

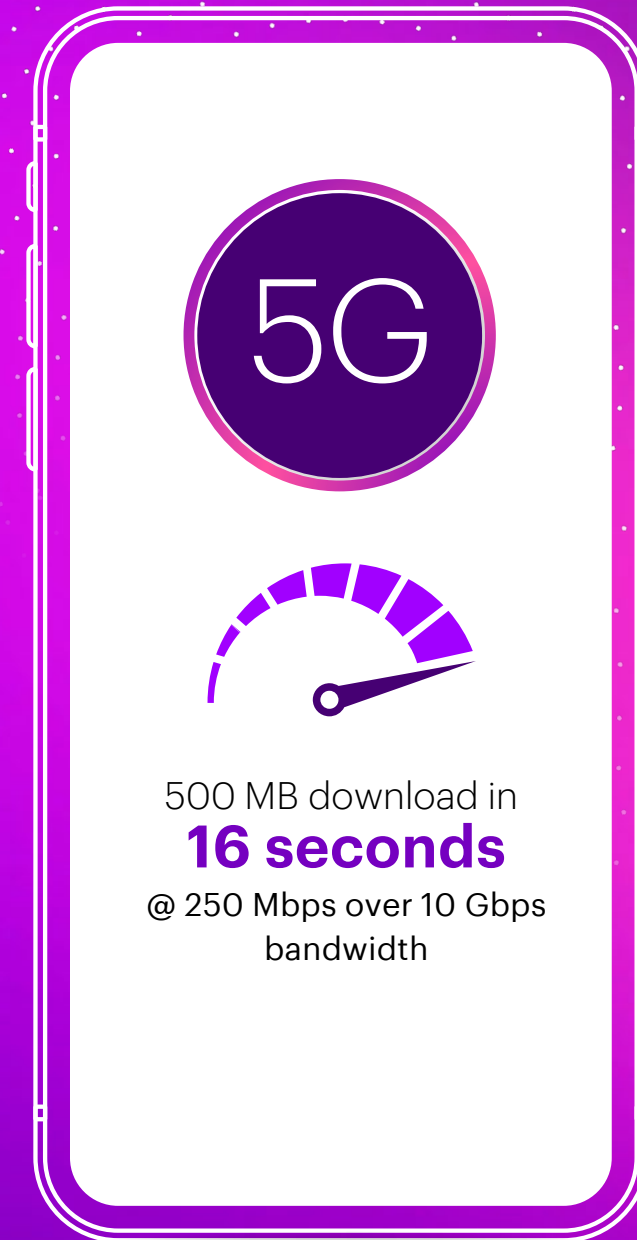
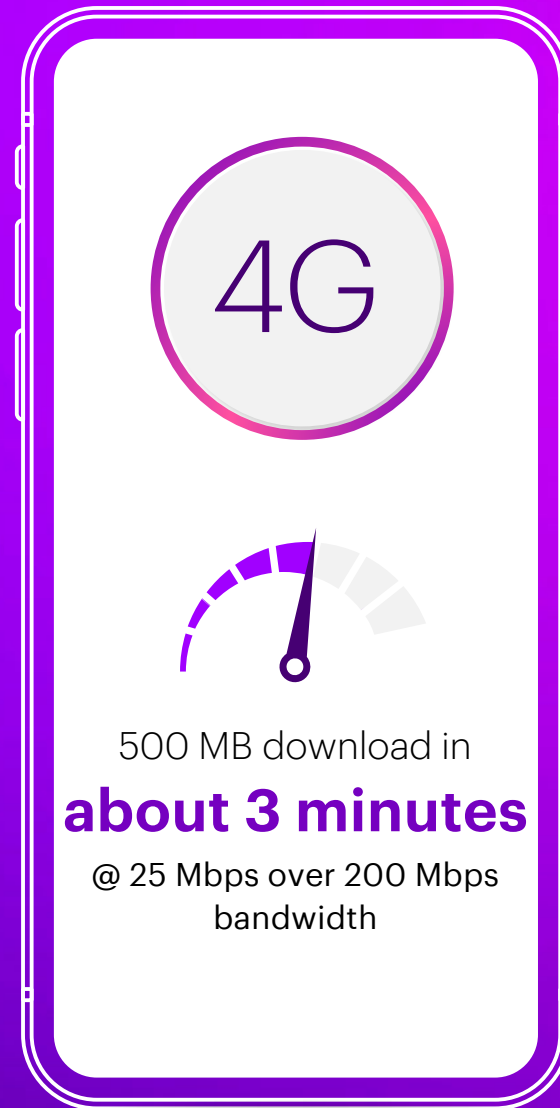
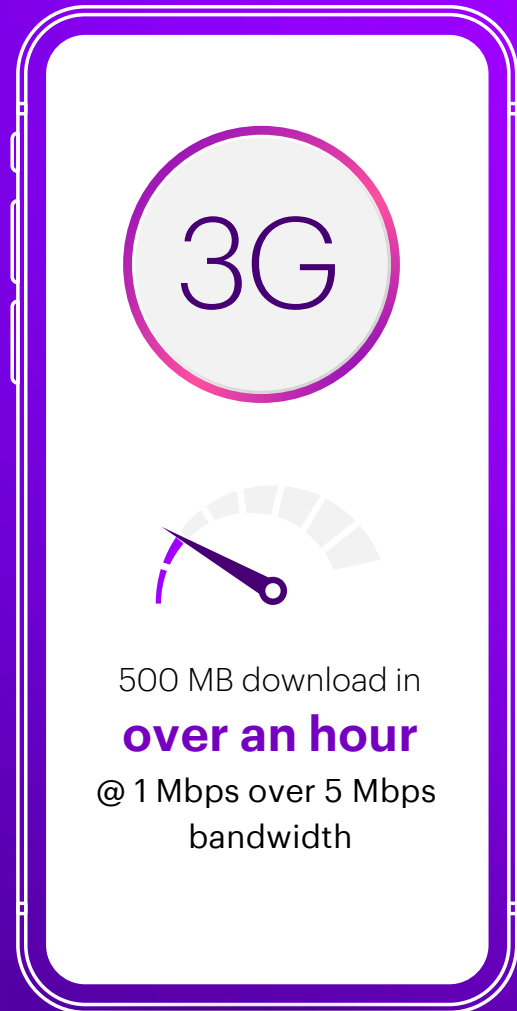
accenture

Opening the door to a world of opportunities

5G in travel



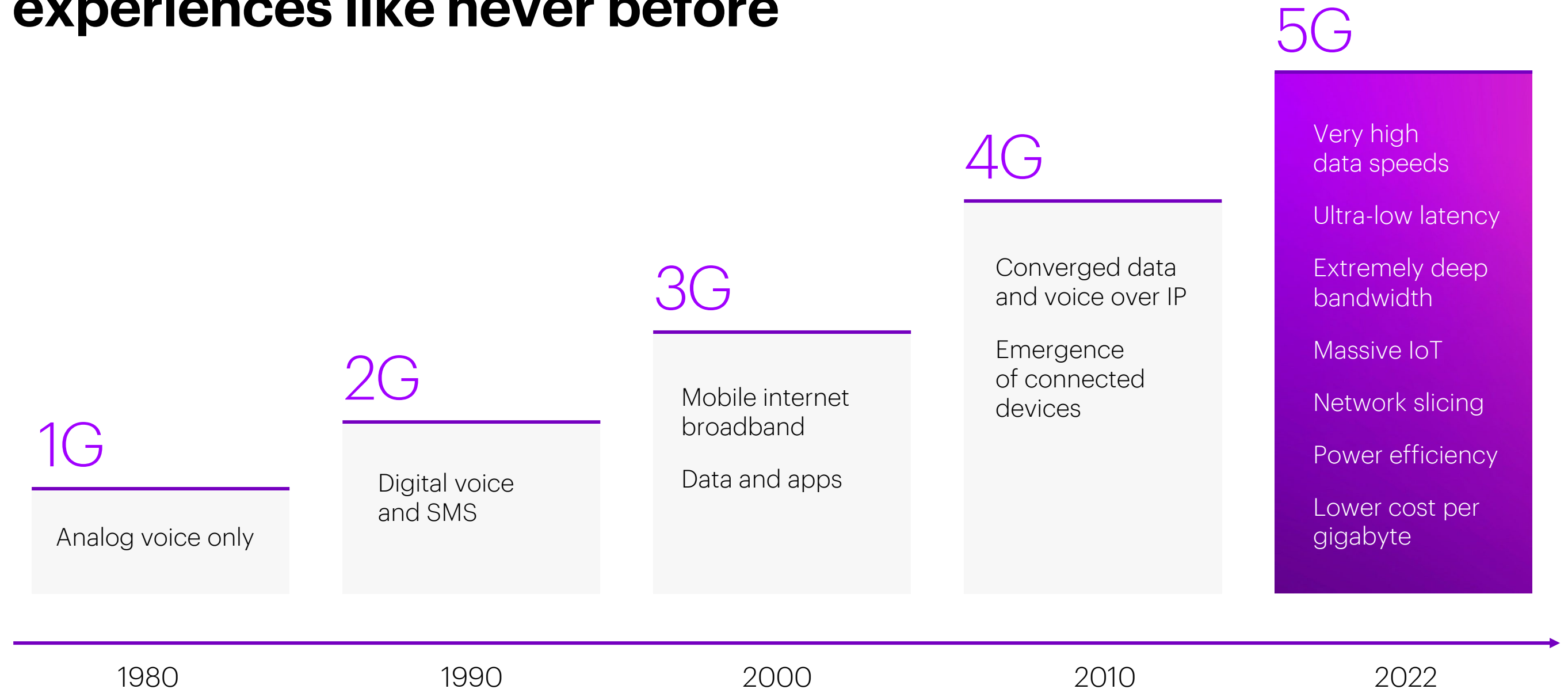
5G is about so much more than just speed...



1. [What is 5G? How It Works & Why It Matters | Accenture, 2022.](#)

2. [The Future of 5G: Comparing 3 Generations of Wireless Technology, Visual Capitalist, 2019](#)

...It's about innovating and building experiences like never before



When the best of technologies and people meet...

5G enables fast, intelligent connectivity, transforming many industries including travel.



Internet of Things

- 5G allows IoT devices to communicate and share data faster than ever.
- 5G boosts cellular bandwidth, making it easier to network large numbers of IoT devices together.
- 5G offers ultra-low latency that reduces data processing and internet response times.

Real-time processing

- 5G and edge computing work together to enable real-time processing of huge amounts of data.
- 5G edge computing applications enable new use cases that require ultra-low latency and high reliability, including gaming and preventative maintenance.

4: 5G enabling the real-time enterprise, Orange, 2020
5: Cellular IoT in the 5G era, Ericsson White Paper, 2020

Networks

- Organizations can set up secure, private networks to address their business needs.
- Network slicing segments parts of a common shared physical network; organizations can use an isolated slice for their requirements, without interference from other slices.

Human + worker

- The combination of 5G and AI enhances wireless communications and opens door to new business solutions.
- AI will help humans analyze and apply the huge amount of data generated by 5G.

...a world of new opportunities opens up

Airlines, airports, hospitality companies and travellers can reap many benefits from this cutting-edge technology that enables new capabilities and services.



Aviation

Airlines can achieve **real-time optimization, efficient maintenance and enhanced safety** levels as flight and sensor data gets securely transmitted by aircraft through **5G networks set up by airports at their hubs.**

Passengers can experience a **more personalized journey** with mobile-based activities.

Airports can use **autonomous vehicles.**



Hospitality

Hotels can deliver an **enhanced guest experience with connected rooms at smart hotels.**

Hotels spend less on traditional technologies with 5G-enabled apps.

Cruise ships can provide **better internet services** to customers and crew members as they increase their network capacity.



Travel services

5G will revolutionize transportation with **autonomous vehicles.**

Travel companies can deliver **personalized in-car and in-seat entertainment** to consumers.

Companies get access to **real-time, secure data from connected vehicles for predictive analytics.**



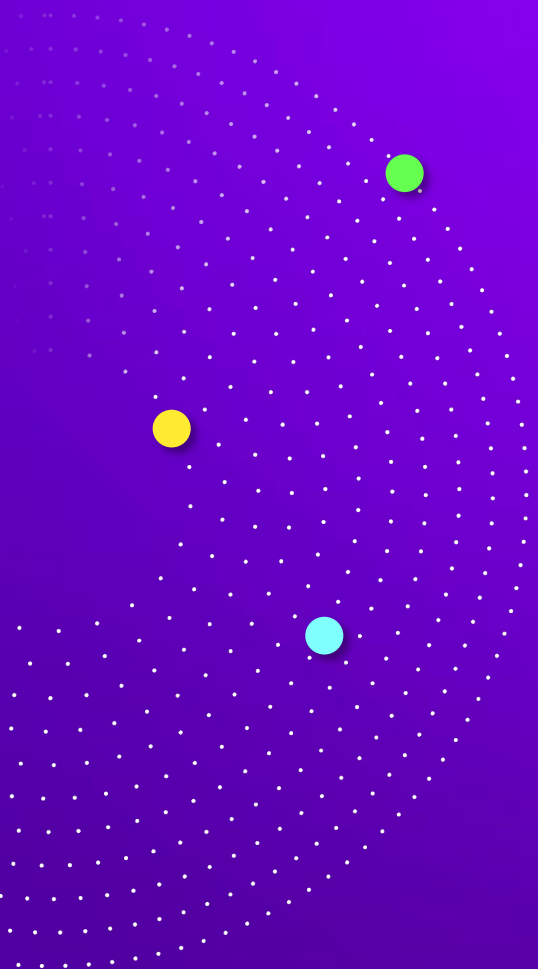
01

02

03

6: Enabling Estonia's 5G with Telia and Intel, Ericsson White Paper
7: 5G goes live in the port of Tallin, Ericsson White Paper, 2017

Looking through the lens of time



Near term (this year)

- Digital identity check-in and onboarding
- Virtual tours and promotions
- In-room/in-flight/in-car entertainment
- Gaming and immersive entertainment
- Immersive training and guidance
- Passenger/guest service robots
- Patrolling robots and drones

Mid-term (next year)

- Digital identity immigration and security
- On-demand and targeted internet zones
- Real-time, rich-content notifications
- Smart/connected rooms
- Tracking and work optimization
- Digital twins and immersive management
- Visual, predictive, remote maintenance
- Visual surveillance and anomaly detection
- Fraud detection and loss prevention

Long term (beyond)

- Immersive sales
- Digital identity shopping
- Holographic assistant
- Construction – remote controlled machines
- Personalized baggage management
- Wireless/unwired operations
- Real-time simulation/optimization
- Telematics and navigation
- Autonomous traffic management
- Air traffic control through UAVs and drones
- Automated cranes/lifts

*Time period indicative only

8: [Connected Aviation powered by Ericsson Private 5G](#)

9: [Major European 5G Trials and Pilots, European 5G Observatory, 2021](#)

10: [5G Smart Tourism, gov.uk, 2021](#)

11: [The Leading 5G IoT Use Cases, IOT Analytics, 2019](#)

12: [How 5G-powered robots are helping China fight coronavirus, Smart Cities World, 2020](#)

Take a
sneak peek
at our

5G zone



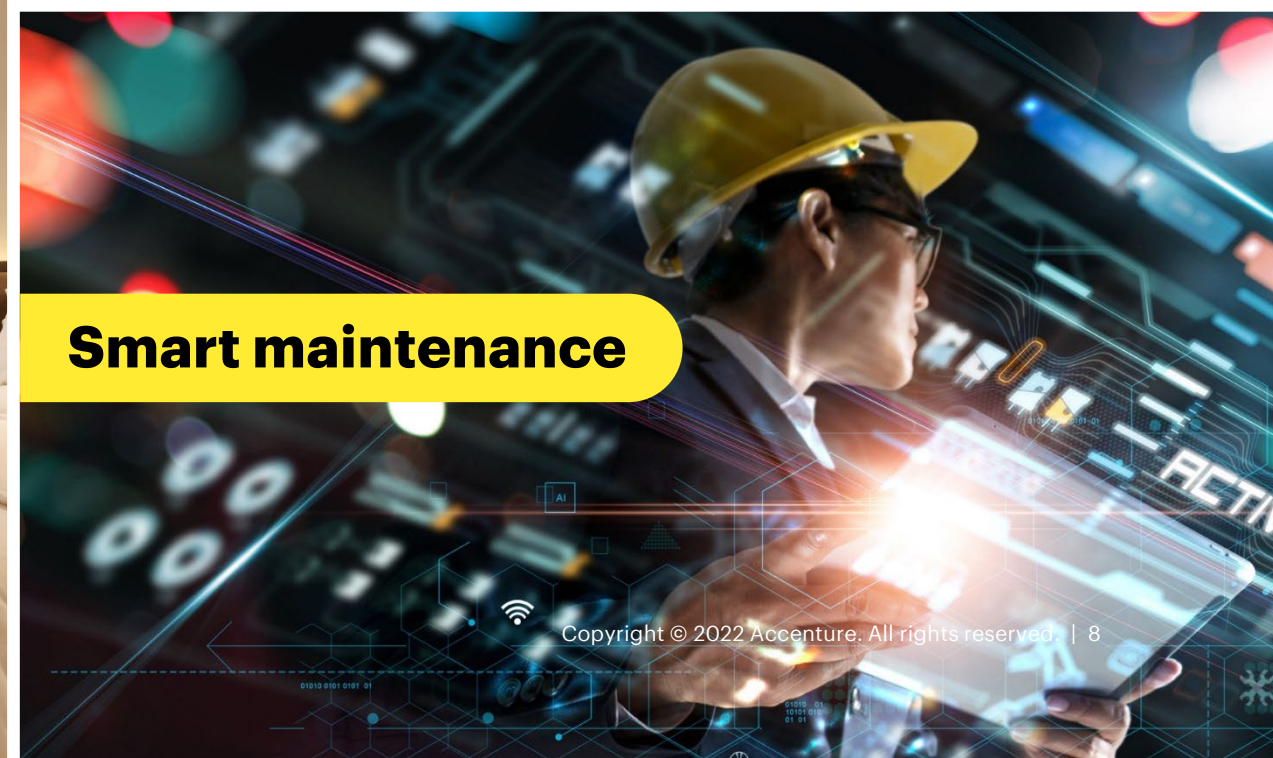
Building a smart future with 5G



Smart airports



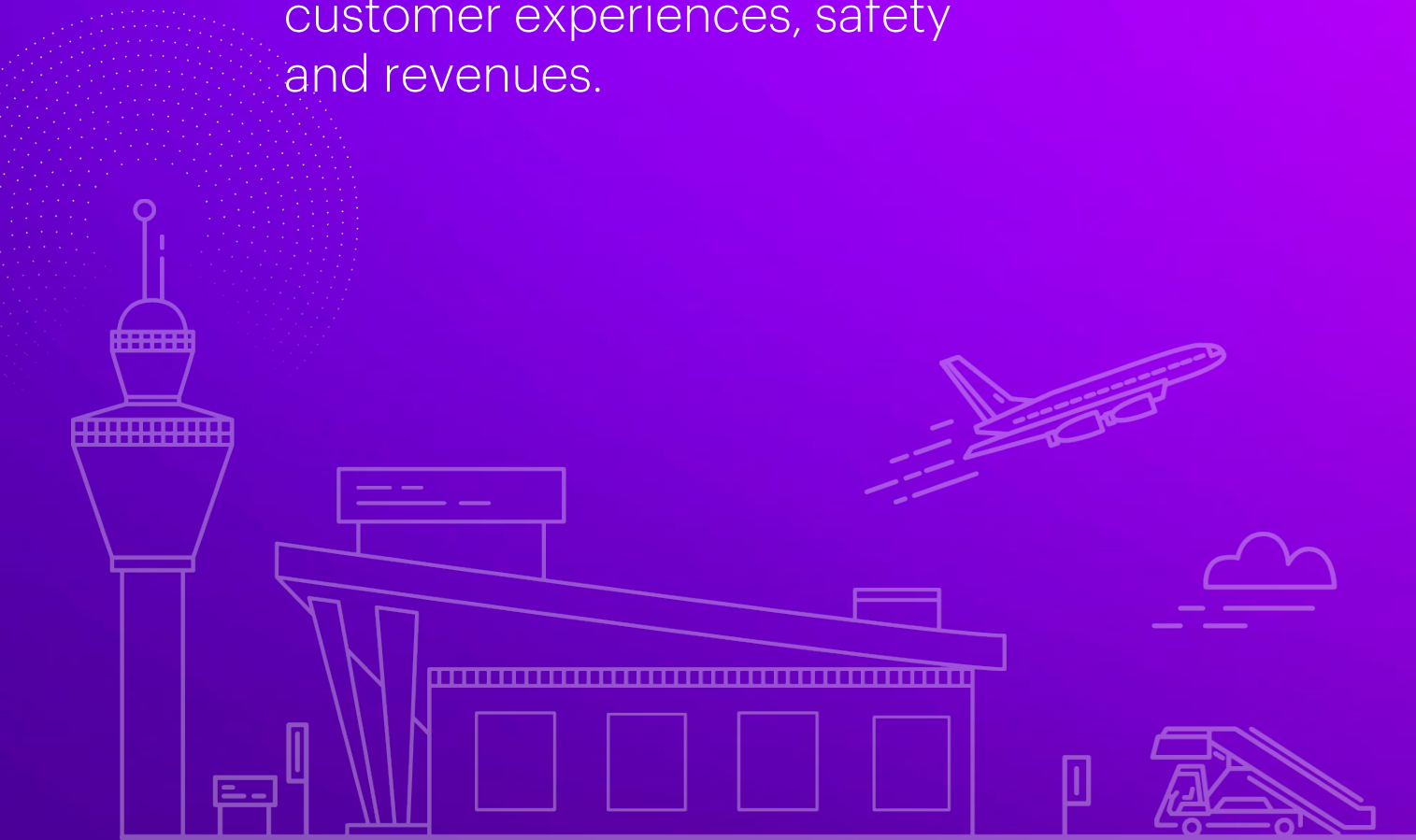
Smart hotels and homes



Smart maintenance

Flying better with smart airports

Intelligent operations are bringing opportunities to boost efficiencies, customer experiences, safety and revenues.



Transportation

Traffic systems reduce congestion, lower fuel costs, reduce CO2 emissions and improve aircraft turnaround times.

Safety and security

Automated video surveillance reduces incidents and improves emergency alert systems.

Energy

Real-time demand for indoor and street lighting and air-conditioning reduces energy consumption.

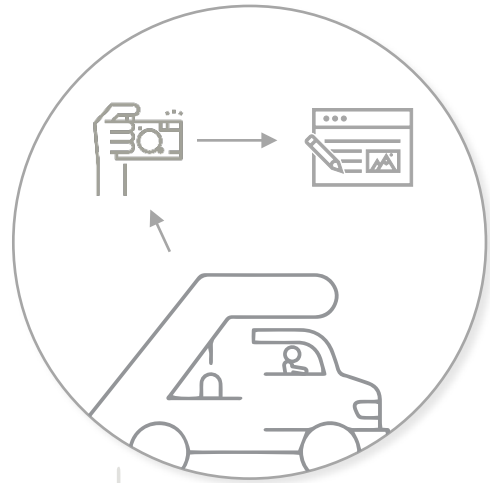
Parking

Consumers get real-time information on available parking and curbside pickup spaces.

13: [The Digital Future of airports white paper](#), Huawei and ABLresearch, 2019

14: [Mission-critical Airport Networks Transformation White Paper](#), Nokia, 2020

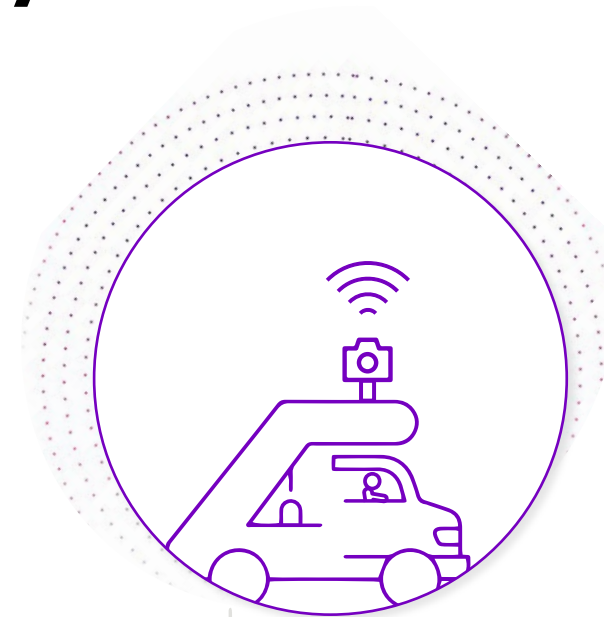
Smart maintenance powered by 5G



Then

Manual survey to take photographs of runway every few hours

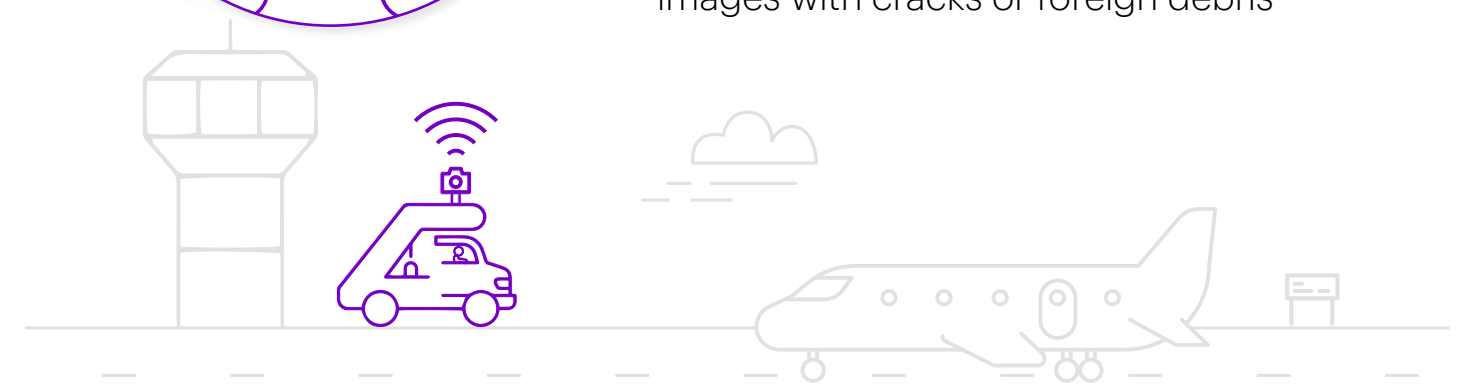
Human intervention for crack and foreign debris analysis



Now

A car equipped with an **ultra-high-definition camera** scans across a four-kilometer-long airport runway, the exterior of an aircraft or the glass facade of a hotel

Applying machine learning to analyze and diagnose, and **image analytics** to classify images with cracks or foreign debris



As-is



Manual



Inefficient



Reactive

Benefits



30% lower maintenance cost



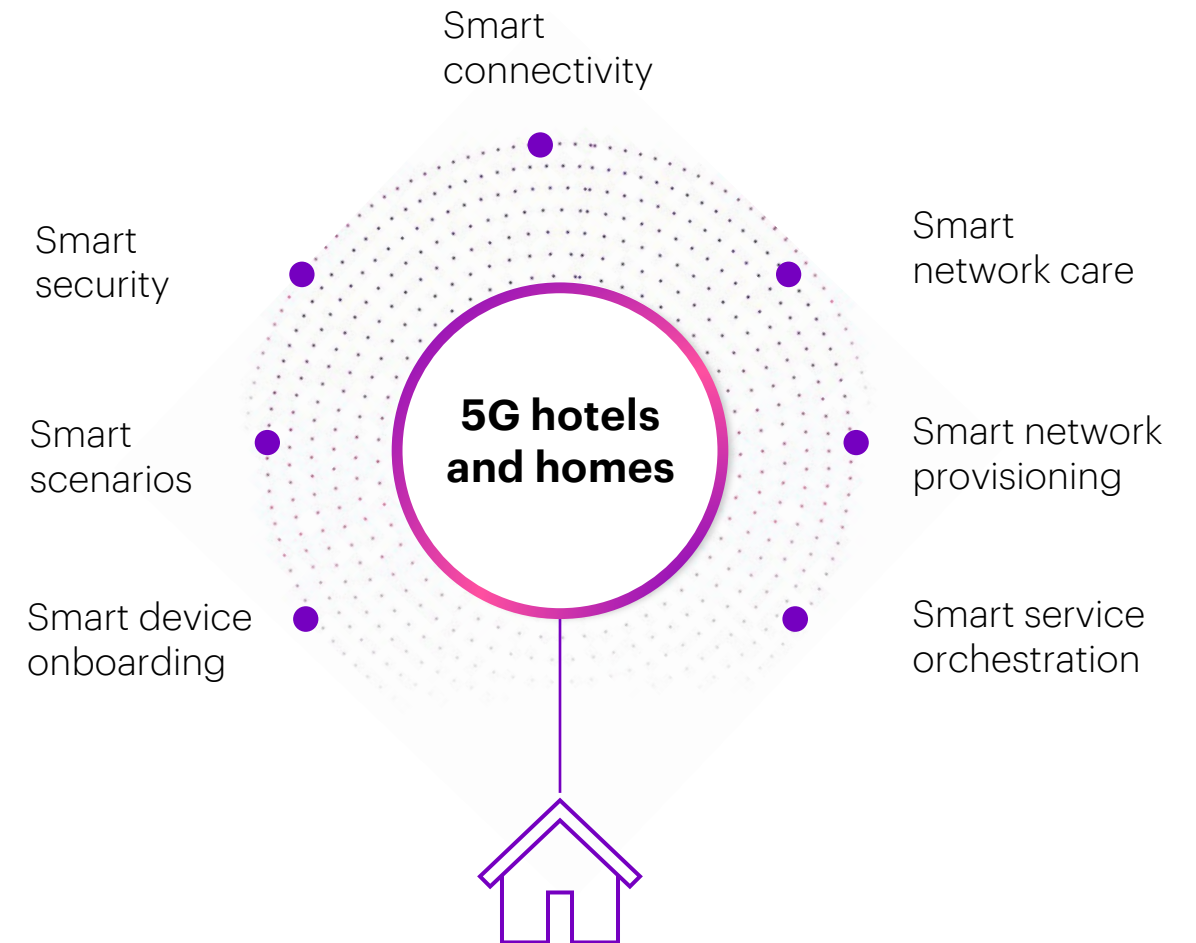
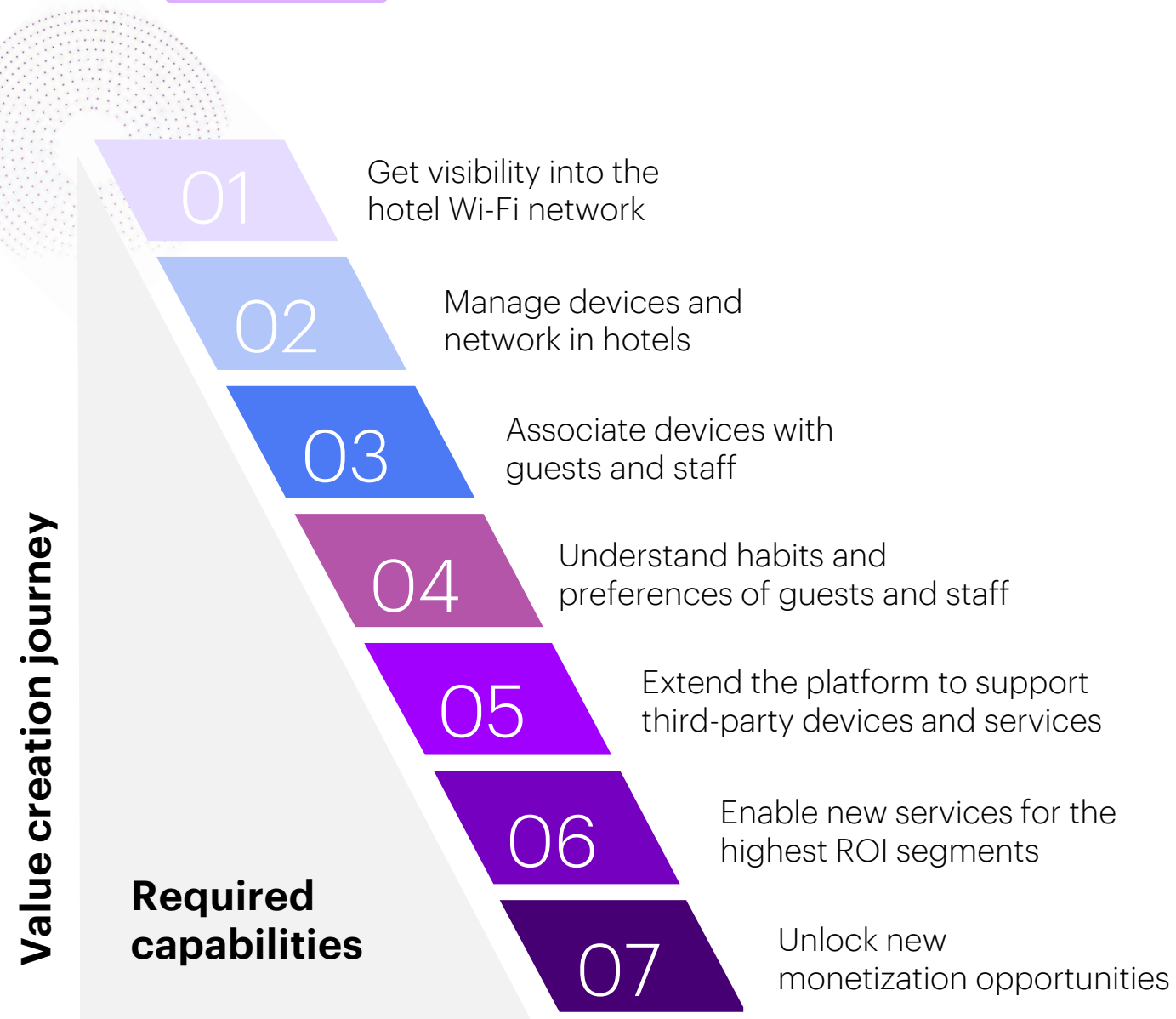
Less manual effort



20% reduction in downtime (predictive)

Delivering enriching experiences with smart hotels and homes

Showcase of smart hotel and home solution based on open-source IoT framework (e.g. [Eclipse SmartHome](#))



[16: 5G Smart Hotels: New Use Cases and Experiences Enabled, Huawei, 2019](#)
[17: Eclipse SmartHome](#)

The road ahead



Bringing the future closer, faster with 5G

Did you know the global 5G market in aviation is expected to grow from US\$0.54 billion in 2021 to US\$9.92 billion in 2028? That's a Compound annual growth rate of 47%.*

Also, 80% of travel executives expect the impact of 5G technology to be breakthrough (41%) or transformational (39%) in the future.**

5G is a revolutionary technology that is not just about speed. It also enables fast, rich, real-time and reliable connectivity—taking the customer experience and journey to a whole new level.

18: 5G in Aviation Market Size, Revenue, Growth & Trends, Fortune Business Insights, 2022
19: **FY22 Tech Vision - travel version

Companies in the travel industry have already started embracing it.

Beyond operational goals, 5G can also support sustainability efforts. For example, smart buildings connected over 5G can reduce energy consumption, helping fight climate change.

Travel companies that prepare for and implement 5G will gain a competitive edge and meet their strategic goals. Are you ready for a more connected and sustainable future?

Take your first step toward a 5G-powered future—connect with our experts

Authors

Anshul Gupta

ATCI Travel Industry Lead
anshul.u.gupta@accenture.com

Meeta Budhrani

ATCI Travel Industry
Technology Consulting Practitioner
meeta.lal.budhrani@accenture.com

Contributors

Sanjay Tiwari

5G Industry Lead, ATCI
sanjay.t.tiwari@accenture.com

Knut Knudsen

Travel Industry Consultant
knut.knudsen@accenture.com

About Accenture Research

Accenture Research shapes trends and creates data-driven insights about the most pressing issues global organizations face. Combining the power of innovative research techniques with a deep understanding of our clients' industries, our team of 300 researchers and analysts spans 20 countries and publishes hundreds of reports, articles and points of view every year. Our thought-provoking research—supported by proprietary data and partnerships with leading organizations, such as MIT and Harvard—guides our innovations and allows us to transform theories and fresh ideas into real-world solutions for our clients. For more information, visit www.accenture.com/research.

About Accenture

Accenture is a global professional services company with leading capabilities in digital, cloud and security. Combining unmatched experience and specialized skills across more than 40 industries, we offer Strategy and Consulting, Interactive, Technology and Operations services—all powered by the world's largest network of Advanced Technology and Intelligent Operations centers. Our 710,000 people deliver on the promise of technology and human ingenuity every day, serving clients in more than 120 countries. We embrace the power of change to create value and shared success for our clients, people, shareholders, partners and communities. Visit us at www.accenture.com.

Disclaimer

This content is provided for general information purposes and is not intended to be used in place of consultation with our professional advisors. This document refers to marks owned by third parties.

All such third-party marks are the property of their respective owners. No sponsorship, endorsement or approval of this content by the owners of such marks is intended, expressed or implied.

Copyright © 2022 Accenture. All rights reserved.
Accenture and its logo are registered trademarks of Accenture.

References

- 1.[What is 5G? How It Works & Why It Matters | Accenture, 2022](#)
- 2.[The Future of 5G: Comparing 3 Generations of Wireless Technology, Visual Capitalist, 2019](#)
- 3.[Internet of Things in the 5G Era Opportunities and Benefits for Enterprises and Consumers, GSMA, 2019](#)
- 4.[5G enabling the real-time enterprise, Orange, 2020](#)
- 5.[Cellular IoT in the 5G era, Ericsson White Paper, 2020](#)
- 6.[Enabling Estonia's 5G with Telia and Intel, Ericsson White Paper](#)
- 7.[5G goes live in the port of Tallin, Ericsson White Paper, 2017](#)
- 8.[Connected Aviation powered by Ericsson Private 5G](#)
- 9.[Major European 5G Trials and Pilots, European 5G Observatory, 2021](#)
- 10.[5G Smart Tourism, gov.uk, 2021](#)
- 11.[The Leading 5G IoT Use Cases, IOT Analytics, 2019](#)
- 12.[How 5G-powered robots are helping China fight coronavirus, Smart Cities World, 2020](#)
- 13.[The Digital Future of airports white paper, Huawei and ABIresearch, 2019](#)
- 14.[Mission-critical Airport Networks Transformation White Paper, Nokia, 2020](#)
- 15.ATCI Bangalore, Travel Demo, 2022
- 16.[5G Smart Hotels: New Use Cases and Experiences Enabled, Huawei, 2019](#)
- 17.[Eclipse SmartHome](#)
- 18.[5G in Aviation Market Size, Revenue, Growth & Trends, Fortune Business Insights, 2022](#)
- 19.**FY22 Tech Vision - travel version