

Appendix to
**The Effect of Work Environments
on Productivity**

Brittany Johnson, Thomas Zimmermann, Christian Bird
{bijohnso@ncsu.edu, tzimmer@microsoft.com, cbird@microsoft.com}

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Microsoft Research
Microsoft Corporation
One Microsoft Way
Redmond, WA 98052

Part 1

Recruitment Survey

Work Environment Survey

We are researchers in Microsoft Research investigating the effect of work environment on developer productivity. With this survey, we want to learn about the different work environments at Microsoft and how they help and hurt your productivity. Your answers will help us to improve the work environment at Microsoft.

We would be greatly appreciative if you would be willing to take the survey. The survey should take 5 minutes. Thank you!

This survey is anonymous. No personal information will be collected. Aggregate information may be shared with research collaborators outside of Microsoft and used in publications. We selected you as part of a sample of Microsoft employees worldwide based on your job role and/or subscriptions to distribution lists. Please contact EMAIL ADDRESS if you have any questions about this research project.

As a thank you for your time, you can enter your name into a raffle of two \$50 Amazon.com Gift Certificates after completion of the survey (official rules of the sweepstakes).

**Thanks,
Brittany Johnson, Thomas Zimmermann, and Christian Bird**

1) Which of the following disciplines best describes your job role?

- Software Engineering
- Program Management
- Other: _____

2) Please describe the typical environment in your work space in two words.

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3) What do you like about your work environment?

4) What do you NOT like about your work environment?

Thank You!

Thank you for taking our survey. Your response is very important to us.

As another way of saying thanks, we're raffling off two \$50 Amazon.com Gift Certificates (official rules of the sweepstakes).

Click here to enter the raffle by email

We're interested in following up with people with 15-20 minute interviews about their work environment.

Click here to email us if you would be willing to talk with us

For Additional Information

**Learn more about the [Empirical Software Engineering group](#) at Microsoft Research.
Recent papers: [The Emerging Role of Data Scientists on Software Development Teams](#)
[Analyze This! 145 Questions for Data Scientists in Software Engineering](#)
[Software Developers' Perceptions of Productivity](#)**

Part 2

Interview Guide

Hi, my name is Brittany and I am an intern in the ESE group at MSR. For the next couple months, I will be doing research on how work environments affect developer productivity. Thank you for taking the time out to help us with this research!

Today, I just want to talk to you for about 30 minutes about you and your work environment. We plan to use what we find from our interviews to create more detailed surveys that we distribute to developers inside and outside of Microsoft.

Do you mind if I record our conversation?

Background

What do you do at Microsoft/what is your job?

If you had to describe a typical work day for you, what would it be?

-- How often does your work involve others?

-- How often are you interrupted while trying to get your work done?

Environment and Impact

***if not in office, ask if they are willing to sketch their office/work environment**

What in your current environment has a positive effect on your productivity?

What in your current environment negatively effects your productivity?

-- how often? (relative) degrees of negative impact?

What do you do when you are not feeling productive?

-- if working elsewhere, how often?

-- do you change work locations in anticipation for not getting work done?

Is there anything you need in or from your work environment that you currently aren't getting?

Improving Work Environment

What specific improvements would you like to see made to your work environment?

Have you worked in the same office/building/location since at Microsoft?

-- If not, what was your favorite work environment? Why?

What would be your ideal work environment? Feel free to give us a sketch if you feel so inclined.

This was great, thanks so much for your feedback! Before we go, do you mind if we take some photos of your workspace?

Other Data

- pictures (ask)
- notes on environment during interview
 - is door to office open or closed when I arrive
 - Headphones? Other ways to block others out?
 - number of monitors; type of chair; type of desk
 - windows in office? nearby? is there a scenic view?
 - people walking by/conversations and noise in the background
 - Any other interruptions (pop-ins, phone calls, etc.)

Part 3

Follow-up Survey

Work Environment Satisfaction Survey

How Do You Like Your Work Environment?

We are researchers in the Empirical Software Engineering group at MSR, and we're looking at ways to improve productivity at Microsoft. We're conducting a survey that will take about 20 minutes to complete. The questions are about what you do at Microsoft, the environment you do it in, and how it affects your productivity. Some questions may not apply to your current environment; you can skip these or select Not Applicable. *Please note that when we say work environment, we are referring to your desk and everything the area surrounding your desk within the space you work.*

This survey is anonymous. No personal information will be collected. Aggregate information may be shared with research collaborators outside Microsoft and used in publications. Please contact EMAIL ADDRESS if you have any questions about this research project.

As a thank you for your time, you can enter a drawing for one of **four \$100.00 Amazon Gift Certificates** after completing the survey (official rules of the sweepstakes).

Thanks,
Brittany Johnson, Thomas Zimmermann, and Christian Bird

Demographics

1) What group do you primarily work in (required)?*

- ASG - Applications and Services Engineering Group (Qi Lu)
- Business Development Group (Peggy Johnson)
- C&E - Cloud and Enterprise Engineering Group (Scott Guthrie)
- Corporate Strategy & Planning (Kurt DelBene)
- Finance Group (Amy Hood)
- HR Group (Kathleen Hogan)
- LCA - Legal and Corporate Affairs Group (Brad Smith)
- Marketing Group (Chris Capossela)

- Operations (Kevin Turner)
- TnR - Technology and Research (Harry Shum)
- Windows and Devices Group (Terry Myerson)
- Other: _____

Validation: Must be numeric

2) How many years have you worked at Microsoft (decimals okay)?

3) What is your current job title?

Validation: Must be numeric Whole numbers only

4) What is your age in years (whole numbers)?

5) What is your gender?

- Female
- Male
- Other
- Prefer not to say

6) What building do you work in?

- LIST OF BUILDINGS
- ...
- Home Office

Other

7) How many people are in your current work environment?

- 1 person (just me)
- 2 people
- 3-5 people
- 6-14 people
- 15 or more people

8) What do you and others call your work environment?

For example: neighborhood, six-pack, pod, etc.

9) How long have you been working in your current work environment?

Years: _____

Validation: Must be numeric

Months: _____

Validation: Must be numeric Whole numbers only

10) How many different work environments have you been in over the last 2 years?

11) Have you ever worked in an open work environment?

We define an open work environment as one that includes 3 or more people.

- Yes
- No

My Work Environment

For questions below, please answer from the perspective of the environment you are currently in.

12) Overall, how satisfied are you with your work environment (required)?*

- Very Satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very Dissatisfied

13) Please denote your satisfaction with the following aspects of your work environment (required):*

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Not applicable
Ability to communicate with my team and/or leads	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access or proximity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

to windows						
Ability to personalize work space	()	()	()	()	()	()
Ability to work privately, with little to no interruptions	()	()	()	()	()	()
Accommodations for working outside normal work hours	()	()	()	()	()	()
Noise control	()	()	()	()	()	()
Decoration	()	()	()	()	()	()

Cable Management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Furniture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to do secure or confidential work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14) Please rate the following statements in terms of your agreement with each (required):*

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
My environment is ideal for the work I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy to keep secure work confidential in my	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

work environment.						
I would prefer to be in or near a room with other members of my product team than in a private office on the other side of the same building.	()	()	()	()	()	()
I can deal with an increase in noise if there is collaboration or information sharing happening.	()	()	()	()	()	()

I feel most productive in my work space.	()	()	()	()	()	()
I like my work environment enough to come to work outside normal working hours.	()	()	()	()	()	()
My work space has a positive affect on my ability to get my work done.	()	()	()	()	()	()
In my work area, there are understood norms	()	()	()	()	()	()

or signals that we follow.						
I am aware, or made aware, of when I'm being making too much noise.	()	()	()	()	()	()
I can easily find a focus room or meeting room when I need one.	()	()	()	()	()	()
It is easy for me to communicate with my team when needed.	()	()	()	()	()	()

Lack of investment into my work area satisfaction is like a lack of investment in me or my happiness within the company.	()	()	()	()	()	()
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15) Please rank the following in terms of importance to personal productivity in your work environment. Place the most important at the top. You do not have to include them all; only the ones that matter to you.

- _____ Ability to easily communicate with my team and/or leads
- _____ Nearby windows
- _____ Ability to personalize my desk or work space
- _____ Ability to work privately, with no interruptions
- _____ Accommodations for working outside normal working hours
- _____ Noise control
- _____ Having bright colors and fun décor
- _____ Effective cable management
- _____ Ergonomic furniture
- _____ Security

**16) Which of your work tasks is your environment most fit to accommodate?
Please list one task per line.**

**17) Which of your work tasks is your environment least fit to accommodate?
Please list one task per line.**

18) Are there social norms or signaling mechanisms used in your work environment?

- Yes
- No
- Not applicable

**19) If social norms or signals exist, what are some of the social norms or signaling mechanisms used in your work environment?
Please start a new line for each norm or signal listed.**

For each of the following, please select all that apply.

20) I know not to bother someone in my work environment when:

- They have on headphones.
- They use a signal (i.e. a sign on the desk).
- Their IM status is away or busy.
- Not applicable - I have a private office.
- Other - please specify:: _____

21) When I feel unproductive, I:

- Work from home.
- Work in a different location in my building or a different building.
- Work outside normal work hours (i.e. evenings, weekends).
- Look out my window at the view.
- Take a break (walk away, maybe stare at a wall).
- Take a nap.
- Play with personal items in my work environment.
- Re-organize the personal items on my desk or in my work environment.
- Find work or help from others.
- Other - please specify:: _____

22) When it comes to personalization:

- I personalize my work environment.
- My team personalizes our work environment .
- I do not personalize my work environment because I am not allowed.
- I do not personalize my work environment because I do not want to bother or offend others around me.
- I do not personalize my work environment because I move around a lot.
- I do not personalize my work environment because I do not want to.
- Other - please specify:: _____

23) On or around my desk, other than my computer, you will find:

- Plants
- Personal or family photos
- Posters
- Stuffed Animals
- Games
- Awards
- Coffee mug(s)
- Other - please specify:: _____

24) I have the following ergonomic furniture:

- Chair
- Keyboard
- Mouse
- Desk
- Monitors or monitor stands
- Other - please specify:: _____

25) When my work environment is too noisy, I:

- Put on my headphones.
- Leave my work environment.
- Join the conversation and hope I get something good out of it.
- Glare or stare until it quiets down.
- Say something to the individual(s) making the noise.
- Do nothing - it gets too loud for me to fix sometimes.
- Not applicable - noise is not a problem in my work environment.
- Other - please specify:: _____

26) The other people in my work environment are:

- Other members on my team.
- Members or leads from other teams.

- Team leaders for my team.
- Vendors.
- Not applicable - I work in a private office.
- Other - please specify:: _____

**27) Which of the following are important for your productivity when working in an open space?
Even if you have never worked in an open environment, please answer based on what you think would be important to your productivity.**

- Sharing the space with my team.
- Having enough physical space between the people around me.
- Having somewhere close where I can work in private or smaller groups.
- Having understood social norms, rules, or signaling in place.
- Ability to personalize my work space.
- Other - please specify:: _____

28) What is the one thing, if given the opportunity, that you would change about your work environment?

29) Is there anything else you would like to add about your work environment?

Thank You!

Thank you for taking our survey. Your response is very important to us.

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