

05.

Micro frontends

Do we need microservice revolution
in frontend development?



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” It’s still early days and there are many lessons to learn but I believe that micro frontends will evolve and reach maturity – just as microservices did.

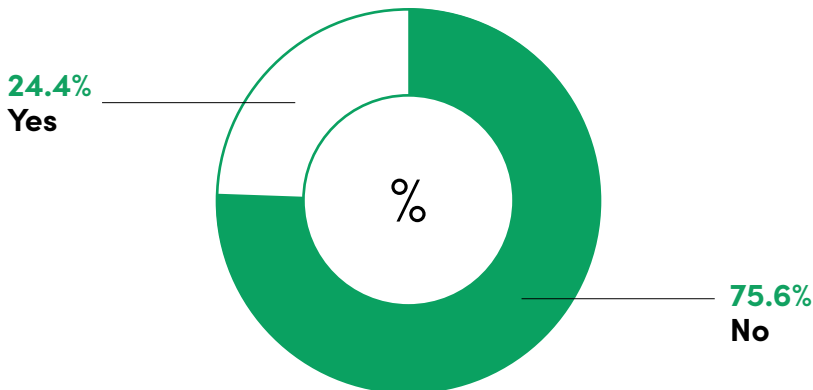
It's incredibly exciting to see how people are embracing micro-frontend architecture nowadays. We already know, that there are many companies around the world using micro frontends – just to mention American Express, DAZN, IKEA, Spotify and Starbucks. Now, with the results of the State of Frontend survey, we also know that practically $\frac{1}{4}$ of frontend devs have already developed micro frontends.

I think that web components are a great, entry-level solution for developers who are just beginning their adventure with micro frontends – and the results of the survey seem to confirm that. On the other hand, there are quite a few new frameworks available for server-side rendering (e.g., Holocron, Podium and Ara Framework), as well as for client-side composition (e.g., Module Federation or Single SPA). However, you should remember that while these frameworks are a great addition to the micro-frontend community, they should be picked carefully – always looking at the context in which you operate.

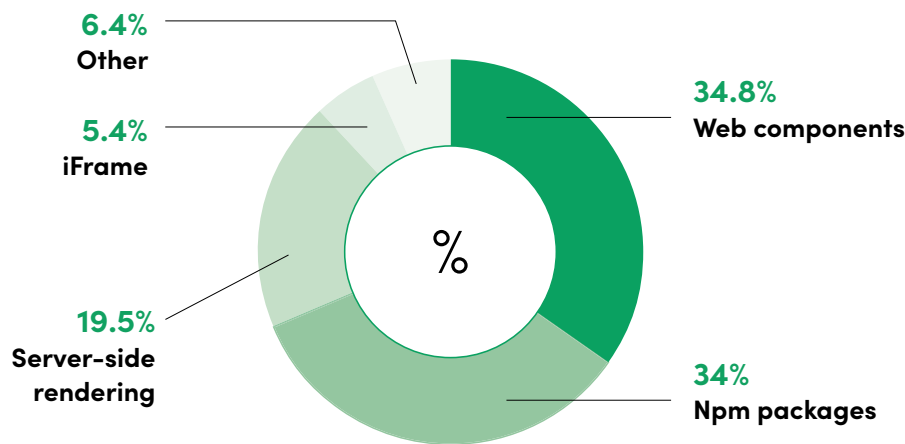
It makes me happy that only 20% of respondents agree with the statement that micro frontends will disappear in 3 years time (see: Chapter 11. Future of frontend). I also believe that the future looks promising for micro frontends – they will for sure evolve and possibly reach maturity, just as microservices did in the past few years. In fact, there are already interesting movements in the TC39 world with the Realms proposal, already in stage 2, that could open up new scenarios for micro frontends.

Micro frontends are not a silver bullet but definitely a nice addition to other architectures such as server-side rendering, Jamstack and single-page applications. It's still early days, therefore, there is definitely more work to do, tons of practices to discover and many lessons to learn. However, I feel very confident that this architecture, when used in the right context, can provide a benefit for scaling projects and teams.

Have you used micro frontends?



How do you compose your micro frontends?



06.

Search engine optimization

It seems that you don't care about SEO. Here's why you should



Tomek Rudzki

Head of R&D at [Onely](#)



Once you understand Google's perspective, it doesn't take much to build websites that are both user-centric and bot-friendly

Traffic coming from search engines is crucial for any online business. According to the Wolfgang Digital's "KPI Report 2020", organic search is responsible for 43% of traffic. That's more than direct traffic and paid search traffic combined! Still, according to the results of the State of Frontend 2020 survey, as much as 52% of developers don't care about SEO.

I'm not here to cast blame. I guess that some of you develop password-protected, internal applications which don't have to (or even cannot) be visible in search results. However, in other cases, if you want a website that's successful on Google, you must take care of SEO. It's difficult, as SEO specialists don't always speak the developers' language. Allow me to lend a helping hand.

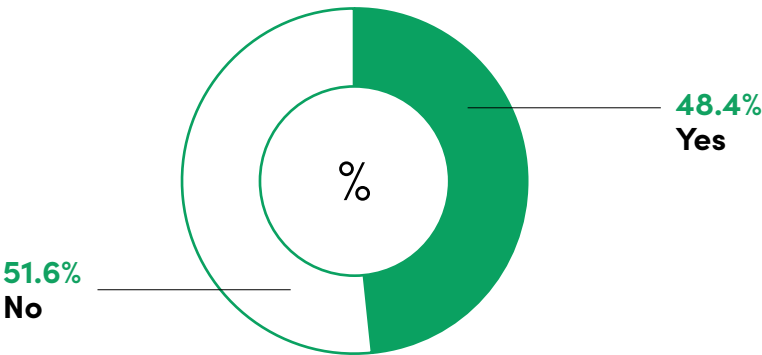
Firstly, you should always make sure that Google can properly render JavaScript on your website. For example, it's possible that you're accidentally blocking some scripts in robots.txt or using JavaScript features that are not supported by Googlebot. I recommend that you use the

Mobile-Friendly Test or the URL Inspection Tool – they are free, easy-to-use tools provided by Google. Using them, inspect the DOM to ensure all important sections of your page can be properly rendered by Google.

Also, according to the survey, over 11% of developers use dynamic rendering (which is essentially detecting search engine bots and serving them a static version of your page). Google calls it "a workaround for crawlers". It's risky, as dynamic rendering sometimes fails – I've seen websites presenting Googlebot with blank pages, causing their organic traffic to drop to zero. Thus, always make sure you thoroughly test if dynamic rendering works as expected.

SEO is crucial for many businesses, and rendering is just one of many aspects of SEO. You have to put as much focus on using proper HTML tags and designing a logical website structure as you do on choosing between server-side rendering, client-side rendering and dynamic rendering. Once you understand Google's perspective, it doesn't take much to build websites that are both user-centric and bot-friendly.

Do you take care of Search Engine Optimization?



How do you approach the subject of SEO?

