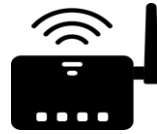# 1st India ISP conclave

11.06.2023

What will we cover

About our Home Broadband Business

What are we doing differently

Building Big Pillars of Data Business
- Submarine Cables
- Data Centre

Global Broadband Outlook
Fiber continues to accelerate, India to be 2nd largest market

Growing Broadband market
- ✓ Subs to **grow at ~11% CAGR** to **1300mn** by 2030*
- ✓ China to be largest followed by **India with 100mn+** subscribers by 2030*

Global ISPs bullish on Broadband
- ✓ Globally **Fiber is a big bet** in the long term
- ✓ Top **ISPs investing** heavily in Fiber
- ✓ **Superior Experience** vs Mobile → higher ARPU & better continuity

5G, an enabler for Fiber
- ✓ **High speeds** & **New use cases** (IoT/8K etc.) emerge
- ✓ **Data consumption** to reach **~20X**
- ✓ **Addiction** for uninterrupted & **consistent Internet**
- ✓ FWA on 5G : **Enabler** for **unconnected** customers

Managerial comments on Broadband

COMCAST
"Revenue increased 7.1%, reflecting increases in broadband & other businesses | Fiber continues to win share".

AT&T
"Broadband revenues grew by more than 6% for the year due to fiber base expansion."

SK telecom
Consolidated revenue increased by 9.4% in 2021 vs. 2020| Solid growth in the fixed line business

中國移動 China Mobile
"Homes" revenue increased by 18.7% |BB upgrade & expansion expedited

verizon
Expansion of 5G Ultra Wideband network amplified fixed wireless momentum, with 2.5x additions vs Q4, and drove momentum in wireless upgrades

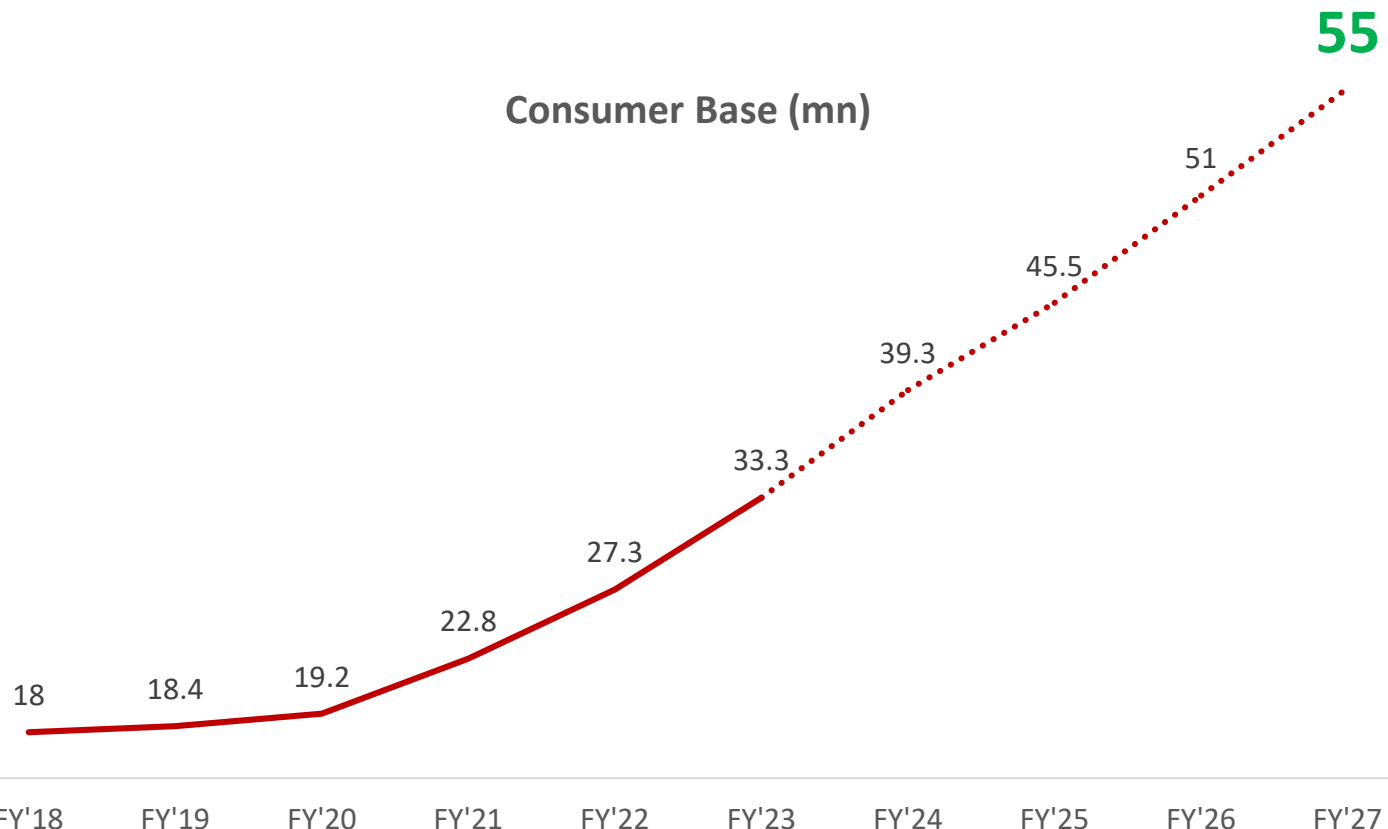## 5G to complement Broadband → Fiber & FWA for Home & 5G for outdoors

Source: Point topic & FWA subs included

Strong Outlook | India Broadband Industry set to add 6 mn NADs
55mn subscriber base by FY'27

The market is set to grow @CAGR of 15%

How can we reach 100mn?

Consumer Base (mn)

55

51

45.5

39.3

33.3

27.3

22.8

19.2

18.4

18

	FY'18	FY'19	FY'20	FY'21	FY'22	FY'23	FY'24	FY'25	FY'26	FY'27
NADs:	-0.3	0.4	0.8	3.6	4.5	7.0	6.0	6.2	5.5	4.0

Ease of Fiber rollout
- Enforcement of Uniform policy for ROW (@INR1) and Pole rentals (@INR100)

Lowering cost for subscribers
- Waiving off 8% license fee for broadband

Viability gap funding
- Encourage private players to expand in rural areas by providing viability gap funding (on the lines of UDAAN)
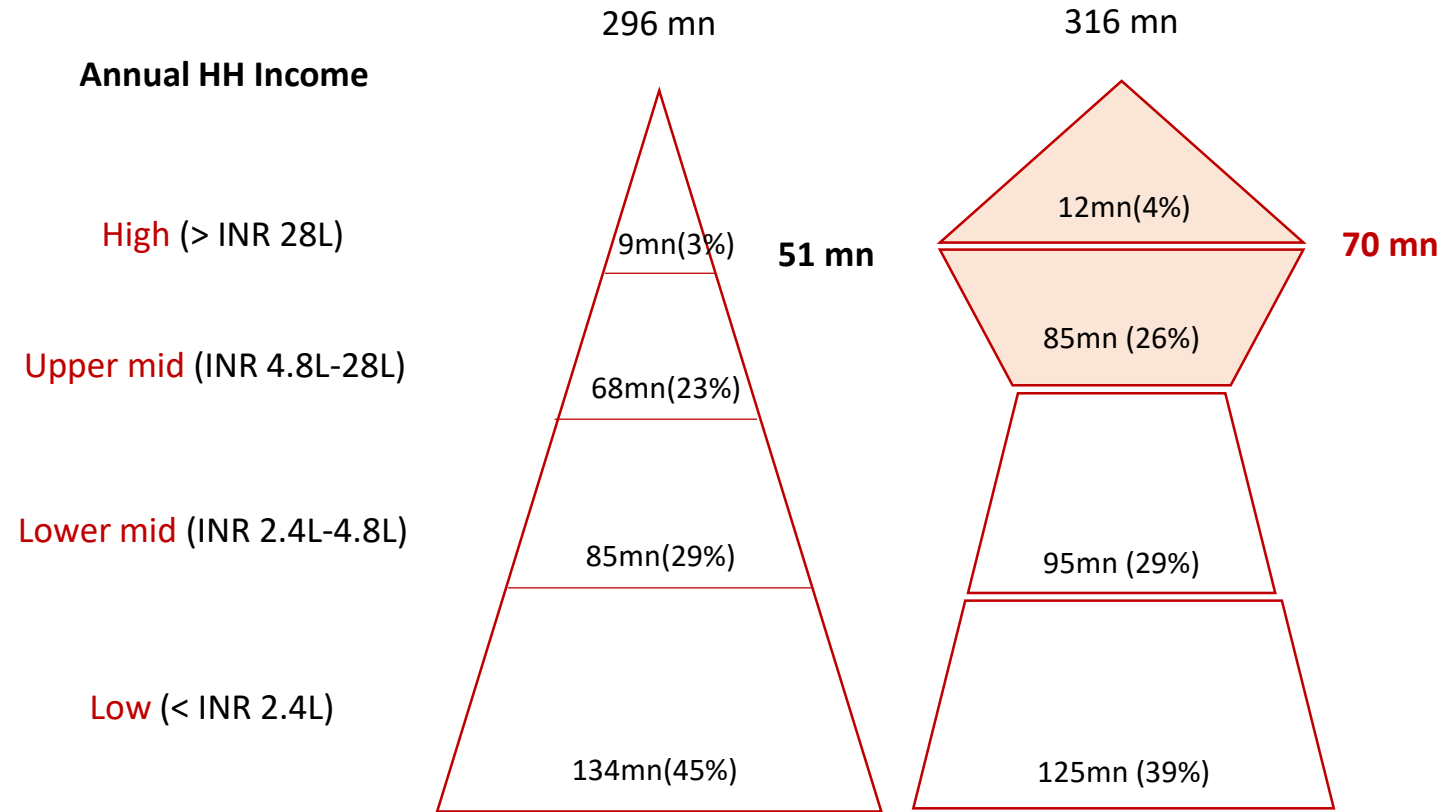
Rising affluence & evolving consumer behaviour to open up 70mn HHs

TEAM 23

2021
GDP: INR 250 tn

296 mn

2024
GDP: INR 340 tn

316 mn

Annual HH Income

India's household population

High (> INR 28L)

9mn(3%)

51 mn

12mn(4%)

70 mn

Upper mid (INR 4.8L-28L)

68mn(23%)

85mn (26%)

Lower mid (INR 2.4L-4.8L)

85mn(29%)

95mn (29%)

Low (< INR 2.4L)

134mn(45%)

125mn (39%)

How is consumer behavior evolving?

300 GB
Monthly Data Usage
143 GB

6
Connected Devices (#)
4.8

51%
Content Take Rate
32%

42%
>=100 mbps Take Rate
24%

90%
% Smart TV Sales*

2022

2020
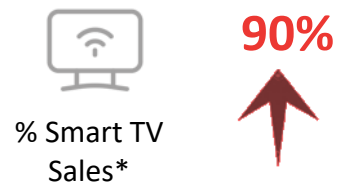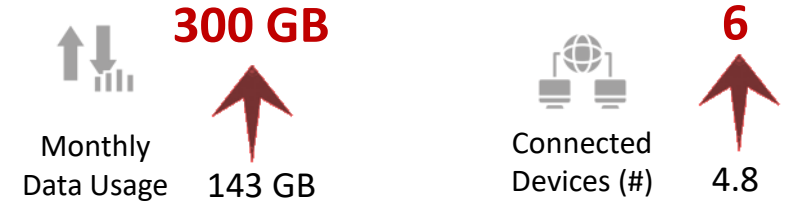
*Source: Counterpoint Technology Market Research

Broadband, now an integral part of Life

Wi-Fi is now my basic need

Anu, while **shifting** to a new city, realized her **apartment's power had been snapped** off & hence kept declining our Installer's call.

Airtel's UPS to her surprise, put her online. Setting her up for her Bhagavad Gita class, with practically <u>nothing in her home, just Airtel Wifi!</u>

Gives me my 'Sense of Confidence'

Manish Sharma, working with Capgemini was doing **WFH** at his native place in for last 2 years. He was **using a mobile dongle** for it in the absence of Fiber.

Like a lot of people who have **migrated back to cities**, he was asked by his organization to attend office in-person. He took up Airtel Xstream fiber instead of using his dongle as he wanted a <u>reliable connection</u>.

His source of recommendation was **social proof,** "Everyone is using airtel in my four-storey building".
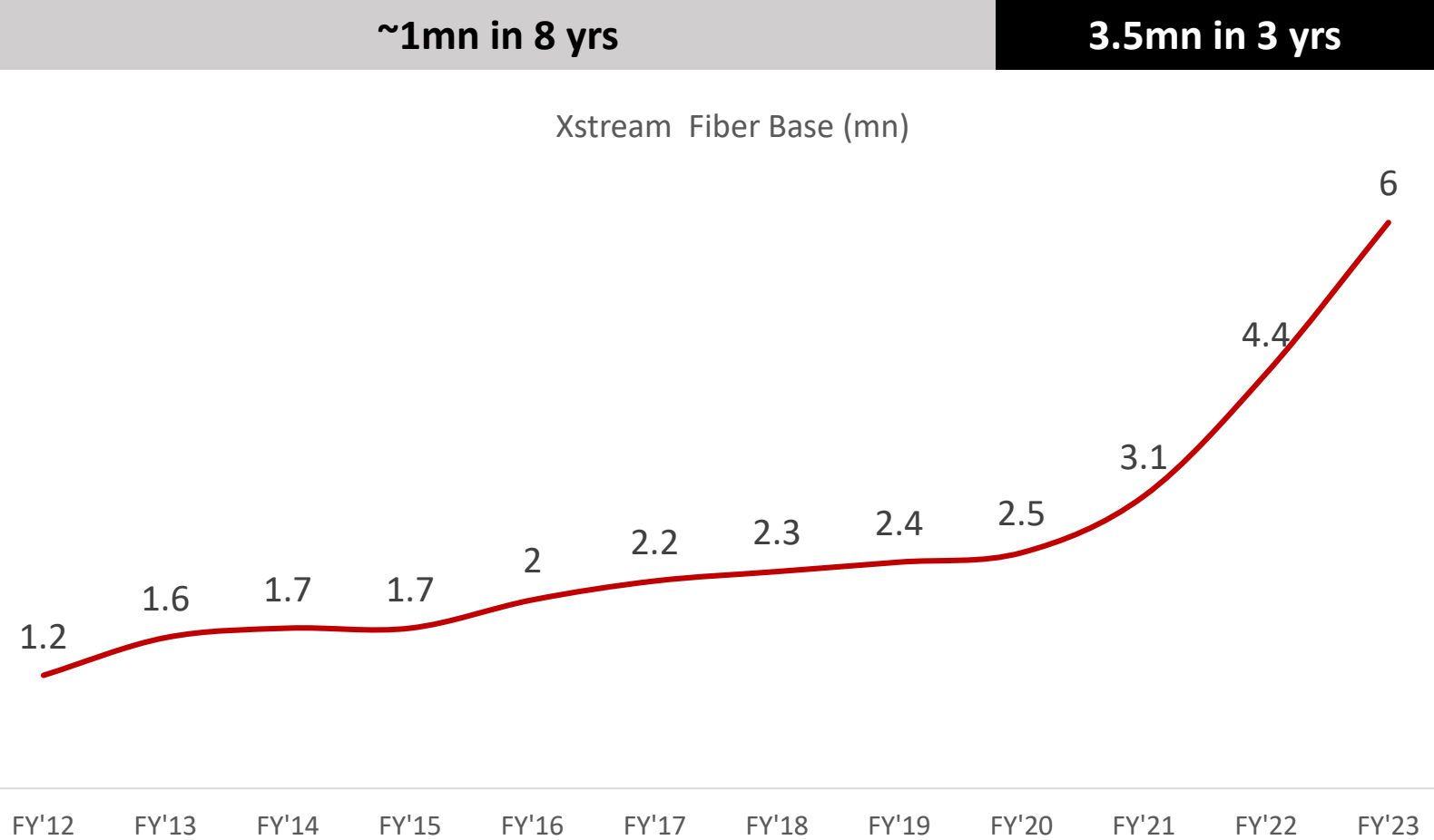
Enables me to progress in life

Md. Mosin, a scrap dealer in Itarsi, MP, a tier 2 town, wanted to **upgrade from mobile TV viewing to a bigger screen** & better experience, in order to not miss out the WC22 IndvPak match, at his shop.

Bought a <u>smart TV</u>, <u>creating the need for getting a fiber</u> connection. Which in turn **opened up more avenues for him**.

He also went on to install **smart cameras** to monitor & secure his shop front.

Expectations from broadband have now shifted Permanently! ➔ BASIC FACTORS THAT WERE NICE TO HAVE, ARE NOW HYGIENE FACTORS.
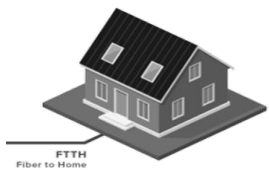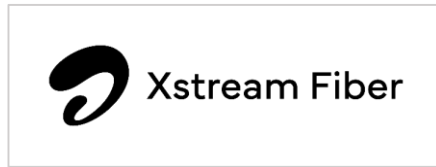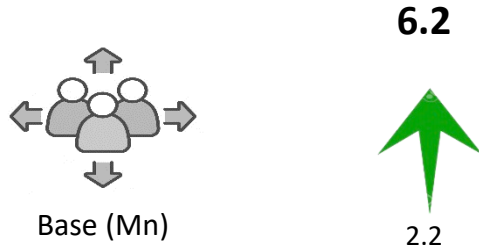
How has Airtel helped connect homes?

~1mn in 8 yrs	3.5mn in 3 yrs

Xstream Fiber Base (mn)

FY'12: 1.2
FY'13: 1.6
FY'14: 1.7
FY'15: 1.7
FY'16: 2
FY'17: 2.2
FY'18: 2.3
FY'19: 2.4
FY'20: 2.5
FY'21: 3.1
FY'22: 4.4
FY'23: 6

10k field force + 15k engineers today serve 6mn happy homes!

What has helped us reach 6mn?

Dec 2019 → Apr 2023

Innovations and unique offerings helped us reach here

Base (Mn)

6.2

2.2

Xstream Fiber

24 (96% FTTH)

Homepass (mn)

9.9 (32% FTTH)

1200+

76

Towns

Unique LCO business model enabled us to Expand fast

Airtel BLACK

MAKE IN INDIA

100% Make in India Routers

Our Customer Obsession has helped us grow!

TEAM23

#Homepasses

#Field force

Customer obsession

#Engineers

Pricing

57%
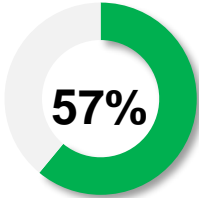
1. Speed / Network

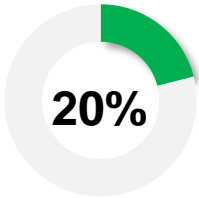High speed internet – 43%
Good network connectivity – 27%

"Airtel xstream has good speed and its service is better then other brand service providers"

21%
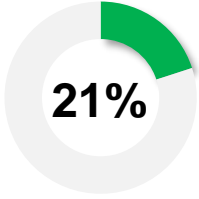
2. Customer support

Good customer service – 18%

"Airtel Provides Good Network And Its Service Is Very Good Because it helps us whenever we need It"

20%

3. Value for money

Best price / bill plans – 10%

"I got the new connection in 300 (50 off) and installation was free"

Our customer stories

Airtel Xstream fiber helped students in Far fetched Kargil to learn online

Airtel Xstream fiber connected dal lake to the world

Enablers needed for more people to get connected to fiber!

Enforcement of central policies by local bodies → help the ecosystem

TEAM 23

ROW policy

- Central Govt. has defined standard rate of Rs1000/km for UG rollout but states are still issuing DNs ranging from Rs 1 to Rs 33K /meter. High rates in few states makes business cases totally unviable.
- Gati Shakti (Single window clearance): Portal live only in 10 states others yet to be onboarded

Pole policy

- EB Poles: Central Govt. has defined Rs 100 /pole/annum rate but various authorities are charging rates ranging from Rs 100 to Rs 1700/pole/annum.
- Own poles: Central Govt. has defined Rs 1000/pole as one time charge but authorities are charging rates ranging from Rs 1000 to Rs 6000/pole.

License fee waiver

- Industry is eagerly awaiting 8% license fee waiver for broadband to boost Capex deployment by private players which in turn will lead to more homes getting connected

Subscriber reporting

- There are 1007 reported ISPs with TRAI but in reality market has many more ISPs
- Need stricter compliance to safeguard subscriber interests and to ensure 100% license fee collection

#ISPs as per TRAI reporting

Jun'20	Jun'21	Sep'21	Dec'21	Mar'22	Jun'22	Sep'22	Dec'22	Mar'23
342	440	522	616	653	666	846	907	1007

Enablers needed for more people to get connected to fiber!

Enforcement of central policies by local bodies → help the ecosystem

Landline Voice

- Need to ease Point of interconnection (POI) approval from BSNL

Additional recommendations

- Policy to handle Private ROW like Housing Societies, Private SEZ etc.
- Easy and standardised cRecovery of Security Deposits, Bank Guarantees, GST Invoices etc
- Standard restoration charges to be defined centrally
- Shortening of approval process from different government bodies like Forest dept, NHAI etc.

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Changing Service Industry
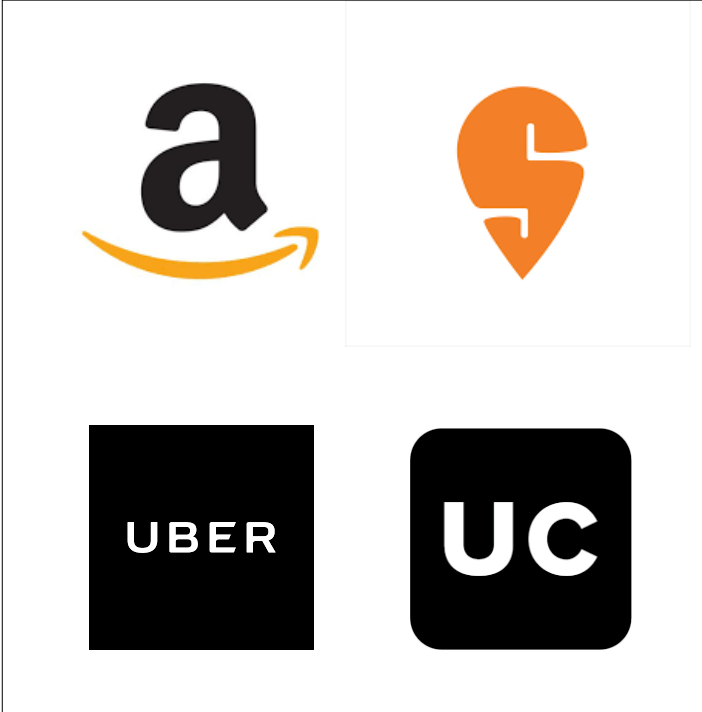
E-Commerce companies have changed the customer's expectation

How did they do it?
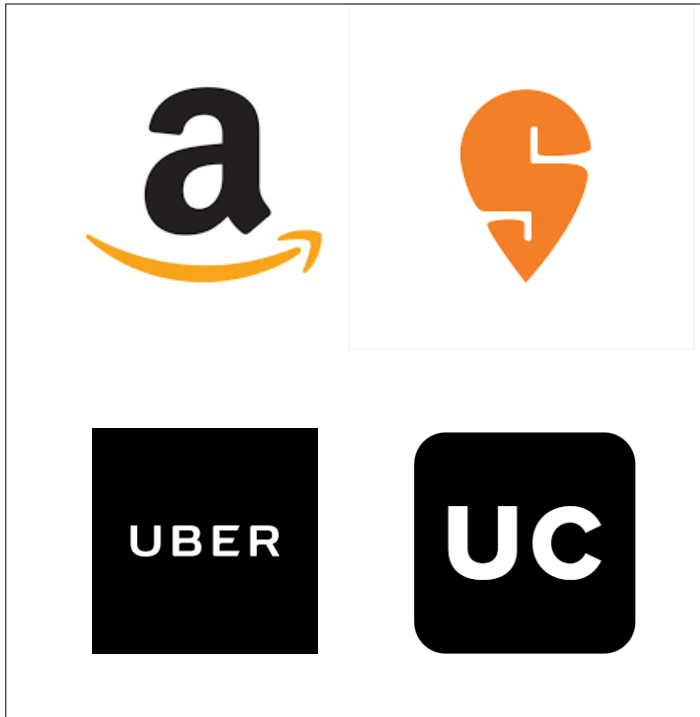
1 Provide appointment to customers as per their convenience

2 Ensure 100% appointment adherence

3 100% process adherence for any service

Follow 3 Steps of Excellence

1 Appointment availability as per customer's convenience

2 Reach as per appointment : "100% Slot Adherence"
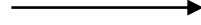
3 Follow Method of Procedures

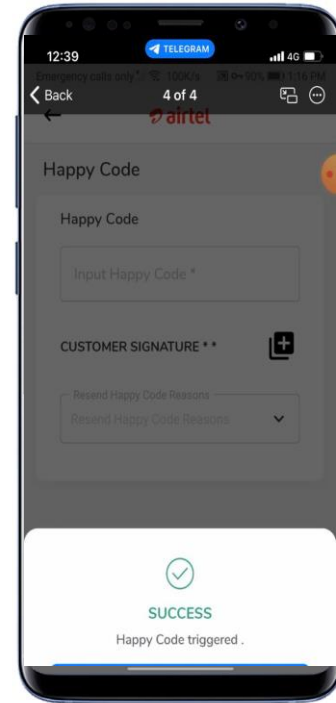Promise Fulfilment | Quality Delivery

How do we do it?
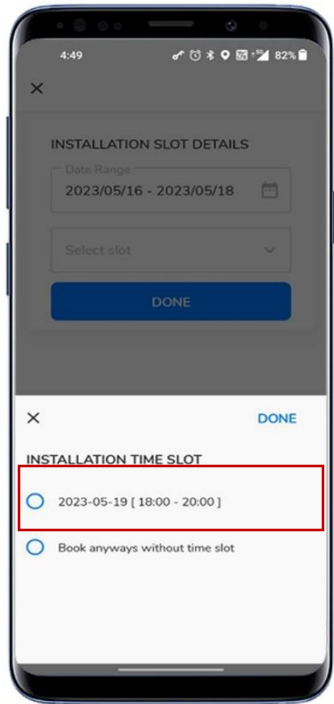
Order booked with the **customer appointment**

HDO Engineer **reaches as per the appointment & marks on-site**
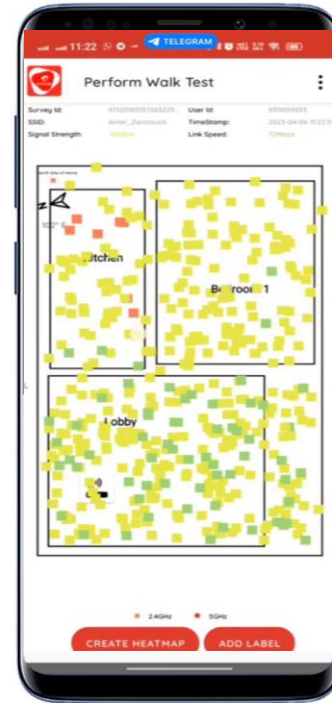
Engineer Starts the Installation activity

Walk Test is done to check the Wifi coverage across the house

Engineer completes task as per the process

Future Plans | Delivery through MOP

What is a Method of Procedure?

- Task will be broken into smaller steps

- System will diagnose the correct steps for any task

- Engineer will be guided step by step by the system to ensure quality delivery & reduce human error
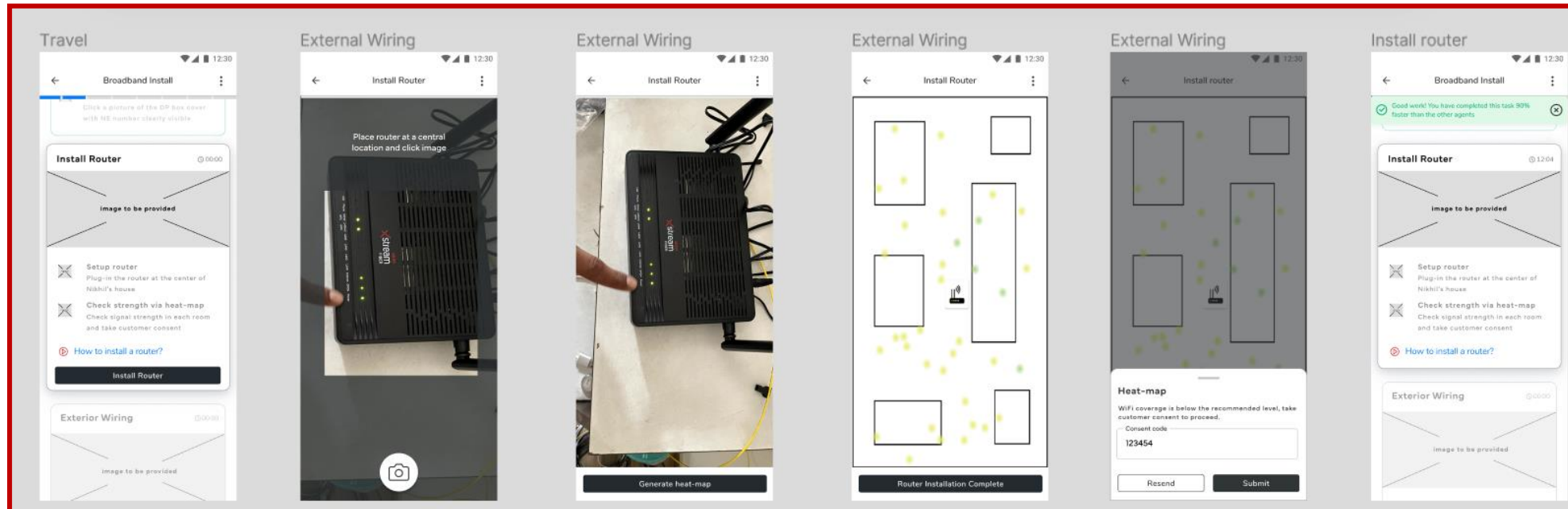
Images are only for
representation purpose

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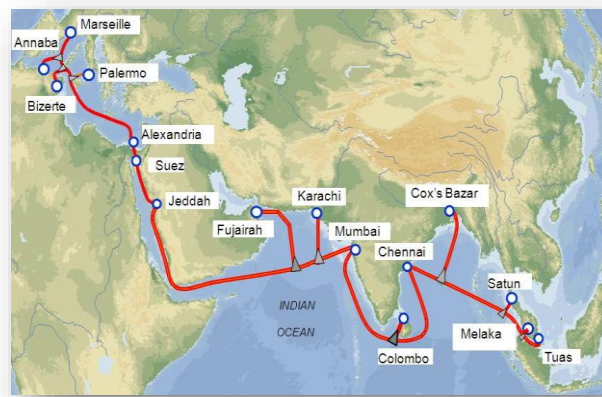- Data Centre

Subsea Cables – Airtel - Atlantic Cables

Cable Name	Investment	Route	Commissioning Year
EIG	Consortium	Mumbai - Europe	2011
IMEWE		Mumbai - Europe	2010
SMW4		Singapore - Europe	2005
MENA	Private	Mumbai - Italy	2014
GBI		Mumbai - Italy	2012
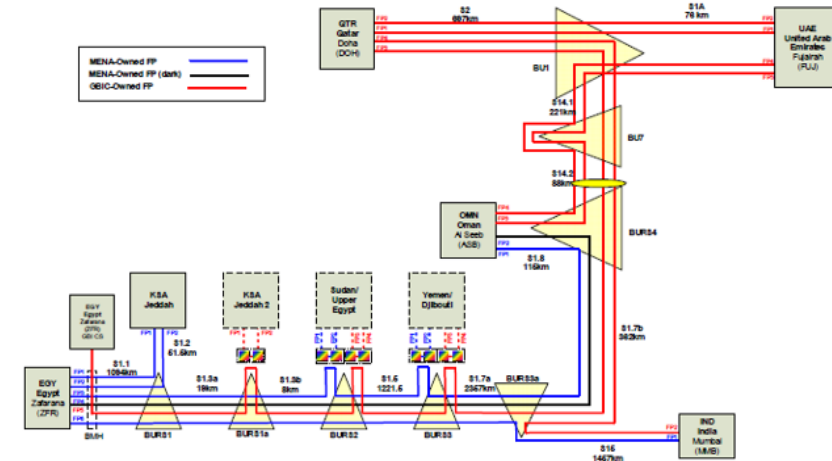
MENA + GBI Cable
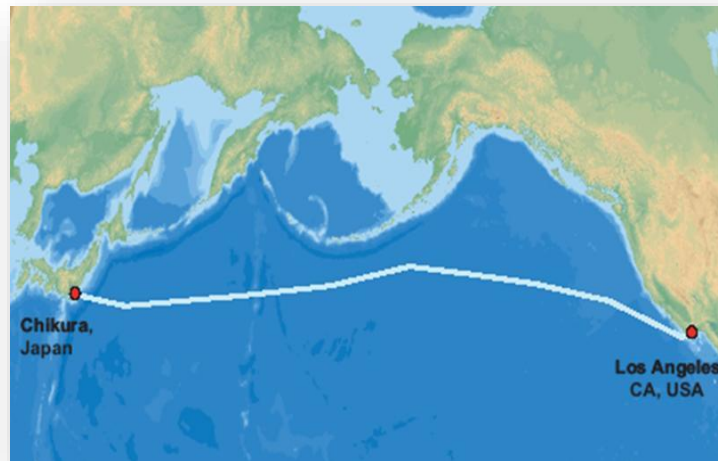

EIG Cable

SMW4 Cable

IMEWE Cable

Airtel - Indian Ocean & Pacific Cables

Indian Ocean & Pacific Cables

Cable Name	Investment	Route	Commissioning Year
AAG	Consortium	Singapore - US	2009
UNITY		Japan - US	2010
I2I	Private	Chennai - Singapore	2002

UNITY Cable

AAG Cable

I2I Cable

International Submarine Cables as alternate OR Backup to NLD

✓ Challenges in standalone Submarine cable as NLD

1. High capital cost per unit due to single purpose built.

2. High cost of maintenance.

3. Submarine Cable with in territorial waters will have lower stability.

4. Cable safety is a challenge due to shallowness of territorial water.

5. Inability to carry international capacity.

✓ How International Submarine cable as NLD can solve these challenge.

1. Cable laying cost is lower in deep waters (outside EEZ).

2. Shared cost with international users will give economies of scale.

3. Cable are more stable in deep water and lower outages will lead to have lower maintenance cost.

Challenges

- High turn around time in Indian water as compared to other countries

  - Multiple permits and clearances required.

  - Longer permit process leading to high cost.

- Customs regulations post GST.

  - Immortalization was applicable up-to territorial waters (12 nautical miles) limits.

  - Post GST immortalization is applicable up-to EEZ (200 nautical miles) limits.

  - This regulation is only implied in India only and not followed by any other country.

- Cable cuts due to fishing trawlers

  - In last 10 Years majority of the failures were attributed to fishing trawlers

  - There is no effective mechanism for information sharing and safeguarding cable route.
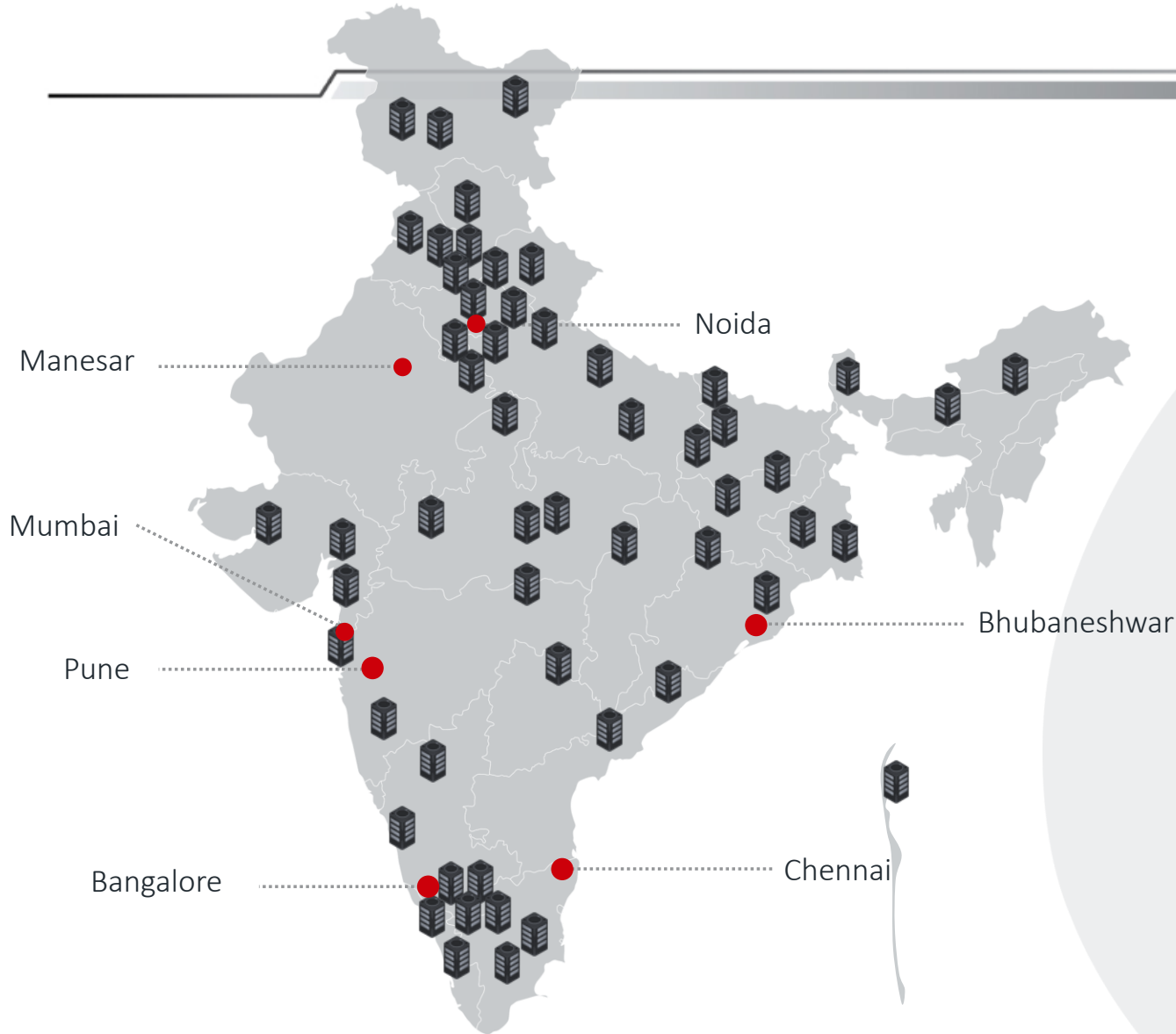
Support Required

- Time bound online single window process for permits.

- Implementation clarification received from CBIT on customs.

- Coordination with Fisheries Department to improve the cable safety.

Get closer to your customers
with India's largest network of data centers

India's largest network of Core & Edge DCs

12 Core

120+ Edge DCs

36,000+ Racks

190+ MW Power

Map labels: Manesar, Mumbai, Pune, Bangalore, Noida, Bhubaneshwar, Chennai

Exponential Expansion

We are investing

INR5000cr

to triple our data center capacity by 2026

2021 ——————————————————————————— 2025

400MW
3X↑ in power capacity by 2025

7
Hyperscale Campuses

50%
Green Power

Access future-ready Hyperscale DC Campus across India

Chennai II — Launched
40 MW

Hyderabad
60 MW

Mumbai
100 MW

Noida III
60 MW

Pune III
150 MW

Bengaluru II
60 MW

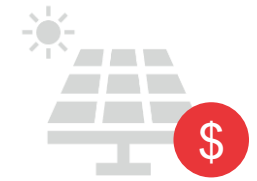Kolkata **25** MW

Noida
Kolkata
Mumbai
Pune
Hyderabad
Bengaluru
Chennai

Committed to build a more sustainable future
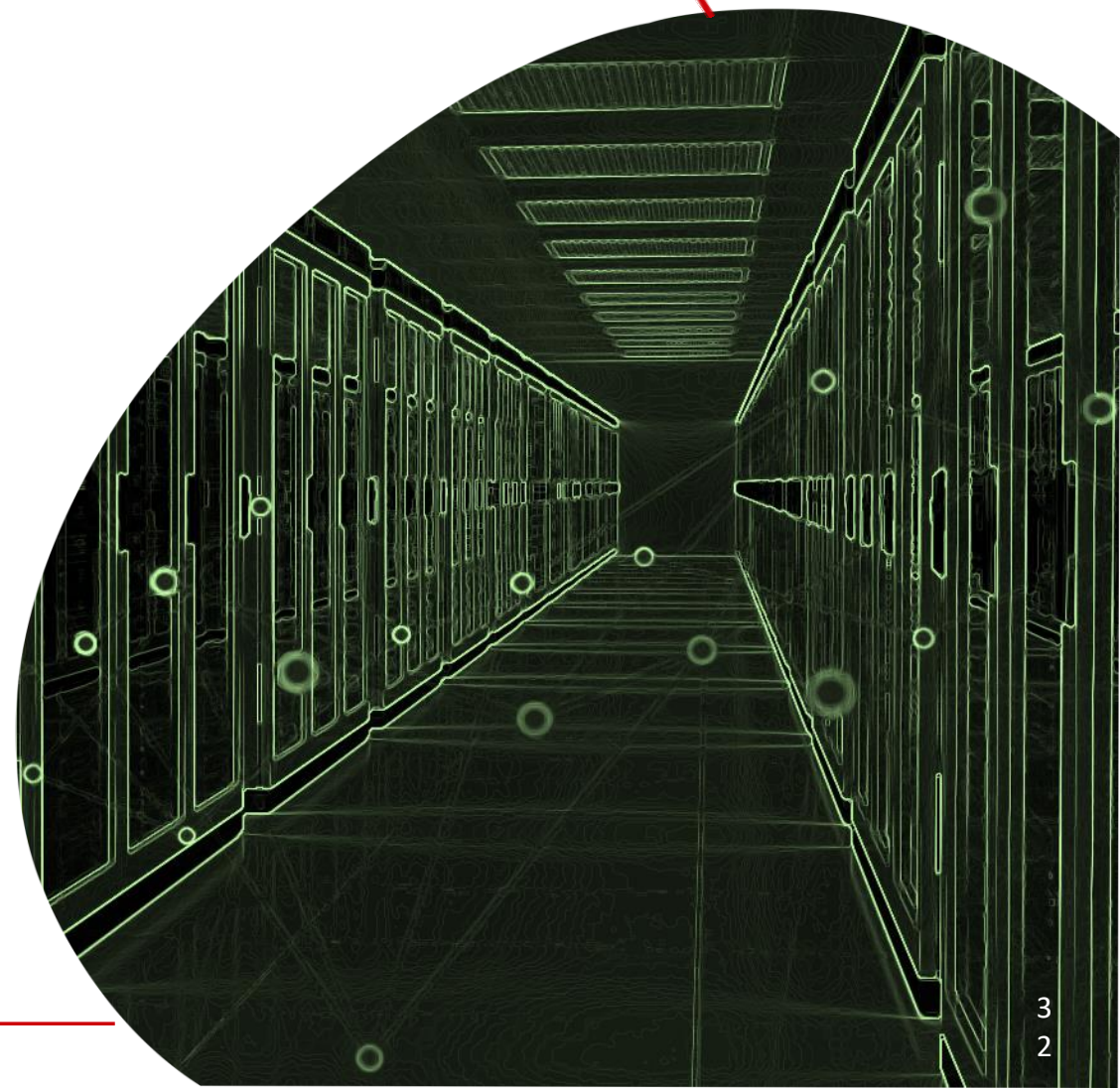
Green power consumption to increase from 34% to 50%

Sustainability in design and operations

Invest in green power companies.
12 companies funded till date.

In next 12 Months, we aim to meet over 80% power requirements of our large Hyperscale data centres across India through renewable sources

Challenges

- Pre and Post construction approvals

  - Long gestation period especially on Environment clearances and CTE approvals

  - No Single national policy for all Civil, Electrical and Operational certifications- Need to work with different departments and different city organizations

  - Ineffective Single window clearances

  - No Defined Indian data center standards

- Power and Sustainability

  - High power Tariff costs and huge variation across states

  - Capping on Renewable energy process and settlement process

  - Capex borne by DC operators for Infra creation of Electricity distribution boards

- Financial

  - GST input credit on Civil construction is not available for set off against Data center services, thereby making the construction costlier by 18%

THANK YOU