

# The 2021 State of Open Source in Financial Services

Fintech Open Source Foundation

In Partnership With:







GitHub

# Methodology & Segmentation











### **About the Survey Sample**

#### Sample

- Sample size: N=331 overall
- Operational sample size: N=208 (see screening criteria below)
- Survey fielded: June–July 2021
- Scope: Worldwide
- Who Surveyed: Financial services enterprises and suppliers to it

#### **Target Respondents**

- A broad cross-section of financial services roles in IT and LoB
- Director, VP, or C-Level roles

### **Respondent Screening Criteria**

Must be employed by the financial services industry or a supplier to it (q1, N=208)

MoE is +/- 5.2% with 90% confidence and +/- 6.2% with 95% confidence (N=250)

# Demographics

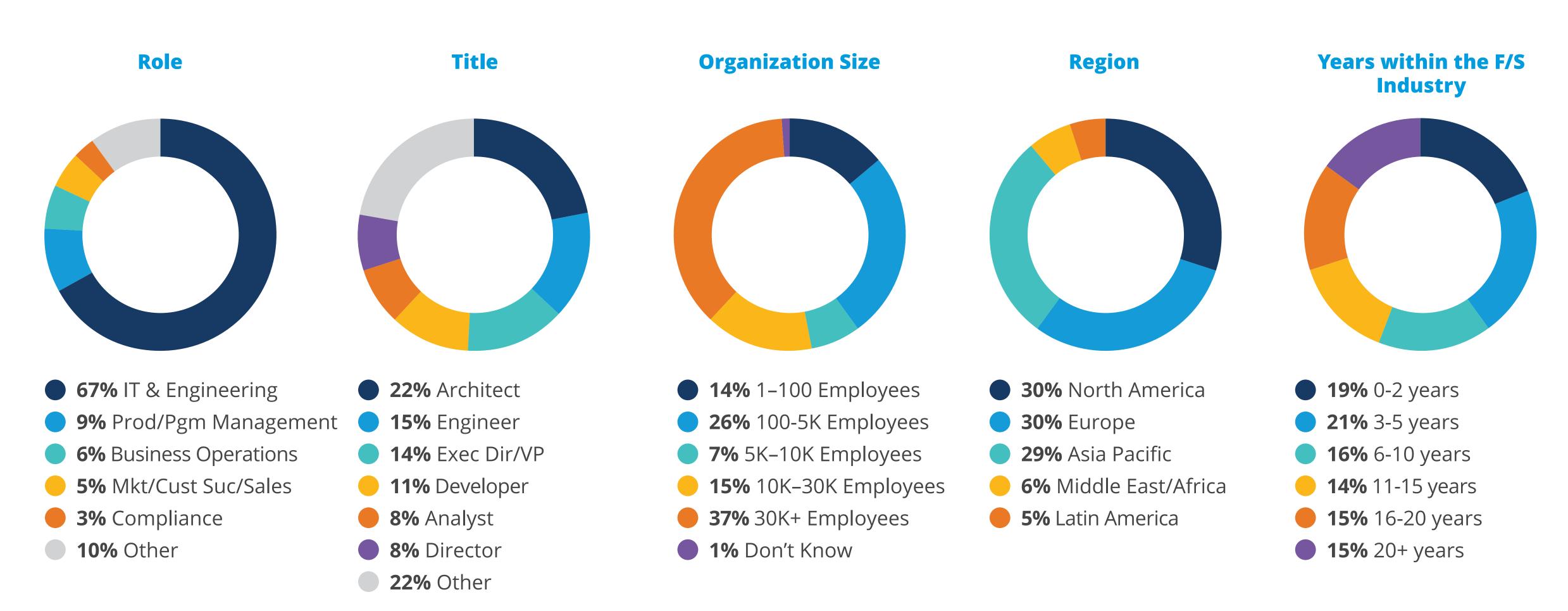








### **Demographic Summary of Financial Services Respondents**



# Key Findings



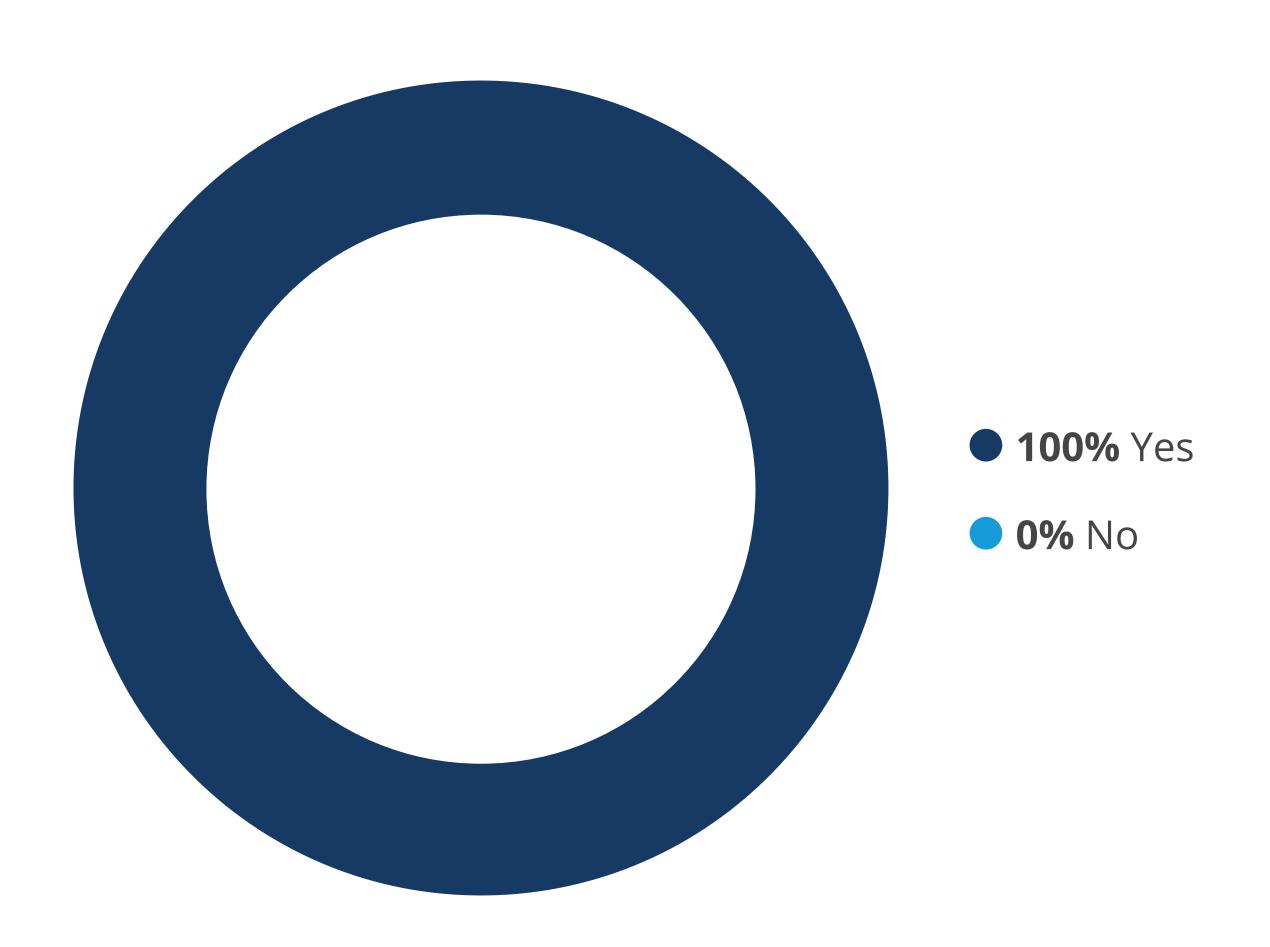




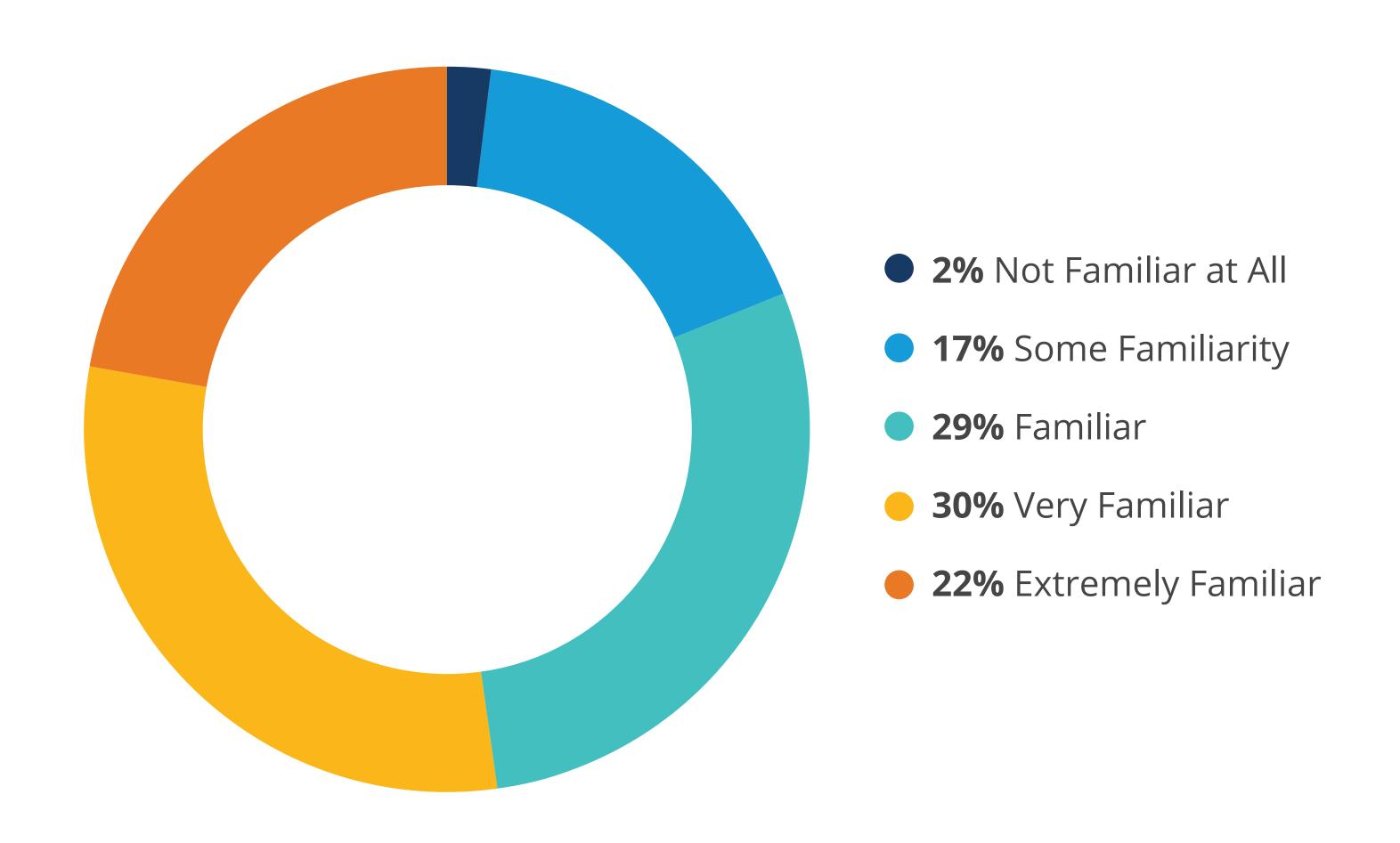




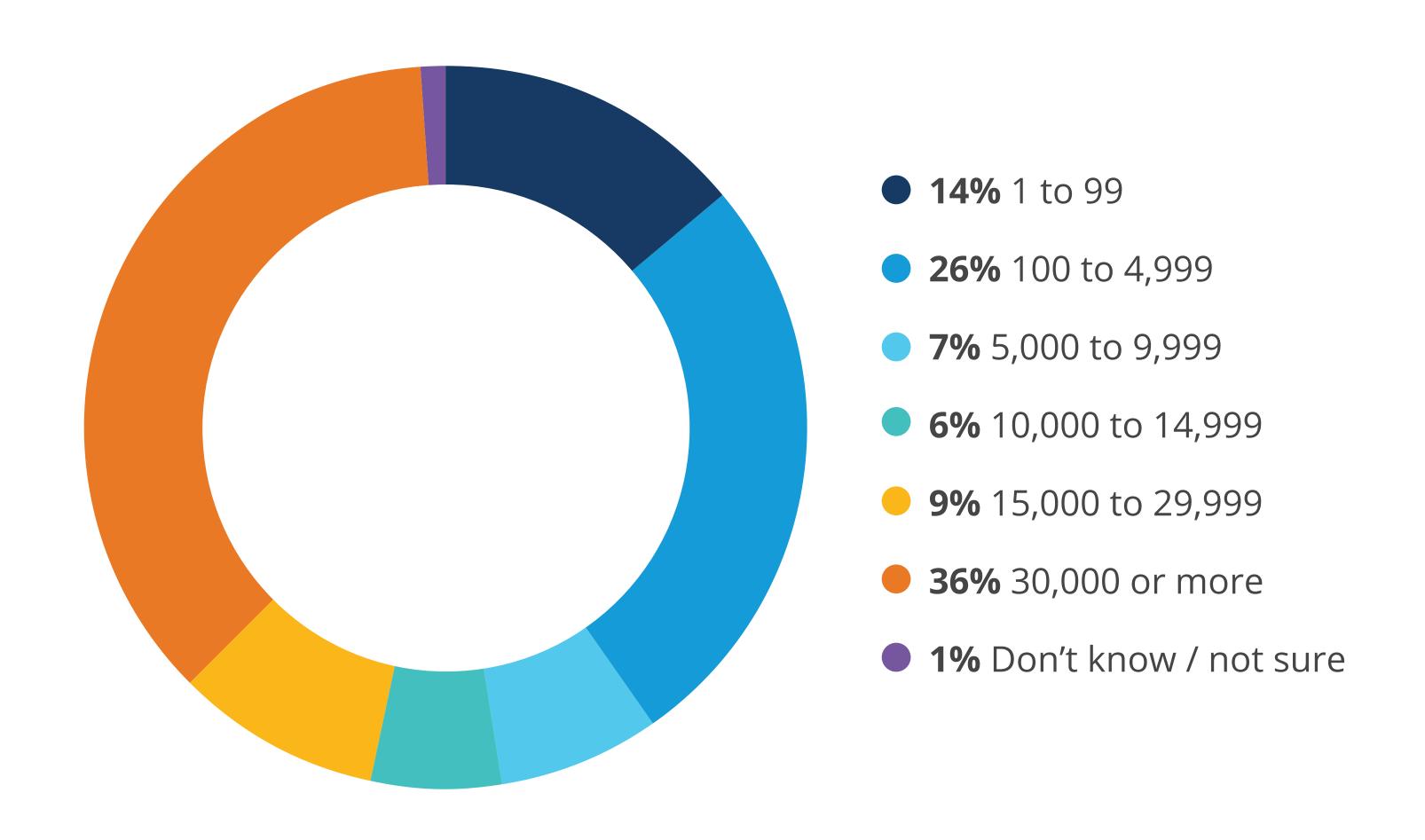
### Are you employed by the financial services industry or a supplier to it?



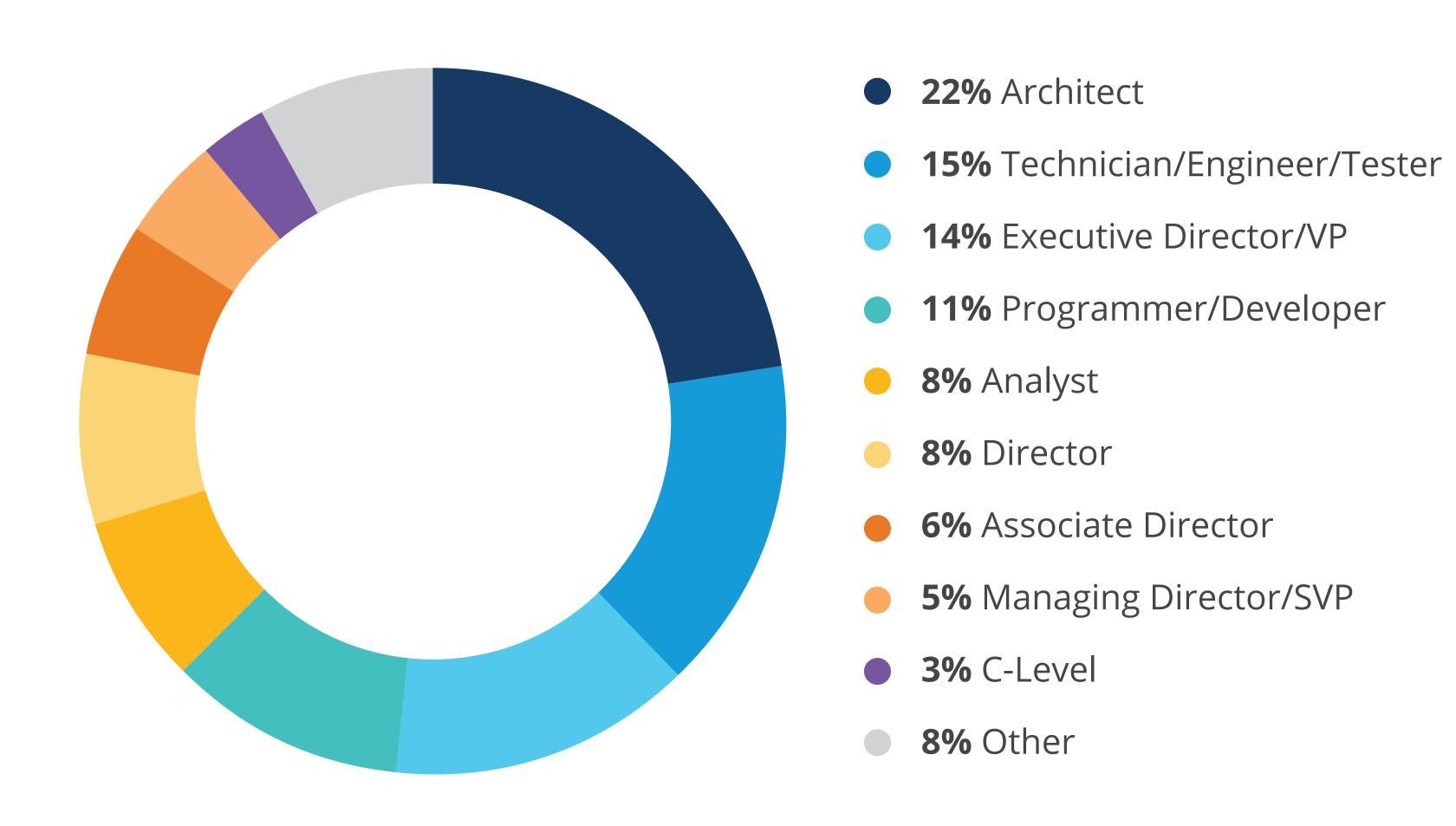
### What is your level of familiarity with your organization's approach to open source?



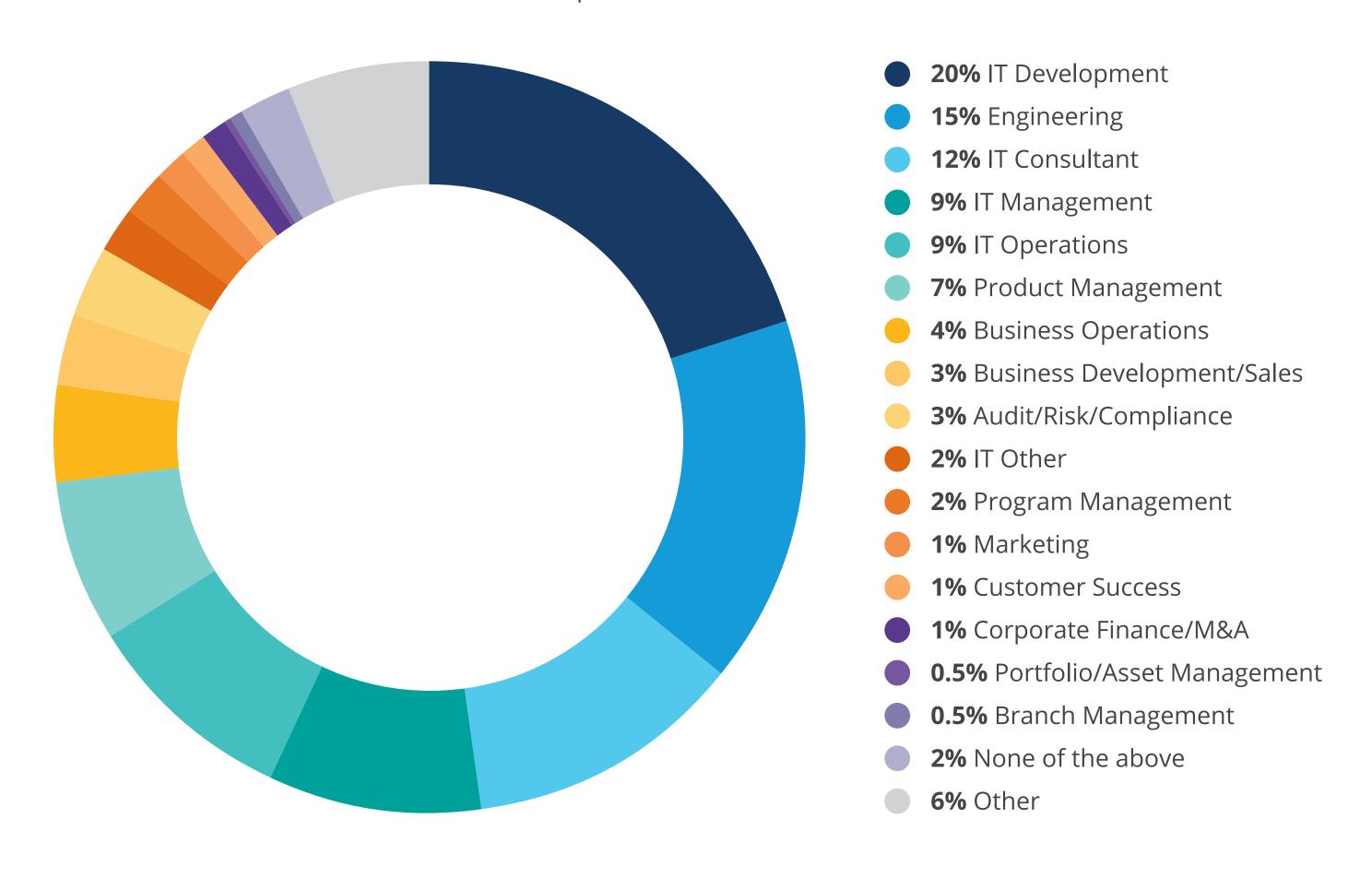
### Please estimate how many total employees your organization has worldwide.



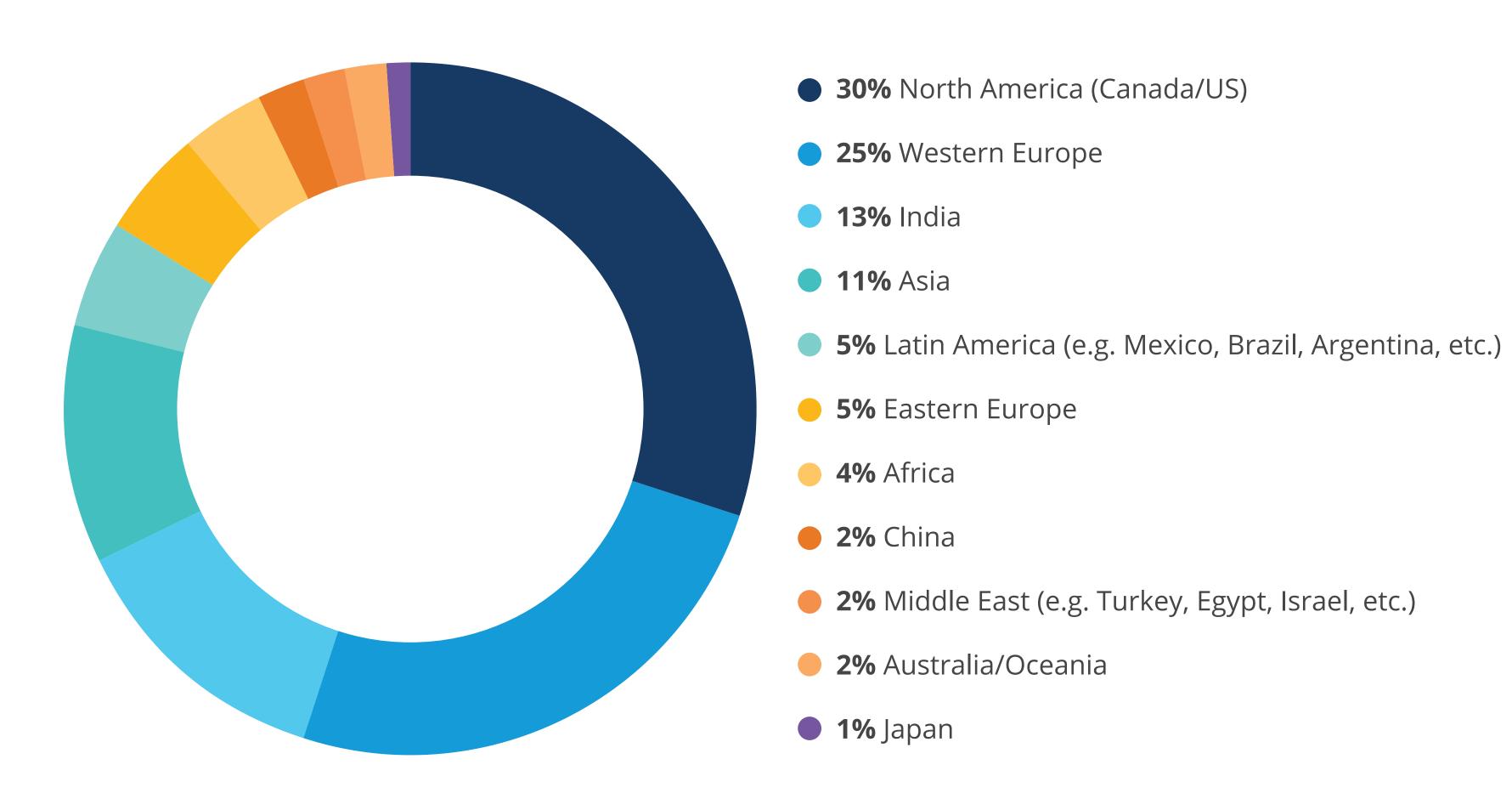
### Which of the following best or most closely describes your title within your organization?



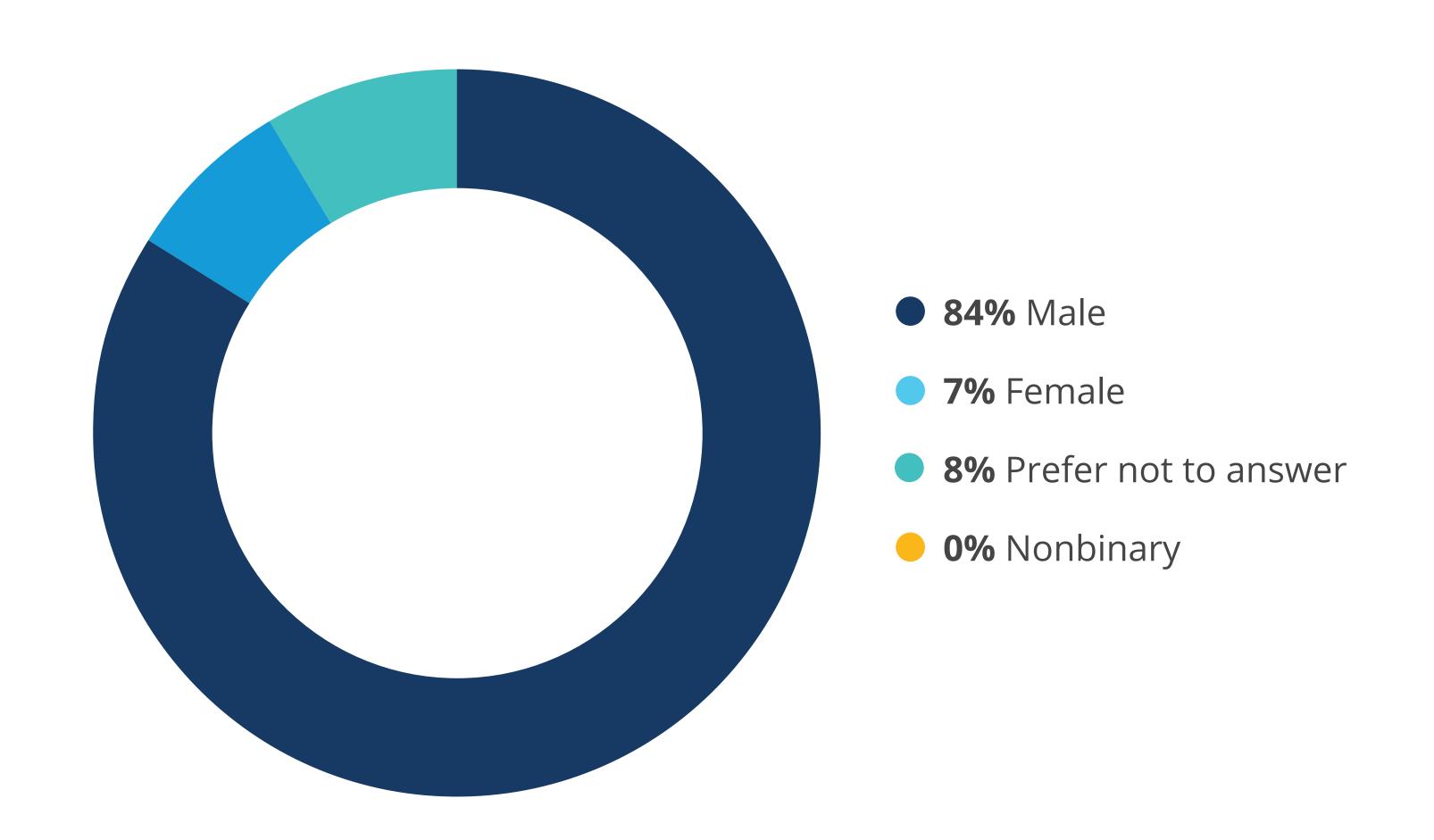
# Which of the following best or most closely describes your primary role(s) within your organization?



### What geographic region do you live in?

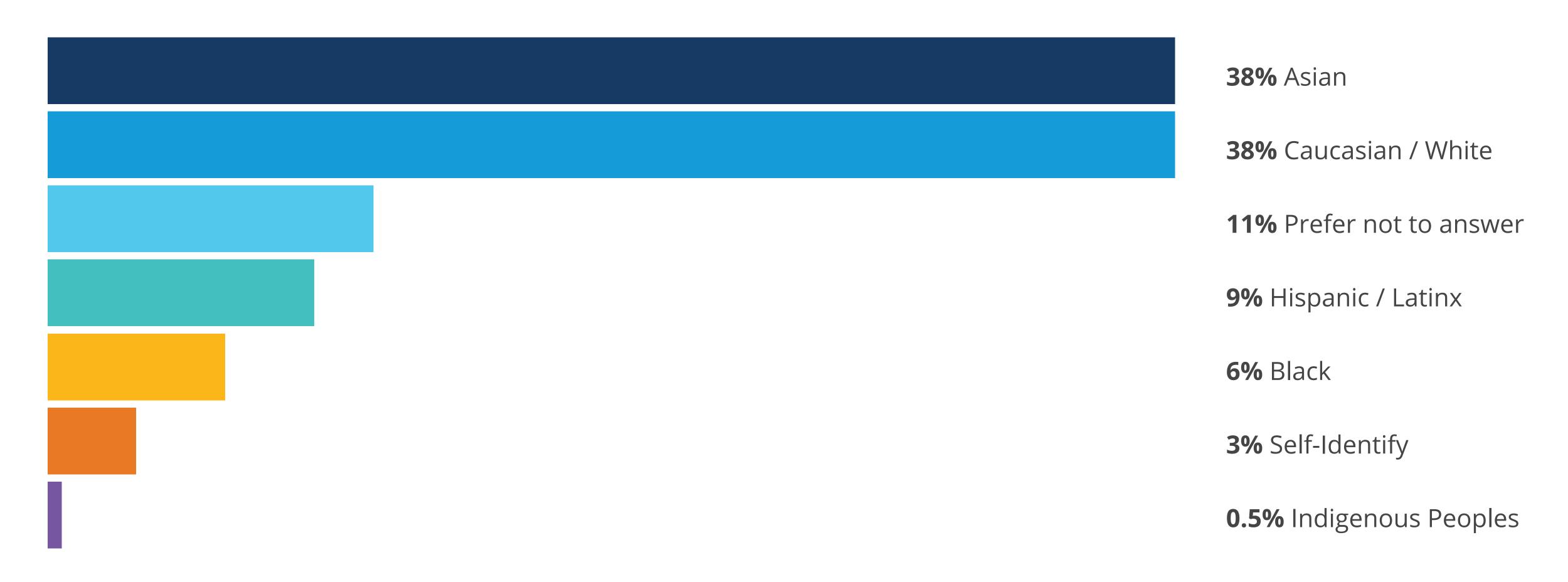


### What is your gender (acknowledging that gender can be fluid)?

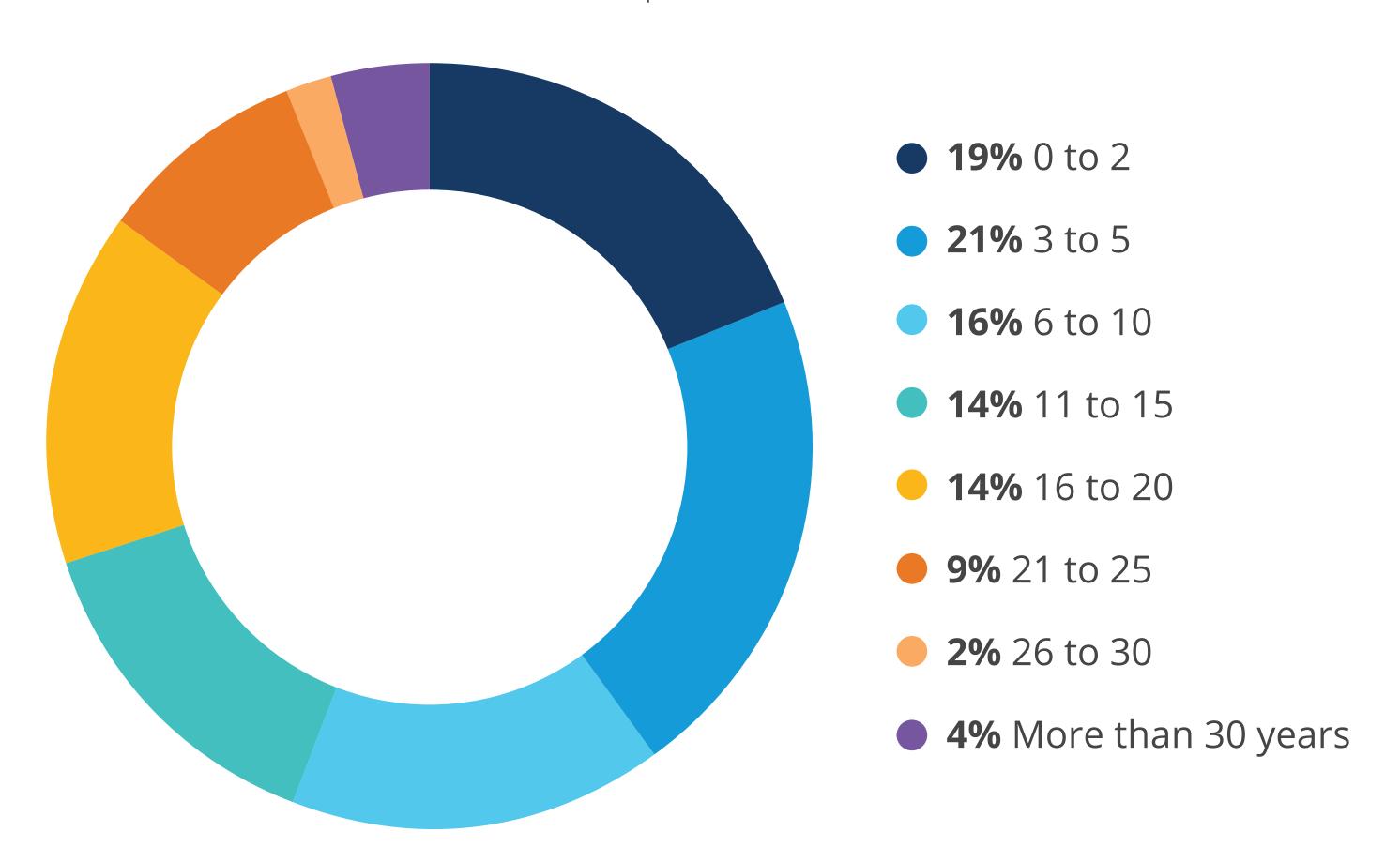


### Which of the following best describes you? Check all that apply.

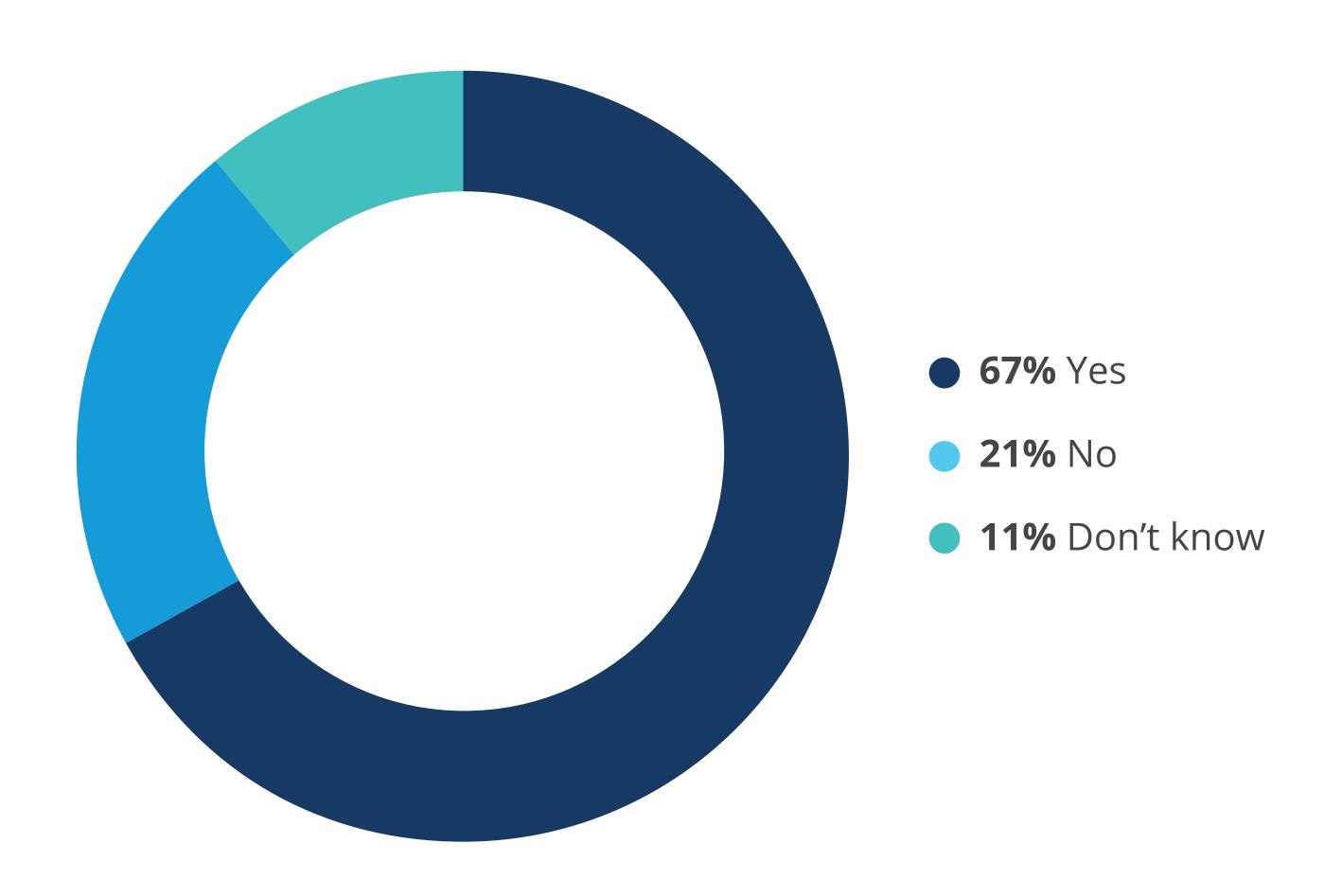
2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 206, Valid Cases = 206, Total Mentions = 216



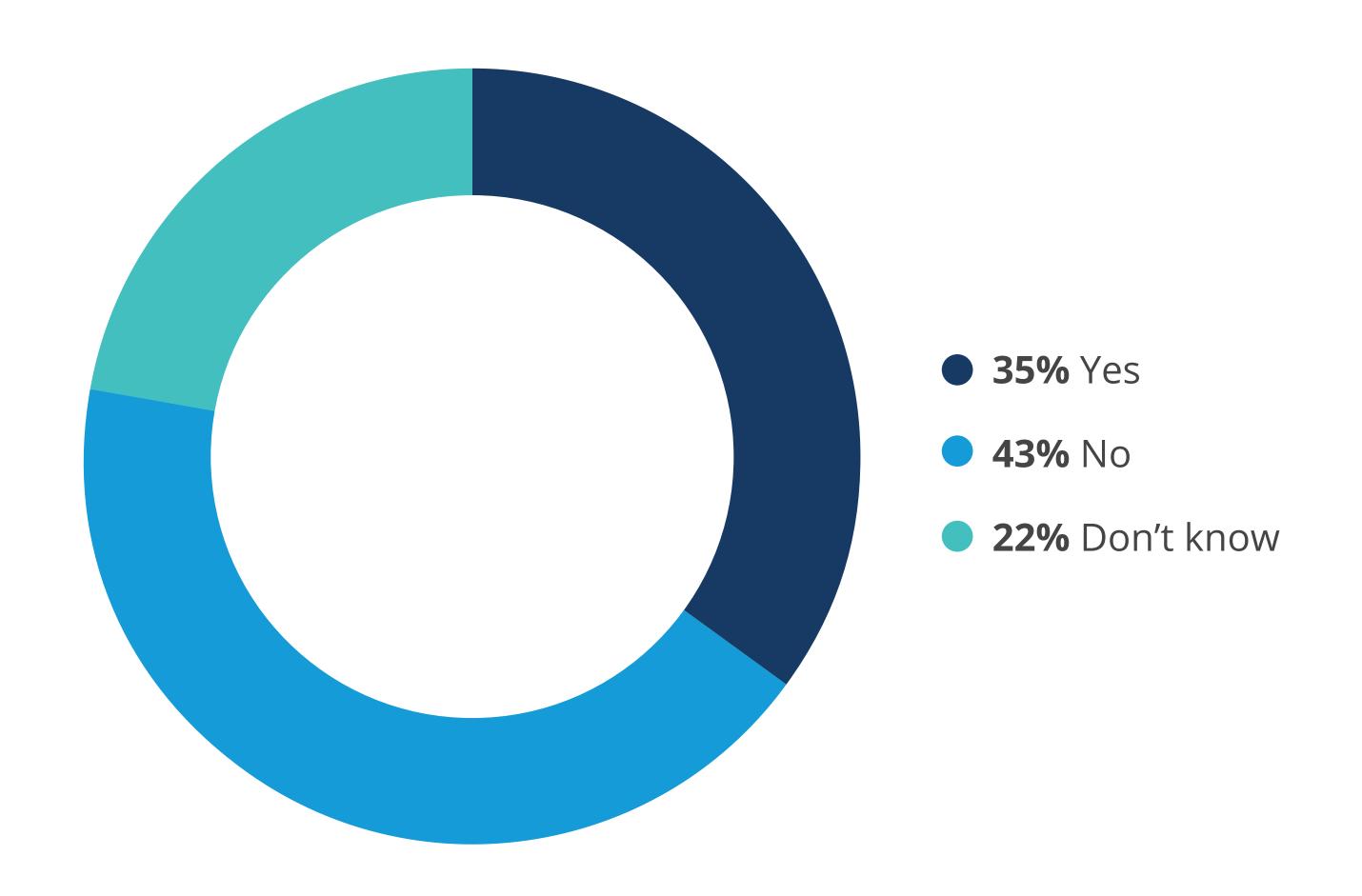
### How many years have you been working in the financial services sector or been a supplier to it?



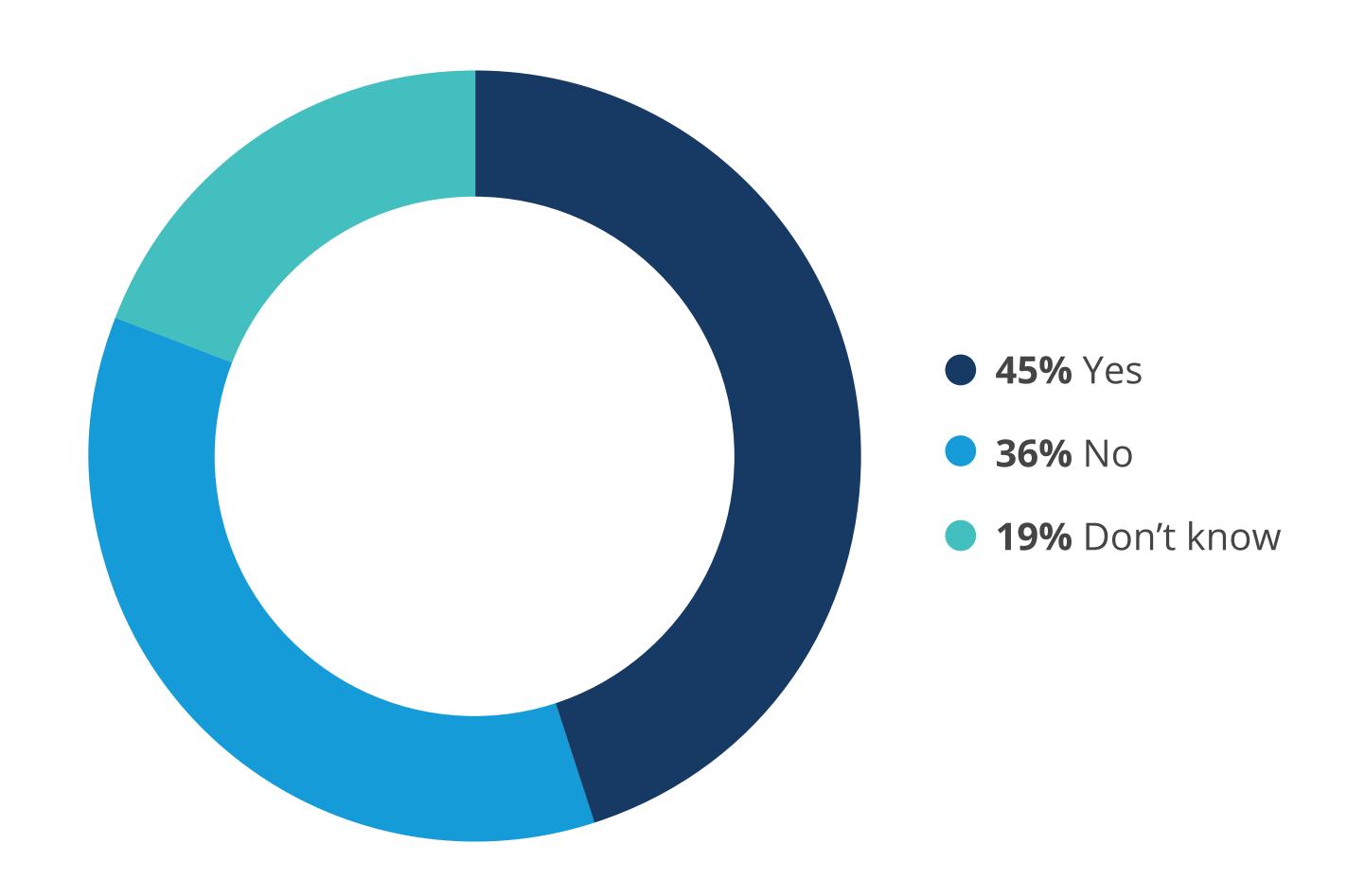
### Do you have an open source policy?



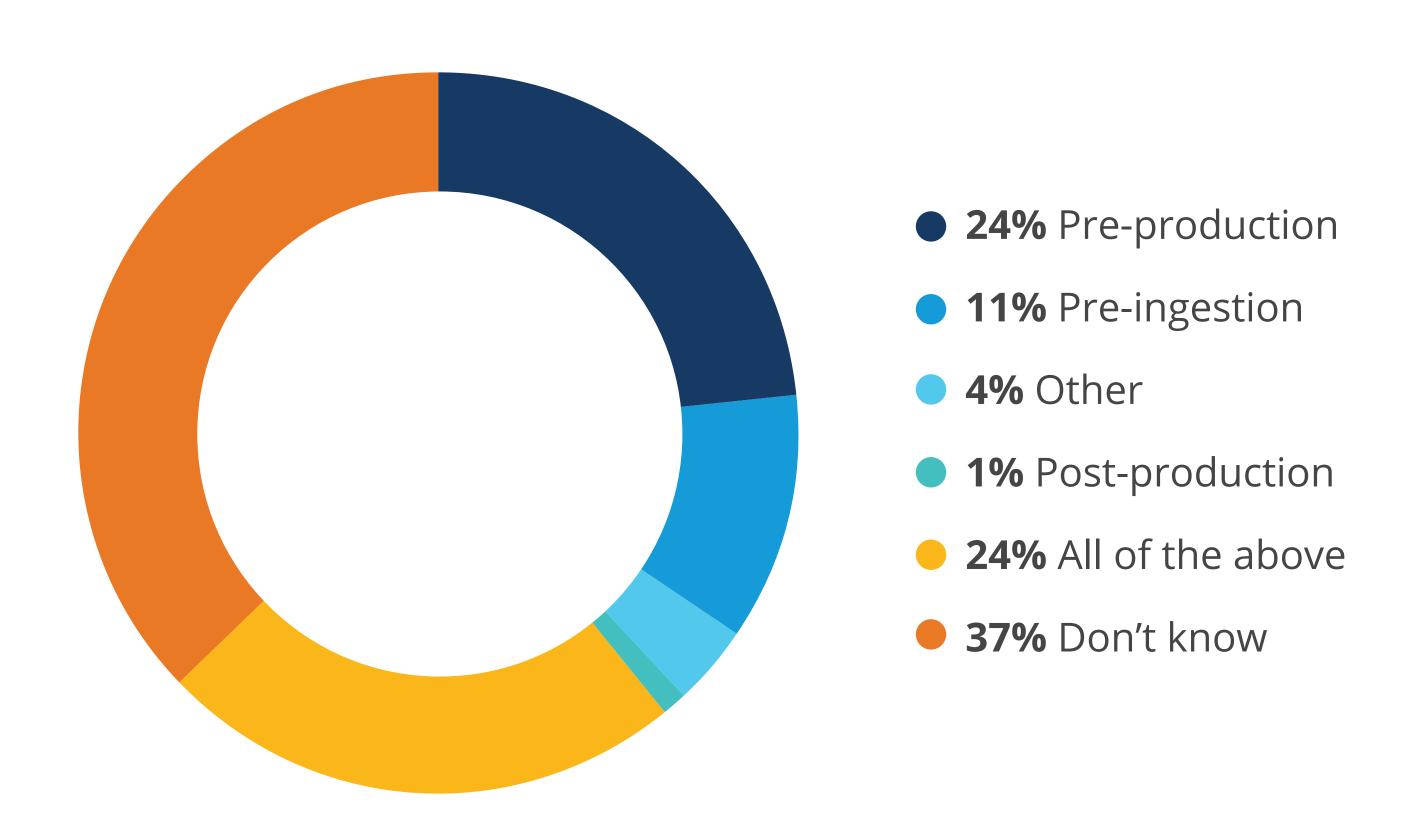
### Do you have an Open Source Program Office (OSPO) or formal review board?



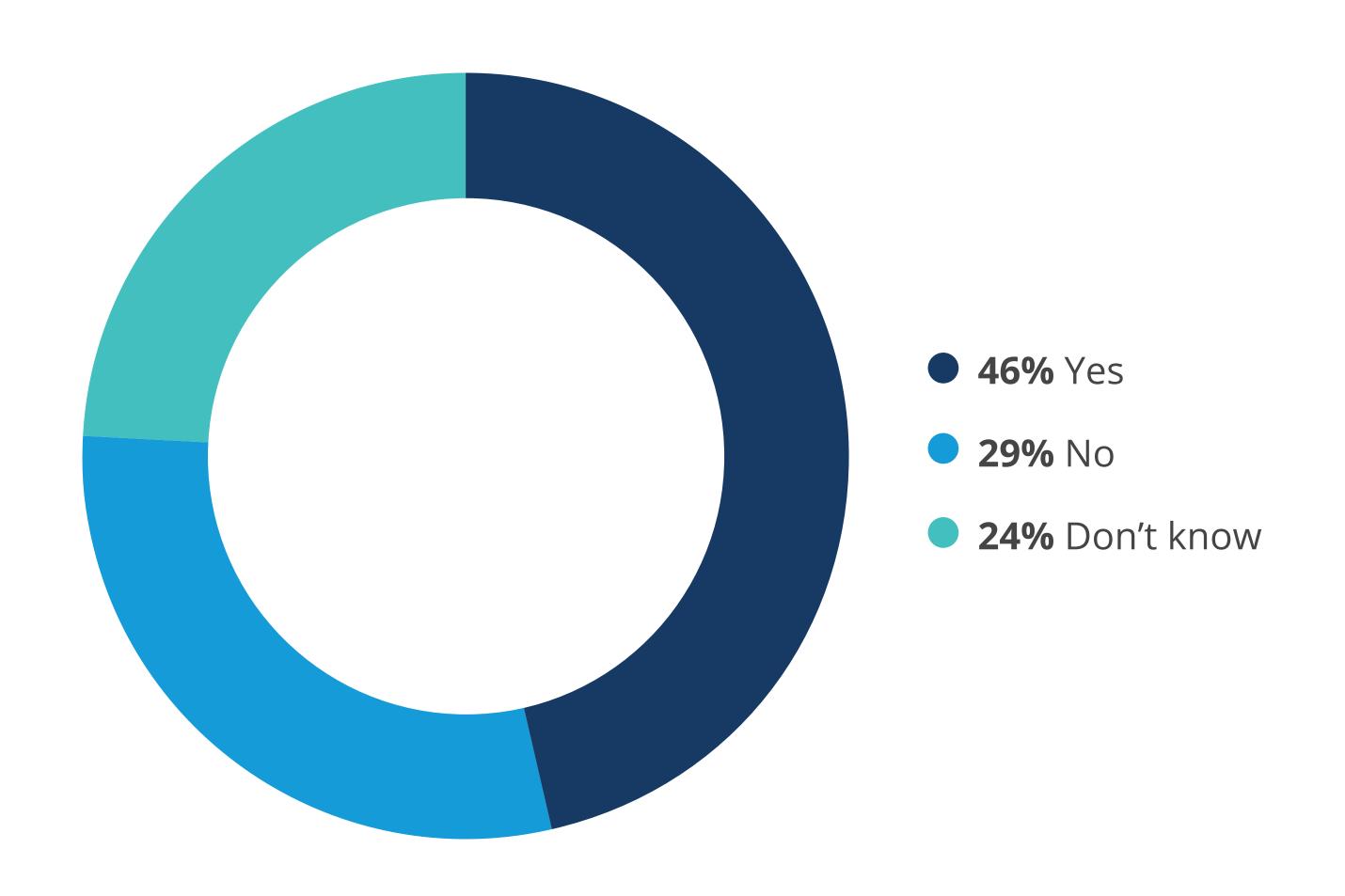
### Are your developers required to get policy training?



# When do you scan your code (SCA/binary) specifically for open source licensing, IP, compliance, and security issues using tools like Black Duck, Nexus, Whitesource, FOSSA, etc.?

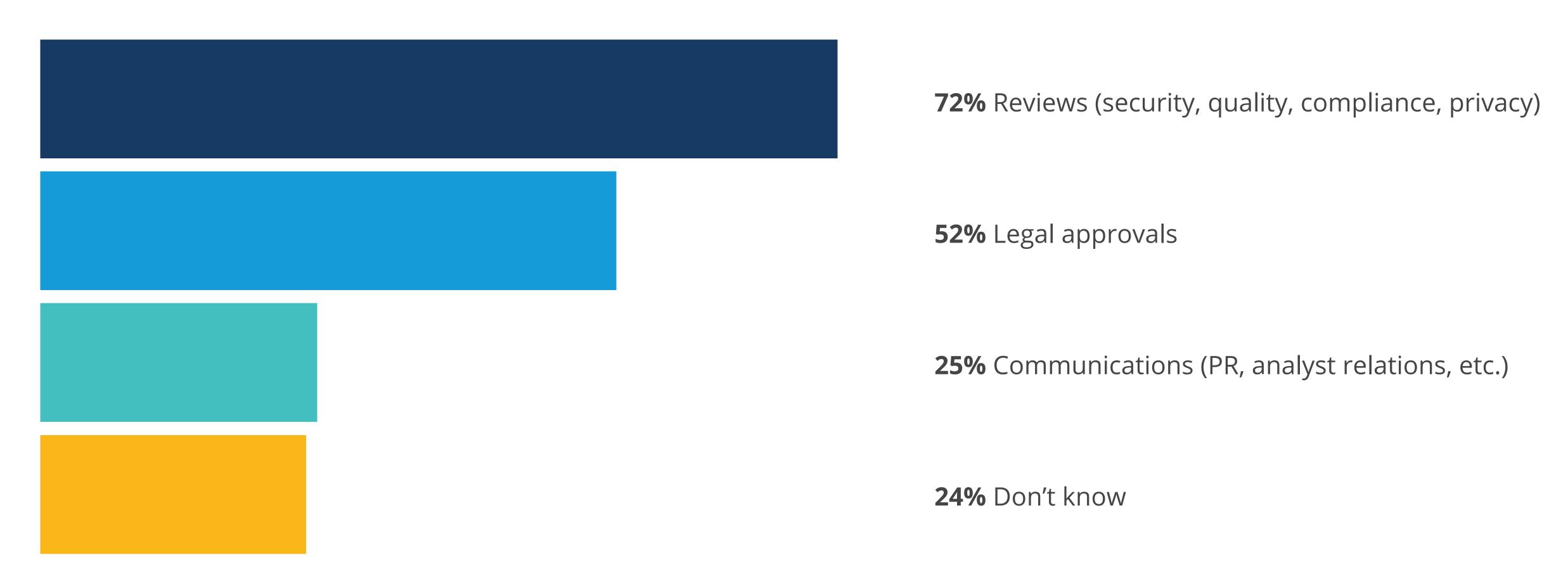


### Does your policy restrict what types of open source licenses you can use?



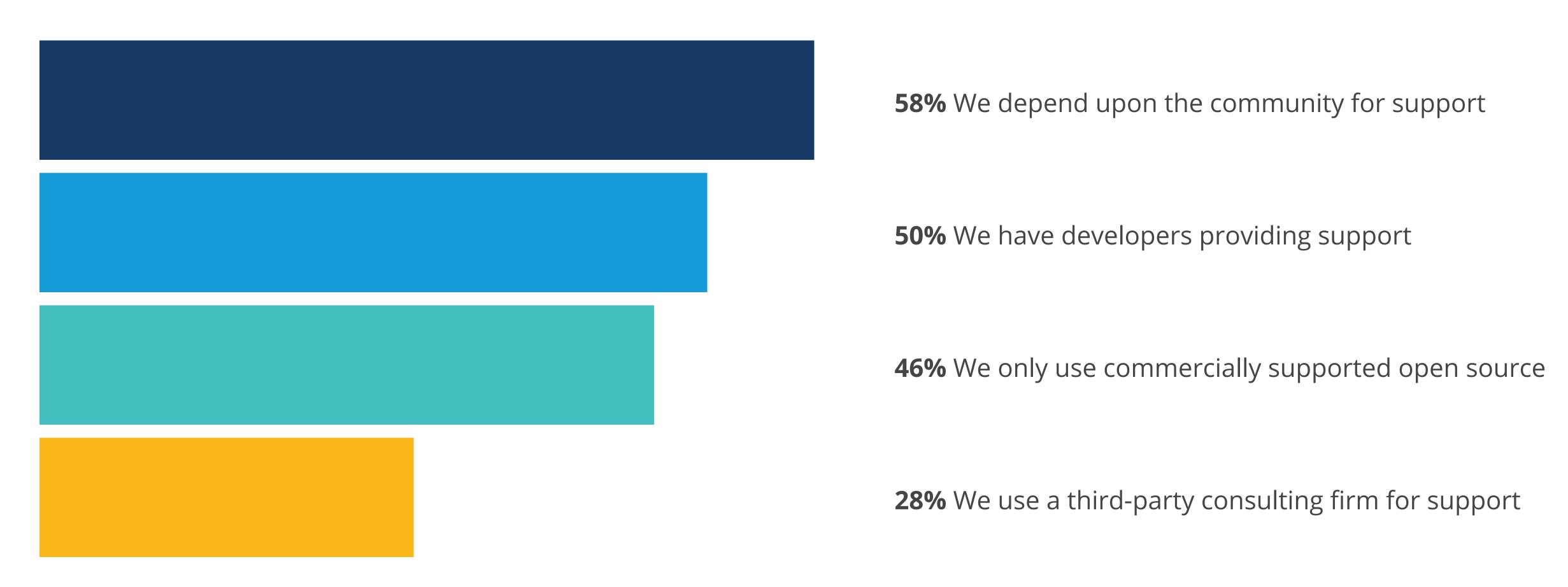
# Does your policy mandate a flow of steps (process) to be checked before releasing code outside your organization? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 166, Valid Cases = 166, Total Mentions = 286



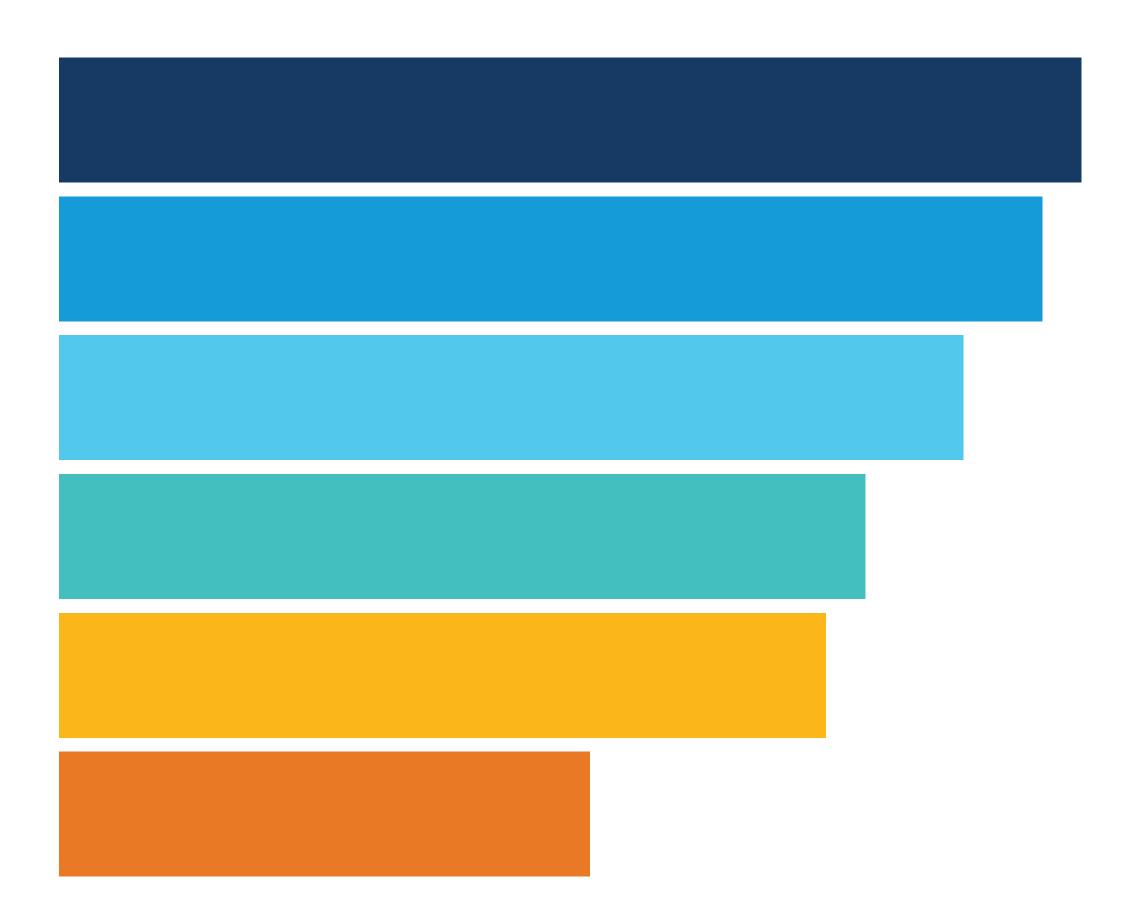
# How do you provide support for the open source components your organization uses? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 162, Valid Cases = 162, Total Mentions = 295



# Is there a single leader responsible and accountable for any of the following? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 111, Valid Cases = 111, Total Mentions = 283



52% Owning and overseeing the execution of open source strategy

**50%** Fostering an open source culture within the organization

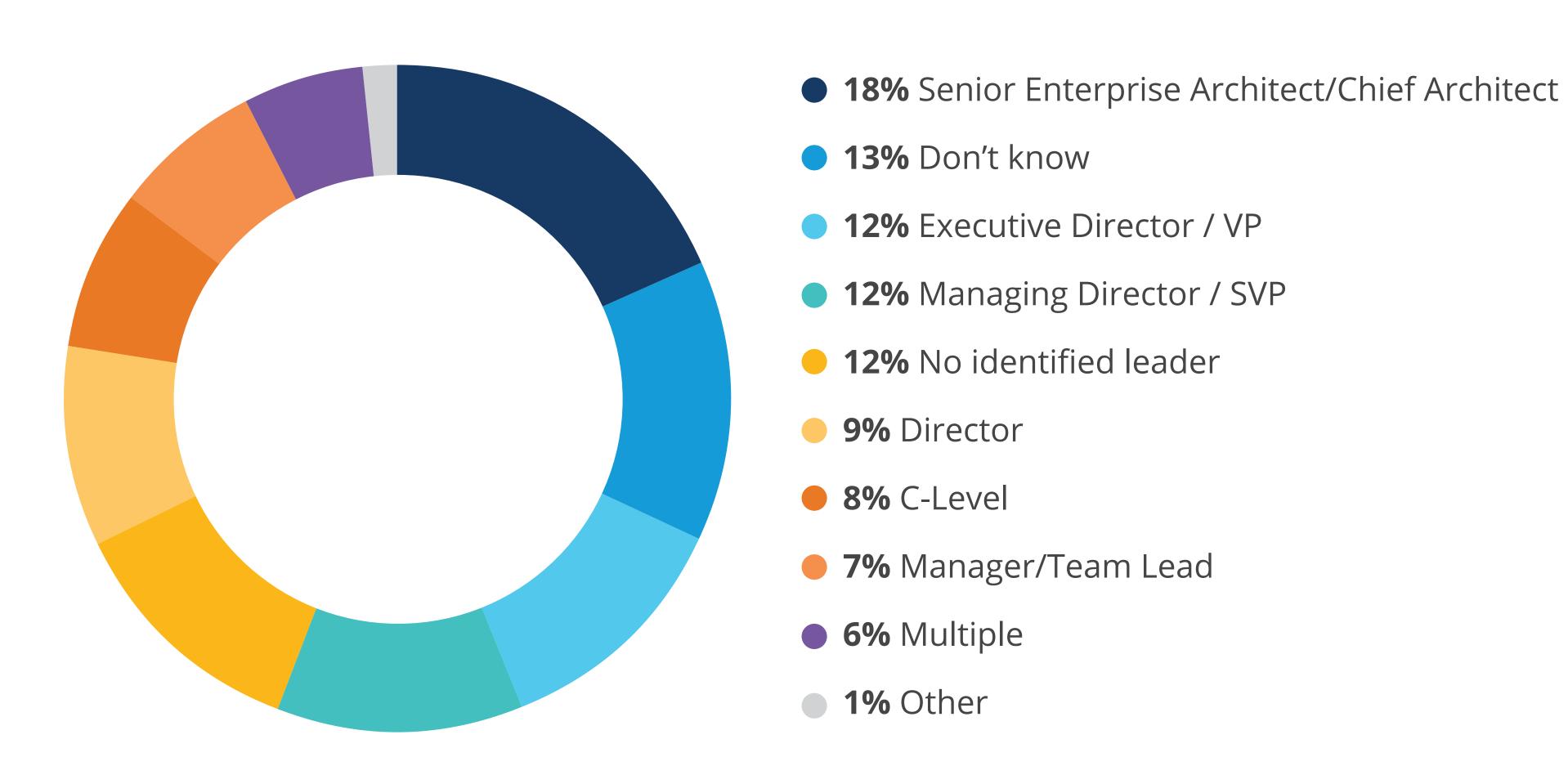
46% Communicating open source strategy within and outside the company

**41%** Developing and delivering open source training, resources, and documentation

**39%** Engaging with developer communities, so the company contributes back to other projects effectively

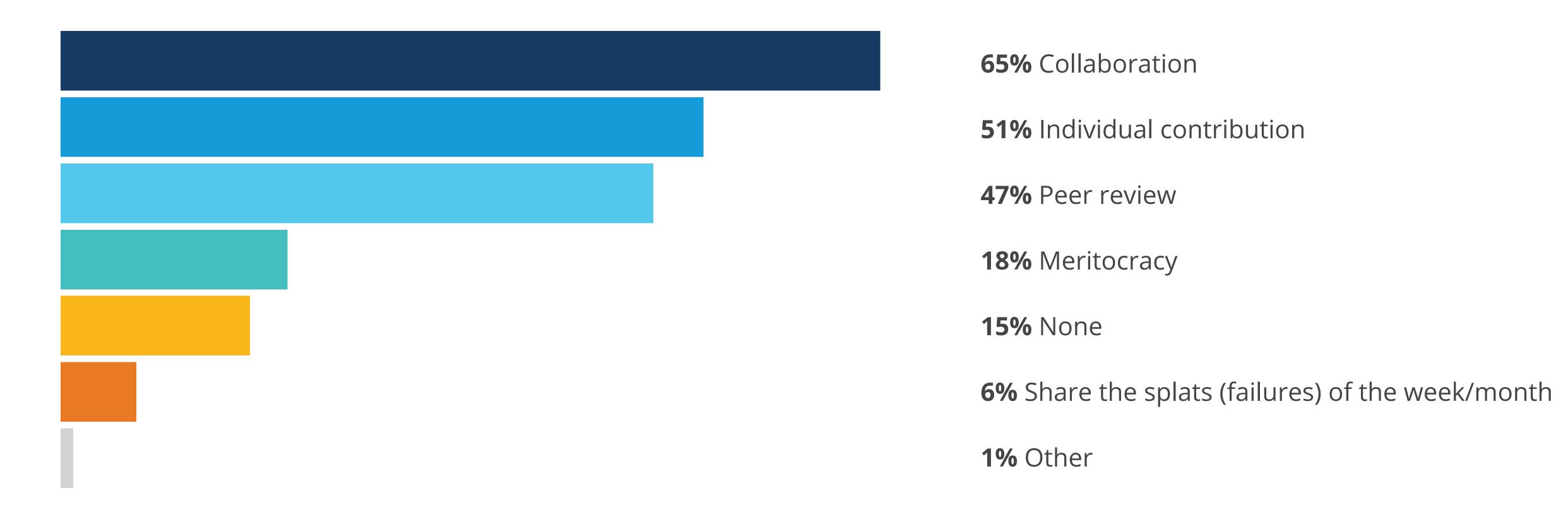
27% Ensuring high-quality and frequent releases of code to open source communities

### What seniority is your open source leadership?

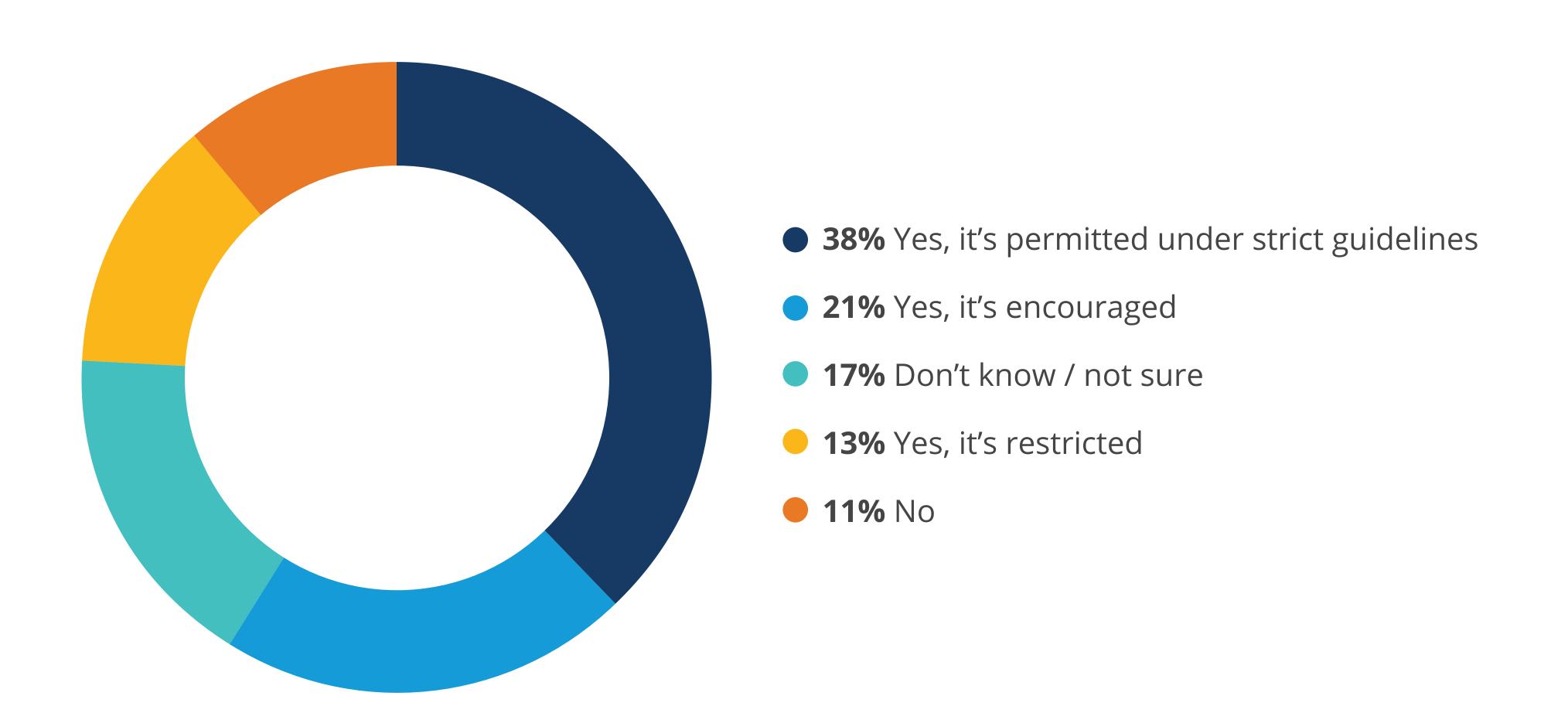


# What open source behaviors are championed in your organization to establish trust and transparency to drive increased open source / inner source collaboration? Check all that apply.

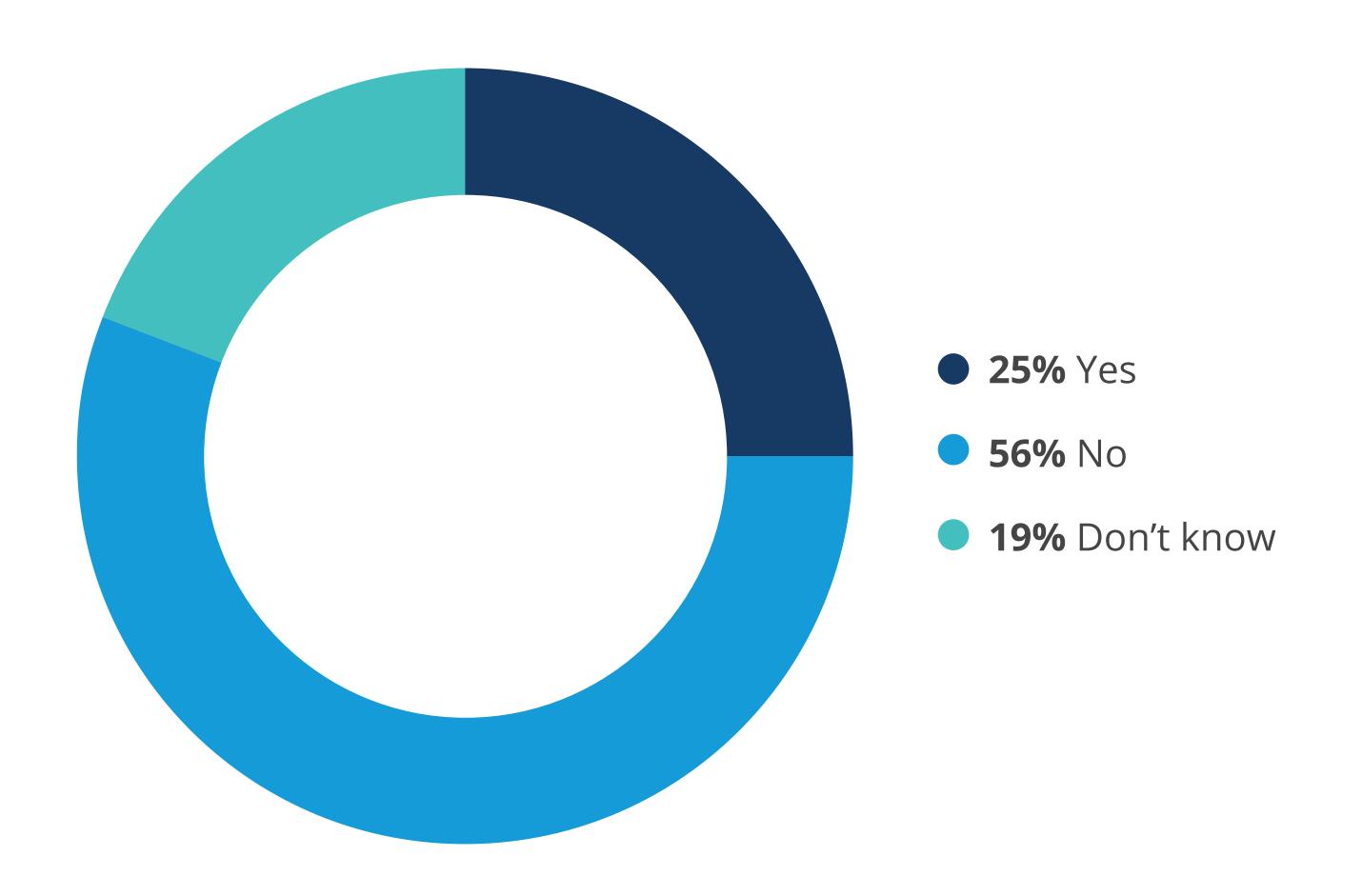
2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 139, Valid Cases = 139, Total Mentions = 283



### Do you have a policy on consumption?

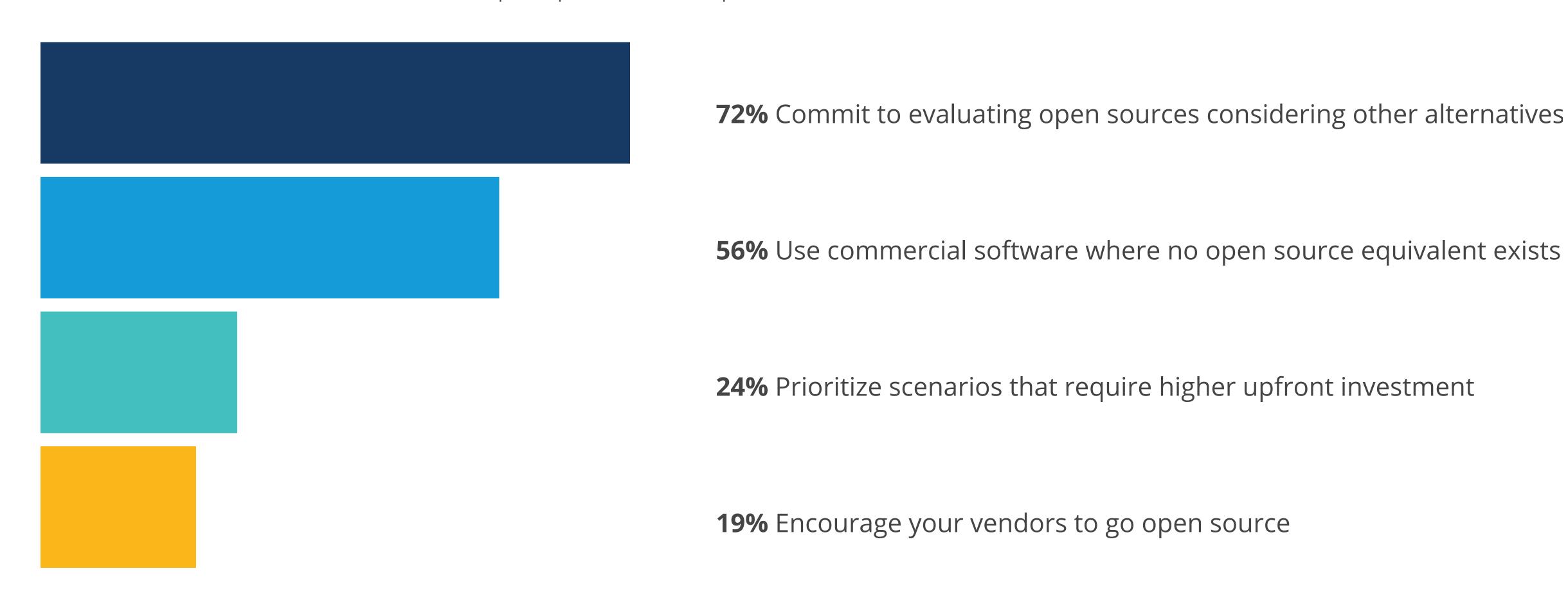


### Are you an open source first organization?



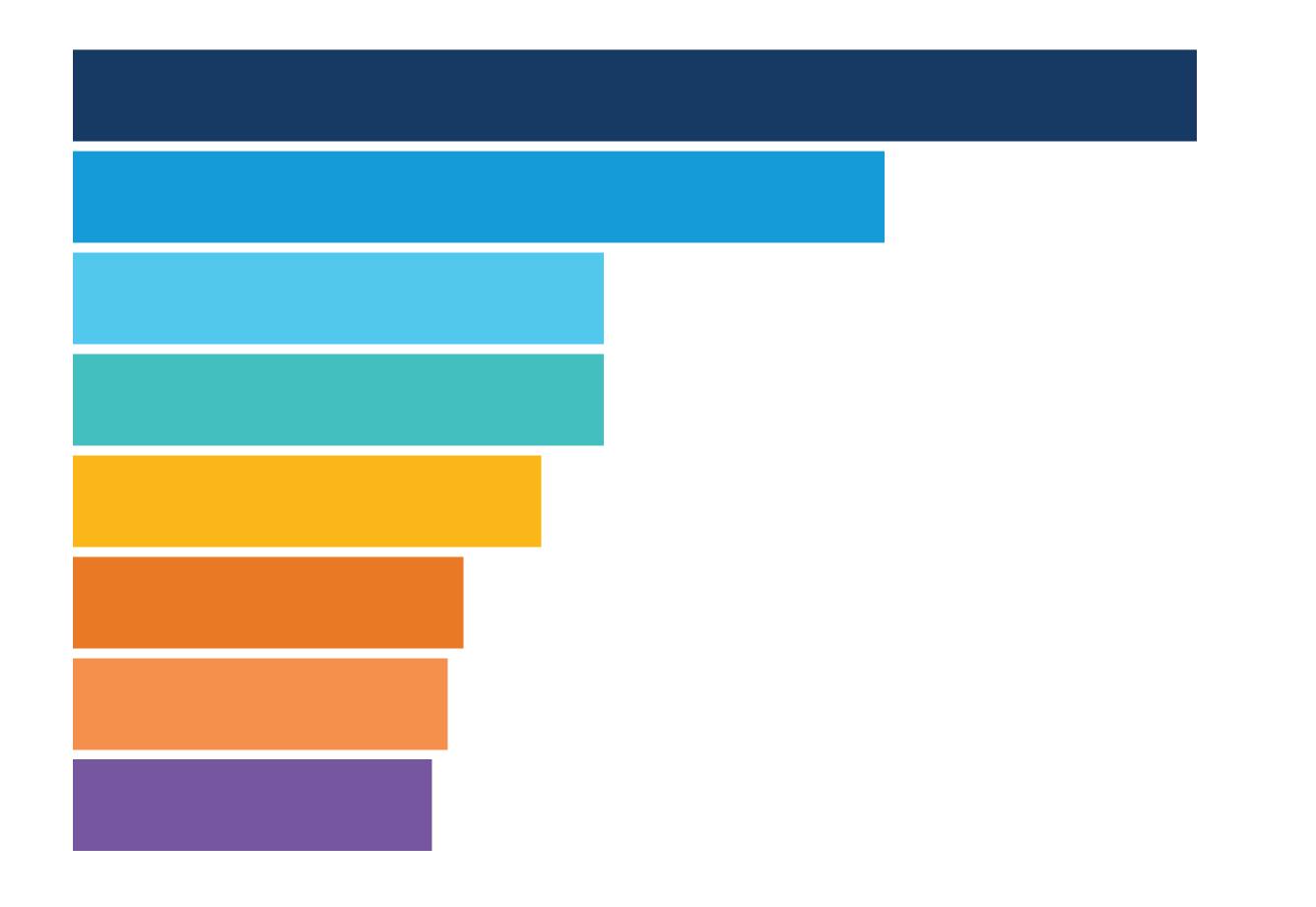
# If your organization has an open source first strategy, does it do any of the following? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 85, Valid Cases = 85, Total Mentions = 145



### What are your most common challenges when using open source? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 132, Valid Cases = 132, Total Mentions = 435



72% Making good decisions about which components and versions to use

**52%** Making good decisions about when to upgrade components and frameworks

34% Unclear which open source components are safe / approved at my organization

34% Understanding which licenses can be used together vs. which are in conflict

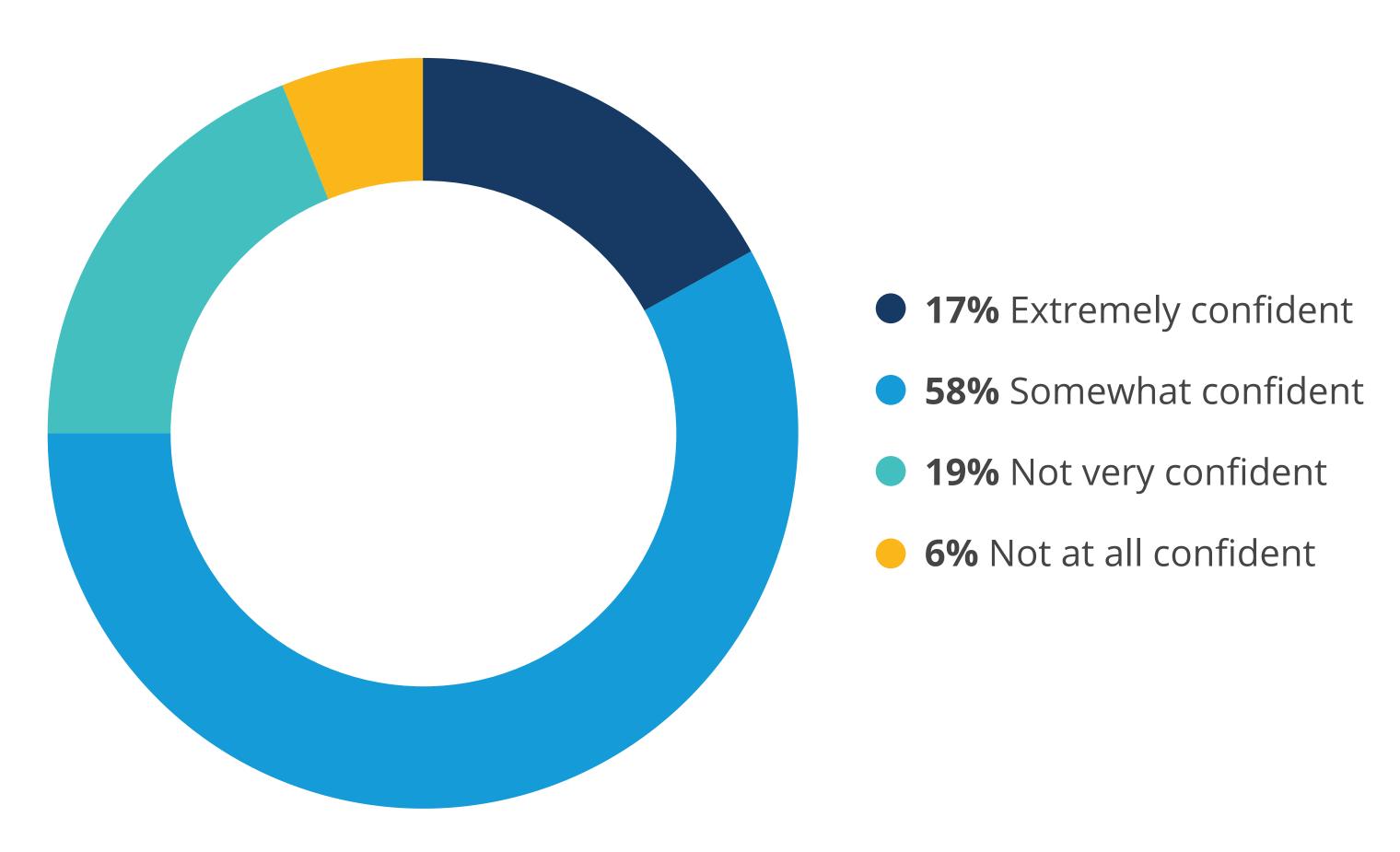
30% Finding unbiased information that objectively compares open source and proprietary solutions

25% Identifying and resolving security vulnerabilities

24% Resolving licensing issues or complying with the organization's license policy

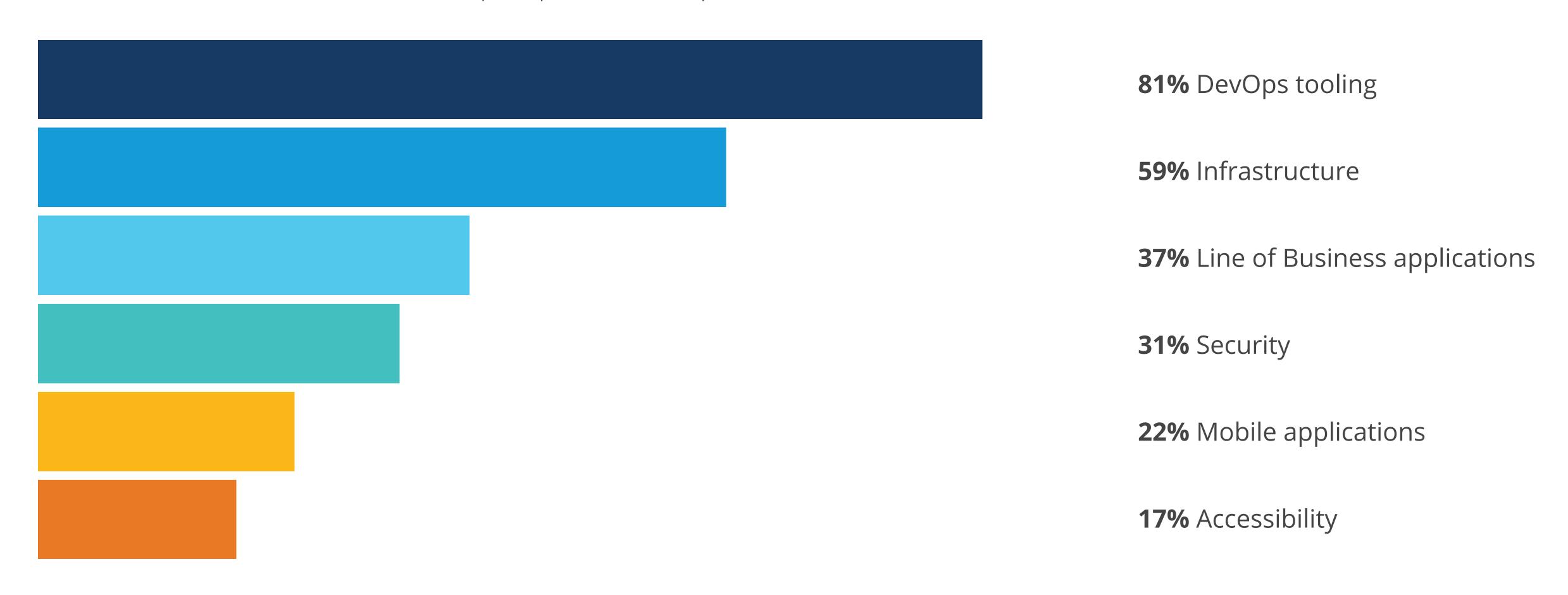
23% Requesting to use new open source components is a lengthy or confusing process

### How confident are you that the open source components you use are maintained and up-to-date?



### Where are you seeing the most use of open source software in your organization? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 137, Valid Cases = 137, Total Mentions = 338



# Please select the statement closest to your current employer's policy on using open source applications or infrastructure.



- **42%** Use of open source libraries or code is acceptable if it is the best tool
- 22% Use of open source libraries or code is encouraged
- 15% No clear policy
- 11% Not sure
- **10%** Use of open source libraries or code is rarely, if ever, permitted

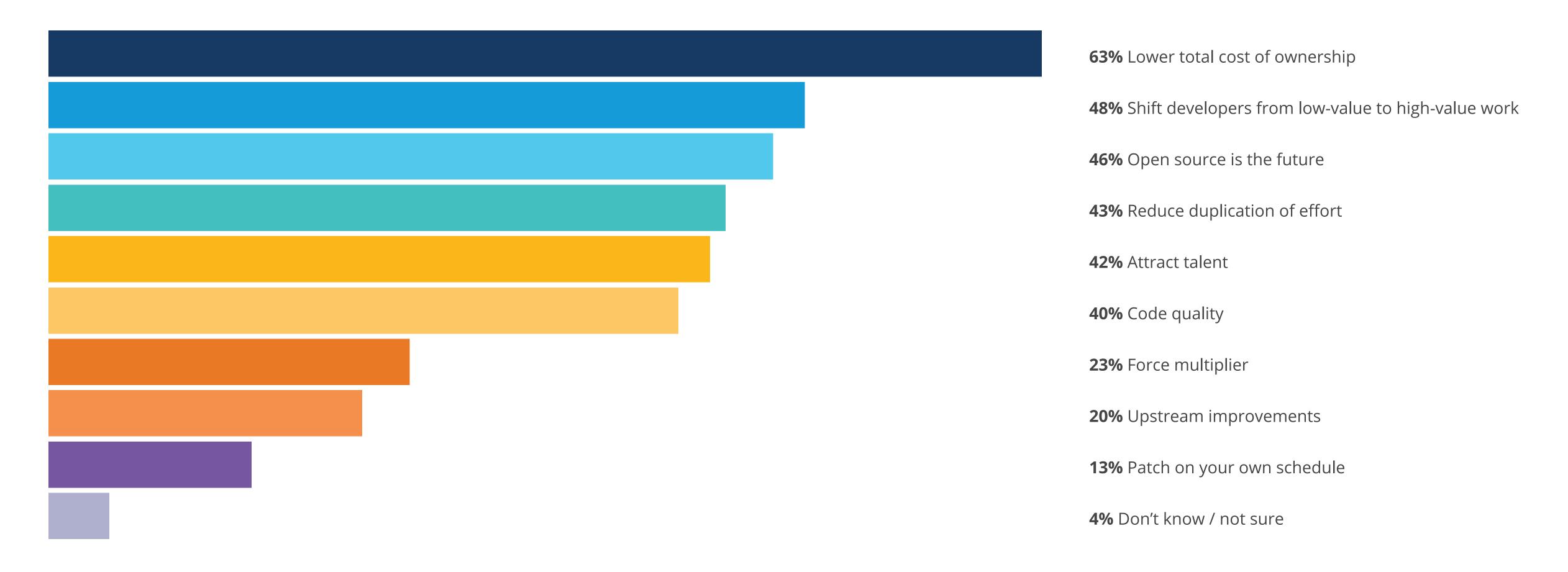
# Please select the statement closest to your current employer's policy on incorporating open source libraries or code into your code base.



- 42% Use of open source libraries or code is acceptable if it is the best tool
- **25%** Use of open source libraries or code is encouraged
- 13% Not sure
- 13% No clear policy
- 6% Use of open source libraries or code is rarely, if ever, permitted

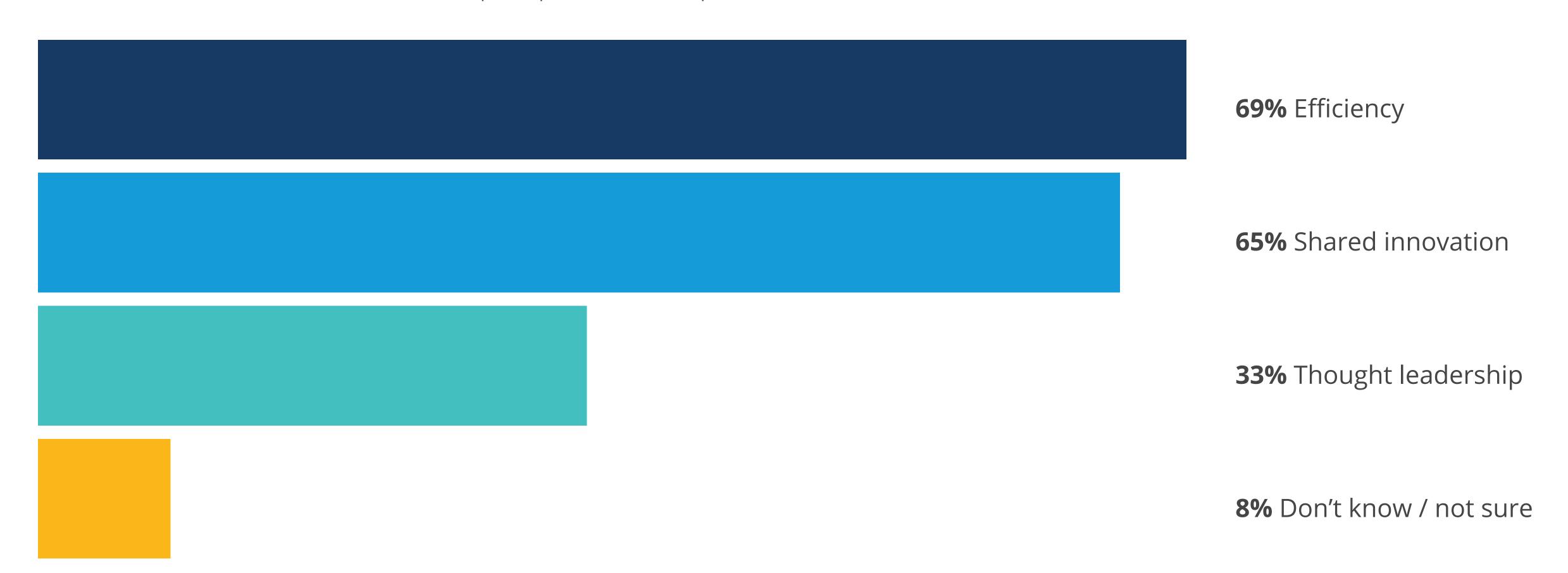
# What are the macroeconomic motivations for using open source software? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 132, Valid Cases = 132, Total Mentions = 452



# What are the microeconomic motivations for using open source software? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 131, Valid Cases = 131, Total Mentions = 228



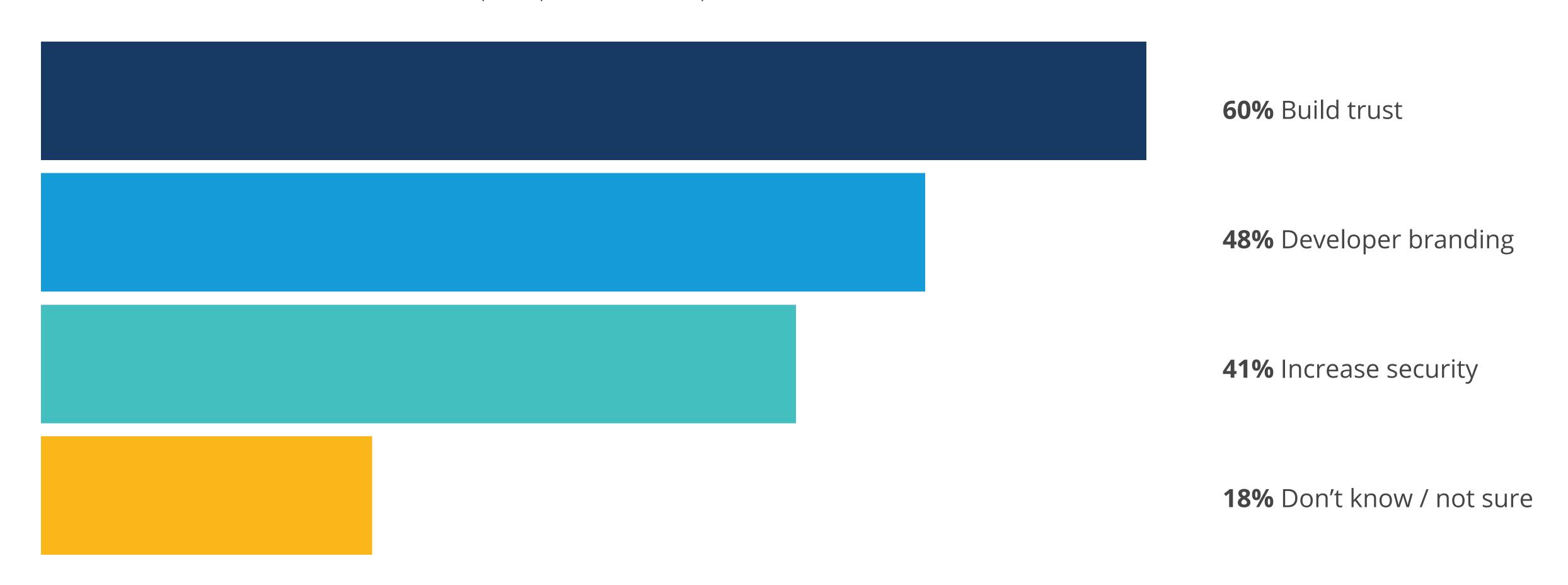
# What are the moral motivations for using open source software? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 128, Valid Cases = 128, Total Mentions = 196



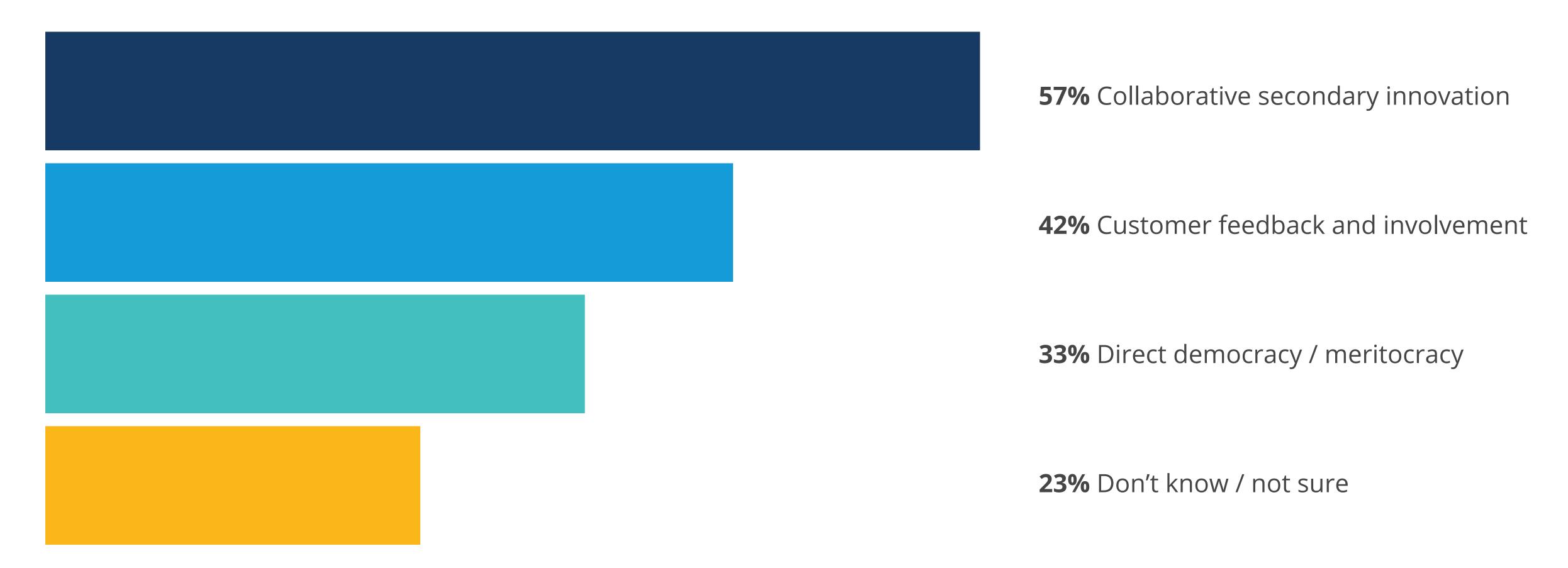
# What are the transparency motivations for using open source software? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 128, Valid Cases = 128, Total Mentions = 214



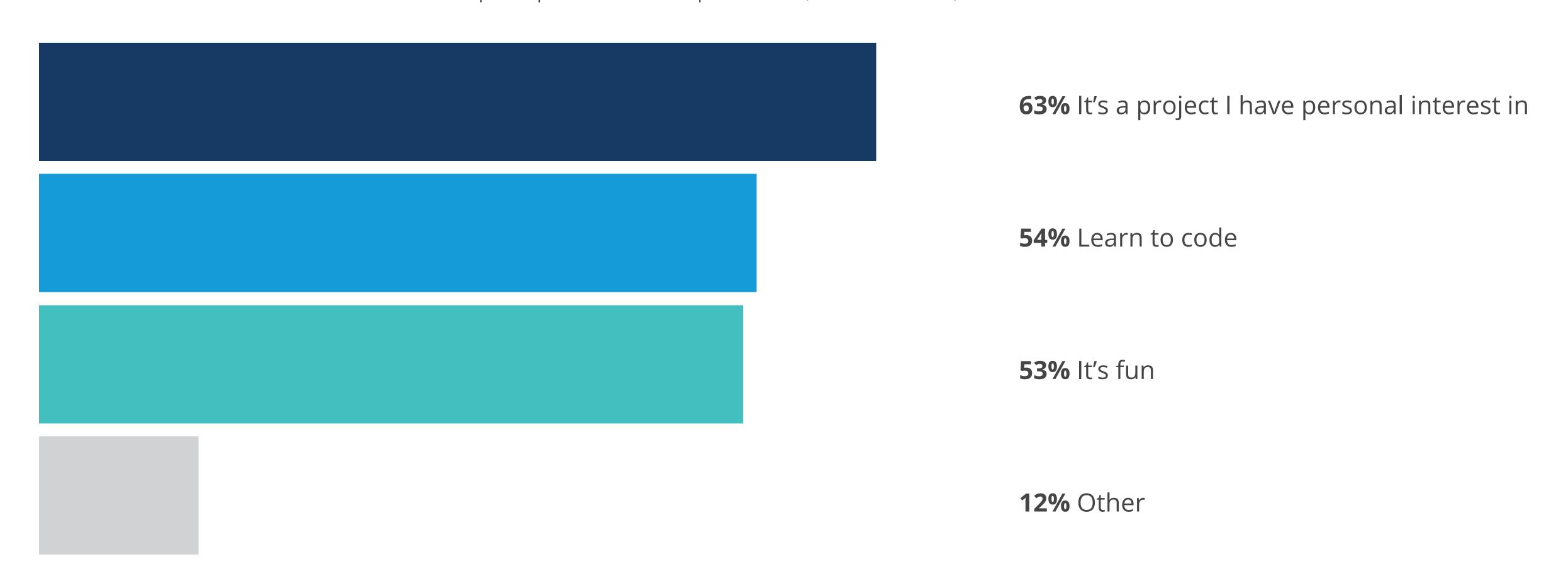
# What are the participatory motivations for using open source software? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 129, Valid Cases = 129, Total Mentions = 199

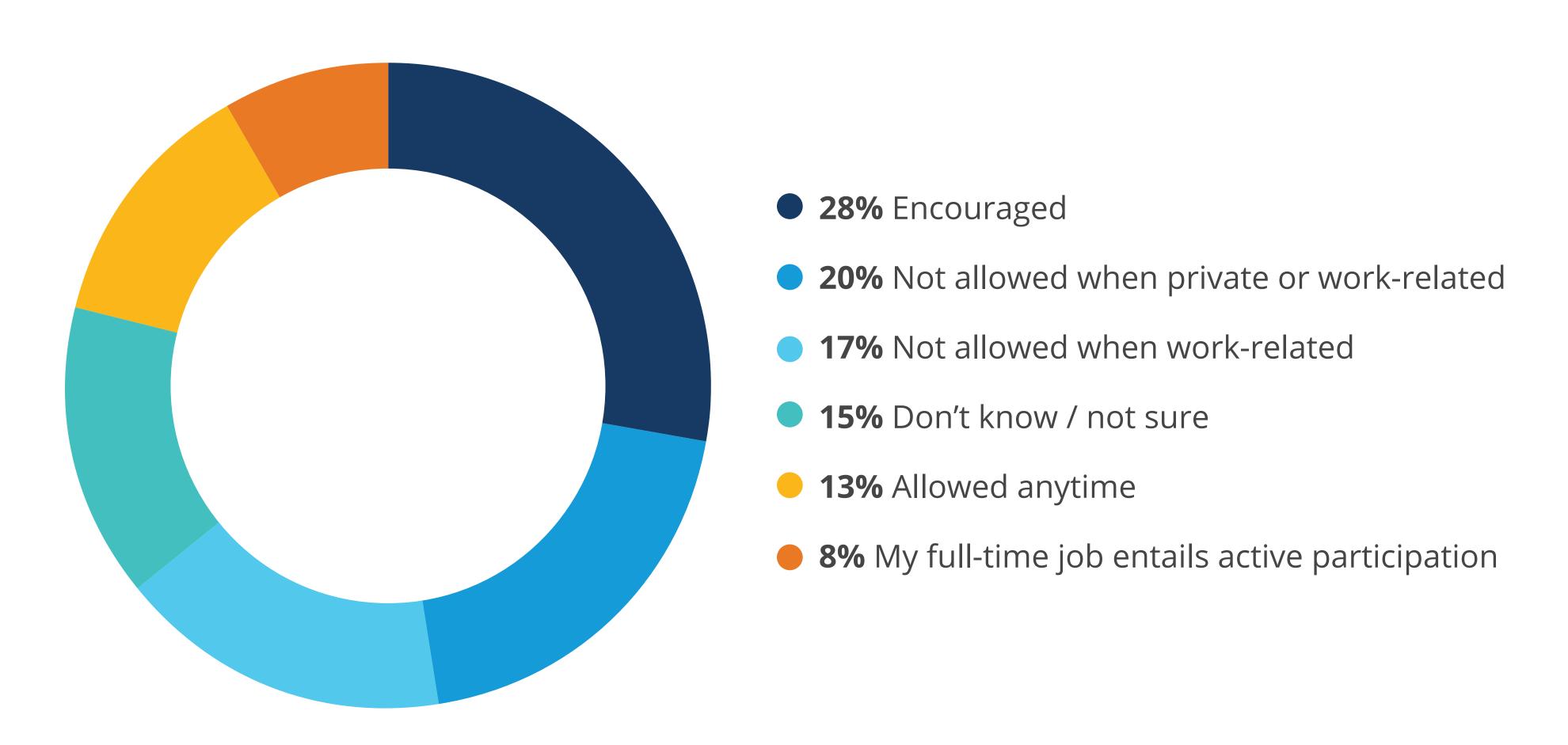


# What is your personal motivation for using open source software? Check all that apply.

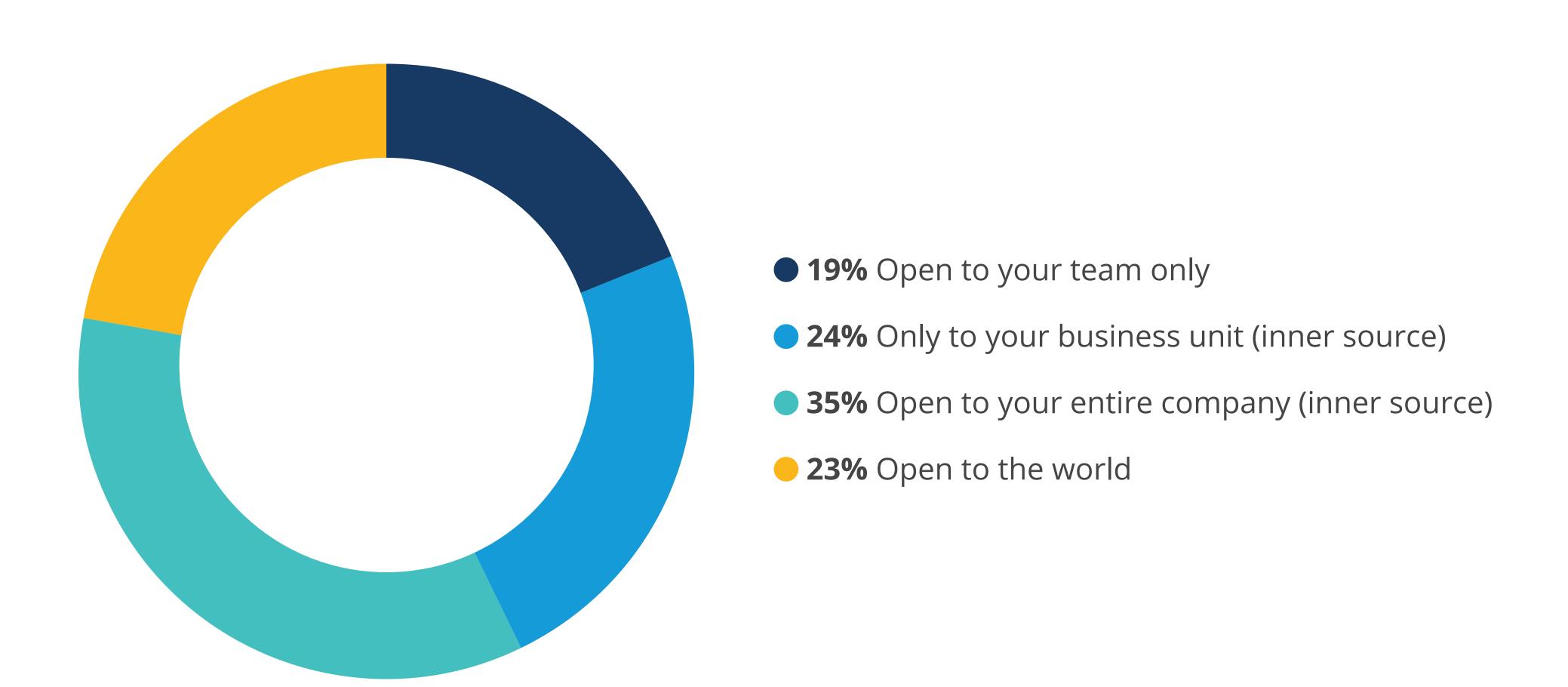
2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 120, Valid Cases = 120, Total Mentions = 217



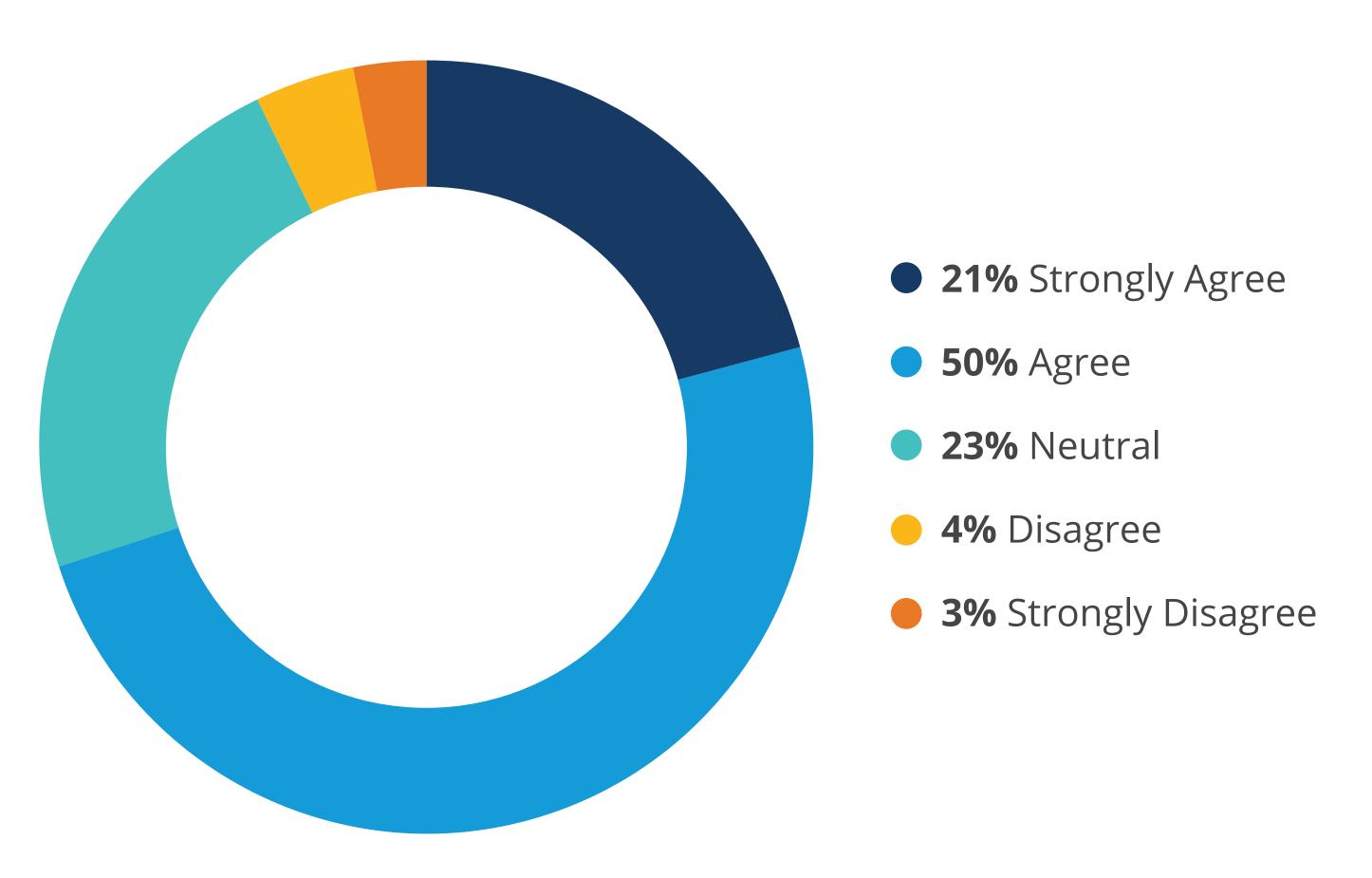
#### What are your current employer's principles and policies on open source contributions?



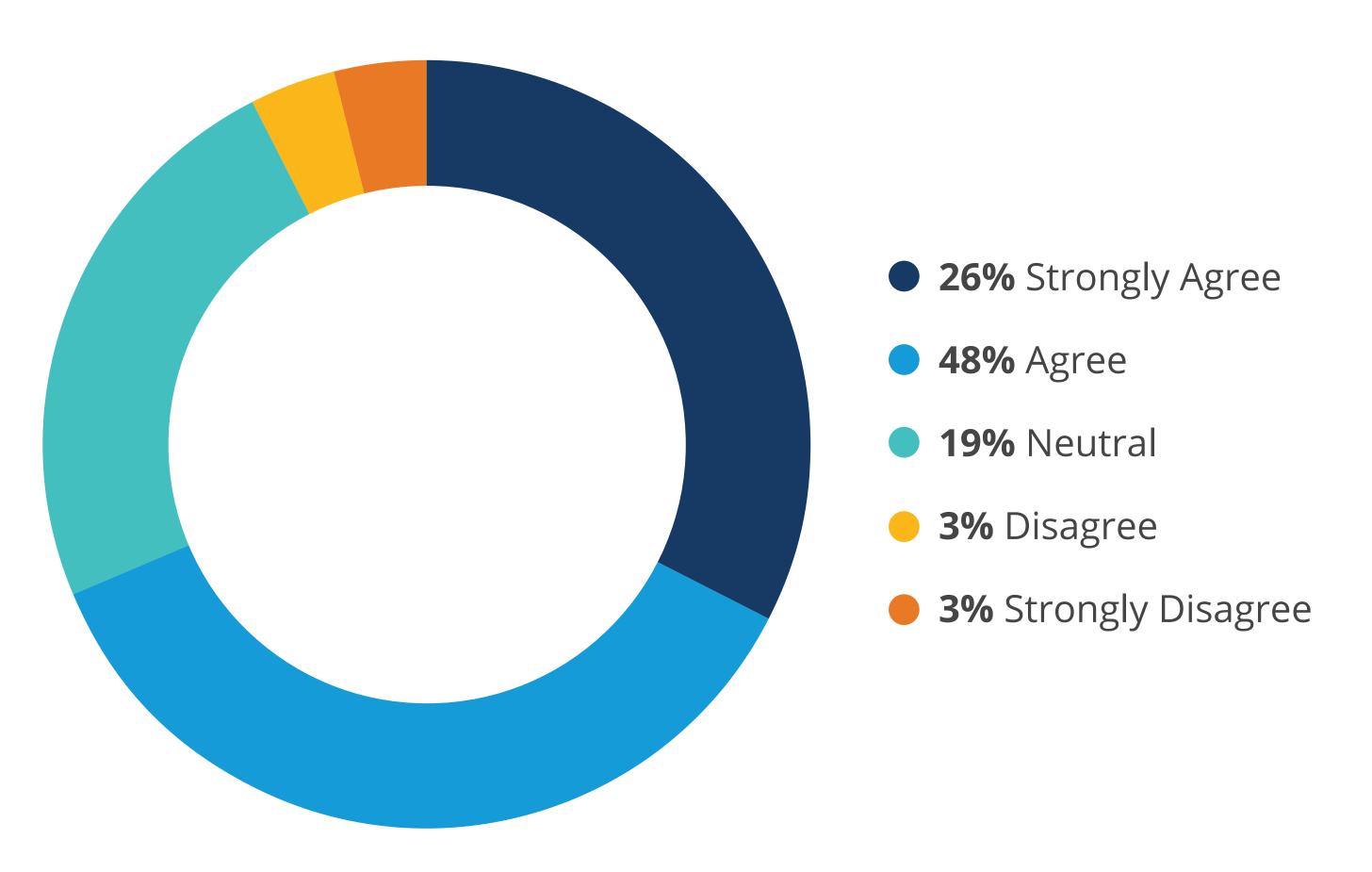
#### At work, you or your colleagues contribute to work-related software projects that are:



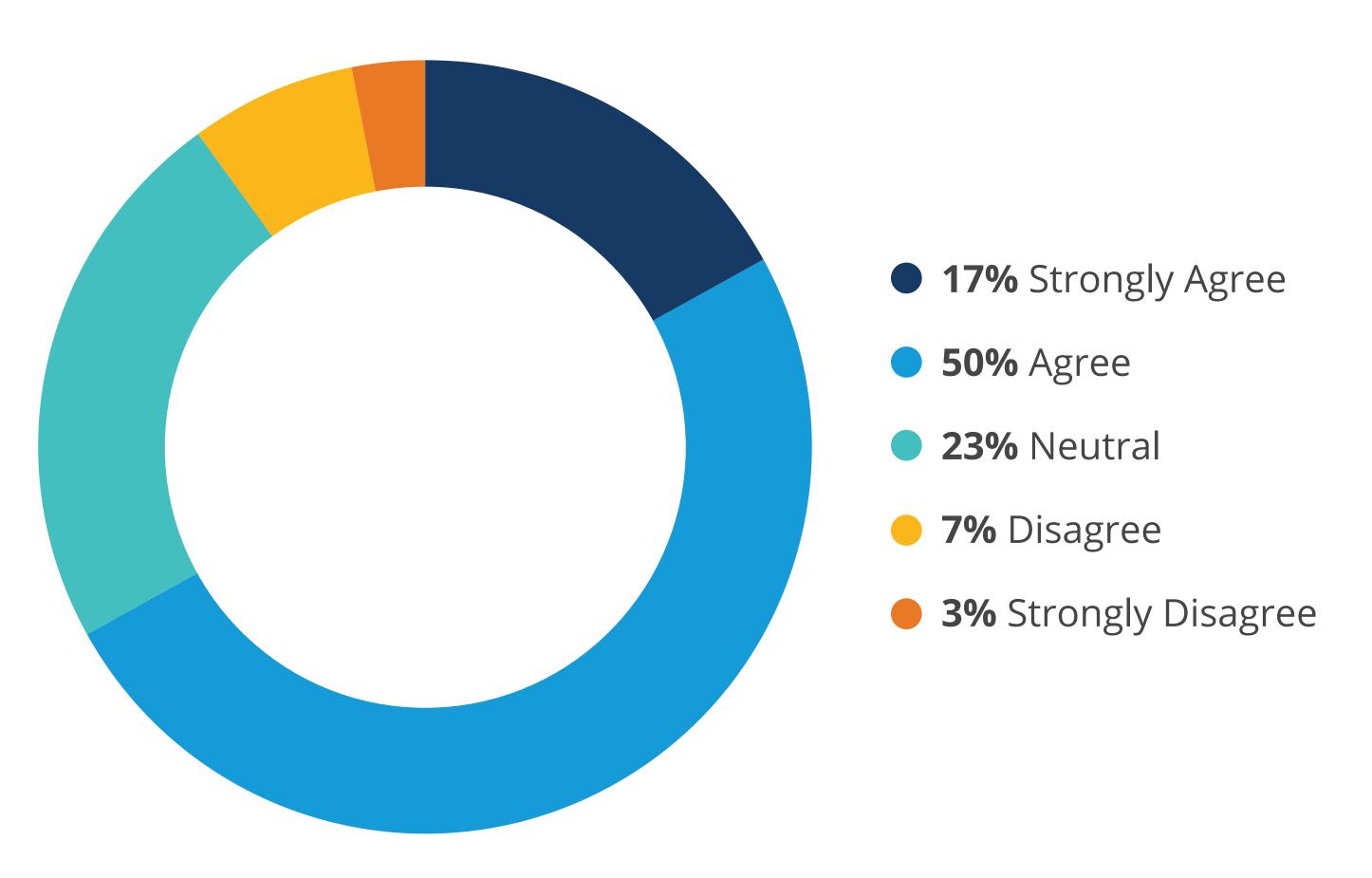
# What do you feel are the main reasons your company participates in open source from the culture point of view: Recruitment?



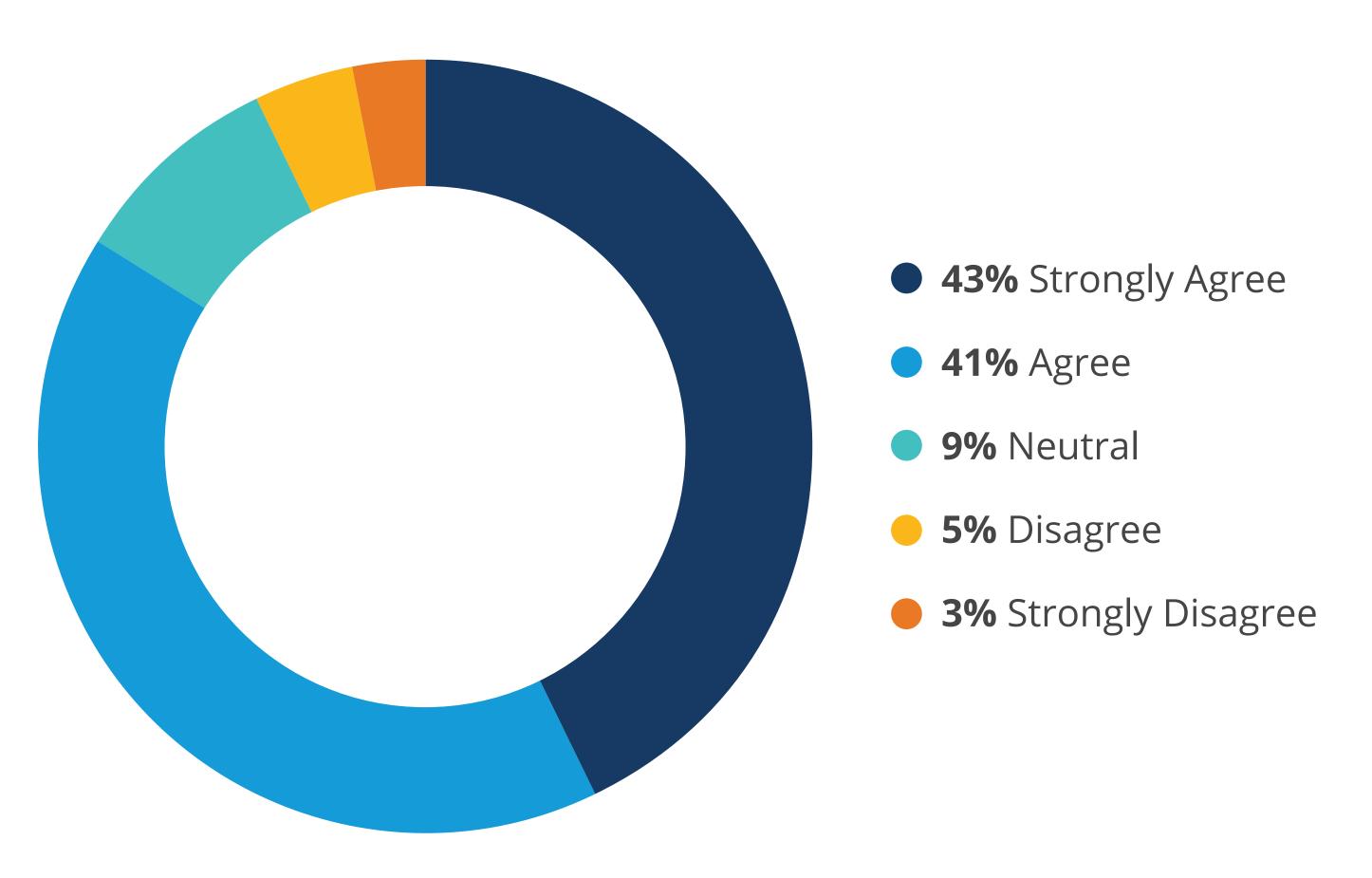
# What do you feel are the main reasons your company participates in open source from the culture point of view: Talent Retention/Job Satisfaction?



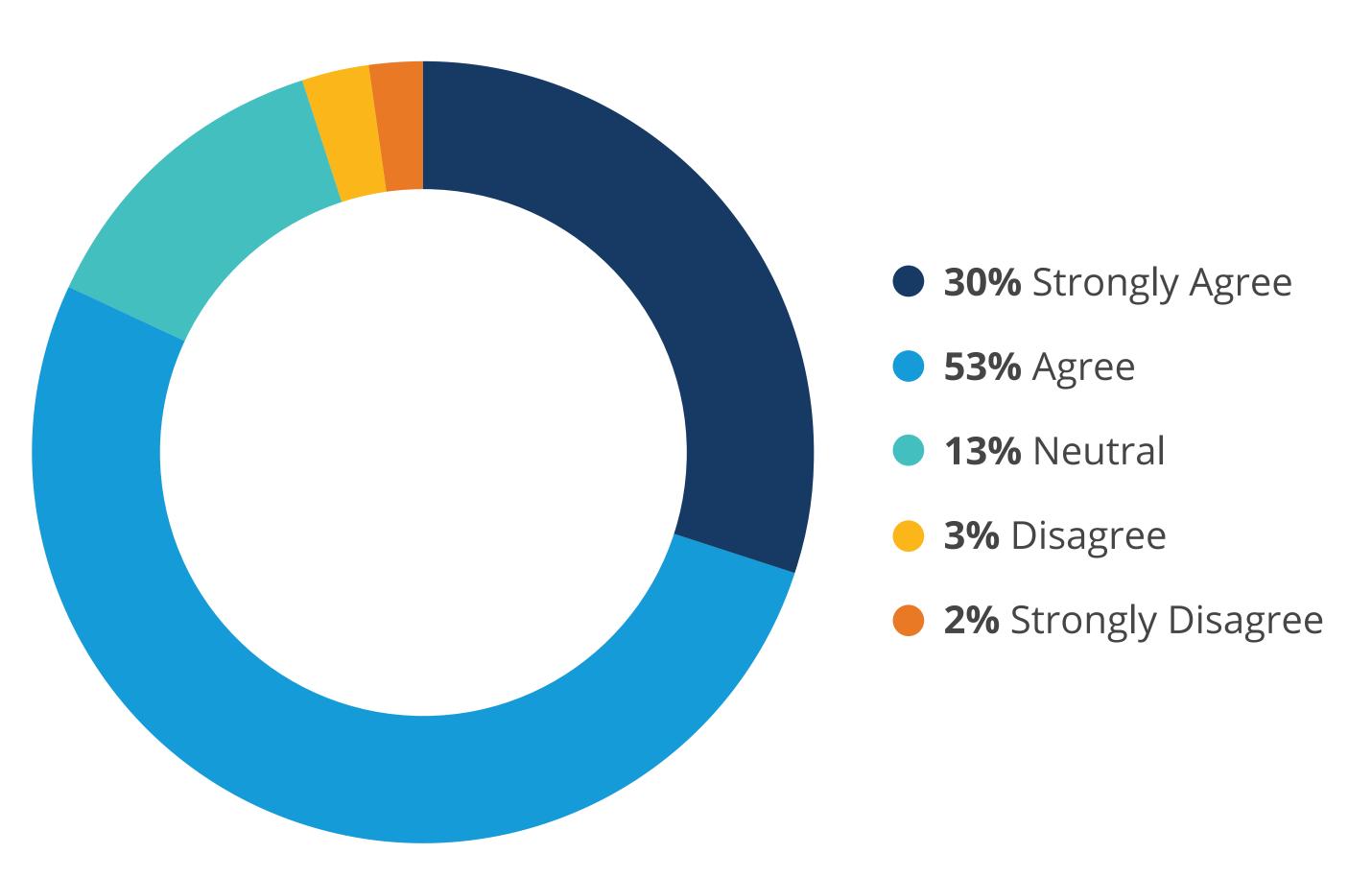
# What do you feel are the main reasons your company participates in open source from the culture point of view: Brand?



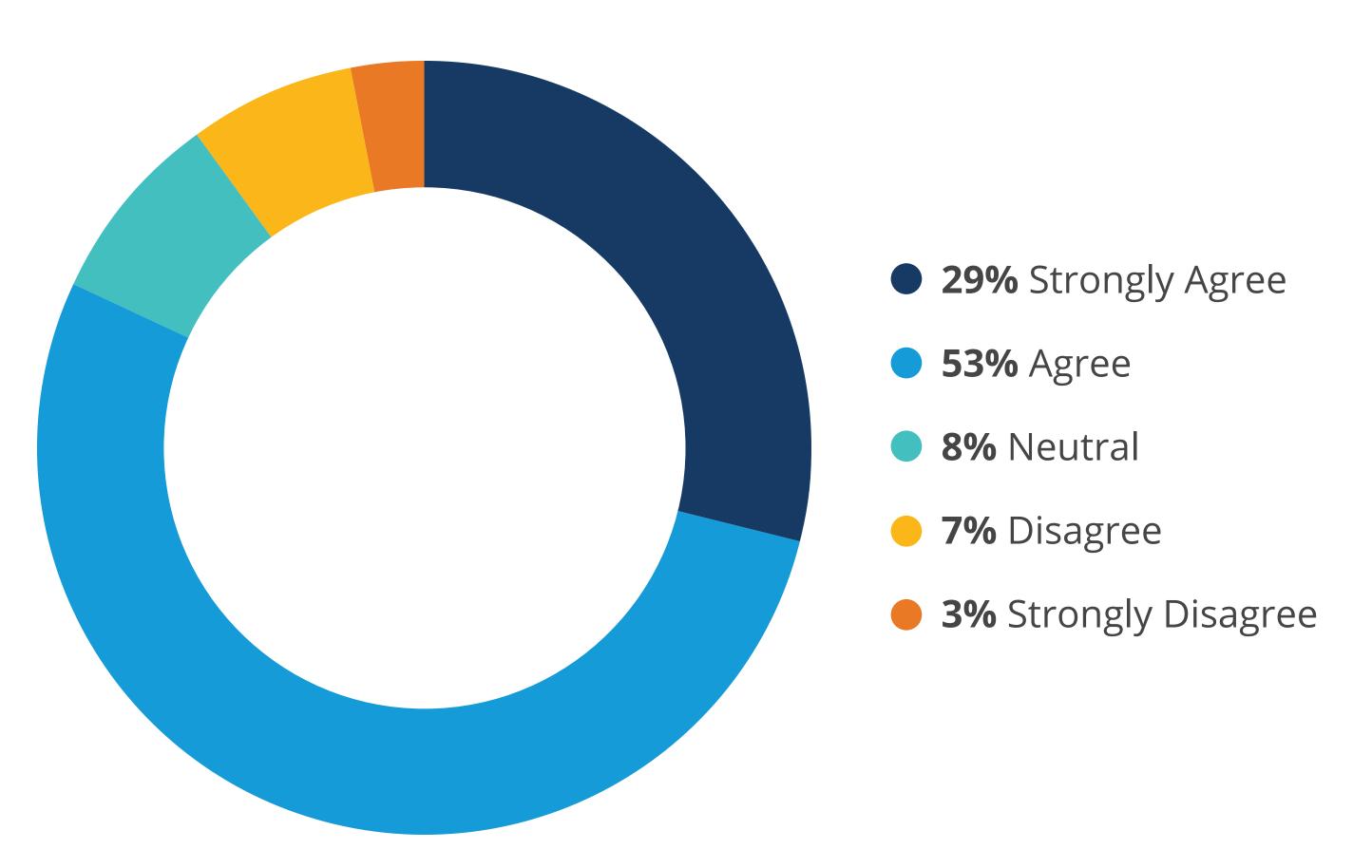
# What do you feel are the main reasons your company participates in open source from the culture point of view: Innovation?



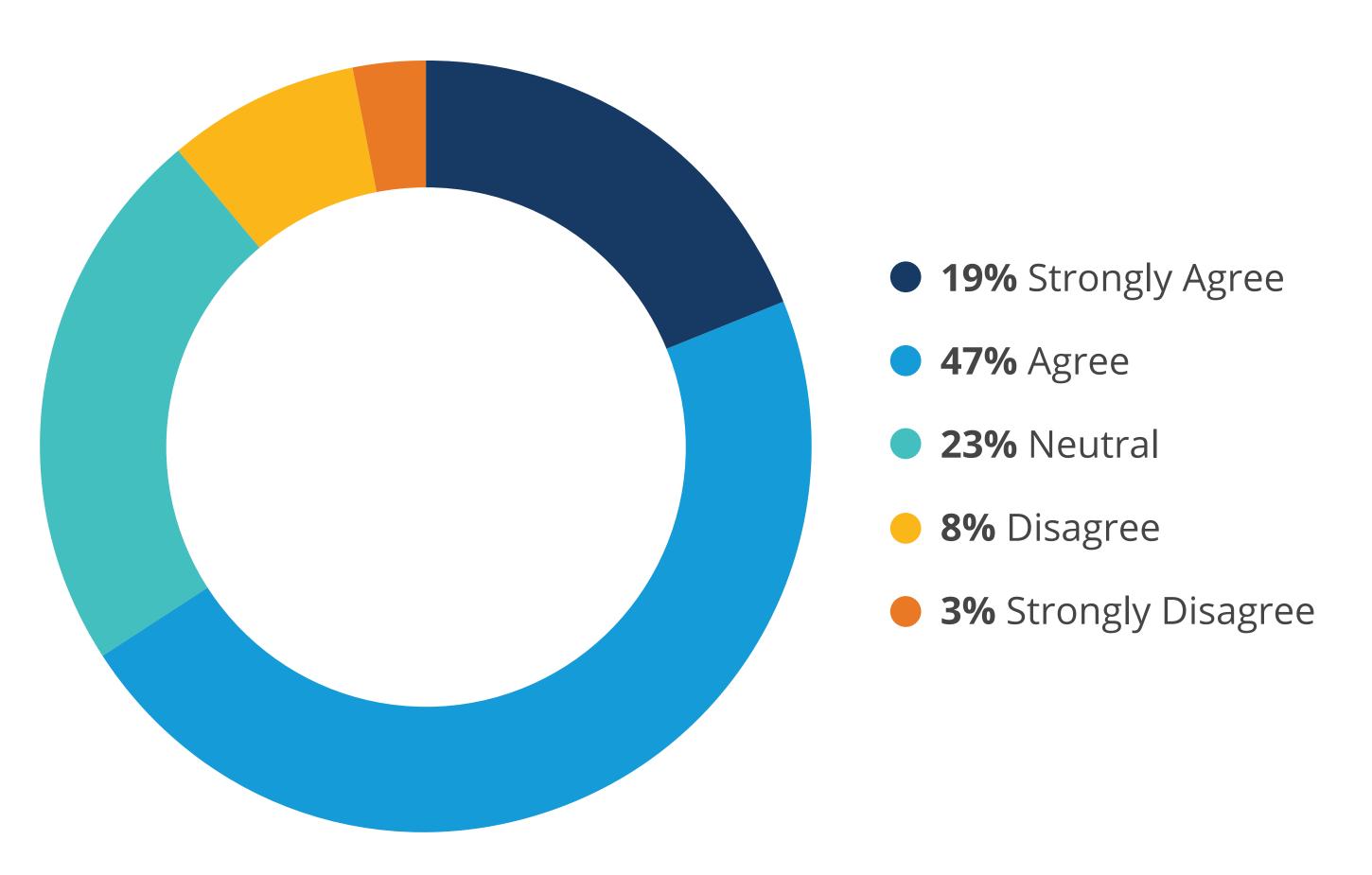
# What do you feel are the main reasons your company participates in open source from the culture point of view: Time to Market / Increased Velocity?



# What do you feel are the main reasons your company participates in open source from the culture point of view: Total Cost of Ownership?



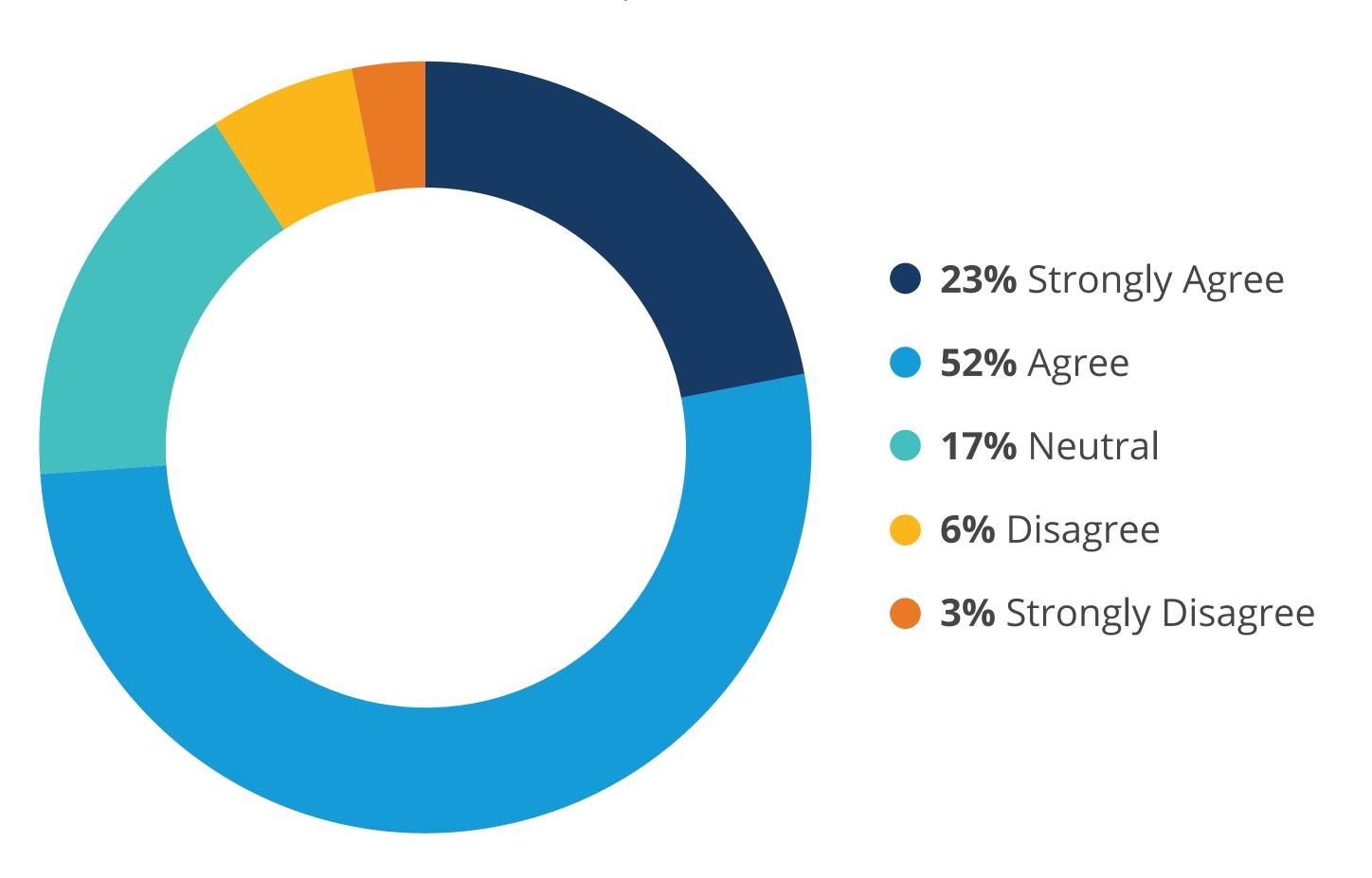
# What do you feel are the main reasons your company participates in open source from the culture point of view: Quality?



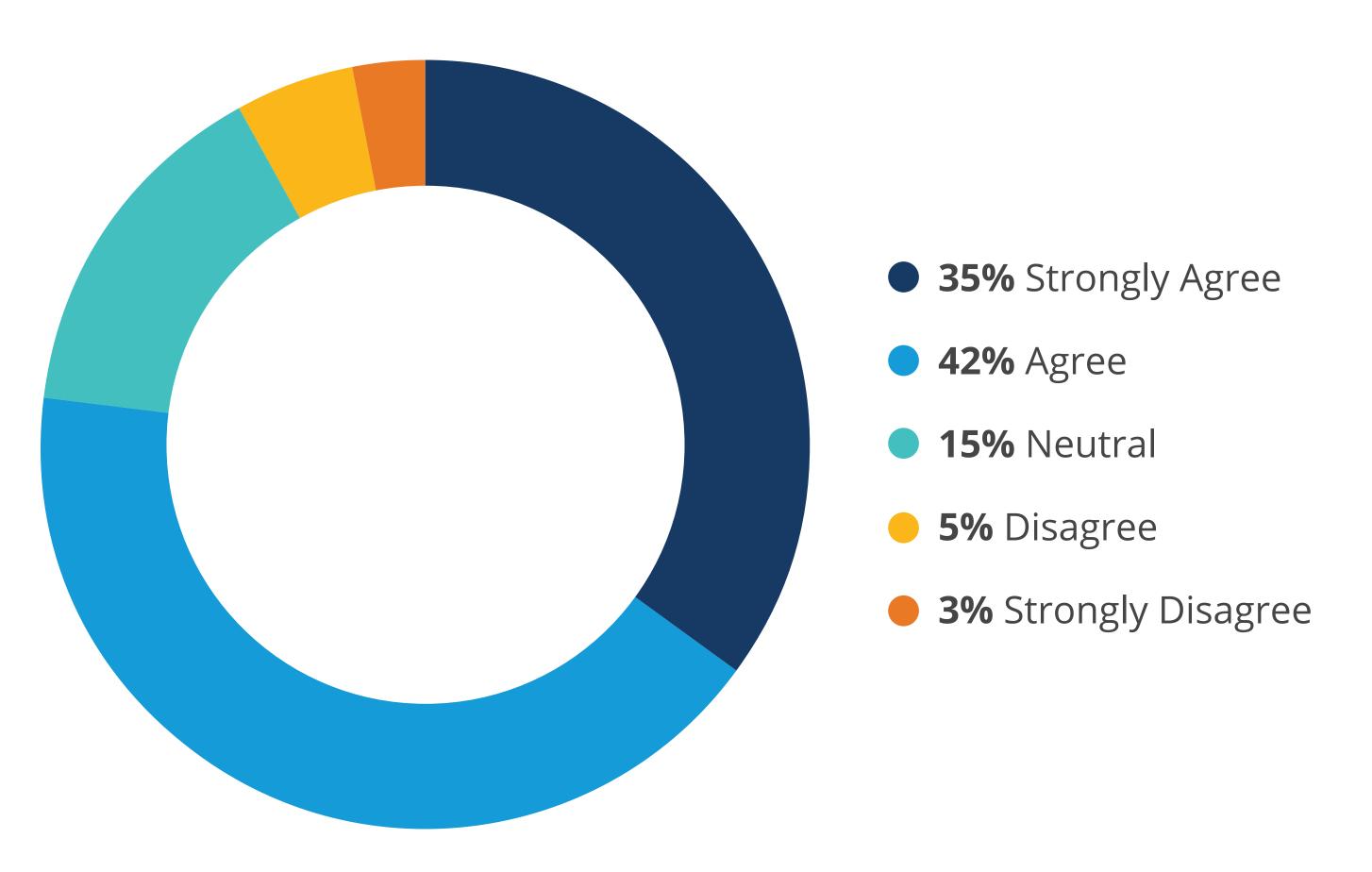
# Who do you think has significant influence over the direction of open source engagement within your organization: Individual contributors in technology?



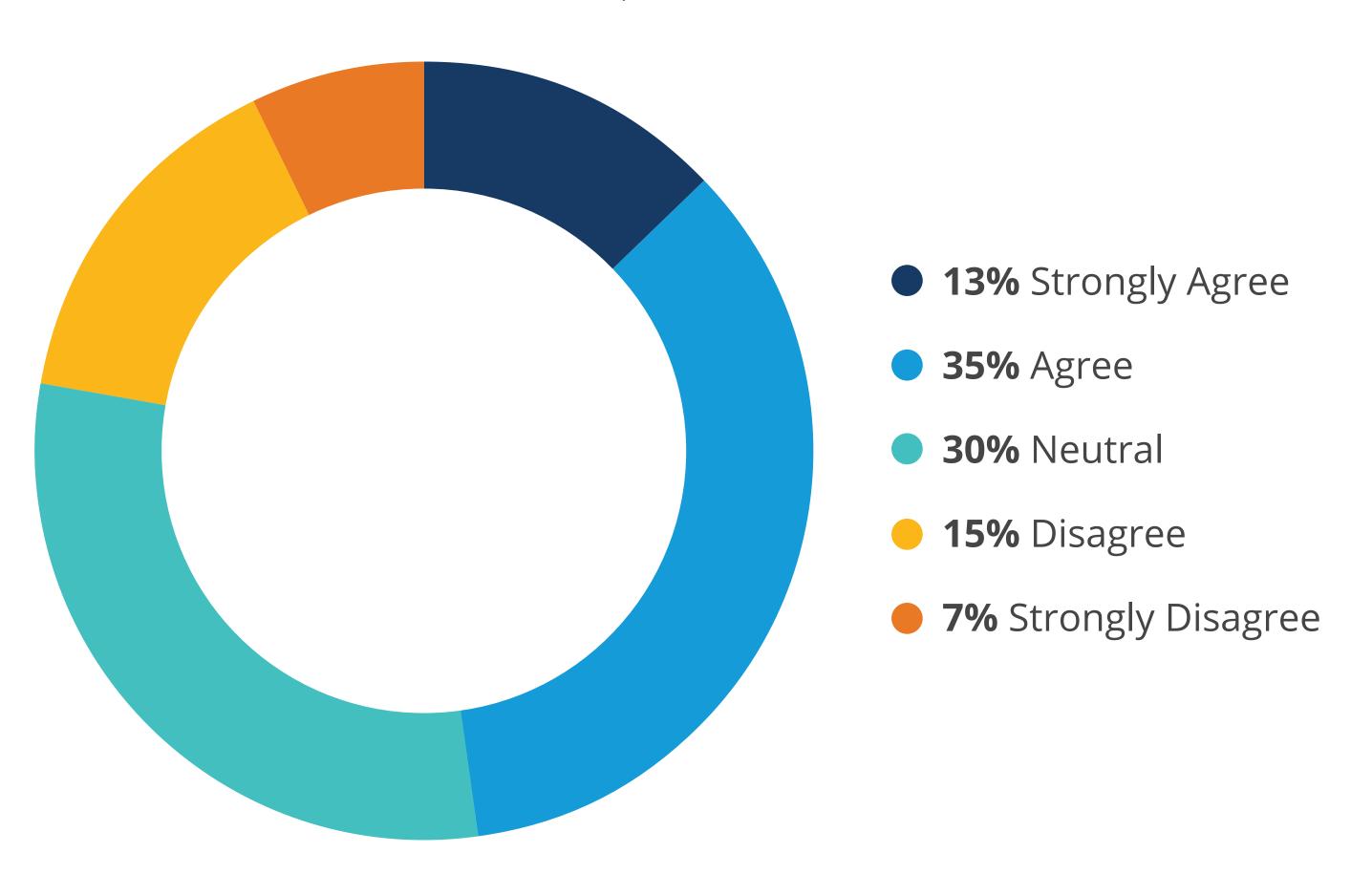
## Who do you think has significant influence over the direction of open source engagement within your organization: Managers in technology functions?



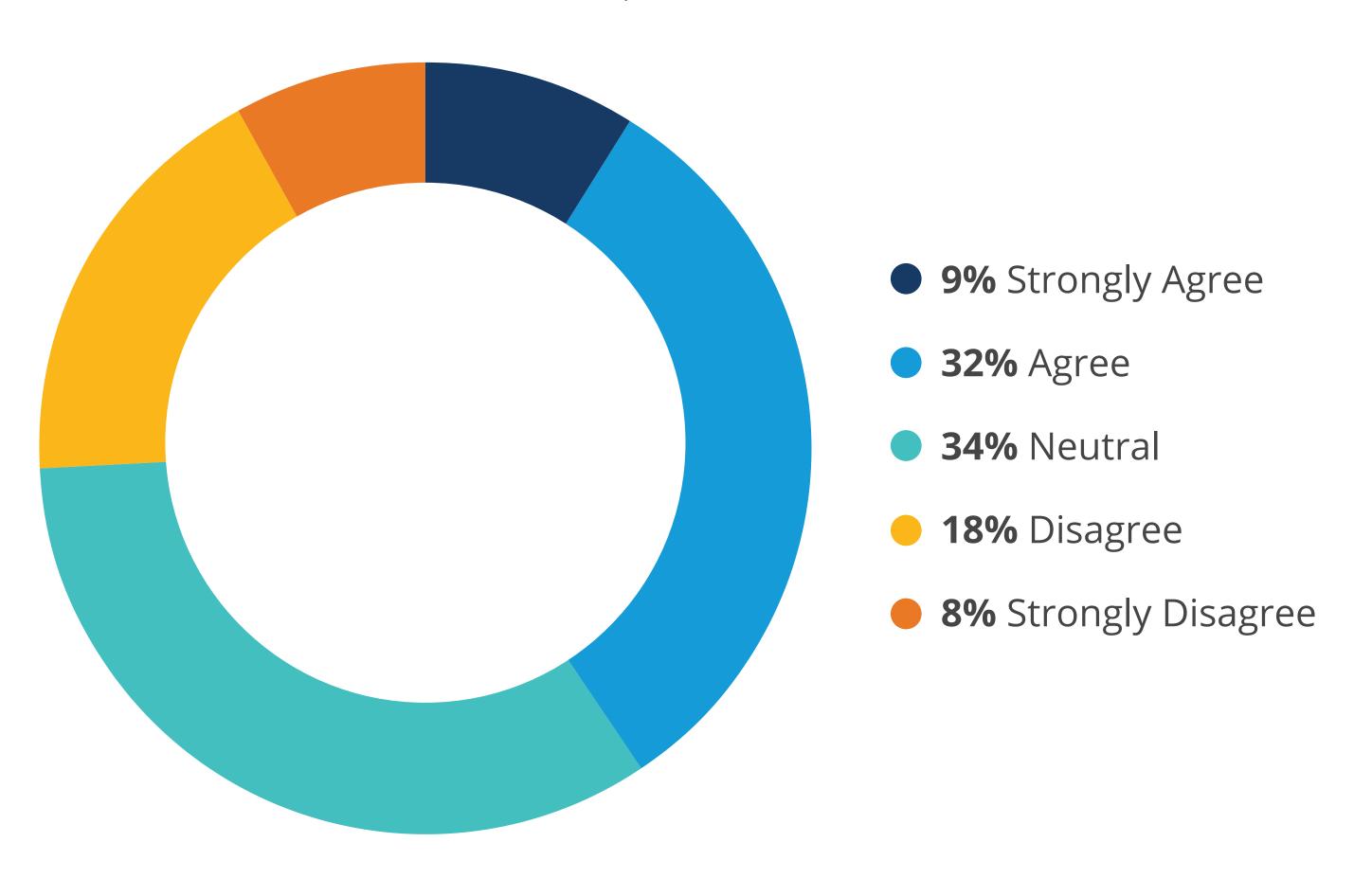
## Who do you think has significant influence over the direction of open source engagement within your organization: Executives in technology functions?



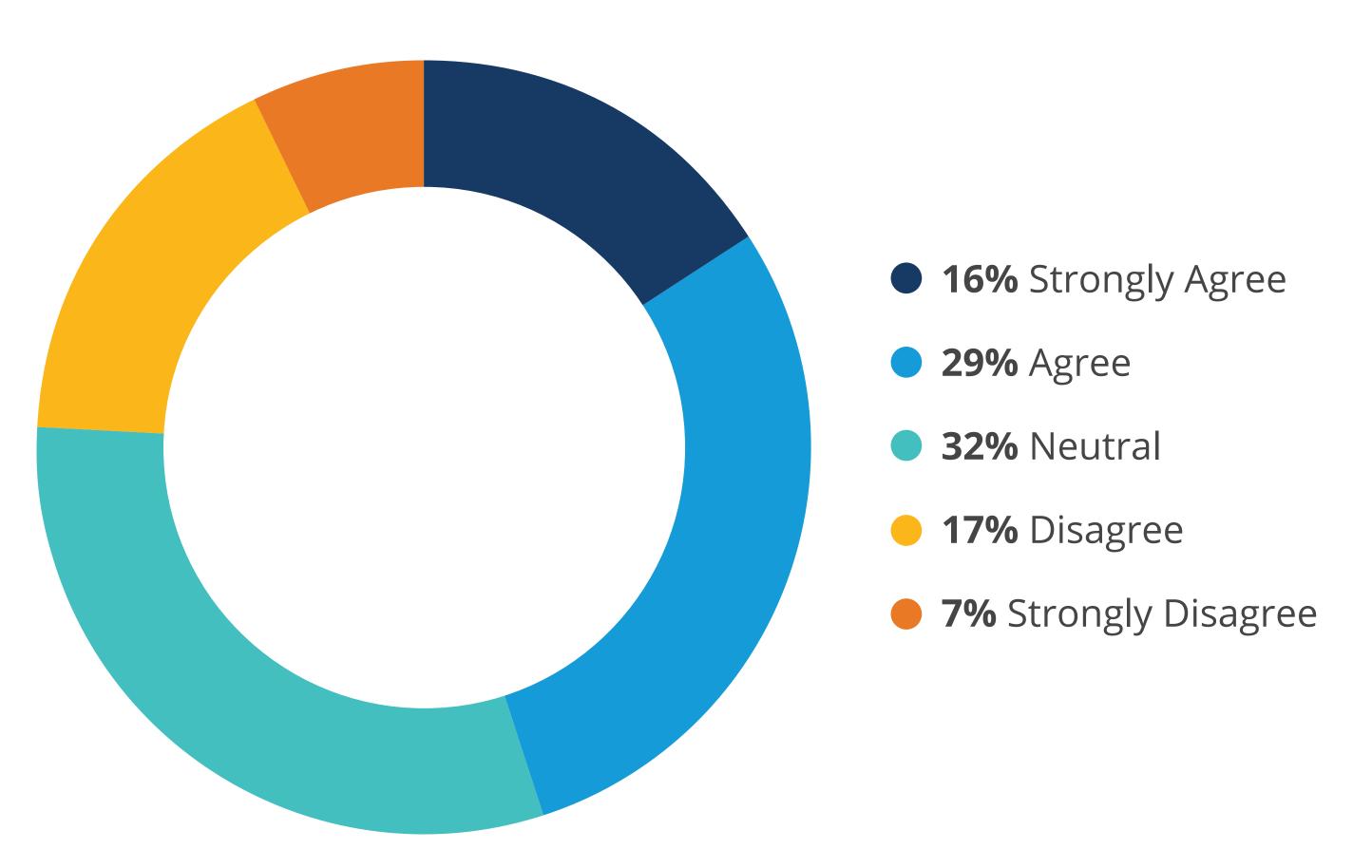
## Who do you think has significant influence over the direction of open source engagement within your organization: Individuals in business functions?



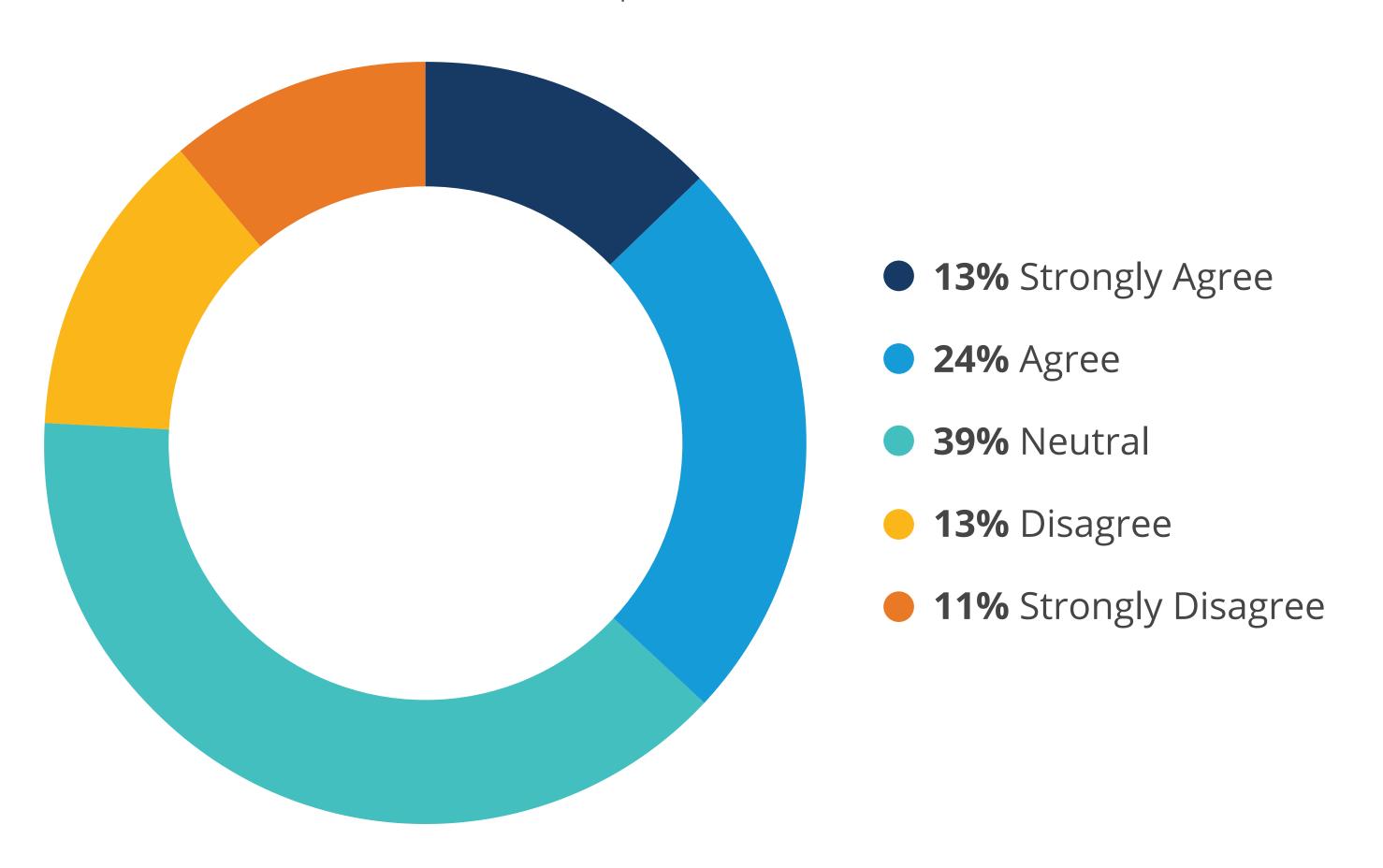
## Who do you think has significant influence over the direction of open source engagement within your organization: Managers in business functions?



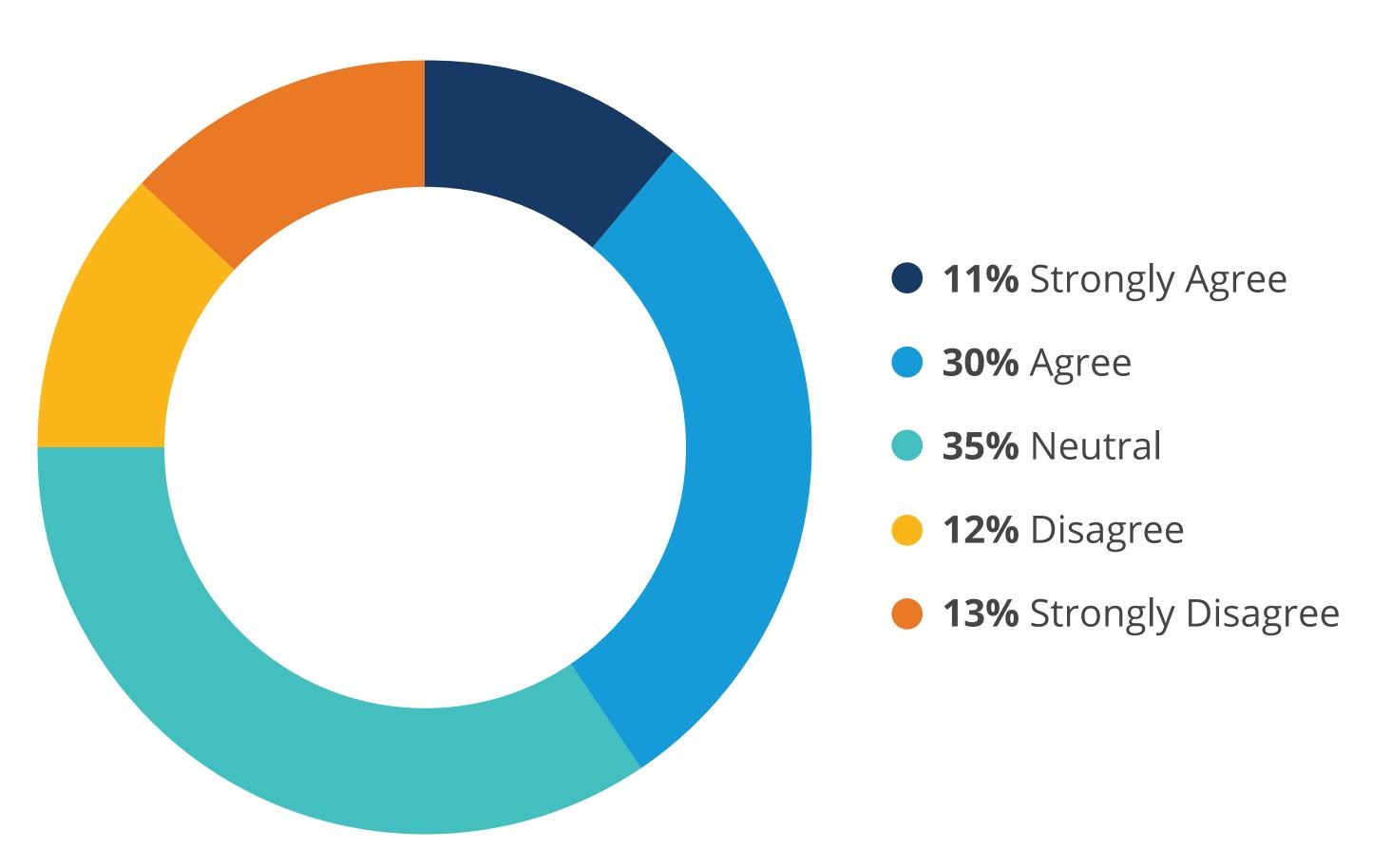
## Who do you think has significant influence over the direction of open source engagement within your organization: Executives in business functions?



# Who do you think has significant influence over the direction of open source engagement within your organization: Industry analyst firms?

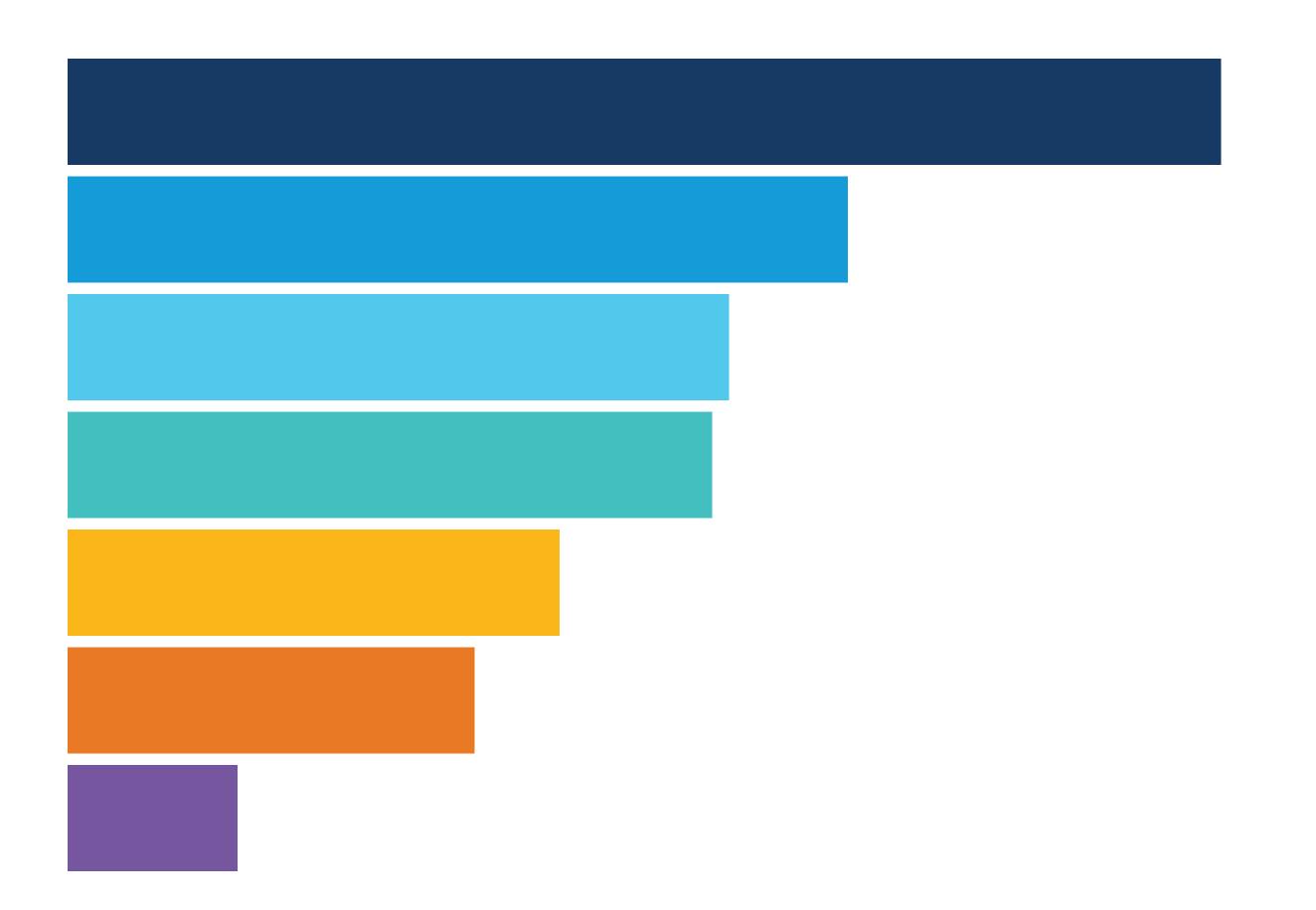


# Who do you think has significant influence over the direction of open source engagement within your organization: Management consulting firms?



# In what other ways does your employer support open source culture? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Sample Size = 112, Valid Cases = 112, Total Mentions = 286



68% Allowing staff to attend conferences or other events

**46%** Documentation

39% Project Management support

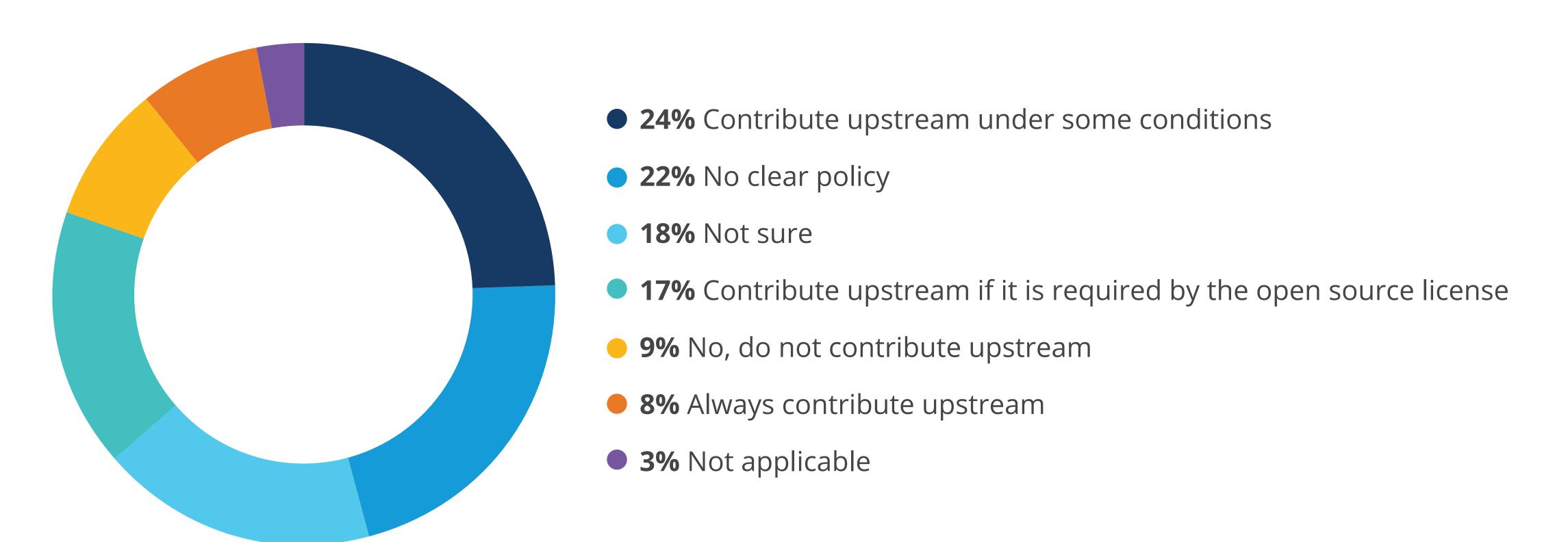
**38%** Financial support

29% (Co-)Organizing conference or other events

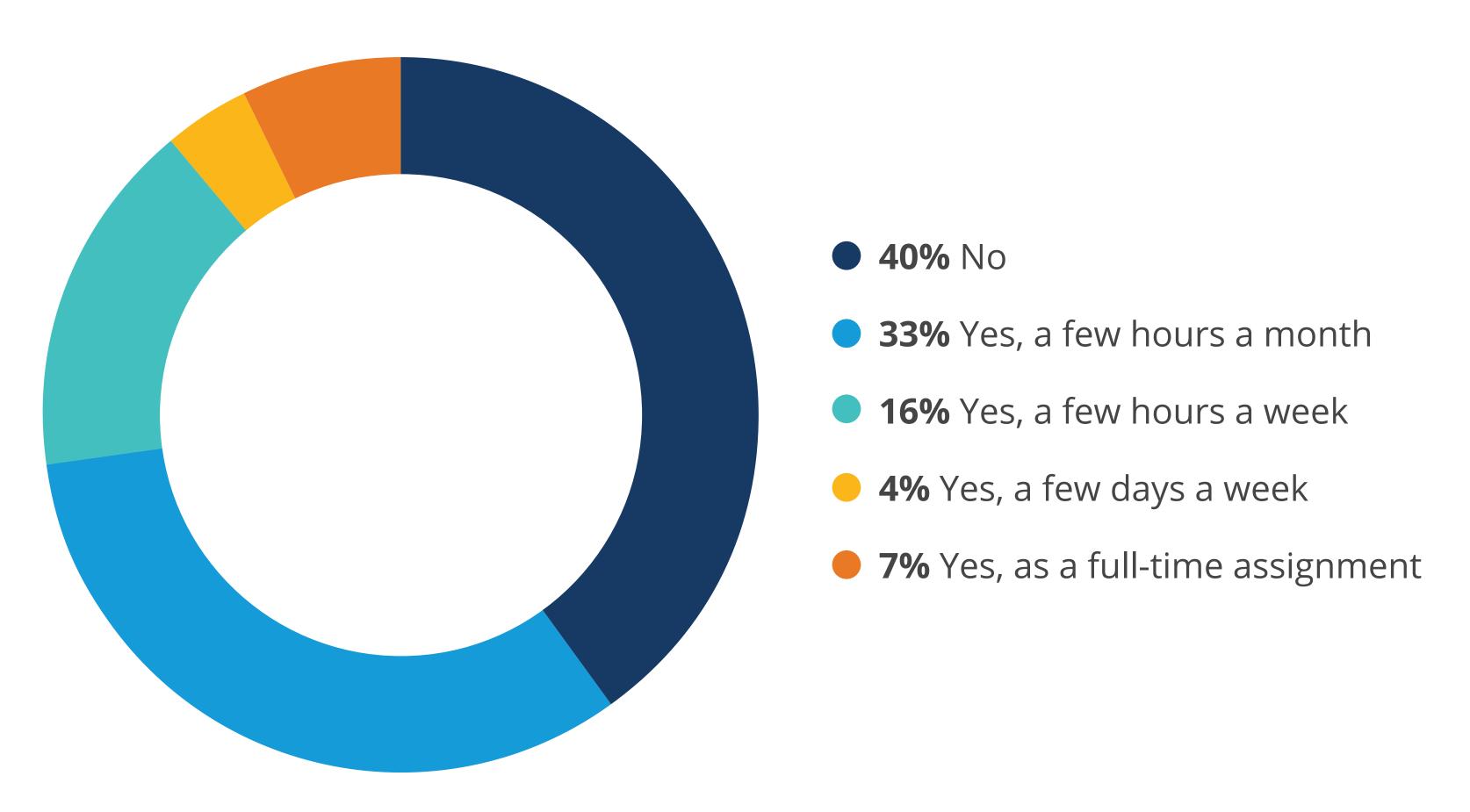
24% Legal support

10% Venture capital investing into startups that have an open source business model

# Please select the statement closest to your current employer's policy on contributing upstream (e.g., sending changes you make to an open source project, external to your organization, back to the original maintainers for inclusion into an upcoming release)



## Do you spend any time contributing to projects managed by other teams within your organization?



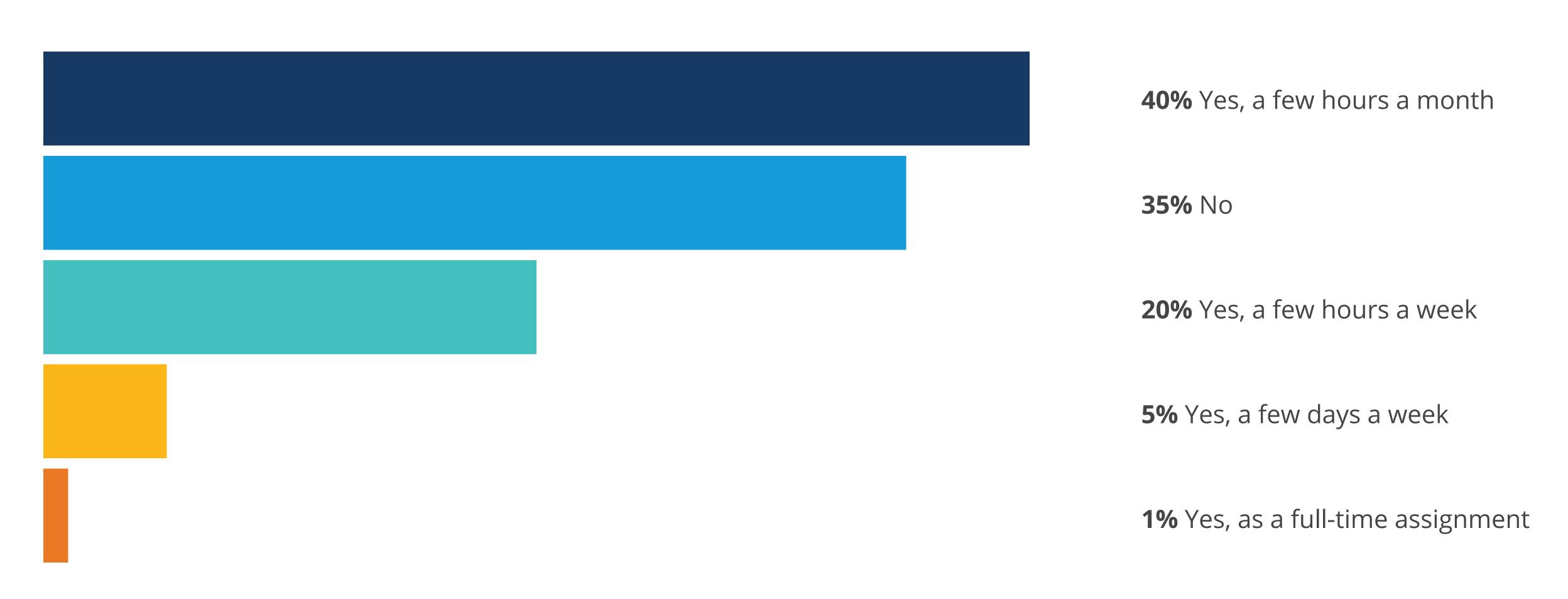
# Do you spend any time at work contributing to externally distributed open source projects that your employer founded, adopted, or sponsors?



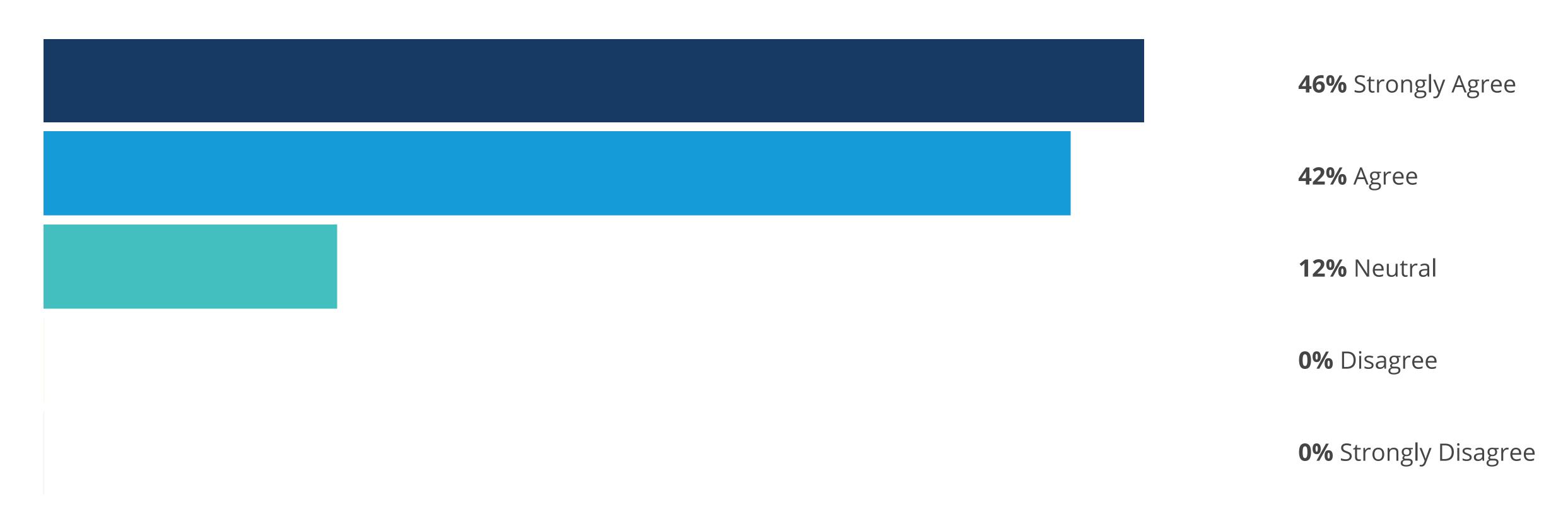
# Do you spend any time at work contributing to third-party open source projects (e.g. those in which your employer has no commercial relationship)?



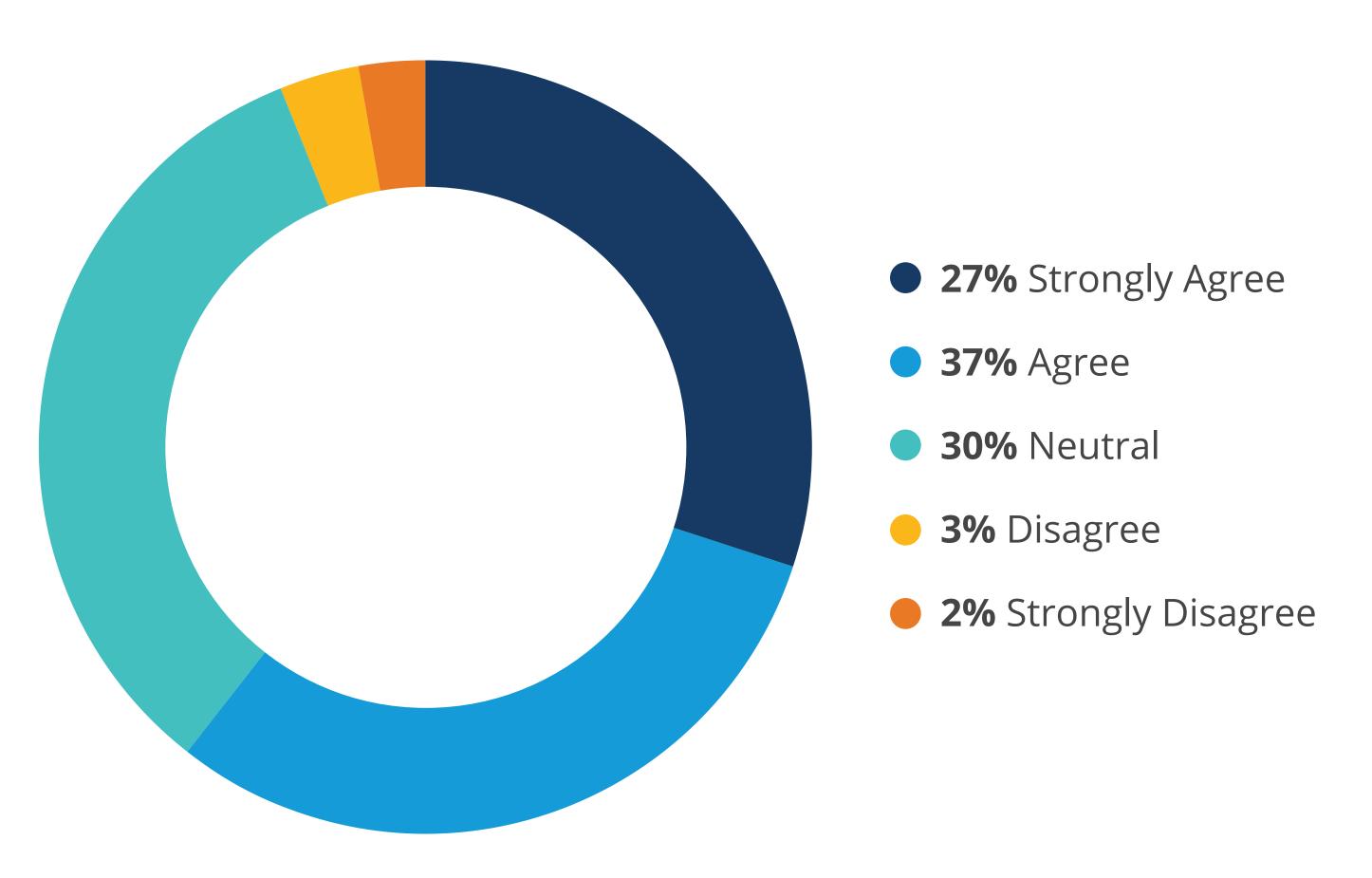
#### Do you spend any personal time contributing to open source projects?



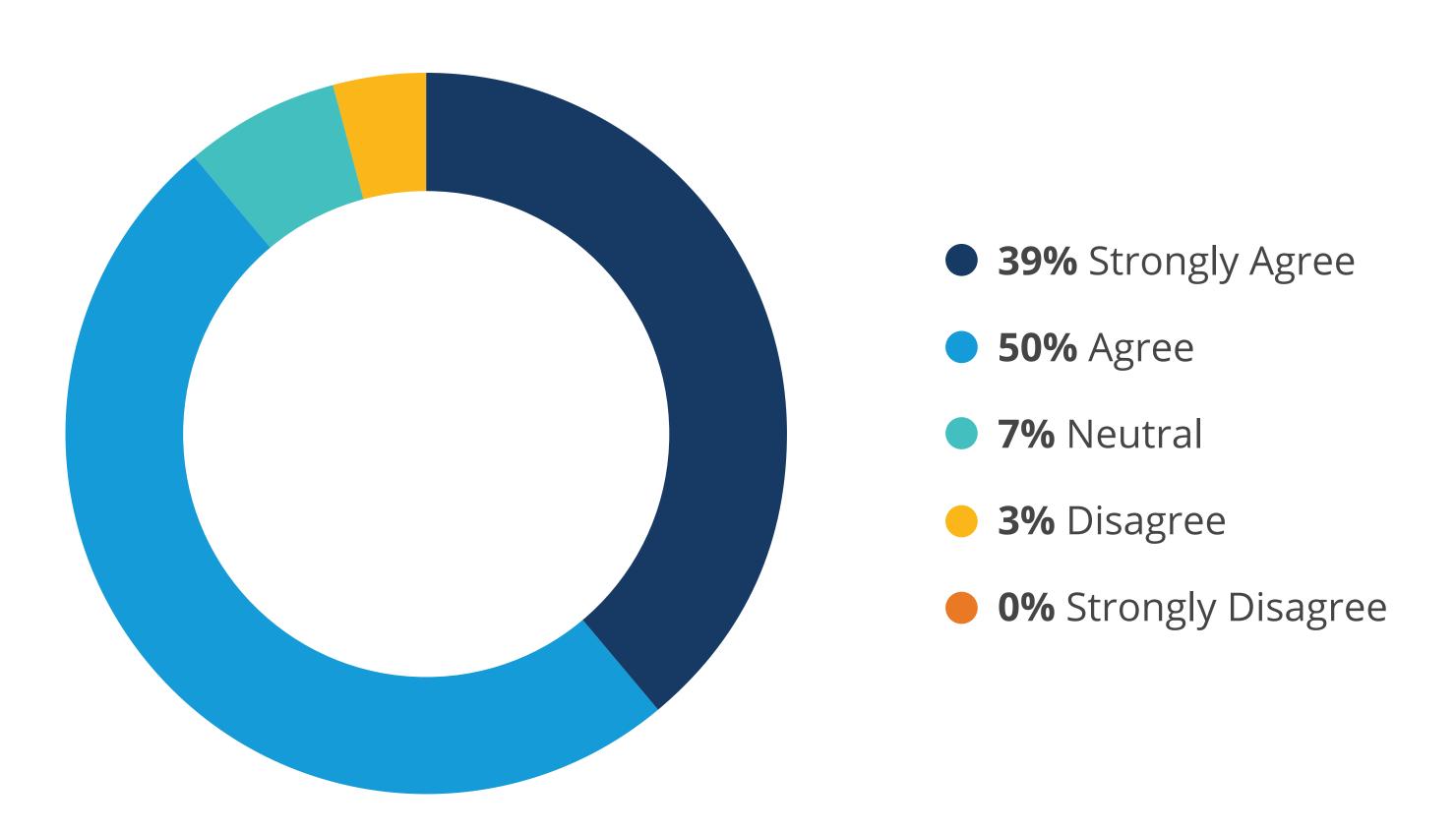
### Why do you think your employer should invest in open source software (from the wider community) and encourage contributions: To improve the overall quality of the open source software that they are currently using?



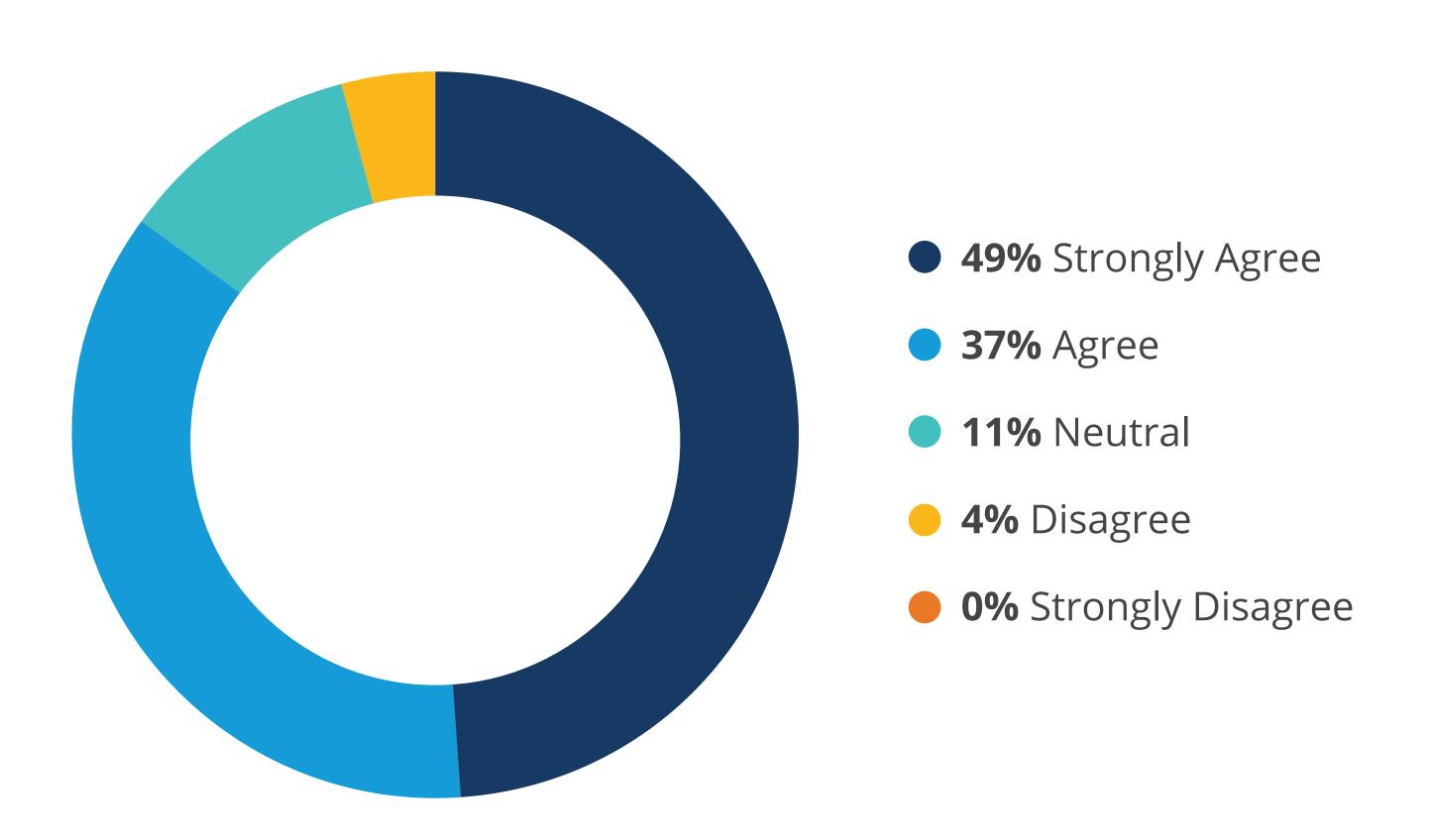
# Why do you think your employer should invest in open source software (from the wider community) and encourage contributions: They have a moral obligation?



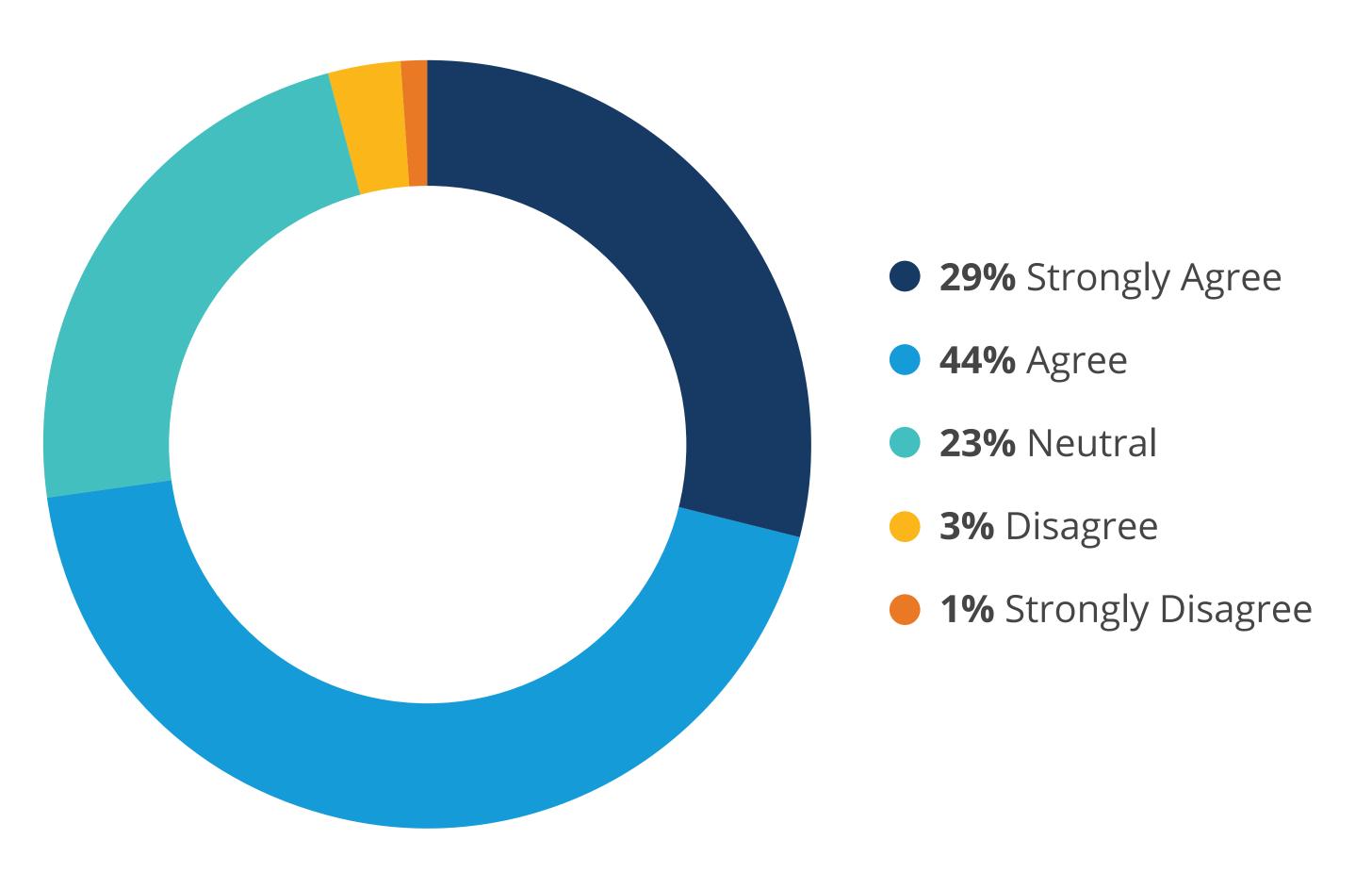
# Why do you think your employer should invest in open source software (from the wider community) and encourage contributions: For employee career development and improved culture?



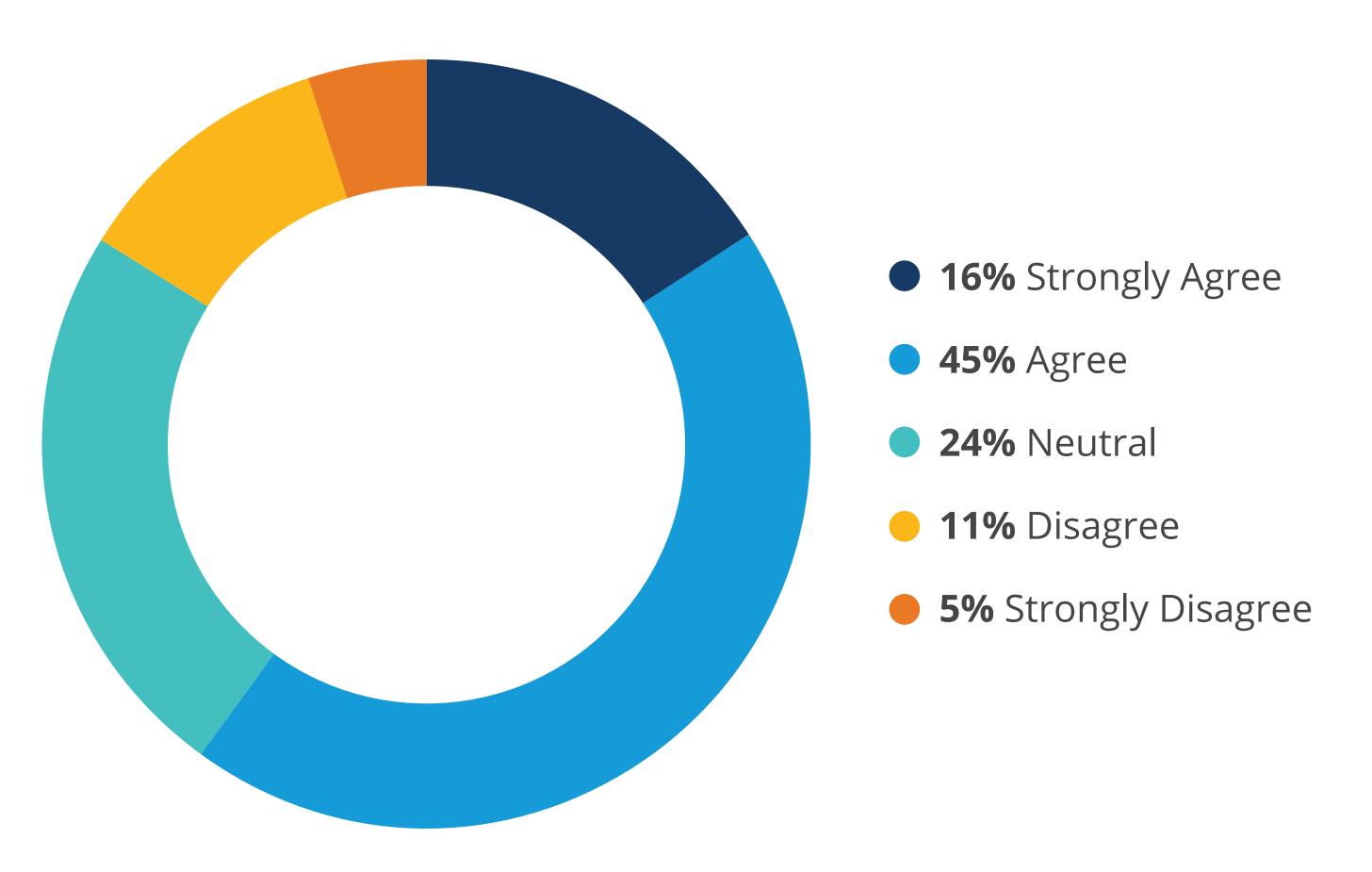
# Why do you think your employer should invest in open source software (from the wider community) and encourage contributions: To become a more attractive employer?



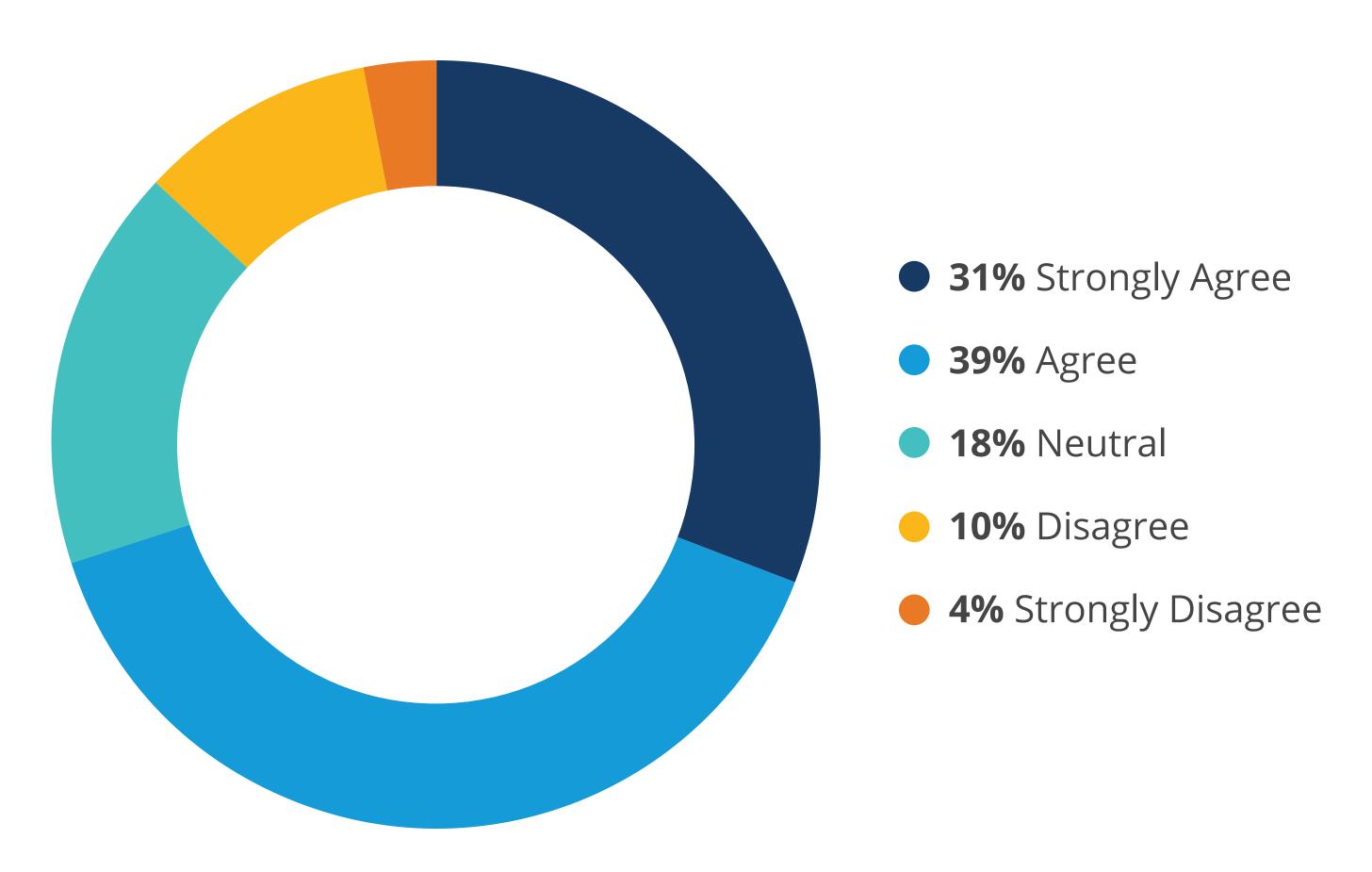
# Why do you think your employer should invest in open source software (from the wider community) and encourage contributions: Improved security?



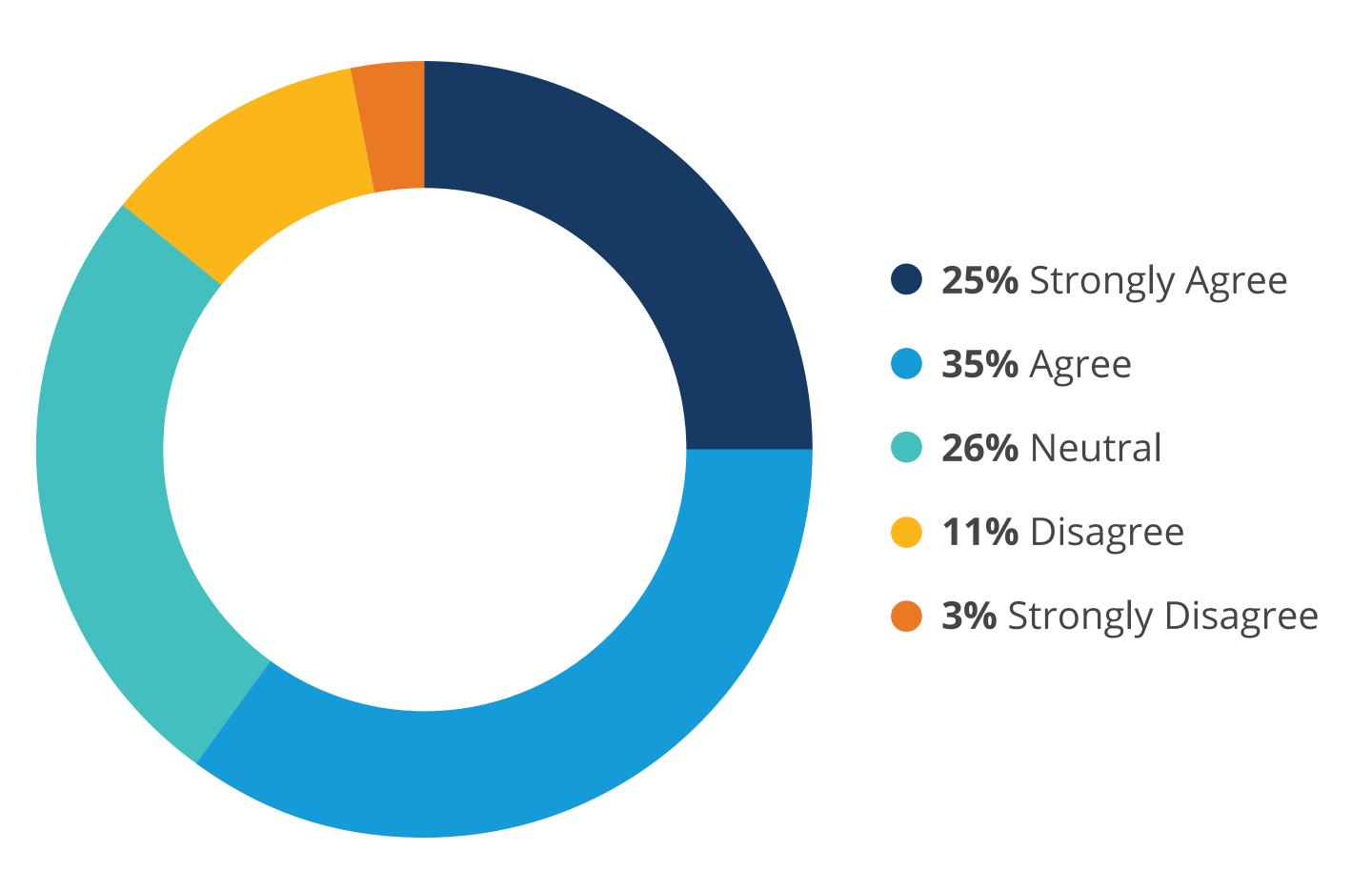
# What do you think limits your employer's open source investment and/or discourages contribution: There is a lack of clear return on investment?



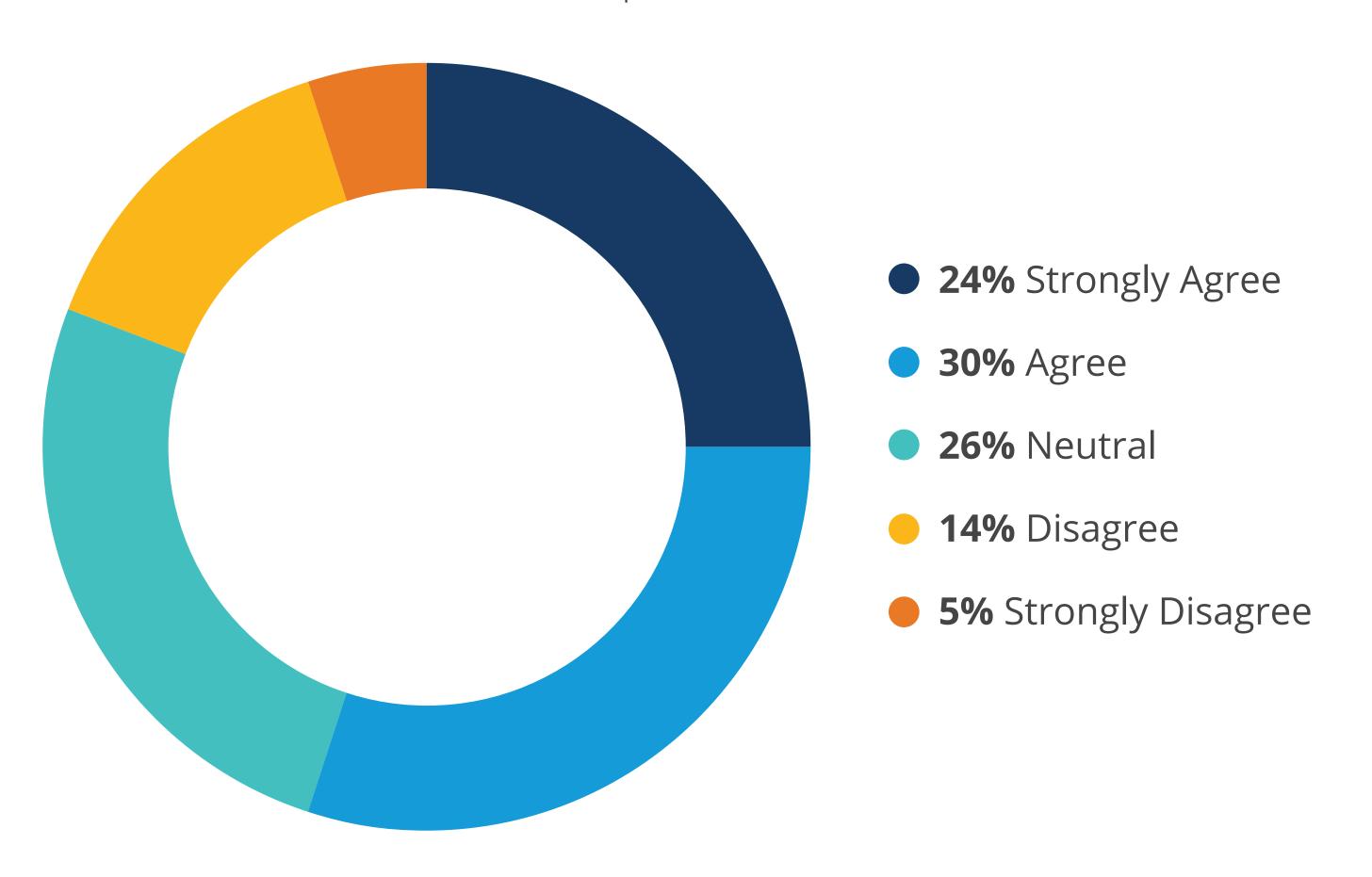
# What do you think limits your employer's open source investment and/or discourages contribution: A fear of leaking IP?



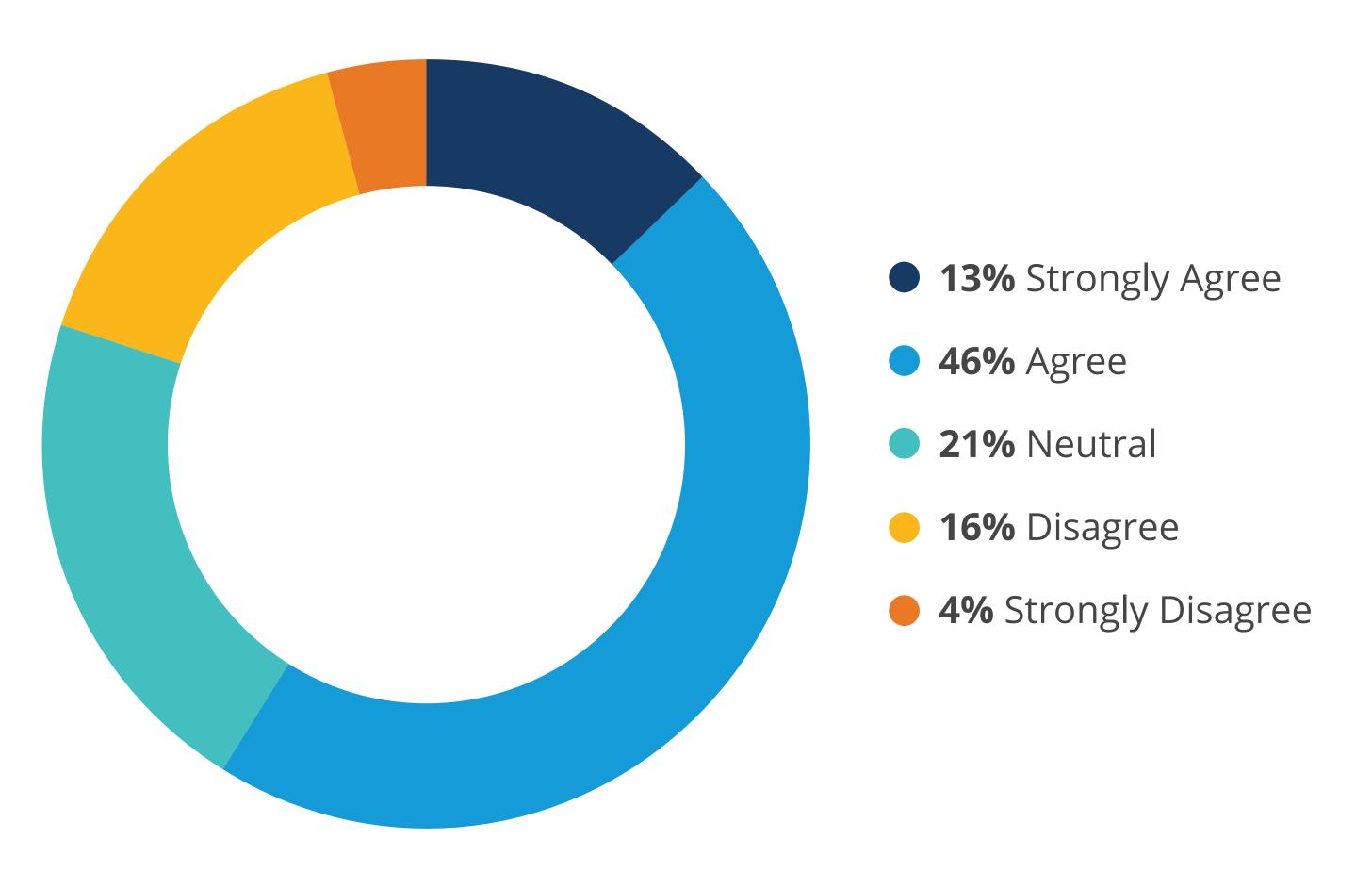
# What do you think limits your employer's open source investment and/or discourages contribution: Legal or licensing concerns?



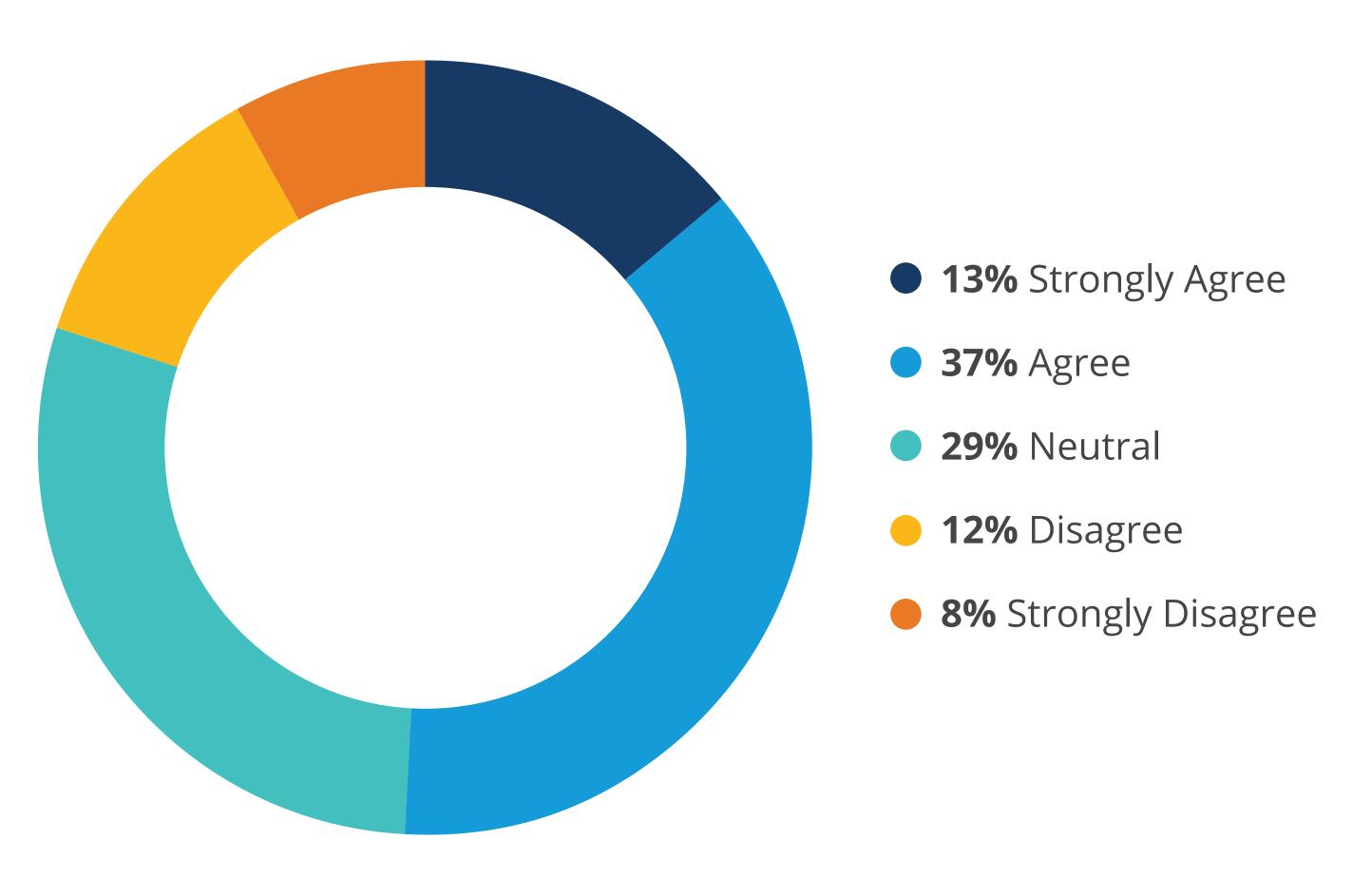
# What do you think limits your employer's open source investment and/or discourages contribution: A lack of understanding of the open source value proposition?



# What do you think limits your employer's open source investment and/or discourages contribution: Technology constraints and challenges?

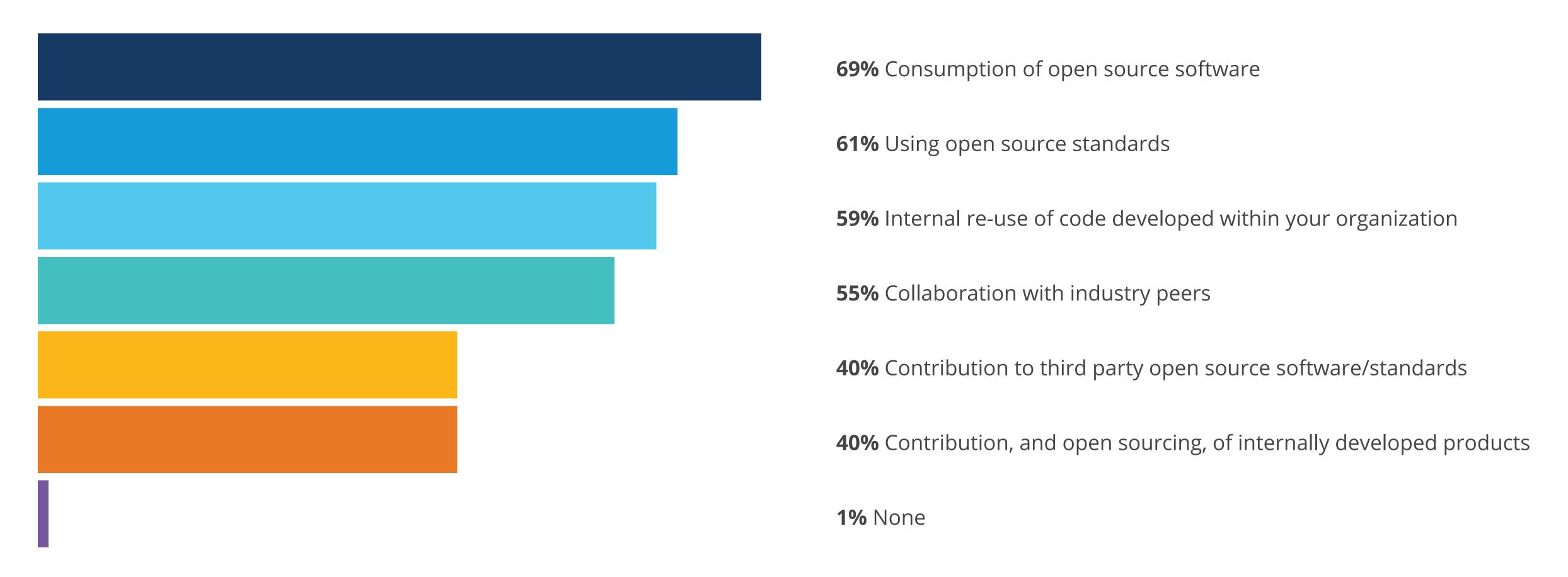


# What do you think limits your employer's open source investment and/or discourages contribution: Lack of published industry analyst research and industry case studies?



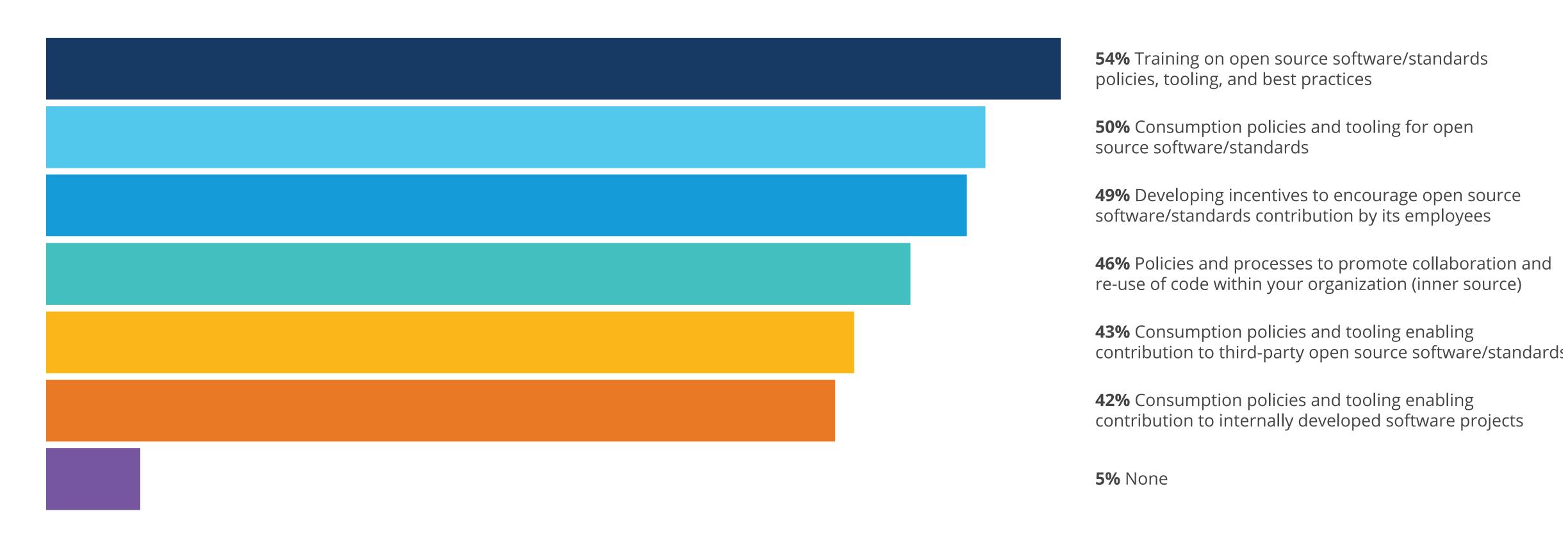
# Which of the following do you think can/does increase your productivity at work? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 115, Valid Cases = 115, Total Mentions = 373



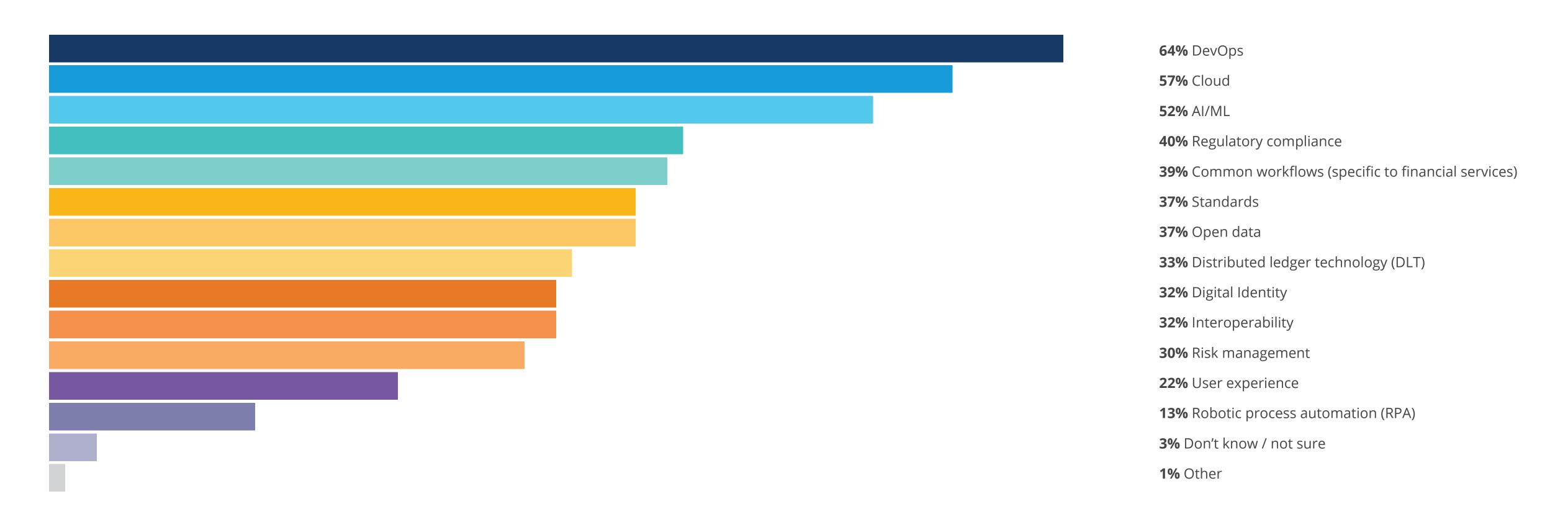
# Where do you think your employer should provide greater support or make additional investment to improve the use of open source in your organization? Check all that apply.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 111, Valid Cases = 111, Total Mentions = 320



### In which of the following areas do you think open source engagement could bring the most benefit to the financial services industry (including through improvement of existing processes/technology or delivering innovative new approaches)? Select three.

2021 State of Open Source in Financial Services Survey, May, June, July, 2021 Multiple Response Variable Sample Size = 115, Valid Cases = 115, Total Mentions = 568







In Partnership With:







October 2021

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