Manufactured Capital

SDGs impacted



Goal 9 Industry, Innovation and Infrastructure

Goal 13 Climate Action

Our ability to delight customers rests on strong network infrastructure. We continue to invest in the latest technologies and innovative solutions, thereby making our network infrastructure future ready and ensuring brilliant customer experience

India is transforming towards becoming a leading digital economy and home to the second-highest number of internet users globally. On the backdrop of this fast-paced growth and with digitisation reshaping our industry landscape, we, at Airtel, have recognised that it is imperative for us to continue to make smart investments to expand our infrastructure and spectrum portfolio to ensure best-in-class experience to our customers.

Highlights for FY 2021-22

20,676 New mobile network towers installed

145,353 New mobile broadband base stations added

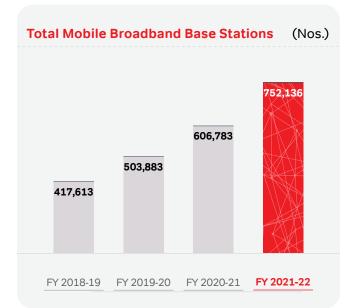
12 Large data centres

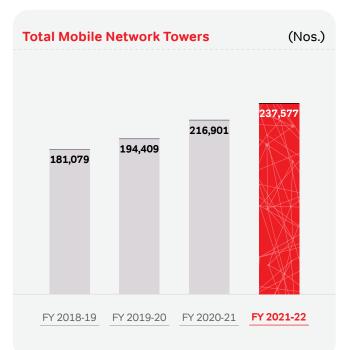
120+ Edge data centres

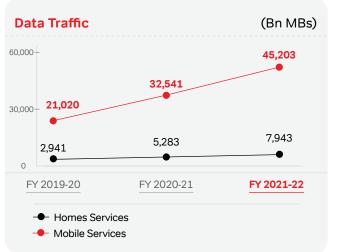
7,943 Bn MBs Data traffic (Homes services)

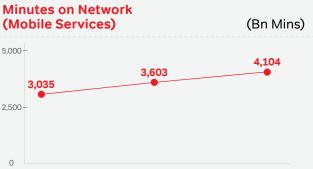
45,203 Bn MBs

4,732 Br Minutes on network (Gross)









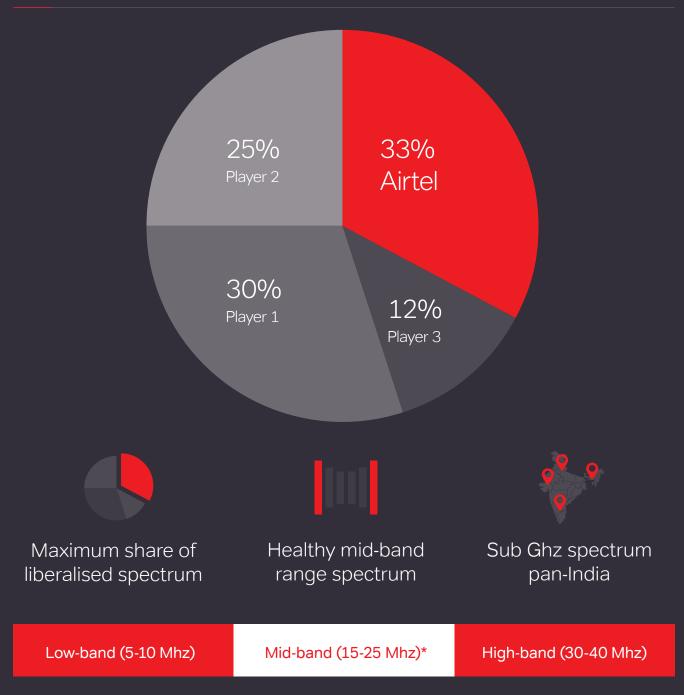
FY 2019-20

FY 2020-21 FY 2021-22

Strong spectrum portfolio to embrace next-generation technologies

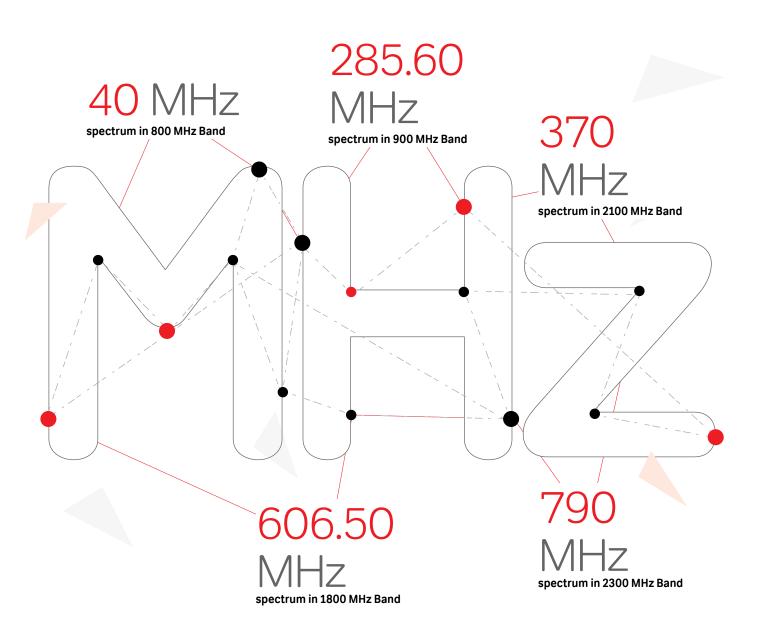
Over the years, Airtel has built an unmatched and strong spectrum footprint and has consistently strengthened spectrum holdings in order to deliver an exceptional customer experience. With maximum share of liberalised spectrum, strong mid-range spectrum and Sub-GHz spectrum pan-India, Airtel is well positioned to serve the needs of India's fast growing digital economy.

Spectrum share



*Except for Kolkata (10 Mhz)

Airtel's Spectrum snapshot (Unpaired)



Airtel now has Sub-Ghz spectrum pan-India to enable deeper indoor penetration and cover a larger population footprint than ever before. Spectrum addition in 1800, 2100 and 2300 bands will help address capacity needs due to ever-increasing data consumption, resulting in much improved experience.

During FY 2021-22, Airtel made fresh deployments and upgraded infrastructure to provide superior networks across India, in the states of Andhra Pradesh, Telangana, West Bengal, Assam, Jammu and Kashmir, Ladakh, Himachal Pradesh, Haryana, Gujarat, Kerala, Tamil Nadu and Karnataka. This aggressive investment towards new spectrum and network upgrades have ensured access to high-speed data services for our customers, with advance network tools delivering wider coverage along highways and rail routes as well as increase footprint in villages. We have also re-farmed our spectrum from legacy technologies like 2G and 3G to 4G to enhance coverage and capacity. In last 2 years, more than 33,000 sites have been converted to 4G with 3G shut down across 8 circles.

Network transformation through automation

Airtel deploys the latest automation, machine learning and artificial intelligence technologies for its network infrastructure. This results in superior customer experience through:

- Prevention of network degradation
- Proactive and preventive decisions using the big-data driven insights
- > Reduction of overall service disruption time with faster identification and rectification
- > Reduction of the customer frustration and complaints; and
- > Faster resolution of network issues

Airtel designed and developed an Al-ML-driven, closed-loop, self-healing platform called Airtel SON (A-SON) to detect, analyse and correct network anomalies/degradations with high sensitivity. The system also does pre-post analysis and restores the network settings to normal values. With future-ready architecture, the platform is currently live across India and is addressing the critical business use-cases.

A-SON

(Self Optimising Network) awarded the Innovative Mobile Service and Application honour at the prestigious GTI Awards 2022

Additionally, digital platforms comprising automated tools (Ribbon, Glimpse, Groundhog and Vision tools etc.) have been launched for remote monitoring and faster resolution of network issues. These platforms automatically identify chronic network sites and enable aggressive actions during the ducting period, thereby minimising the network degradation.

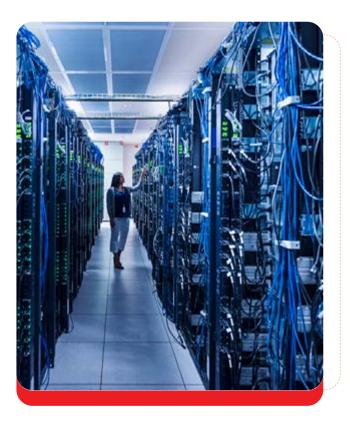
Network mobility complaints handling platform (NCH) launched in mid-2020 has now been rolled out on pan-India basis. As a result of automated tools, the complaint resolution rate has increased to \sim 95% while complaint re-open rate has reduced to \sim 10%.

Such measures are resulting in enhanced network resilience and reduced network interruption, with 0.005044 Average Network Interruption Frequency and 0.000014 Average Network Interruption Duration in the reporting year.

Data centres: Accelerating digital transformation

Nxtra Data Limited, a subsidiary of Airtel, offers Secure, Scalable and Reliable data centre services to leading Indian and global enterprises, hyperscalers, OTTs, fintechs, SMEs and Government. With one of the largest interconnected digital platform comprising 12 large and over 120 edge data centers, we enable customers to create converged ICT digital services. Rebranded as 'Nxtra by Airtel', we reassure our customers about our centricity and obsession to serve.

The year marked highest capacity creation for Nxtra till date (44MW+) and recorded 100% uptime. Nxtra will invest ₹5,000 crores by 2025 to increase its capacity by 3 times to over 400 MW. This includes hyperscale data centre parks in key metro cities, including Mumbai, Pune, Kolkata, Bangalore, Hyderabad and Noida.





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Ready for 5G

Airtel is spearheading 5G in India and has conducted demonstration of test cases on a live commercial network, rural 5G trial, cloud gaming experience trial and 700 MHz band 5G trials. We have accelerated our digital transformation programs and upgraded transport capacities to offer end-to-end best-in-class 5G experience. In FY 2021-22, extensive 5G trials were conducted in various cities and learnings acquired are considered for 5G site and product planning.

Airtel has entered into strategic partnerships with Intel, TCS and Tech Mahindra etc. for building 'Make in India' 5G solutions, developing and marketing 5G use cases across Indian and global markets and accelerate the 5G development in India.

Refer page 23_of this Integrated Report for details on such 5G trials, innovative use cases for India and strategic partnerships with the leading organisations.

During FY 2021-22, Airtel, for the second time, hosted the India edition of O-RAN ALLIANCE Global PlugFest 2021, demonstrating the growing maturity of O-RAN 5G ecosystem, at Airtel's state-of-the-art Network Experience Centre in Manesar (Gurugram), India.

Enhancing digital inclusivity in difficult terrains and data-starved regions

Car Nicobar, a remote tribal island of Andaman and Nicobar Islands, has limited accessibility. Ships are the only means of transport, with 1-2 ships traversing in a month, and one needs to seek special passes to enter into this island. During April 2021, at the time of peak of COVID-19 pandemic, Airtel launched the first 4G network on this island with 2 sites, with one site serving Airforce Base and another, Car Nicobar Headquarters. In line with Government of India's proposal to implement a Comprehensive Telecom Development Plan for the North-Eastern region, Airtel continued providing 4G services in identified uncovered villages and along national highways in Assam and other regions.

The program has enabled local communities to access digital services like HD quality video streaming, superfast downloads and high-speed internet browsing.

1,519 Total towers installed

~ 1 Mn Total customers benefitted

₹7,500 Mn+ Total spend on infrastructure development

~10,000 People covered (Other than tourist inflow & Indian Air Force)

A bouquet of digital services firing on all cylinders

Driven by our customer obsession, we have made significant investments to create a differentiated portfolio of digital services. The digital flywheel of these services is helping us create a seamless experience for our customers and be more efficient. At the same time, it is enabling us to incubate new revenue streams which are growing exponentially and now turning meaningful in the overall scheme of things.

As standalone businesses, some of our incubated digital services like Wynk, Airtel Ads, Airtel IQ, Airtel Payments Bank and Nxtra by Airtel data centres would comfortably add five more unicorns to India's tally of unicorns.

Statutory Reports

Sizeable bouquet of Airtel's digital services

Airtel Payments Bank- A profitable fintech players in the worldwide to build an Airtel IQ being payments space

Airtel Ads- amongst CPaaSthe first telcos AdTech platform

leading player with adopted by more and more of our enterprise customers

Nxtra by Airtel India's leading data centre provider

Wynk-Amongst India's largest music streaming service

Cloud & Security Solutions in partnership with AWS, Google Cloud, Forcepoint, Radware, Cisco, Palo Alto

Airtel Payments Bank

A profitable fintech players in the payments space

Our Payments Bank business, which hit breakeven during the year, is growing exponentially. Its profitability is driven by our focus on onboarding customers at a relatively low cost and creating a large fee income pipeline from B2B services, fees on transactions, customer subscriptions and interest spread. We are further doubling down on accelerating the business by leveraging the unique strengths of the telco authentication, distribution security and digital scale. Alongside the opportunity with more 300 Mn underbanked people in the country, another opportunity is around the ability to leverage 200 Mn 4G users, most of whom are engaged on one or the other of our own digital assets, which makes the possibilities for growth unlimited.

We strive to be the largest banker for the underbanked people, serve digitally-savvy customers through a dedicated section on the Airtel Thanks App and help digitise small ticket cash transactions for businesses leveraging a network of banking outlets.

129.4 Mn Total Customer base of Airtel Payments Bank

36.7 Mn Monthly transacting user base

₹1,333,9<u>88 M</u>n Gross Merchandise

Airtel Ads

Breaking new ground in the Indian digital advertising industry

Airtel Ads, India-first advertising solution from Airtel, provides a zero ad-fraud platform to advertise to Airtel's ~360 Mn strong customer base. It rides on our digital assets, offers consent-based privacy safe advertisement platform to one of the biggest pools at over 189 Mn MAUs across screens. Advertisers can use various ad formats to access Airtel's popular telco and media offerings –Wynk Music app, Xstream app and Set top boxes, Thanks app, SMS, Calls and DTH. The platform is further strengthened by investing in blockchain capabilities and developing solutions that address more privacy issues and potential regulations around them.

Leveraging all our digital assets to grow rapidly

Enables power of reaching

) Mn Users with our unique data science capabilities

Reach the right audience, with the right message at the right time

- **Precision targeting capabilities**
- **Exclusive inventory**
- **Omni-channel presence**
- Inspire audiences to take action throughout the funnel



Airtel IQ

Fast capturing India's cloud communications market

Airtel IQ, an in-house developed solution, is a unified customer engagement and cloud communication solution that spans across multiple touchpoints including voice, messaging, video streaming and virtual contacts centre solutions. It features capabilities to integrate any application in minutes with our full-featured IQ APIs. Equally, natively integrated into telco grade infrastructure and architected by top digital talent, Airtel IQ is robust, secure, cost-efficient and intuitive.

During the year, Airtel IQ Video, a CPaaS solution, was launched to democratise video streaming in India. It allows entertainment companies and broadcasters to offer OTT video services with minimal investment by leveraging Airtel's cutting-edge and secure video cloud platform.

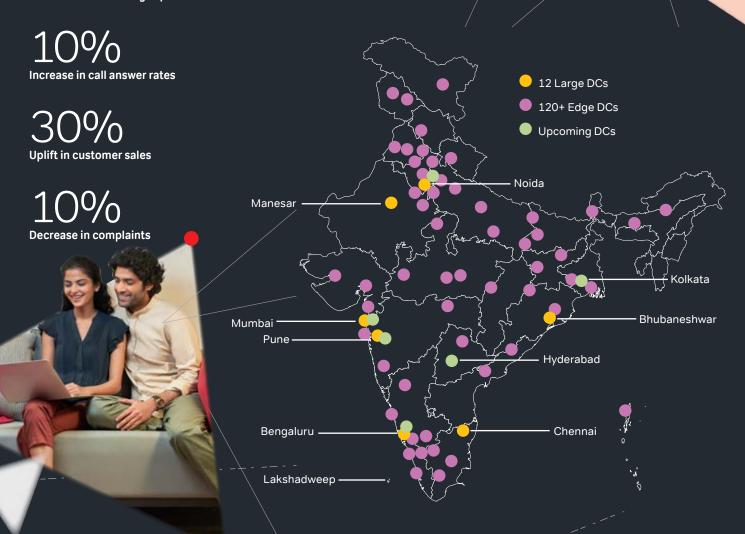
Airtel IQ's value proposition

50% Decrease in marketing expenditure

Nxtra by Airtel

India's largest network of data centres

Nxtra by Airtel currently operates in a fast growing data centre market with a portfolio 12 large and 120+ edge data centres located strategically across India and also manages critical submarine landing stations. Coupled with Airtel's global network, it offers secure and scalable integrated solutions to global hyperscalers, large Indian enterprises, start-ups, SMEs and governments. Backed by a robust and expanding portfolio of data centres, Nxtra brings the possibilities of creating innovative edge solutions for long-term business advantage. With an objective to further bolster the leadership position, we announced investment of ₹50 Bn by 2025 to triple Nxtra by Airtel's installed capacity to over 400 MW.



Statutory Reports

Wynk

Amonst India's largest music streaming service

Wynk, the music streaming app, offers customers with personalised music recommendations based on listening history, helps them discover their own personalised radio station based on music preferences, allows them to create and share playlists with friends and serves them with best of music in their language of choice. It is an integral part of our digital marketplace. Including Wynk Music, our digital assets are scaling well with currently having over 189 mn monthly active users. Best-in-class partnerships continue to be the cornerstone of the digital marketplace with the focus on content, loans and insurances.

100 Mn+

15 Mn

3 Bn+

14 Languages to choose from

Airtel Cloud & Secure

India's most comprehensive suite of cloud solutions and cyber security services

Cloud and cyber-security solutions continue to be key part of our strategy to focus on the emerging segment of B2B business. Nxtra and key partnerships enable our strong capabilities on cloud to offer a host of cloud services including public cloud, private cloud and even edge cloud services. These are the key focus areas of our digital services. Additionally, combining our robust network security with cutting-edge solutions delivered through global partnerships, our cyber-security solution Airtel Secure provides a comprehensive solution.