UNLEASH THE TRANSFORMATIVE POWER OF

# **APIs and Integration**



# Integrate to Innovate and Dominate

When global enterprises ponder the worldwide success of companies like Uber, Spotify, and Airbnb, a single question stands out: how did they scale so rapidly to dominate their market so thoroughly?

It's commonly explained that startups, by their very nature, are more agile and adaptable than their large enterprise counterparts. But in reality, there's a lot an enterprise can learn from venture-backed startups.

These companies share a common, crucial approach that has radically changed how applications are produced: they utilize external APIs throughout their products to rapidly build a market-dominating experience. This method of selectively integrating APIs frees them from the onerous expense and effort needed to write code from scratch for every part of their offering. More importantly, over the last 15 years, it has let these once fledgling startups rapidly scale their way to billion-dollar success.



"We rely upon certain third parties to provide software for our products and offerings, including Google Maps for the mapping function that is critical to the functionality of our platform."

- Uber IPO filing, 2019

Take Uber. Instead of creating custom maps and defined directions, Uber simply calls the Google Maps API—and in less than a second—incorporates the geographic details of drivers and customers into the app.

By relying on and integrating services from specialist, niche providers, Uber needed far less resources to bring a solution to market. What's more, their engineering resources were then focused on building the features that would differentiate them from competitors and allow them to eventually dominate and thoroughly disrupt the world's taxi and limousine industries. As for new products? Using APIs, Uber was able to quickly enter the food delivery market. Uber Eats is now the company's fastest growing profit center.

As these startups have grown, many of them have also exploited the value of exposing their own APIs and allowing other businesses to be built on their own platforms. Shopify, for example, offers APIs, SDKs, and a suite of developer tools to make building custom storefronts and marketplaces easy.









# **Enterprise and the API**

The next question that comes to mind: why hasn't this API-centric approach that is so common in high-growth tech businesses been more broadly adopted by enterprises? And why don't more enterprise companies make APIs open to their internal solutions—allowing scale-ups, customers, and other businesses to leverage enterprise applications for rapid growth?

Enterprises, of course, are more complex organizations than startups, and that's especially true of enterprises that have been in business longer. Many still rely on legacy systems that were developed before the rise of the API economy, which means many enterprise companies don't have an easy or fast way to create APIs from their existing technology. For Uber, many of the APIs needed to compose the app—mapping, for example—already existed. But, for most enterprises, the APIs needed to compose compelling apps often don't exist, either because data is locked in on-premise applications or it is too costly and time-consuming for developers to code thousands of APIs from scratch.

Enterprises need a way to create APIs from existing integrations without replacing the applications or connections that already work, so they can begin to unlock the value of IT systems, compose value-added applications, and rapidly open new revenue channels.

Integration platforms understand enterprise data and have secure access to on-premise, Software as a Service (SaaS), and cloud apps. A modern Integration Platform as a Service (iPaaS) that combines two sides of the same coin—integration and APIs—can help enterprises create APIs from existing connections, enabling them to unleash the power of existing systems, amplify SaaS and cloud applications, and even infuse artificial intelligence into all business processes and decision—making.

By using a single API integration platform, enterprises can automatically create APIs based on existing integrations with back-end systems, as well as publish those APIs internally or externally and manage integrations and APIs—all in one place.

With the ability to create, publish, and manage APIs in one platform, enterprises can begin to use IT resources, developers, and technical business users to compose new applications, just like the Ubers of the world—and make good money doing it. Composing applications versus writing code will ignite enterprise innovation, and it all starts with integration and APIs.













# Accelerate Innovation and Unlock the Value of IT Systems Through APIs

APIs are key to accelerating innovation and can be used in many ways.



Consume. Although most companies consume APIs on a regular basis, integrating them to create a single view of data is still a huge challenge. SaaS apps, for instance, use APIs to communicate information within the app, but connecting the APIs in meaningful ways to existing apps and services that aren't SaaS, or even other SaaS apps, can be complicated and need constant IT monitoring.



Create. Creating APIs is where most enterprises get stuck, because creating an API from scratch has traditionally been the domain of developers furiously writing code. This makes API creation difficult, costly, and time-consuming. It also means every API is unique and not necessarily built to industry standards, making it just as difficult to consume by other partners, customers, and internal resources.



Publish. Enterprises can publish APIs internally behind the firewall or externally to customers and partners. Publishing APIs opens the door to new revenue channels, increased customer retention, faster time to market and the ability to attract new partners to your ecosystem.



Manage. It's important for companies to manage all their integrations as well as APIs in one place. Having one place to create, manage and monitor APIs sets up companies to leverage them as strategic elements of business success.



Monetize. Once an API is created and published externally, it's possible to monetize it. This means charging directly for an API, usually by call or via a premium subscription, and—most importantly for the enterprise—adding incremental revenue.



Compose. Composing new applications or solutions is possibly the most transformative use of APIs. By leveraging existing technology and newly-created APIs, enterprises can open new channels faster and easier than ever before.











# Many enterprises are already using APIs to their benefit. Here are a few examples of how enterprises can unleash the transformative power of APIs and integration.

1. Real-time language translation to improve customer service, reduce operating costs, and beat the competition by bringing differentiated ideas to market faster.

Global call centers rely on customer service reps who can speak multiple languages. These highly specialized positions are expensive and difficult to fill and create the need for multiple office locations—not to mention the fact that multilingual customer service reps aren't always capable of answering challenging technical questions.

By using an API integration platform that can automatically call an AI API to translate communications in real-time into the language of a service or support and reply back to the customer's language, call centers can centralize operations, reduce staff costs, and differentiate from the competition—in one step.

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API PLATFORM

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EXAMPLE 1 | Real-time language translation

### 2. Attract a new ecosystem of electronic trading partners for increased revenue.

Retail and ecommerce organizations have incredibly valuable demographic, purchase, and behavior data that can be exposed to partners via an API.

In this example, the API is the IP, so by publishing it and exposing it for partners to consume, companies can create new services, which will attract new partners looking for more valuable services and can generate revenue sharing, upsell, and cross-sell opportunities.











### 3. Close more deals faster by automating sales workflows and consolidating data.

An API integration solution for sales teams can automate processes and bring together data from any source to create better, more actionable prospect and customer insights.

Integration eliminates time-consuming busywork, such as logging sales activities, while APIs infuse intelligence, including information to help better prioritize leads, recommendations to help close deals faster, and important news and data that affects specified customers, into the entire sales process.

### 4. Expose on-premise systems as APIs for a competitive advantage and to further monetize IT assets.

By publishing APIs that can be consumed by their partners to provide value-added products and services to customers, companies can further monetize their IT assets. For instance, a financial services firm can share information on its high-net-worth customers with its investment banking partner so that they can pitch appropriate investment products (as long as the customer has given permission to share their personal information). The same information could also be used by a partnering credit card company to market attractive credit card options suited to the individual's income and lifestyle.

Information is shared securely by creating and publishing APIs or exposing relevant customer information as a microservice using an API integration platform. In this example, the financial services company can not only provide value-add to its customers but also monetize their existing customer data by sharing information with partners and third-party companies.

# 5. Maximize tech investments and IT time to increase ROI and reduce risk by leveraging existing technology investments.

Insurance companies rely on quotes to generate business, but as "compare apps" and aggregation websites become the easier, more convenient quoting option for consumers, insurance companies without an external API to talk to these new options will be left behind.

With an API integration platform that already has access to the quoting engine and data needed to generate accurate quotes, insurance companies can easily create APIs to expose to compare apps, as well as compose value-added apps like additional coverage estimates for customers and revenue-generating apps like real-time process updates for partners.

APIs created from existing technology investments allow companies to address rapidly changing technology and consumer behavior while simultaneously generating new avenues of growth and additional revenue.





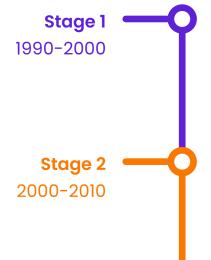






# The History of API Transformation

Over time, APIs have transformed not just the companies who use them, but entire industries. To understand the challenges enterprises face, it is important to examine the evolution of integration and the pivotal role APIs play in both how businesses are run and how they innovate.



# Enterprise Application Integration (EAI) and the "Bus"

In the beginning, all data lived on-premise, tucked away behind corporate firewalls. As specialized applications first came to market in the 90s—for example, SAP for back-office data or Siebel for customer data—it was critical to connect these systems and databases in a consistent and repeatable way for business processes to run smoothly. Point-to-point integrations through EAI solutions and "connect once, connect anywhere" Enterprise Service Buses (ESB) were born. For nearly a decade, they worked well and integration was solved... until, that is, applications started to emerge beyond the enterprise firewall.

# Software as a Service (SaaS)

When SaaS applications like Salesforce and NetSuite came on the scene in the late 1990s, companies that had invested heavily in their EAI and ESBs hit a roadblock. These legacy integration technologies remained stuck behind the firewall alongside the systems they had connected. Reaching securely outside the firewall to these new SaaS apps proved difficult. To fix this problem, a new breed of SaaS integration solutions was developed to connect SaaS apps to on-premise systems.

But having invested heavily in existing on-premise systems, many enterprises weren't quite ready to venture out beyond the firewall. Integrations with SaaS applications remained focused on direct, point-to-point connections—Salesforce to SAP; NetSuite to Siebel, for example. However, a seismic shift was about to occur.

# **Stage 3** 2010-2022

# APIs & the rise of Integration Platform as a Service (iPaaS)

While SaaS opened up a whole new frontier, it has been the rapid introduction and shift to the massive on-demand cloud computing platforms of Amazon AWS, Google GCP, IBM's SmartCloud, and Microsoft Azure that has upended how apps and services are created and run. While these cloud platforms were initially utilized for cost-effective storage, today the majority of new apps and services are launched and run on these vast clouds.

This seismic shift from on-premise to the cloud has demanded that today's modern enterprise have a clear, cloud-first strategy. Throughout its evolution, integration has lived where the critical mass of applications are. And, as new technologies are increasingly built on the cloud, modern iPaaS solutions must also be built on the cloud to connect on-premise, SaaS, and cloud applications through APIs.

# Stage 4 Today's landscape and the future

## **Machine Learning and Artificial Intelligence**

Digital transformation doesn't end simply by connecting the cloud. Artificial Intelligence and machine learning have come of age in the cloud, and the incredible promise of these technologies is now more accessible than ever. A modern iPaaS solution, born on the cloud, can infuse ML and Al into any business process via APIs and is flexible and scalable enough to adapt as the technology changes.

For example, imagine you could instantly translate support tickets from any language into English in real-time, enabling a single customer support representative to service anyone worldwide. Or, what if you could infuse sentiment analysis into social media channels, allowing representatives to prioritize and proactively address customer concerns based on their attitudes.

The key to enterprise-level API creation is leveraging an API integration platform. APIs have become an essential tool for companies to integrate and exchange data. The number of developers using APIs for integration grew by 61% in 2022 alone, which is only set to continue in 2023. Every company will need an API-first strategy to succeed and stay competitive.











# Five API trends that will dominate in 2023 and beyond

Already on an upward trajectory, the API landscape is expected to evolve rapidly in 2023, and businesses that invest in robust API strategies are likely to reap significant benefits. Here are five trends that will prove specifically important in the next year and beyond:



### Companies will invest in APIs to further their automation journey.

Businesses are now looking to finally eradicate their time-consuming and cumbersome manual processes. While the continued evolution of APIs will focus on the developer experience (DX), automation and increasing investment in low-code/no-code technologies will enable businesses to streamline their systems and rely on non-technical employees to easily devise and manage workflows and apps in one place.



## Al has the power to transform every industry.

By improving data gathering, synthesis, and identification, AI can facilitate automated decision-making, making businesses better for customers. But many companies lack the resources to develop and integrate AI/ML. Expect to see more cost-effective, plug-and-play AI APIs, which can be easily integrated into the enterprise and managed through an iPaaS.



## API marketplaces will gain momentum.

A more comprehensive range of API platforms and software will become available as companies attempt to monetise more parts of their business. Previously more associated with specific companies, external marketplaces will become more commonplace with a growing range of cloud-based and "Serverless as a Service" offerings. Developers and non-technical employees now have the ability to build and run applications without worrying about the underlying infrastructure.



# Security is going to be a strong focus in 2023 and beyond.

As API usage grows, so does the need for robust security and privacy measures. A hacked API can mean a massive breach, as businesses use APIs to connect their services, transfer large amounts of data or expose elements of their own business to other companies. According to market analyst Gartner, most web-enabled applications are more likely to be attacked through exposed APIs than through the user interface.



# More enterprises will seek to unlock value by exposing their own APIs.

Many companies are failing to exploit the full value of their business by not providing APIs to their data, technology, or services. As market conditions impact the enterprise and pressure, expect to see more enterprise companies analyze their market offer and open up APIs that create innovative new revenue streams, sometimes outside their core market.









# **Next Steps in the API Transformation Journey**

For enterprises, the power to accelerate innovation with APIs is here now, but defining an API integration strategy first is key. Here are a few steps to consider:

### 1. Identify your current infrastructure.

Most enterprises are running hybrid architectures, some in the cloud, some in SaaS and some on-premise. Before defining an API strategy, it's important to know how or if all of these systems and apps fit together and how or if the company is gaining real value or return on investment from them.

### 2. Build your vision for where you want to take your business.

The possibilities are almost endless, but part of defining an API integration strategy is knowing what business goals and targets you want to achieve beforehand and how creating and publishing APIs can help accomplish them. For instance, are you looking to create new channels of revenue through your partner ecosystem? Or are you looking to accelerate innovation with new offerings that your team can create with access to all your business data via an API? Perhaps you're looking to provide customers with a mobile experience or to infuse intelligence, such as image recognition, into your business processes. The type of outcomes you're looking for in your business will determine your API integration strategy.

#### 3. Determine the required capabilities of a platform to achieve these outcomes.

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### 4. Integration, like APIs, is fundamentally about partnership

The last thing to keep in mind when determining your API integration strategy is to consider the partners that can accelerate your progress—from providing an iPaaS and no/low code tools to advising you on your integration strategy, deployment process, and even optimizing the monetization of your APIs.

If you'd like to discuss your API and integration strategy or want to learn more, contact one of our API integration experts here.















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