

Where are we on Working from Home?

Nick Bloom (Stanford), Feb 6th 2025



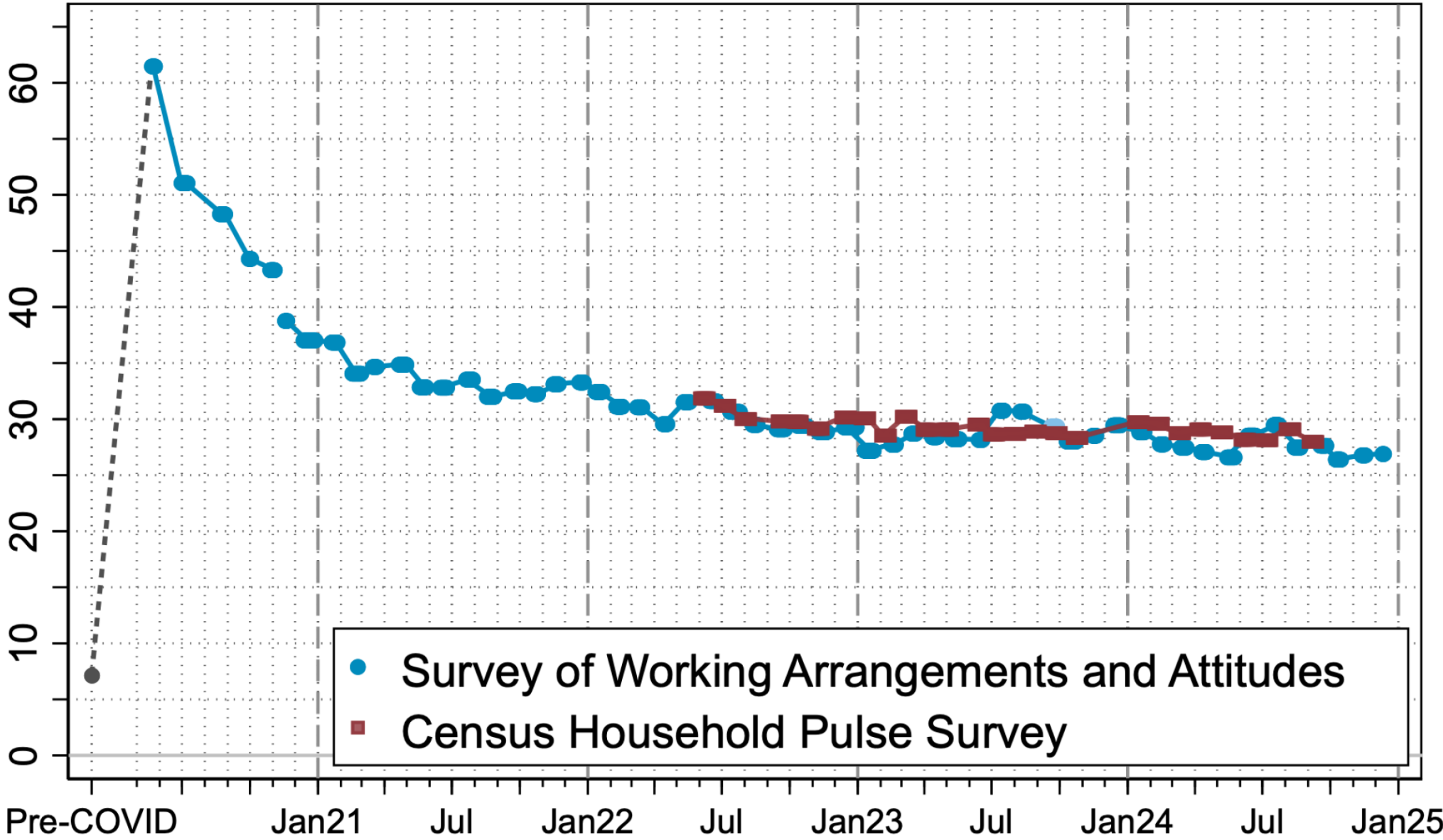
Going to cover two sections

>>>> Current state of working from home

>>>> Thoughts on managing hybrid and remote

WFH stabilizing at about 25% of days from 2023 onwards

US full days worked from home, %

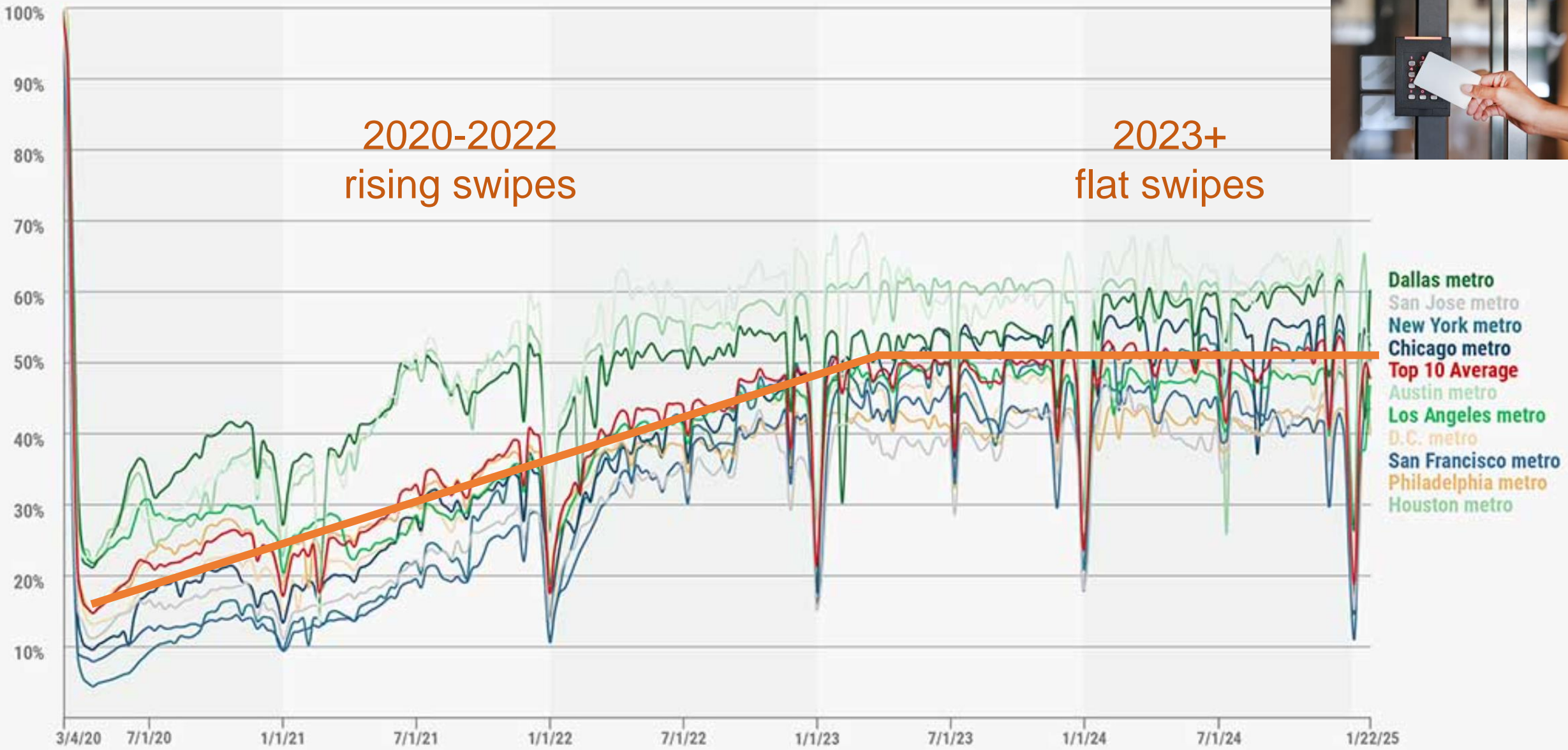


Source: 216,587 (SWAA) N = 923,587 (HHP). SWAA data from survey responses weighted to match the US population. Pre-covid data from the American Time Use Survey. CHPS respondents weighted to match the US population aged 20 to 64 in households with incomes above \$25,000.

Survey of Workplace Attitudes and Arrangements (Barrero, Bloom and Davis 2021) <https://wfhresearch.com/>

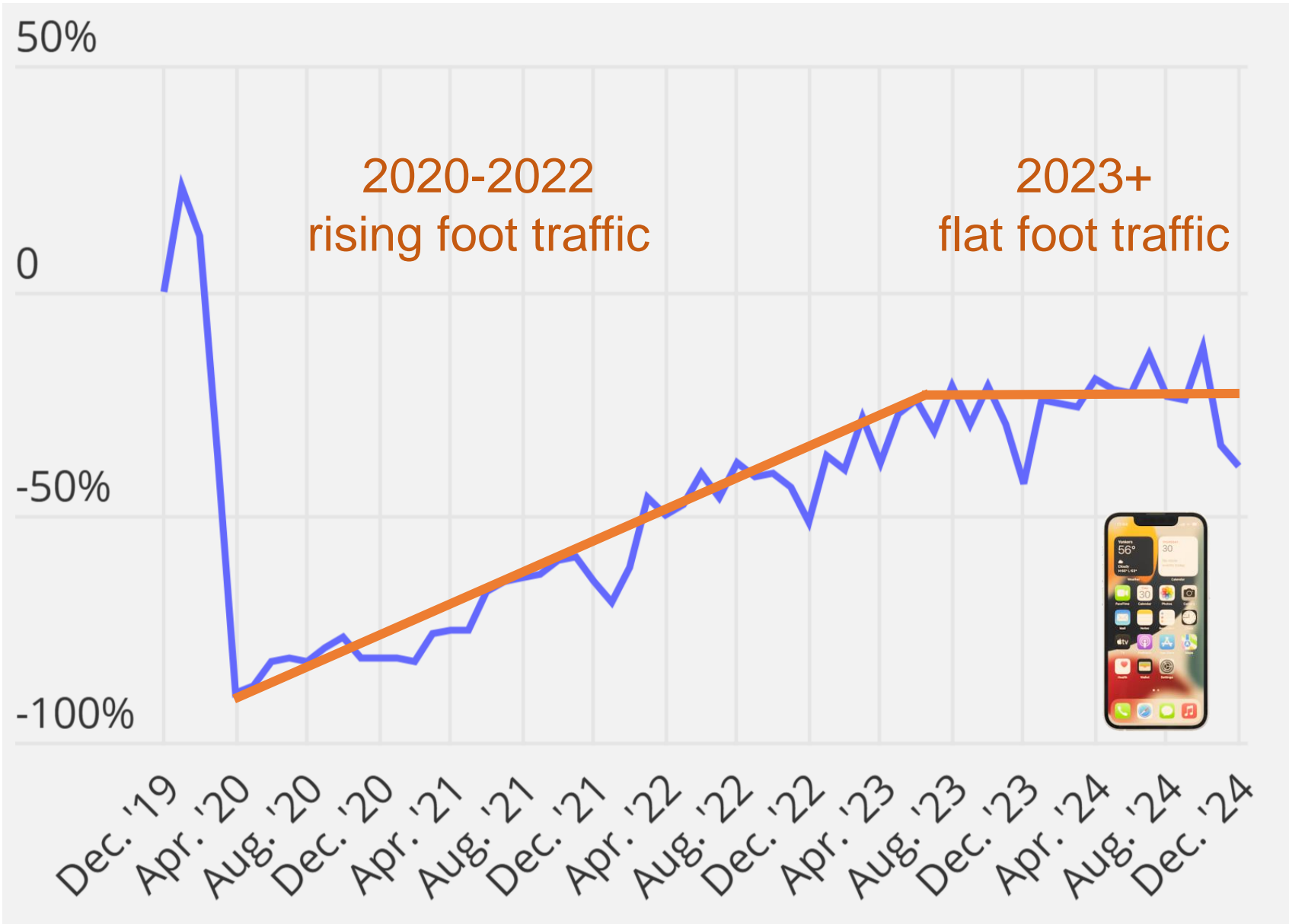
Same story in office *swipe card data* - stabilizing from 2023 onwards

Kastle office occupancy data



Same story in cell-phone location *data* - stabilizing from 2023 onwards

Placer-AI cell phone foot traffic into US offices



Source: Placer.ai Nationwide Office Building Index: The office building index analyzes foot traffic data from over 700 office buildings across the country. It only includes commercial office buildings, and commercial office buildings with retail offerings on the first floor (like an office building that might include a national coffee chain on the ground floor). It does NOT include mixed-use buildings that are both residential and commercial.

<https://www.placer.ai/blog/placer-ai-office-index-december-2024-recap>

RCT on 1612 engineers, marketing and finance professionals found hybrid WFH had no performance impact and cut quit rates by 35%

Hybrid working from home improves retention without damaging performance

nature

<https://doi.org/10.1038/s41586-024-07500-2>

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Received: 15 August 2023

Accepted: 30 April 2024

Published online: 12 June 2024

Open access

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Working from home has become standard for employees with a university degree. The most common scheme, which has been adopted by around 100 million employees in Europe and North America, is a hybrid schedule, in which individuals spend a mix of days at home and at work each week^{1,2}. However, the effects of hybrid working on employees and firms have been debated, and some executives argue that it damages productivity, innovation and career development³⁻⁵. Here we ran a six-month randomized control trial investigating the effects of hybrid working from home on 1,612 employees in a Chinese technology company in 2021–2022. We found that hybrid working improved job satisfaction and reduced quit rates by one-third. The reduction in quit rates was significant for non-managers, female employees and those with long commutes. Null equivalence tests showed that hybrid working did not affect performance grades over the next two years of reviews. We found no evidence for a difference in promotions over the next two years overall, or for any major employee subgroup. Finally, null equivalence tests showed that hybrid working had no effect on the lines of code written by computer-engineer employees. We also found that the 395 managers in the experiment revised their surveyed views about the effect of hybrid working on productivity, from a perceived negative effect (–2.6% on average) before the experiment to a perceived positive one (+1.0%) after the experiment. These results indicate that a hybrid schedule with two days a week working from home does not damage performance.

Working from home (WFH) surged after the COVID-19 pandemic, with university-graduate employees typically WFH for one to two days a week during 2023 (refs. 2, 6). Previous causal research on WFH has focused on employees who are fully remote, usually working on independent tasks in call-centre, data-entry and helpdesk roles. This literature has found that the effects of fully remote working on productivity are often negative, which has resulted in calls to curtail WFH^{7–10}. However, there are two challenges when it comes to interpreting this literature. First, more than 70% of employees WFH globally are on a hybrid schedule. This group comprises more than 100 million individuals, with the most common working pattern being three days a week in the office and two days a week at home^{2,6}. Second, most employees who are regularly WFH are university graduates in creative team jobs that are important in science, law, finance, information technology (IT) and other industries, rather than performing repetitive data-entry or call processing tasks^{10,11}.

This paper addresses the gap in previous studies in two key ways. First, it uses a randomized control trial to examine the causal effect of a hybrid schedule in which employees are allowed to WFH two days per week. Second, it focuses on university-graduate employees in software engineering, marketing, accounting and finance, whose activities are mainly creative team tasks.

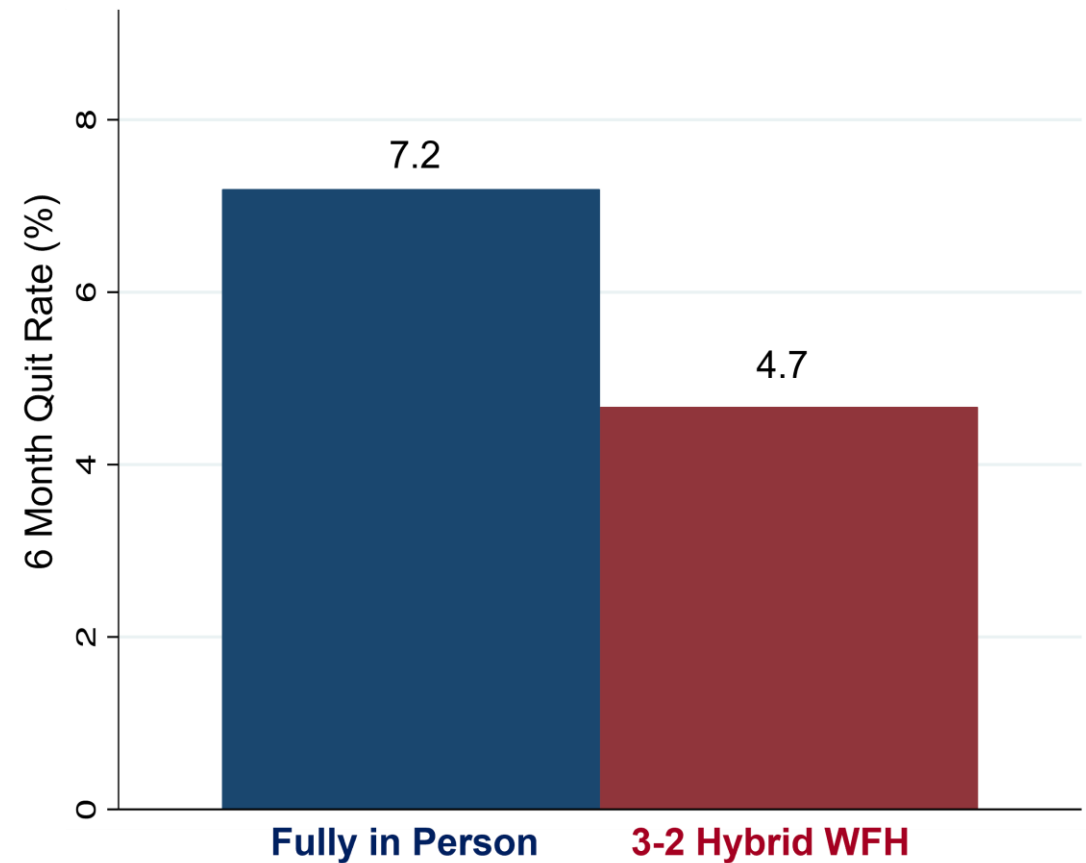
Our study describes a randomized control trial from August 2021 to January 2022, which involved 1,612 graduate employees in the Airfare

and IT divisions of a large Chinese travel technology multinational called Trip.com. Employees were randomized by even or odd birthdays into the option to WFH on Wednesday and Friday and come into the office on the other three days, or to come into the office on all five days.

We found that in the hybrid WFH (‘treatment’) group, attrition rates dropped by one-third (mean_{control} = 7.20, mean_{treat} = 4.80, $t(1610) = 2.02$, $P = 0.043$) and work satisfaction scores improved (mean_{control} = 7.84, mean_{treat} = 8.19, $t(1343) = 4.17$, $P < 0.001$). Employees reported that WFH saved on commuting time and costs and afforded them the flexibility to attend to occasional personal tasks during the day (and catch up in the evenings or weekends). These effects on reduced attrition were significant for non-managerial employees (mean_{control} = 8.59, mean_{treat} = 5.33, $t(1215) = 2.23$, $P = 0.026$), female employees (mean_{control} = 9.19, mean_{treat} = 4.18, $t(568) = 2.40$, $P = 0.017$) and those with long (above-median) commutes (mean_{control} = 6.00, mean_{treat} = 2.89, $t(609) = 1.87$, $P = 0.062$).

At the same time, we found no evidence of a significant effect on employees’ performance reviews, on the basis of null equivalence tests, and no evidence of a difference in promotion rates over periods of up to two years (‘Null results’ section of the Methods). We did find significant differences in pre-experiment beliefs about the effects of WFH on productivity between non-managers and managers. Before

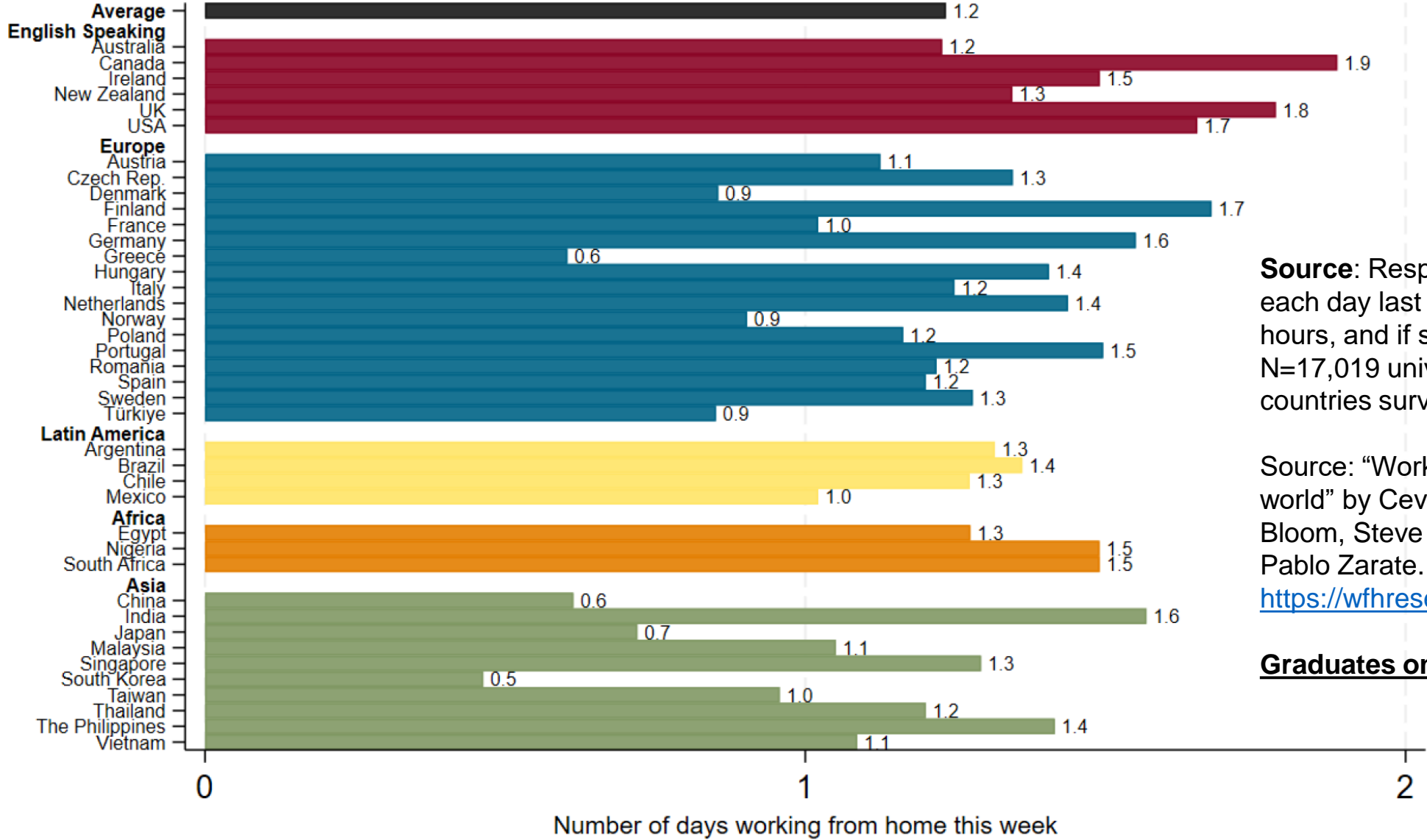
Hybrid WFH lowered employee quit rates by 35%



Source: Attrition rates for 1612 engineers, marketing and finance professionals of Trip.com who were randomized between September 2021 and February 2022 by even and odd birthdays into control (5-days a week in the office) and treatment (Mon, Tue and Thur in the office; Weds and Fri working from home). Difference statistically significant at the 5% level. Details in Bloom, Han and Liang (2022) ‘How Hybrid Work from Home Works Out’.

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WFH varies by country - highest in North America lowest in Asia



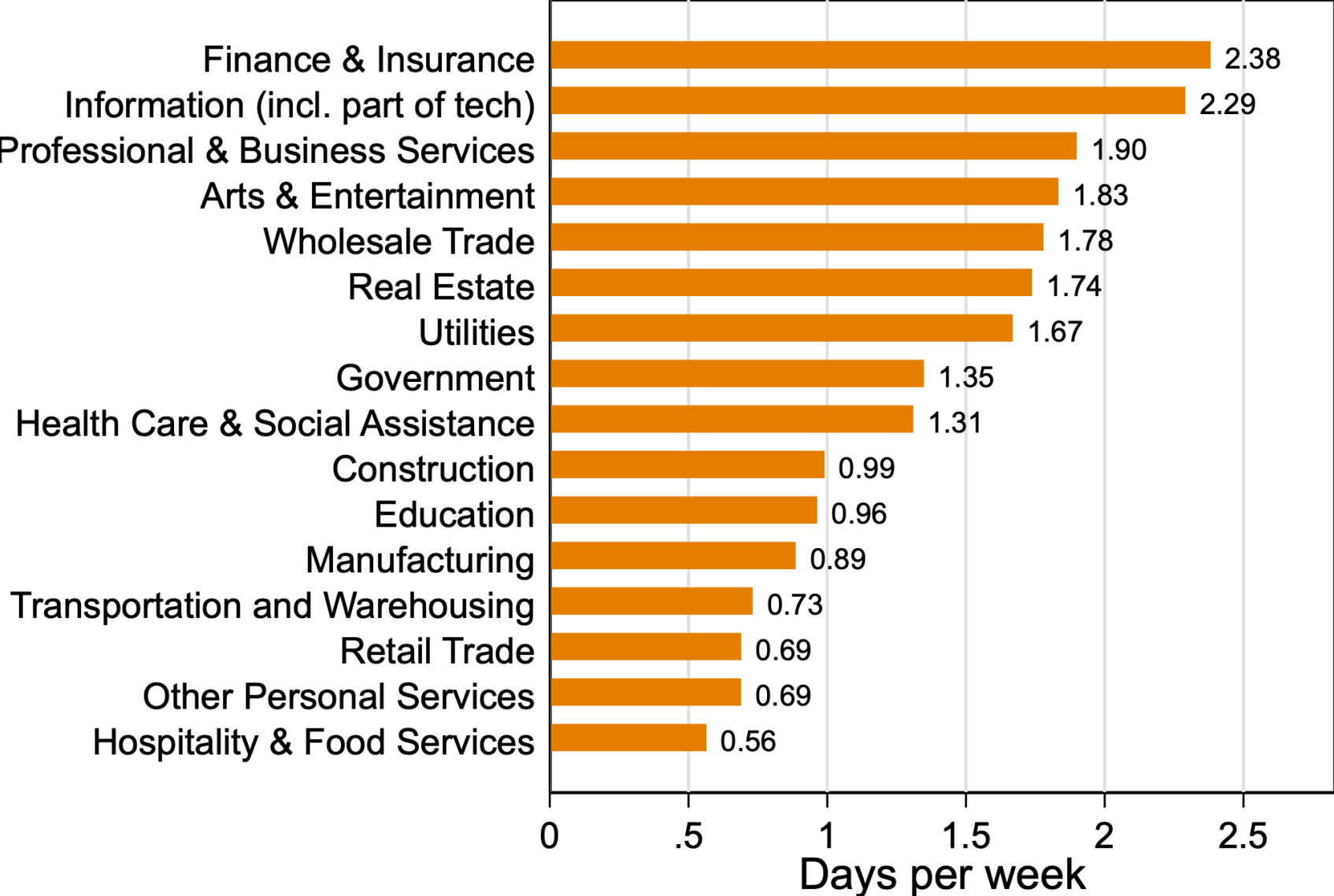
Source: Responses to the question “For each day last week, did you work 6 or more hours, and if so where?”. Sample of N=17,019 university graduate workers in 40 countries surveyed in Nov 2024-Feb2025

Source: “Working from home around the world” by Cevat Aksoy, Jose Barrero, Nick Bloom, Steve Davis, Mathias Dolls and Pablo Zarate.
<https://wfhresearch.com/gswadata/>

Graduates only

WFH varies by industry – highest in Finance and Tech

Current WFH: all wage and salary employees by industry



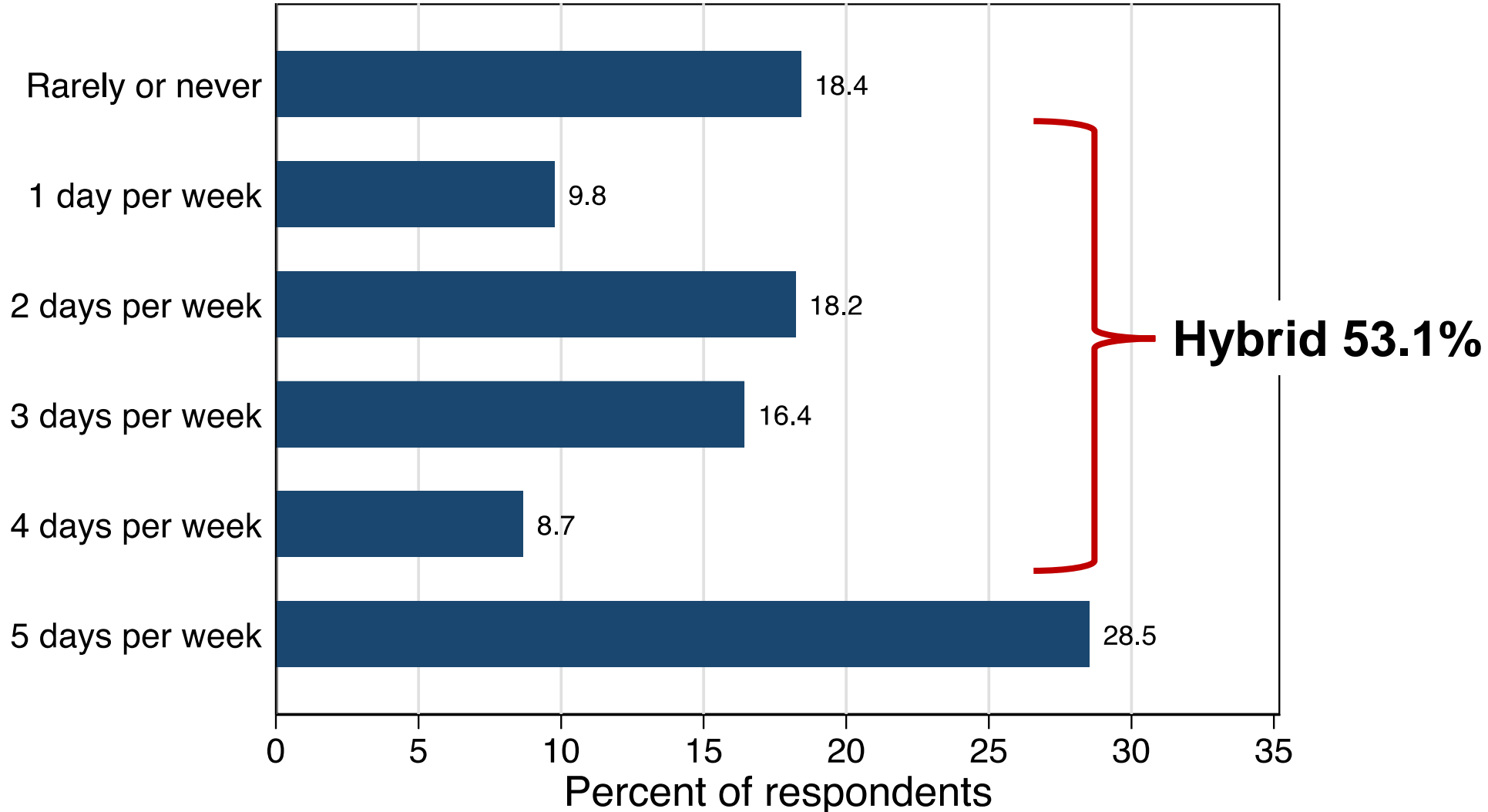
Notes: Survey of Workplace Attitudes and Arrangements www.wfhresearch.com Sample from June 2024 to November 2024

>>>> Current state of working from home

>>>> Thoughts on managing hybrid and remote

Managing this is *hard* - there is a wide variation in what employees

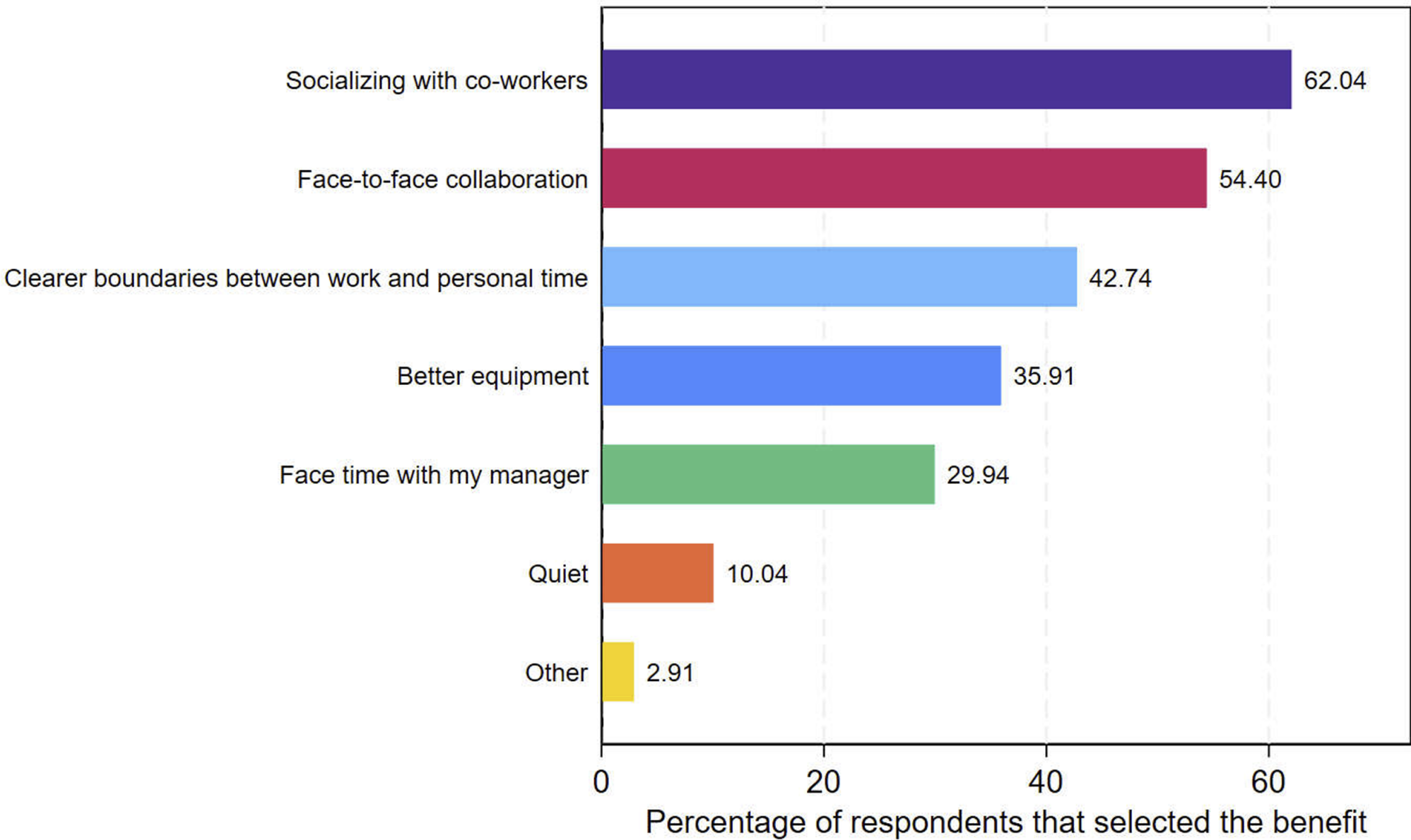
Worker desired amount of post-COVID WFH days



Sample: Full-time wage and salary employees who are able to WFH. N = 11439

1) Coordination – office benefits are being with co-workers

Qu: “What are the top three benefits of working on your employer’s business premises?”



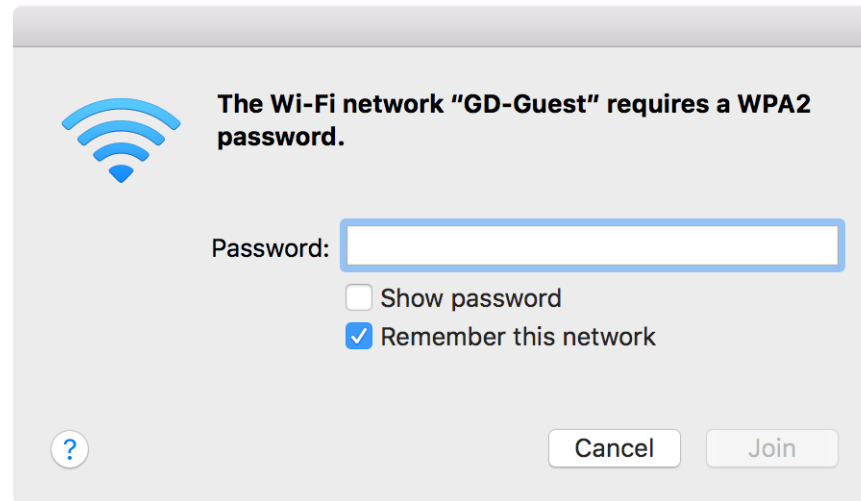
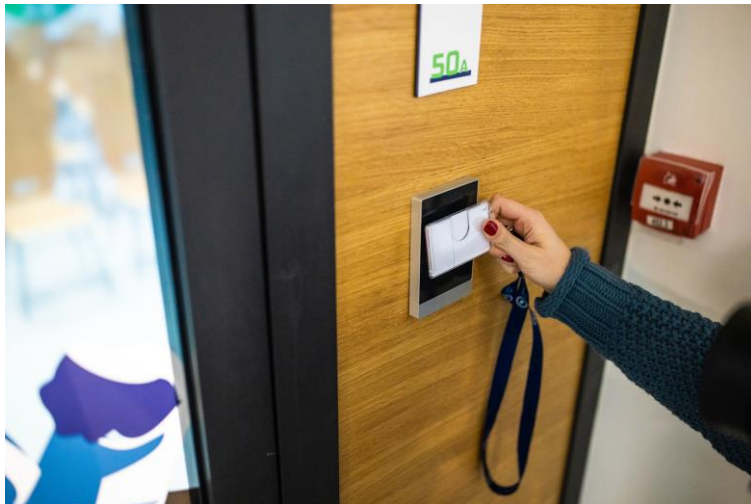
Notes: Among workers that have work-from home experience during the COVID-19 pandemic. Responses to the question “What are the top benefits of working on your employer’s business premises? Please choose up to three”. Sample of N=20,732 workers in 34 countries surveyed in April-May 2023. All values are available at <https://bit.ly/Figures-GSWA-2023>

Steps to support coordinated hybrid

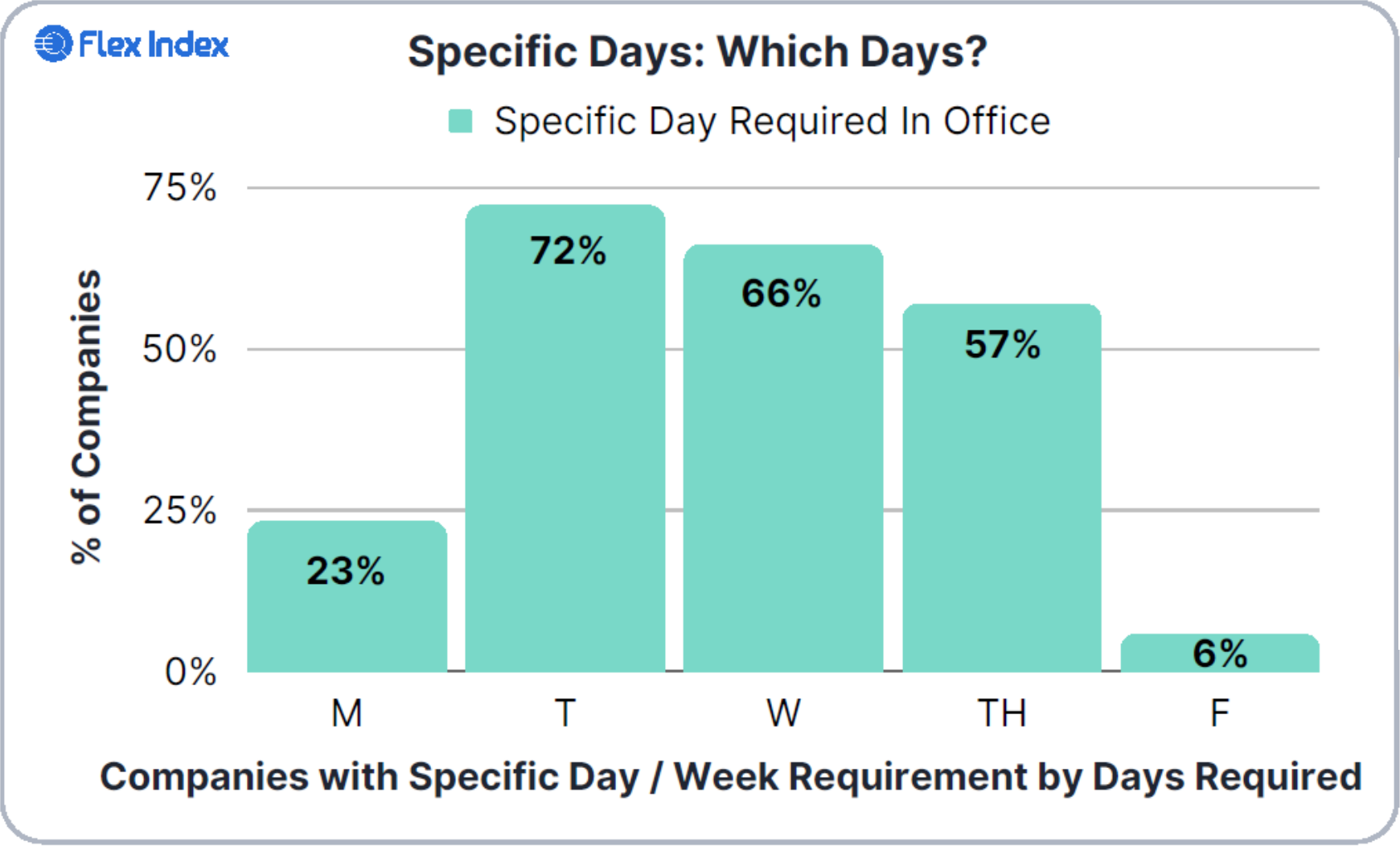
1) Attendance data: swipes, wifi logins & travel

2) Regular dissemination: monthly reports

3) Sensible plans: 3 days is a lot easier to enforce than 5



Coordination generates the hybrid squeeze into Tuesday to Thursday



Source: [Flex Index](https://flex.scoopforwork.com) (flex.scoopforwork.com) employee surveys and publicly available data on companies with a specific day / week office requirement. N = 229 companies. The Flex Index is presented by [Scoop](https://scoopforwork.com) (scoopforwork.com).

2) Performance reviews critical for managing output with WFH

- Office employees can be (partly) evaluated by observing inputs - hours & activity
- WFH employees instead need output evaluation – data, assessments & discussion
- Importantly this is not surveillance, but “outcome” performance reviews



Porte A

	Out	Nov	Dez	4Tri	Jan	Fev	Mar	1Tri
Total Segmentos	61,53	83,64	79,17	73,25	52,27	0,00	0,00	34,37
Total PF	70,15	76,99	75,13	68,82	42,11	0,00	0,00	26,86
Preferencial	58,09	86,85	86,87	76,92	15,16	0,00	0,00	13,43
					18,78	0,00	0,00	18,12
					37,11	0,00	0,00	25,07
					75,99	0,00	0,00	51,89
					47,40	0,00	0,00	41,84
					26,08	0,00	0,00	23,13

Porte A

SEGMENTO	PESO	META	REAL	%	PONTOS	OPORT.
Cientes					0,00	0,00
• Incr. Base Ativa	0	28	146	150,0	0,00	0,00
• Incr. Clientes c/ Ofer...	0	153	0	0,0	0,00	0,00
• Abertura Contas PF	0	120	24	11,3	0,00	0,00
• Abertura Contas Busine...	0	6	0	0,0	0,00	0,00
• Aquisição Com Of. Bási...	0	136	0	0,0	0,00	0,00
• Conversão Of. Básica	0	313	1	0,0	0,00	0,00
Vendas					0,00	0,00
• Super Auto	0	5	2	40,0	0,00	0,00
• Seguro Vida	0	47	26	55,3	0,00	0,00
• Seguro Residencial	0	25	8	32,0	0,00	0,00
• Seguro Auto	0	6	1	16,7	0,00	0,00
• Seguro Vida Master	0	2	0	0,0	0,00	0,00
• Cartões	0	140	75	53,6	0,00	0,00
• CP Protegido	0	295	70	23,7	0,00	0,00
• Capitalização	0	58	6	10,3	0,00	0,00
• Novas Cobranças Ativas	0	4	2	50,0	0,00	0,00
• Títulos Liquidados	0	5.301	1.815	34,2	0,00	0,00
Captações - Captação Líquida					0,00	0,00
• Captação Alvo	0	1.371	1.072	78,2	0,00	0,00
• Previdência Foco PF	0	184	599	325,6	0,00	0,00
• Captação Demais	0	766	-3.001	-391,8	0,00	0,00
Depósito à Vista / Float					0,00	0,00
• DAV / Float	0	100	1.708	999,0	0,00	0,00
Empréstimos - Incr. Saldo Médio					0,00	0,00
• Empréstimos Alvo PF	0	543	-118	-21,7	0,00	0,00

TOTAL SEGMENTOS 52,27

PERÍODO: Jan: 10% Jan: 27%

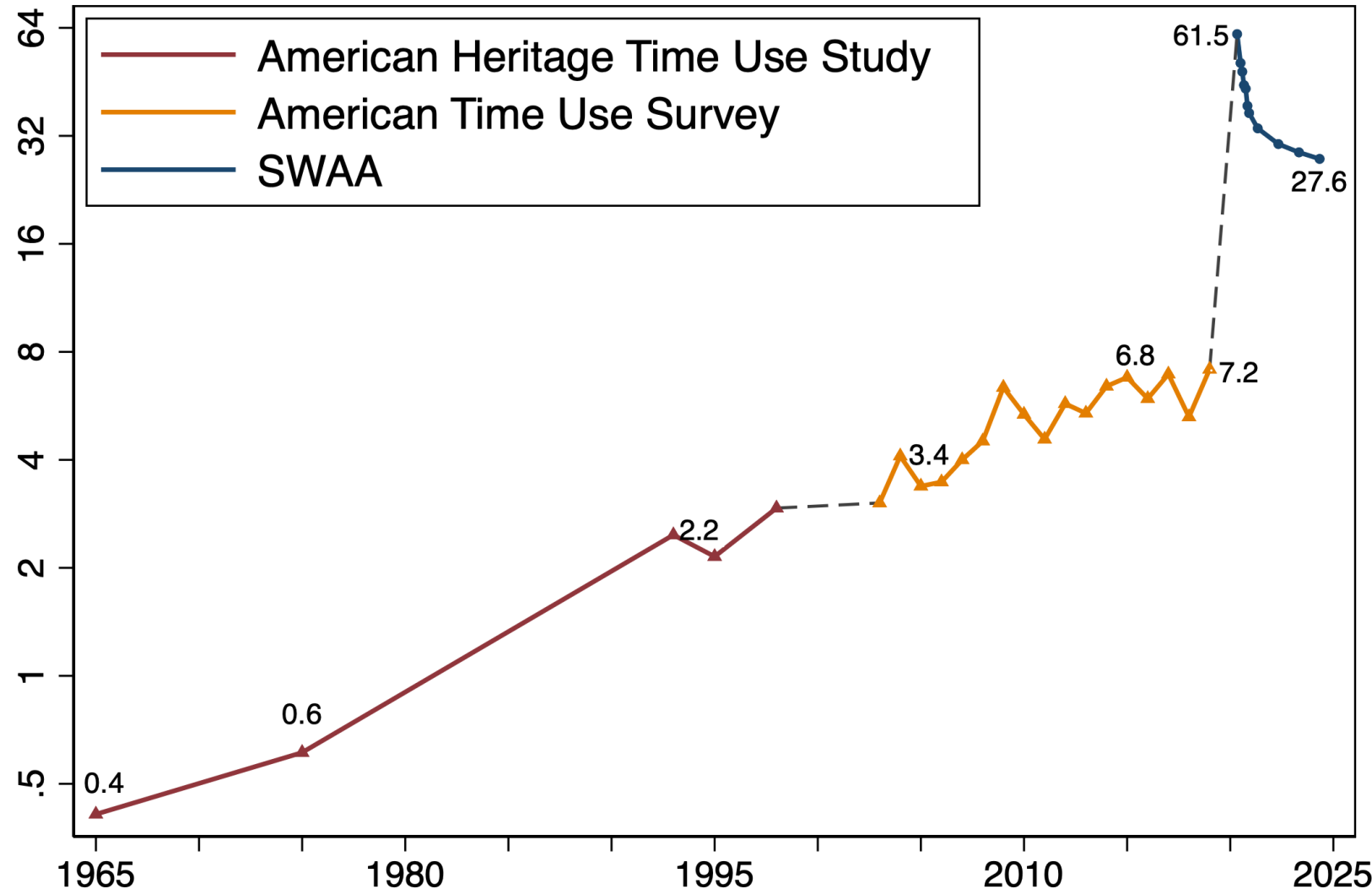
Voluntar Imprimir

SUPER RANKING

What about the future – will WFH eventually drop back down?

What about the future – will WFH eventually drop back down? To answer this I want to start with historical WFH data....

Full Days Worked at Home, Percent of Paid Workdays



Notes: For each dataset, we compute the percent of working individuals who worked full days at home during the survey's reference period. For the AHTUS and ACS, if an individual reports usually working from home, we mark them as working from home 100% of the time. In SWAA we compute the percent of full paid days at home to account for a hybrid work schedule, and calculate monthly averages. We report those monthly values in 2020 and combine them into yearly averages from 2021 onwards. Then we plot each percentage on the vertical axis. We re-weight the sample of US residents aged 20 to 64 earning \$20,000 or more in 2019 dollars to overall population shares. We impute the September 2023 data value as the average of August and October due to data quality issues.

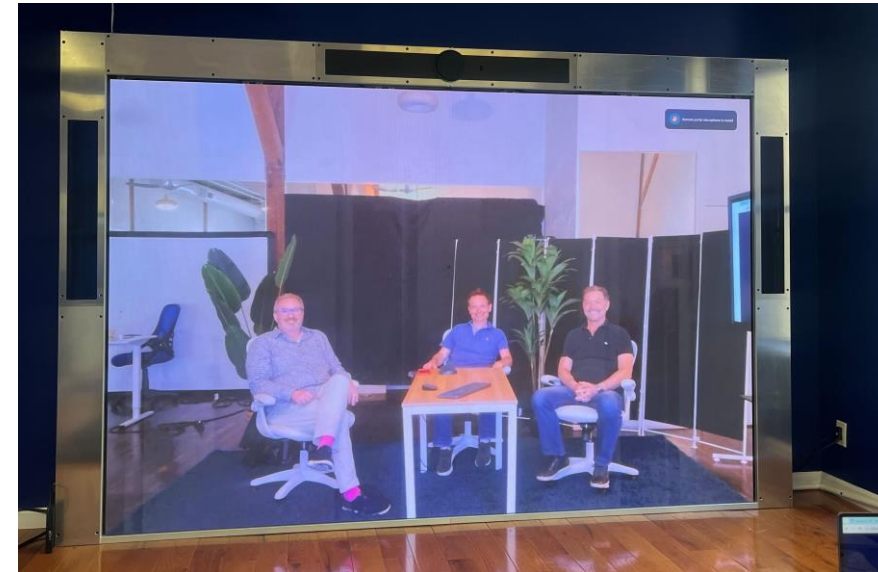
Work with Shelby Buckman, Jose Barrero and Steve Davis

Looking 10 years out technical change will increase WFH

Share of New Patent Applications Supporting WFH



New WFH technologies are being rapidly developed as the market for WFH products has increased 5x. For example, better video, screens, virtual reality and holograms etc

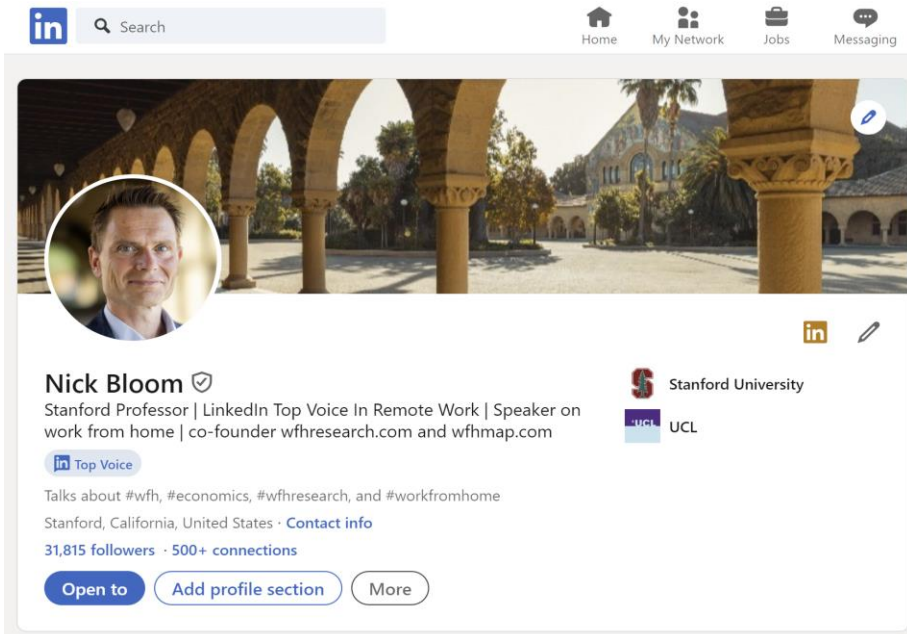


Source: US Patent and Trademark Office new patent application files. Details in Bloom, Nicholas, Mihai Codreanu, Steven J. Davis, and Yulia Zhestkova from May 2024. "[COVID-19 Shifted Patent Applications toward Technologies that Support Working from Home.](#)"

Conclusions

WFH is here to stay, typically 2 or 3 days a week for managers and professionals

Managing it is hard – needs coordination and a performance review focus



The image shows a screenshot of a LinkedIn profile for Nick Bloom. At the top, there is a search bar and navigation icons for Home, My Network, Jobs, and Messaging. The profile picture is a circular portrait of a man with short brown hair. The background of the profile banner is a photograph of a large, arched stone building. Below the profile picture, the name "Nick Bloom" is displayed with a verified badge. His bio reads: "Stanford Professor | LinkedIn Top Voice In Remote Work | Speaker on work from home | co-founder wfhresearch.com and wfhmap.com". To the right of the bio are logos for Stanford University and UCL. Below the bio, it says "Top Voice" and "Talks about #wfh, #economics, #wfhresearch, and #workfromhome". At the bottom, it shows "Stanford, California, United States" and "Contact info". The profile has "31,815 followers" and "500+ connections". At the very bottom, there are three buttons: "Open to", "Add profile section", and "More".

