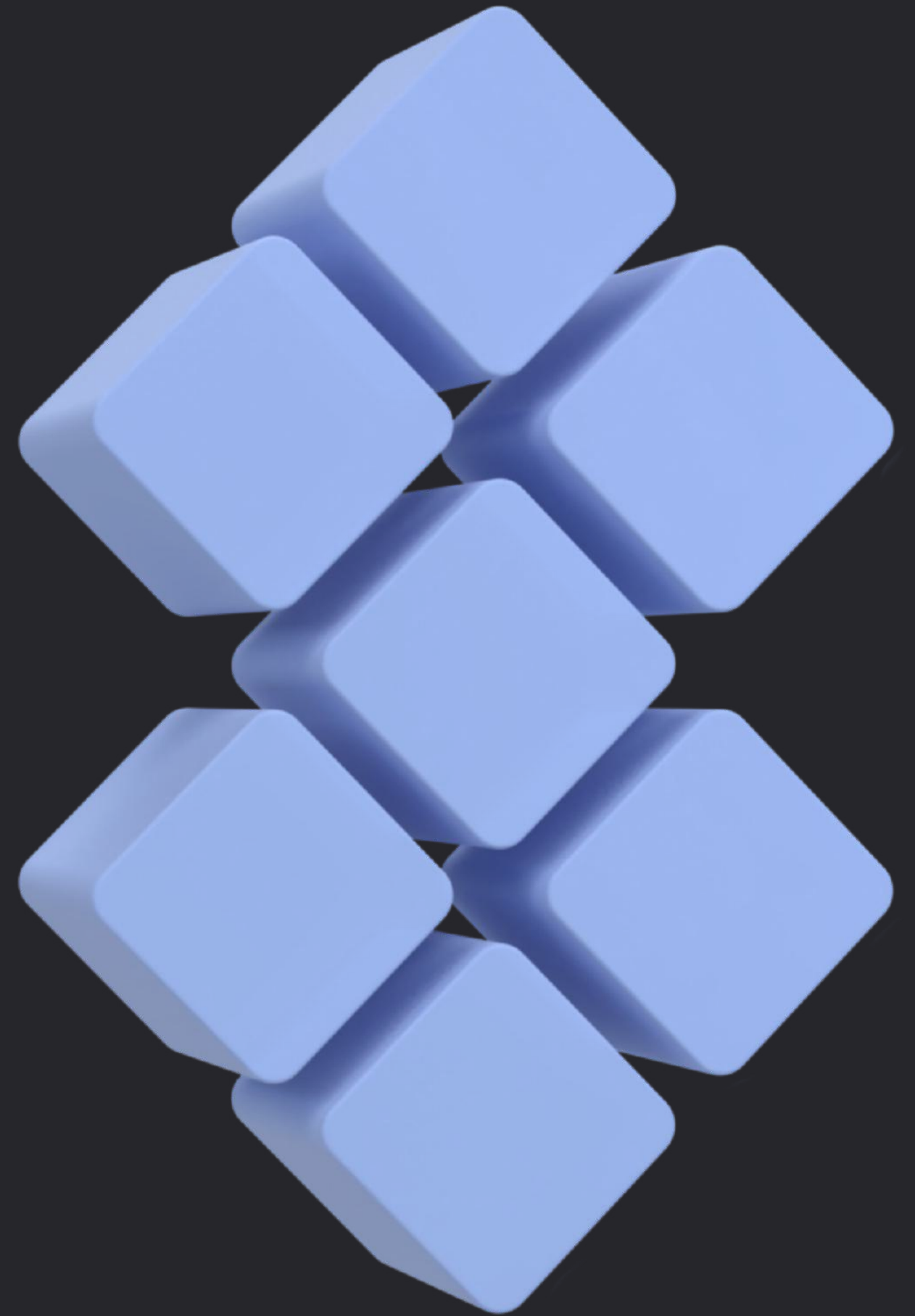


Mac Developer Survey 2023



Intro to 2023 survey

Meet the latest edition of Mac Developer Survey! For seven years now, we asked Mac developers about their common practices and challenges, preferred distribution channels and what they anticipate to be the biggest trends in the industry going forward.

From incorporating ChatGPT to third-party app stores, discover what 2023 has been like so far in the eyes of Mac developers.

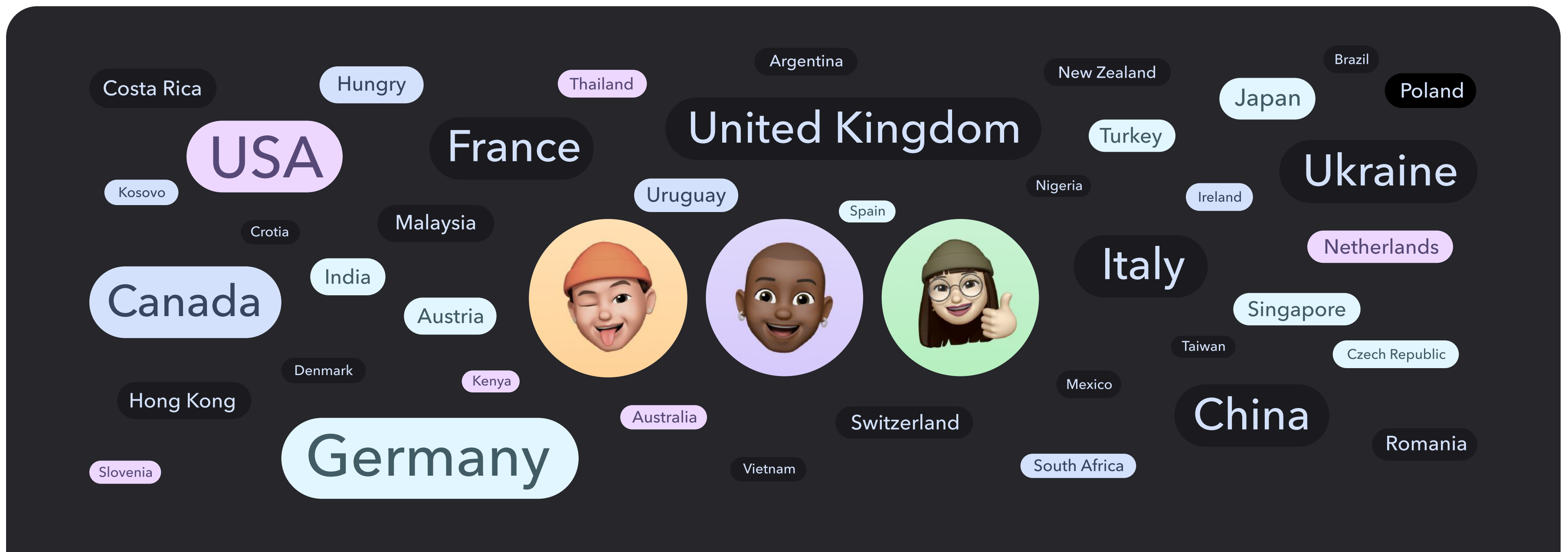


Table of contents

4	Methodology	22	Accessibility
5	Mac Developer's Portrait	23	Cross-Platform Development
7	Key Highlights	25	Third-Party App Stores for iOS
8	App Distribution	28	Impact of the russian War Against Ukraine
12	Mac App Store vs Setapp	30	Impact of Global Trends
14	App Development	32	Looking Forward
16	Experience with Apple Silicon	34	Final Notes
19	AI/ML		

Methodology

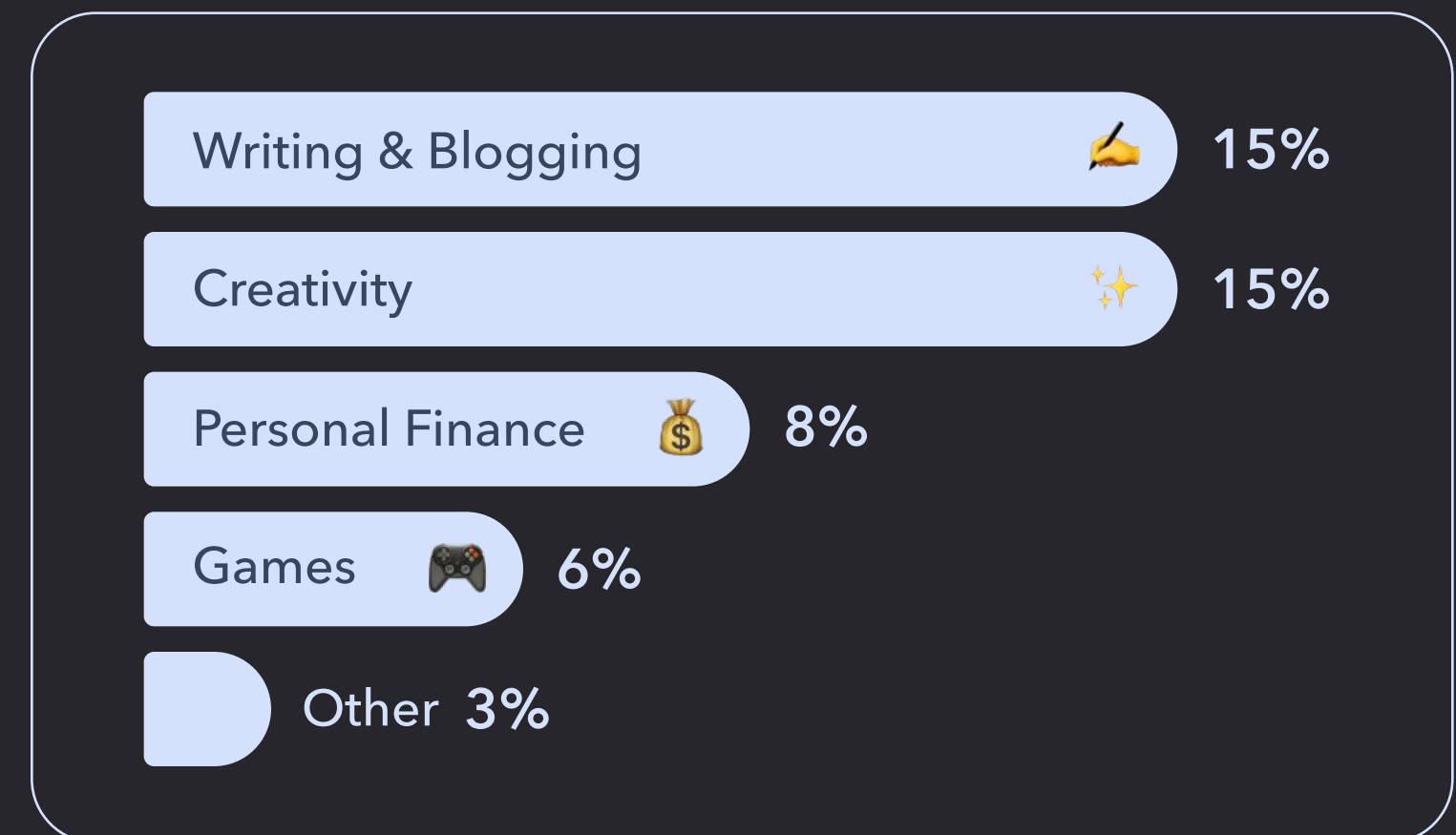
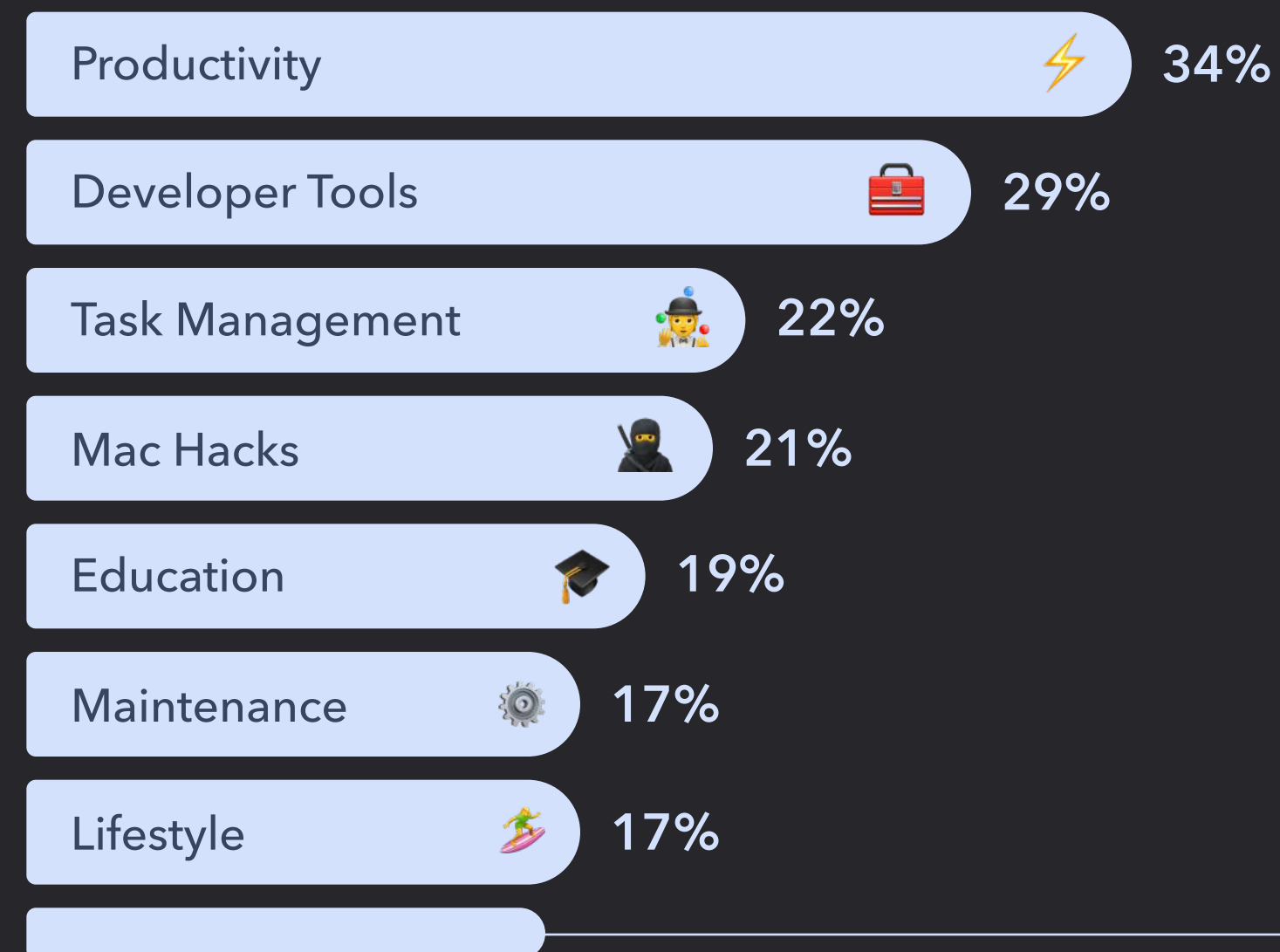
This year, we surveyed 701 respondents from across the world. The survey ran from February 28 to March 13, 2023.



Mac Developer's Portrait

Deeper look

What category/categories do your apps fall into?



Mac Developer's Portrait

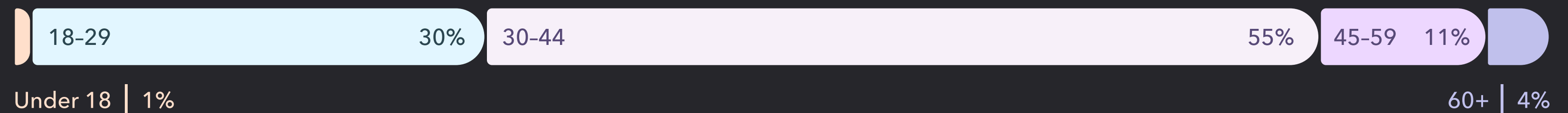
How many people are on your team?



Gender



Age



Key Highlights

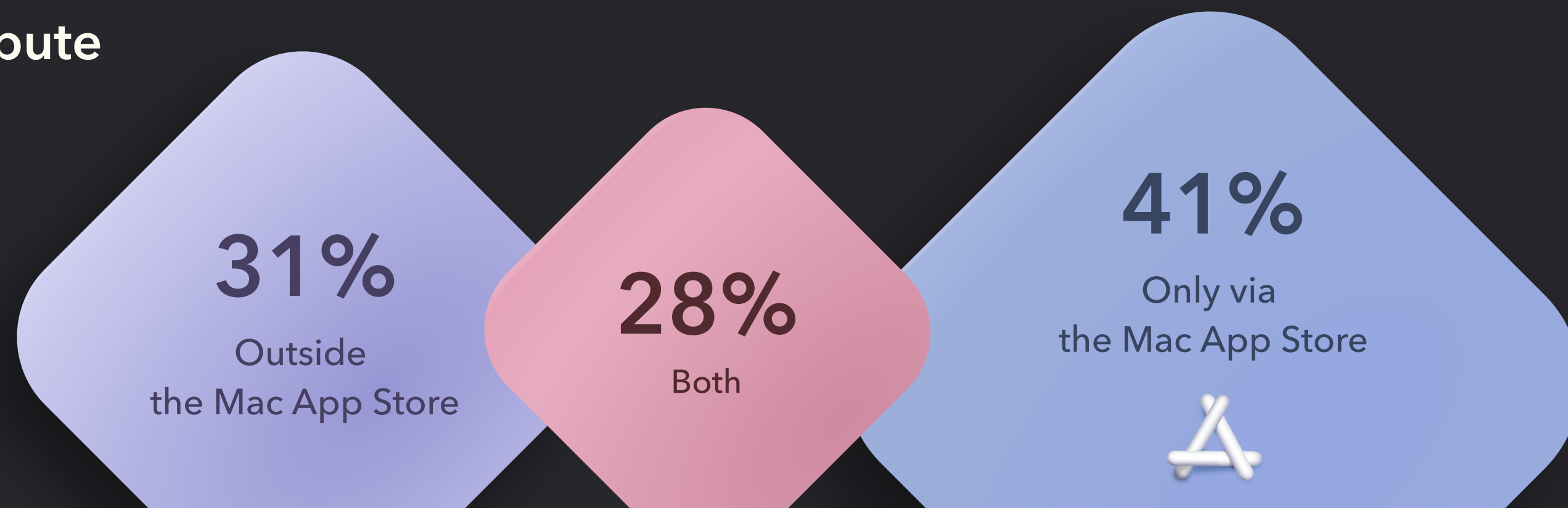
- ◆ Almost $\frac{1}{3}$ of the surveyed Mac developers distribute their apps solely outside the Mac App Store.
- ◆ 60% of the surveyed Mac developers are interested in distributing their iOS apps through third-party app stores, given the opportunity. Key motivations – growing the number of users and adding a revenue stream.
- ◆ 39% of respondents have already implemented ChatGPT in their development flow, while another 41% are working on that.
- ◆ 87% of developers put effort into making their apps accessible, with visual impairments getting the most focus.
- ◆ 44% of respondents have already implemented AI/ML models in their apps, and 28% are working on it.
- ◆ 75% of the surveyed Mac developers have felt the impact of the economic downturn on their businesses.

App Distribution

More than half of the surveyed Mac developers distribute their app(s) outside the Mac App Store (exclusively or in combination with other distribution tools).

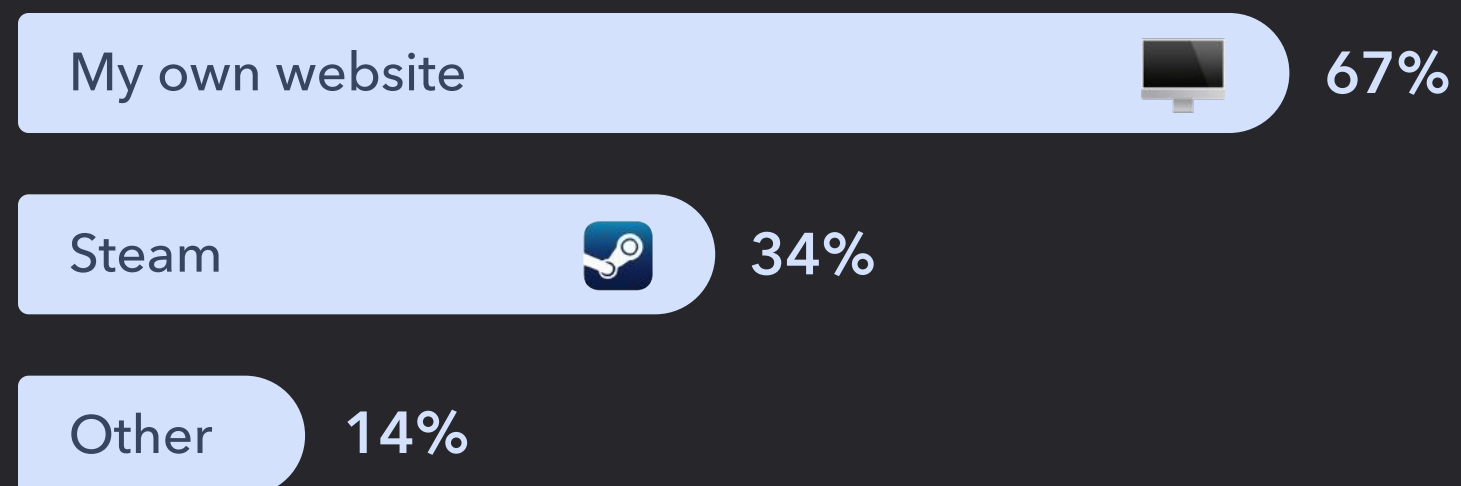
Developers mainly rely on their websites to distribute apps outside the Mac App Store. Third-party distribution channels are used by more than half of the respondents.

How do you distribute your apps?

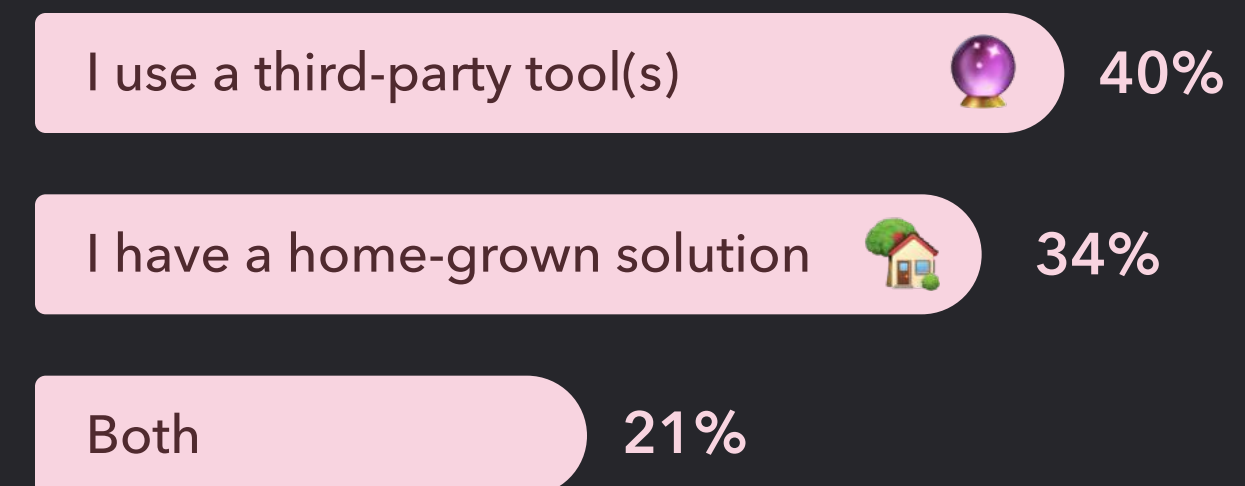


App Distribution

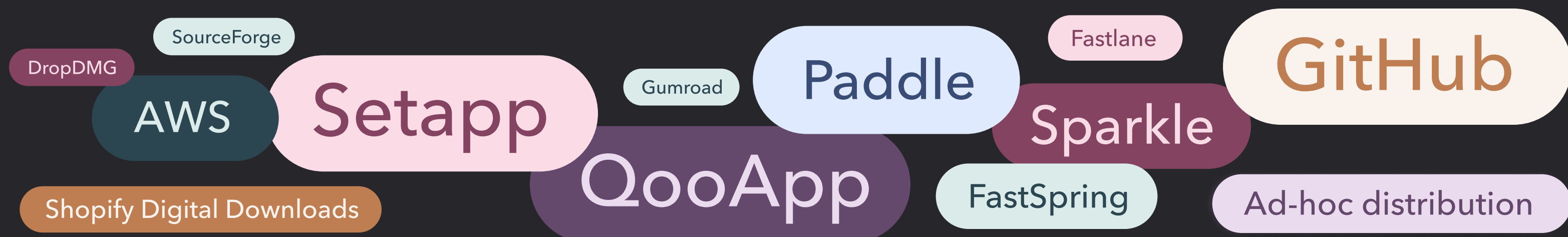
Which channels outside the Mac App Store do you use for app distribution? Please choose all that apply.



How do you distribute your app(s) outside the Mac App Store?



Please specify which third-party tool(s) you use, if any.



App Distribution

The main challenges Mac developers face with app distribution are app discovery, marketing, and user acquisition.

		2023	2022
What are the main challenges you are facing with current distribution channels, if any? Please choose up to three.	App discovery	54%	57%
	Marketing	51%	51%
	User acquisition	47%	52%
	Monetization	35%	22%*
	No recurring revenue model	30%	27%
	Other	2%	2%
	I don't have any challenges	3%	7%
*Only Monetization demonstrates significant difference vs 2022			

App Distribution

How is your revenue divided between different app distribution channels?

(Only respondents who distribute both through the Mac App Store and outside of the Mac App Store)

Outside the Mac
App Store
44%

On the Mac
App Store
57%



The Mac App Store

Do you think sharing revenue is worth what Mac App Store gives you?

3%
Definitely no

49%

Rather yes

18%
Rather no

31%
Definitely yes

14% more developers YoY consider sharing revenue is worth the advantages of distribution through the Mac App Store.

Setapp

Do you think sharing revenue is worth what Setapp gives you?

Just as last year, almost 90% of the surveyed Mac developers think sharing revenue is worth the advantages of distribution through Setapp.

1%
Definitely no

13%
Rather no

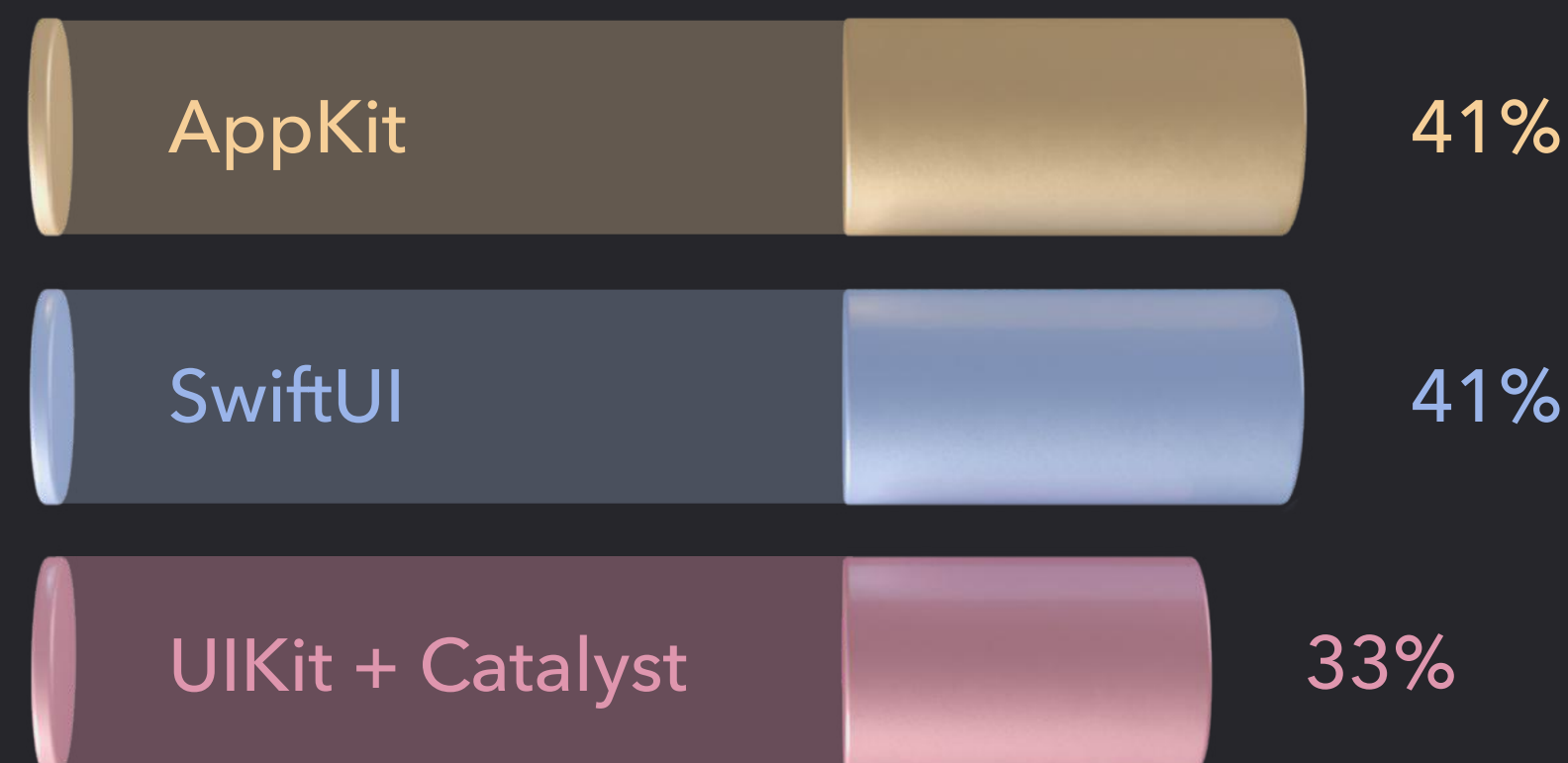
40%
Definitely yes

57%
Rather yes

App Development

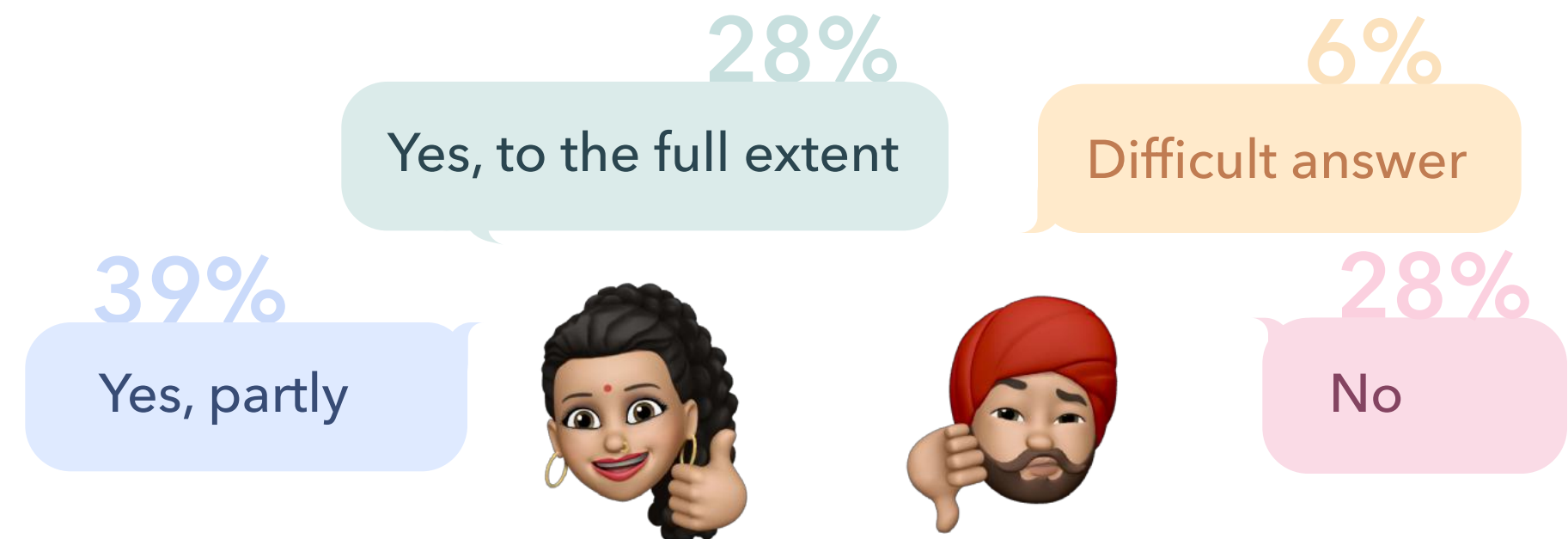
When it comes to UI toolkits, there's no clear leader. All key frameworks are in high demand. Still, almost 70% of surveyed Mac developers who are not using SwiftUI are considering switching to it in 2023, at least partially.

What frameworks do you use for the development of your macOS app?



App Development

Are you going to switch to SwiftUI framework in 2023 for your macOS apps?



How do you evaluate your experience with SwiftUI?



Experience with Apple Silicon

Most Mac developers are embracing Apple silicon. Moreover, slightly more than 70% say Apple silicon chips positively influence their app(s) performance and increase their app(s) future relevance.

Have you optimized your app(s) for Apple silicon chips (M1 & M2 series)?

71%

22%

Yes, we have already released an Apple silicon-optimized version

Not yet, we are working on optimization

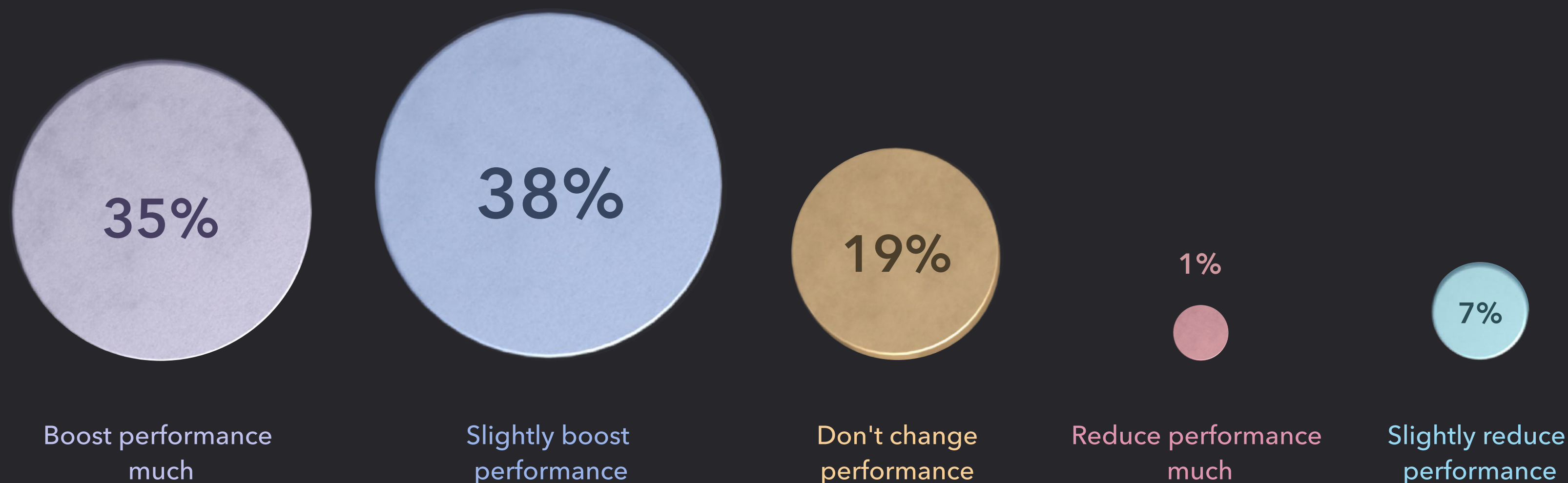


7%

No

Experience with Apple Silicon

How do you describe
the influence of the Apple silicon
chips (M1 & M2 series) launch on your
current app(s) performance?



Experience with Apple Silicon

```
1 switch "How do you describe the influence of the Apple
   silicon chips (M1 & M2 series) launch on your
   current app(s) future opportunities?" {

2   case "Increase relevance and abilities for future development":
3     34%

4   case "Slightly increase relevance and abilities for future development":
5     38%

6   case "Don't change abilities for future development":
7     23%

8   case "Slightly reduce relevance and abilities for future development":
9     5%

10  case "Reduce relevance and abilities for future development":
11    1%

12 }
```

AI/ML

Mac developers are embracing AI/ML models – 44% have already used them, and 28% are working on implementation.

Do you use AI/ML models in your apps?

44%

Yes



28%

Not yet, we are working on it



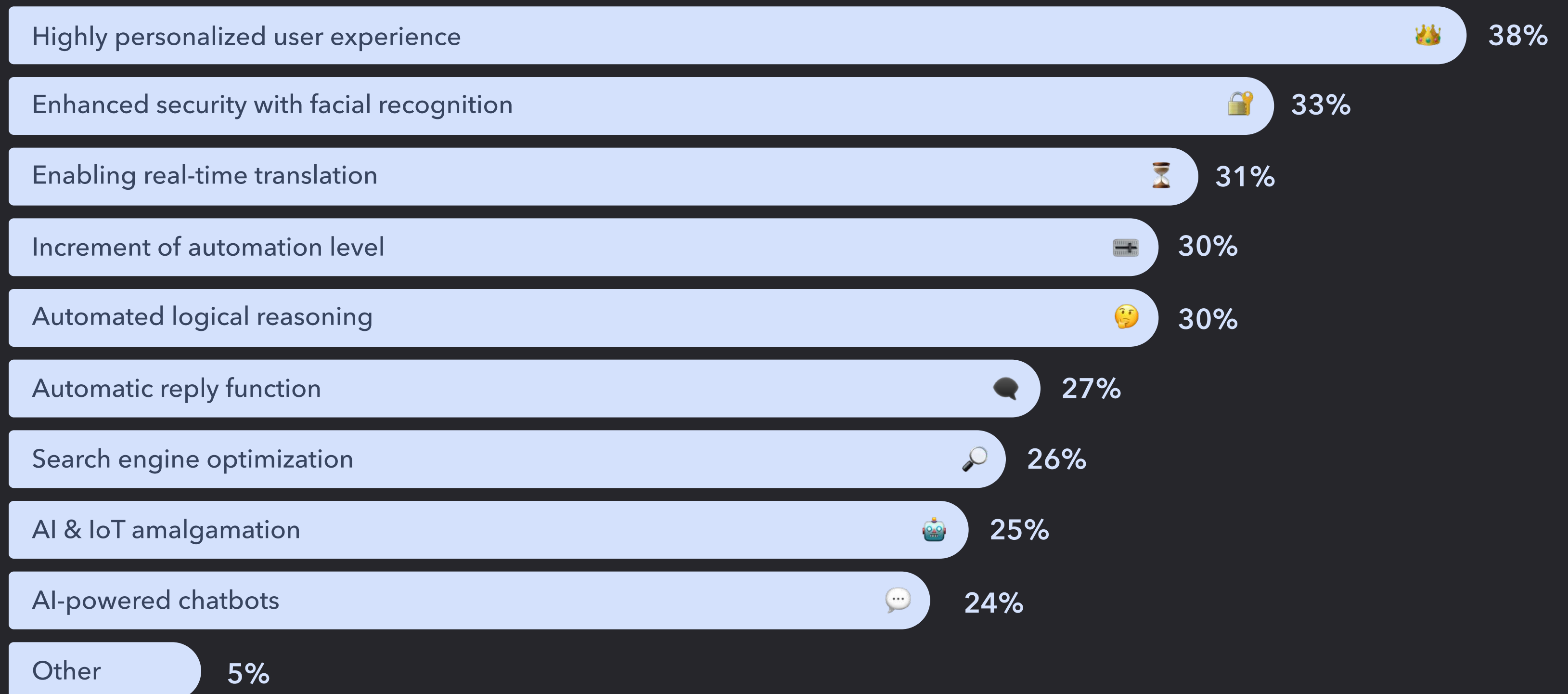
28%

No



AI/ML

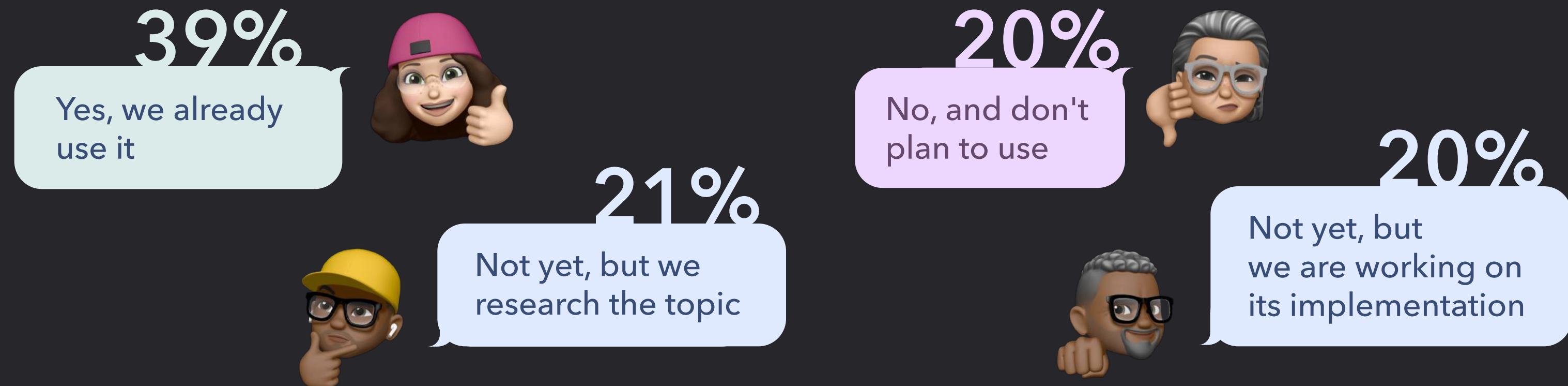
For what purposes do you implement AI/ML models in your app(s)?



AI/ML

ChatGPT also looks poised for a rapid adoption – only 20% of developers are not planning to implement it in their workflow.

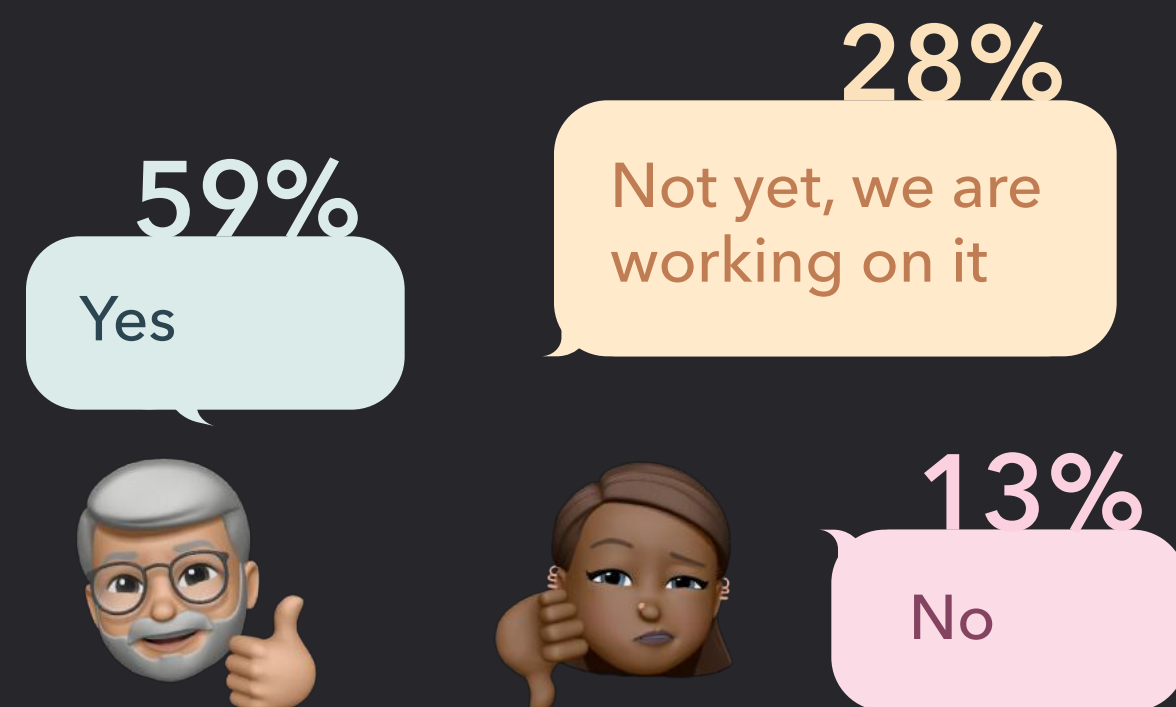
Do you use ChatGPT technology in the development work process?



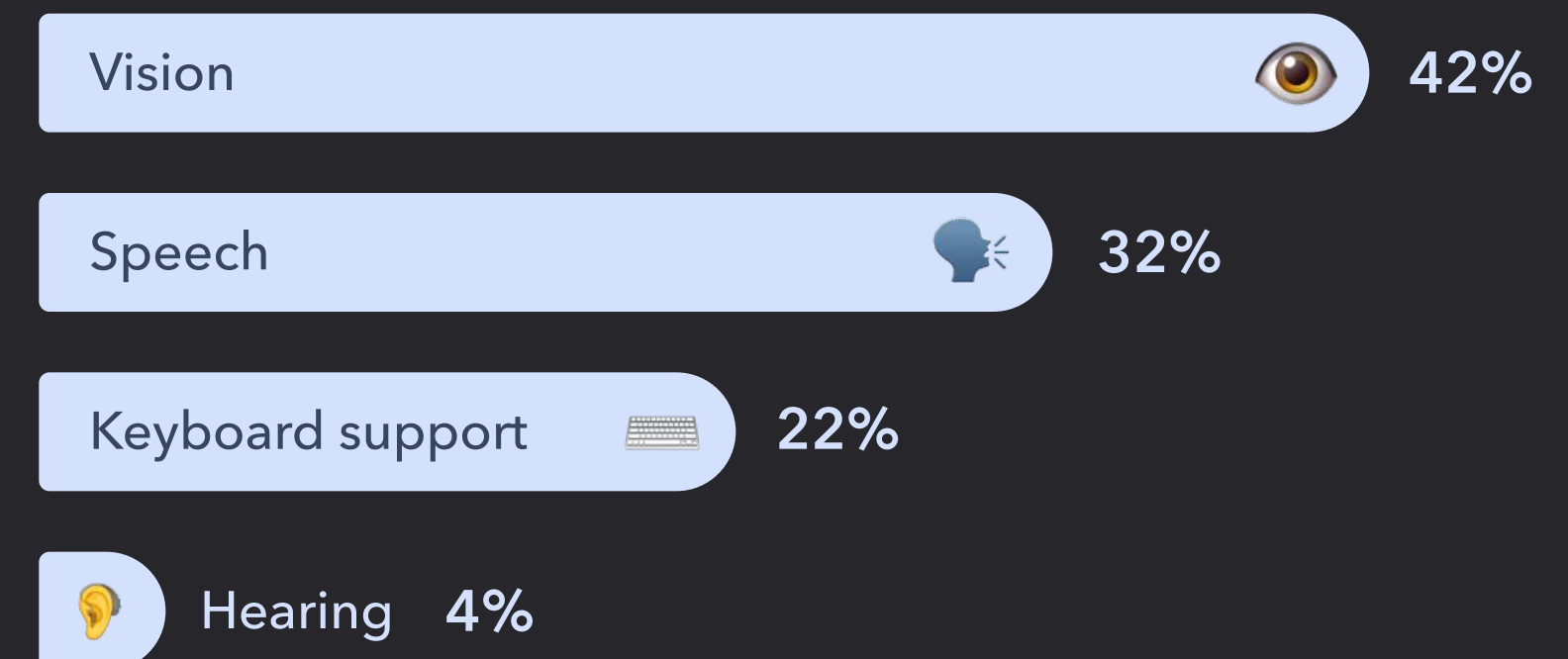
Accessibility

Attention to the accessibility of app(s) is high among developers. 88% consider their app(s) accessible or in the process of such adaptation.

Do you make your app accessible?



What do you focus most on in the accessibility of your app(s)?



Cross-Platform Development

42% of Mac developers build cross-platform solutions to attract their customers.

The majority of them prefer to stay within the Apple ecosystem (90% have app(s) for Apple ecosystem devices).

Do you develop apps only for macOS or for other operating systems too?

58%

Only on macOS

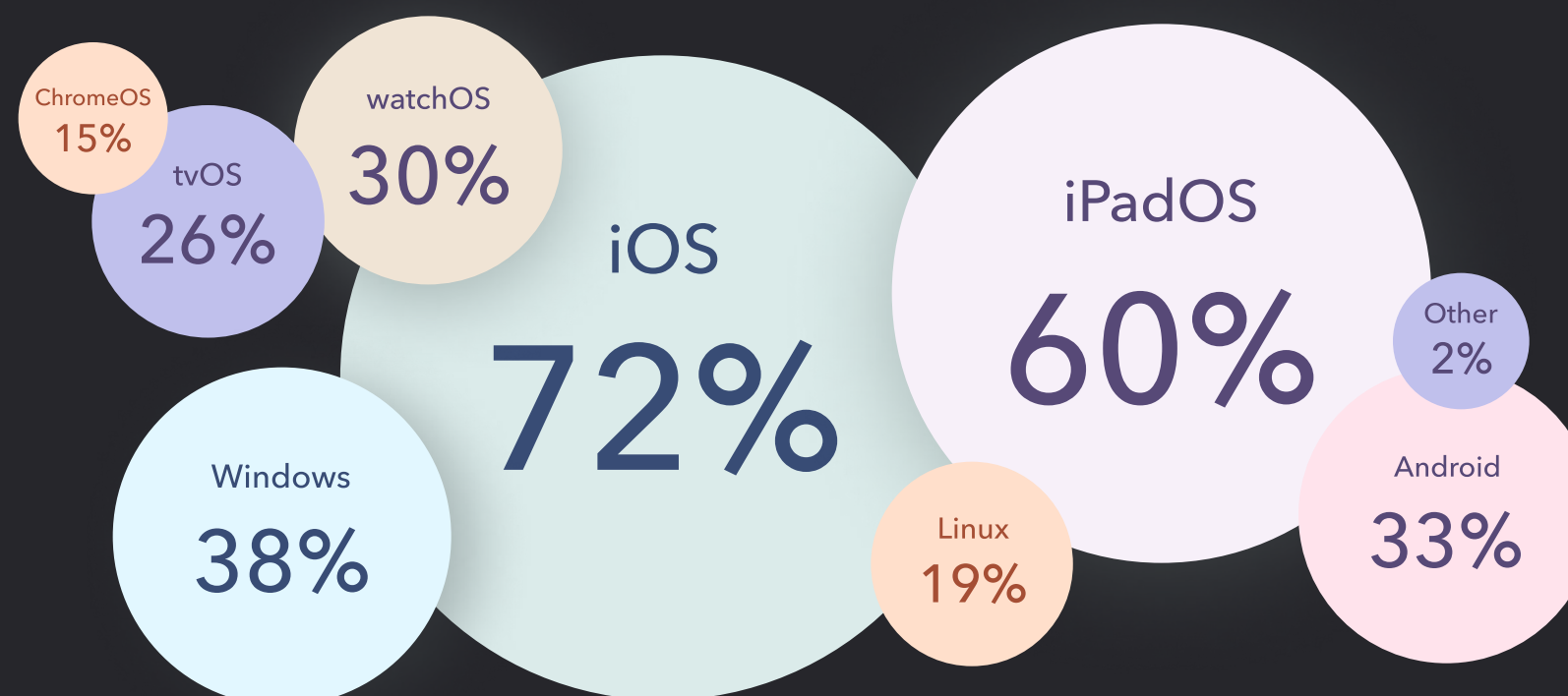


42%

For other operating systems too



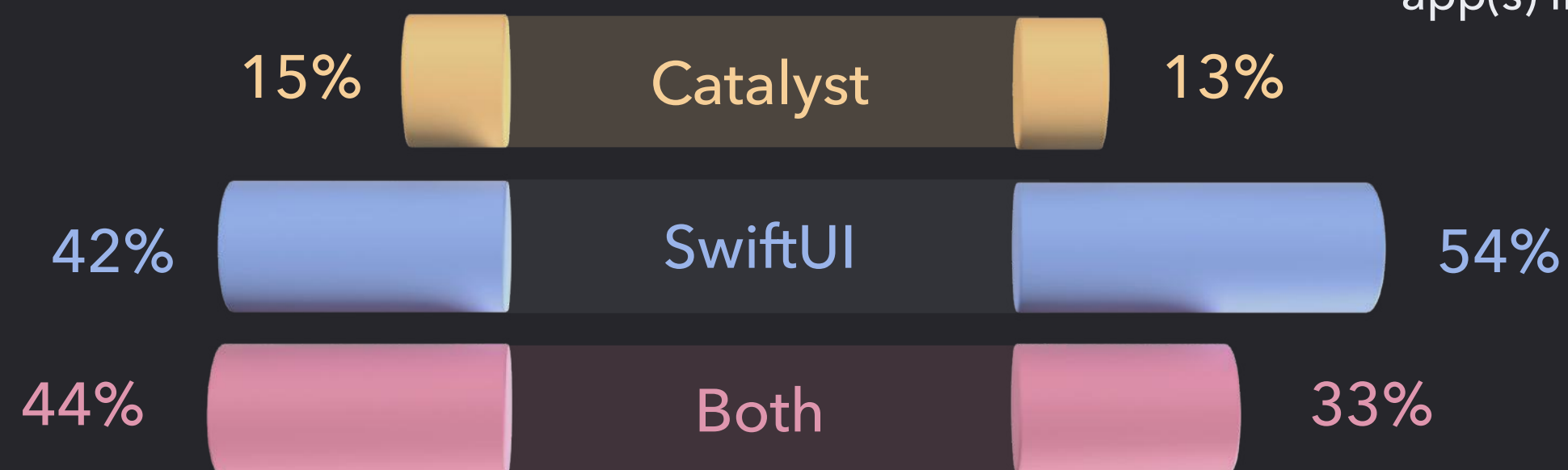
Which operating systems, other than macOS, do you develop for?



Cross-Platform Development

SwiftUI framework is the most commonly used by developers for cross-platform development (exclusively or in combination with Catalyst). Surveyed developers also consider it to be the most promising for future uses.

What **frameworks** do you **use** for the development of your cross-platform app(s) in the Apple ecosystem?



What frameworks do you consider the **most promising** for the future development of cross-platform app(s) in the Apple ecosystem?

Third-Party App Stores for iOS

New opportunities for distribution

60% of the surveyed Mac developers are interested in distributing their apps for iOS outside the App Store, given the opportunity.

Apple is reportedly planning to allow third-party app stores on iOS (for now, such prospects are discussed for the EU region only). How does that change your mind about distributing through the App Store/Setapp/other app stores?

14%

I'll switch to outside of the App Store

14%

I'll stay with the App Store only

46%

I'll use both

26%

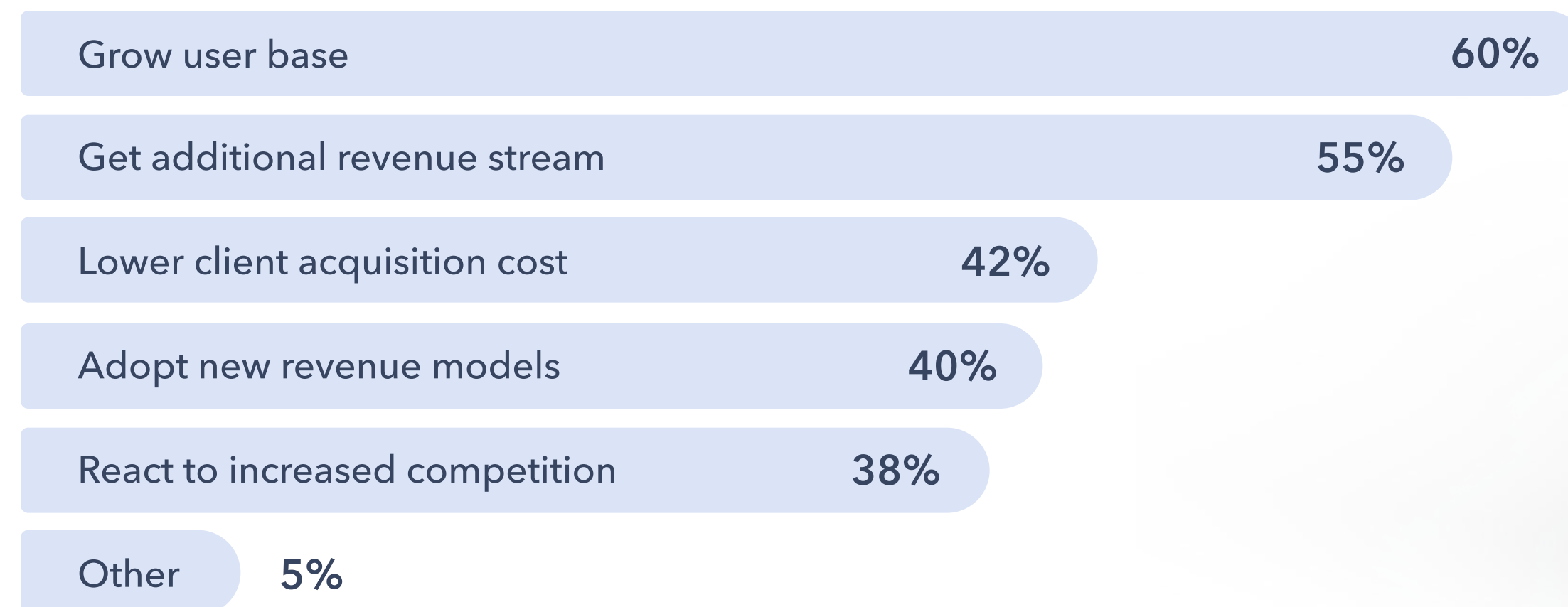
I haven't decided yet



Third-Party App Stores for iOS

Benefits

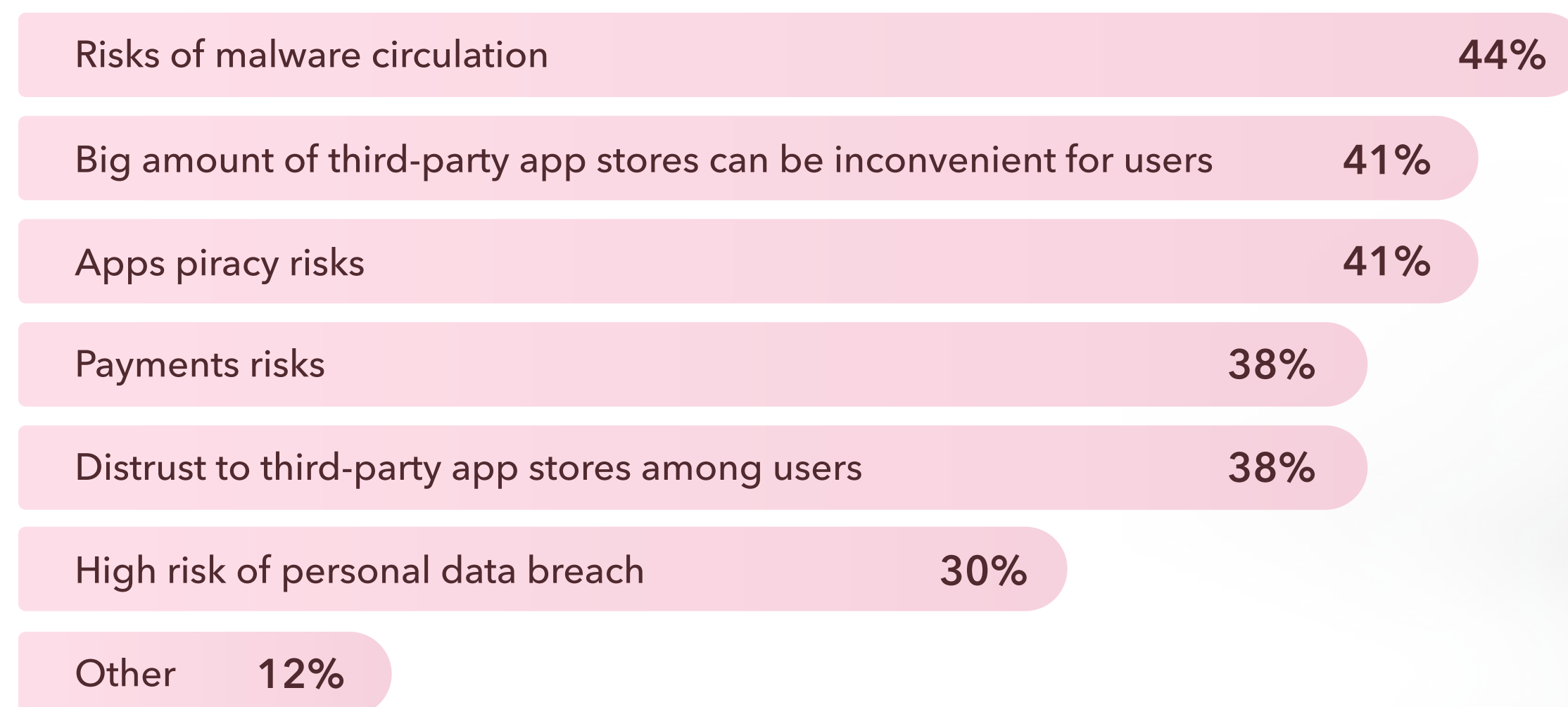
What will be the main reasons for your possible distribution via third-party app stores?



Third-Party App Stores for iOS

Concerns

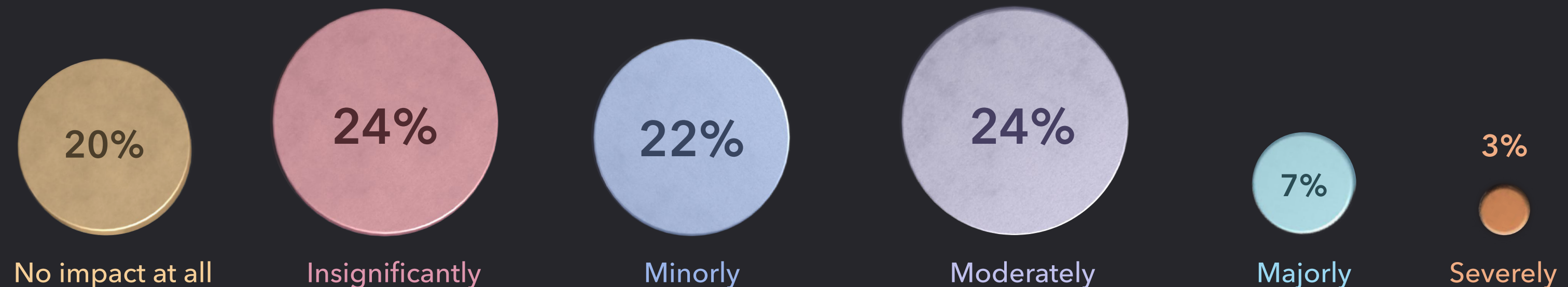
What are the main risks that distract you from possible distribution via third-party app stores?



Impact of the russian War Against Ukraine

80% of respondents felt some impact of the russian war against Ukraine, with 10% being impacted majorly or severely.

How did the full-scale russian invasion of Ukraine impact your business?



Impact of the russian War Against Ukraine

● No impact at all

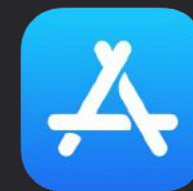
● Insignificantly

● Minorly

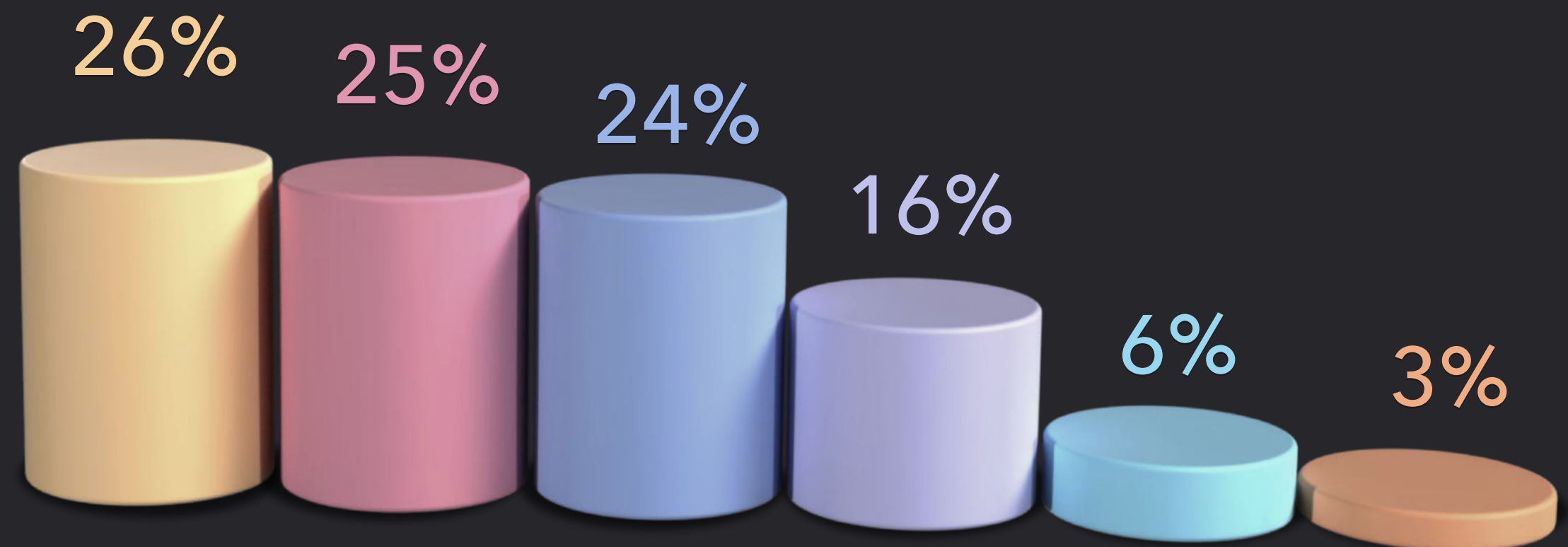
● Moderately

● Majorly

● Severely



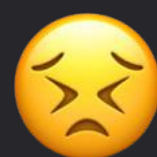
How did the ban of the App Store in russia influence your business/revenue?



Impact of Global Trends

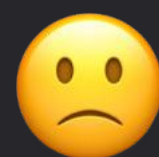
In 2022, more than 150,000 people lost their jobs at some of the biggest players in tech due to layoffs, and the wave continues in 2023, according to Layoffs.fyi. Among the surveyed Mac developers, $\frac{1}{3}$ felt the negative impact of these events.

How did the latest tech layoffs impact your business?



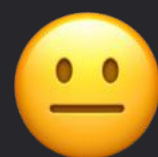
13%

Definitely negative



21%

Negative



57%

Neither negative nor positive



7%

Positive



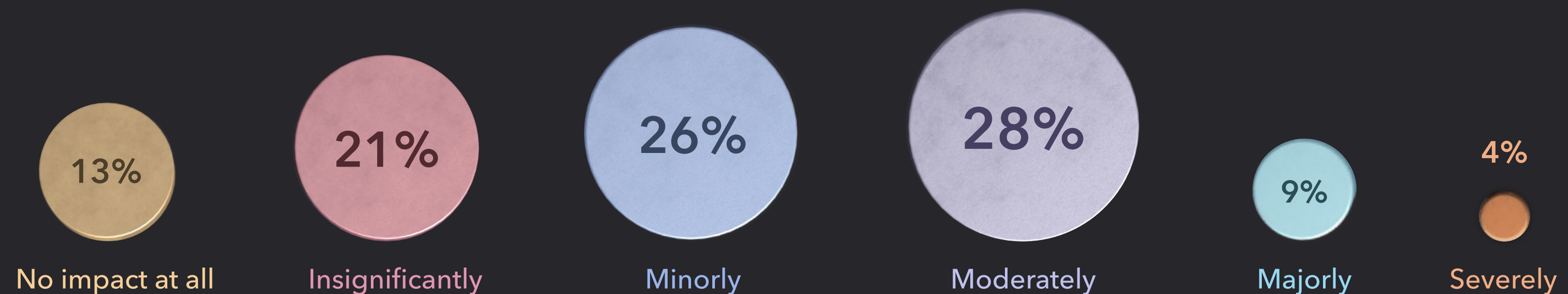
2%

Definitely positive

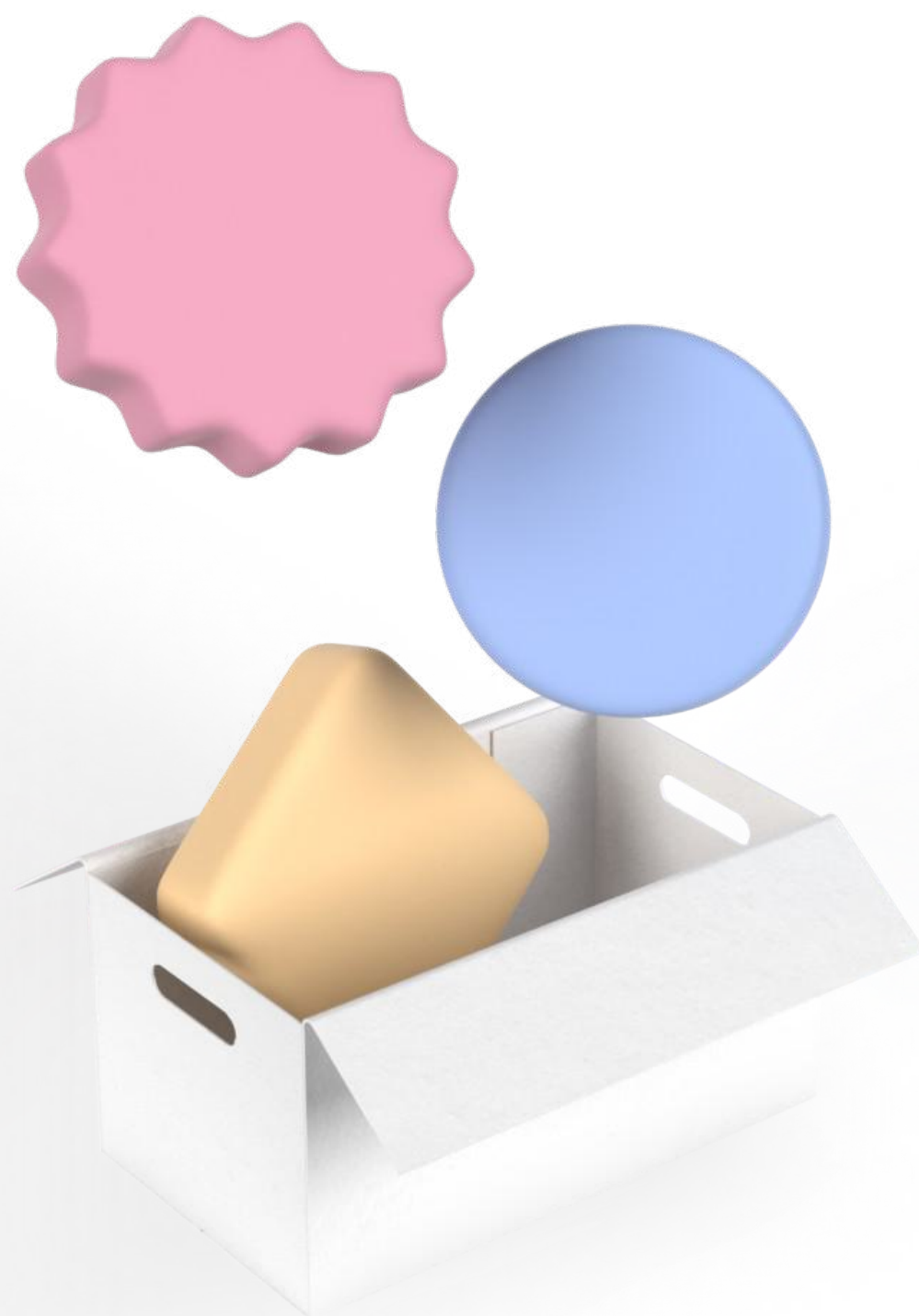
Impact of Global Trends

The economic downturn was noted by the surveyed Mac developers. Only 13% said that it didn't influence their business. Still, majority (75%) evaluate this impact as insignificant to moderate.

How did the economic crisis influence your business/revenue?



Looking Forward



In 2023, as in 2022, the most common plans for developers are to maintain their app(s), launch a new app(s) and release major updates. Still, there is a trend for these milestones to decline.

This year, more developers plan to focus on integrating new third-party technologies, sunseting apps and hiring new staff.

Looking Forward

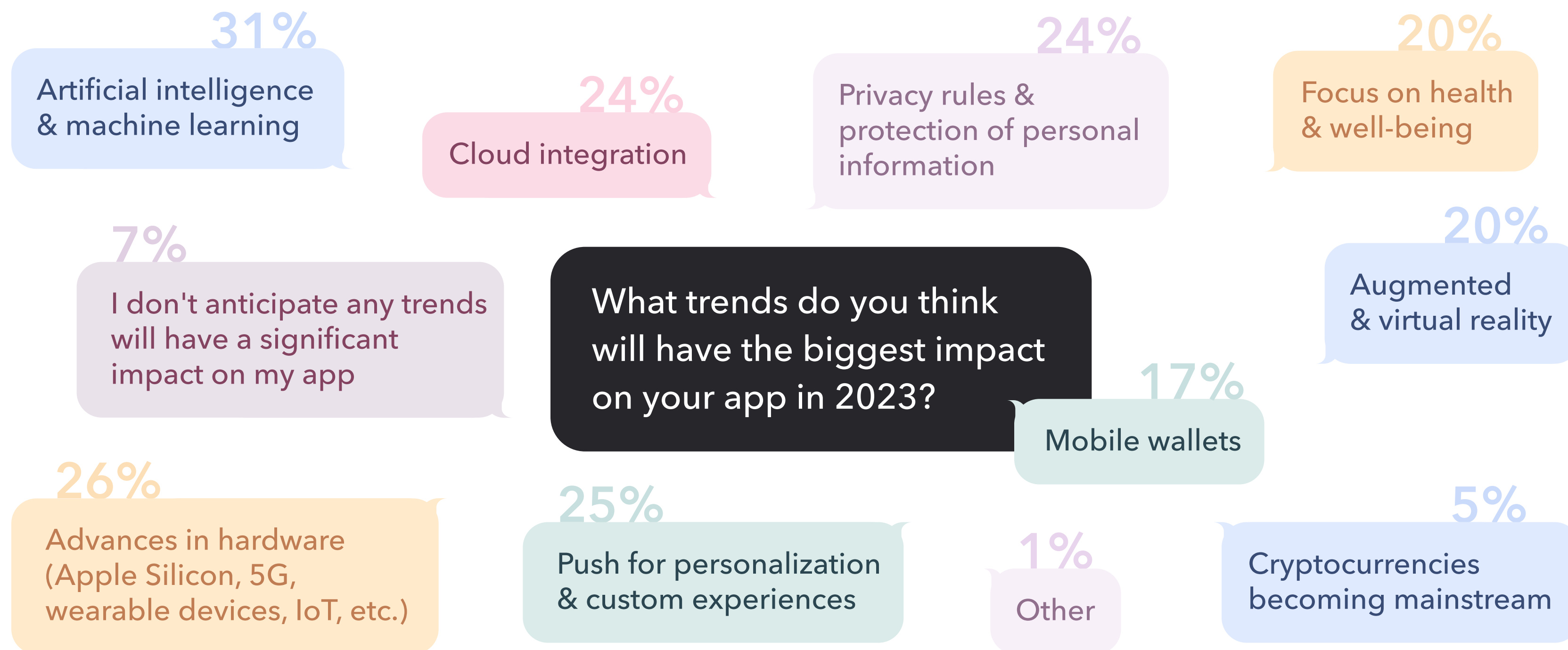
This year, are you planning to complete any of the following major milestones?

	2023	2022
Maintain my app(s) via incremental improvements & bug fixes	42%	61%*
Launch a new app(s)	37%	45%*
Release a major update to my existing app(s)	34%	51%*
Launch new major new marketing or branding campaign(s)	29%	28%
Integrate new third-party technology (hardware or software) compatibility into my app(s)	29%	21%*
Sunset my app(s)	19%	12%*
Hire new staff	18%	11%*
Complete certification on ISO/IEC 27001/SOC 2 etc.	7%	-
I'm not doing any planning for 2023 yet	1%	7%*
Other	1%	2%

*sig. lower/higher vs 2023

Looking into the future

Among some of the impactful trends for 2023, Mac developers expect to see AI & ML and hardware advances.





Thank you for exploring the results of the 7th annual Mac Developer Survey!

Together, we can build a passionate community that
pushes the boundaries of what Macs can do for us.

Let's stay in touch:



[Discord](#)



[Twitter](#)



[Instagram](#)



[setapp.com](#)

We welcome feedback at media@setapp.com.

Hungry for more? Explore 2022 findings in this summary:
<https://setapp.com/news/mac-developer-survey-2022>