RapidAPI Developer Survey and Insights 2019 - 2020

Survey Background and Methods

Thank you to everyone who participated in the 2019 RapidAPI Developer Survey! In total we had **over 2000 participants**, representing over 600 unique job titles and 104 different countries.

This survey was open to developers of all backgrounds. Over 50% of respondents identified themselves as Professional Developers, 24% as Students, and 23% as Hobbyists. Nearly 14% indicated they were Engineering Managers (multiple selections allowed).

We also had a wide variety of coding experience reported by our respondents. About half reported coding for over 5 years, and about half reported coding for less than 5 years.

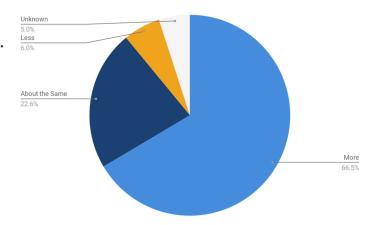
Key Finding - API Usage to Increase in 2020

This survey confirmed what we already expected — APIs continue to be an important tool for software developers. Companies of all sizes and from a wide range of industries continue to rely on APIs, and most plan to expand their API usage moving forward.

66.5% of respondents expect to use APIs more in 2020 compared to 2019.

Only 6% said they expect to use APIs less in 2020 compared to 2019.

The rest expect their API usage to remain the same or felt unsure.

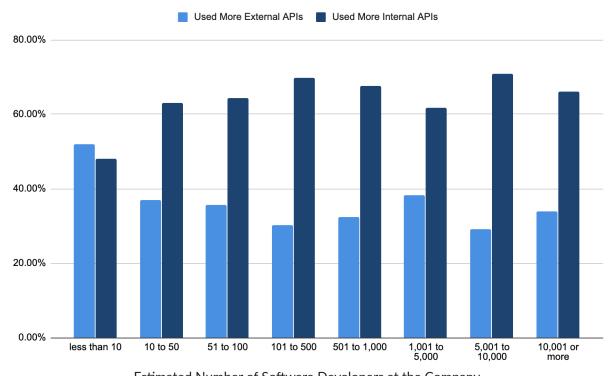


Other Key Findings:

- Companies are using more internal APIs than external APIs.
- Internal API usage increases significantly with company size.
- Coding experience correlates with API usage.
- VMs remain the most common API deployment, with Serverless close behind.
- Of the emerging technology trends we surveyed, developers were most interested in Serverless & FaaS and GraphQL.
- AWS was the most popular API gateway, and Postman was the most popular API design tool.

Companies Use More Internal APIs than External

On average, we found that companies are using slightly more internal APIs than external APIs. In total, **74.3% of companies used more internal APIs than external APIs**. A complete breakdown of what percentage of companies said they expect to use more internal or external APIs sorted by company size can be seen below:

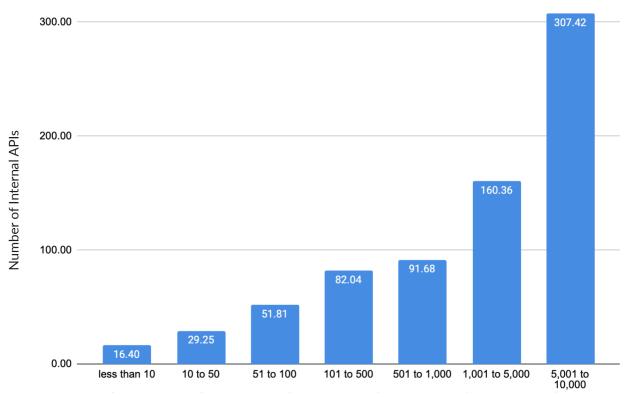


Estimated Number of Software Developers at the Company



Internal API Usage Increases with Company Size

As company size increases, so does the number of internal APIs they use. The increase is rather significant, especially at the higher end of company size. For example, **companies** with 1001 to 5000 software developers use an average of 160 APIs. Companies with 5000 to 10,000 use nearly twice that, averaging 307 internal APIs. The full comparison of company size to average number of APIs can be seen below:



Estimated Number of Software Developers at the Company



Coding Experience Correlates with API Usage

Developers who report more years of coding experience were more likely to predict that they would use APIs more or about the same in 2020 as they did in 2019.

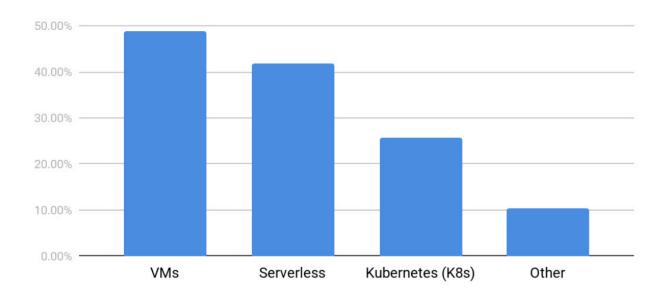
Over 91% of developers with 5 or more years of experience expect to use APIs more or about the same, compared to 82% of developers with 1 year or less.

Coding experience	Predicted to use APIs more or about the same
1 year	82%
2 to 5 years	88%
5 to 10 years	91%
10+ years	91%

The number of APIs developers reported using in an application was also strongly correlated to their years of coding experience. Only 3% of developers with 1 year of experience reported integrating 50 or more APIs, compared to almost 20% of developers with 10 or more years of experience.

Most Developers Use VMs to Deploy APIs

When we asked developers where they deploy their APIs, the most common response was VMs (48.8%). Serverless was a close second (41.9%) followed by Kubernetes (25.6%). Note: Multiple selections allowed.

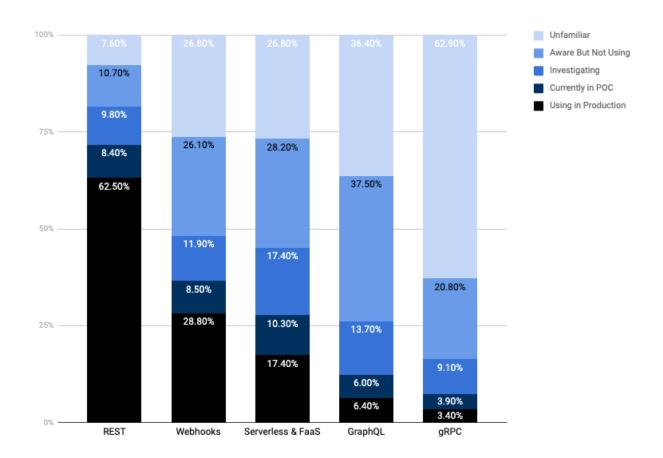




Emerging Technology Trends

Of the tech trends we included in the survey, we found developers were most familiar with REST and most unfamiliar with gRPC. Likewise, REST was the most commonly used in production, while gRPC was the least.

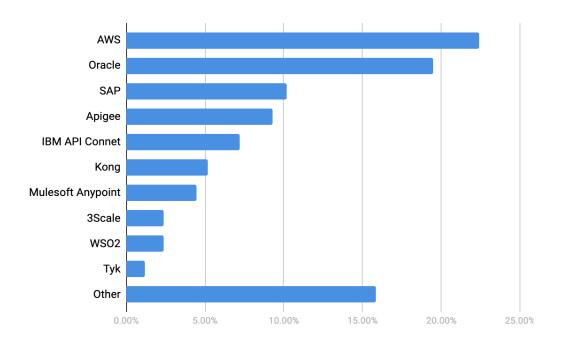
Developers expressed the most interest in Serverless & FaaS (27.7% investigating or POCing) and GraphQL (19.7% investigating or POCing).





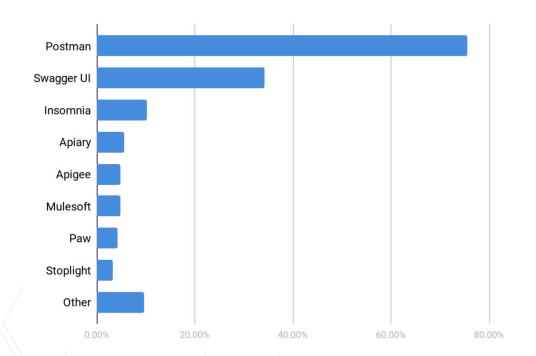
Most Popular API Gateways

This is the distribution of API Gateways our survey respondents reported using:



Most Popular API Design Tools

This is the distribution of API Design tools our survey respondents reported using:



Final Thoughts

Thank you again to everyone who participated in the RapidAPI Developer Survey! By sharing these results, we hope to give some additional insight into the API landscape and emerging trends.

What is RapidAPI?

RapidAPI, the world's largest API Marketplace, is used by over one million developers to find, test, and connect to thousands of APIs — all with a single account, API key, and SDK. Software development teams can also collaborate on APIs using RapidAPI for Teams.

RapidAPI for Teams offers a common workspace to publish internal APIs and share public API subscriptions. In turn, organizations can use RapidAPI to create a centralized hub environment to help developers reuse and connect to existing APIs faster while providing IT with enterprise-wide visibility and governance of API consumption.