

Future of Work: Tech Industry

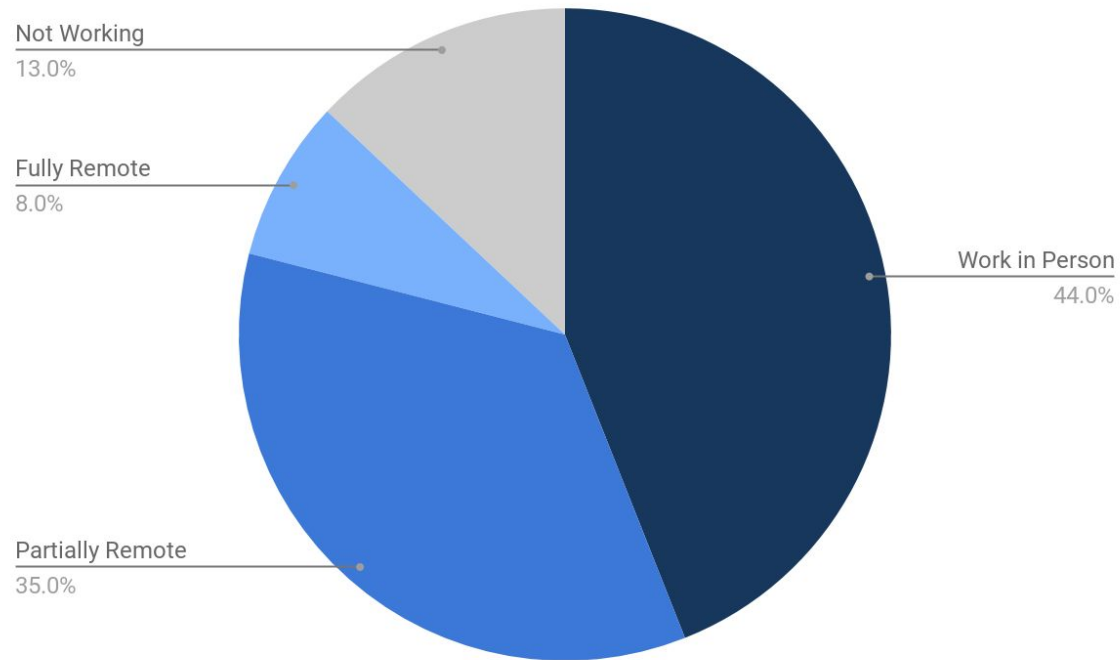
Sophie, Subhash, and Claire

BEP - October 28

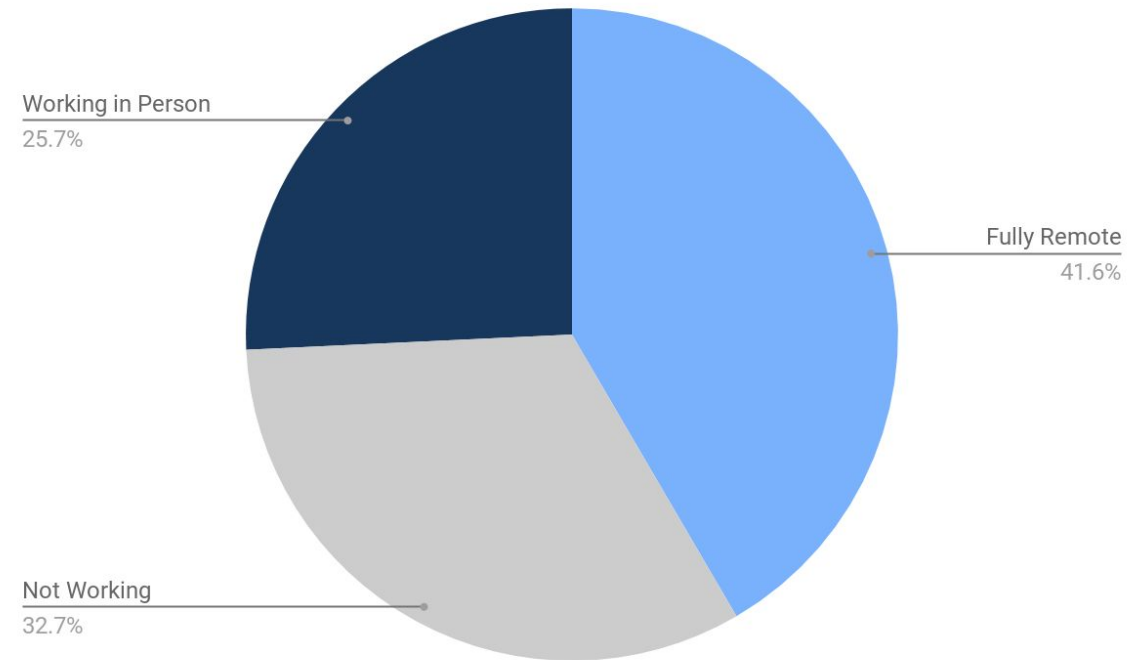


WFH has increased in prevalence

Pre-COVID



Present



Individuals prefer working from home

- 83% of tech workers have been able to work from home
- 27% say they'll want to work from home all the time from now on
- Over 50% want hybrid schedules after COVID
- Only 5 % say they'll want to work from home less often



WFH increases retention and employee satisfaction

- 83% of people would turn down a job that didn't offer flexible working
- People are willing to take an 8% hourly wage cut to work from home
- Employees experience 25% lower stress levels
- Telecommuting improves employee satisfaction



Remote workers are more productive



Employees self scoring their productivity

Office Workers

6.5/10

Remote Workers

7.7/10

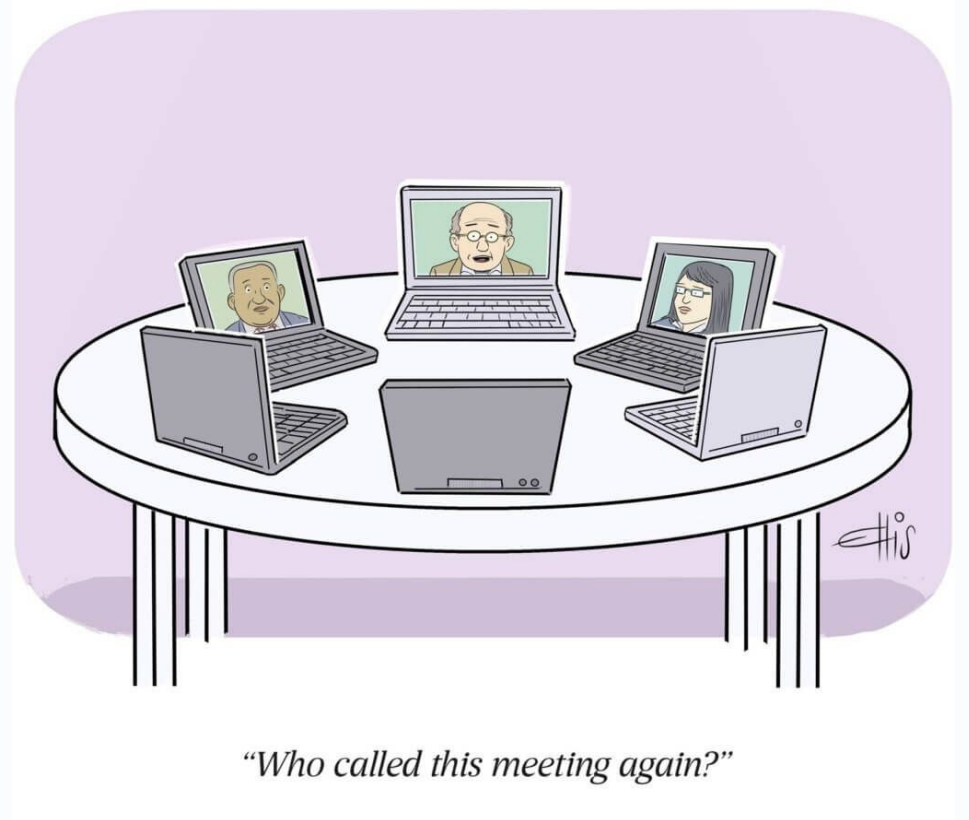
Remote working hinders innovation

- WFH has hurt innovation by impeding:
 - Spontaneous lunch chats
 - Informal drop-ins
 - Creative spitballing during meetings
- In 2013, Yahoo stopped letting employees work from home because of decreased innovation

Yahoo Orders Home Workers Back to the Office

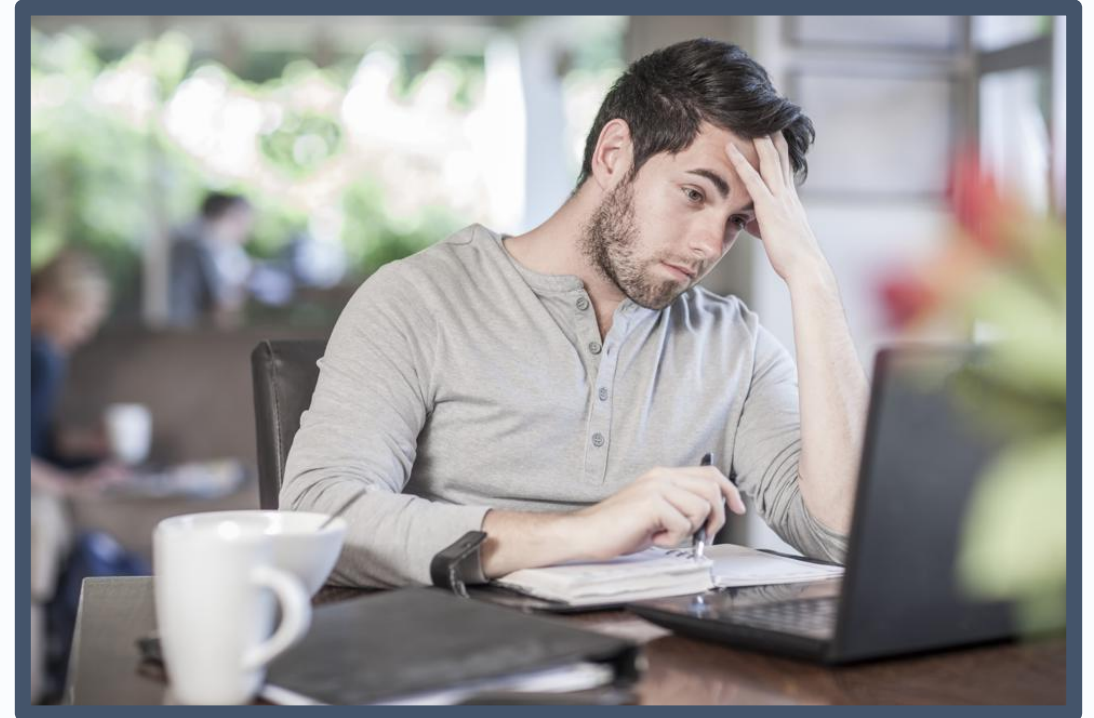
By Claire Cain Miller and Catherine Rampell

Feb. 25, 2013



WFH raises possible concerns

- Productivity varies by person
 - Lack of home offices
 - Professional Isolation
- Technological challenges
 - Privacy and data security
 - Strong internet connections



Keys to optimizing individuals' WFH experience

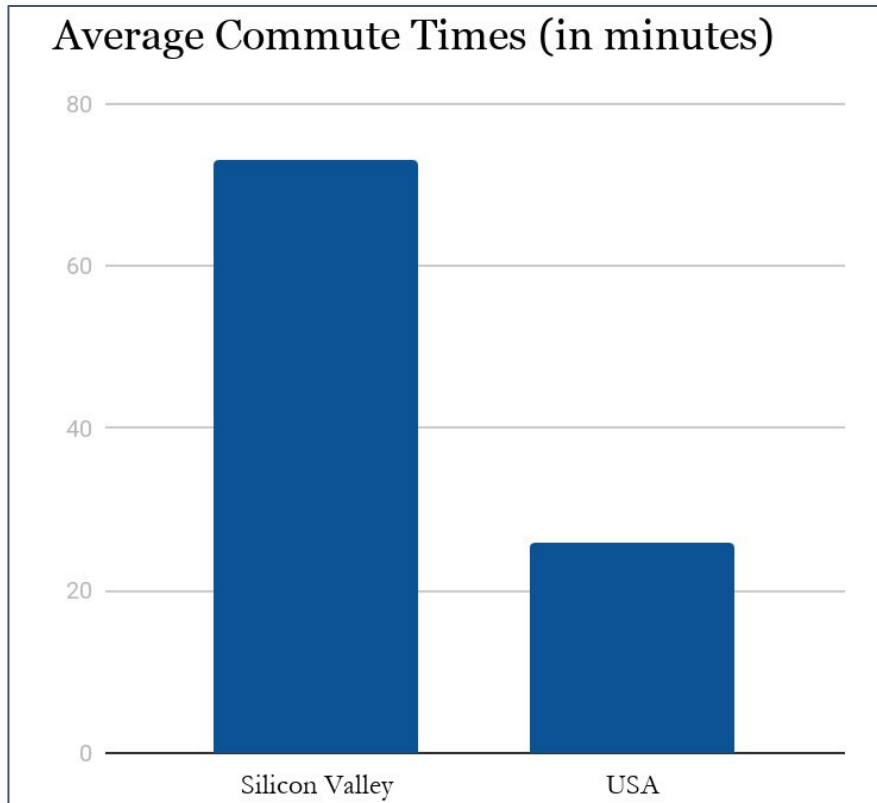
- Make meetings more casual
- Encourage screen sharing and the use of virtual whiteboards
- Host online “office hours”
- Normalize coffee chatting

Overall, it's important to cultivate a friendly and collaborative virtual atmosphere

WFH eliminates pain point of commuting

Individuals

- \$4,523.04 in commuting costs per person per year



Employers

- Minimized productive hours
- Increased tardiness, sick days
- Employers **lose \$1,800 per employee per year** on unscheduled absences

Tech firms' overhead breakdown

Office spaces

Transportation

Food

Tech industry: **26%**
of US office
leasing activity

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\$249,000 per
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+\$100 per month
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stipends (Apple)

→ **\$35M annually**

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Food

\$20 per employee per
day (Google)

→ **\$721M annually**

Optimizing WFH for firms

Office spaces

- Decrease use of office space
- Provide WFH stipend
→ **\$500-1000** per employee

Transportation

- Reduce number of transit buses
- Allow **\$50** per month transportation stipends

Food

- Meals on Wheels: **\$10** per employee per day

Tech companies should adopt a hybrid work model post-COVID

Productivity Changes



Establish expectations, schedule in advance



Develop measurable employee performance metrics



Regular team / manager meetings

Company Culture / Benefits



Cultivate an innovative virtual



company culture

Reduce in-person office spaces



Adapt amenities



Introduce WFH benefits

Sources

Slide 2:

- <https://news.stanford.edu/2020/06/29/snapshot-new-working-home-economy/>
- <https://www.dallasfed.org/~media/documents/research/papers/2020/wp2017r1.pdf>

Slide 10:

- <https://pubmed.ncbi.nlm.nih.gov/15576620/>
- <https://www.svl.org/traffic-relief-its-about-time/>
- <https://productiveleaders.com/telecommuting-business-profits/>
- <https://www.npr.org/2018/09/20/650061560/stuck-in-traffic-youre-not-alone-new-data-show-american-commute-times-are-longer>

Slide 11:

- <https://www.nytimes.com/2013/02/26/technology/yahoo-orders-home-workers-back-to-the-office.html>
- <https://www.macrumors.com/2014/03/31/apple-expanding-employee-transportation-program/>
- <https://productiveleaders.com/telecommuting-business-profits/>
- <https://www.businessinsider.com/how-much-googlers-eat-2014-8>
- <https://www.cushmanwakefield.com/en/united-states/insights/2020-office-leasing-spotlight>

Slide 12

- <https://www.nytimes.com/2013/02/26/technology/yahoo-orders-home-workers-back-to-the-office.html>
- <https://www.macrumors.com/2014/03/31/apple-expanding-employee-transportation-program/>
- <https://productiveleaders.com/telecommuting-business-profits/>
- <https://www.businessinsider.com/how-much-googlers-eat-2014-8>

Market Sizing I

How many hours will SBC members spend on Zoom for the fall semester?

- SBC members: ~ 25 per class * 4 classes = **100 members**
- Classes: 3 hrs per class per week * 5 classes = **15 hrs/week**
- Clubs: 1.5 hrs per club per week * 3 clubs = **4.5 hrs/week**
- Social, p-setting, etc.: **~ 3 hrs/week**

Total hrs per week per member on Zoom = **22.5**

Total hours = $22.5 \text{ hrs / week / member} * 15 \text{ weeks} * 100 \text{ members}$
= **33,750 hrs**

Market Sizing II

ii. How much money did MIT spend providing all undergraduate students with iPads?

- total undergraduate population - 4530
 - assume that about 30% of the undergrad population already had their own ipads/tablets and didn't use the loaner program
- cellular enabled ipad air gen 3 w/ 256 GB (\$699) (school discount - 20%)
- apple pencil (\$89) (education price)
- protective case (\$65) (bulk discount - 20%)

$3171 \text{ students} * (\$560 + \$89 + \$52) = \$2,222,871$

Market Sizing III

Number of people doing more online work:

1st - 12th grades

3M per grade

College kids

$\approx 2.5M$ per grade? (fewer college kids than high school)

$= 46M$

Approx screen time goes from 5 hr/day \rightarrow 10 hr/day
 $= 230M$ hr extra/day

Total workforce $\approx 200M$

Percent of online workers $\approx 60\%$?

$= 120M$ online workers

Screen time goes from 8 hr \rightarrow 12 hr (already worked on lot online)

$460M$ hr extra/day

$\frac{7 \text{ days}}{\text{week}} (460M \text{ hrs/day} + 230M \text{ hrs/day})$

$\approx 5B$ extra hours per week

Is this just a honeymoon phase?

Problems

- Little to no in-person interaction can have adverse effects
 - Zoom fatigue
- increasingly blurred lines between work and leisure

Solutions

- People crave in person interactions (hybrid schedule)
- Settings work-life boundaries
- Some factors negatively affecting WFH will go away post-pandemic
 - Children homeschooled
 - Concentrated work space
 - Increased isolation from friends and family