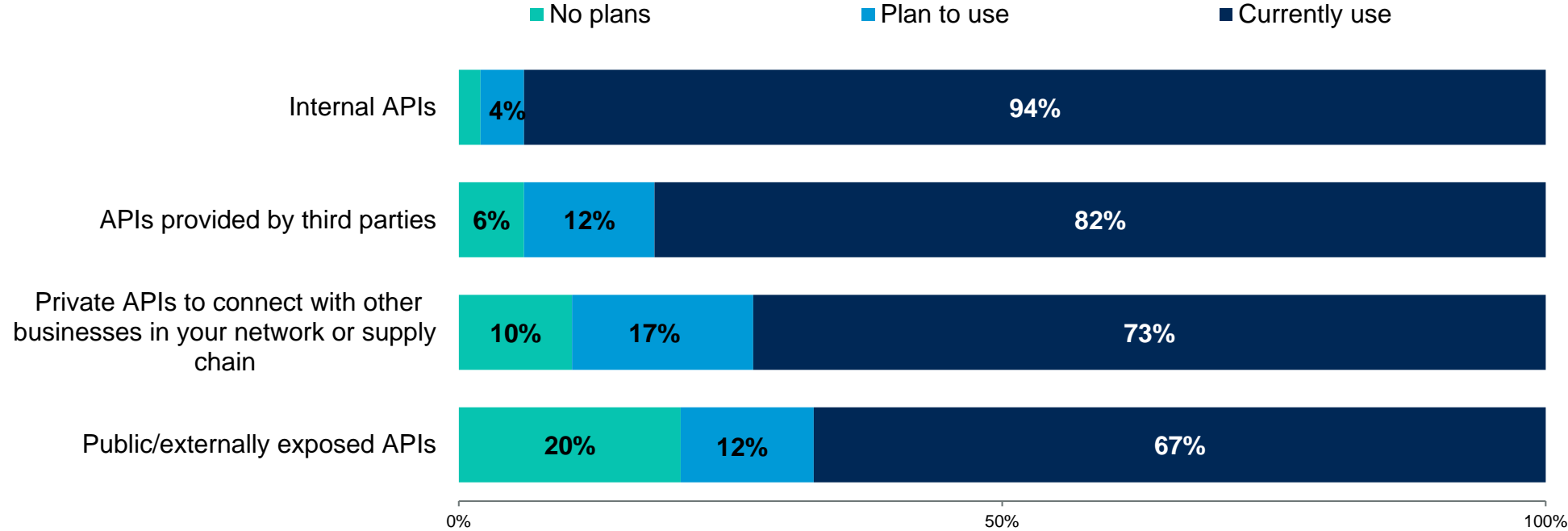# API Trends

Mark O'Neill
VP Analyst
Chief of Research, Software Engineering
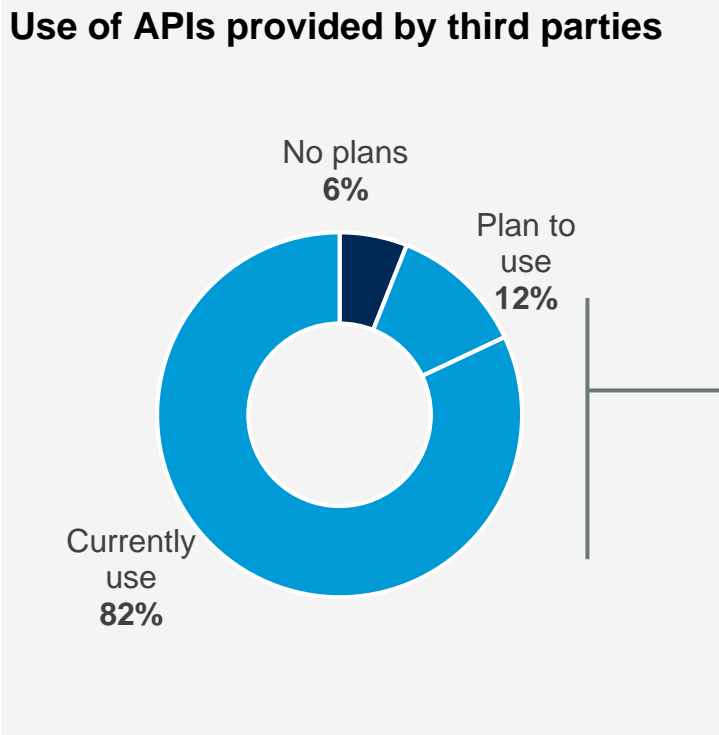
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APIs – especially Internal APIs - are now Ubiquitous

Gartner Survey

- Publicly exposed APIs are more commonly used in Europe than North America
- Financial Services industry more commonly use publicly exposed APIs (78%), while 22% of orgs have no plans, and 0% plan to use.
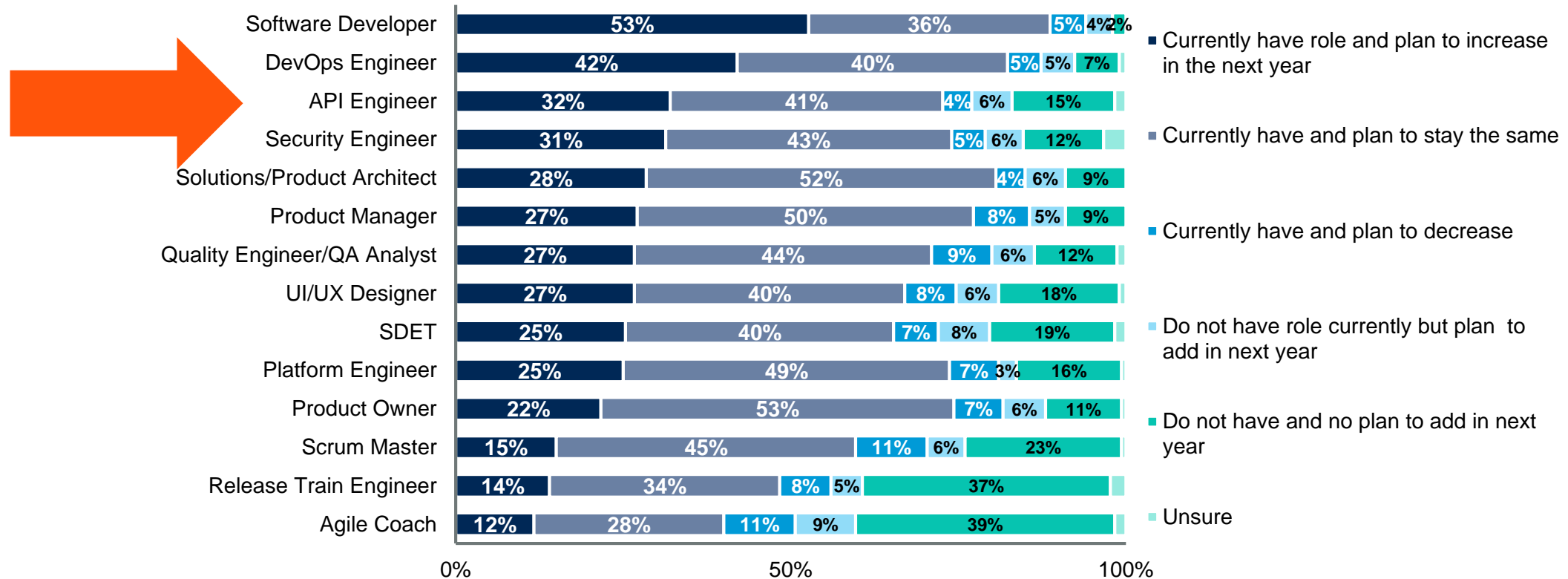
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Which Third Party APIs are Most Used?

Use of APIs provided by third parties

- No plans 6%
- Plan to use 12%
- Currently use 82%

Specific API Third Party Providers

UIPath
ServiceNow
HeathSherpa
Youtube
AvePoint GovernmentAgencies
Zapier Docusign
LexisNexus AgentCubed
Central1 Pexlp Facebook
Doxim Collibra SaaS NewRelic
Connecture BusinessPartner Splunk
Twitter Finastra
Certicamara Oracle Payroll
Microsoft365 CMSACA GoogleCloud
BMC SalesForce
Experian Workday
SmartFreight Adobe OpenBankingAPIS
OpenAPI
Pennie

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API Roles are in Demand in Software Development

Demand projections in the next 12 months

Role	Currently have role and plan to increase in the next year	Currently have and plan to stay the same	Currently have and plan to decrease	Do not have role currently but plan to add in next year	Do not have and no plan to add in next year	Unsure
Software Developer	53%	36%	5%	4%	2%	
DevOps Engineer	42%	40%	5%	5%	7%	
API Engineer	32%	41%	4%	6%	15%	
Security Engineer	31%	43%	5%	6%	12%	
Solutions/Product Architect	28%	52%	4%	6%	9%	
Product Manager	27%	50%	8%	5%	9%	
Quality Engineer/QA Analyst	27%	44%	9%	6%	12%	
UI/UX Designer	27%	40%	8%	6%	18%	
SDET	25%	40%	7%	8%	19%	
Platform Engineer	25%	49%	7%	3%	16%	
Product Owner	22%	53%	7%	6%	11%	
Scrum Master	15%	45%	11%	6%	23%	
Release Train Engineer	14%	34%	8%	5%	37%	
Agile Coach	12%	28%	11%	9%	39%	

Q01. What are your demand projections for the following roles in the next 12 months?
Source: Gartner Software Engineering Leaders Role Survey

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Gartner Hype Cycle for APIs
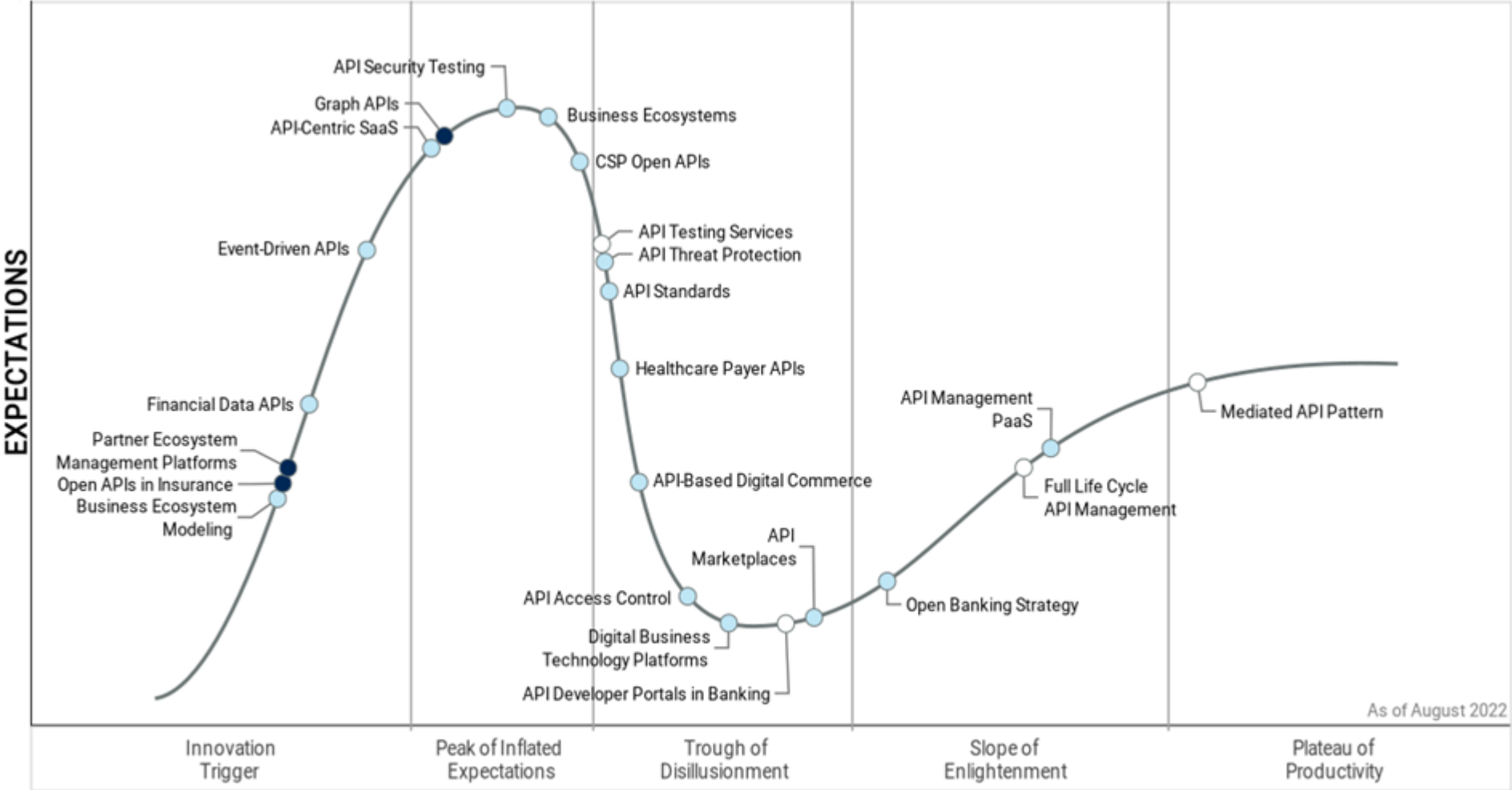
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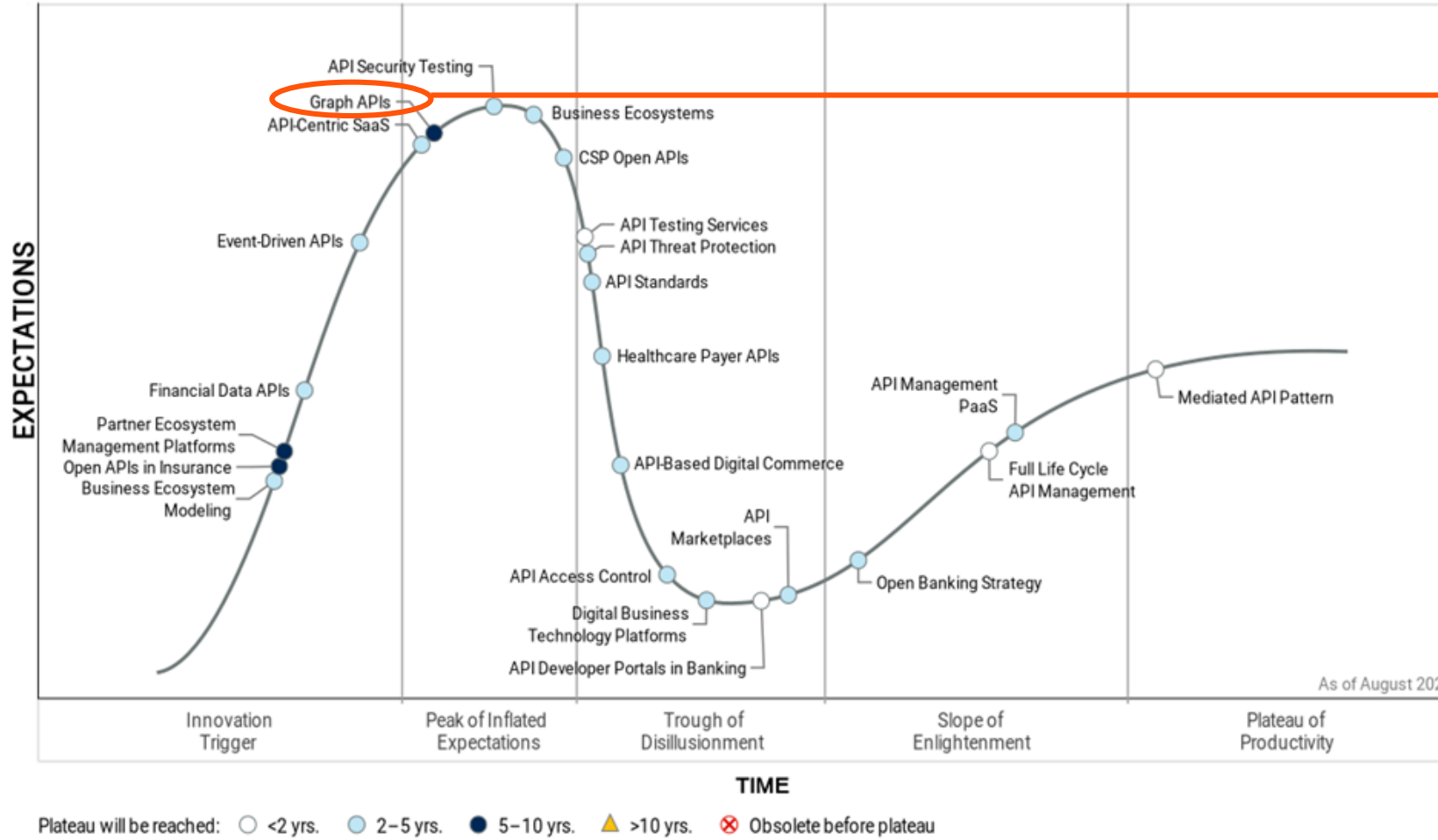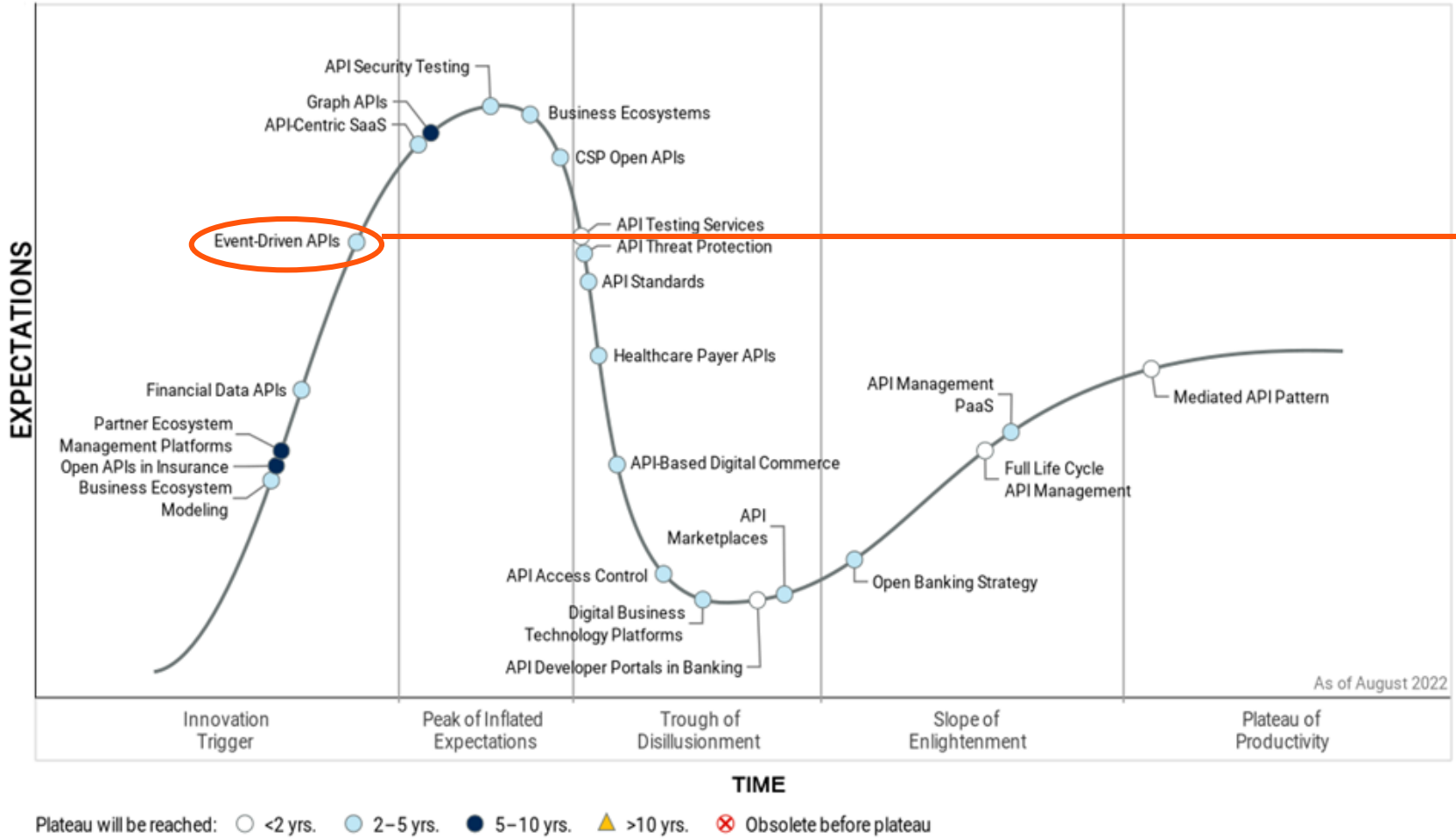
Graph APIs

Interest in Graph APIs, including GraphQL, has grown strongly but is levelling off
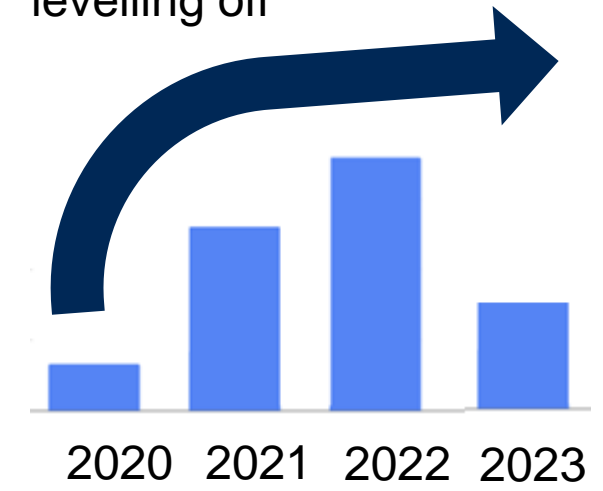
gRPC is now showing more growth

Event-Driven APIs

Now just AsyncAPI, but webhooks, Websocket, and subscriptions within GraphQL

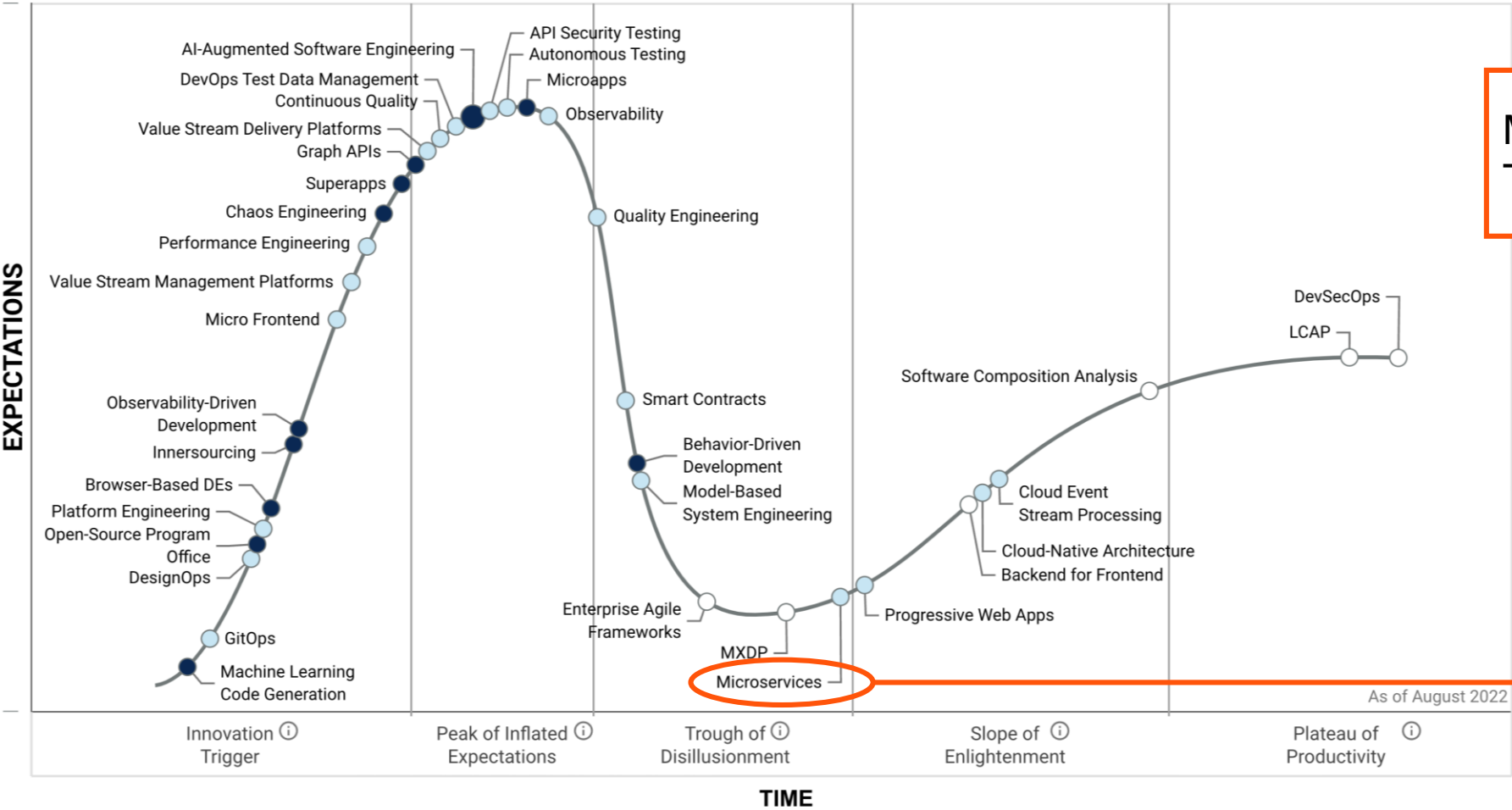Requirement to manage both request-response and event-driven APIs

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Microservices

Microservices are in the Trough of Disillusionment.

Gartner.

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Why Are Microservices in the Trough of Disillusionment?

- Highly complex

- Requires experts in the architecture role

- Requires mature processes and practices

- Data model requirements, since each microservice must "own its own data"

Expert Only

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API Management is Changing

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Over 2/3 of organizations currently use API Management solutions

Organization Current and Future Plans for API Management Solutions
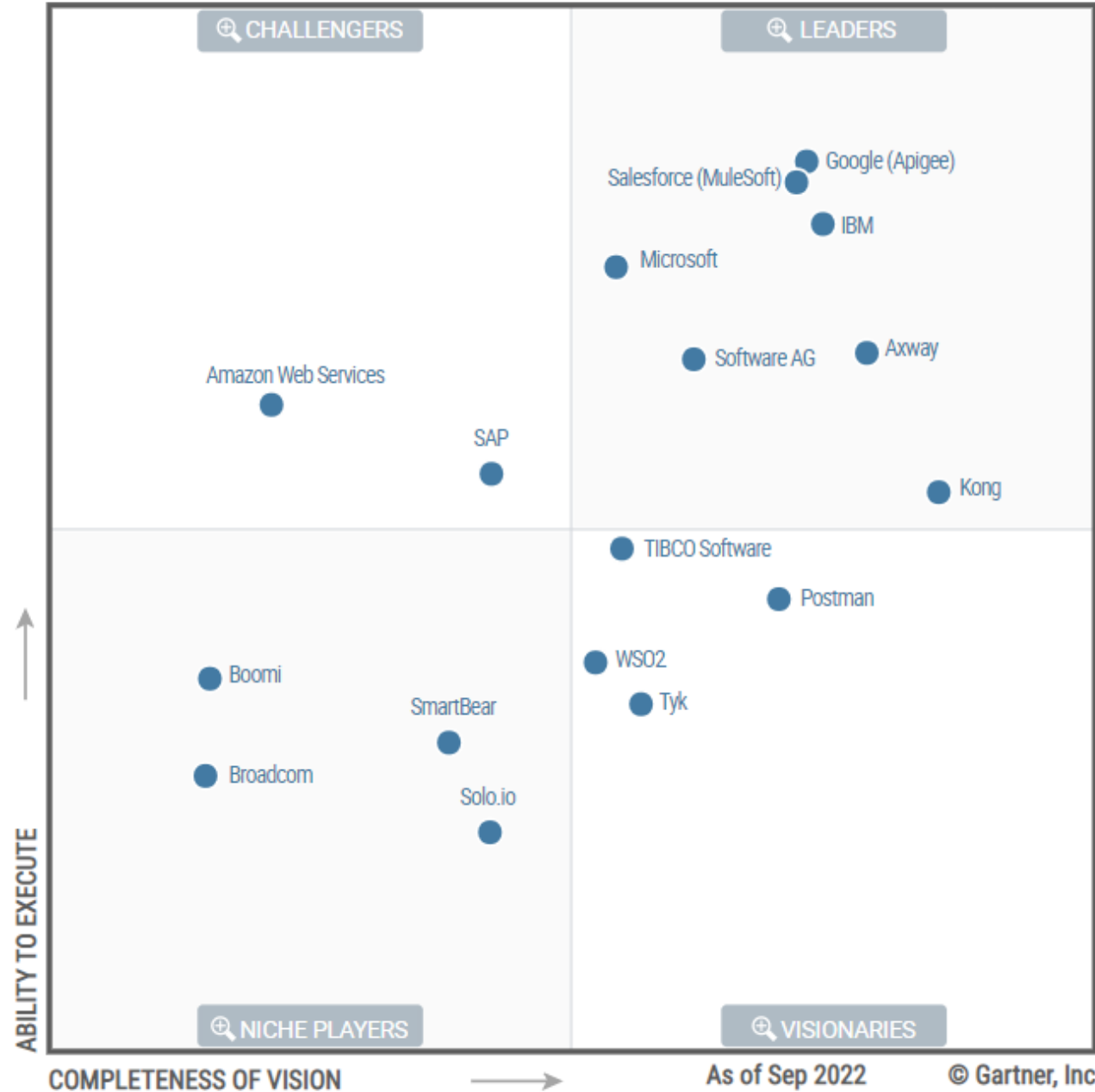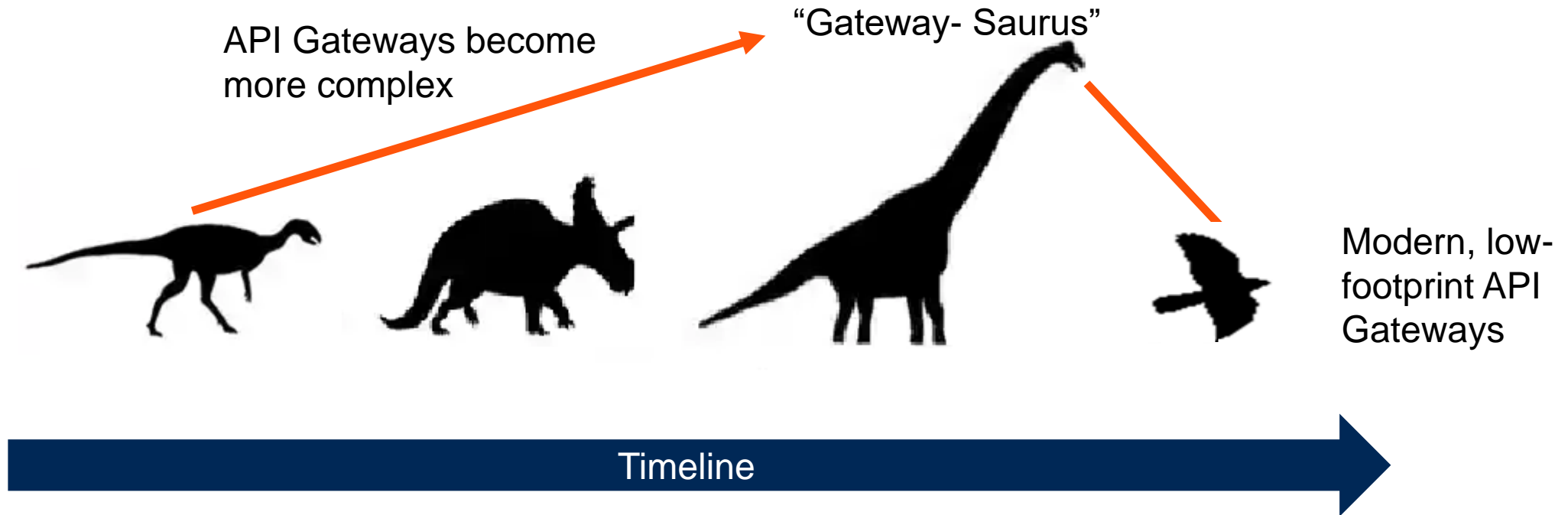
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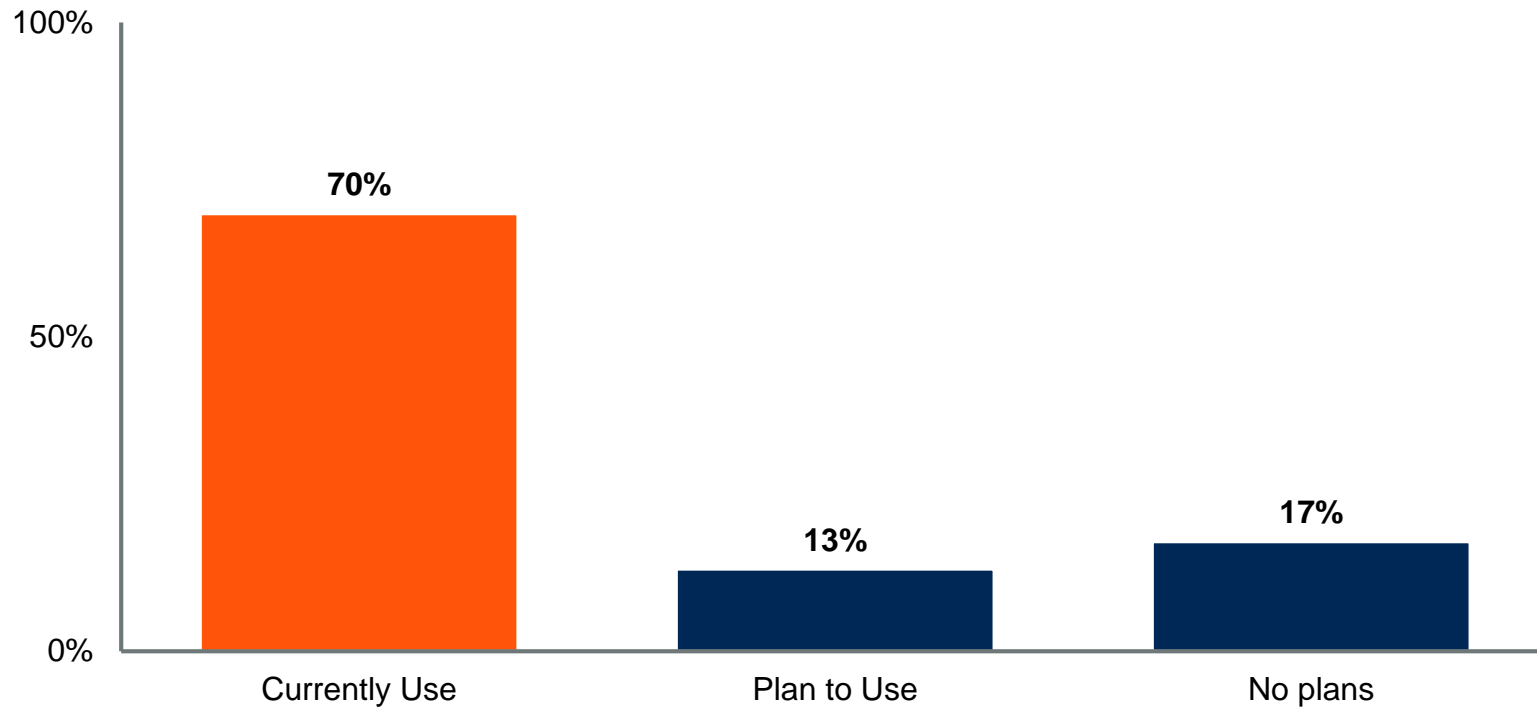
Magic Quadrant

Includes vendors who are not gateway-centric, as well as vendors who also provide service mesh

Honorable Mentions:
- Ambassador Labs
- Gravitee
- RapidAPI (Rapid)
- Stoplight
- Traefik Labs

API Gateway Evolution

API Gateways become more complex

"Gateway- Saurus"

Modern, low-footprint API Gateways

Timeline

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The Rise of "Bring Your Own Gateway"

- Many organizations now have multiple API gateways, not one "big honking gateway"

    1. An on-premises API gateway which may be in place for many years

    2. Cloud provider API gateways such as Amazon API Gateway and Google Cloud API Gateway

    3. API gateways as part of platforms such as Spring [Spring Cloud Gateway]

- Developer friendly, automation-friendly, Gateway instrumentation is required

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Impact of Generative AI on API Management

1. (Even more) importance of documentation for APIs, as LLMs become major consumers of APIs

2. Requirement to block/throttle LLM access to APIs

3. Further focus on API monetization, as organizations follow Reddit and Twitter and charge for API access to data

4. Requirement to design schema correctly so that you aren't inviting overly broad queries

   – Especially for APIs consumed by prompt engineering

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Key Gartner Research

- [Reference Model for API Management Solutions](#)

- [Market Guide for API Gateways](#)

- [Magic Quadrant for Full Life Cycle API Management](#)

- [Research Index: Everything You Should Do to Address API Security](#)

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