

Microsoft Research Technical Report

MSR-TR-2021-26

## **Appendix to How Developers and Managers Define and Trade Off Productivity and Quality**

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This technical report includes two Microsoft Research surveys that were deployed to software engineers and software engineering managers to learn about their definitions and alignment with respect to software productivity and quality.

# Survey Instrument for Individual Contributors

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## Software Productivity Survey 2020

We are researchers at Microsoft investigating which factors impact your productivity at work. We'd like to learn about how you, your peers, and your manager define productivity and any trade-offs that you faced. Your response will enable us to understand productivity better and give recommendations to Microsoft how to improve productivity.

The survey should only take about 10 minutes to complete. This survey is anonymous. No personal information is collected. Aggregate information may be shared with research collaborators outside of Microsoft and used in publications and reports. We selected you as part of a sample of Microsoft employees based on your job role. By responding to this survey, you agree that you (1) are at least 18 years of age, (2) are participating voluntarily in this survey, and (3) understand you can withdraw from the survey at any time.

We hope you enjoy filling out this survey. After completion of the survey, we invite you to enter your name into a separate form (to preserve your anonymity) to win one of four \$100 [Amazon.com](https://www.amazon.com) Gift Certificates. The sweepstakes is open only to US Microsoft employees and interns. For the official rules, see [...]

If you have any questions about this research, please contact [...]

Thanks a lot for participating!

Brian Houck (BHOUCK), Margaret-Anne Storey (V-MARGST), and Tom Zimmermann (TZIMMER)

## Microsoft Research Project Participation Consent Form

Questions 1., 2., and 3. Included the consent form.

## The Software Productivity Survey

4. Please read the following definitions. (required)

**Manager:** Your manager is the person who you directly report to. If you recently switched teams or joined Microsoft, feel free to respond to questions about your manager by thinking about your previous manager.

**Peers:** Your peers are the co-workers who report directly to your manager.

**Team:** Your team includes you and all of your co-workers who report directly to your manager.



I have read and understood these definitions.

5. How many years have you worked at Microsoft? (required; decimals okay)

6. How many software engineers are on your team? (required; integer/whole number)

7. When thinking about your work, how do you define your productivity? (required)

8. How do you think your manager defines productivity? (required)

9. How do you think your peers define productivity?

10. Have you ever had to make tradeoffs between team productivity and your personal productivity? If so, please explain?

11. When thinking about your work, how do you define quality?

12. Have you ever had to make tradeoffs between productivity and quality? If so, please explain.

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13. If you think of your most productive peer, what sets them apart?

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14. Thinking about the past month, what activities do you do that are recognized by your peers and manager?

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15. Are there activities you have done in the past month that you feel should be recognized by your peers and manager, but are not?

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16. What have you or your team tried to do to improve productivity? How did those work out?

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17. Do you have any ideas for how to improve productivity?

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# Survey Instrument for Managers

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## Software Productivity Survey

We are researchers at Microsoft investigating which factors impact your productivity at work. We'd like to learn about how you, your team, your peers, and your manager define productivity and any trade-offs that you faced. Your response will enable us to understand productivity better and give recommendations to Microsoft how to improve productivity.

The survey should only take about 10 minutes to complete. This survey is anonymous. No personal information is collected. Aggregate information may be shared with research collaborators outside of Microsoft and used in publications and reports. We selected you as part of a sample of Microsoft employees based on your job role. By responding to this survey, you agree that you (1) are at least 18 years of age, (2) are participating voluntarily in this survey, and (3) understand you can withdraw from the survey at any time.

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Thanks a lot for participating!

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## The Software Productivity Survey

4. Please read the following definitions. (required)

**Manager:** Your manager is the person who you directly report to. If you recently switched teams or joined Microsoft, feel free to respond to questions about your manager by thinking about your previous manager.

**Team:** Your team refers to you and all your direct reports.

**Peers:** Your peers are the co-workers who report directly to your manager.



I have read and understood these definitions.

5. How many years have you worked at Microsoft? (required; decimals okay)

6. How many software engineers are on your team? (required; integer/whole number)

7. When thinking about your team, how do you define productivity? (required)

8. How do you think your direct reports define productivity? (required)

9. How do you think your manager defines productivity?

10. Have any of your direct reports ever had to make tradeoffs between team productivity and their personal productivity? If so, please explain.

11. When thinking about your team's work, how do you define quality? (required)

12. Has your team ever had to make explicit tradeoffs between productivity and quality? If so, please describe those tradeoffs. (required)

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13. When you think of your most productive team member, what sets them apart?

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14. Thinking about the past month, what activities do your team members do that you feel are recognized by the team?

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15. Are there activities that your team members have done in the past month, that you feel should be recognized, but are not? If so, please describe the activities.

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16. What have you or your team tried to do to improve productivity? How did those work out?

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17. Do you have any ideas for how to improve productivity?

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