

The Future of Work

Sonia Jaffe

*Based on research
from the
New Future of Work*

Opinions are my own.
I do not speak for Microsoft



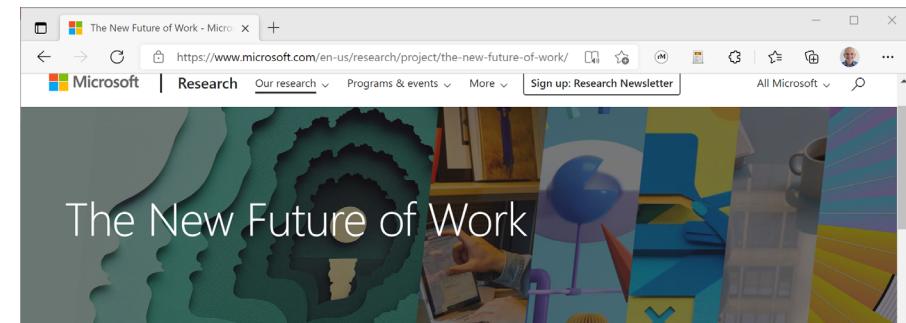
New Future of Work Initiative

- Current focus: Coordinating cross-company research efforts on *hybrid work*
- Goals: Helping to ensure research meets needs in three areas: thought leadership, internal policy, and product.
- Activities: partnerships with product teams, huddles with leadership, press engagements, memos and guidance, *many* research share-outs and collaboration opportunities
- Learn more at aka.ms/nfw



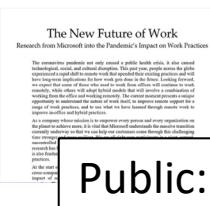
THE NEW FUTURE OF WORK

Mission: *Create a new and better future of work through applied research*



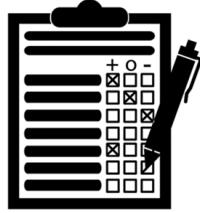
Since the onset of the pandemic, people across the globe have experienced a rapid shift to remote work that upended their existing work practices. The current moment presents a unique opportunity to create a new and better future of work, one that empowers the people who return to work in an office, those that stay remote, and the growing group that will lean into a hybrid model of work.

At the start of the pandemic, researchers at Microsoft formed a cross-



Public: aka.ms/nfw

Dozens of research studies



**Surveys &
Diary studies**



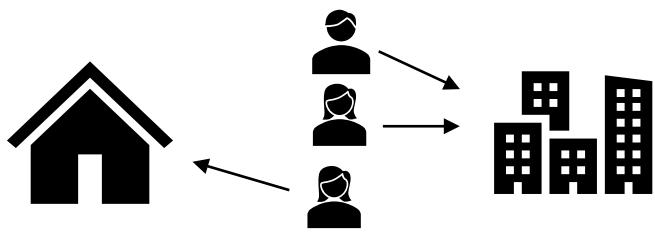
Interviews



Telemetry

This talk tries to focus on the findings I think will be of most interest to economists

What do we mean by hybrid?



- A **hybrid worker**: a person who spends some of their regular working hours in an office or other location shared with colleagues and some of their regular working hours working from their home or other location that is not shared with their work colleagues
- A **hybrid team or workforce**: a group where some people spend some of their time working from the same location.
A team of hybrid workers is a hybrid team, but a team can also be hybrid without any hybrid workers if some of the workers are in-office and some are all-remote (mixed mode), or if everyone works in an office, but the team is **geo-disperse**.

The future of knowledge work is hybrid

67%

want more in-person work or
collaboration post pandemic

73%

want flexible remote
options to stay

Information workers prefer hybrid over other modes

- Lots of studies finding this
 - Some variation with industry, geography (cultural norms & apartment size), age
- Surveys of Microsoft employees show 69-79% prefer hybrid
- Microsoft Work Trend Index (global survey of not employees)
 - 47% of the survey respondents reported that they are more likely to put family and personal life over work than they were before the pandemic
 - 21% of respondents who had quit their jobs in 2021 reported doing so because of lack of flexible working hours or location
 - Preferences may shift over time: approximately half of surveyed remote workers reported thinking of switching to hybrid and vice versa

Hybrid is hard

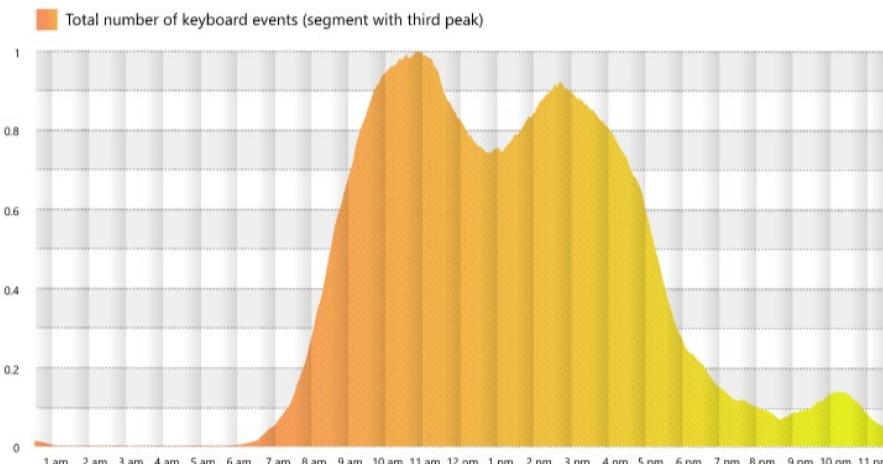
- **Sociotechnical challenge**: tech companies often ignore the complexity of the social science component of these challenges.
 - How to avoid “worst of both worlds” hybrid?
- **Challenges and benefits of WFH are linked**: some people complain about the same things others value, or the natural consequence of something they themselves value
 - No easy fixes
- **Network effects**

Benefits and challenges of WFH are linked

Pros	Cons
 Flexibility	Lack of structure / Longer workdays 
No commute	Blurring the boundary between home and work
Fewer work distractions	Isolation & communication challenges & lack of visibility
More time with family	More non-work distractions

Triple-peak workday

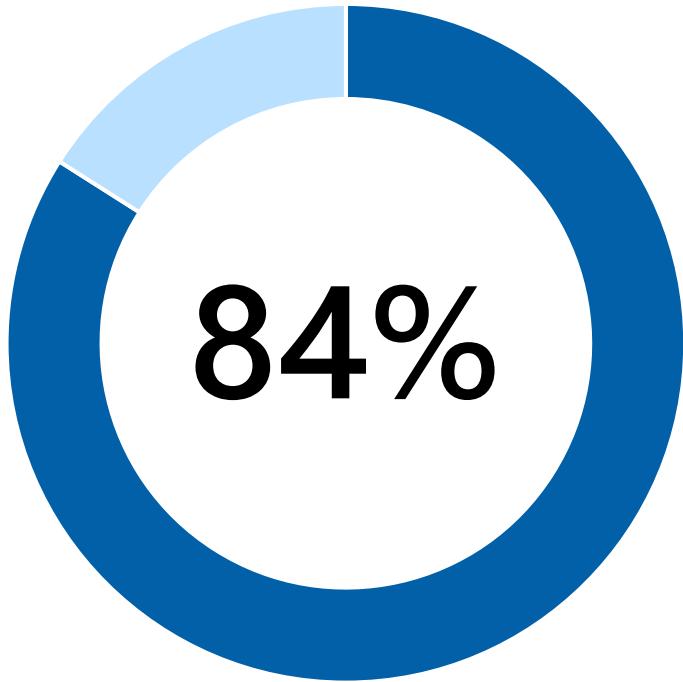
- Telemetry also showed an increase in the span of work time
 - Observationally: a 28% increase in after-hours work, and a 14% increase in weekend work (Microsoft WTI).
 - Causally: 10% higher workweek span relative to baseline
- Emergence of a 'third productivity peak',
 - Emails are the most frequent activity during the after-hour work (Morshed et al. 2022).



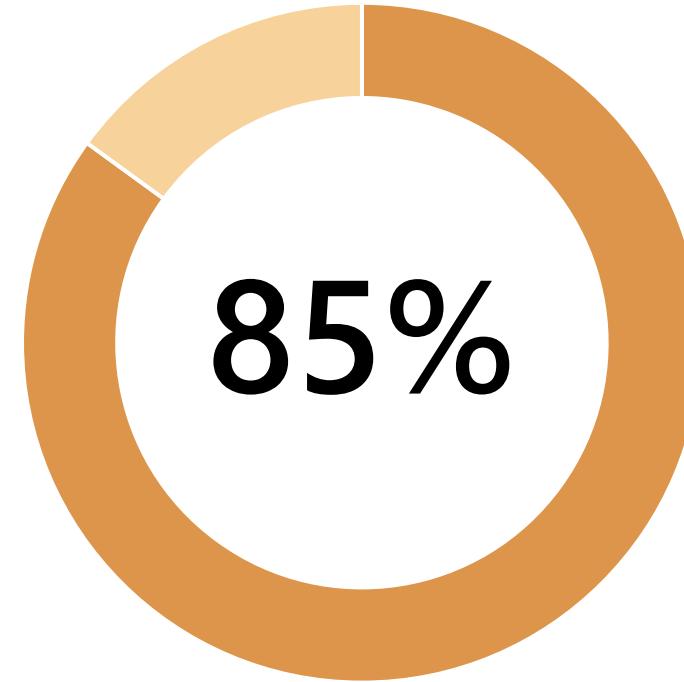
Additional productivity peak after hours as indicated by keyboard activity on productivity app (WTI/Morshed et al. 2022)

Substantial individual heterogeneity

- Some people prefer WFH, some prefer going to an office
- Some are more productive at home, some in the office
- BUT there are network effects



of employees would be
motivated by the **promise of
social connection with
coworkers**



of employees are
**motivated by rebuilding
team bonds**

Individual heterogeneity doesn't mean individual decision-making

- Some people prefer WFH, some prefer going to an office
- Some are more productive at home, some in the office
- But there are network effects
 - Preferences:
 - Most people who want to go into the office, want to go to see their colleagues
 - Some people who prefer working at home would go to the office if they knew everyone else on their team would be there
 - Productivity
 - Effects on focus isn't driven by colleagues (or may be negatively so)
 - Effects on collaboration require colleagues

Communication
in organizations
became more
siloed

Dynamic Silos: Increased Modularity in Intra- organizational Communication Networks during the Covid-19 Pandemic

Jonathan Larson, Tiona Zuzul, Emily Cox Pahnke, Neha Parikh Shah, Patrick Bourke, Nicholas Caurvina, Fereshteh Amini, Youngser Park, Joshua Vogelstein, Jeffrey Weston, Christopher White, Carey E. Priebe

<https://arxiv.org/pdf/2104.00641.pdf>

- Study of anonymized metadata from over 4,000 organizations worldwide, including 1.4 billion accounts.
 - In 2020, communication networks in organizations around the world became more modular or siloed compared to 2019
 - This pattern broadly holds across countries and seems to coincide with the imposition of national emergency orders.

What about the causal effect?

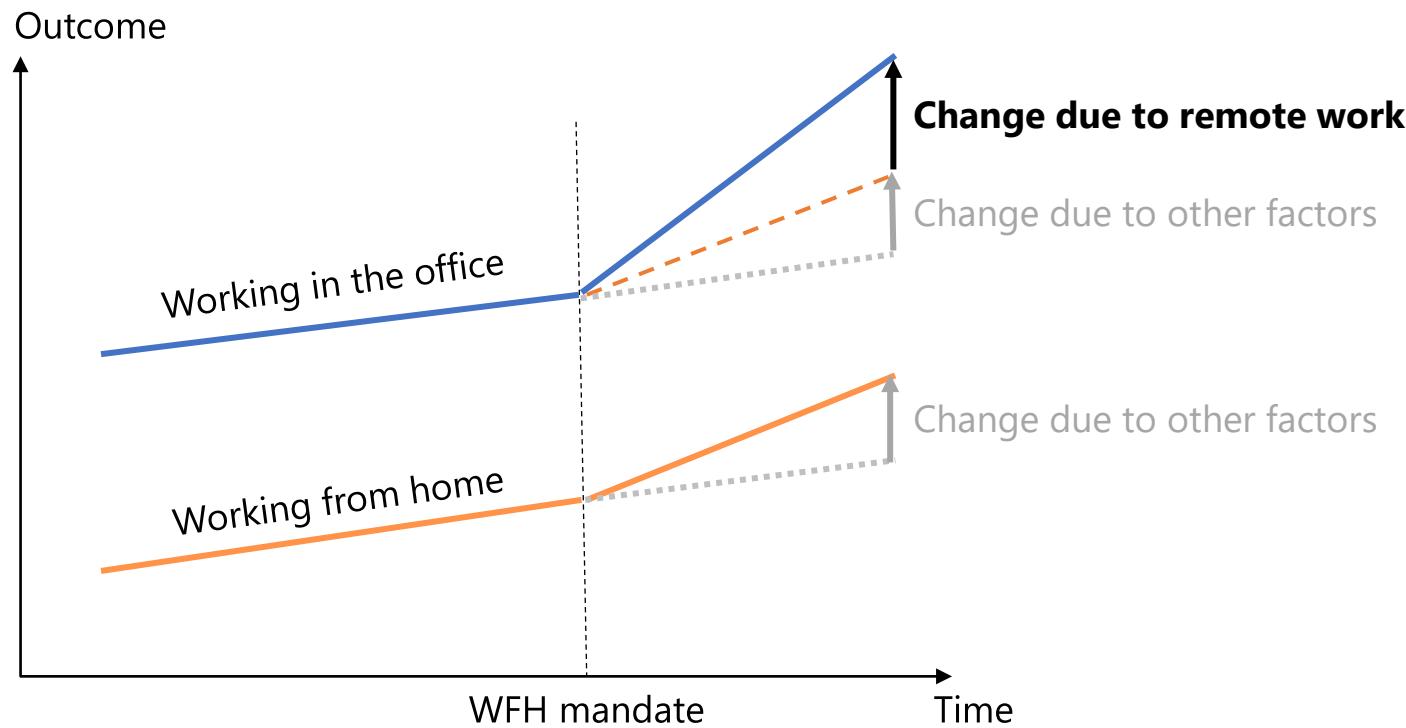
The effects of remote work on collaboration among information workers

Longqi Yang, David Holtz, Sonia Jaffe, Siddharth Suri, Shilpi Sinha, Jeffrey Weston, Connor Joyce, Neha Shah, Kevin Sherman, Brent Hecht, Jaime Teevan

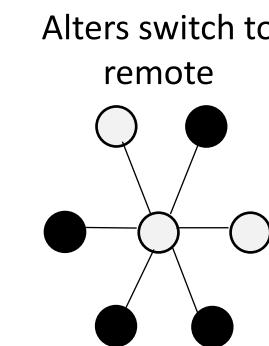
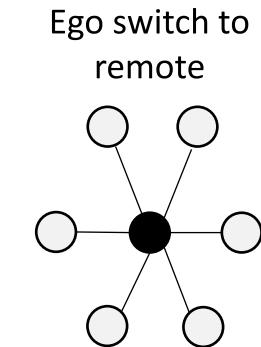
<https://www.nature.com/articles/s41562-021-01196-4>



Difference-in-differences

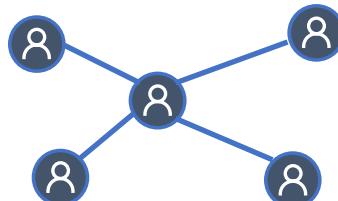


Direct effect & collaborator effects
(black indicates switching to remote)



Results (collaboration network)

No effect on # of connections



Decreases # of group connected to by **.07 FV**

Decreases # of cross-group ties by **.04 FV**

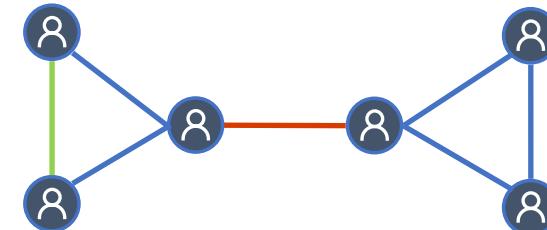
Decreases share of time with cross group ties by **.26 FV**



Decreases # of bridging ties by **.09 FV**

Decreases share of time spent with bridging ties by **.41 FV**

Increases clustering by **.06 FV**



Decreases # of churned ties by **.05 FV**

Decreases # of added ties by **.04 FV**

Decreases share of time with added ties by **.28 FV**

Remote work caused

Collaboration networks to
become more siloed and less
dynamic

Coordination is key

- Surveys say people want to go in to see their colleagues
 - Lots of people don't know when to go in
- Options:
 - Company-wide policies (e.g. everyone must come in Tu and Th)
 - Inflexible, inefficient use of real estate,
 - Team-level policy
 - “Cluster and diversify”
 - Individual choices
 - Need guidelines and tools for coordination
- Motivation for “Microsoft Places”

Solutions

- Fixing / mitigating weaknesses
- Leaning into strengths
- Leveraging relative strengths and weaknesses

Optimizing Hybrid

can be used for both product and policy design

Mitigating
Weaknesses

Building on
Strengths

Leverage
Strengths

Requires coordination

Remote

- Improving remote interactions
 - Spatial audio
 - Reducing “zoom fatigue”
 - Helping people “read the room”
- Figuring out how to socialize and build social capital remotely
- Better talk track support while presenting
- Help people mix work and life
- Asynchronous collaboration features
- Augmented reality experiences (displaying names is just the beginning)
- Individual work / focus time
- ‘Standup’ meetings & presentations

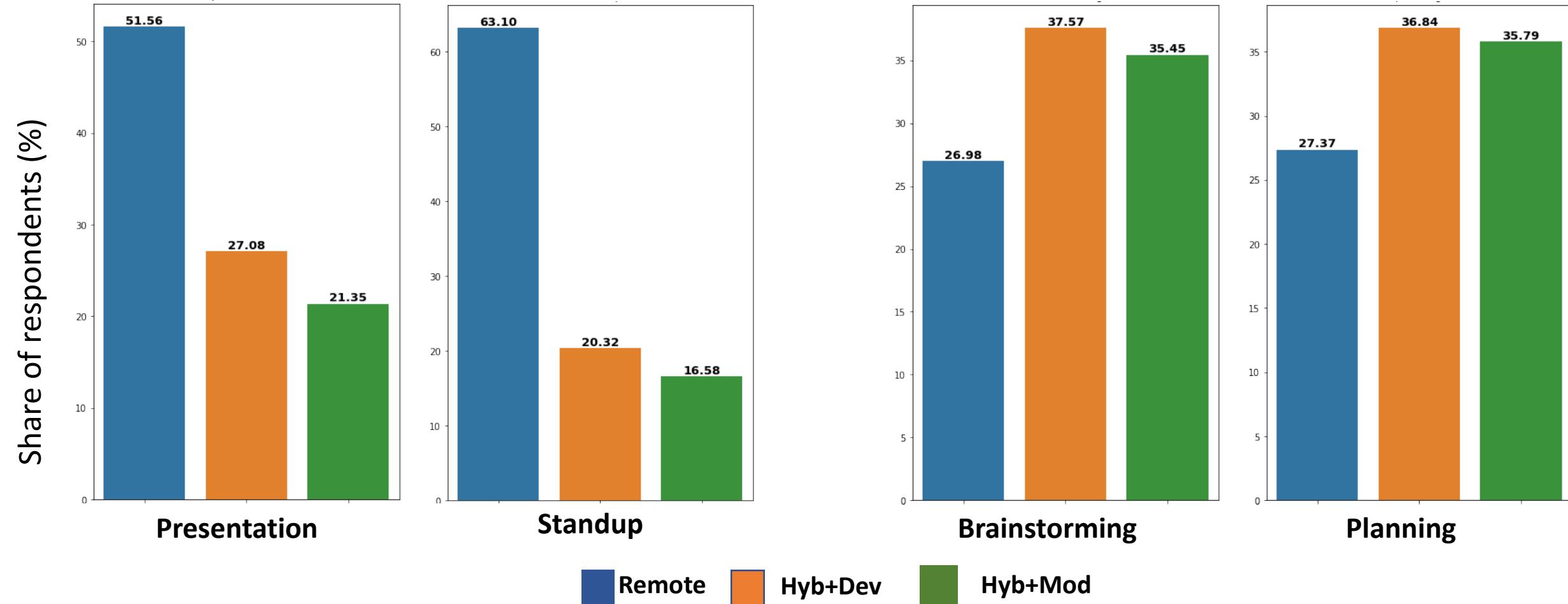
Collocated

- Sound mitigation technologies that help people focus in the office
- Flexible hours decreases commute time
- Mixed reality experiences
- Software that minimizes the challenges of space constraints
- New office layouts + software to optimize serendipity and spontaneity
- Employee services (daycare, laundry, etc.)
- New collaboration devices like Surface Hub
- Team building / relationships
- Brainstorming

Preference for meeting format depends on type

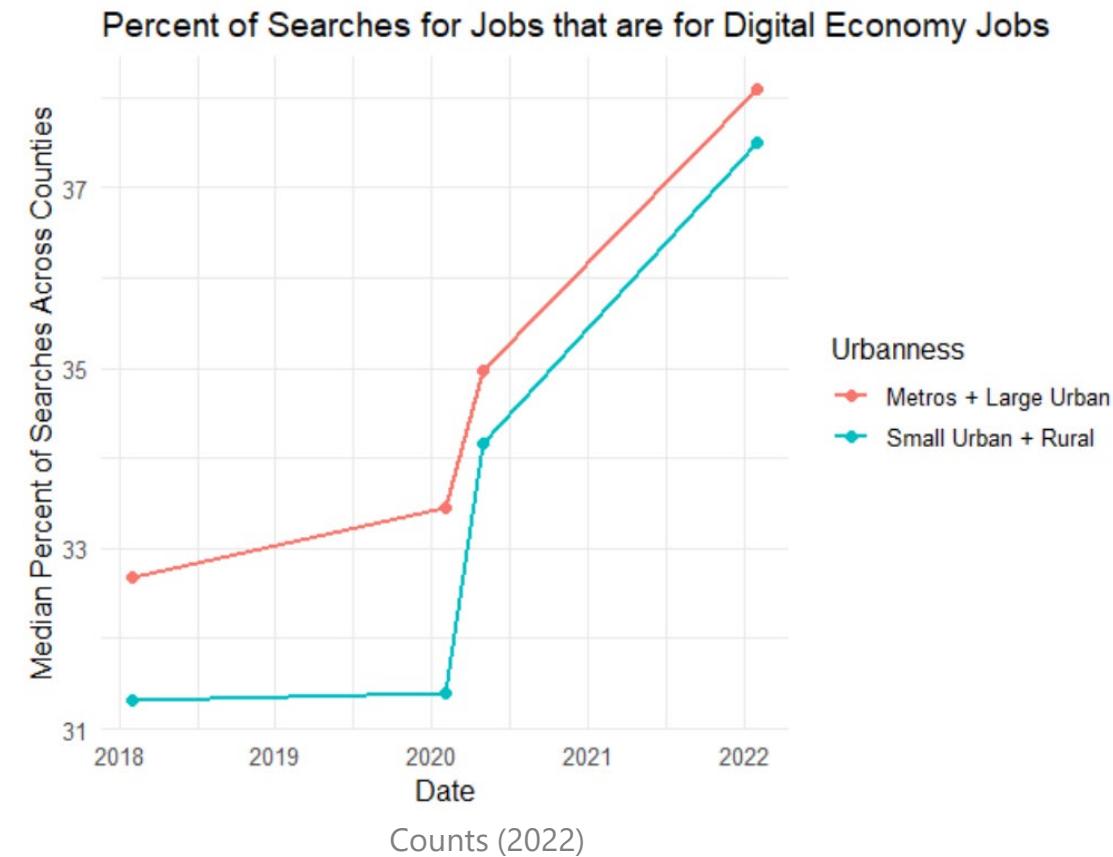


Which meeting format do you prefer?



Remote work broadening opportunities

- Job interest in digital economy sectors (innovation, business, finance, art) in the U.S. spiked during the onset of the pandemic.
- Searches for digital economy jobs on Bing jumped by about 5% compared to before the pandemic, including sustained growth following the initial pandemic shock
 - The interest surge was most pronounced for small urban and rural areas.
- LinkedIn reports people in Sun Belt cities are applying to remote jobs at a rate substantially higher than the national average.
 - Women also more likely to apply to remote jobs



Questions?

Most findings are in the NFW report aka.ms/nfw2022

Research papers are on the website aka.ms/nfw