

2022 Predictions: Big Tech's next act will be to evolve into networks

Article



Big Tech companies are expanding beyond websites, apps, devices, and platforms running on the internet to owning pieces of the infrastructure itself.

Whether it is through partnerships with network operators or mobile carriers for last-mile or edge connectivity, or co-opting fiber installations in emerging countries, companies like **Google, Amazon, Microsoft, and Meta** are angling to build broadband and wireless networks.

By 2019, content providers **reportedly** owned or leased more than half of the world's undersea bandwidth.

Emerging countries looking to upgrade their network infrastructure have become good starting points for expanding Big Tech's network provider aspirations.

- Facebook and Google **announced** they were funding two trans-Pacific cables connecting the US West Coast to Singapore and Indonesia.
- Amazon and Meta contractor **Edge Cable Holdings USA** applied to operate a submarine cable linking the Philippines to California, after **China Mobile (CMI)** bowed out of the project.

This is an ideal scenario for players like Amazon and Facebook, enabling them to commandeer infrastructure projects in developing countries whose local telecom companies might not be able to afford to invest in expensive infrastructure.

Not only does it enable Big Tech's continued dominance in emerging markets, it expands their control of the internet's physical infrastructure and helps them ensure the presence of their content and services in new markets for years to come.

Google's network expansion to reach new heights

Of all the Big Tech companies, Google will continue to aggressively expand its networks. The search and advertising giant already owns 10,000 miles of submarine cable and is investing \$1 billion over five years in Africa to support "digital transformation" in the region, including a subsea cable to enable faster internet speeds.

- **The subsea cable will connect South Africa, Namibia, and Nigeria**, and St. Helena will serve as a conduit between Europe and Africa when it's completed in five years.
- Google most recently landed the final leg of "**Grace Hopper**," an internet cable covering 3,900 miles of transatlantic territory **connecting** the US, the UK, and Spain.
- In South America, Google's "**Firmina**" is a **plan** to build massive fiber-optic cables between the East Coast of the US and Argentina.

Google is innovating beyond fiber as it expands. One of its projects uses laser-based internet to bridge cities across the Congo River in Africa. **Project Taara** is the experimental 20Gbps laser beam internet conduit, which Google says has already sent **700TB of data across 3 miles with a robust 99.9% uptime.**

Big Tech will further expand connectivity

We expect Big Tech to take an accelerated role in network expansion in 2022 beyond laying intercontinental cable and facilitating last-mile connectivity in remote areas. Various tech companies are partnering with telecommunications companies and carriers to expand network connectivity.

Carriers are still building out their 5G networks, which still don't generate substantial revenues to offset investment, mostly because 5G rollout and adoption has been slowed by the pandemic and resulting fiber shortages as well as FAA-mandated [delays](#) in 5G expansion in the US.

AT&T enlisted Microsoft to run its next-generation mobile network. This is a major move in the race by cloud companies to lock down large carriers and develop their 5G infrastructure. Microsoft will continue to leverage its carrier and government relationships in 2022 to [secure](#) its piece of the 5G space.

Amazon Web Services (AWS), the leading cloud services provider, moved into the [private 5G network market](#) by offering new managed services aimed at simplifying installations for businesses.

By leveraging AWS' ease of use and scalability, Amazon has positioned itself as a viable provider for small to midsize businesses and enterprises lacking in-house expertise or those that would rather deal with one entity instead of an operator, a vendor, and a systems integrator.

Expect more collaboration between Big Tech, carriers

Collaboration between carriers and cloud providers is an emerging trend and is expected to continue in 2021 as 5G networks develop. Enterprise 5G networks are a big opportunity that could reach \$5.7 billion by 2024, [per](#) IDC estimates cited by Insider.

Partnering with cloud service providers helps cover development **costs**. According to **GSMA** forecasts, operators are expected to spend **\$900 billion worldwide between 2021 and 2025 on mobile capital expenditures**, nearly 80% of which will be in 5G, and much of this expenditure could run on cloud infrastructure.

Prepare for serious scrutiny from governments

Big Tech's accelerated evolution into network carriers and service providers will likely catch the attention of government and antitrust regulators in 2022. We expect heightened scrutiny and calls for regulation as Big Tech continues to grow its global network infrastructure and the potential for anticompetitive behavior.

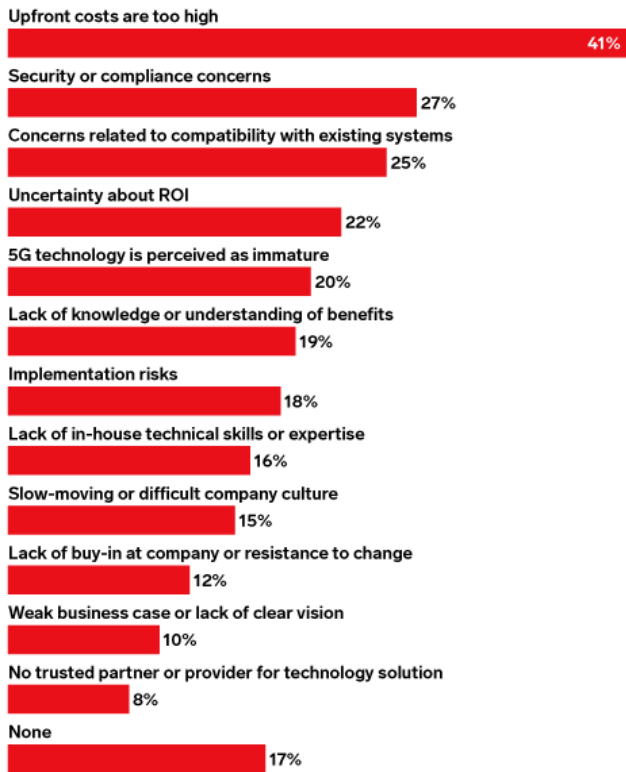
Investigations could result in fines or halt or delay expansions into the network business in North America, the EU, the UK, and other regions. We expect Big Tech to thrive in Asia-Pacific and South America, where various network expansion projects for broadband and 5G will help accelerate network aspirations in 2022.

Wrap-up

Big Tech companies will continue to invest heavily in network connectivity and partner with carriers and operators for cloud or last-mile connectivity. Expect **Amazon, Google, Microsoft** and **Meta** to diversify their strategies in 2022 as a way to own not just the content and data on the internet, but physical infrastructure and services.

Barriers to the Adoption of 5G at Their Company According to US Business Tech Professionals*, Nov 2020

% of respondents



Note: *manager-level or higher with tech decision-making power in IT/IS infrastructure and security, application development, or wireless plans/services
Source: Verizon Business, "Verizon 5G Business Report" conducted by Morning Consult, Jan 27, 2021

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