apidays Platformable

State of the Market Report

# API Economy 2024

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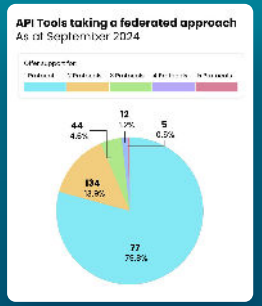


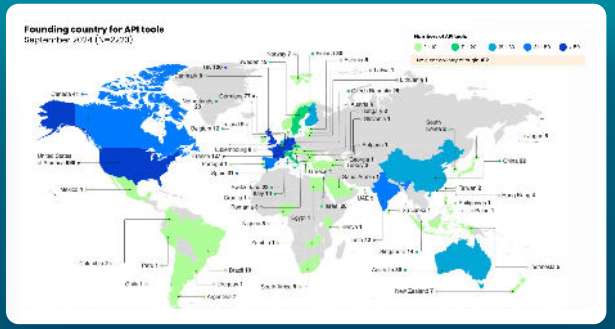


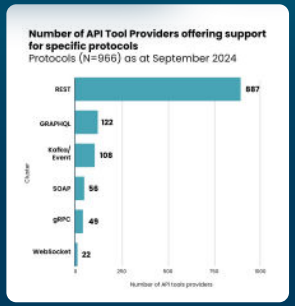


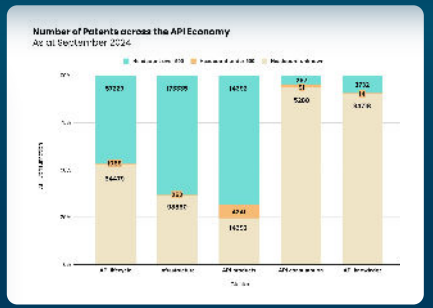

The apidays API Industry State of the Market Report shares data on the growth of the API Economy, maps activities across the API tooling industry, and provides a summary of key trends impacting on API providers and consumers.

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# Foreword 1: Retooling for Growth, Mitigating Complexity

**Markus Müller**
Global Field CTO,
API Management

Nearly every business today is a digital business, and every digital business depends on APIs. In the words of Boomi CEO Steve Lucas:

***"APIs are the backbone of modern software and application development. They have become a cornerstone of modern architectures that enable businesses to stay agile and compete effectively."***

This year's *API Economy State of the Market Report* by apidays and Platformable shows just how important APIs have become for modern IT architectures. All the numbers are big, and most of them are trending higher. The global API cloud marketplace, for example, is rocketing skyward from $610 million in 2021 to a projected $2.9 billion in 2030, sustaining an impressive 19.5% CAGR. By 2030, the global economic impact of APIs is expected to exceed $17 trillion.

That's the so-called "view from 30,000 feet." But closer to earth, inside organizations themselves, the growth of APIs isn't quite as straightforward as a line going smoothly up and to the right. Instead, API growth is complicated and sometimes outright jeopardized by complexity.

Complexity manifests in a variety of ways: different teams using different tools, increasing costs and undermining standardization; one team not knowing that another team has already built the API functionality they need; the security team wrestling with API sprawl, trying to bring consistent security standards to APIs everywhere, even though some of those APIs are "shadow APIs," undocumented and unmanaged.

Complexity confounds the progress organizations are trying to make with API development, API usage, and API productization. In every industry and region, complexity increases costs, uncertainty, and risk.

# Foreword 2: Retooling for Growth, Mitigating Complexity

The five major trends highlighted in this report all address the wrestling match between growth and complexity. To make the most of APIs, organizations need to tackle and tame complexity, and they're doing so through trends such as standardization, federated API management, platform engineering, AI-powered development, and bundled security.

**Trend #1: Regulations and standards are shifting the conversation to digital ecosystems**

As financial services, healthcare, and other industries come to rely more heavily on APIs, the issue of API standardization becomes ever more important. For example, the open banking movement relies on standard APIs to provide third-party service providers with fast, accurate access to consumer banking data. Without standard APIs enabling various stakeholders to share sensitive information quickly and securely, the open banking ecosystem would be at a standstill. The growing importance of API standards puts pressure on organizations to ensure their own APIs are compliant. Federated API management, which provides a comprehensive, hierarchical way of discovering, governing, and securing APIs across an enterprise, becomes an essential capability for tackling the issue of API standards and best practices.

**Trend #2: Platform engineering is elevating API governance and developer productivity discussions**

To tame complexity within organizations' own development and use of APIs, it's important to standardize tools, libraries, and workflows whenever possible. Platform engineering is the practice and discipline of embracing this standardization. Platform engineering standardizes toolsets and workflows across teams. It also calls for creating and documenting internal API libraries and publishing these APIs in a comprehensive developer portal, so developers can easily discover which APIs have already been built. By bringing consistency and efficiency to API management, platform engineering makes building, using, and governing APIs more productive and predictable.

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**Markus Müller**
Global Field CTO,
API Management

# Foreword 3: Retooling for Growth, Mitigating Complexity

**Trend #3: API consumption increases in importance while API product management undergoes rethink**

Organizations are using APIs more than ever before. They're also using APIs from more sources than ever before: this year's report finds that 71% of organizations are consuming APIs from third parties. The increased volume and variety of API calls makes API management both more important and more complex. API teams need the right tools and processes to address this complexity. They also need ways of working more closely with business units and other stakeholders who are driving API growth. Developer relations roles have taken a hit in recent layoffs. This year's report notes a shift in these roles along with strong recognition of their importance. Savvy companies will invest in the people (including developer relations staff), tools, and processes to make their API initiatives successful.

**Trend #4: AI over-hype begins to settle as balance sought between AI usage and ROI**

2023 was the year in which AI seemed to promise us the moon. Key to that moonshot: using APIs to move data into and out of LLMs, AI agents, and other AI applications. APIs remain central to any AI solution, but in 2024, we've seen expectations come down to earth and use cases become more practical. One of those use cases in API development itself: 13% of API tool vendors have now incorporated AI features into their tools. So, AI has begun playing a role in helping developers build and manage the APIs that power their AI innovations.

**Trend #5: API security tooling enters rebundling phase**

APIs are more central to business than ever, connecting mission-critical applications and data sources. Cybercriminals have taken notice. They're focusing their attention on APIs, targeting them in web attacks. As a result, 95% of organizations report facing challenges managing API security risks.

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**Markus Müller**
Global Field CTO,
API Management

# Foreword 4: Retooling for Growth, Mitigating Complexity

Federated API management can help here, providing IT and security teams with global visibility into APIs and a means of enforcing security policies consistently across the enterprise. API tool vendors play a role, too. Most of them recognize that security can't be an afterthought; instead, it's an essential part of API management. So, in this year's report, you'll find evidence that a growing number of API tool vendors are bundling security tools into their solution, helping API teams to build security into APIs as part of their routine API development and management.

In summary, this report reminds us that APIs are a foundational technology for digital transformation and growth. By tackling complexity through platform engineering, federated API management, and other evolving trends, organizations can realize the potential of this exciting technology.

At Boomi, we're committed to helping organizations around the world realize their boldest ambitions for API development, governance, security, and scalability. That's why we're thrilled to sponsor this report, showcasing the hard work, bold innovations, and market insights of API developers, project managers, vendors, and other API stakeholders midway through this transformative decade.

**Boomi, the intelligent integration and automation leader, helps organizations around the world automate and streamline critical processes to achieve business outcomes faster. Harnessing advanced AI capabilities, the Boomi Enterprise Platform seamlessly connects systems and manages data flows with API management, integration, data management, and AI orchestration in one comprehensive solution. With a customer base exceeding 20,000 companies globally and a rapidly expanding network of 800+ partners, Boomi is revolutionizing the way enterprises of all sizes achieve business agility and operational excellence. Discover more at boomi.com.**

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**Markus Müller**
Global Field CTO,
API Management

# Executive Summary

| | | |
|---|---|---|
| 1 | **The API economy continues to expand, with increasing proportion of internet traffic from APIs, more regulations requiring API creation, and market estimates and funding of API tools growing** | **Find out more:** Review pages 8-10 and 12-13 |
| 2 | **APIs need to comply with regulations and standards, and come in a range of protocols and designs, all of which require API federated management and an ecosystem approach** | **Find out more:** Review pages 24-25 for our trend on federated API management |
| 3 | **To manage this growth of APIs, digital businesses are turning to platform engineering and improving management of API consumption** | **Find out more:** Review pages 26-29 for our trends on platform engineering and API consumption management |
| 4 | **Like other industries, AI has influenced product design and features for API providers, consumers and tool providers, with a new balance emerging where AI supports the work of developers** | **Find out more:** Review pages 30-31 to see how AI is being used in the API economy |
| 5 | **The API sector goes through unbundling and rebundling phases: we expect to see API security products face a rebundling phase in the year ahead as tool providers seek to incorporate more mature security solutions into their offerings** | **Find out more:** Review pages 32-33 for an analysis of expected changes to how API security tools will be offered in 2025 |

# API Economy

## Key facts and figures

# All indicators point to continued growth of the API Economy

We include API Economy market growth indicators including:

- The percentage of internet traffic that is driven by API calls
- Growth in specific API usage for core industries like banking
- Ability for APIs to generate revenue for digital businesses, or
- Demand for skilled workers
- Requirements in national regulations that APIs be the technological format used for data exchange and service creation.

These all point to one clear fact: the API economy is stronger than ever and continuing to impact on how business and society transacts, interacts, shares and collaborates.

The United States is still a global centre for API tool providers, there are other key hubs including UK, Germany, India, Canada, France, Australia, Switzerland, China and  Singapore, amongst others.

# Market growth

## APIs make up most internet traffic

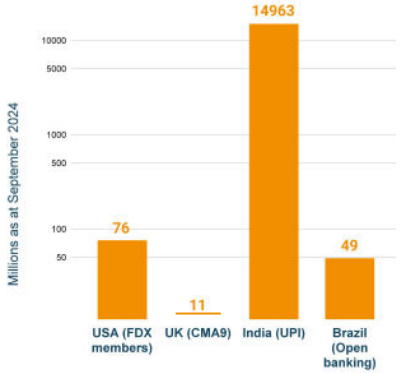
Successful API calls accounted for 57% of dynamic internet traffic processed by Cloudflare in the past year[1]

Imperva calculates that 71% of all internet traffic are API calls[2]

https://blog.cloudflare.com/2024-api-security-report/

https://www.imperva.com/blog/state-of-api-security-in-2024/

## API calls in core global infrastructure like open banking grow each month




https://www.financialdataexchange.org/FDX/News/Press-Releases/Financial%20Data%20Exchange%20(FDX)%20Reports%20Over%20Million%20Consumers%20Use%20FDX%20API.aspx

https://dashboard.openfinancebrasil.org.br/transactional-data/active-consents/receivers

https://openbanking.foleon.com/live-publications/the-open-banking-impact-report-2024-march/notes-methodology

https://www.npci.org.in/statistics/monthly-metrics

## APIs generate revenue

43% of respondents in a 2023 Postman survey said their business generates more than a quarter of its revenue via APIs[3]

Indonesian bank BRI has generated an additional $50 million in revenue from APIs over 5 years [4]

https://www.postman.com/state-of-api/

https://cloud.google.com/customers/bank-bri

## API skills needed for in-demand jobs

Two of the top 15 in-demand tech jobs in 2024 require API experience[5]

API product management, developer evangelist and technical writer positions account for 23.9% of all API roles advertised by June 2024[6]

https://www.cio.com/article/230935/hiring-the-most-in-demand-tech-jobs-for-2021.html

https://netapinotes.com/mid-year-check-in-what-api-employers-and-job-seekers-need-to-know/

# Value of the market

## $8.27 biliion by 2032

### Global API cloud market

Cloud API Market Size was valued at USD 1.2 billion in 2023. The Cloud API market industry is projected to grow from USD 1.5 Billion in 2024 to USD 8.2 billion by 2032, exhibiting a compound annual growth rate (CAGR) of 23.50% during the forecast period (2023 - 2032).

The API Management Software Market is expected to grow to USD8,936.52 Million by 2030 (a CAGR of 24.46%). Others estimate a CAGR of 34.5% between 2024 to 2032.

https://www.marketresearchfuture.com/reports/cloud-api-market-2572
https://tech.einnews.com/amp/pr_news/743236377/api-management-software-market-current-status-and-growth-prospects-ibm-mulesoft-dell
https://www.openpr.com/news/3471447/empowering-growth-in-the-api-management-market-exploration

## $US17.3 trillion by 20230

### Economic impact of APIs

A study by Kong Inc found that “the economic impact of APIs in the U.S. is expected to reach $3.4 trillion by 2030 with the global impact reaching $17.3 trillion.”

https://www.prnewswire.com/news-releases/kongs-2024-api-impact-report-finds-83-of-developers-say-ai-investments-have-created-opportunities-for-new-products-302232461.html

## 26% higher customer lifetime value

### API CLV improvements

"When compared to typical customer acquisition sources, APIs have a higher average customer lifetime value (CLV) and can be thought of as customer acquisition channels because they can draw in more developers. APIs can produce about 26% more customer lifetime value (CLV) than the typical customer acquisition sources by enabling apps to refer more customers."

https://www.whatech.com/og/software/blog/753237-how-can-api-integration-benefit-small-businesses.html

## $49.45 billion by 2030

### API marketplace software

"The global API marketplace market size was estimated at USD 13.74 billion in 2022 and is expected to grow at a CAGR of 17.8% from 2023 to 2030, with estimated revenue forecast in 2030 of $49.45 billion.

https://www.grandviewresearch.com/industry-analysis/api-marketplace-market-report

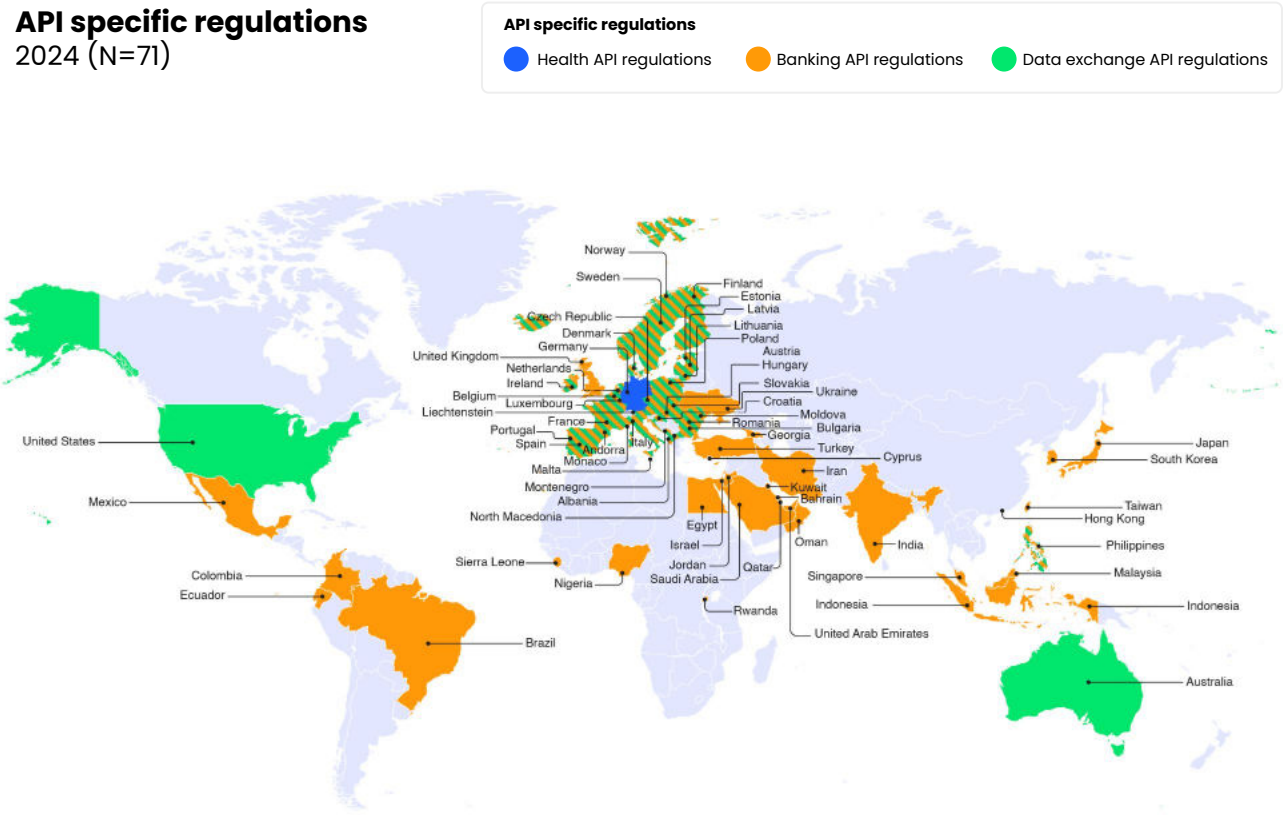
# API regulatory context

## Government laws that require APIs

There are a growing number of regulations and legislations that require ecosystem stakeholders to create APIs. Increasingly, APIs are being specifically mentioned as the technology to be used to ensure data is interoperable, accessible and able to be exchanged with other systems.

For example, across **Europe**, the *EU Digital Markets Act* requires large platforms to offer APIs so that users have data portability. In the **United States**, software vendors that seek funding to offer their services to Medicaid and Medicare healthcare organizations are required to make use of APIs for electronic health records before they are eligible. In **Brazil**, banks must make use of APIs to enable fintech to co-create and collaborate on new services. In **Australia**, consumer data rights require banking, energy, telecommunications, and other services to allow citizens to access their data via API.

## API specific regulations
2024 (N=71)




**Methodology:** Platformable reviews all country regulation timelines and identifies upcoming dates of key milestones when announced.

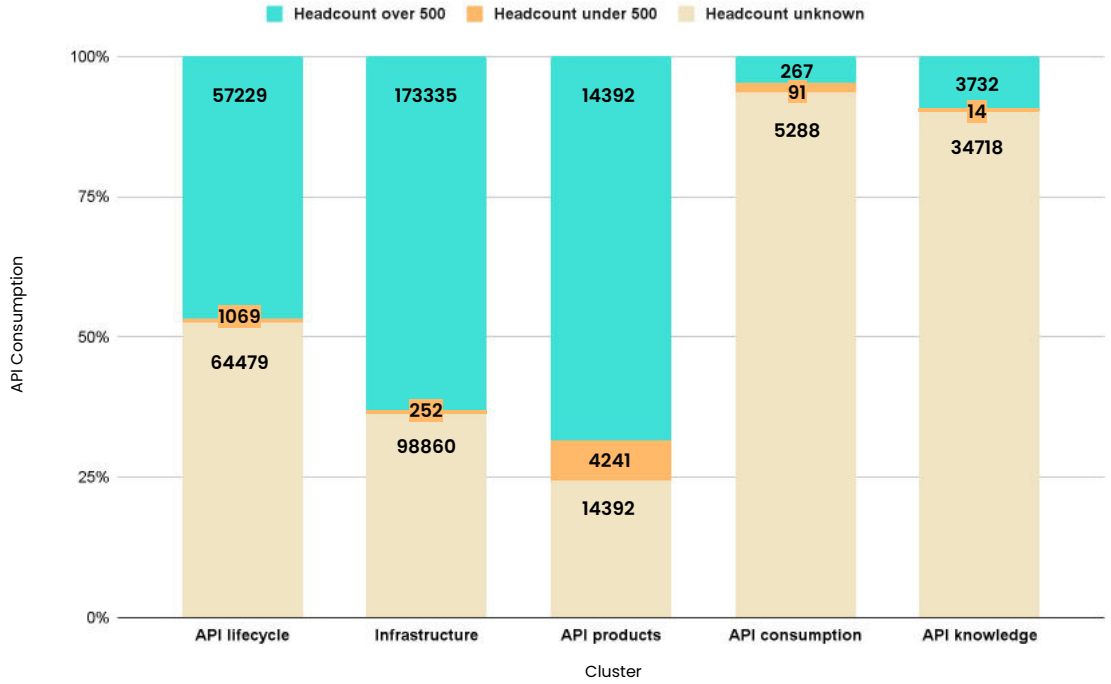
# API tool providers collectively own almost half a million patents

We track 499,418 patents owned by API Tools providers.

While data on the size of the company by headcount is unavailable for almost half of these businesses, it is still evident that among those where headcount data is available, larger tech companies like IBM, Oracle, Microsoft, Fujitsu, and Salesforce own the bulk of patents.

There are a number of smaller/medium-sized API players in each sub-sector cluster that have also registered their innovations.

**Number of Patents across the API Economy**
As at September 2024



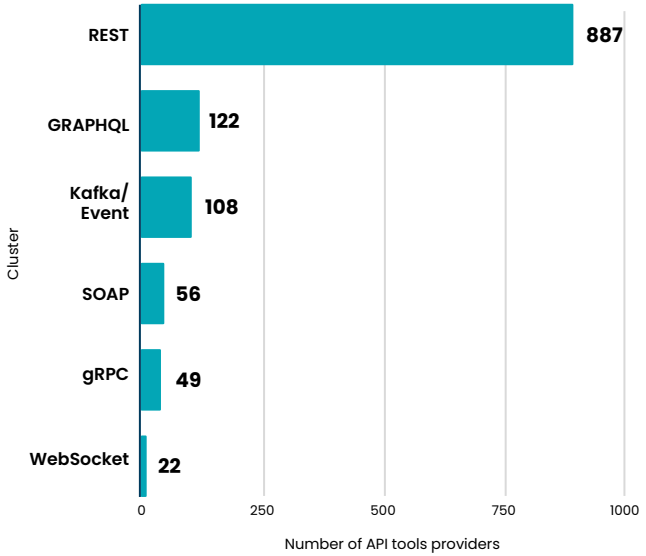

**Source:** Platformable data collected via sqoop email alerts

# The majority of API Tools still focus on one protocol

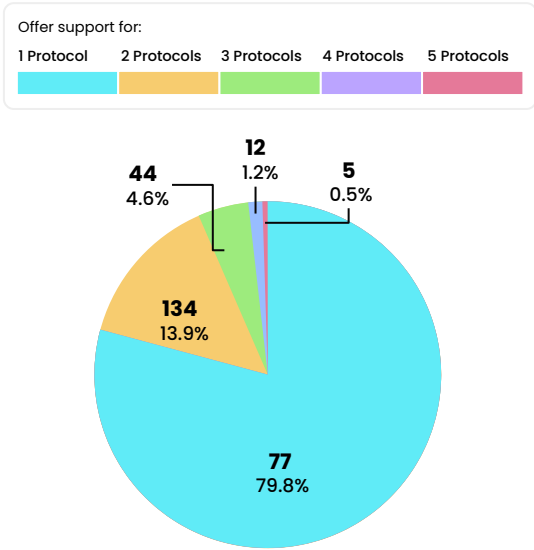
While many tools in the API Landscape are not protocol-specific, amongst the 966 for which data is available, the majority focus on supporting REST APIs.

Many API tool providers are yet to take a federated approach and offer support for more than one type of protocol. 1 in 5 tool providers (20.2%) are able to work with more than 1 protocol, but only a small number of those work with more than 2 protocols (1.7%, or 17 tools).

**Number of API Tool Providers offering support for specific protocols**
Protocols (N=966) as at September 2024



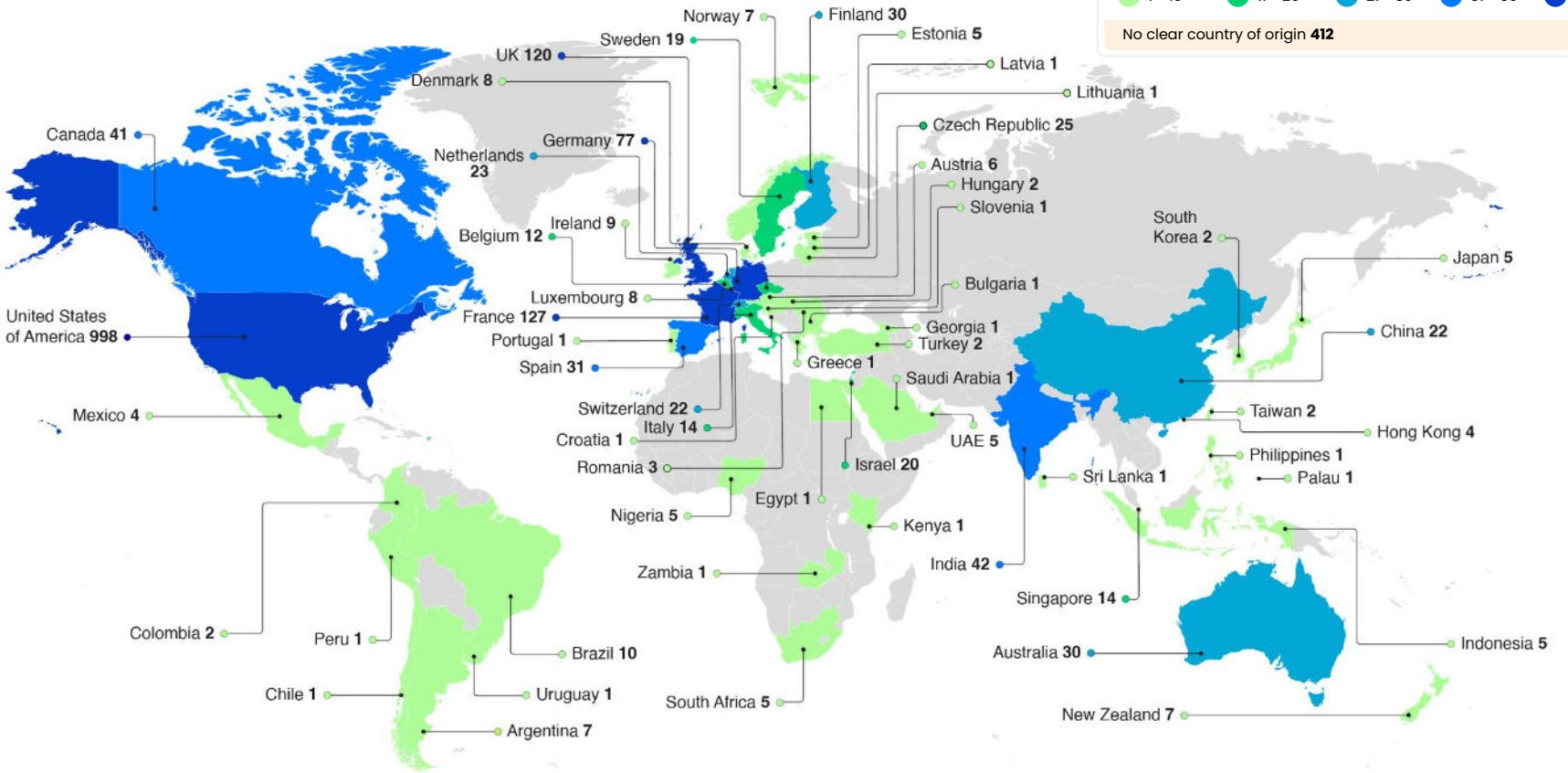

**API Tools taking a federated approach**
As at September 2024




**Source:** Platformable Data

## Founding country for API tools

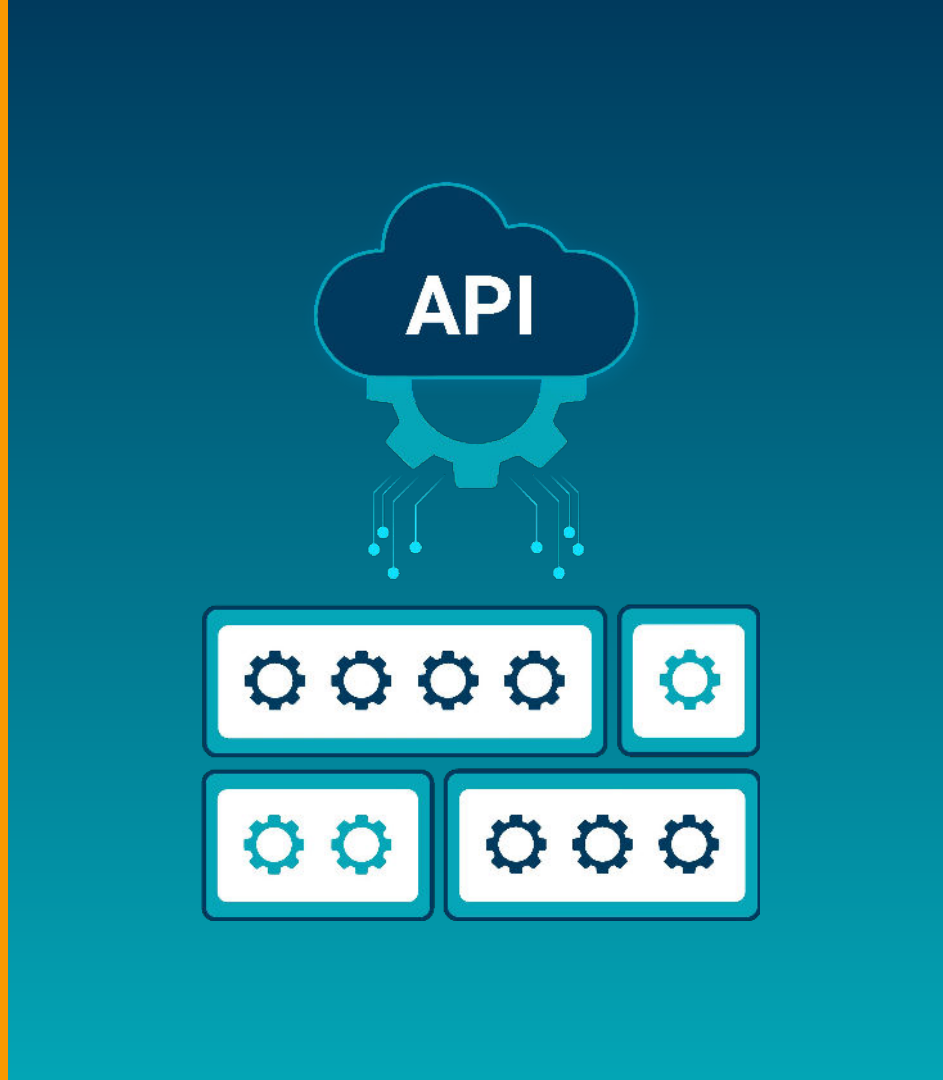
September 2024 (N=2223)




**Methodology:** Platformable collects data on the country of origin for all API tool providers, using the business headquarters location where country of origin is unclear. A total of 412 API tool providers did not have a specific country listed, these mostly cover open source projects that have no clear headquarters or base of business operations.

# API Landscape

## API Tools providers



# API Tool providers continue to expand

New API tool providers across all categories continue to enter the market. We also see acquisitions each year, and whole new types of API tool providers emerge. In 2024, we expanded our API industry taxonomy to include API consumption management as a new sub-category under API gateways/management (as part of the API Lifecycle). We are also looking at expanding platform engineering as a separate category and diving external and internal facing developer portals for a future iteration of the taxonomy as we have seen products mature in this space.

Continued work will be required to breakdown the expanding AI categories to provide some sub-categories as these sectors grow and product diversification becomes clearer.

This year has also seen some fluctuations in the landscape: taking advantage of AI opportunities, some API tool providers have pivoted their core offerings, others have been acquired and subsumed by larger players, there are more industry integration examples of tools embedding in other tools as part of an ecosystem approach, and a key open source project aimed at improving API discoverability has re-emerged with the resurgence of the open source project apis.io.

# API Industry Taxonomy

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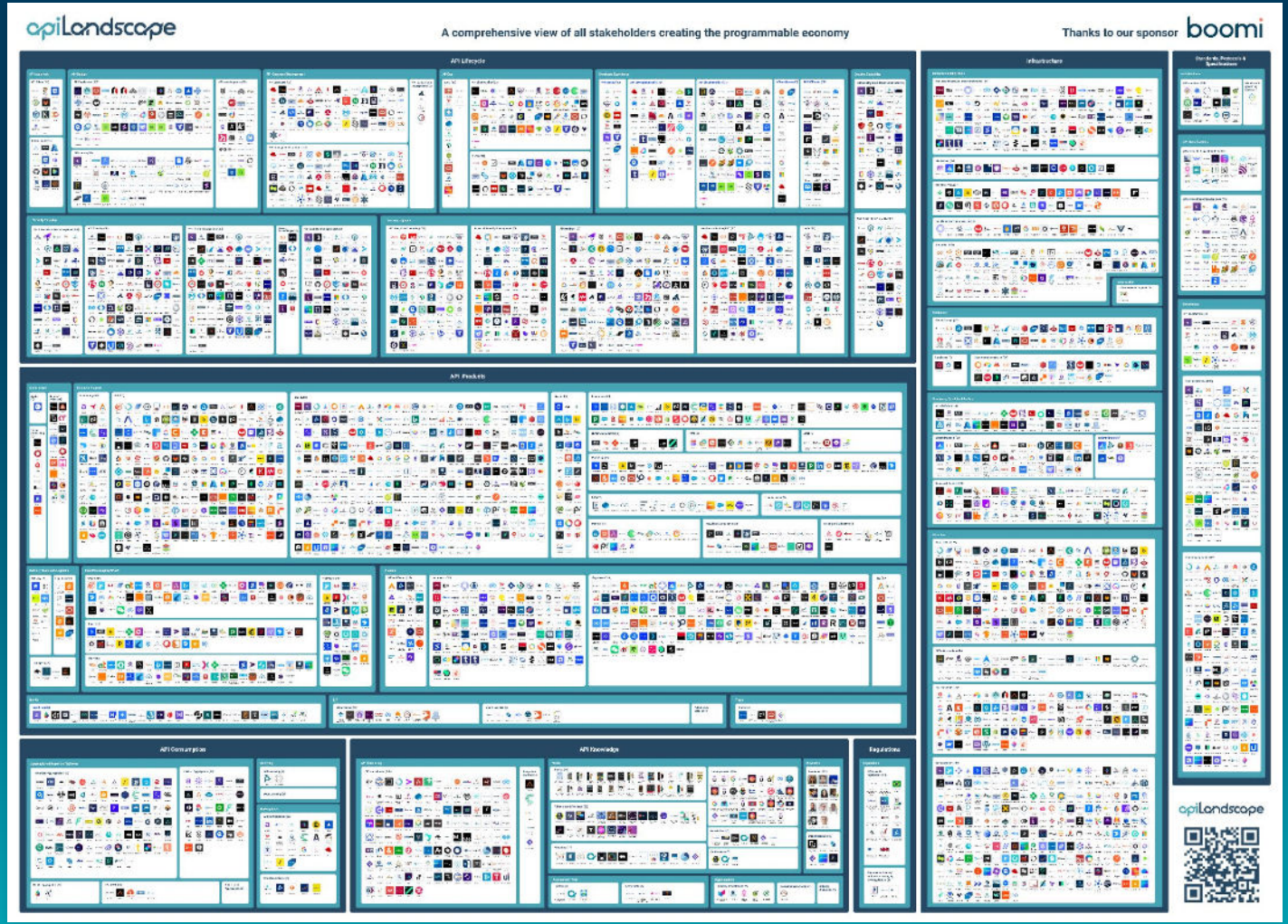
**Methodology:** Following an industry-wide consultation, the API industry taxonomy was created to align with other models of describing the API industry, including Postman's API landscape, Gartner's API Lifecycle Management, and the API lifecycle model described by Medjaoui, Wilde, Mitra & Amundsen in *Continuous API Management*.

**API Industry Landscape**
(N=2227)
As at September 2024



# API Lifecycle: Categories and Subcategories

## API Lifecycle

**Components that enable the design, development, testing, deployment and use of APIs**

| API Code Tools | API Design | API Gateways/ Management | APIOps | Developer Experience | Security Adjacent | Security Embedded | Security Pureplay |
|---|---|---|---|---|---|---|---|
| API client (11) | API design tools (63) | API gateways (62) | APM (12) | API catalogs (16) | API Analytics/ Monitoring (75) | Vulnerability identification/ scanners (46) | API Discovery & Risk management (50) |
| Source code (12) | API linters (58) | API consumption management (3) | API observability (53) | API developer portals (54) | Access & Identity management (74) | Web Application Firewalls (43) | API Security (98) |
| | API mocking tools (35) | API management solutions (71) | CI/CD (37) | API documentation (73) | API testing (135) | | API Threat Management (83) |
| | | | | API sandboxes (13) | Identity verification/KYC (87 | | Privacy Technology (14) |
| | | | | API SDK tools (38) | Login (31) | | Vulnerability Management (63) |

**API lifecycle tools** are the foundation for building API-enabled architecture. These tools cover core elements required to implement an API lifecycle process as an API provider. Tool providers like Boomi provide a full range solution from API design, API Ops, API management, developer experience and security. These are often enough for enterprise and business users to manage their API strategy, while other tool providers focus on offering more nuanced, detailed feature set for those API providers who want to differentiate on a specific area of API impact, like developer experience or API design best practices.

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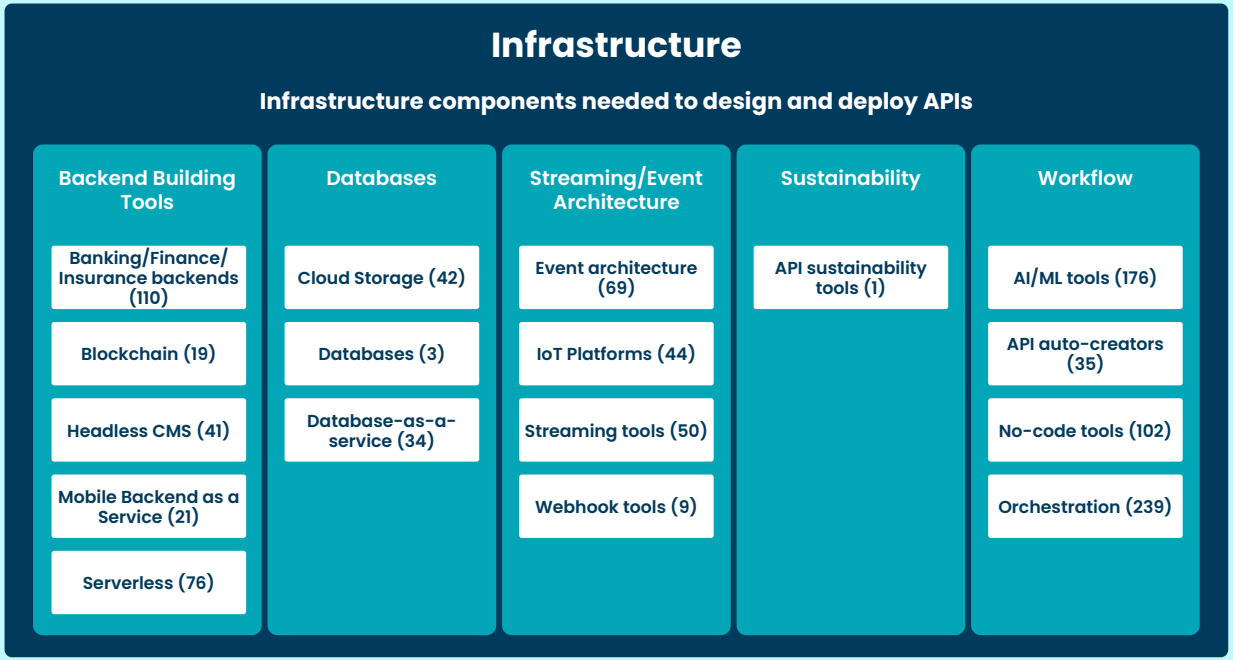
# Infrastructure: Categories and Subcategories

Infrastructure tools cover cloud-based distributed architecture and other components that help enhance the value of an API strategy. It includes API-enabled infrastructure tooling like serverless and backend infrastructures, as well as workflow tools.

Over the past year there has been rapid growth in the number of AI/ML tools available to API practitioners, including tooling that helps improve API design and review processes, facilities deployment and observability monitoring or assists with SDK and documentation generation.

While no-code tools continue to build their customer base, we no longer see no code tooling as a specific industry trend, as we did in 2022. AI/ML, API auto-creators and orchestration tools are replacing some of the core work that we expected to see from no code tools, as users look for more specific use cases than generalist no code platforms which only support either startups or large enterprises.

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# API Products: Categories and Subcategories

## API Products

**API products built to expose a specific functionality or dataset to enable use programmatically in apps, websites, workflows, AI systems, and so on**

### Audio-visual
- Audio (1)
- Camera/Video (18)
- Image processing (7)

### Business Support
- Accounting (34)
- AI (204)
- Data (329)
- ESG (17)
- Human-as-a-service (9)
- Ecommerce (58)
- Forms (11)
- Legal (5)
- Marketing (58)
- Metrics (17)
- Regulatory compliance (24)
- Time/calendar (9)
- Training and Education (8)
- Search (35)

### Delivery/ Transport/ Logistics
- Delivery (9)
- Logistics (10)
- Transport (4)

### Email/ Messaging/ CPaaS
- CPaaS (55)
- Email (36)
- VoIP (46)
- Text/SMS (38)

### Finance
- HR and Payroll (28)
- Insurance (116)
- Payments (155)
- Tax (10)

### Health
- Healthcare (28)

### IoT
- Automotive/ Vehicles (0)
- Smart Home (11)
- Smart Facilities (8)

### Travel
- Travel (5)

**API Products** are listed on our API taxonomy and landscape in order to place all API economy tooling in one place, although this could also be mapped as a separate landscape. These are API products that have been built that provide composable functionality. They are used by organisations that want to focus on their core business and use high quality APIs that provide non-core services for functions like payments, communications, image processing and a range of business support services.

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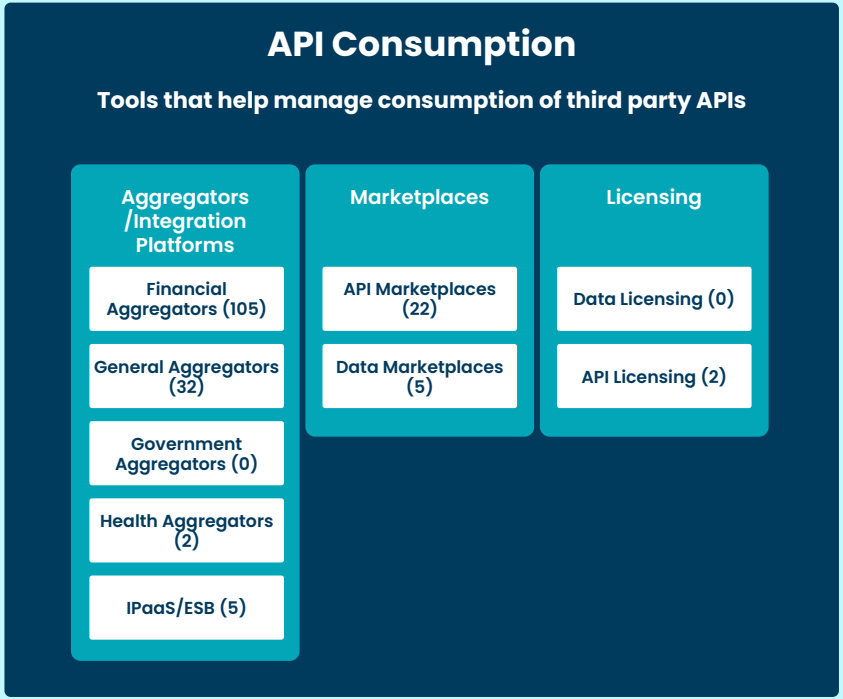
# API Consumption: Categories and Subcategories

**API consumption tools** support organisations and businesses to discover, onboard and consume APIs. While we have added a new category of API consumption management tooling, that is recognised in API Lifecycle tools alongside API management and API gateways as a core tool for managing a full API portfolio whether it is internal or external APIs. This category is focused more on discoverability of potential API products that could be used (through marketplaces), making use of aggregator platforms so that a single API can be consumed to replace a whole range of individual APIs (as we see mostly with open banking APIs), and licensing where decisions on terms of service and usage rights of an API are described.

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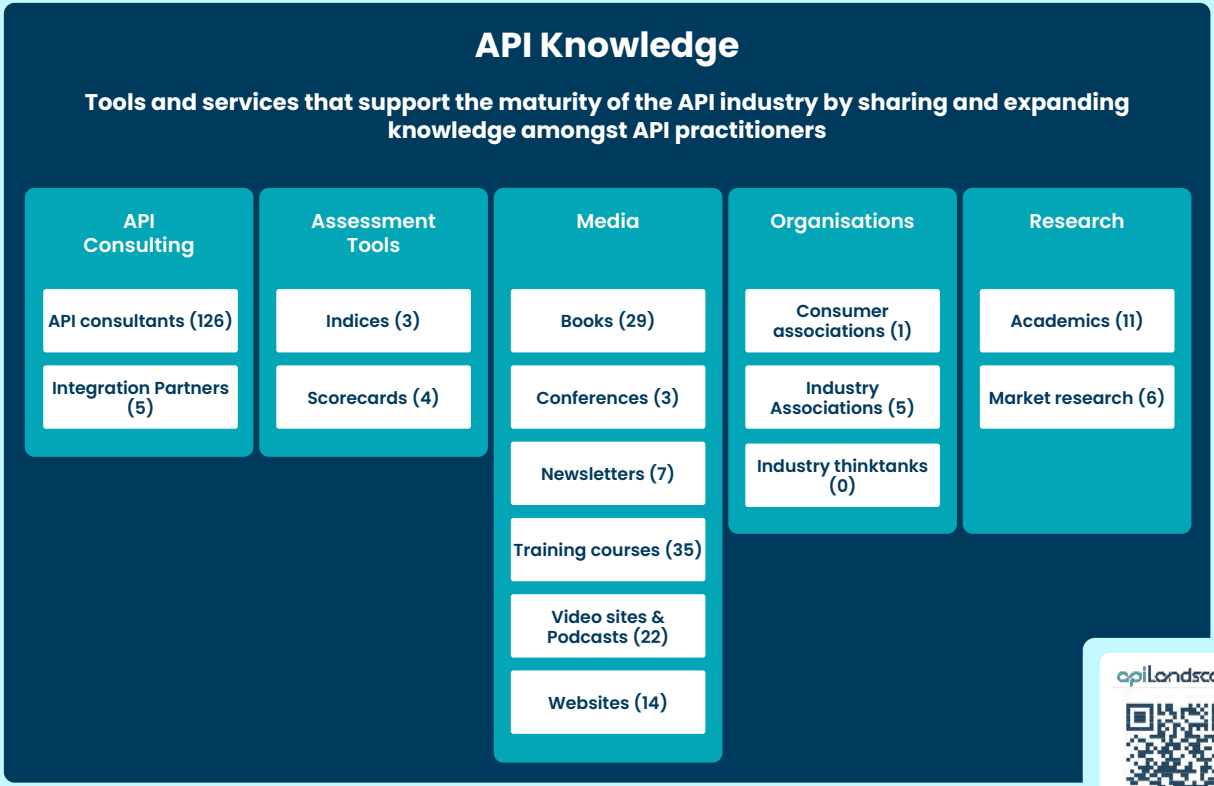
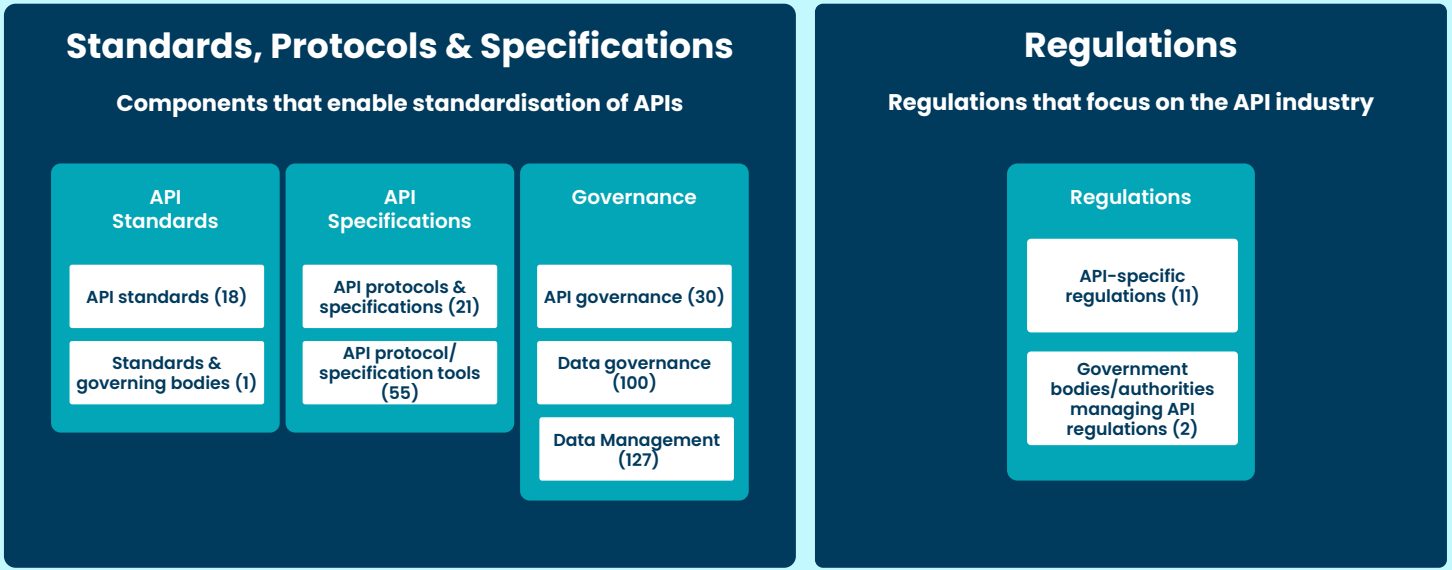
# API Knowledge: Categories and Subcategories

**API knowledge tools providers** is one of our fastest growing categories. As our trends show, API product management is becoming leaner, new skills like API governance are needed to manage complexity, and more work is needed overall as APIs continue to become the core of how data and services are provided digitally. API providers, consumers and digital businesses are turning to media, researchers, consulting providers and training to enhance their team's API capabilities.



# Standards, Protocols & Specifications and Regulations: Categories and Subcategories




**API standards, protocols, and specifications** are at the core of enabling interoperability and security of APIs across the API economy. Tooling that enables APIs to be used by a wider range of internal and external users is essential for digital businesses.

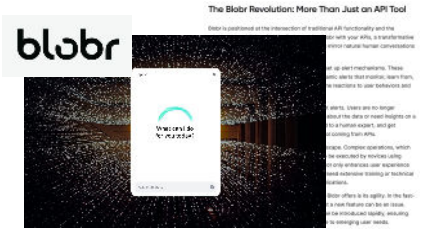
**Regulations** that specifically require the creation and use of APIs is growing, as governments recognise that when AP{Is are not specifically mentioned as the technology to be used, either work does not progress, or new non-interoperable solutions are proposed.

# Emerging fluctuations in the API Landscape

A look at some shifts in how API providers are approaching the API economy

## Blobr

**AI/ML Tools (Workflow)**




Blobr, a French **AI-driven data analysis platform**, originally launched an AI Copilot for APIs in November 2023. However, since then, the company pivoted to focusing on AI-based solutions.

As other API tools providers introduce AI, they may pivot to framing themselves as AI-first rather than the API support they offer.

## SmartBear

**API Design Tools, API Documentation, API Testing (API Design, Developer Experience, Security Adjacent)**

API Documentation and API design tool Stoplight was acquired by Smartbear this year, consolidating the sector.

Spectral, an open source **linter and API style guide** inherited in Smartbear's 2023 acquisition of Stoplight, was recently integrated into Swaggerhub, SmartBear's API design and documentation tool.

## APIMatic

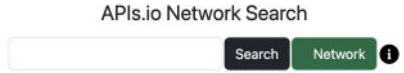
**API SDK Tools, Orchestration, API Developer Portals (Developer Experience, Workflow)**

APIMatic, a New Zealand-based **developer platform for SDKs**, recently combined their SDKs with Spotify-developed open source platform, Backstage. The SDKs include code libraries, documentation, code samples, and guides to help developers get started.

Other tools providers are expected to look at integrating into the emerging ecosystems around other internal developer portals being offered in the market.

## APIs.io

**The open source project for discovering and understanding APIs has been revamped in the past year**

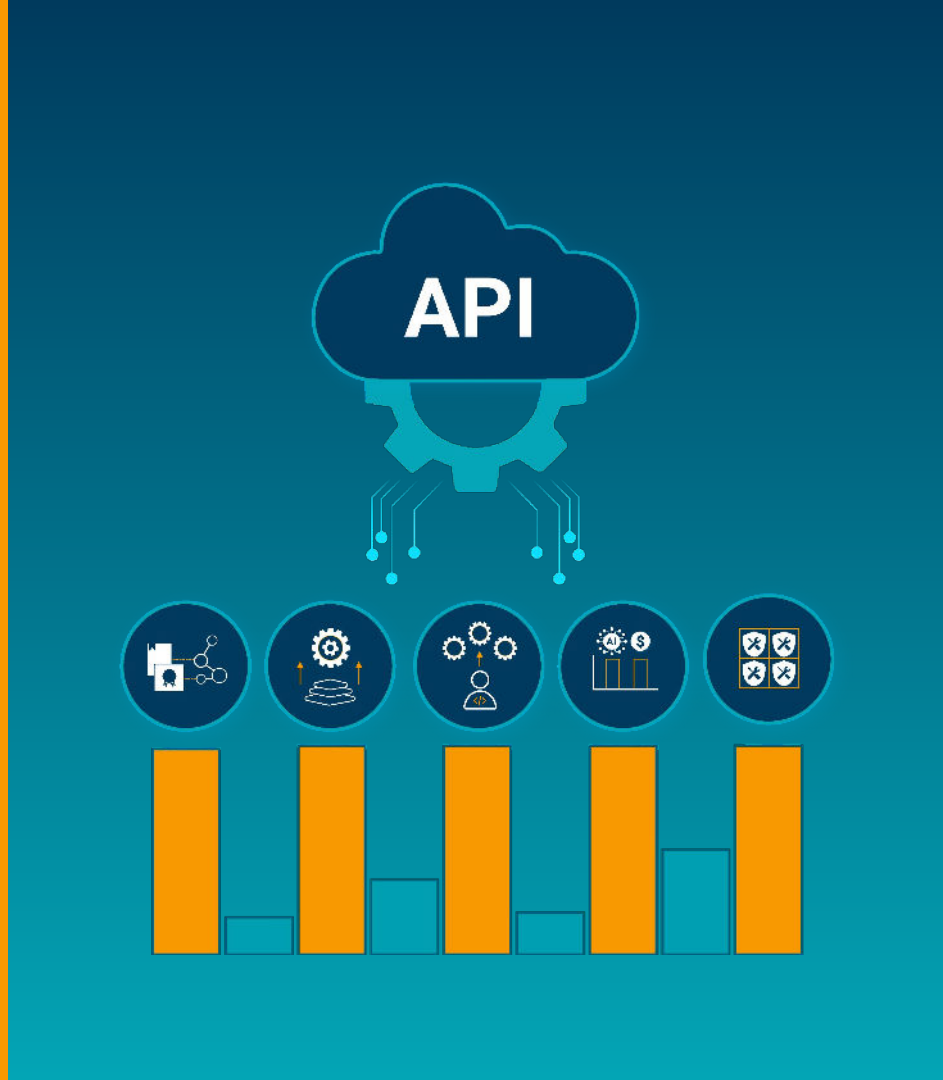



The mission of APIs.IO is to **help developers get their APIs discovered and used** by indexing electronic API descriptions. The site then parses descriptions and provides a searchable entry point to the world of APIs.

The goal is not only to provide a search entry point, but to encourage more high quality API descriptions to be posted and, in-turn, to help more search/indexing efforts to get off the ground.

# API Trends in 2024

5 leading trends we see will impact on the API Economy throughout 2024 - 2025



# 5 key trends facing the API economy

We see that all digital businesses are using APIs, at least as **API consumers**. Internally, these digital businesses are also building APIs for their own infrastructure as part of their composable approach and cloud-based global application architecture design.

A subsection of these digital businesses are also looking at new revenue models and partnership approaches which involve offering APIs to external parties. These API economy players are **API providers** and have specific needs and are impacted by emerging trends in additional ways.

Finally, API tool providers themselves need to keep up with trends to understand what new features to build, how to expand their customer base, and what might impact on their competitive markets.

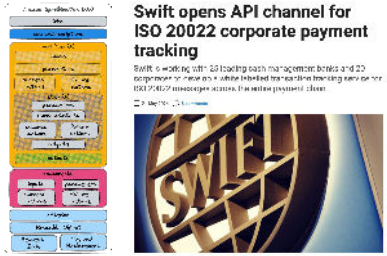
Our trends seek to explain the **5 Key API Economy industry trends** that all market players should monitor, with our predictions for how 2025 will evolve. We look forward to discussing these at apidays events with you throughout the year ahead.

# Regulations and standards are shifting the conversation to digital ecosystems

***Above left:*** Major global platforms are required under EU regulations to provide an API that allows data portability for users
***Above right:*** New financial regulations being drafted in the US are expected to require APIs to share bank account information, according to industry network OpenFinity

## Regulations are requiring APIs

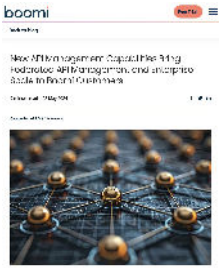
- National regulations around the globe are specifically mentioning requirements to leverage APIs to enable interoperability and data exchange




***Above left:*** OpenAPI released the Arazzo specification to assist with API workflows
***Above right:*** International payments standards body Swift released new API tools for payment standards

## Standards are maturing

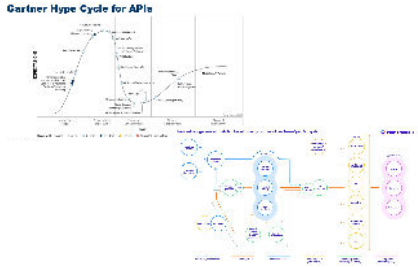
- Standards bodies are offering a greater suite of documentation, supports, new API guidelines and so on to support adoption
- This includes both general standards and API-specific protocol standards




***Above:*** API platform Boomi acquired APIIDA this year in part to expand offerings to customers to ensure federated API management including the ability to work across multiple API protocols and standards

## Need for federated API management solutions arise

- With digital businesses complying with multiple regulations, and using various API protocols and standards, API management solutions are offering federated solutions to manage all




***Top:*** Gartner's API Hype Cycle shows partner ecosystem management platforms and business ecosystem modeling as current innovation triggers
***Bottom:*** Platformable's model for mapping open ecosystems has found traction in banking, health, intellectual property and sustainability sectors

## Conversations shift from platforms to ecosystems

- This complexity of stakeholders acknowledges that beyond the platform business model, digital organisations need to design for ecosystems

# Regulations and standards are shifting the conversation to digital ecosystems

Global regulations in the digital age are increasingly requiring data to be shared or accessed by other actors in the value chain. Alongside these data rights are industry transformations that seek to codify these rights while also shifting traditional imbalances of power amongst existing industry stakeholders to open up sectors to greater competition and choice. This has occurred most notably with banking , but also is occurring with the health, telecommunications and energy sectors.

Concurrently, industry leaders are often working together to improve standards to enable interoperability and provide clarity around data models and web services. With recognition that over 4,000 new standards "will be needed to keep pace with the transformation of the global economy as digitalisation accelerates over the next 10 years", industry is shifting its mindset.

Amongst API specific and protocol standards, significant maturity has occurred over the past year: OpenAPI introduced the Arazzo specification to support API workflows. GraphQL formed an industry foundation to support continued growth. And AsyncAPI released a new version update. The need for APIs to align with regulations, standards and protocol advances has led to an approach referred to as 'federated API management'. Steve Lucas, CEO at Boomi describes federated management as an approach that gives customers "the ability to quickly provision, discover, secure, and infinitely scale in one end-to-end enterprise platform."

With a federated management model, there is also recognition that organisations need to recognise they are part of a wider ecosystem. An ecosystem approach seeks to identify where there are opportunities to compete, and when to collaborate with partners, enable co-creation with API consumers or coordinate around challenges like standards and interoperability.

## What this means for...

### API consumers

Understand what regulations and standards impact on your industry sector and seek out API providers that are addressing compliance and interoperability

### API Providers

Adopt ecosystem design practices to better understand the standards bodies, data models and providers, regulatory authorities, and potential collaborators that will seamless use of your APIs internally and externally

### API Tools providers

Consider building accelerator tools that position your tool in a wider ecosystem, for example, in open banking are there tools or data models you need to assist customers to use alongside your tooling product?

### 2025 prediction Ecosystem design thinking to grow

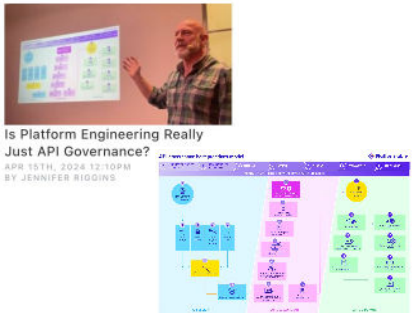
Ecosystem business modeling, tooling to map ecosystems, and new ways to understand the landscape of stakeholders that influence digital transformation, data exchange, web service adoption and interface design will grow in importance over the next year. New business growth will come from understanding who to co-create or collaborate with, who will be a competitor, and when competitors and collaborators need to coordinate to enable interoperability.

# Platform engineering is elevating API governance and developer productivity discussions

***Above top:*** Organisations like Ford Pro are taking platform engineering approaches to manage their growing API catalog
***Above bottom:*** An industry leader at Allianz Direct as quoted in *The New Stack*

## Platform engineering overtakes DevSecOps as a key mechanism to manage IT complexity

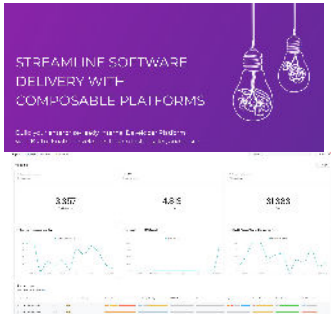
- As noted by The New Stack: *"As the process of designing, building, and maintaining workflows and tools for software engineering organizations, platform engineering helps drive consistency and speed up common tasks."*




***Above top:*** Platform engineering and API governance overlap
***Above bottom:*** Platformable's API governance model is used across industry sectors including banking and intellectual property

## Platform engineering highlights challenges of API sprawl

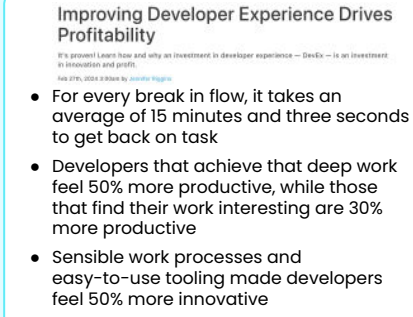
- Platform engineering specifically sought to enable infrastructure components like APIs to be listed in one place for use by internal developers to avoid duplication and fragmentation. In turn, this also led to greater use of standards and emergence of API governance practices.




***Above:*** Tools like Syntasso and Port are emerging (along with others not shown including Backstage, Humanitec, Cortex, Rely and Cycloid)

## Internal developer portal offerings expand

- New API tools offerings emerged to meet platform engineering and API governance needs including a new range of internal developer portals




***Above:*** Data on developer productivity is emerging as a key indicator for the success of moving to a platform engineering approach and is having business and economic impacts

## Platform engineering prioritises developer productivity

- Many organisations increased their ability to measure developer productivity as an impact indicator for their platform engineering efforts
- This highlighted the importance of supporting developers internally in their work

# Platform engineering is elevating API governance and developer productivity discussions

APIs enable faster product development, improve digital partnerships, allow reusable components, integrate data and web services, automate workflows and provide the infrastructure necessary for enabling AI and other technologies.

Federated API management (as described in *Trend 1*) is the key solution for addressing this complexity when exposing APIs to partners and externally. But what about when seeking to simplify the complexity internal developers face when building products and services and automating workflows? Platform engineering has emerged as the solution to support teams to work more efficiently by enabling greater sharing of IT components, encouraging internal standardization and common processes, and highlighting the availability of tools and internal APIs.

API governance is a good place to start when building a platform engineering approach internally. Most organisations have built APIs from the ground up: initially to address a single use case and then discovering the impact value. So another team builds another API, and so on. Over time, API sprawl occurs where there are multiple APIs, each designed slightly differently or using different data models and naming conventions for the same things.

Internal developer portals have arisen as a key tool that addresses API sprawl by providing an internal catalog for APIs, but also a central space to share internal developer resources such as organisation API style guides and data models. Some internal developer portals are now enabling new APIs to be reviewed against internal standards and then moved to deployment automatically where they meet defined API governance requirements. (Ikenna Nwaiwu's book on *Automating API Delivery* provides further insights into managing API governance and automating processes in a way that supports a move to platform engineering.)

When implemented well, developer productivity increases: a key impact outcome that is now being measured as a metric for determining the success of an organisation's platform engineering processes.

## What this means for...

### API consumers

As a digital business, platform engineering can help you maintain oversight of your API assets, and streamline engineering teams to utilise best-in-breed tools when managing API consumption.

### API Providers

Having all APIs collected in an internal developer portal can help speed up product development and reduce complexity and security risks from API sprawl and shadow APIs.

### API Tools providers

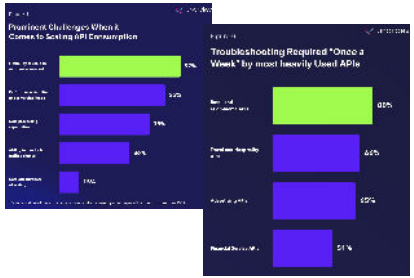
Consider whether your product can integrate with existing internal; developer portals and other platform engineering tools.

### 2025 prediction Platform Engineering will become a core process of IT

API governance, data governance, DevSecOps and observability processes will all converge into platform engineering as a discipline for managing APIs and other digital components that help organisation's build out their digital products and services, automate workflow processes and incorporate new technologies like AI.

New API tools will continue to expand to support platform engineering approaches.

# API consumption increases in importance while API product management undergoes rethink




***Above:*** Lunar.Dev's study on API consumption trend shows keys challenges and levels of complexity that developers are addressing each week

## API consumption is increasingly complex for digital businesses

- According to Gartner's 2024 API Strategy Survey, 71% of respondents consumed APIs provided by third parties
- A study from Lunar.dev shows a range of API consumption challenges

***Above:*** Kong shows how their new AI gateway enables consumption management

## New tooling is emerging but mostly focused on AI gateways to manage one area of consumption

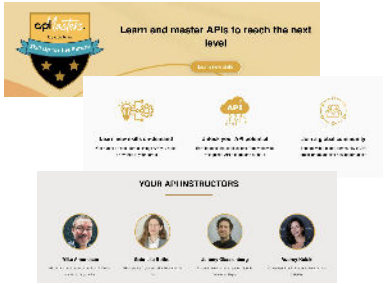
- New gateway products aimed at supporting consumption are emerging, but both new products in the market focus on AI consumption at present
- New API consumption management services are emerging, but slowly at present

| Job Role | % of Jobs in Jan | % of Jobs in Jun |
|---|---|---|
| Software Developer | 59.1% | 48.8% |
| Software Architect | 19.4% | 22.5% |
| Product Management | 14.8% | 20.2% |
| Designer | 2.8% | 3.3% |
| Developer Evangelist | 0.6% | 2.2% |
| Test/Quality Assurance | 1.6% | 1.5% |
| Technical Writing | 1.6% | 1.5% |

***Above:*** Matthew Reinbold's NetAPI Notes analysis of jobs that mention APIs found growth by midyear 2024 in key categories including developer evangelist and product management

## API developer relations roles are growing again

- Recent research shows that while developer relations roles were amongst the 136,000 tech staff losses this year, there is a modest uptake in API roles specifically aimed at developer evangelism and product management




***Above:*** To support lean product management, new providers are offering more diverse training including LaunchAny (not pictured) and apidays' API Masters program (shown above)

## ...But new approaches are emerging

- Lean product management and online training courses, greater alignment between developer productivity and organizational approaches to API governance, and moves towards ecosystems are all reshaping expectations of API product and developer relations roles

# API consumption increases in importance while API product management undergoes rethink

According to Gartner, 71% of digital businesses surveyed are consuming APIs created by third parties. These create a security and complexity risk that will grow with the inclusion of AI-related integrations. New tooling is needed to help manage these external components alongside internal API tools (see *Trend 2*). Consumption gateways from services like lunar.dev, Kong, and Portkey are emerging as a new mechanism to provide greater management over external APIs used in internal production use cases.

While this reliance on external APIs has grown, some tech businesses have gone through a period of staff layoffs. From January to September 2024, there have been an estimated 136,000 tech workers laid off by 422 companies. This has occurred while many complain of the deterioration of the user quality of apps and digital services (which rely on APIs). A key challenge for the tech industry is the wider societal economic structure that consolidates profits at the expense of providing quality services to customers.

One area of roles that saw significant layoffs is developer relations and product management. Research from the Developer Relations Agency has found that 62% of C-level decision-makers value the work of developer relations, yet budgets remain typically underfunded. There are signs of hope for API developers. Matthew Reinbold's tracking of API positions vacant advertised throughout 2024 has found recent increases in product management and developer evangelist positions, for example.

But API product management and developer relations may require a shift in some of the roles and approaches to product management and developer relations. 1/3 of all developers do not audit their developer experience, and 47.4% of developers craft their own SDKs rather than use well-developed industry tools that are widely available. Product management may also require some rethinking, leading to an increase in the recent emergence of training programs like API Masters which seek to provide core skills and alter industry roles in API consumption support.

## What this means for...

### API consumers

If you are consuming multiple APIs for production use cases, including internal automation workflows, consider use of API consumption gateways to help you manage your third party APIs

### API Providers

Re-evaluate the impact you want your developer relations and API product managers to have on your business. Set new metrics for what you expect from how teams support API consumers

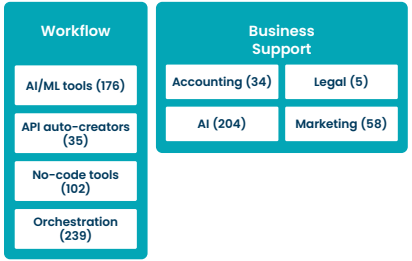
### API Tools providers

Focus promotional efforts on explaining how your tooling can better support adoption of APIs with external consumers

### 2025 prediction New API consumer support roles

Developer relations and API product management roles will go through some shifts to become more specific in the way they provide support and show impact as a swing back to supporting API consumption of API products grows. This will start with new training programs that better describe methodologies and processes that can be adopted to support API consumption, and lead to new role descriptions that place more emphasis on demonstrating impact for investment.

# AI over-hype begins to settle as balance sought between AI usage and RoI




***Above top:*** apidays API Landscape maps AI tools in two categories: those that support API teams in their workflow and AI products that can be consumed

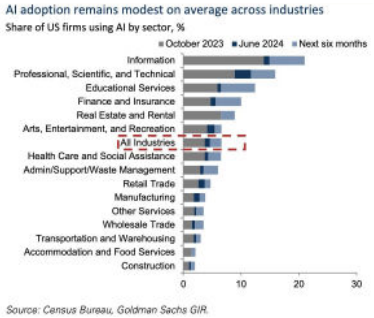
## The first half of 2024 saw AI overhyped as a solution for everything

- AI saw massive investment in the first half of 2024 even amidst concerns of wildly inaccurate data responses and some companies reporting productivity gains from using GenAI solutions, particularly chatbots, into their customer-facing service delivery

***Above:*** Twilio provides a service for users to show AI labels that describe AI governance processes, modeled on proposals from the National Telecommunications and Information Administration. Vercel offer playgrounds to test various LLM models before integrating them into API-enabled infrastructure

## 13% of API tools providers have introduced some AI element into their product features

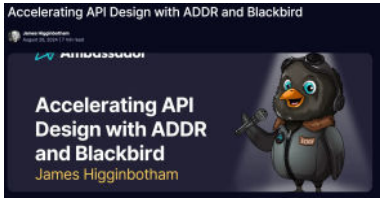
- A review of all API tools providers in the API Landscape has found that 12.7% have introduced AI features
- Example of AI features being offered by API tool providers include: AI labeling (Twilio), AI-deployment verification (Harness), AI voice cloning service via API (Descript), and AI-model comparison (Vercel)




***Above top:*** A Goldman Sachs study into AI by industry sector found that up until mid-2024, less than 120% of all industry sectors are using AI

## There is a greater understanding of the limitations of current AI

- A report from Goldman Sachs researchers forecasts limited economic upside from AI over the next decade and argues that AI isn't designed to solve the complex problems that would justify costs
- Studies on AI coding copilots have also shown deficiencies in productivity gains




*"With the addition of Blackbird, I can now accelerate the API design lifecycle by importing an existing OpenAPI document, using GenAI to produce an OpenAPI document, and see my API in action by generating and deploying a mock API with a single click."*

***Above top:*** James Higginbotham's blog post for Ambassador shows how API teams can balance AI with API design best practices

## AI can complement rather than replace API developer work

- Recent developments from API tools providers like Ambassador with their Blackbird product are showing a middle ground where AI can help assist developers improve their API design

# AI over-hype begins to settle as balance sought between AI usage and RoI

As the year started, Artificial Intelligence (AI) and in particular generative AI (Gen AI) was held up as enabling a pivotal turning point for industries of all kinds, offering the opportunity to create solutions faster by enabling coding pilots, automatic content generation, solutions to questions, chatbots, and other opportunities.

But as organisations of all sizes started testing AI, a number of concerns began arising: the high environmental cost of compute power required, the propensity for AI to 'hallucinate' and provide incorrect answers, the mediocre quality of the content produced, the need to introduce strong data and AI governance, the poor copyright legal adherence, the exploitation of workers required to view disturbing content, and for developers in particular, the poor code outputs provided by Gen AI autopilots. Regular studies found that AI-generated code had security flaws, required deployment rollbacks, or had to be refactored at a higher rate than developer-generated code.

However, many developers have found benefits in using Gen AI to ask about coding or spreadsheet formula questions and so on, and have been able to use those responses to create code that addresses areas where perhaps the developer did not know a particular language capability. This has give rise to chatbots, including to assist developers search documentation or understand process steps that has proven beneficial to developer productivity.

In API design, new tools like Blackbird from Ambassador have been able to enhance API design practices and speed up some of the more tedious tasks required when working through an API design process and converting outputs into an OpenAPI definition.

Other AI use cases for API management, such as using AI to analyse and monitor traffic, are also emerging that show significant promise. New open source AI governance tools like PAIG are also emerging to support developers.

These more recent approaches: where AI helps developers do their core work more successfully are becoming the new balance for introducing AI effectively into API teams.

## What this means for...

### API consumers

Ensure you have good AI governance, and consumption management practices in place before integrating AI tools into your API consumption value chain

### API Providers

In addition to documenting AI governance, work with developer teams to see AI as an aid to developer coding work rather than as a replacement

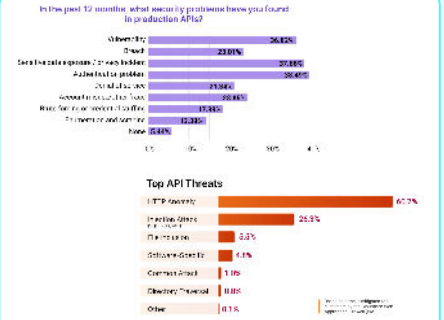
### API Tools providers

Look at opportunities to deliver features that enable users to reduce the tedious and repetitive aspects of their work with AI. Look at how to introduce features that support the work developers are doing.

### 2025 prediction AI collaborative work instead of AI replacing work

The poor quality of content completely generated by AI will reduce interest in using Gen AI as a replacement for coding and content generation. However, a new balance will be found with tooling that uses AI to assist developers to work more effectively and productively by reducing repetitive and duplicative tasks and more tedious aspects of their work. More organisations will start to make decisions based on the cost and environmental impact of AI.

# API security tooling enters rebundling phase




***Above:*** Studies from Salt Security and Cloudflare show key challenges facing digital businesses when keeping APIs secure

## 95% of businesses surveyed face challenges managing API security risks

- According to a national survey by Salt Security, in addition to security risks, 23% of organizations surveyed have experienced an API-related breach
- Cloudflare data shows HTTP anomalies are the greatest threat vector

***Above:*** Some industry rebundling has started occurring as larger enterprises acquire API security tolling to expand their feature set

## F5 acquires Wib
## Akamai acquires Noname Security

- This year has seen two major acquisitions already as large API tool providers with horizontal services across the API landscape seek to build out more sophisticated security solutions through acquiring the emerging pureplay security providers described in the API Landscape

***Above:*** Research studies show API security does not always escalate to C-level discussions at present

## API security recognised as a core concern

- While data shows that security discussions are not always elevating to C-level discussions, the increased focus on API governance and platform engineering, alongside DevOps observability, will bring more of these conversations to the forefront as a key area of risk management

***Above:*** apidays API Landscape has identified a number of API Security pureplay tool providers across a range of sub-categories: how many will be acquired in 2025?

## Further market consolidation is an API industry trend

- It is a common cycle in the API industry that as some feature-sets grow in maturity, tooling is acquired by the main API management solutions and cloud providers. We expect security tooling will be acquired by some of the API tools providers in 2025

# API security tooling enters rebundling phase

API security threats continue to become  a key risk for all digital businesses. As estimates of up to three-quarters of all internet traffic being powered by APIs, the level of risk from various API threats continues to grow.

A study by Kong estimates “an expected 548% growth in the forecasted annual number of API attacks by 2030." Demonstrating the convergence of data privacy regulations and compliance, platform engineering, API governance, and adoption of AI, they also noted that in interviews with survey respondents, "data privacy and security/governance were a top concern for nearly 60% of developers surveyed when it comes to integrating AI services with existing microservice infrastructure.”

The history of the API industry over the past 15 years has been a story of unbundling and rebundling of services. As new needs are identified for global digital application architecture and API-enabled infrastructures, startups bloom to provide composable solutions to meet these specific needs. Like any business they then tend to expand horizontally to offer a richer feature set that covers all use cases of their core business. In the API sector, when this occurs, those businesses have been ripe for acquisition by larger tech platforms such as API management solutions or cloud providers who have sought to address that gap in their vertically integrated offerings.

The urgent need for security, observability and responsiveness, the complexity of the sector in building specific features, and the maturing of current solutions to their current stage of evolution where they are fit-for-purpose and becoming robust solutions to security concerns would suggest they are ready for re-absorption via rebundling over the year ahead. Some of this has commenced with F5 and Akamai both making security acquisitions in 2024, and we expect this to continue into 2025.

## What this means for...

### API consumers

Be aware that adoption and integration of AI solutions and third party APIs will increase the threat surface and potential of API security risks

### API Providers

When creating APIs, ensure a robust API security audit is conducted as part of the design and testing phases before APIs are deployed to production

### API Tools providers

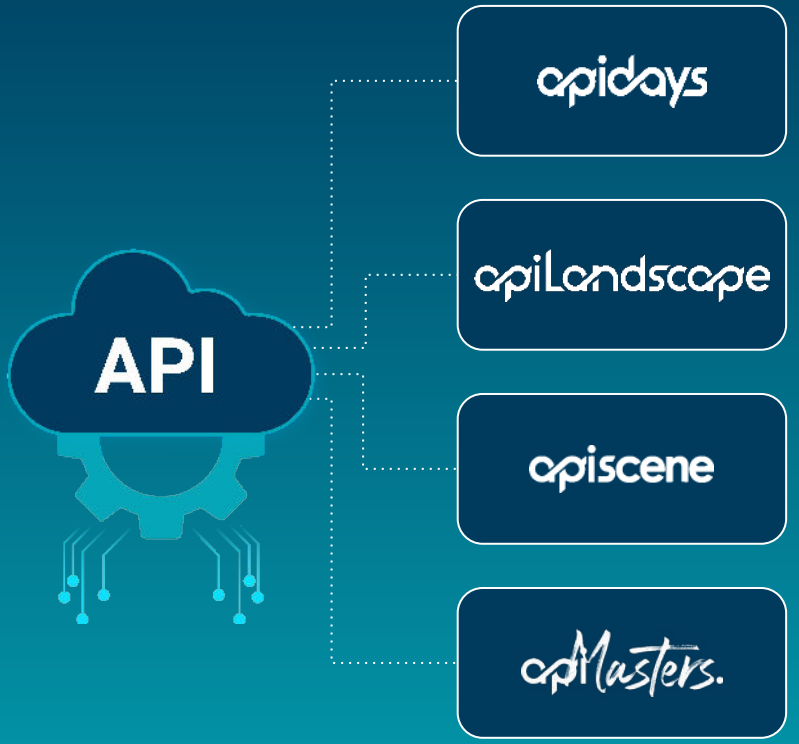
Consider how to collaborate with security and risk compliance tooling, perhaps through ensuring your product includes API governance features and integrations

### 2025 prediction Security continues to become a first order concern

Several more of the pureplay API security companies will be acquired by API management solutions and potentially other tools categories like internal developer portals as the complex area of API security management needs to be elevated from being an-in-built feature with simple tooling by API management products as providers respond to customer demands for more fully developed security suite tooling

# Keeping up with the API Economy

## Services and offerings



# Explore top resources for API enthusiasts, from conferences and expert insights to in-depth analysis of the evolving API landscape.

apidays

**Discover Upcoming Conferences**

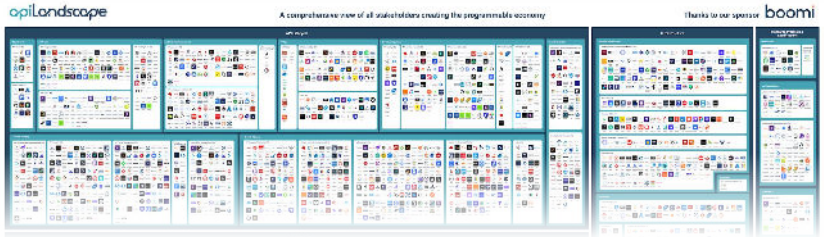
LONDON – SEPTEMBER 18 & 19, 2024

AUSTRALIA – OCTOBER 16 & 17, 2024

GENERATION AI – DECEMBER 3, 2024

apiLandscape

**Access API Landscape**




apiscene
Inspiring the community one API story at a time

**Engage with API Stories**

APIs & Today's Digital Revolution

Marc Friend

Modernize file transfers with APIs

Brian Liu

apiMasters.

**Boost Your API Knowledge**

Learn and master APIs to reach the next level

Learn new skills

# Methodology

## Brief description of our value models and taxonomies

# Methodology

At Platformable, we have:

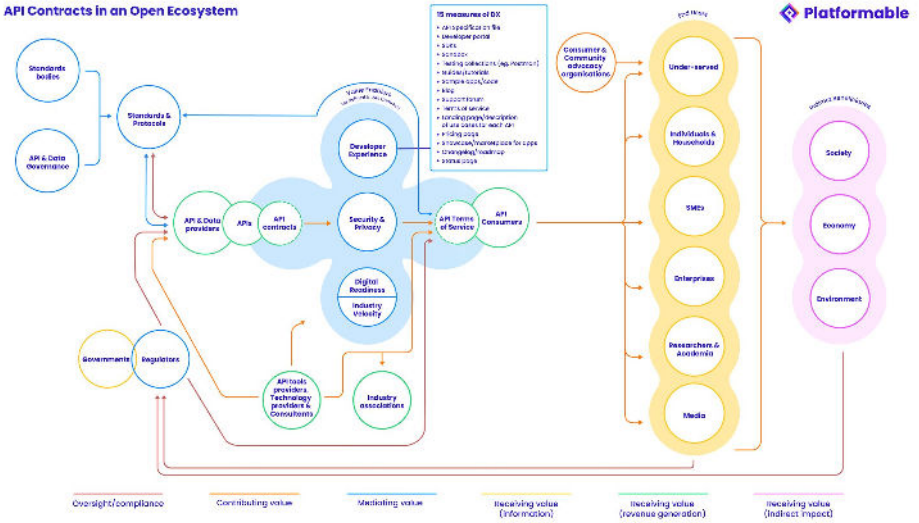
**Defined the API ecosystem value flow.** Drawing on industry and academic research, as well as our own datasets and analytics techniques, we have documented how value flows to various stakeholders in an ecosystem(see at right). This helps us identify what metrics to collect at each stage of the ecosystem value flow.

**Researched and defined taxonomies for key data model elements.** This has included API landscape categories and sub-categories, patents, API standards, security tech, AI components, investment generated, diversity of management, product range, and pricing models.

**Created a regular data collection system.** We have processes in place to continually collect data on API tools providers and to monitor how value flows across the global API landscape. We use alerts, data subscriptions, regulatory datasets, and manual data collection processes to identify key trends impacting

on the API economy.

**We do the reading.** We keep up with apidays presentations, read key industry media, meet with stakeholders, discuss trends with API practitioners and sense-check all findings with thought leaders.




***Above:*** *Platformable's ecosystem models have been used with the World Bank, World Health Organization, global enterprises, non-profits, and industry associations across a range of sectors including Open Banking/Open Finance, Intellectual Property, Digital Health, Sustainability, and Supply Chain Traceability. For more on the above model design, see:* [https://platformable.com/blog/api-contract](https://platformable.com/blog/api-contract)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ADD YOUR API TOOL

REPORT A BUG

NEW FEATURE IDEA

# References


### Trend One

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### Trend Two

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### Trend Three

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### Trend Four

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### Trend Five

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## Get in touch

Whether you have a pricing question, want a custom demo, need technical support, or have a suggestion, our team is ready to assist you

Contact us

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## Want to be involved?

- Be a sponsor at our conferences
- Contribute to industry reports
- Become a speaker at our events

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Platformable

## Understand the opportunities in open digital ecosystems

- Apply ecosystem thinking
- Map ecosystem growth
- Support interoperability

Contact us