The State of APIS

2017 Report: How APIs Power Digital Ecosystems
The State of APIs Report 2017

Whether they are digital natives like Google, Twilio, and Stripe, or enterprises like Walgreens, Ticketmaster, and Pitney Bowes, companies build successful digital platforms by fostering a thriving ecosystem of developers and partners.

The 2017 State of the APIs report identifies factors that contribute to building successful digital platforms and explores how enterprises can build or participate effectively in digital ecosystems.

This report was built based on the hundreds of billions of API calls in the Apigee Cloud from hundreds of customers (in 2014-2016), as well as surveys conducted with customers across a variety of verticals.
Digital platforms: the winners take most

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- Data-rich industries lead the way
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How to build a winning digital platform

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- Lead with business use cases
- Obsess about developers & build strong developer programs
- Treat APIs as products & track success with business KPIs

Ecosystem stories

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- Walgreens
- Arity
- Act like a scrappy digital native
Digital platforms: the winners take most
Rise of platform-driven businesses
Successful platforms experience non-linear growth

Successful business platforms enable third party developers to easily consume APIs and build applications. Leading platforms offer open APIs, strong developer programs, and focus on clear success measures.

* Number of active applications consuming an enterprise's APIs in the Apigee customer base.

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APIs are the building blocks of digital ecosystems

Outside innovation has exploded as APIs enable partners and other third parties to easily build applications on an enterprise’s digital platform.

Apps developed by third parties* are on the rise

* Apps that were registered by external developers of Apigee customers
Thriving ecosystems dominate API traffic

A healthy digital ecosystem is measured not only by the number of applications on the platform, but also the API activity.

In the Apigee customer base, top quartile companies account for 90% of all API traffic.

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Data-rich industries lead the way

Technology, media, and information services industries lead the pack in building digital business platforms with APIs.
Most successful ecosystems benefit from network efforts

Over two million active apps and websites leverage the Google Maps API every week. This large ecosystem contributed to Google Maps’ growth of over 300% during the last two years.

Equally important, some companies that use Google Maps APIs contribute a wealth of new data that improves the overall Google Maps user experience.
How to build a winning digital platform
Focus on digital ecosystem capabilities

Platform initiatives focus on enabling developers and partners, connecting apps, data, and devices, and innovating on new business models.

APIs underpin both external and internal ecosystems.

Focus of platform initiatives
(How respondents describe the focus of their organization's platform initiatives)

- Connect/Enable partners: 38.9%
- Faster app development: 30.6%
- API monetization: 27.8%
- Integrate internal apps: 30.6%

Organizations selected above are in the Top quartile. Quartiles are based on the number of applications and API traffic generated on the enterprise business platform. All data from customers on Apigee Cloud.
Consider APIs as strategic to your business

As requirements for digital business constantly evolve, enterprises use APIs and API platforms to quickly deliver new apps while leveraging existing legacy services.

Percentage of companies who say their organization considers APIs to be strategic

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Lead with business use cases

At successful organizations, business stakeholders define APIs to ensure that the right business use cases are addressed.

Bottom quartile companies mostly focus on technical integration with APIs.

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Obsess about developers

Successful organizations make it easy for developers to discover, consume and use their APIs.

These organizations run developer outreach programs (hackathons, for example), deploy developer portals for easy API discovery and secure self-service access, and publish interactive documentation.

Developer adoption measured by # of developers registering apps on a given organization's platform

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Build strong developer programs

Successful organizations have open developer programs that provide self-service developer registration, interactive documentation, and developer communities to foster sharing.
Treat APIs as products

Successful organizations have four times more API products than organizations in the next quartile.

Treating APIs as products enables companies to package APIs with quota limits and pricing models. Organizations can iterate on a variety of business models to optimize on the right offerings.

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Track platform success with business KPIs

Successful platforms clearly define and measure a combination of business metrics like direct or indirect revenue and API consumption metrics like API traffic, the number of apps, and the number of active developers.

Percentage of companies who believe their organization measures the business success of their APIs

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Ecosystem stories
Walgreens: a thriving partner ecosystem

- Created and launched a variety of APIs that enable developers to integrate Walgreens retail and pharmacy business capabilities into their apps
- 100+ partners build apps
- 40 million consumers access refills via third-party apps
Arity: A New Business Model

Allstate spun out Arity, a new API-driven company focused on delivering insights gleaned from millions of drivers and over 10 billion miles driven.

Arity partners with mapping and weather providers to build insights into risky driver profiles and safe routes, and provide these data to other insurance, financial services, and transportation customers.
To win, act like a scrappy digital native

1. Engage business stakeholders to identify high value digital services
2. Invest heavily in developer outreach and engagement
3. Treat APIs as products and build product management capabilities
4. Measure success with business KPIs and track them diligently
Findings are based upon the hundreds of billions of API calls made through the Apigee cloud from 2014 through 2016 from customers spanning a variety of industry sectors. In presenting the findings, we organized customers into quartiles based on business platform adoption, which is determined by API traffic and the number of consuming applications for an enterprise using the Apigee platform.

Contact us at info@apigee.com or tweet @Apigee with questions about this report or its findings.
About Apigee

Apigee, which is now part of Google, provides a leading API platform for enterprises and developers to design, secure, scale, and analyze APIs and manage the entire API lifecycle. Hundreds of companies, including Walgreens, Burberry, First Data, Swisscom, and Live Nation—as well as tens of thousands of developers—use Apigee.

For more information, visit apigee.com.