



Seven Technology Industry Predictions for 2022

The technology sector spent 2021 adjusting to the radical changes catalyzed by the events of 2020. While the pandemic has underscored the importance of tech, it has created new risks and priorities for the industry.

The technology industry, along with the rest of the world, is struggling with global supply chain disruption, material scarcity, rising transportation costs, unpredictable shutdowns, and an industry-wide labor shortage.

Though tech is in high demand, a string of recent events has diminished trust in tech corporations. Calls for tech companies to be more transparent are growing increasingly louder, and they extend to tech companies' tax contributions. This coincides with the emergence of tax legislation aimed at recouping tax revenue from organizations that operate across both state and international borders, as most tech companies do.

The confluence of all of these factors sets the stage for a new year in which supply chain, transparency, legislative and tax concerns will top tech companies' priority lists.

Introducing the seven trends we expect to shape 2022 and beyond.



Prediction #1

Techno-nationalism on the rise

Techno-nationalism — the view that a nation's success can be measured by its innovation — is on the rise. This is due to several factors that have emerged over the past few years. The current chip shortage is a prominent example of this phenomenon. The shift to at-home work, unforeseen pandemic era demand fluctuation and other supply chain disruptions have led to a severe shortage of chips that impacts nearly every industry. The shortage is projected to extend through 2022 (and possibly into 2023) and the reverberations are expected to last much longer.

Formerly a major chip manufacturer, the U.S. has passed much of its production on to East Asia over the past 15 to 20 years. Other nations are gearing up to enter the competition, and with the proposed CHIPS Act, the U.S. is looking to become a leading chip manufacturer once again.

The Cyberspace Administration of China (CAC) has imposed a variety of [fines and penalties](#) this year, as the country looks to promote a “civilized internet” and crack down on the sharing of personal data. Based on the actions of the country's regulators, a [major Chinese tech company](#) recently delisted from the NYSE. This is possibly a sign of things to come as China looks to secure data and solidify its role as a global tech superpower. These policies pose new challenges and added red tape for many foreign-owned businesses, pushing them out and reducing competition for local Chinese businesses. We have already seen many U.S. tech companies realize that due to China's complex and strict web of security laws, leaders may have to rethink their business models and the way they traditionally process data to have a significant presence in the country.

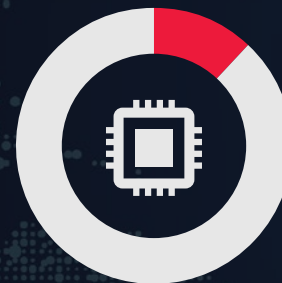
1 www.bloomberg.com/news/articles/2021-02-17/the-world-is-short-of-computer-chips-here-s-why-quicktake

2 www.theverge.com/2021/3/10/22322860/eu-semiconductor-chip-supply-double-output-2030-global-compass-investment, <https://www.bloomberg.com/news/articles/2021-11-04/white-house-presses-lawmakers-for-passage-of-semiconductor-act>

3 www.businessinsider.com/why-us-doesnt-make-chips-semiconductor-shortage-2021-4



Europe aims to double its share of global chip production, bringing its output to **20%** by 2030



12%: the current share of semiconductors manufactured in the U.S.³



\$4 billion: the amount raised by Chinese based organization Didi in its June 2021 IPO. The organization is now delisting from the NYSE. (Source: [Bloomberg News](#))

Prediction #2

Nomadic workforce will grow as top tech talent is harder to pin down

The shift to remote work has led many to embrace the digital nomad lifestyle, which has grown exponentially during the pandemic. Once a rarity in the corporate world and offered almost exclusively to freelance workers, increasing numbers of full-time employees are traveling while working as more companies go fully remote.

Companies with aspirations of remaining in office at least part time may find themselves directly impacted by a shortage of tech workers, who have grown accustomed to the freedom and flexibility remote work offers. However, companies considering a move to a fully remote model to attract and accommodate tech professionals should consider [various implications](#), including remote work nexus (a taxable presence for corporate income purposes), cybersecurity issues, workforce management complications and more.



50%

The surge in U.S. digital nomads in 2020⁴

⁴ www.techmonitor.ai/leadership/workforce/digital-nomads-capitalising-rise-remote-work



Prediction #3

Supply chain component shortages force U.S. technology firms to reduce reliance on China and reevaluate just-in-time manufacturing practices

The pandemic exposed fragility in the just-in-time manufacturing method supply chains have long relied on. This strategy of receiving goods only as needed is not feasible in a time of large-scale disruption. Completely doing away with a just-in-time inventory model may not be entirely possible due to several factors, and if achieved would require more investment in physical inventory.

Instead, supply chain managers are refining their approach to supply chain issues, implementing more self-sufficient and cost-efficient operations through “nearshoring.” This process of bringing manufacturing operations closer to home is growing in popularity as tech firms look to reduce their reliance on China. To further protect their supply chain, firms are looking for geographically diverse raw material sources—insulating against regional disruptions. Companies’ ability to operate closer to home, guarantee access to materials and produce parts on demand helps reduce inventory, cuts costs and expedites the entire process.



0.9%

Expected **reduction** in world economic growth in 2022 due to **supply chain disruptions** in 2021⁵

⁵ Kiel Institute for the World Economy



Prediction #4

Multinational tech companies to re-evaluate business models in response to global tax changes

More than 130 countries [recently agreed](#) to adopt a global minimum corporate tax of 15% and change tax allocation rules so that certain large multinational corporations are taxed according to where they sell goods and services, rather than where their operations are located. Adoption of the OECD two-pillar framework is a welcome development for many U.S. tech companies with a multinational presence. Consensus on the OECD's framework aims to eliminate the potential for certain revenue streams being subject to tax in multiple jurisdictions considering the proliferation of unilateral digital service tax regimes and ultimately, the phase-out of these regimes. However, many companies may also re-evaluate their business models considering the increased tax cost associated with their activities.

The OECD's framework is designed to reverse the erosion of tax bases experienced by many countries, in light of tech companies' ability to limit their physical presence in customer markets and serve those customers from regional geographic headquarters or operational subsidiaries located in low-tax jurisdictions.

The 15% global minimum tax was championed by the U.S. in exchange for its participation in the agreement. Time will tell if these [global tax changes](#) will encourage major tech leaders to shift operations and intangible assets back to the U.S. now that tax rates will be more consistent globally.



15% the global **minimum** corporate tax rate **proposed** to go into effect in 2023

Prediction #5

With trust in tech firms reaching an all-time low, regulators will make moves to improve safety, privacy and consolidation in the industry

Suspensions have always dogged innovation, but trust in tech has a hit in a new low in light of recent events. In October 2021, leaked documents revealed Facebook executives are aware of negative psychological impacts of its platforms on some young users and that Facebook's algorithm pushes misinformation.

Long seen as the arbiter of tech trends, Facebook serves as fuel for regulators working to improve safety and privacy and keep an eye on potential antitrust issues in tech. With concerns about the power wielded by tech giants, legislators and the public are looking for new oversight and regulations to keep big tech's business practices in check.

Section 230 is also under scrutiny, having previously been interpreted by the courts as blanket immunity for harm caused by third-party content. A bill was proposed that would remove certain political content from the safety net while President Joe Biden has proposed abolishing Section 230 entirely. Others believe that the best revision of Section 230 lies somewhere between these two plans.

Section 230 is under scrutiny, considered by some as a **get out of jail free card** for Big Tech



Prediction #6

Edge computing to complement the cloud as AI processing moves onto the chip

Whereas previous year-end lists tout cloud computing as the way of the future, 2022 may be the year interest in edge computing exceeds that of cloud computing for AI. Though cloud computing still offers more benefits than the traditional computer paradigm, the closest cloud facility can still be hundreds of miles from the point of data collection and relies on often unreliable Internet connectivity. Businesses are increasingly adopting edge computing architecture, moving storage and resources out of central data centers and closer to the source of the actual data, leveraging many AI chips to process smaller portions of data.⁶ Estimates for edge computing growth are in the 40% compound annual growth rate (CAGR), in the \$50 billion range.⁷

⁶ www.searchdatacenter.techtarget.com/definition/edge-computing

⁷ www.idc.com/getdoc.jsp?containerId=prUS46878020

Edge computing **estimated growth**

40% increase
\$50 billion



Prediction #7

Demand for tech M&A deals to exceed record highs

After reaching record highs in 2018, the number of tech M&A deals briefly dipped in 2020 at the onset of the pandemic, only to rebound in 2021 as the economy recovered. Private equity firms invested in tech are seeing record returns as of late, and it is expected that much of their dry powder in 2022 will also be committed to tech investments. Consolidation trends also suggest the formation of a landscape in which key competitors — often service providers — merge. Consolidation of providers with high overlap jumped 65% in the services market and 40% in the software market in the second half of 2020 compared to the average number of M&A transactions in 2018 and 2019.

Gartner predicts global tech provider M&A activity will surpass 2018 highs in 2022. As pandemic-related volatility drops, market conditions for deals will improve and competition for acquisitions will increase.

The new year will bring new opportunities for U.S. tech companies. Industry M&A is set to exceed record highs, the U.S. is the leading producer of increasingly ubiquitous AI chips and the recently ratified global corporate tax works in their favor. 2022 also brings new risks. Trust in tech is at a record low, techno-nationalism is a significant concern, industry talent is growing harder to attract and retain and longstanding manufacturing processes are no match for today's supply chain woes. With an eye on opportunities for innovation, adaptation and transparency, tech companies can forge ahead with confidence.





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