ISO 45001 & 14001
- ✓ 0 Accident in last 3 years



# Huawei E2E 5G Products are All Available

## Full Scenario Deployment



Coverage in Urban



Continuous Coverage for Railway



Hot Spot Coverage Indoor



Hot Spot Coverage in Dense Area





## **Huawei Vision and Mission**

**Bring digital to every person, home and organization  
for a fully connected, intelligent world**

**THANK YOU**

