Analyst Insights:
Unveiling the 2024 Global Trends Report

Hosted by GSMA Intelligence

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GSMA Intelligence
Who are we? What do we know?

GSMA Intelligence is the definitive source of mobile industry insights, forecasts, and research, used around the world. Our insights cover every mobile operator, network, and MVNO in every country worldwide.

COMPREHENSIVE DATA PLATFORM | INSIGHTFUL RESEARCH | EXPERT ANALYSIS | BESPOKE CONSULTING | EVENT SUPPORT

Who we work with
Mobile Network Operators
Regulatory Bodies
Government Departments
Financial Corporations
Cybersecurity Firms
OEMs and Manufacturers
Technology Companies
Consulting Businesses

BY THE NUMBERS
7/10 of Forbes’ Top digital companies worldwide, rely on our data and insights

50m+
individual datapoints covering everything from operational to economic

4,600+
networks tracked, spanning every country

9/10 of the top Telecos in the world work with GSMA Intelligence
This report is the latest edition – our 9th – of the Global Mobile Trends series.

Much has changed since our first publication in 2015. Technology has advanced and companies have come and gone.

As always, the purpose is simple: understand the biggest and most important things happening in telecoms and the broader TMT industries, and explain what they mean for people, companies and governments.
Our partners in 2024

- Amazon Web Services (AWS)
- European Space Agency (ESA)
- Vodafone
- Kigen
Distilling the future

How do all of 2024’s trends come together?

5G’s Continued Progress...
- Adoption vs. Monetization
- FWA as a Breakout
- 5G-Advanced on Horizon

...With “New” Tech Drivers
- Gen AI’s art of the possible
- Cloud / edge balancing act
- Private 5G and eSIM come of age

...And New Biz Dynamics
- Circularity vs. efficiency
- Entertainment diversity
- NTN: biz trumps tech innovation
5G’s Next Wave

Fastest mobile broadband uptake. Monetization a work in progress.

Fastest in history

Headline 5G penetration now around 20%.

Drivers

Uptake helped by...

• Handsets
• Coverage
• Speeds
• Pricing

Growth imperative

Mobile revenue growth still challenged. SA and B2B momentum still ramping.

Mobile Broadband Penetration: Global Connections

Source: GSMA Intelligence
5G Advanced

Driving at ROI on the road to 6G

Solution vs. problem
New tech often begs the question of why it’s needed. 5G-Advanced faces the same scrutiny.

Tech vs. services
Most-cited capabilities and use cases focus on tech innovation. BUT, they must be linked to monetized services: metaverse, connected things, efficient media, etc.

B2B monetization
A common theme across 5G-Advanced priorities is B2B support.

Source: GSMA Intelligence

5G-Advanced priorities

Top use cases

| 5G multicast | Low-cost IoT | Satellite integration |

Top technology capabilities

| Improved uplink | Network slicing | Enhanced security | Edge compute |

Source: GSMA Intelligence
Fixed Wireless Access

Everyone’s favourite 5G use case begins to mature.

Breakout growth
5G FWA up 55% in 2024, outpacing success 4G FWA was able to manage.

Why FWA?
Key to growth: monetizing 5G spectrum and network investments into a new customer base.

What next for FWA?
• Competing
• Complementing
• Converging
• 5G-Advanced

FWA connections show strong growth
Source: GSMA Intelligence
Generative AI

Scratching the surface en route to the Generative Telco

Making money vs. saving money
Where to focus Gen AI efforts: internal or external?

Network wins early battle
Infrastructure-related use cases dominate initial telco efforts – but fall well short of full value prop.

Growth imperative
New revenues and customer experience improvements drive telco strategy priorities. Gen AI priorities must follow.

Greatest business impact from GenAI deployment
Source: GSMA Intelligence Operators in Focus: Network Transformation Survey 2023

- Troubleshooting: 66%
- Threat detection / mitigation: 47%
- Personalised service creation: 28%
- Increased traffic demands: 20%
- Network planning and optimisation: 19%
Cloud and edge

Getting the industry’s compute architectures right

It takes a village
Where traffic is processed is just as important as the rise in traffic.

Shifting trends
Cloud and on-premises edge to soak up the majority of incremental traffic through end of the decade.

Local digitalization
Edge focus underscores broader trend of B2B clients seeking on-prem compute; MEC and cloud compute are two sides of the same coin in facilitating private wireless.

Telco Traffic Distribution: Expectations through 2030
Source: GSMA Intelligence Operators in Focus: Network Transformation Survey 2023

Cloud (core) | Near edge (between premises and cloud) | Far edge (on premises) | On device
---|---|---|---
2022 | 100% | 0% | 0%
2023 | 100% | 0% | 0%
2024 | 100% | 0% | 0%
2025 | 100% | 0% | 0%
2026 | 100% | 0% | 0%
2027 | 100% | 0% | 0%
2028 | 100% | 0% | 0%
2029 | 100% | 0% | 0%
2030 | 100% | 0% | 0%
Future of entertainment

Strategy diversification as the new imperative

Horses for courses

Telco strategies for video are diverse: vertical integration, premium video content acquisition, partnerships with third-party streamers.

Distribution Dominates

Distro partnerships are most common, but also diverse: carriage agreements, tech and service integrations, revenue shares.

Diversification and churn

Offset of low growth in mobile/fixed connectivity and churn reduction remain the focus, aided by bundling demands. Edge focus underscores broader trend of B2B clients seeking on-prem compute; MEC and cloud compute are two sides of the same coin in facilitating private wireless.

Digital entertainment offerings:
What consumers want packaged with mobile subscriptions

Source: GSMA Intelligence

<table>
<thead>
<tr>
<th>Digital entertainment</th>
<th>5G users</th>
<th>Difference versus 4G users (pp)</th>
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<td>Video streaming</td>
<td>62%</td>
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<td>Music streaming</td>
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<tr>
<td>Gaming</td>
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Private wireless

Slow burn, but with strong demand signals

Expanding customer base
Start of 2023: 1-in-3 operators had more than 200 private wireless customers. End of 2023, 1-in-2 had surpassed that level across their customer base.

Market signals
Enterprise customer feedback is positive. Positive sentiment is there for 2/3rd of the customer base, with 25% seeing operational AND financial returns.

What next?
SA and 5G-Advanced only extend the value of mobile.

Customer experience with EXISTING 5G private wireless networks
Percentage of operator respondents, globally
Source: GSMA Intelligence Operators in Focus: Mobile Operator Enterprise Survey 2023

- Benefits realized, financial returns not yet measured: 24%
- Early stage, have not yet measured impact: 32%
- We don't know: 3%
- Benefits realized as well as financial returns: 41%
eSIM
Scaling smartphone and going beyond

Gathering momentum
After slow start, eSIM smartphone adoption gains momentum over the next two years. By 2025/2026...

- Most operators will offer commercial eSIM service to their smartphone customers, and
- eSIM-only phones (a major factor driving eSIM adoption) will be more widespread globally

**Chart: eSIM smartphone connections to 2030**
Percentage of total smartphone connections (installed base) globally
Source: GSMA Intelligence

<table>
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<tr>
<th>Year</th>
<th>Low adoption scenario</th>
<th>Baseline scenario</th>
<th>High adoption scenario</th>
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<td>2030</td>
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**Key milestones: baseline scenario (globally)**
- **2025**: 1 billion eSIM smartphone connections
- **2028**: half of smartphone connections use eSIM
- **2030**: nearly 7 billion eSIM smartphone connections
Satellite and NTNs

Finally passing an inflection point

Reach

Telco-satellite partnerships now cover addressable subscriber footprint of more than 2 billion

More than a developing world problem

Early activity focused Sub-Saharan Africa. Many efforts and partnerships now cover Europe, the US, Canada and parts of rural Australia.

How big?

GSMA Intelligence estimates an annual run rate of $30–35 billion by 2035, equivalent to a boost of 2.0–2.5% on current mobile revenues
Sustainability

Evolving past energy efficiency. Making circularity the norm.

Definitions
• Basic but still important
• Key to help move from concept to commercial reality

Operator roles vs. others
• Operators are among biggest buyers of handsets, CPE and other H/W
• However, OEMs and vendors are closer to manufacturing process...and by extension, product design
• Coordination key

Market mechanisms
• Certifications
• Secondary trading markets (e.g. metals)

Deployments and need for proof points
• Only around 15% of handsets recycled so far
• Upping this, and expanding to network equipment, needs case studies and proof points on process and value gain

Key circularity practices for operators
Source: GSMA Intelligence

Supply Chain
• Sourcing of sustainable materials
• Reusing and refurbishing products
• Sales of refurbished devices
• Device recycling
• Design equipment for end-of-life disposal
• Tracking system metrics

Operations
• Reusing and repairing network equipment
• Recycling network equipment
• Refurbishing network equipment
• Resale of network infrastructure
• Network softwarisation

Products and Services
• Attractive device take-back programmes
• Device repair offers
• Device-as-a-service
• Raising consumer awareness of the impact of device disposal
Global Mobile Trends 2024
Enter AI and the ‘open of everything’