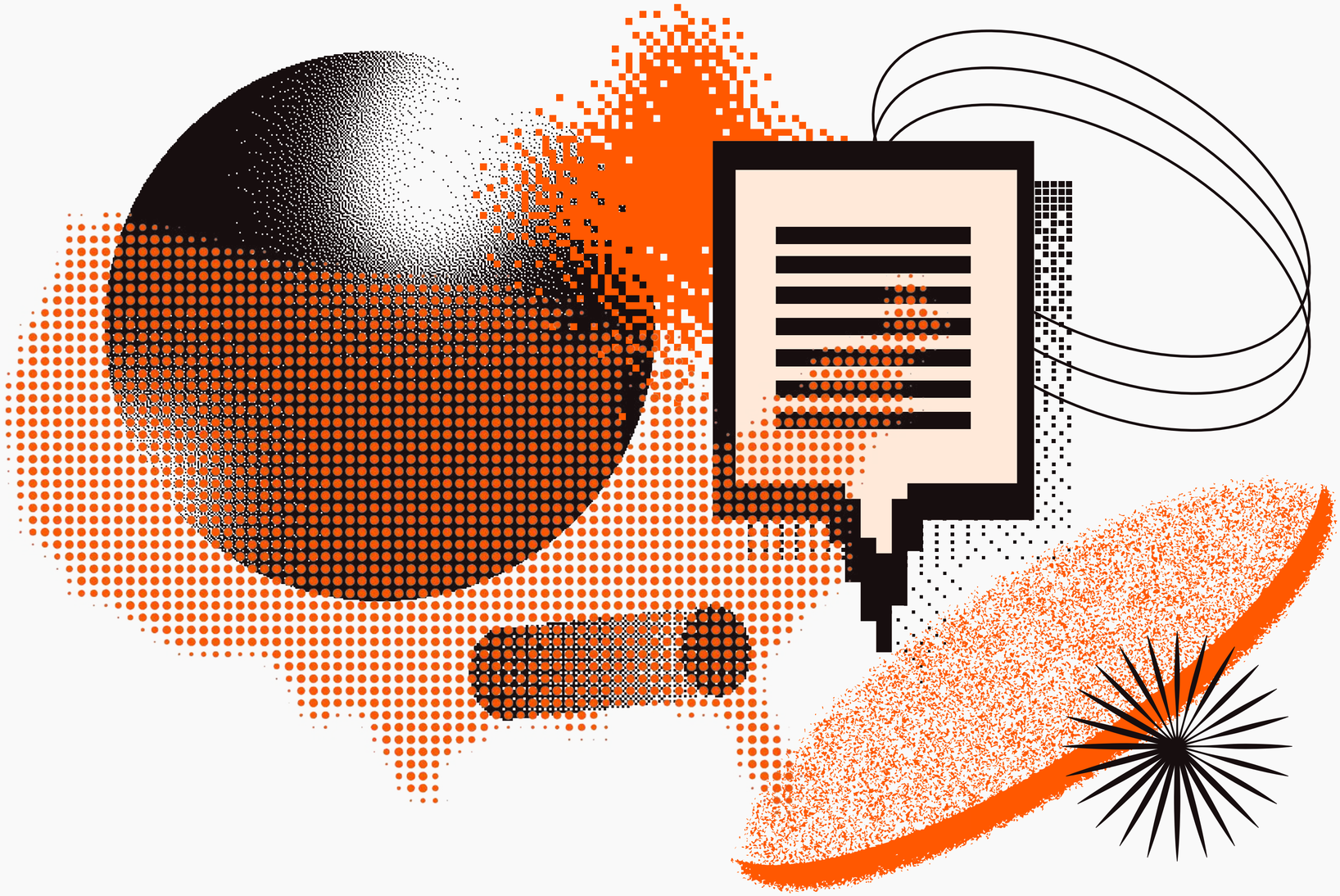
FLETCHER
The graduate school of global affairs at Tufts University

Digital Planet
Where Digital Innovation Meets the World

IDEA 2030
IMAGINING A DIGITAL ECONOMY FOR ALL

Imagining a Digital Economy for All in 2030:

US COMPENDIUM



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EXECUTIVE SUMMARY

Imagining a Digital Economy for All or IDEA 2030, with support from the Mastercard Impact Fund, is a research, dialogue and impact program that draws from three core Fund principles: innovation, learning mindset and collaboration.

We launched the initiative with the idea that digital technology is both multiplier and divider: it provides a pathway to inclusive growth, while digital divides risk leaving many even further behind. Our aim was to understand where and why this duality manifests, and what actions must be taken to boost the multiplier and close the divides.

This compendium features our work focused primarily on the United States. Since the launch of the IDEA 2030 initiative in 2020, a global pandemic was declared, underscoring not only the depth of these divides across communities in America, but the cruelty crisis inflicts on those furthest behind. We dove deep into the nature of the digital divide in America, exploring how racial, gender, and socioeconomic realities intersect with access to crucial technologies. We collaborated with advocates, policymakers, researchers, and practitioners to not only more clearly define challenges, but devise actionable solutions for the private and public sector to implement quickly.

Through our work over the past three years, we learnt that the digital state of the union is uneven. We measured the gaps across the country, and created granular maps and data table for policymakers at the state, county, city, and federal levels. We've embarked on a series of discussions with state and local policymakers, showcasing our tool. This work is now part of the public record, and was used to inform White House policy.

As the world shut down in early 2020, several divides emerged as Americans became more reliant on digital technologies to work, learn, access medical care, socialize, and entertain themselves. The first, foundational divide lies simply between those who had access to high-speed broadband and those who did not. Approximately 120 million Americans do not have access to broadband at speeds fast enough to handle the demands of the current decade. In exploring the nature and consequence of this digital divide, we discovered several actionable insights.

The urban-rural digital divide offers one case in how digging deeper into the data reveals more nuanced policy solutions, requiring the public and private sectors to work closely together to achieve. Our work found that while at a relative level, rural areas are unsurprisingly less connected (29% of rural areas have a broadband connection vs. 67% in non-rural areas), from the perspective of absolute numbers, there are far more Americans in urban and suburban places who are unable to access high-speed broadband. As such, allocation for broadband infrastructure funds should focus on reaching people, rather than simply covering miles.

The pandemic underscored the importance of high-speed broadband. We found that early in the pandemic, the states that were able to shift to remote work relatively seamlessly due to higher levels of digital readiness experienced lower increases in unemployment. Workers in high-touch jobs faced greater risk of unemployment. Digitally-ready states and households were more resilient against pandemic-induced job loss.

A second driver of divides – both digital and analog – in the US is racial discrimination and access to opportunity. Black and Latinx or Hispanic workers are overrepresented in frontline and high-touch jobs, and underrepresented in flexible and digitized (work-from-home) jobs. Remedying this divide requires an increase in access to computers and broadband for Black and Hispanic households. Even among Black professionals holding some of the most marketable STEM degrees, the highest-paying and highest-growth jobs in the tech sector remain elusive – Black STEM grads are underrepresented in the technology sector.

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As we began to emerge from the pandemic, it became clear that Black communities were disproportionately affected – in mortality, morbidity, unemployment, and financial losses. As governments and businesses navigated the repercussions of the pandemic, we urged them to take into account these extant inequalities to ensure a more inclusive recovery.

Gender and sexual identity represent a third divide calling for closure. While women are making educational gains, we found that there is still a significant pay gap in the US, and the pandemic only deepened the disparity between men and women. We also examined the office culture for LGBTQ+ workers, and found that fewer STEM graduates expressed affiliation with LGBTQ+ groups on their public resumes than graduates working in other fields. Younger workers tended to express affiliation with LGBTQ+ groups more openly than older workers. Using innovative open-source data collection techniques, we took the pulse of Twitter, following the Supreme Court's decision to overturn Roe v. Wade, finding a decidedly negative reaction among both men and women.

We continued our collaboration with several data partners to leverage data for the public good. Using data from one of our partners, Similarweb, we explored how the pandemic altered the way Americans spent time online, and discussed implications for those on both sides of the digital divide. We untangled several implications for those without a connection to high-speed broadband: a lack of access to telehealth, fewer work opportunities, and even higher Covid death rates.

Looking ahead to the future, we suggested paths forward to boost the multiplier effect of digital technologies: we outlined recommendations on how to harness remote work for a more inclusive workforce, offered solutions to limit the spread of misinformation, and analyzed the environmental cost of cash in the US.

The following links highlight our efforts to boost the multipliers of digital technology and close the divides – we thank you for joining us in our journey towards Imagining a Digital Economy for All in 2030.

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RESEARCH AND INSIGHTS

2020	Mapping the Uneven State of the Union: How are American states charting a path out of the pandemic? - Phase 1
2020	Work From Home or Out of Work? - Phase 2
2020	Uneven State of the Union: Spread of COVID-19 Hotspots across Rural America
2020	How Digital Disparities Across the US Disproportionately Hurt Black and Latinx Communities
2020	Urban-Rural Divide in the US during COVID-19
2020	Digital Health Divide: Disparities in broadband access prevent telehealth policies from reaching millions of Americans
2020	Resilient Support Systems: The impact of digital infrastructure on the pandemic-induced loss in employment
2020	The Big Easing: Re-Open in Haste, Repent at Leisure?
2020	Color of Disparity: Addressing extant racial gaps in digital and economic capital key to ensuring an inclusive recovery
2020	The State of the Gender Pay Gap: Earning Disparities Widen as Women Bear the Brunt of the Pandemic
2020	The Misinformation Maelstrom: A Mapping of Vulnerability Across America
2021	A Tale of Two Digital Economies: Gig Workers and Remote Workers
2021	Big Tech's Opportunity for Inclusive Growth
2021	The Shifting Geography of Talent
2021	The Impact of Internet Access on Covid-19 Deaths in the US
2021	How Green is the Greenback? An Analysis of the Environmental Costs of Cash in the United States
2021	The Long Shadow of the Lockdown: How the Pandemic Altered the Way Americans Spend Time Online
2022	Glass Ceilings, Broken Rungs, and Gummy Floors
2022	Broadband Infrastructure Funding and the Digital Divide: Prioritizing People over Miles
2022	Pride and Prejudice 2022
2022	Pride and Prejudice
2022	Roe v. Wade Supreme Court Decision: Twitter's Decidedly Negative Reaction

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DIGITAL PLANET AUTHORED ARTICLES

2020	To restore the economy, we must fix America's technology gaps. - The Hill	THE HILL
2020	ICE's international student ban is a politicized pandemic response that hurts America. - NBC News	NBC
2020	Make Surveillance Capitalists Pay Their Dues. - Foreign Policy	FP
2020	Antitrust Isn't the Solution to America's Biggest Tech Problem. - Harvard Business Review	Harvard Business Review
2020	The Case Against Big Tech's Election Strategies. - Foreign Policy	FP
2021	Getting Biden to Love Tech. - Foreign Policy	FP
2021	Political Bickering Prolongs the Digital Divide. - Wired	WIRED
2021	Biden's Plan for Broadband Isn't Bold Enough. - Bloomberg	Bloomberg
2021	Hire Black and Latinx Tech Talent From These Overlooked Cities. - Bloomberg	Bloomberg
2021	How to Close the Digital Divide in the U.S. - Harvard Business Review	Harvard Business Review
2021	Two birds, one stone: Closing the digital divide and facing down Mark Zuckerberg. - The Hill	THE HILL
2022	How Biden's "Internet for All" Initiative Can Actually Fulfill Its Mission. - Harvard Business Review	Harvard Business Review

ON THE RECORD

2020	COVID-19 Vaccines Could Arrive as Soon as Next Week, But Issues Regarding Digital Accessibility Could Pose a Significant Hurdle	NBC
2021	Baystate Business: Two Mayors and a Former Governor (Radio)	Bloomberg
2021	Economies of Digitally Advanced Nations Fare Better During Pandemic	TuftsNow
2021	Considering a move for remote work? Check for broadband first	
2022	The Carbon Footprint of Cash	abc

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WEBINARS AND EVENTS

2020	An Uneven State of the Union: How the Pandemic Lays Bare America's Coastal-Heartland Gap and How to Act to Close It	Digital Planet, IDEA 2030, Center for Inclusive Growth
2020	Does Working from Home Actually Work?	Tufts University
2020	One Month to Election, Seven Months of a Pandemic: How Equal is the State of Digital Survival Across America?	Digital Planet, IDEA 2030, Center for Inclusive Growth
2020	Tech Policy in the New Administration: A Proposal with Bhaskar Chakravorti	Techonomy
2021	IDEA 2030: Turning America's Digital Divide into Digital Dividends Bhaskar Chakravorti, Pt I	Digital Planet, IDEA 2030, Center for Inclusive Growth
2021	Techonomy Talk: How America's Digital Divide Adds Up: A Report on Connectivity	Digital Planet, IDEA 2030, Center for Inclusive Growth
2021	Turning America's Digital Divide into Digital Dividends	Digital Planet, IDEA 2030, Center for Inclusive Growth
2022	Bridging the US Broadband Divide-Fairly	Digital Planet, Next Century Cities

BLUEPRINT AND IMPLICATIONS FOR ACTION

Moving from insights to impact requires a collaborative approach. To extract the most value from our work, we mobilized a collaborative network of unprecedented scale and scope: with the Fletcher research teams and the Mastercard Center team at the core, we assembled academic researchers, data and narrative science experts, digital learning specialists, prizewinning education and impact evaluation teams, racial and broadband equity experts and lobbying organizations focused on advocacy for inclusive policies, impact investors, technology and data providers, design and production professionals and widely-read media platforms.

It was critical for the results of our work to reach decision makers and those in positions to put them to use. We created several tools for American policymakers to discover the affordability and accessibility challenges facing their communities. We hosted and spoke at eight public events promoting these tools and our insights on how to close digital divides across the country. Interviewed by outlets like NBC, Bloomberg, and ABC, we spread our insights to the greater public through print, podcasts, and TV. We authored 12 pieces on how to improve digital inclusion in the US, in outlets read by decision-makers, like the Harvard Business Review, The Hill, Wired, and Foreign Policy. We collaborated with policymakers at all levels – from the White House to the New York Office of Technology & Innovation to Next Century Cities – supporting more inclusive policies and offering advocates and doers the data they require to get things done.

In consultation with policymakers and practitioners, we developed the tools and insights to boost the multipliers and close the divides of the digital economy in the US