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**ARCHITECTS**  
INSIDE KNOWLEDGE

# Consequences of Micro Frontends

## Survey Results

# Objectives

- What benefits did practitioners observe, and how do they rate their positive impact?
- What drawbacks did practitioner observe, and how do they rate their negative impact?
- How did practitioners compensate for drawbacks, and how effective have the used countermeasures been?

# Key Data

- Structured Survey
- Conducted in Fall 2023
- Received 156 answers

# Question Groups

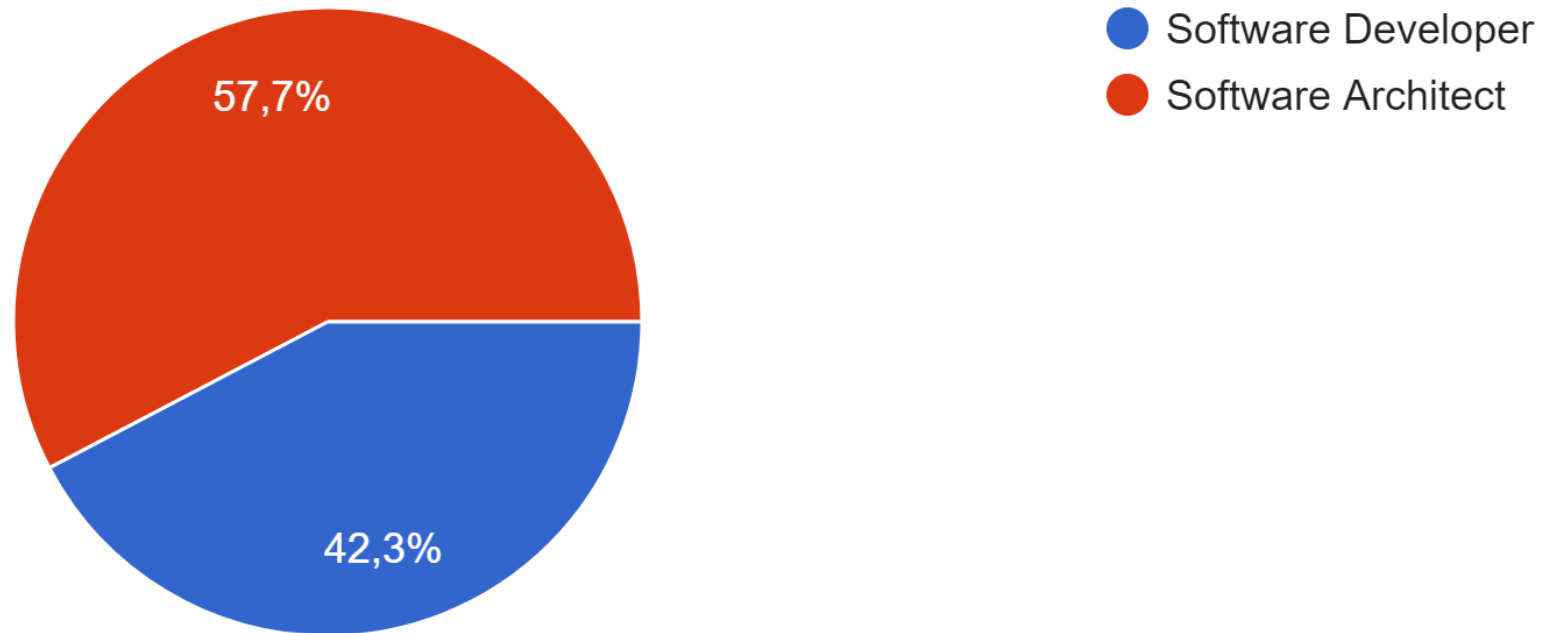
- 1) About the Interviewee
- 2) Project Context
- 3) Architectural Decisions
- 4) Perceived Technical Benefits
- 5) Perceived Organisational Benefits
- 6) Perceived Technical Drawbacks
- 7) Perceived Organisational Drawbacks

# 1) About the Interviewee



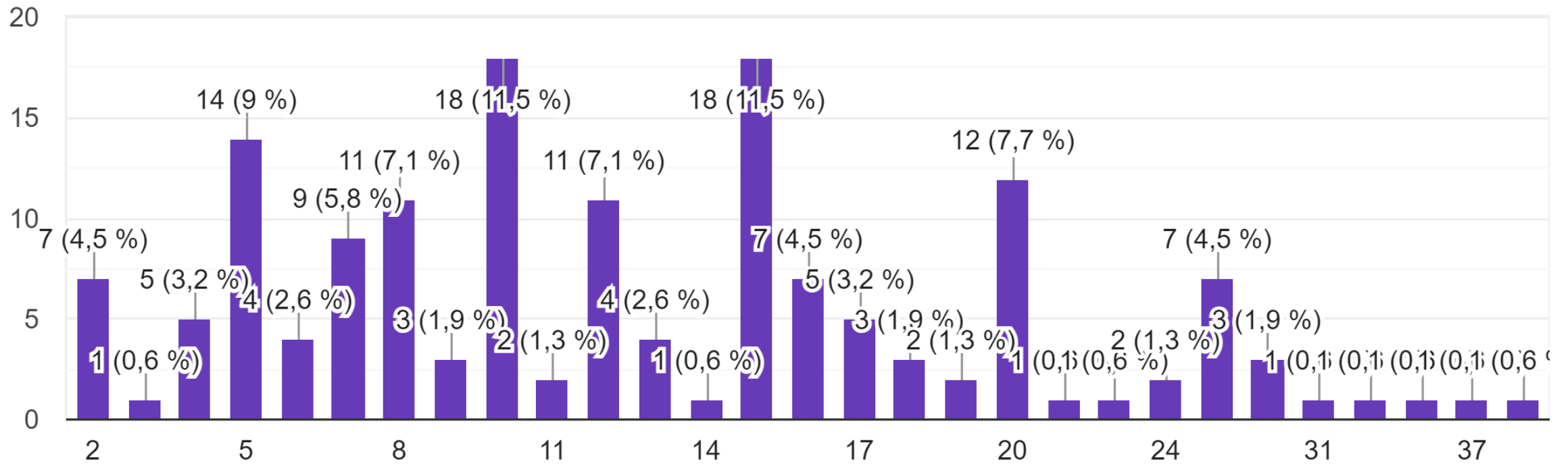
# What was your role in the respective Micro Frontend project?

156 Antworten



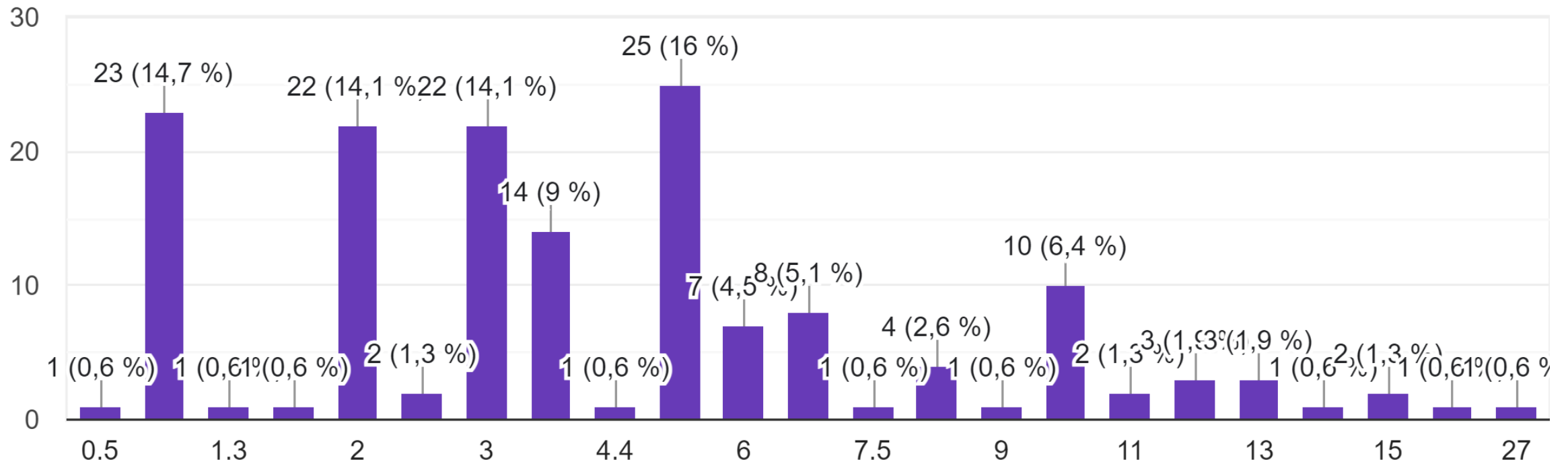
# How many years have you been working as a developer and/ or architect in general?

156 Antworten



# How many years have you been working in the company the project in question took place?

156 Antworten





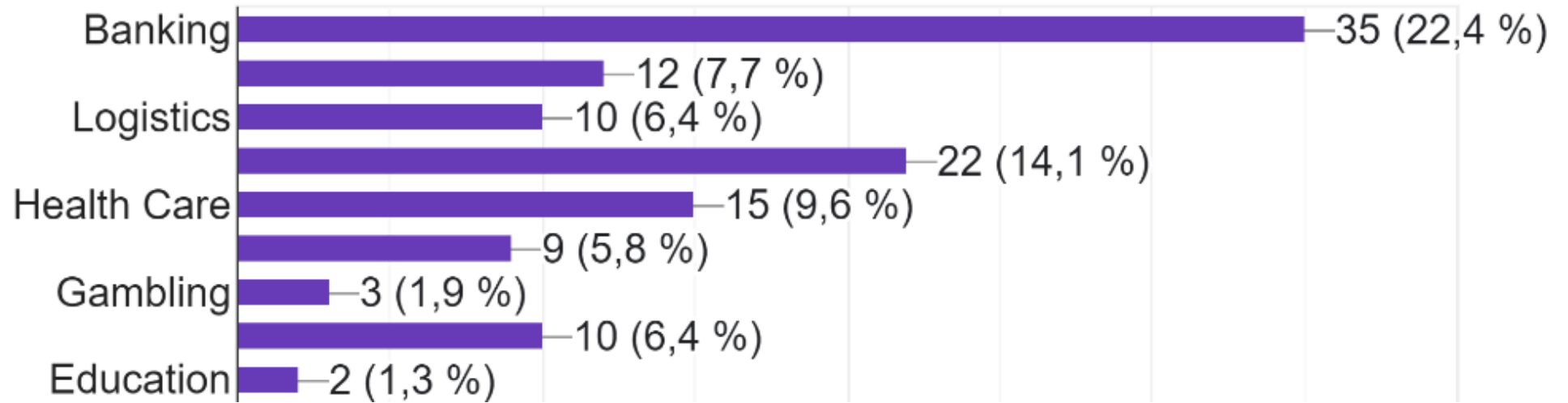
## 2) Project Context



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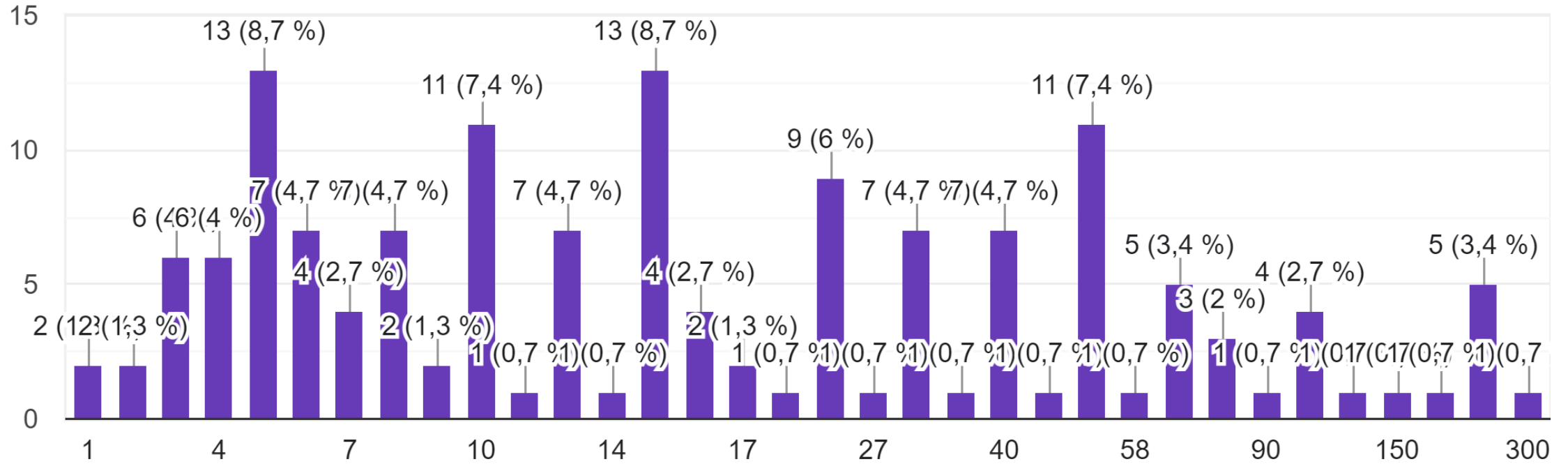
## For which business area was the system developed?

156 Antworten



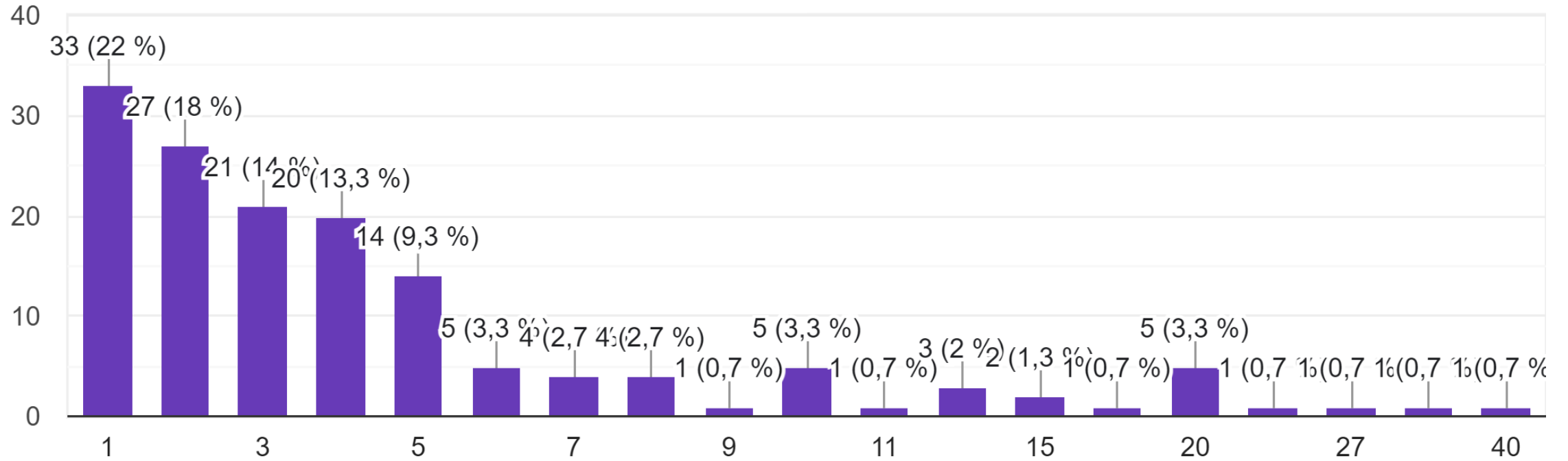
# How many developers have been involved in implementing the overall system?

149 Antworten



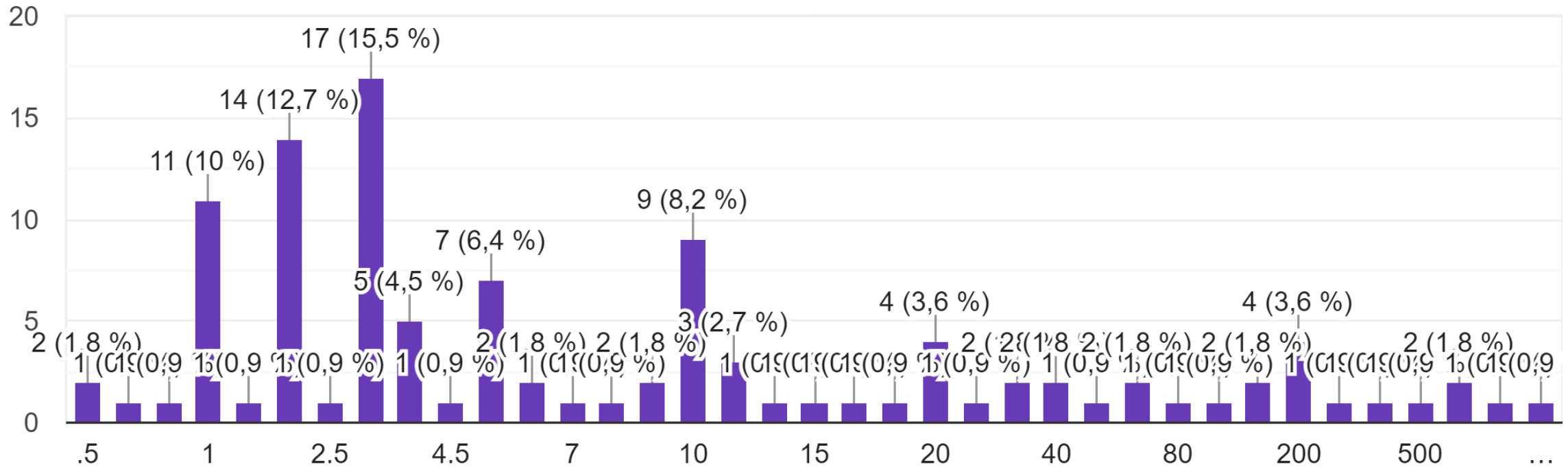
# How many teams are these developers divided into?

150 Antworten



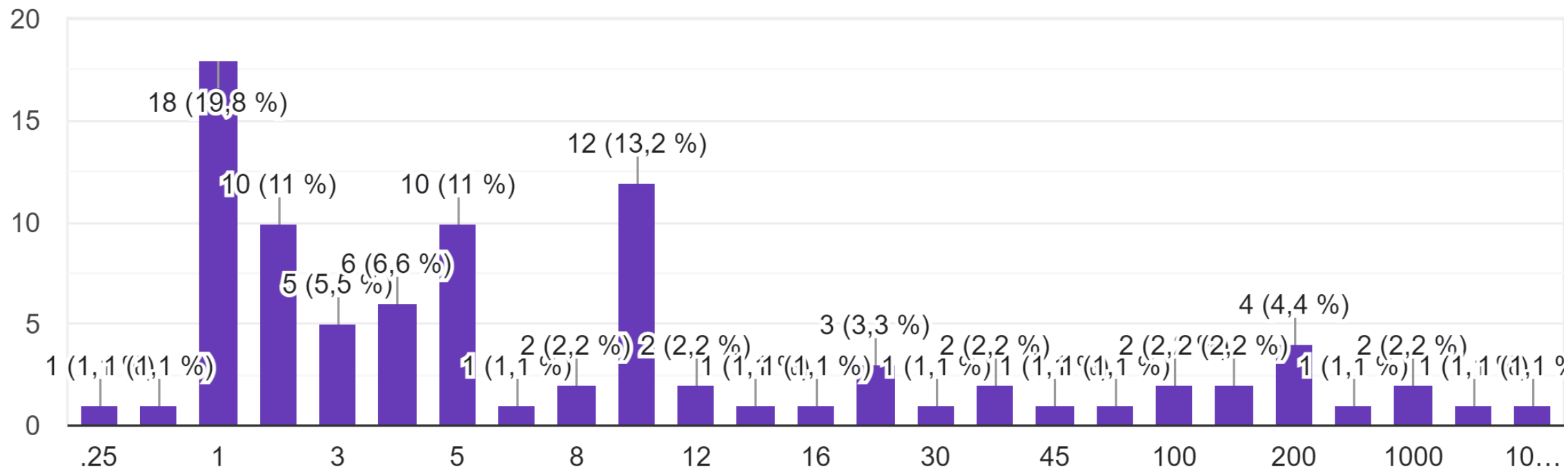
# How many person years have been invested?

110 Antworten



# How many additional person years will be invested?

91 Antworten

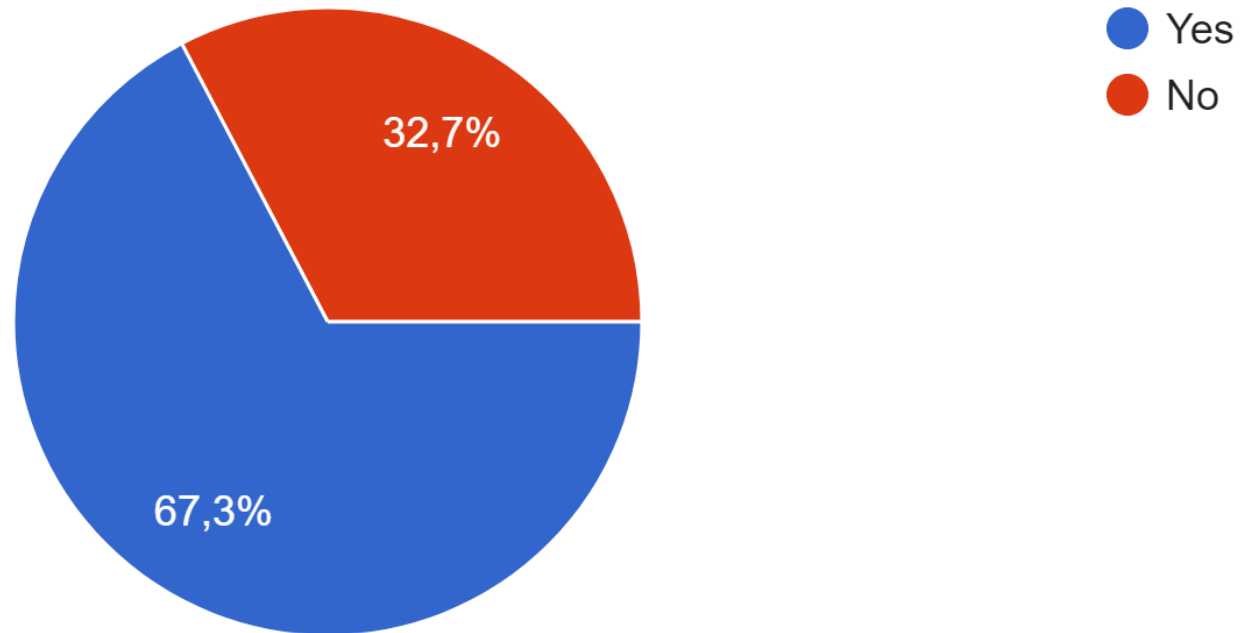


# 3) Architectural Decisions



In your shell, do you display more than one Micro Frontend at the same time?

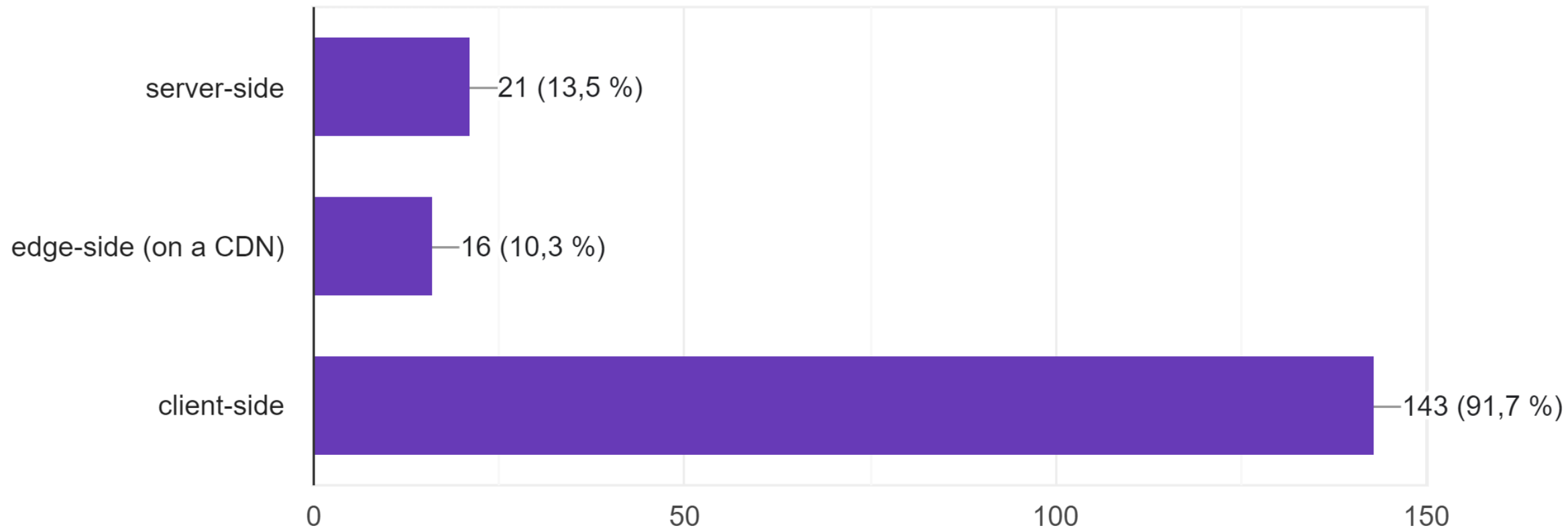
156 Antworten





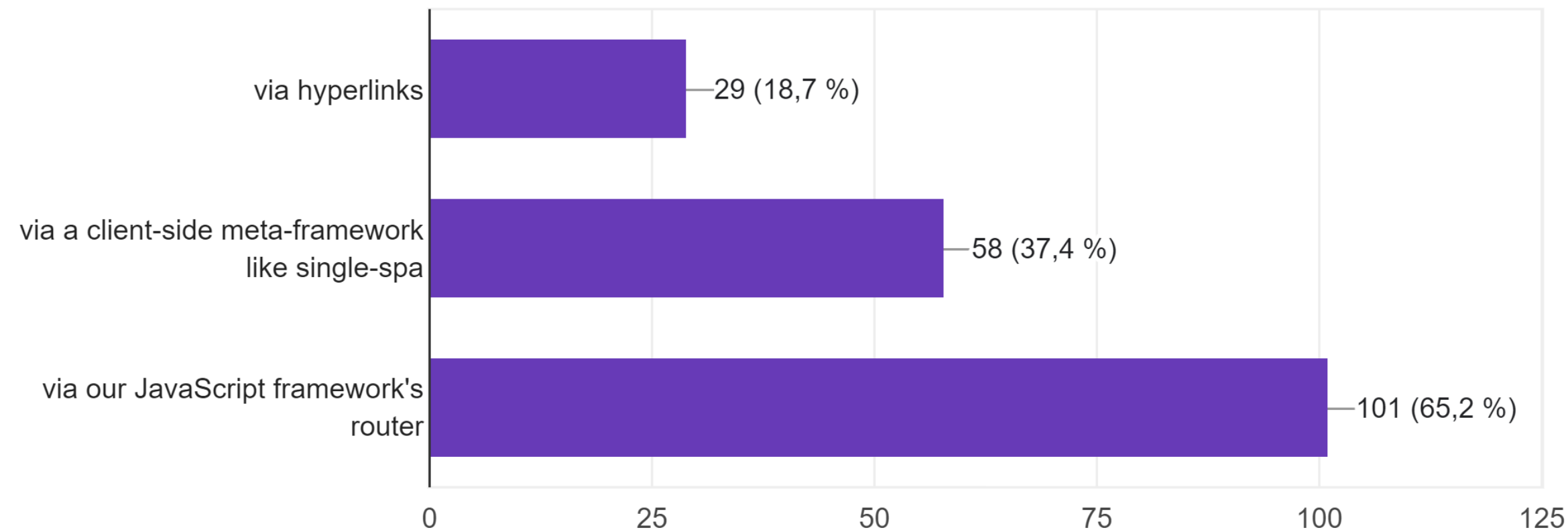
## Where are your individual Micro Frontends composed?

156 Antworten



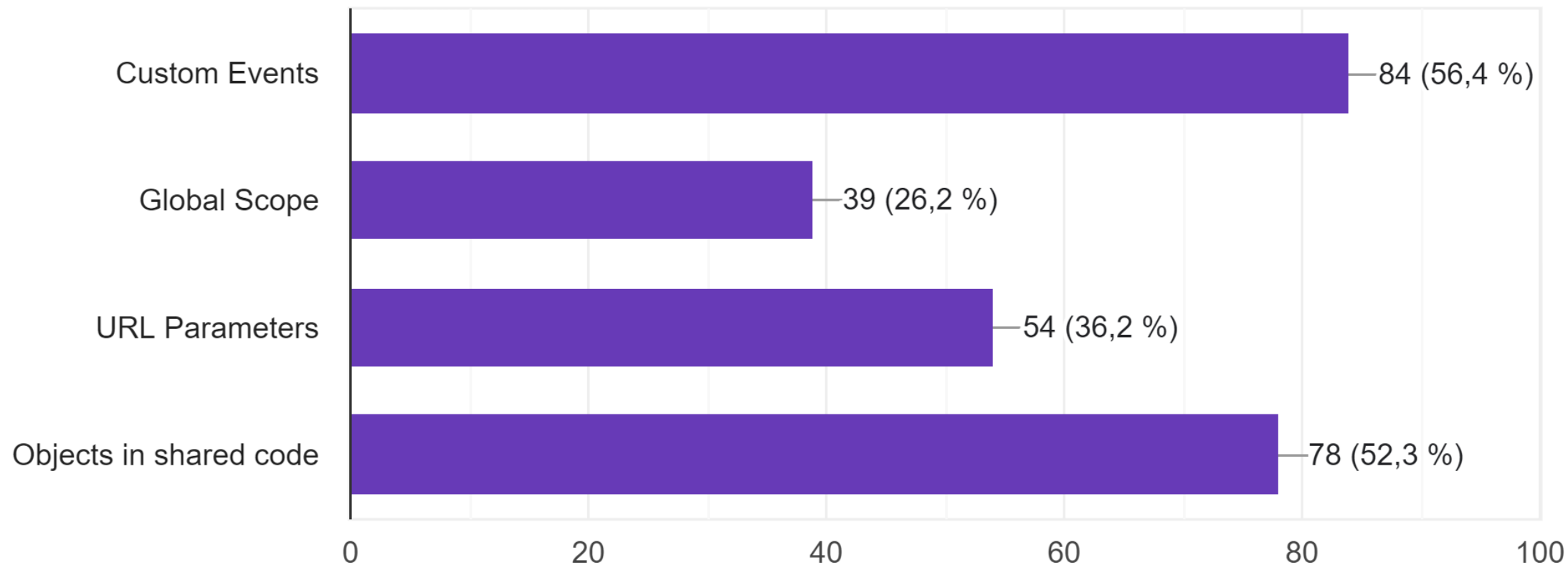
## How does your solution decide when to display what Micro Frontend?

155 Antworten



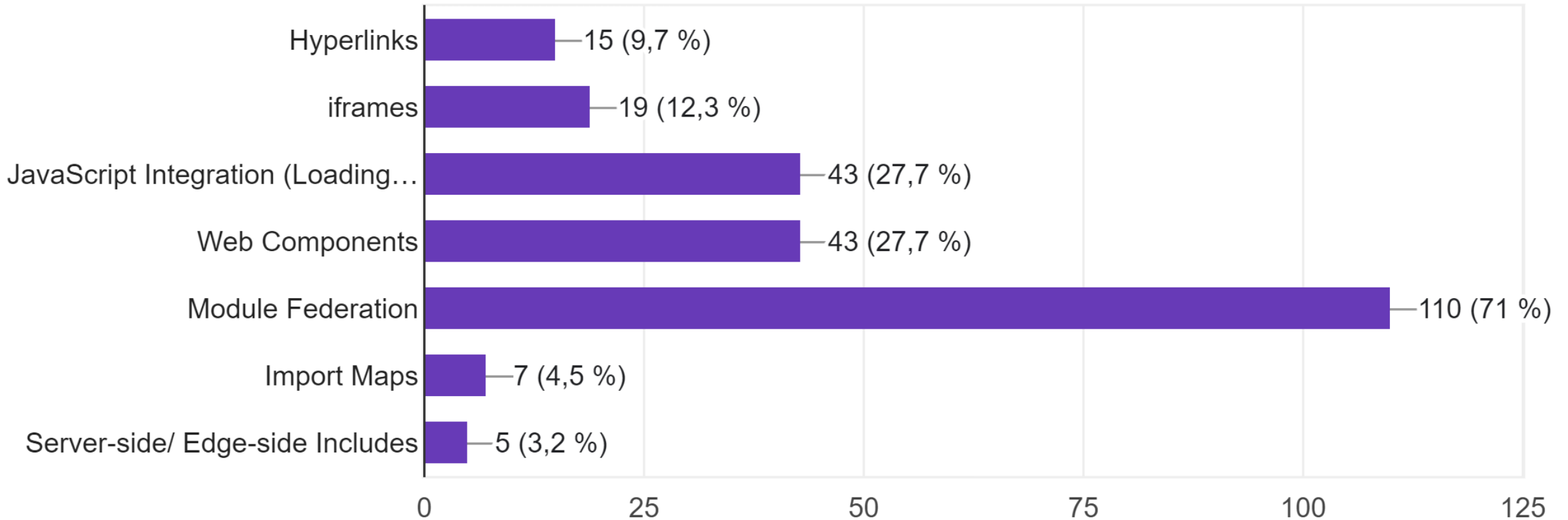
# How do you implement communication between the individual Micro Frontends?

149 Antworten



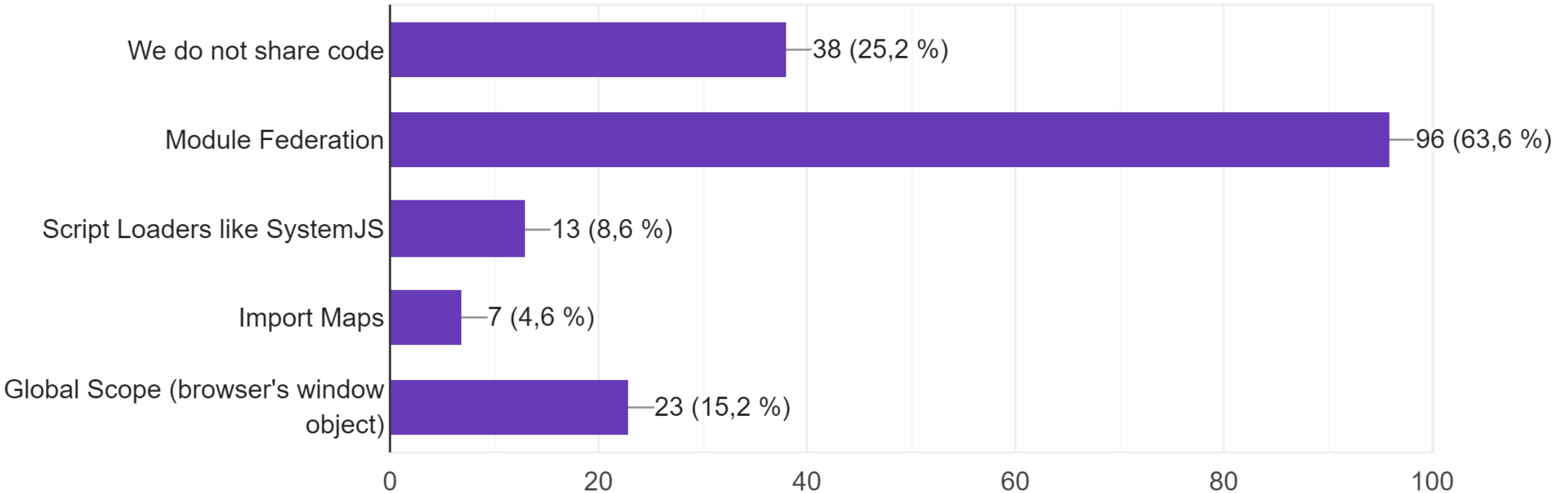
# How do you integrate individual Micro Frontends?

155 Antworten



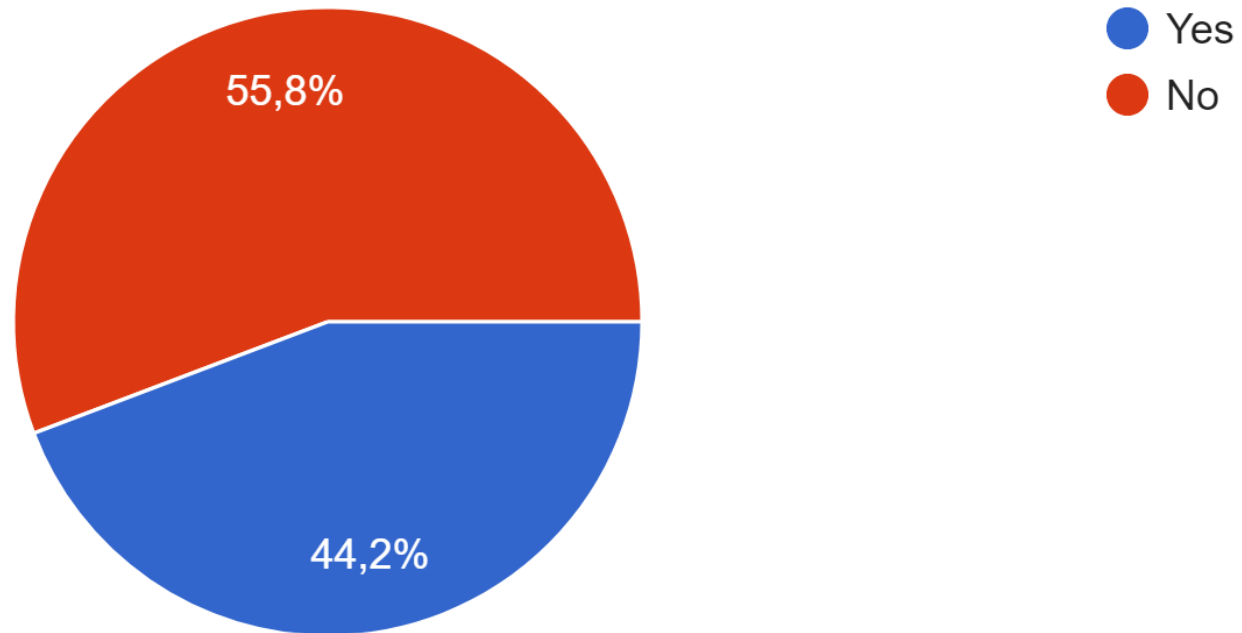
# How do you share code between individual Micro Frontends?

151 Antworten



Is the source code of your Micro Frontends managed within one sole repository?

156 Antworten

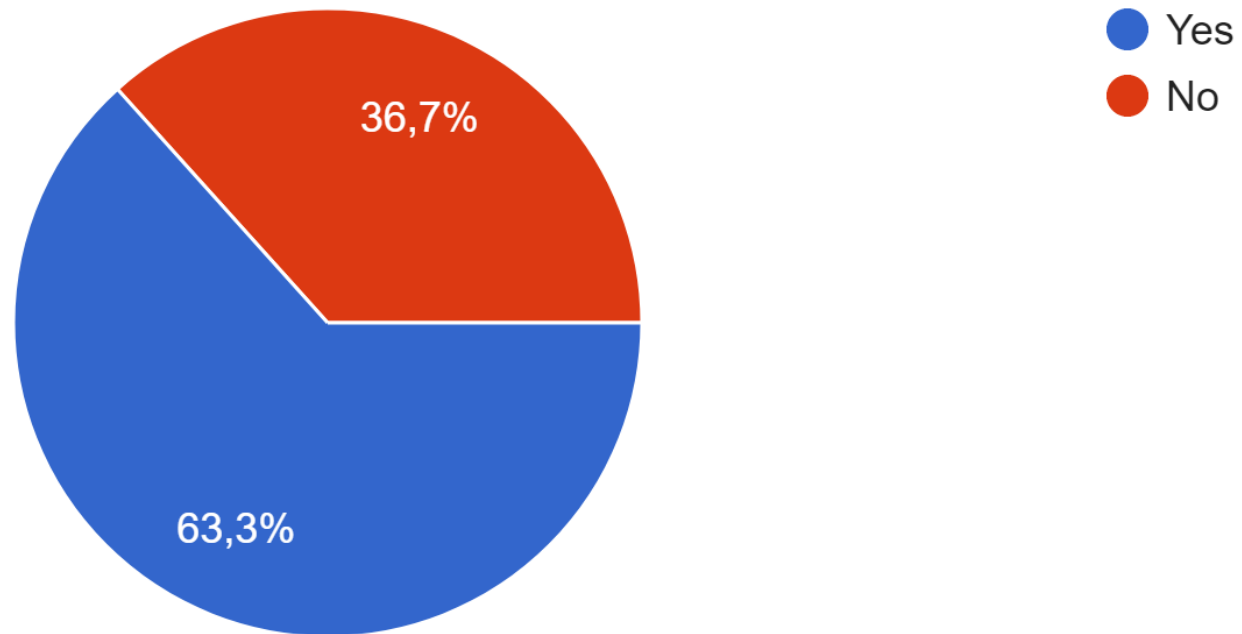


# 4) Perceived Technical Benefits



# Did the Micro Frontend architecture improve the system's testability?

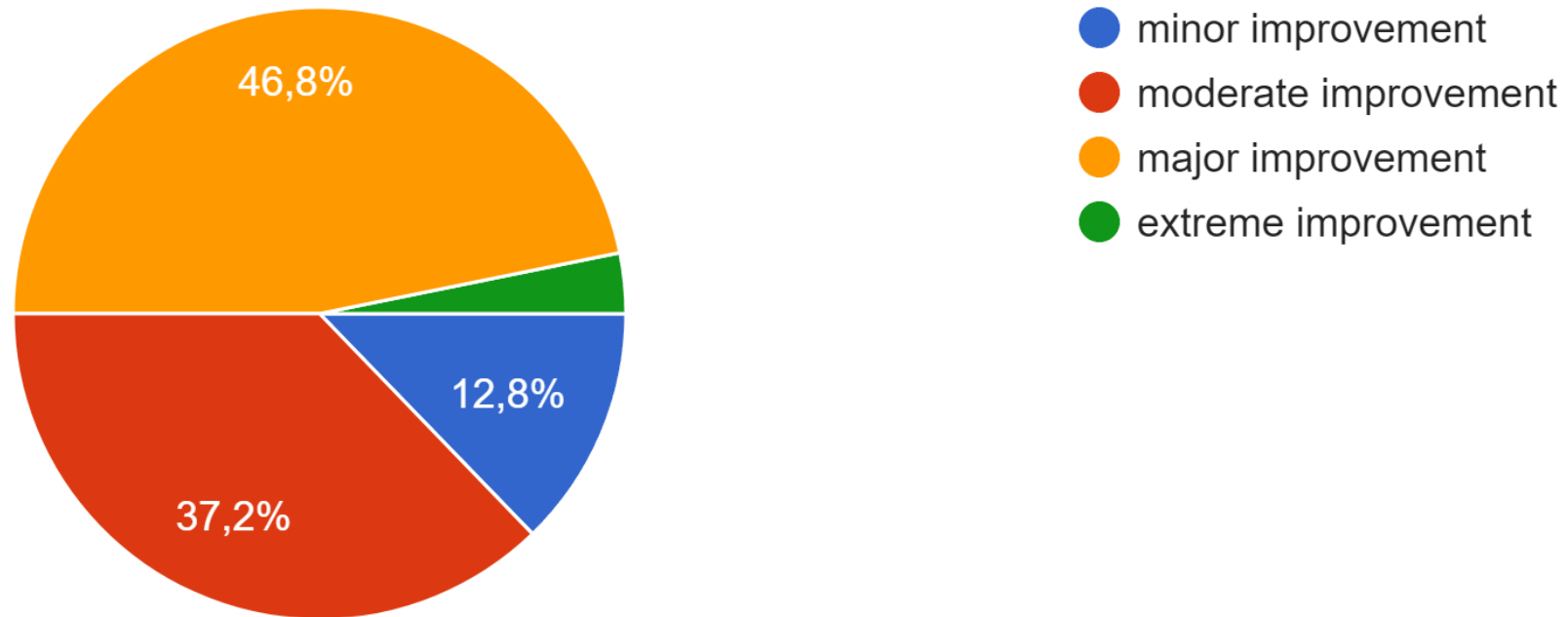
150 Antworten





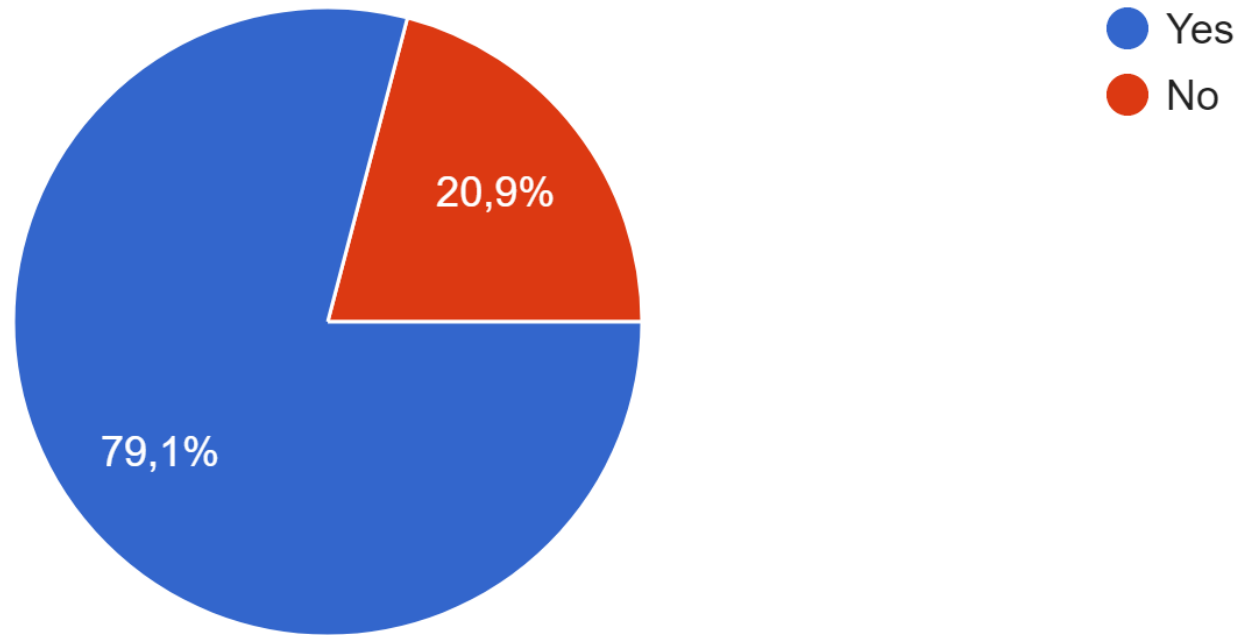
## To what extent did the Micro Frontend architecture improve the system's testability

94 Antworten



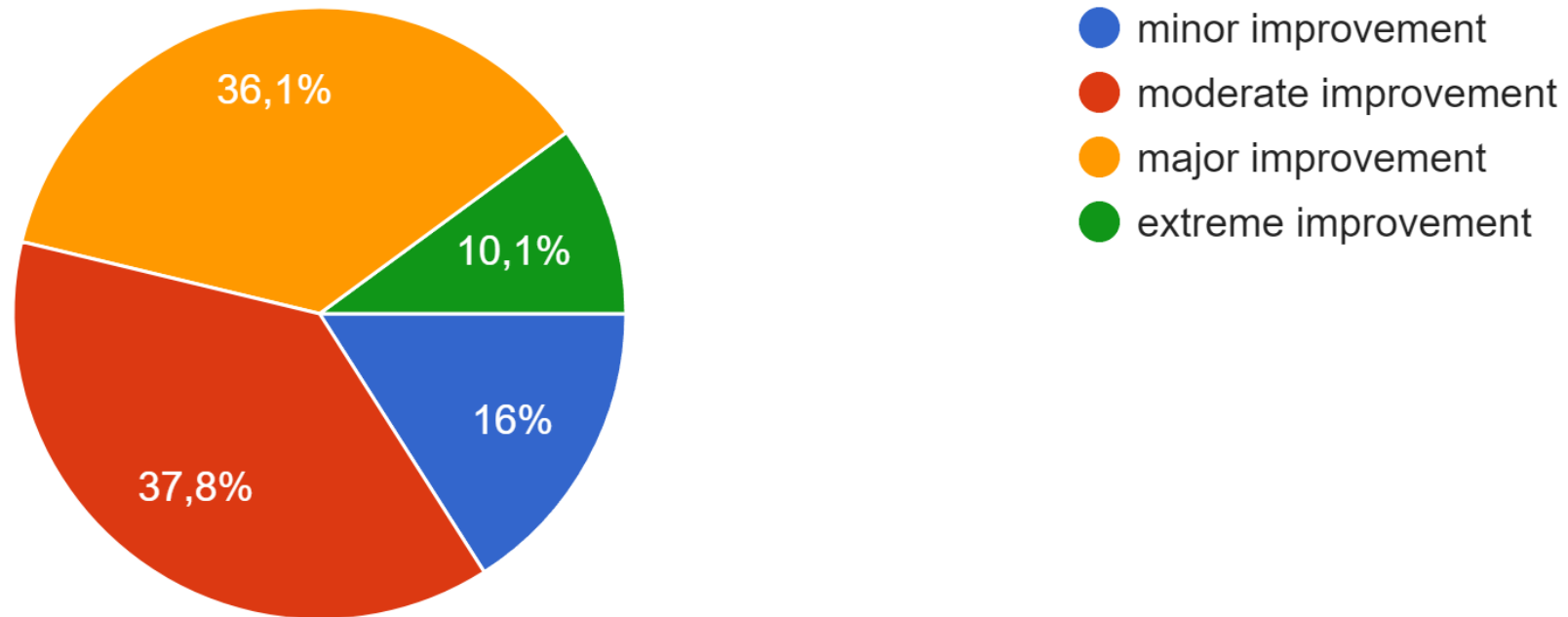
# Did the Micro Frontend architecture improve the system's fault isolation?

153 Antworten



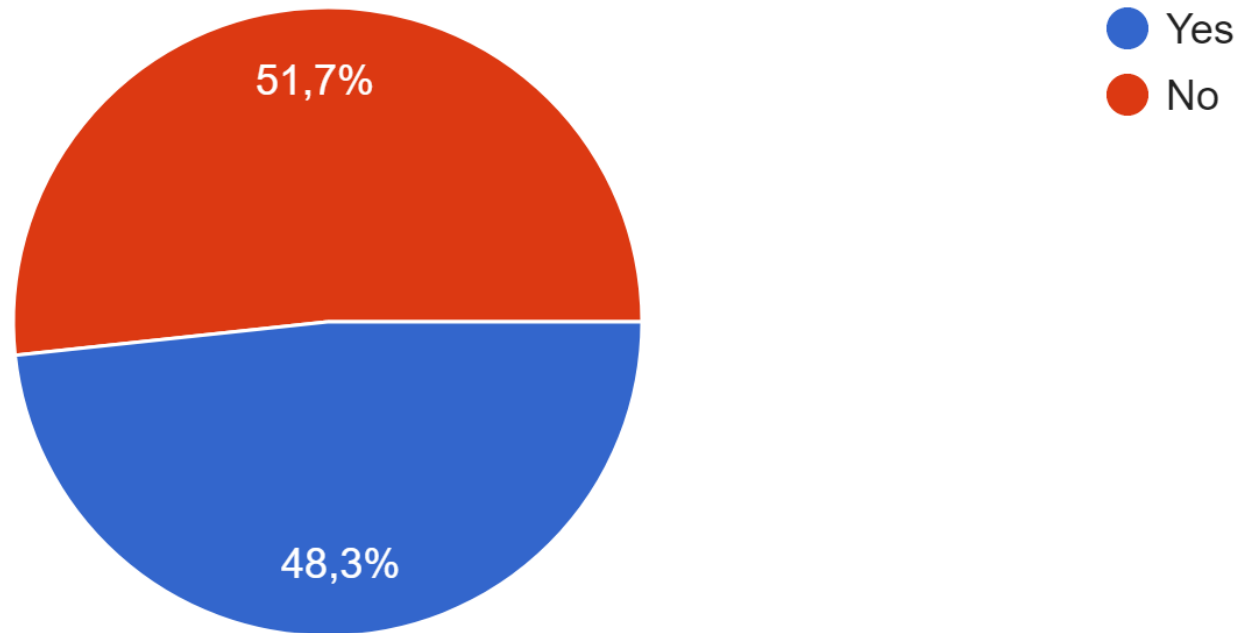
## To what extent did the Micro Frontend architecture improve the system's fault isolation?

119 Antworten



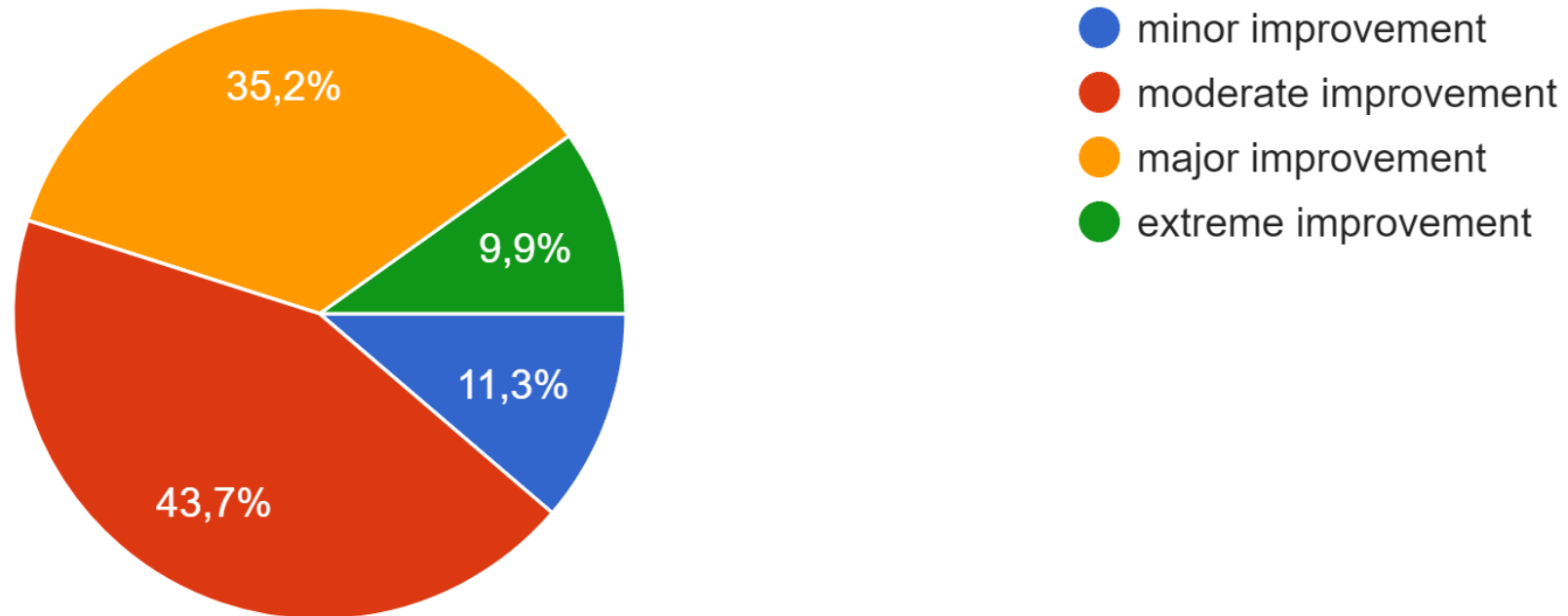
Did the Micro Frontend architecture improve the system's runtime performance?

147 Antworten



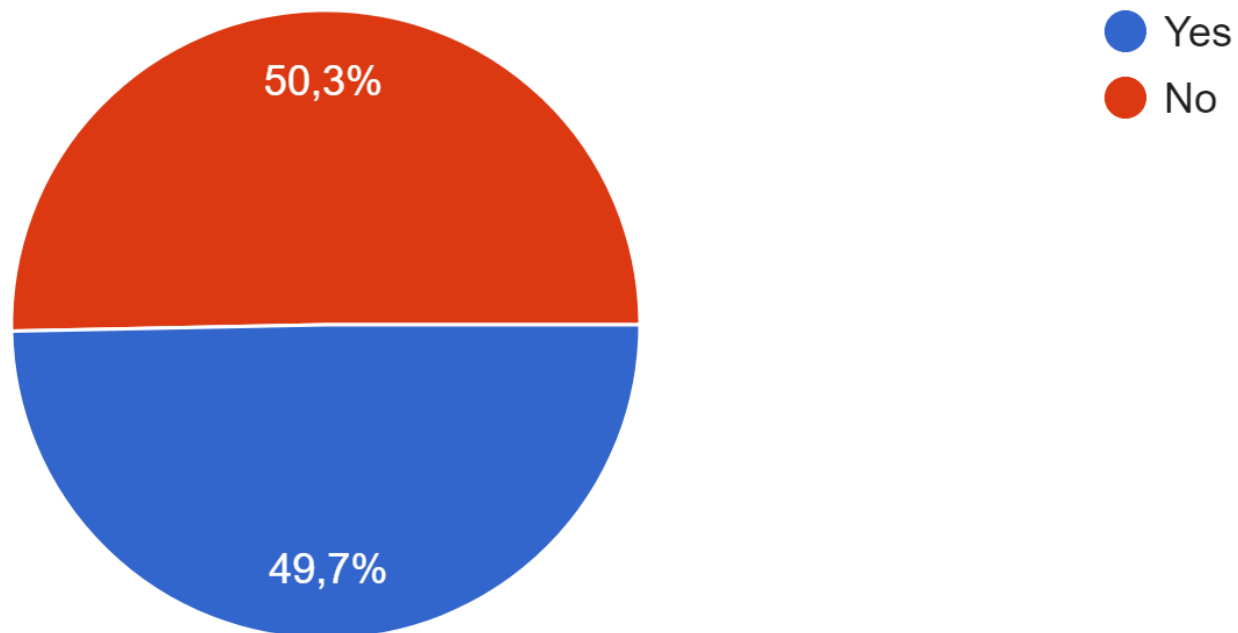
To what extent did the Micro Frontend architecture improve the system's runtime performance?

71 Antworten



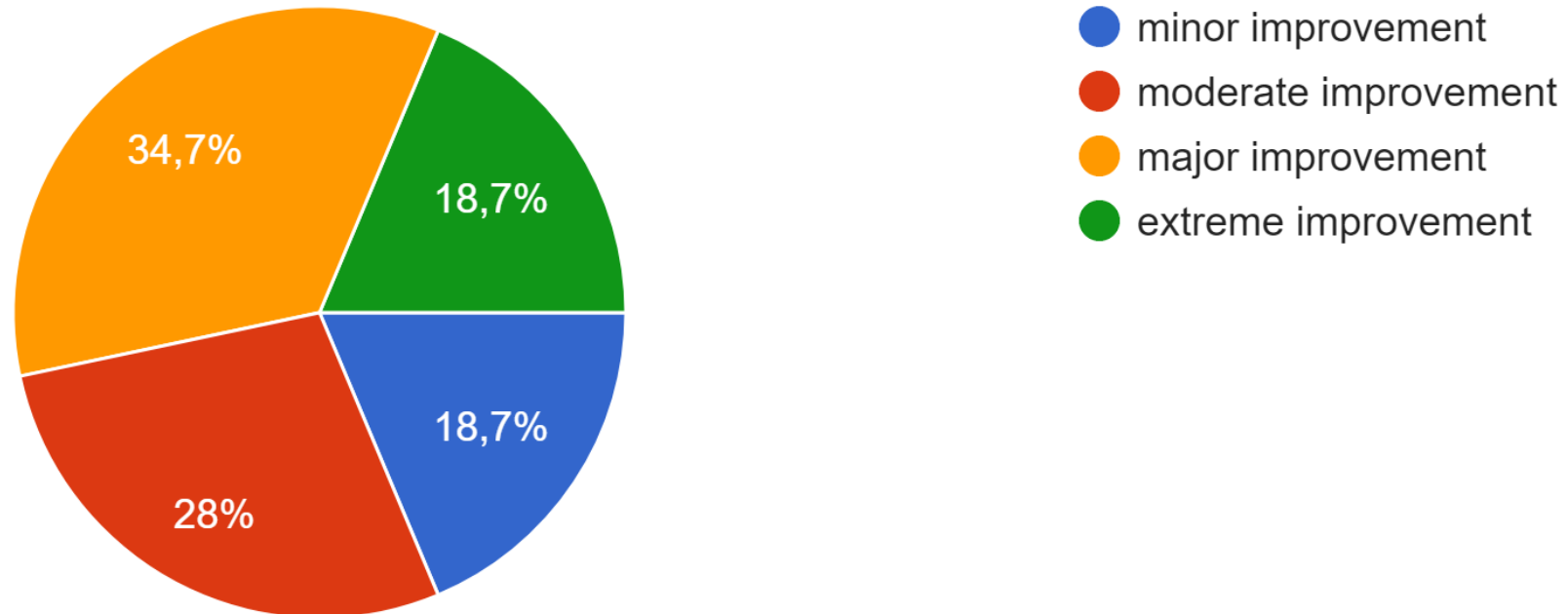
Did the Micro Frontend architecture improve your ability to use different technology stacks (in terms of frameworks or libraries) in different Micro Frontends?

155 Antworten



To what extent did the Micro Frontend architecture improve the capability to use different technology stacks (in terms of frameworks or libraries) in different Micro Frontends?

75 Antworten



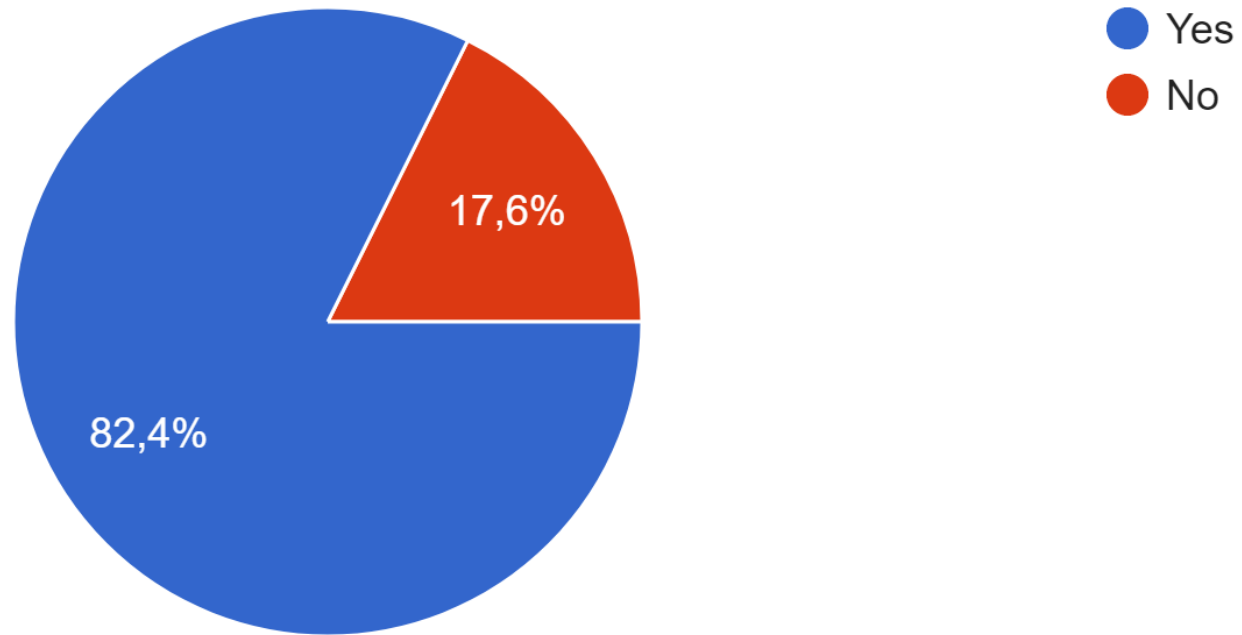
# 4) Perceived Organisational Benefits





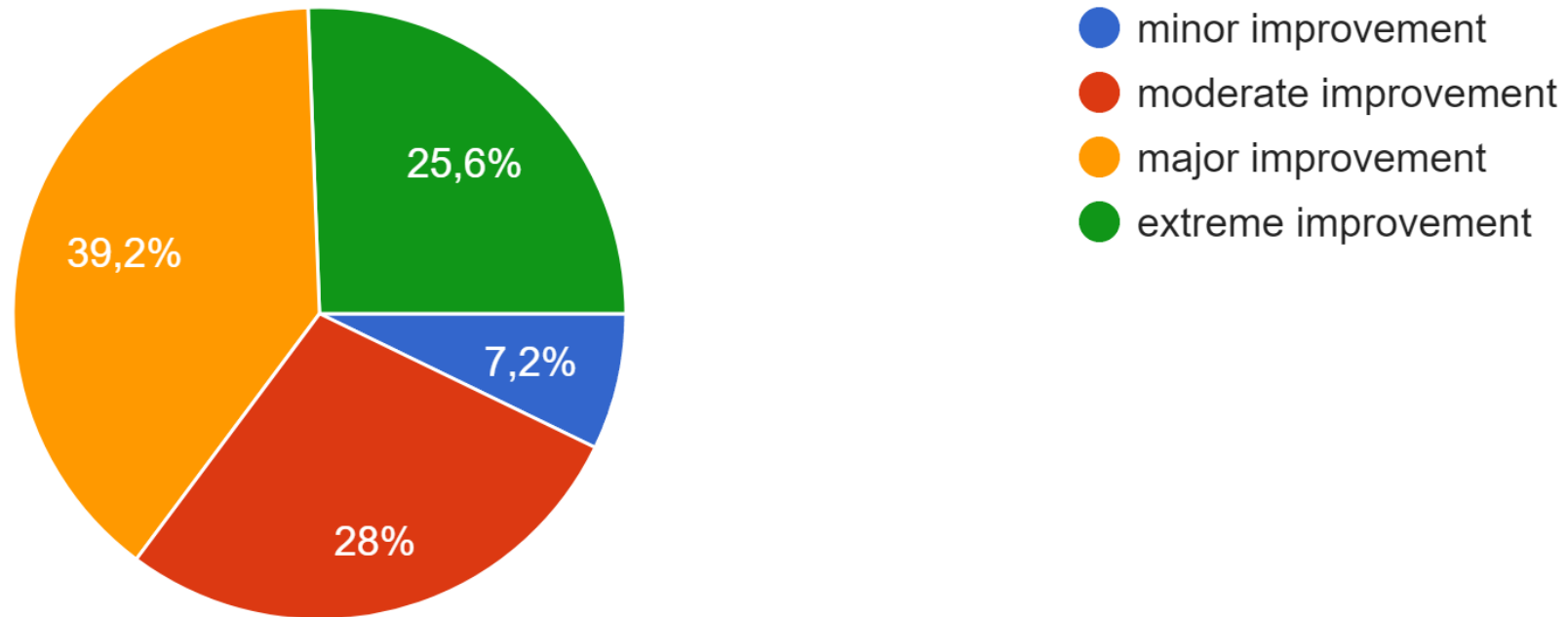
Did the Micro Frontend architecture improve the autonomy of the teams involved?

153 Antworten



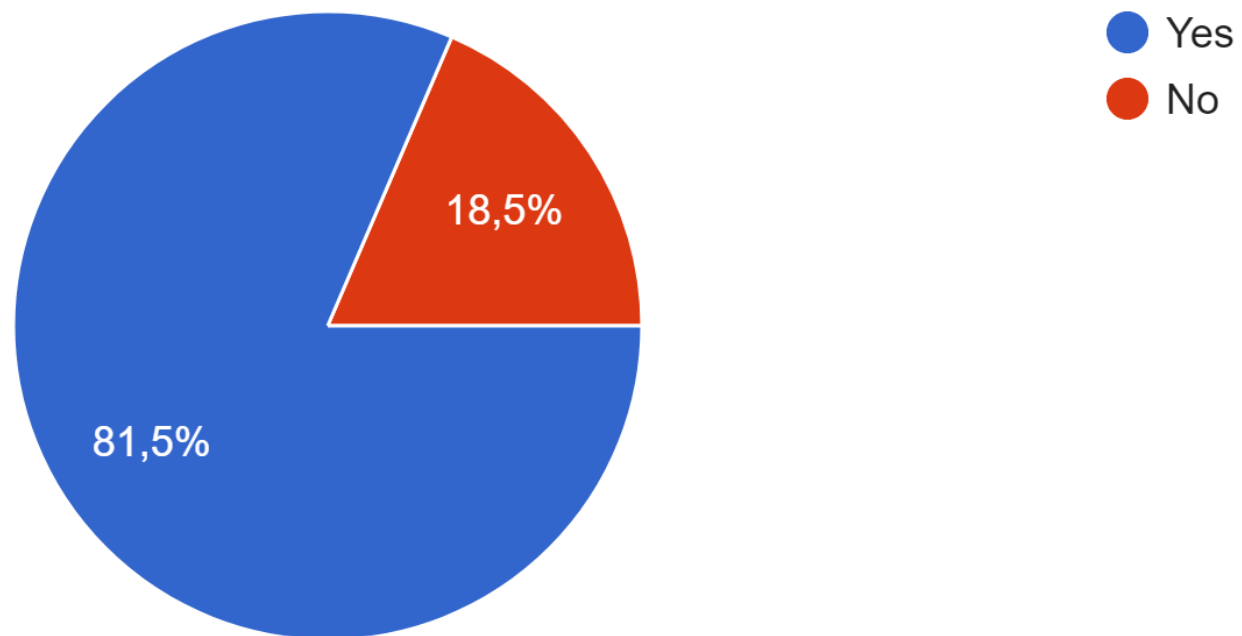
To what extent did the Micro Frontend architecture improve the autonomy of the teams involved?

125 Antworten



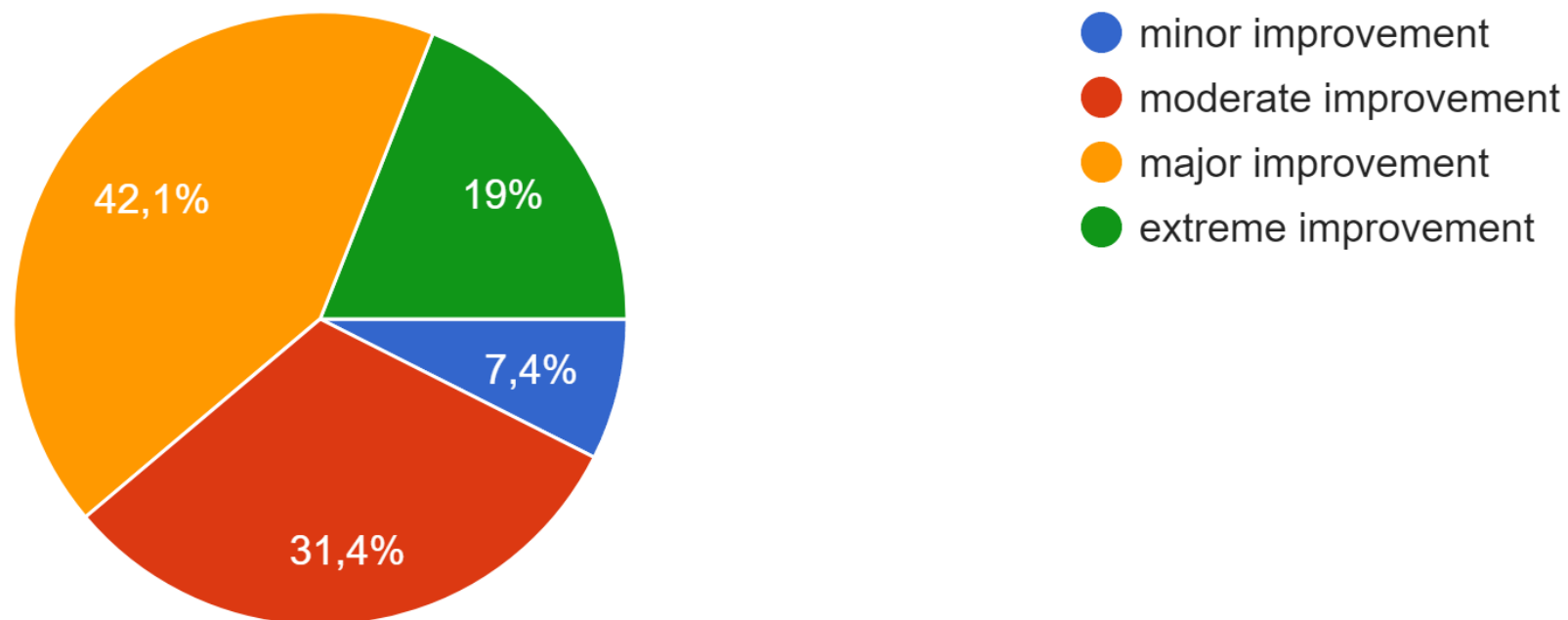
Did the Micro Frontend architecture improve your ability to add additional teams to the project?

151 Antworten



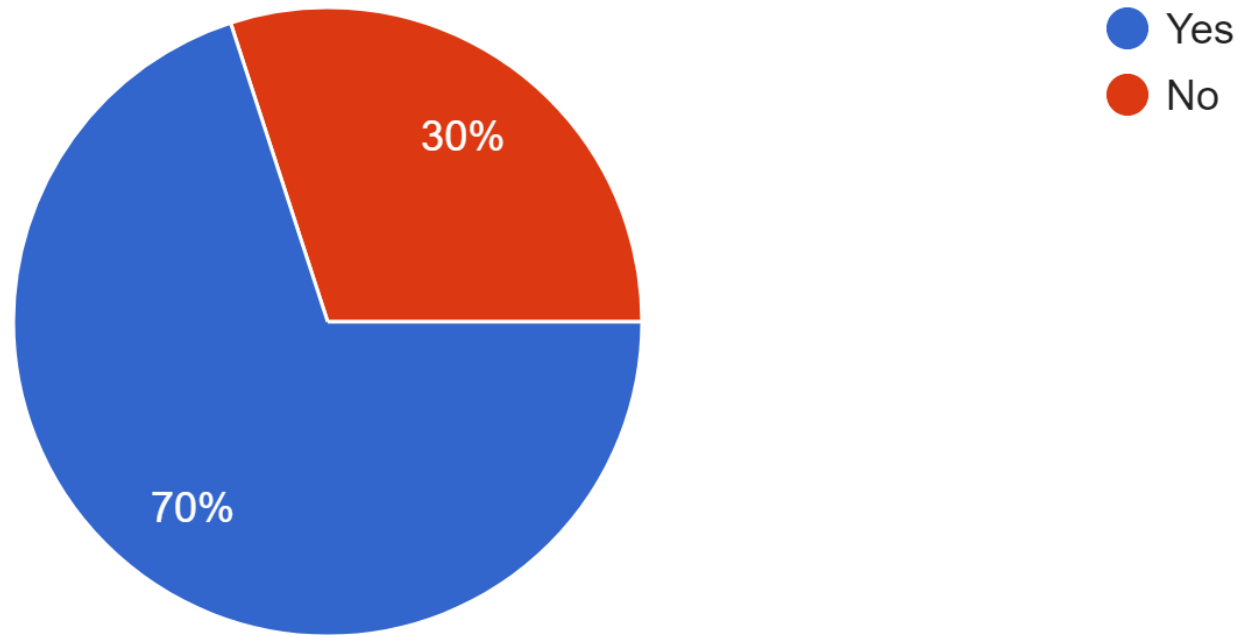
To what extent did the Micro Frontend architecture improve your ability to add additional teams to the project?

121 Antworten



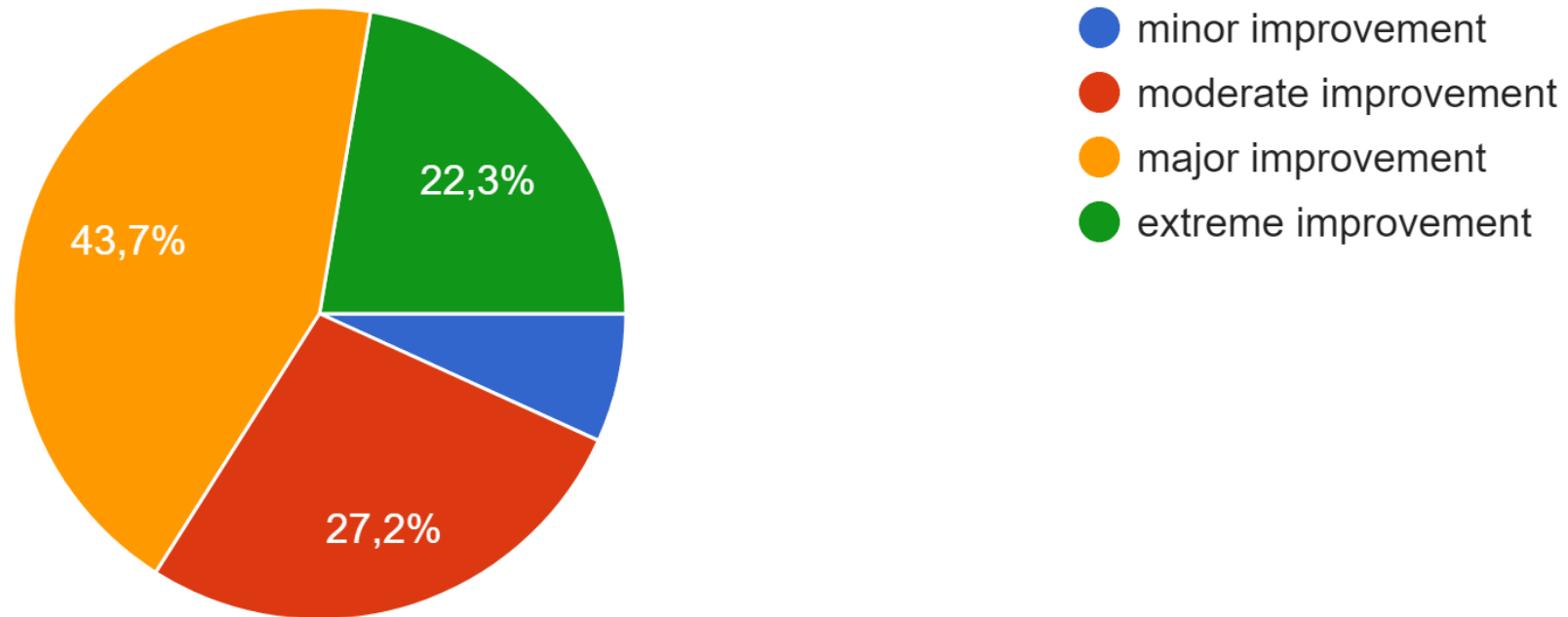
Did the Micro Frontend architecture improve your ability to ship new releases more often?

150 Antworten



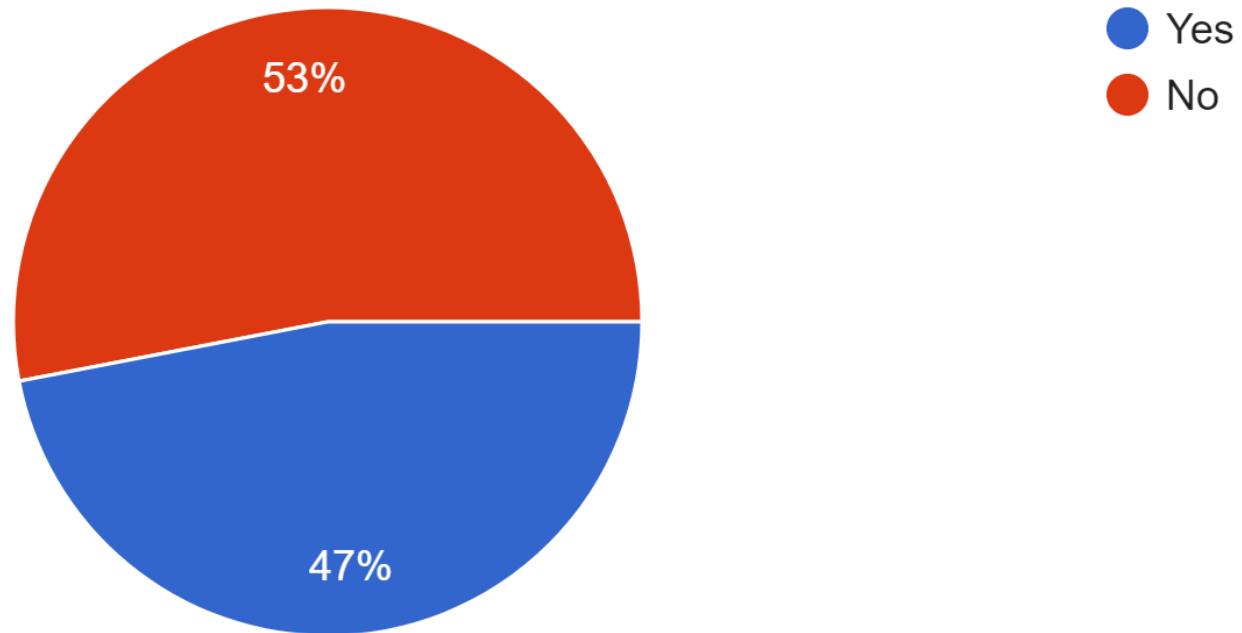
## How beneficial was the improved ability to ship new releases more often?

103 Antworten



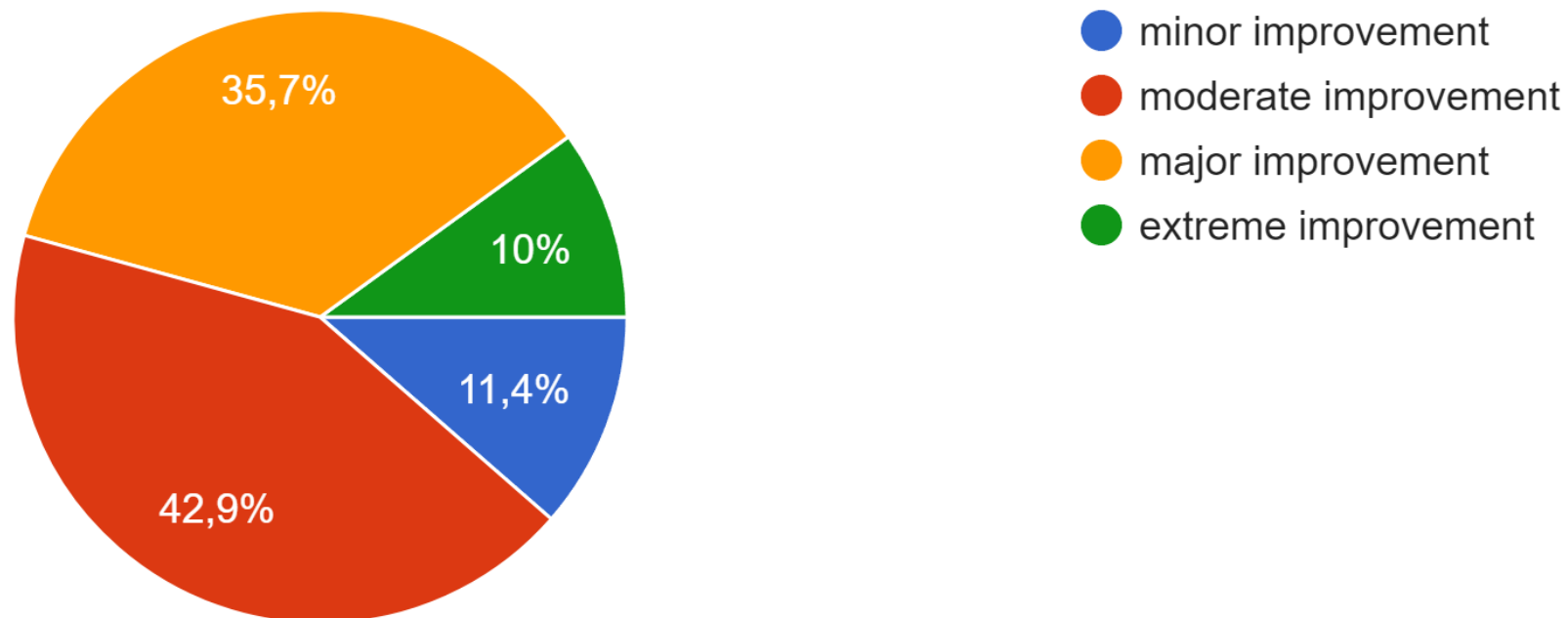
Did the Micro Frontend architecture improve the ability to onboard new team members?

149 Antworten



To what extent did the Micro Frontend architecture improve the ability to onboard new team members?

70 Antworten



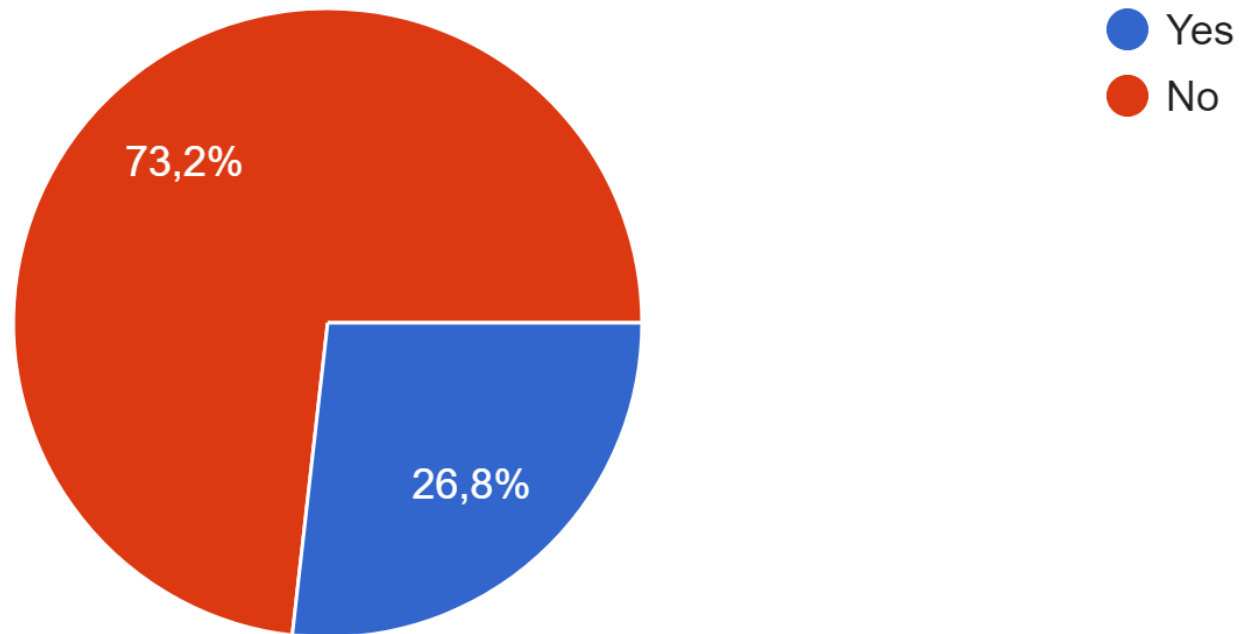


# 4) Perceived Technical Drawbacks



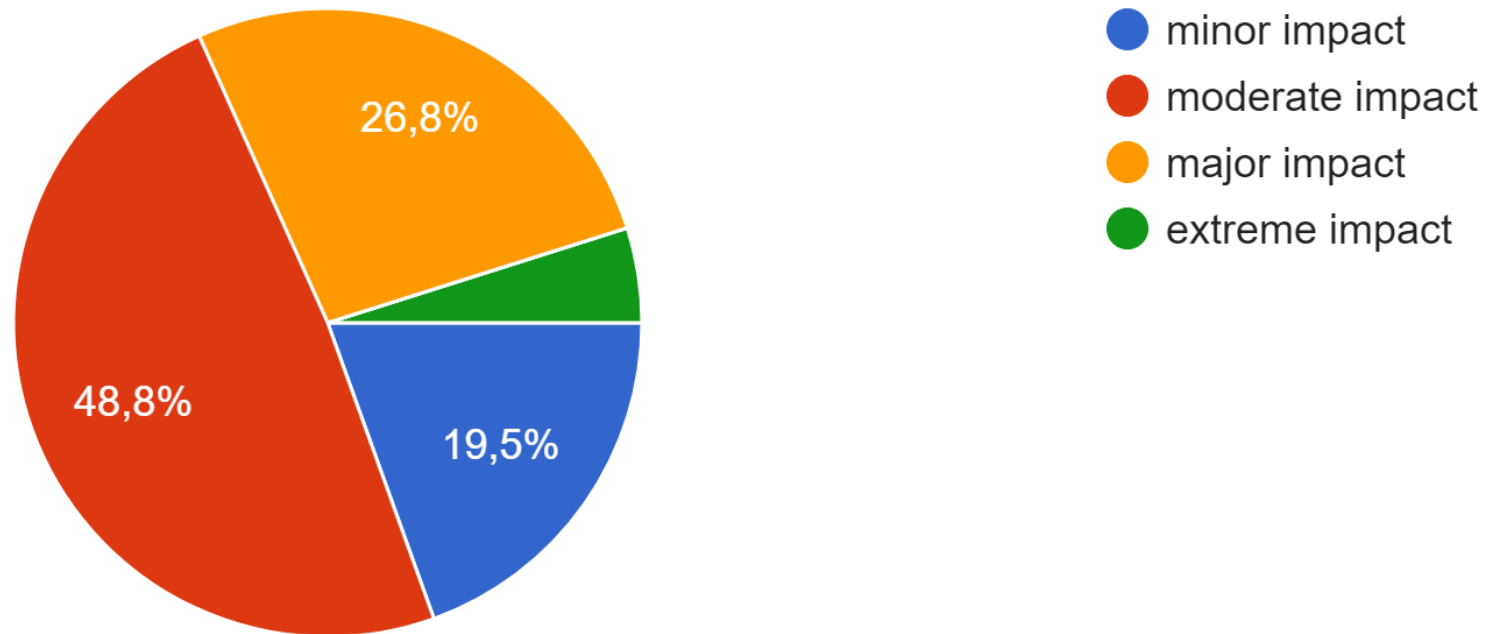
# Did the Micro Frontend architecture have a negative impact on UI/UX?

153 Antworten

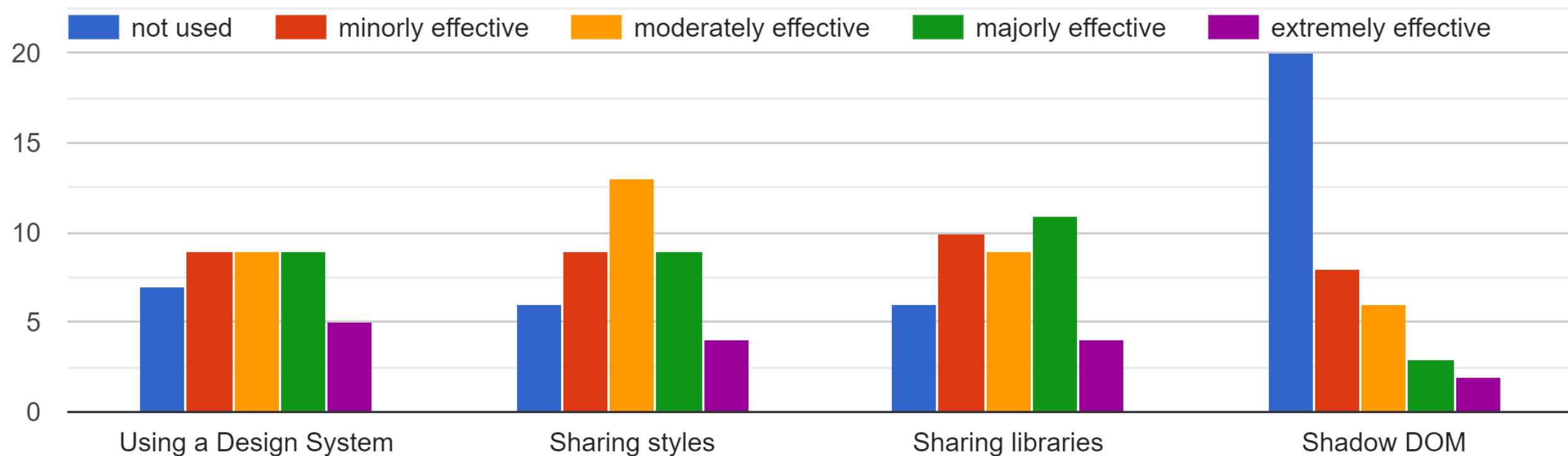


## To what extent did the Micro Frontend architecture have a negative impact on UI/UX?

41 Antworten

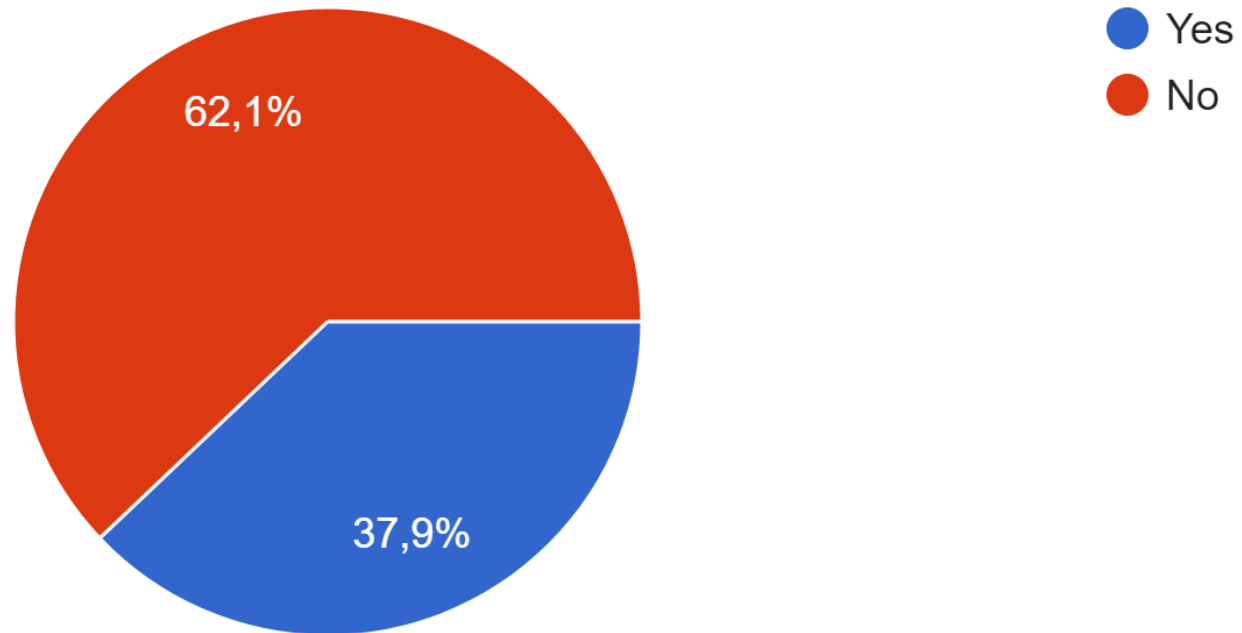


Which countermeasures compensating for this negative impact have been taken and how effective have they been?



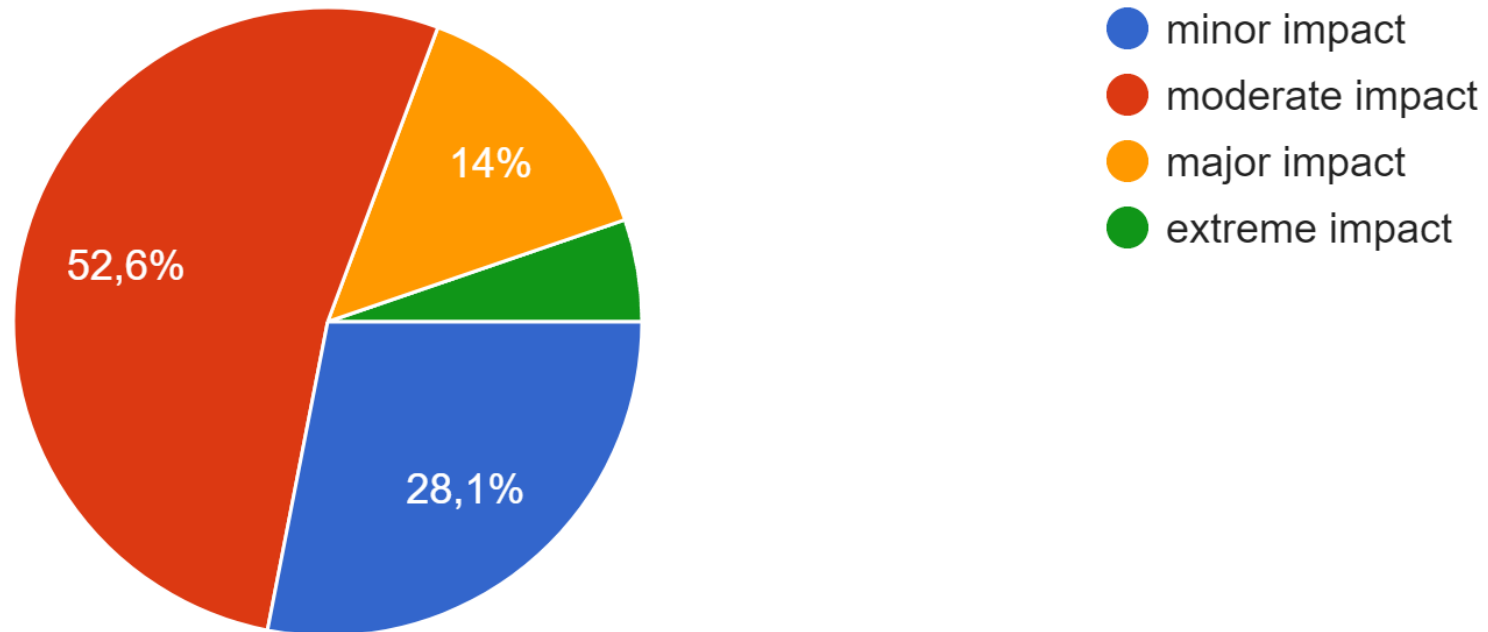
Did the Micro Frontend architecture have a negative impact on initial loading times?

153 Antworten

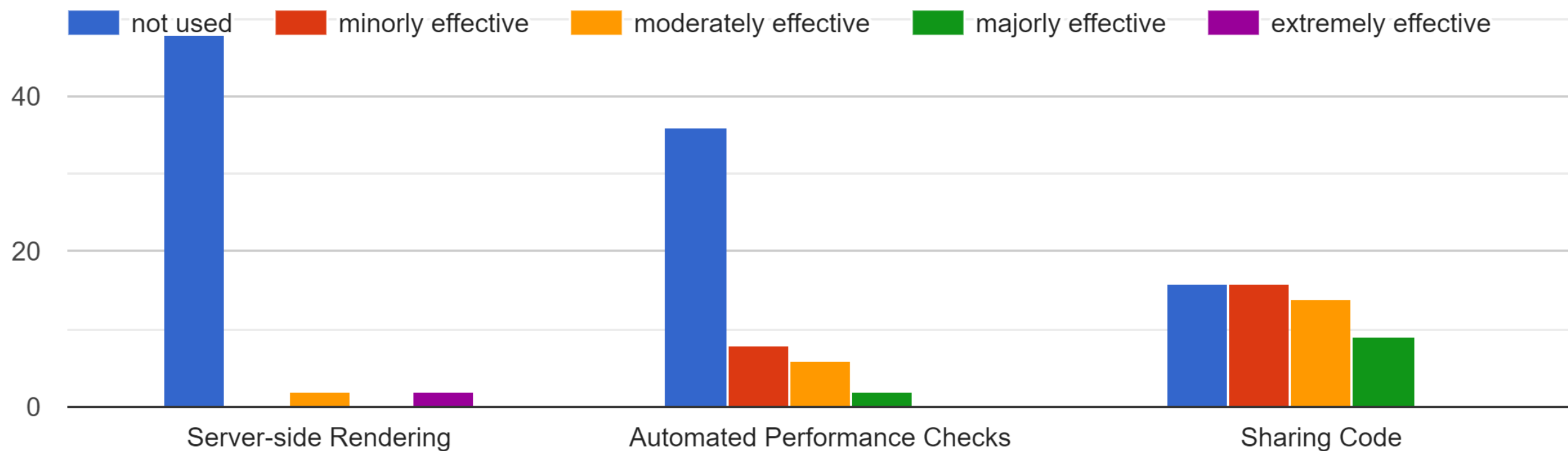


To what extent did the Micro Frontend architecture have a negative impact on initial loading times?

57 Antworten

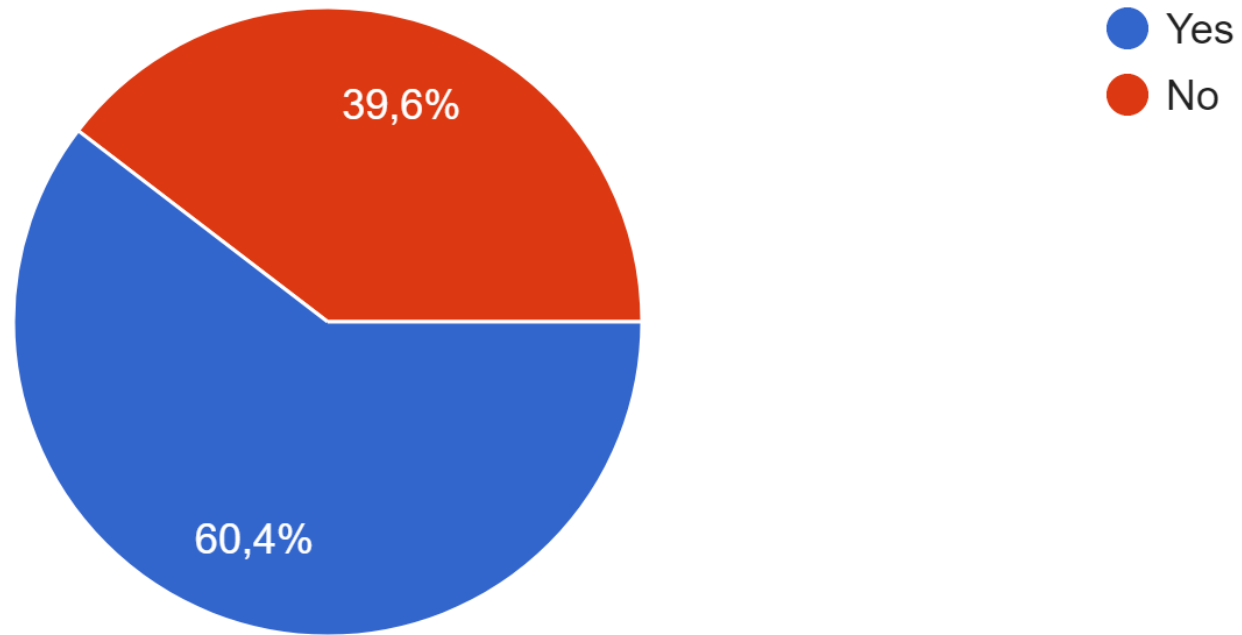


Which countermeasures compensating for this negative impact have been taken and how effective have they been?



# Did you experience difficulties preventing coupling between Micro Frontends?

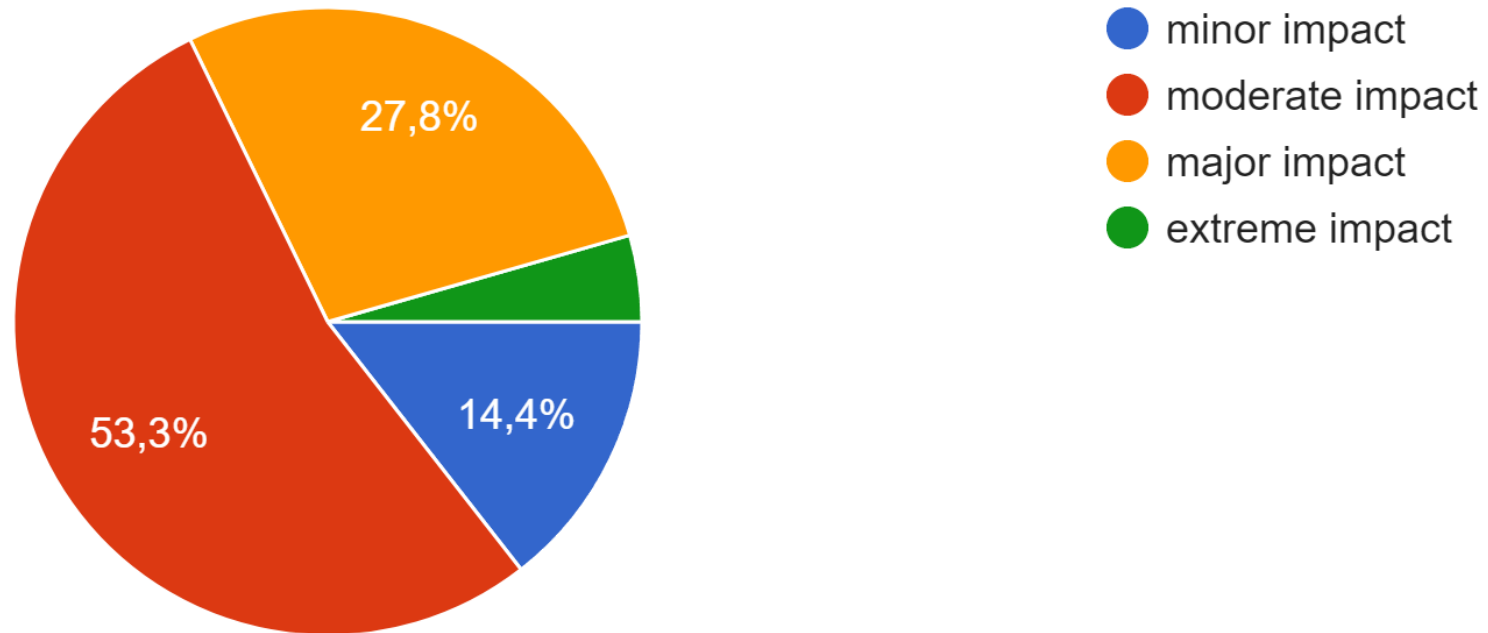
149 Antworten



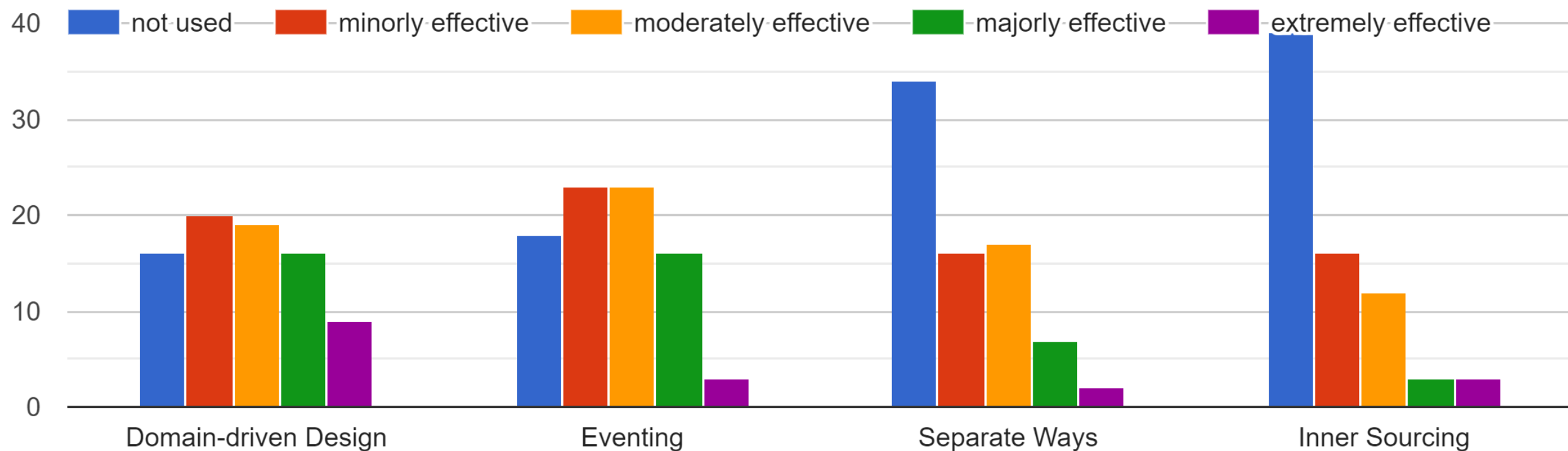


# How do you rate the difficulties with preventing coupling between Micro Frontends?

90 Antworten

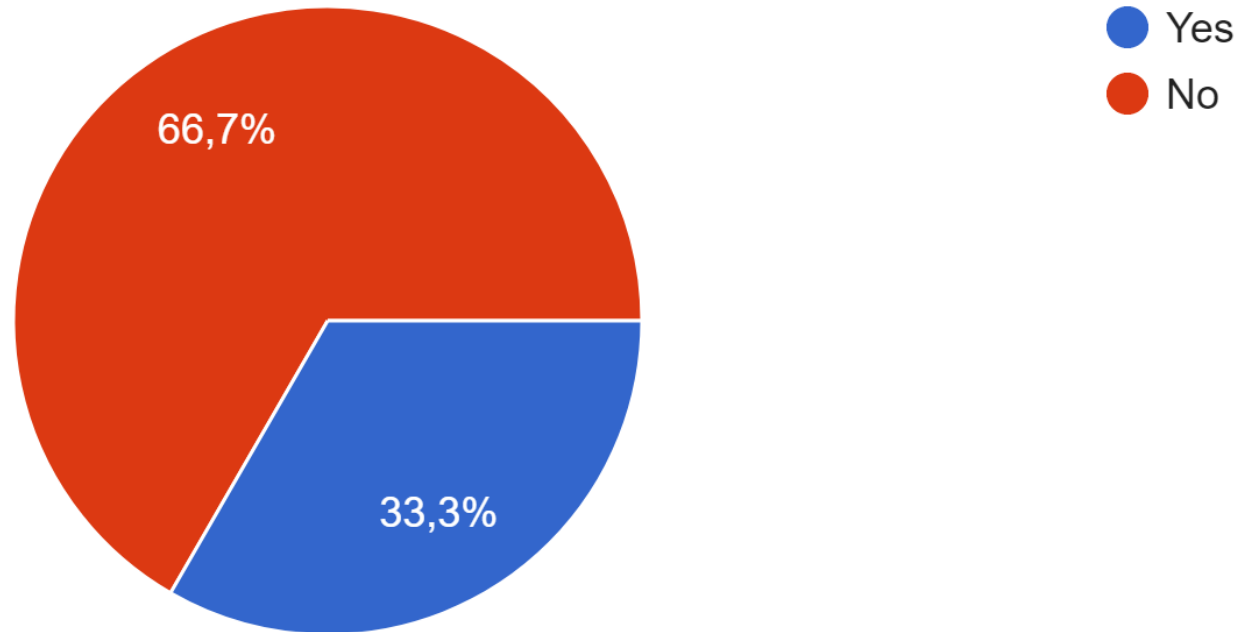


Which countermeasures compensating for this negative impact have been taken and how effective have they been?



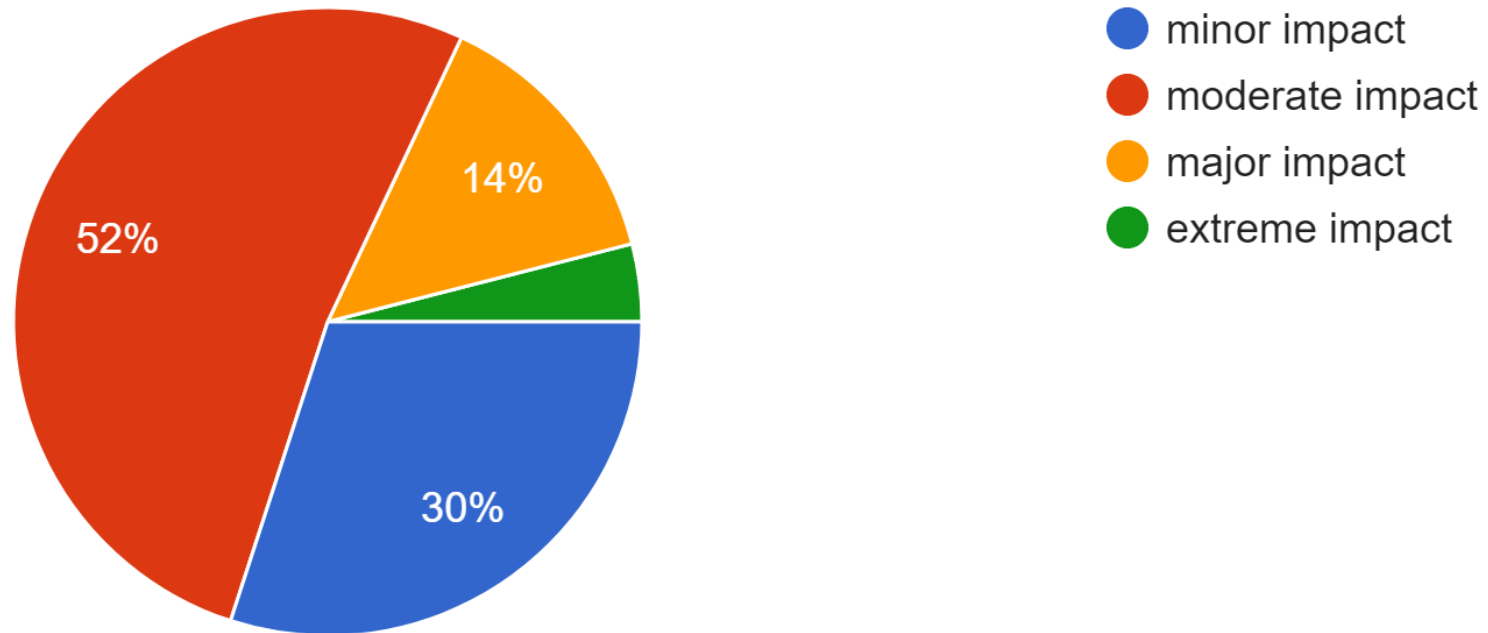
Did you experience conflicts between Micro Frontends in the sense of Micro Frontends negatively impacting each other?

153 Antworten

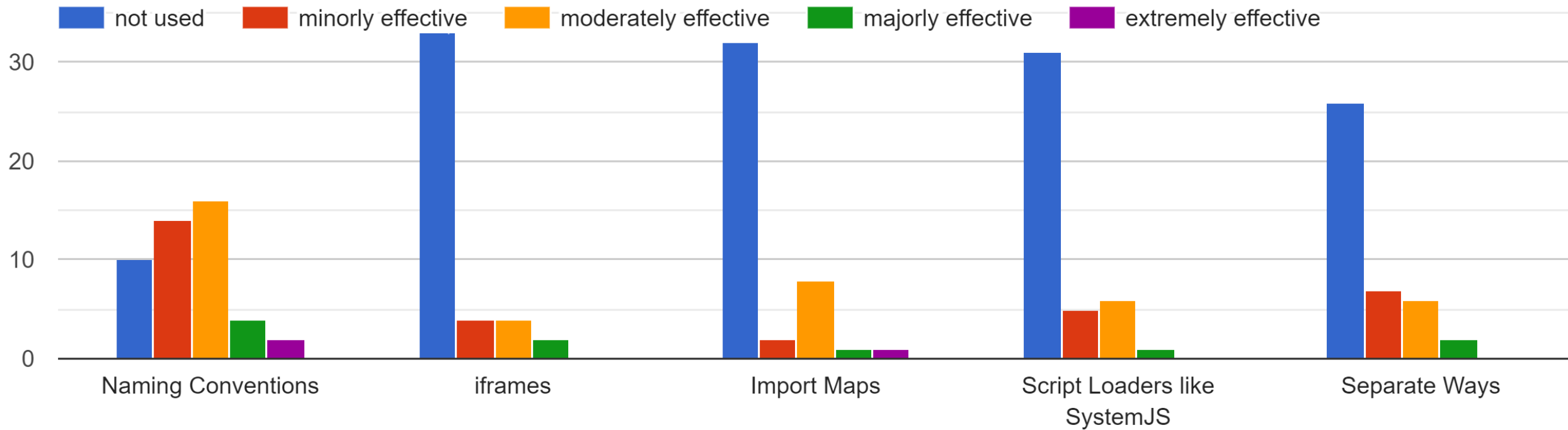


# How do you rate the negative impact regarding conflicts?

50 Antworten



Which countermeasures compensating for this negative impact have been taken and how effective have they been?

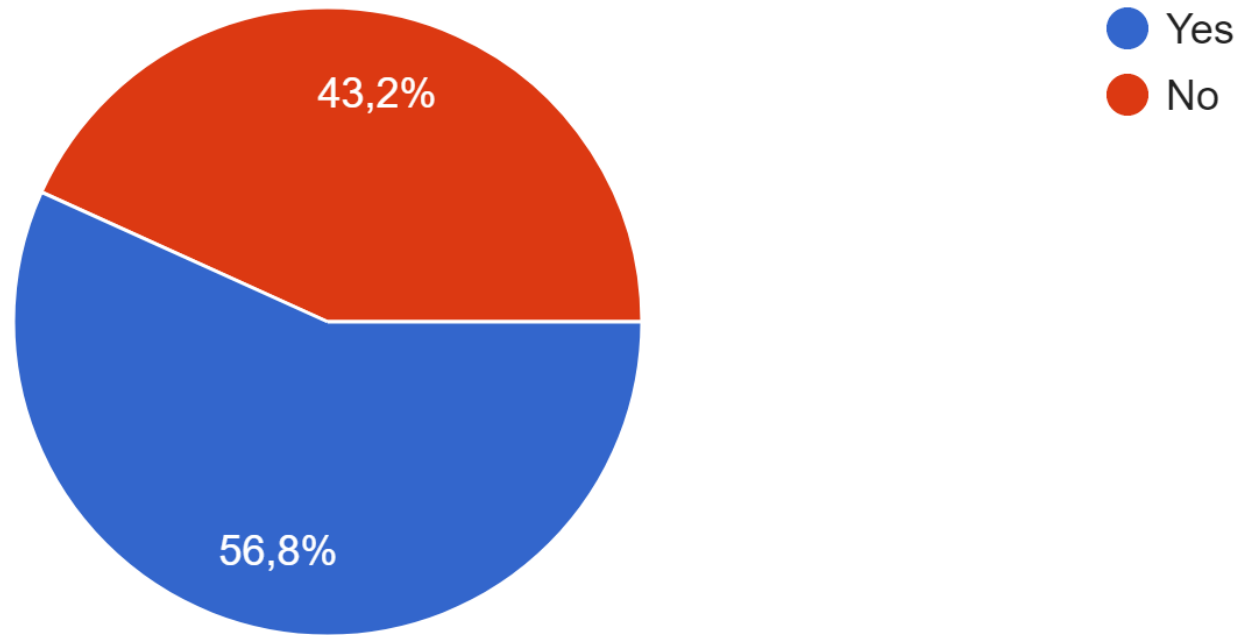


# 4) Perceived Organisational Drawbacks



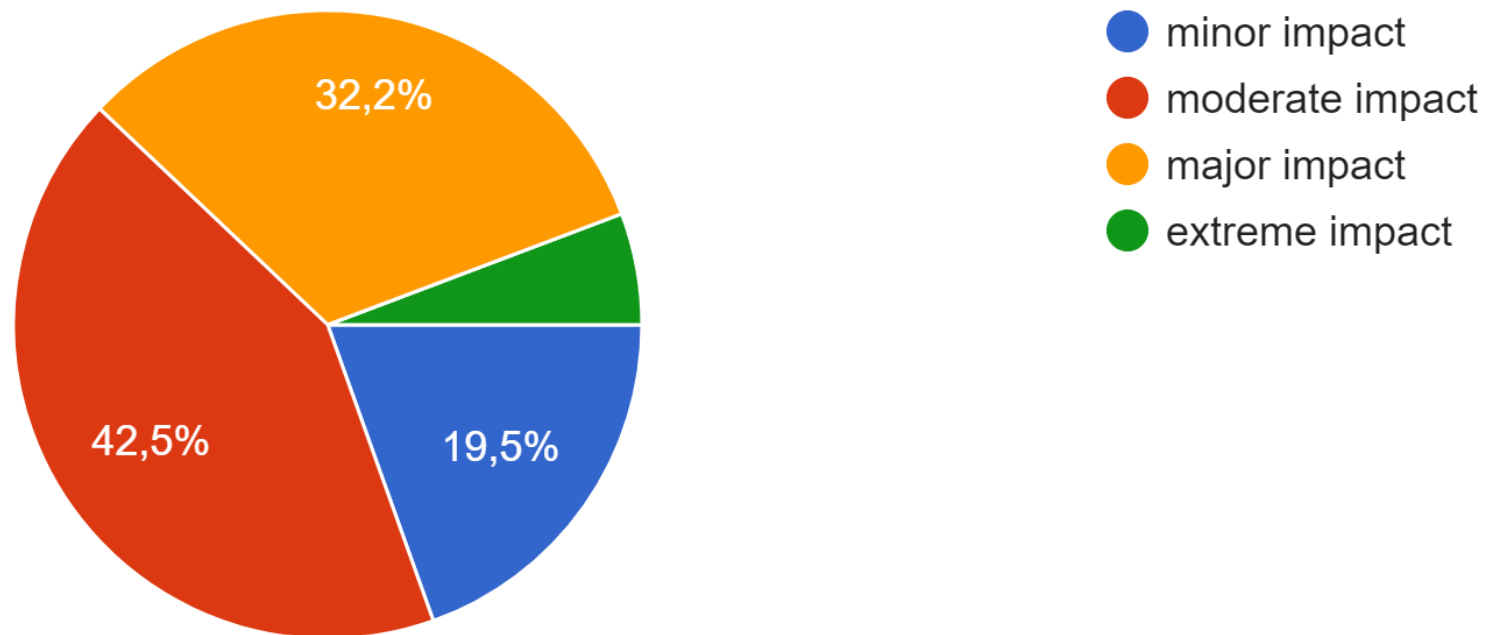
Did you experience an increase in code complexity?

155 Antworten



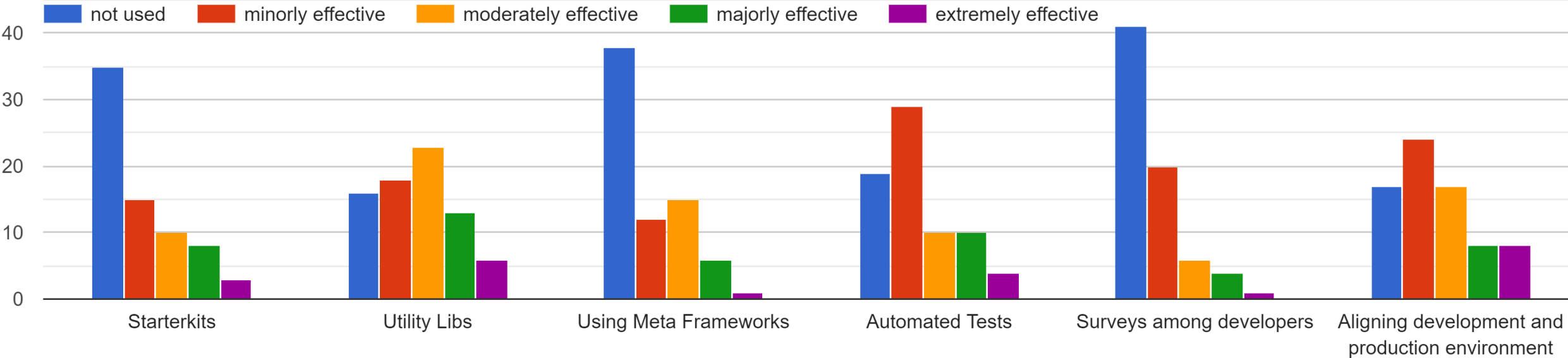
To what extent did the Micro Frontend architecture have a negative impact on complexity?

87 Antworten



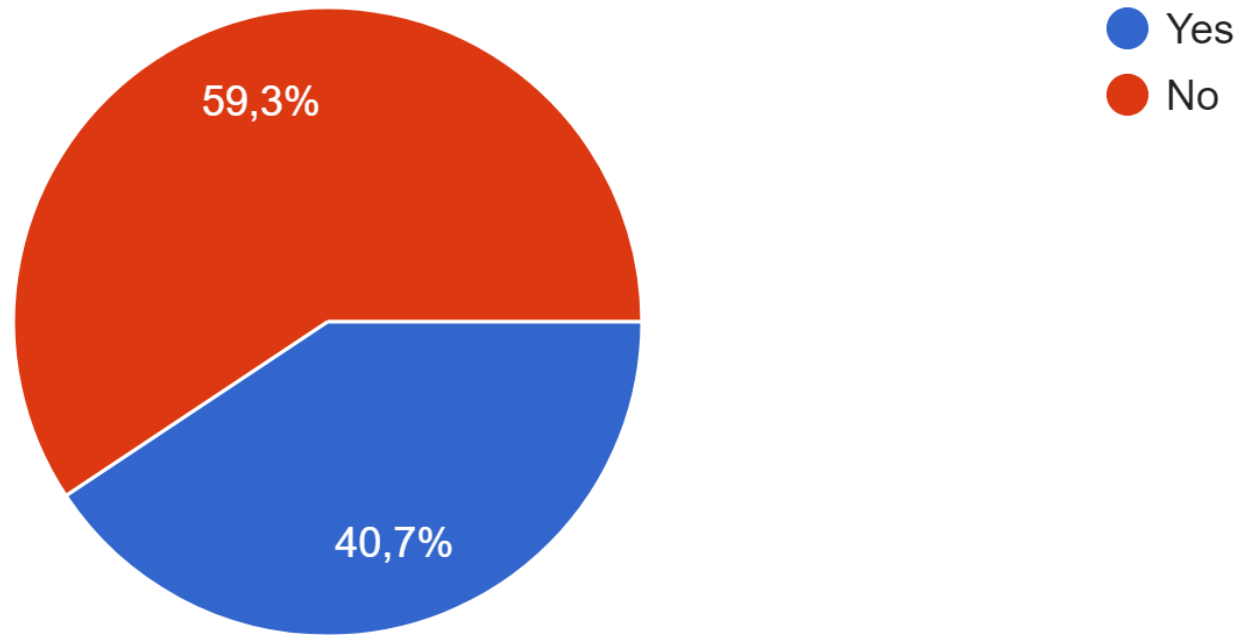


Which countermeasures compensating for this negative impact have been taken and how effective have they been?



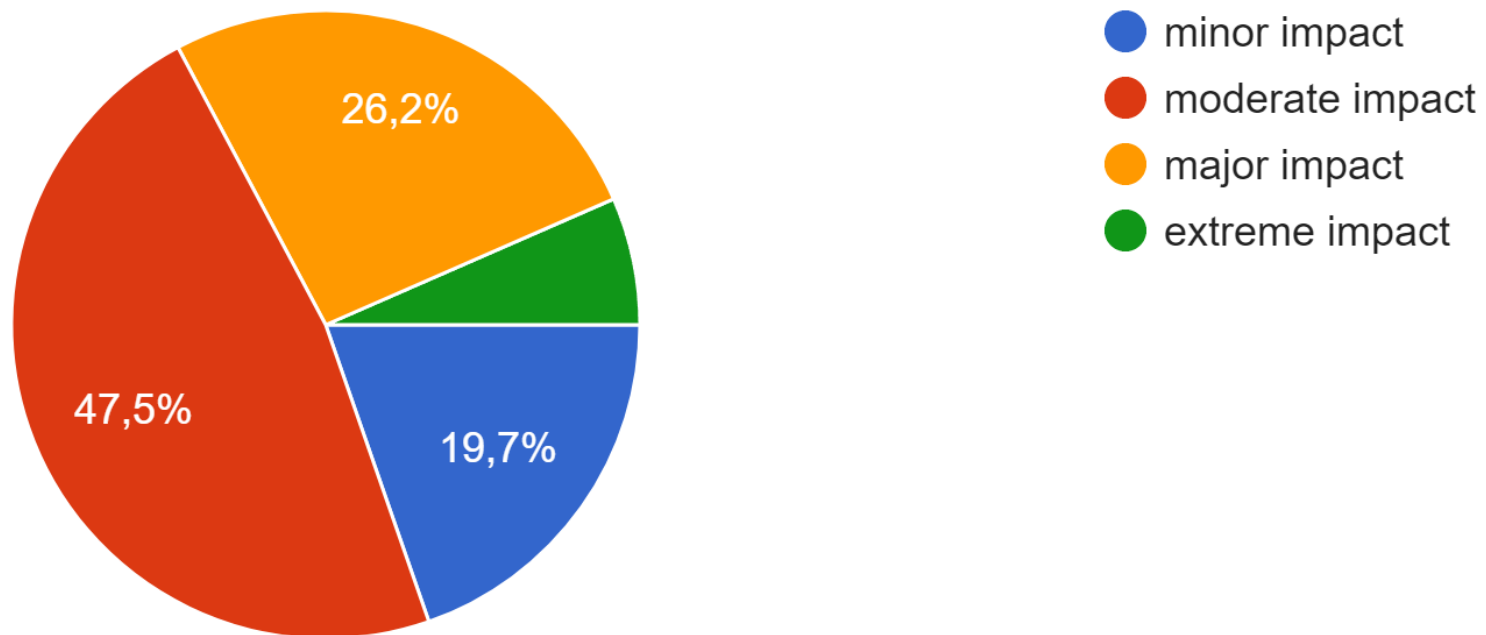
# Did you experience diverging Micro Frontends?

150 Antworten

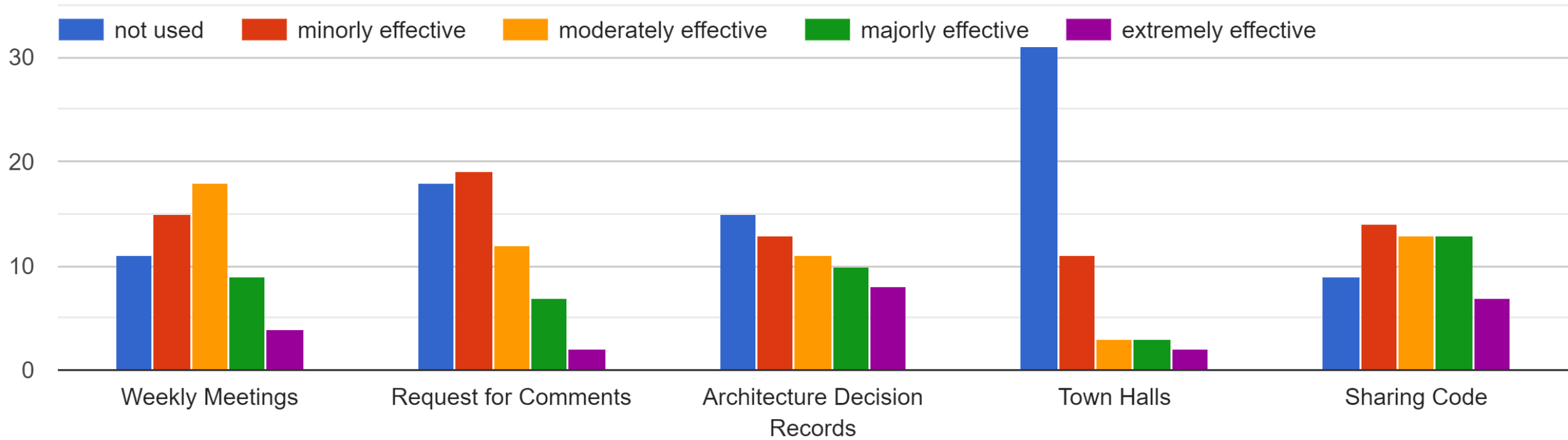


## How do you rate the impact regarding diverging Micro Frontends?

61 Antworten







Which countermeasures compensating for this negative impact have been taken and how effective have they been?



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- Maintainable Architectures
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[web] **ANGULAR***architects.io*

[twitter] ManfredSteyer



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