

Survey - The attributes of great software engineering managers

Your answers help us.

Thank you for agreeing to participate in this survey.

Microsoft Research is interested in uncovering the attributes of great software engineering managers. Our aim is to improve how managers attract, retain and grow talent in their engineering teams. Responses to this survey are private and confidential. [Please click here to review the privacy statement.](#) The survey takes about 10 minutes to complete.

This survey is anonymous - no personal information will be collected. Aggregated 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 based on your job role. If you have any questions about this research project, please contact t-eikall@microsoft.com

After completing the survey, you can enter a raffle for one of two \$50 Amazon gift cards (official rules of the sweepstakes). Instructions for entering the raffle will be provided once you submit your response.

**Thank you,
Eirini Kalliamvakou (T-EIKALL) and Christian Bird (CBIRD)**

Demographic information

1) Which one of the following describes you best? (required)*

- ☐ You are an Individual Contributor
- ☐ You are an Engineering Lead

- ☐ You are an Engineering Manager
- ☐ Other - Write in:

Logic: Hidden unless: Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Individual Contributor")

2) What role do you directly report to?

- ☐ Engineering Lead
- ☐ Engineering Manager
- ☐ Other:

Logic: Hidden unless: Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Engineering Lead","You are an Engineering Manager","Other - Write in")

3) What roles report to you? (select all that apply)

- ☐ Individual Contributors
- ☐ Engineering Leads
- ☐ Engineering Managers

Validation: Must be numeric

Logic: Hidden unless: Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Engineering Lead","You are an Engineering Manager","Other - Write in")

4) How many people directly report to you (non-vendors)?

Validation: Must be numeric

Logic: Hidden unless: Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Engineering Manager", "Other - Write in")

5) How many people in total report to you, directly and indirectly?

Validation: Must be numeric

Logic: Hidden unless: (Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Individual Contributor") AND Question "What role do you directly report to?" #2 is one of the following answers ("Engineering Lead"))

6) How many people report to your Engineering Lead?

Validation: Must be numeric

Logic: Hidden unless: (Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Individual Contributor") AND Question "What role do you directly report to?" #2 is one of the following answers ("Engineering Lead"))

7) How many people in total report to your skip level manager, directly *and* indirectly?

If you don't know exactly, please give a rough estimate.

Validation: Must be numeric

Logic: Hidden by default

How many people report directly to your skip level manager?

If you don't know exactly, please provide a rough estimate.

Validation: Must be numeric

Logic: Hidden unless: ((Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Individual Contributor") AND Question "What role do you directly report to?" #2 is one of the following answers ("Engineering Manager")) OR Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Engineering Lead"))

8) How many people in total report to your Engineering Manager, directly *and* indirectly?

If you don't know exactly, please provide a rough estimate.

Validation: Must be numeric

Logic: Hidden by default

How many people report to your Engineering Manager directly?

If you don't know exactly, please provide a rough estimate.

Validation: Must be numeric

Logic: Hidden unless: Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Engineering Lead")

9) How many years in total have you been an Engineering Lead?

Validation: Must be numeric

Logic: Hidden unless: Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Engineering Manager")

10) How many years in total have you been an Engineering Manager?

Validation: Must be numeric

Logic: Hidden unless: Question "Which one of the following describes you best? (required)" #1 is one of the following answers ("You are an Individual Contributor")

11) How many years in total have you been a professional software engineer?

Validation: Must be numeric

12) How many years have you worked at Microsoft? (required)*

13) In what location do you work? (required)*

- ☐ North America: USA - WA (Puget Sound regions: Redmond, Bellevue, Seattle, Sammamish, etc.)
- ☐ North America: USA - Silicon Valley, CA
- ☐ North America: USA - Other
- ☐ North America: Canada, Mexico
- ☐ Central America and South America
- ☐ Europe
- ☐ Asia: China
- ☐ Asia: India
- ☐ Asia: Middle East
- ☐ Asia: Other
- ☐ Australia, New Zealand, Oceania
- ☐ Africa
- ☐ Other:

Validation: Must be numeric

14) How old are you? (enter in years)

15) What is your gender identity? (required)*

- ☐ Female
- ☐ Male
- ☐ Other - Write in:
- ☐ I prefer not to say

The following questions ask specifically about the role of the Engineering Manager.

16) Below are 15 attributes that interviews with developers and managers indicated make great engineering managers -- but, of course, opinions vary. What do you think, based on your experience?

Under each attribute you can find examples of the engineering manager demonstrating that attribute.

Please rate how important each attribute is for distinguishing a great engineering manager from a good one, ranging from "critical" to "not important".

A great engineering manager...*

[illegible]

17) If you think there are attributes of great engineering managers which we missed above, please enter them below.



18) Imagine you are responsible for recruiting an engineering manager for team X, and you are down to your final two candidates:

1) Person A, a brilliant engineer with an impressive track record. They have expressed interest in furthering their career by becoming an Engineering Manager. Person A has been responsible for small feature teams as an Engineering Lead in the past. The teams they have managed so far have performed great. The feedback from Person A's directs has been reserved at best, highlighting that team members have felt awkward around them and that their social skills need improvement.

2) Person B, an enthusiastic Engineering Lead with a history of becoming a linchpin for all the teams they have worked with. They have brought to your attention lots of articles on leading and growing teams, and best people management practices. The teams they have managed so far have performed great. The feedback from their directs has been that they consider Person B an inspiring figure, but have had little input from them on technical aspects of the team's work.

Which of the two candidates would you choose?

☐ Person A, because:

☐ Person B, because:

19) Please rate your level of agreement with the statements about engineering managers below:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
If I heard of a team in another company with a great engineering manager I would consider moving there	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An engineering manager that is technical is respected by their team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager influences the success of the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should be the person that makes the technical decisions in the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should understand engineering,	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

but not practice it					
The most important goal for an engineering manager should be to drive execution excellence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should be the mentor for the engineers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delegation is a way for an engineering manager to avoid performing certain tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most important goal for an engineering manager should be talent retention in their team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should guide the team by providing solutions to coding problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The primary concerns of engineering managers should be business-related	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should have insight on discussions about alternative options for design or implementation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20) Please rate your level of agreement with the statements about engineering managers below:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Software engineers are more engaged if the engineering manager cultivates a fun atmosphere in the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I heard of a team with a great engineering manager I	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

would consider moving there					
The engineering manager should provide rationale for thinking about problems, rather than provide solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An engineering manager that is not technical is not respected by the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most important goal for an engineering manager should be explaining the merit of a team's mission to its members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager influences the quality of the code	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The primary concerns of engineering managers should not be technical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delegation is a signal that the engineering manager trusts team members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should be data-driven in all their discussions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should be the shield from randomization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should guide the team by asking questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most important goal for an engineering manager should be making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

engineers happy					
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21) Please rate your level of agreement with the statements about engineering managers below:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The engineering manager should be the person that software engineers go to for technical guidance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most important goal for an engineering manager should be to generate business impact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should be the team's best advocate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

should coach engineers in the team to be self-sufficient					
The most important goal for an engineering manager should be to clearly explain the desired outcomes for the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would leave the company if I didn't like my engineering manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The primary concern of engineering managers should be growing a healthy team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should enable, rather than direct	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Delegation is a way for the engineering manager to empower team members by giving them ownership over what they do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should contribute code to the project regularly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should hold back their technical opinion unless asked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should clearly state their technical opinion to the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22) Please rate your level of agreement with the statements about engineering managers below:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The engineering manager should be the person that software engineers go to for coding help	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Software engineers are more productive when their engineering manager takes an interest in their life outside work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should leave implementation decisions to the engineering team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most important goal for an engineering manager should be to grow engineers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

manager should play a critical role in the motivation of the team					
Empathy for people is an important trait for an engineering manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager should coach engineers in the team to share effort, successes and failures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would leave my team if I didn't like my engineering manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The engineering manager influences the success of the product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most important goal for an engineering manager should be to teach decision making to engineers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The engineering manager influences the productivity of the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Wrap-up

23) Please rank the following factors that affect retention in an engineering team, from most important to least important.

- The level of pay
- The relationship with the engineering manager
- The relationship between team members
- How interesting the work is to engineers
- The opportunity for career advancement
- The working environment

24) How can a great software engineering manager have a positive or negative impact on the software his/her team produces?

▲

■

▼

▶

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After clicking "Submit" you will see instructions on how to enter the raffle for the gift cards. Good luck!

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](#)
