Here or There: Whither Work From Home

A Review: What We Actually Know About Remote Work

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Overview

- Intro material:
  - Terminology
  - Why you care
  - Presenters' biases
- What we know about remote work: the good, the bad and the counterintuitive
- Brief survey of tech remote work policies and practices
- Summary strategies for remote work success
• **WFW**: Working From Work, in a traditional office with desks and coffee machines
• **WFH**: Working From Home, two cases:
  ○ Local: Same city, timezone, country as work team
  ○ Remote: Different city, timezone, country as work team
• **WFRemote**: Working from another office of the same company, but remote to primary work team
• **Distributed**: There is no office for primary work team. Everyone is WFH or WFRemote

**This presentation: WFW vs just about everything else.**
The data do not properly distinguish WFH Local/Remote or WFRemote; Distributed is mostly treated as WFH for everyone. Distinction: physically in same place or not.
Why You Care

● Contrived, recent media controversy

[...]

● People want freedom to work wherever
● People like being productive
● Clever companies want to employ awesome people
● This issue impacts technology workers (due to the nature of our work) more than any other industry
● Infrastructure for WFH has been changing networking requirements for years now, and you all provide that infrastructure
Presenters' Background: All Sides of the Commute

- Todd worked remotely from NH for NM-based Oso Grande (3000km away)
  - Good for technical work but personnel management and executive planning was actively bad. **Verdict: mediocre.**
- Todd managed a distributed team at Renesys for several years.
  - This worked **very** well for systems/network/peering staff.
  - Executive management/planning worked **poorly**
  - **Verdict: Pretty Good.**
- Todd now works at Google: Massively distributed company but with an almost-universal "work at the office" practice.
  - High bandwidth communication in-office, high-bandwidth connection to other offices. Bad commutes for some people. **Verdict: Pretty Good.**
- Beth does all of her work on-site. Gynecology is currently not amenable to remote work. The research can be done anywhere but inexplicably involves lots of pieces of paper. **Verdict: Bad :)**
Work from Home?

Desk

Castle!
Work from Work?

- Headphones
- Eye protection (for nerf)
- Treadmill
- Sanitizer (Viruses)
- Towel (because)
What do we Know (or think we know)?

- Everyone wants the holy grail of employees: fast, cheap, and happy
- Everyone wants the holy grail of employers: high-paying, low friction, work-life balance
- Business schools, companies (employers), and social science researchers attempt to determine methods for achieving the holy grail
- To date, the research is thin, methodologically flawed, and contradictory[^1]

[^1]: Much research is, but this batch this is way worse than lots of data but similar to popular social science research quality in general.
Who Works from Home?

Definitions of varying quality and recency:

- Bureau of Labor Statistics data from 2004 (most recent available)[1]:
  - 15% of all non-agricultural workers WFH at least one day/week (flat since 2001)
  - Of people who WFH, 66% were in business, management, or other professionals (you)
  - Only 25% had a formal arrangement to WFH

- US Census data 2010[2]: 10% WFH (based on cruder data)

- In the EU in 2005 (most recent available), 7.5% WFH at least 25% of the time [3]

Do They Work?  
"Working" from Home?

- While WFH, workers reported\[^1\]:
  - 43% watch TV or movies
  - 20% play video games  
    *(Parents were more likely to do both of these)*
  - 24% had a drink
  - 26% took a nap
  - 35% did household chores
  - 28% made dinner\[^2\]

- Might still be a more efficient use of time
  - Interleaving/pipelining tasks hides latency  
    </obvious>
  - Almost everyone is working while cooking dinner anyway

\[^1\] http://s3.amazonaws.com/legacy.icmp/additional/wakefield_research_citrix_survey_results_overview_final.pdf
\[^2\] No word on how many made sweet lo.... nevermind.
Famous Stanford Chinese call center workers study[^1]:

- 10,000 Chinese call center employees
- In random assignment of volunteers, 13% higher productivity, higher happiness and satisfaction, nearly 50% lower rate of promotion in the WFH group
- When workers were allowed to choose WFH or at work, productivity for WFH went up by 22%
- And half of people changed their work location from their assigned experimental group
- WFH has interesting community effects -- lowers vehicle emissions but promotes suburban sprawl

[^1]: http://www.stanford.edu/~nbloom/WFH.pdf
WFH==productive; WFW==creative ?

Widespread belief; is it true?

- Americans appear to be more creative working in groups
- Optimal (for creativity) is a group of people you know well
- Optimal group tolerates and promotes dissent
- Right now, this is more likely to occur in an office setting
- Unlikely to occur at home (YMMV, depends on family)
- Understanding these dynamics presents possibly solvable technological challenges

Dr. Prairie Gets a Coffee Machine!

Bizarro/cool research [1]:

- Set of papers by Biomedical researchers at a specific institution (*cough*Harvard*cough*)
- Locate the author's offices in space
- Collaborators in the same building produced more significant work (ranked by citation)
- Buildings with the highest numbers of intra-bldg collaborators produced the most significant research

(This why Dr. Prairie got a coffee machine in the MWRI in Pittsburgh. Thanks, Harvard!) [2]


[2] There's no citation for the coffee machine, but we promise they got one. No one reads footnotes anyway.
Contradictory Study is Contradictory

But people can be even more creative at home! [1]

- Often cited as demonstrating that WFH is more creative than WFW
- Actual methodology shows: less structure promotes creativity
- WFH not shown to promote creativity (in spite of what the confused business press might tell you)[2]


[2] Shocking, we know.
People who WFH:
- Do not get promoted as often
- Get smaller raises
- Are referred to as "dependable", "responsible" and "committed" less often [1]

Management Challenges:
- WFH necessitates more specific, objective, results-oriented measures of performance
- May not be enough to counter face-time bias
- Face-time bias not merely a product of bad bosses

Meta Analysis: It's a Wash

Meta Analysis\(^1\) of studies like these \textbf{and more!} finds:

- WFH had small but beneficial effects on proximal outcomes (work-family conflict reduced, "autonomy" increased)
- WFH increased job satisfaction, performance, turnover intent and decreased role stress
- WFH > 2.5 days/ week harmed coworker relationships
- The data are pretty mediocre for all of these conclusions

\textbf{TL;DR: It's a wash}

What Improves WFH Success

All good things outside of your field can be learned at a dinner party [1]. WFH success requires [2]:

- A policy
- Initial in-person contact [3]
- Good communication (Frequent; Different modes)
- Objective performance metrics
- Shared interests, different skills [4]
- Perception (even false) of balanced effort
- The right people :-)

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[1] h/t to David Anderson, Erica Fuchs and Justine Cassell who introduced us to some of these data
WFH policies and practices

Overview of various WFH policies/practices[1]

● One large company famously recently modified/clarified its WFH practices

● Google: telecommuting is rare, but considered on a case by case basis. 
  Patrick Pichette, Google CFO: "The surprising question we get is: 'How many people telecommute at Google? And our answer is: 'As few as possible'.'"

● Cisco: 2-days per week WFH average[2] and they claim great things (this is marketing for Cisco products, obviously)

● Notable: IBM claims 40% WFH or "on the road" but includes sales.

● Most of Tech: Part-time WFH is common without policy

Summary: Most companies have no policy and offer WFH for some employees. See previous comments about the importance of a policy to WFH Success.

Conclusions

People who primarily work from home seem to be:
1. Less likely to get promoted
2. More productive
3. Less creative
4. Happier with family
5. Not necessarily happier in general

But we don't really know.

Sorry.
Real Conclusions

Meeting people in person is really important but we don't know why [1].

Your boss needs to see you in person for you to get promoted.

You need excellent communications infrastructure.


Explicit policies seem to be a good idea, but almost no one has one.

[1] Perhaps we need to smell each other. Perhaps our video conferencing is just not good enough... yet.
[2] Look to the left. Look to the right. If it's another white male geek, you might be performing suboptimally.
Questions, Kvetches, Irrational Exuberance, Uncomfortable Excitement?

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