

NO-CODE

API ECOSYSTEM DESIGN & DEPLOYMENT

2024



MESSAGE FROM OUR LEADER

“ Over the past 3-years, I have noticed my vocabulary changing. On a daily basis, I find myself and my team discussing the finer points of “UX” and “User-Journeys” as opposed to “C++” and “User-Logs”.

After almost 40-years as a software engineer, and 20+ years focusing on API Ecosystem design, it is (still) exciting for me to see the ubiquity of API use in our modern, digitally-driven, world.

The challenges we face in API Ecosystem design are no longer purely of a technical nature. Many of the challenges and opportunities lie very much in the business space; and it is now widely understood that many old business practices, processes and strategies must evolve or risk decline into irrelevancy.

It is clear to me from both observing the marketplace and from our own experience within Ostia that business strategy must drive technology. Though while virtually every company (99%) runs on APIs, very few have turned them into a strategic lever.

Effectively defining and implementing your strategy is key to the growth of both your API Ecosystem and your revenue.



I hope you enjoy reading this Report as much as we enjoyed writing it.



John Power, CEO, Ostia

TABLE OF CONTENTS

CONTENTS

01

Introduction

02

The API Economy

Value

API Revenue Models

Maturity

08

Accessing the API Economy

The Jeff Bezos API Mandate

The Analysis

14

Business Strategy

Digital Value Formula

Digital Strategy Formula

Mindset

Collaboration

Standardisation

20

No-Code API Implementation

Overview

No-Code Building Blocks

Standards Team

Design Teams

UX+

INTRODUCTION

Every digital resource, capability, and experience you encounter through your computer and mobile phone is API-driven.

APIs enable the creation of digital ecosystems both within and beyond the boundaries of organisations that extend software and business development opportunities and offer new channels to market.



Figure 1: API Ecosystem Abstraction

APIs and API-related implementations generate approximately 33% of revenue for organisations based in the U.S. (according to the 2024 Connectivity Benchmark Report, by MuleSoft). This figure has been stable over the past three years

It is also estimated that 30% of global economic activity will be mediated within ecosystems by 2025, so the importance and prevalence of APIs look set to continue to rise (McKinsey and Company).

In this report, you are going to examine the fundamentals of the API Economy, the core requirements to access and benefit from it using effective business strategy, and you will also see how No-Code processes enable results that are compatible across entire API ecosystems.



THE API ECONOMY



APIs and API-related implementations generate approximately 33% of revenue for organisations based in the U.S.

MuleSoft

APIs play a key role in the digital and business strategies of modern companies.

They powered the shift from monolithic on-premise software to cloud and microservice-based applications and facilitate the development of ecosystems that open up previously inaccessible business opportunities:

- API providers enable third-party companies to build innovative solutions
- API consumers can access data, software, and services, to extend the functionality of their products
- End users reap the benefits of enhanced user-experience and services.

(API consumers and end users can be internal or external to your organization.)

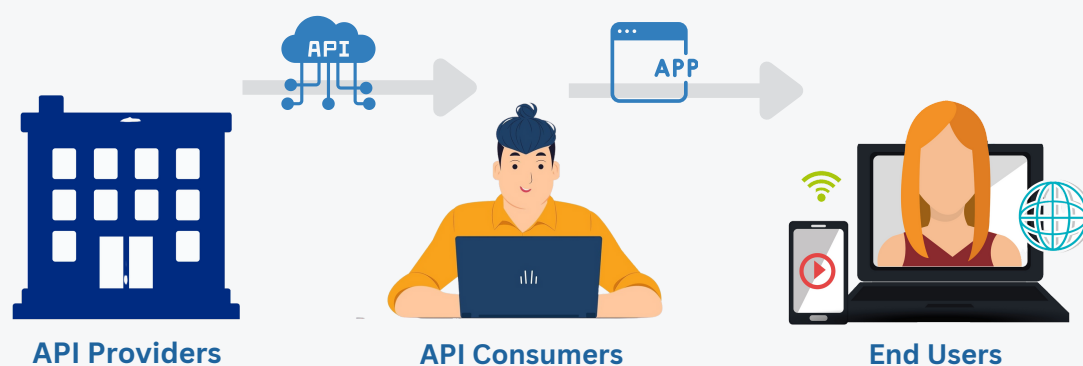


Figure 2: The API Value Chain

The interoperability and composability of APIs allow the quick and secure flow of information and functionality between software, businesses, and end users; creating a new and increasingly important channel for doing business in a digitally transformed world.

Effective API design and deployment can thereby drive innovation, provide greater access to market, increase partner and end user engagement, and create competitive advantage.

The importance of APIs to the growth and success of businesses is encapsulated in the widely used term “The API Economy”.

The transfer of value between participants is at the core of The API Economy; the value in question relates to data, functionality and, ultimately, end user utility.

VALUE

Traditional software design results in siloed information and restricted functionality which ultimately limits the potential utility of, and the audience for, services.

An API-first approach (think cloud and microservice based applications) frees up previously siloed data and functionality and opens the possibility to create enhanced services that offer greater utility to a wider potential audience.

Whether digital native or in the process of digital transformation, companies adopting an API-first approach can access significant benefits:

SPEED

APIs allow companies to pursue opportunities more quickly by supporting faster development processes. For example, where a company wishes to create a new application, it does not have to build its own mapping, payment, or communication tools. It can incorporate such functionality using third party APIs.

AGILITY

APIs enable far greater service implementation agility. Each service provided through an API stands alone and is independent of the others. This means that the underlying software for any component part can be easily changed or modified so long as the relevant API(s) remains constant; the alterations to the infrastructure behind the endpoint should not be noticed by the applications that rely on that API.

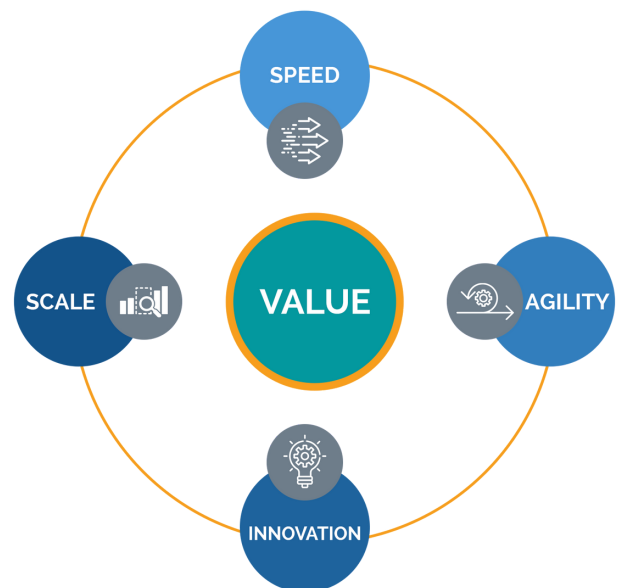


Figure 3: API Value

INNOVATION

The increased speed and agility, combined with the reduction in cost and complexity offered by API-first development processes has heralded continuous innovation and development. APIs enable wide interoperability - as opposed to tight integrations - which provides more possibilities for developer and business creativity.

SCALABILITY

There is often a gap between what a business needs and what IT teams are able to deliver (known as the IT delivery gap). Through the ability to reuse APIs, developers can scale delivery and close the gap between the needs and wants of the business and the ability to effectively deliver software/services.

So far our description relates to the benefits that accrue to organisations that choose an API-first approach for software and service design. Now we will look at the monetisation of APIs and the accrual of direct value in the form of revenue.

API REVENUE MODELS

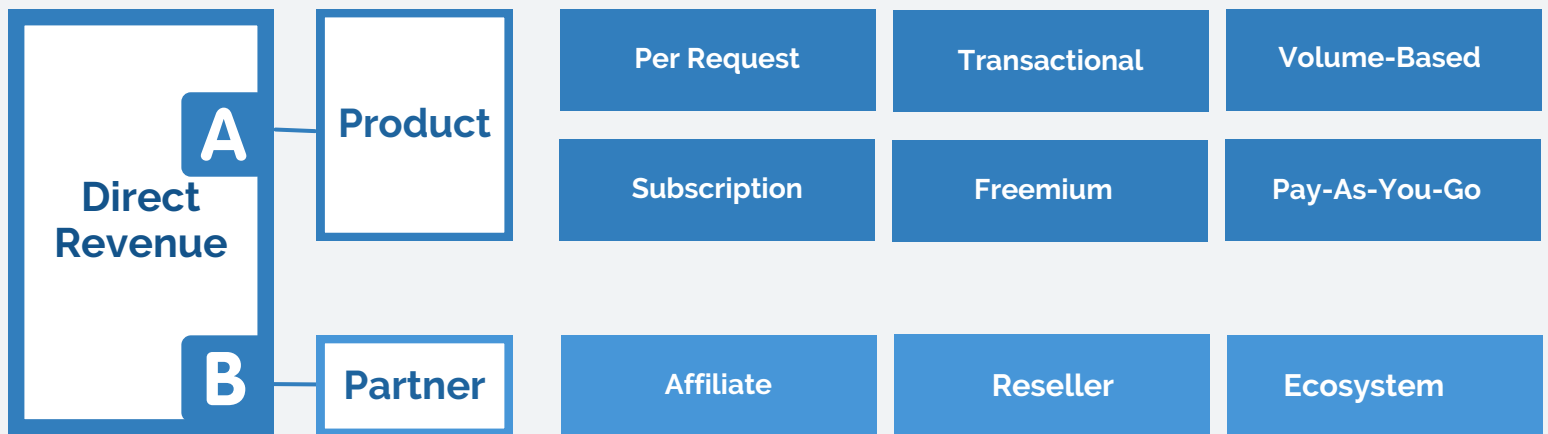


Figure 4: API Revenue Models

Direct monetisation of APIs is achieved in two main ways: by productising/commoditising the APIs and by entering into revenue share agreements with partners.

A. PRODUCTISING / COMMODITISING APIS

There are many methods available to monetise/productise the functionality and data of APIs. Six of the most widely used methods - often used in tandem - are as follows:

- #1 Per Request**
The API contains a fee per call. For example, \$0.0079 to send a message
- #2 Transaction-Based**
The API contains a fee per payment processed. For example, 2.5% + 15c on each transaction.
- #3 Volume-Based**
Volume discounts based on the number of API calls purchased. For example, the fee may be USD100 for up to 10,000 calls and USD150 for up to 20,000 calls.
- #4 Subscription**
Pricing based on tiered API subscription plans. E.g., Offering a Standard Plan, a Business Plan and an Enterprise Plan based on defined cost/usage packages. Upsell: APIs can also be used to upsell where part of a larger product offering that holds several levels of subscription. API access is included at a higher subscription tier as an incentive for customers to adopt the more expensive tier.
- #5 Freemium**
Free usage up to a given threshold to encourage usage. Paid usage begins after the threshold is exceeded.
- #6 Pay-As-You-Go**
Flexible pricing based on usage. Often implemented in conjunction with Freemium and granular Volume-Based discounts.

B. PARTNER-BASED REVENUE SHARE

It is also possible to drive revenue by entering into revenue share agreements with partners. There are 3 main types of partner-based revenue share business models that can help expand market reach and obtain new customers:

#1 Affiliate

In this model, affiliates utilise an API to showcase the products and services of the API provider and receive a small share of revenue in return.

The revenue share received is usually based on criteria such as sales, conversion rates or click throughs (typical affiliate network criteria). API affiliate programs are usually self-service and come with standard terms (an off-the-shelf agreement, not negotiated).

Example: ebay developer program

#2 Reseller

In this model, partners resell the actual APIs themselves to third parties.

The commission that resellers earn on the sales is often negotiated and typically depends on criteria such as the reseller's brand, expertise, profile and network.

Example: RapidAPI Marketplace

#3 Ecosystem

In this model, partners resell entire applications, which may hold many embedded APIs - think Infrastructure-as-a-Service, or App Marketplace. As this can involve complex integration work, terms are most often tailored on a per project basis to reflect the nature of the work involved.

Example: Salesforce AppExchange

MATURITY

Until relatively recently only developers deep within an organization were fully aware of the use and importance of APIs. However, understanding of their importance has certainly spread from the backroom to the boardroom.

The maturity level of API usage on a company and global level can be measured by the effective involvement of business stakeholders in API strategy.

COMPANY LEVEL

Typically, companies begin with an ad hoc developer-led approach to the development and deployment of APIs. The focus is on technical implementation without any clearly defined business goals.

API usage is considered more mature where strategy is devised and promoted by business leaders, focussed on achieving business goals and new channels to market, understood across the entire company, and where results are repeatable.

GLOBAL LEVEL

An international survey by MuleSoft and Deloitte Digital recorded that 30% of organisations had a leadership mandated company-wide API strategy in place in 2023. This represents a very steep increase from the figure of 15% recorded in 2021, though it very clearly indicates that there is a lot of maturing still to do in this space.

It is now over 20 years since what has become known as "The Jeff Bezos API Mandate" placed APIs firmly at the centre of Amazon's growth strategy. A move seen by many observers as a seminal moment in Amazon's development.

APIs not only allowed Amazon to build innovative products within a short timeframe but also to shift from a product business model to an even more scalable ecosystem - and platform business model.

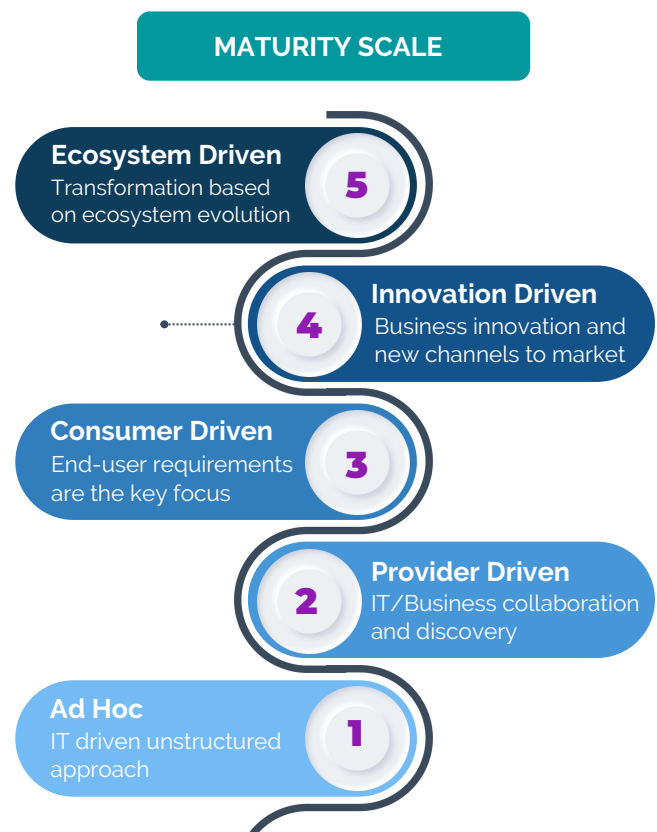


Figure 5: API Maturity Scale

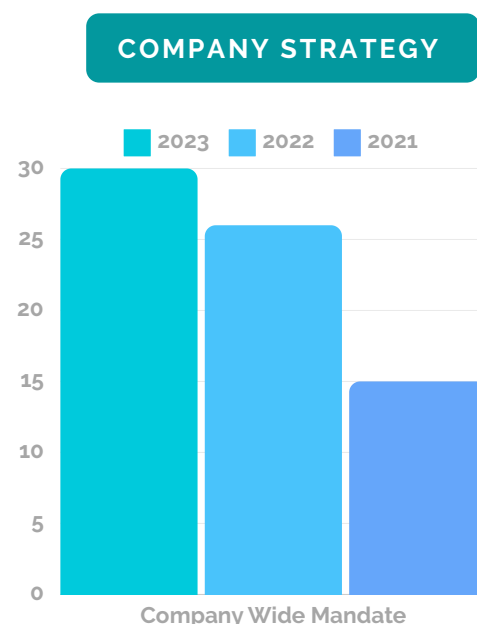


Figure 6: Survey Results



ACCESSING THE API ECONOMY

”

The moral of the story. I chose a half measure when I should have gone all the way. I'll never make that mistake again. No more half measures, Walter.”

Mike Ehrmantraut, Breaking Bad

APIs offer accessibility and connectivity at a level never before achievable. They facilitate a consistent approach for collaboration of software development and business innovation both inside and beyond the boundaries of your organisation.

INTERNAL

Most organizations consist of departments that are responsible for their respective business capabilities. These capabilities can be reimagined as API-led digital services that are easily consumable and reusable across the entire organisation ... and beyond.

EXTERNAL

The provision and consumption of external APIs offers an expansion of your ecosystem for software development and business innovation that also provides access to a potentially far greater end user audience.

END USER

APIs enable you to place your focus firmly on reaching and servicing the end user through your own products and services and those created and delivered in collaboration with other participants of the API ecosystem.

HOW TO BENEFIT?

Regardless of your product, target audience, value chain or business model, the one non-negotiable factor to access and realise optimum returns from the API economy is the adoption of an API-first approach.

However, adopting an API-first approach comes at a cost. It requires commitment, investment and the transformation of both business and software development practices. As such, executive buy-in and leadership are the key ingredients to successful adoption.

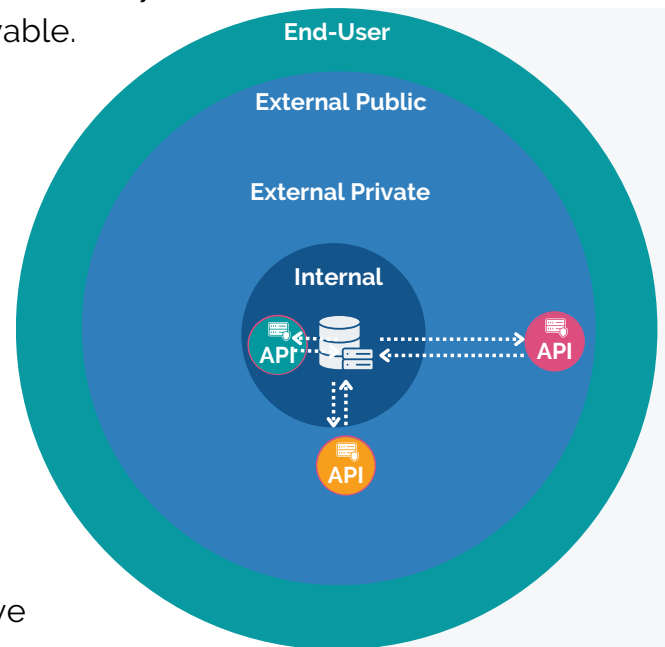


Figure 7: API Ecosystem

THE JEFF BEZOS API MANDATE

Although written over 20 years ago, "The Jeff Bezos API Mandate" (aka The Amazon API Mandate), captures the key foundational requirements of the modern API-first approach and the level of commitment required for successful adoption.

The mandate itself was triggered by the rising operational costs within Amazon due to a lack of a consistent process and approach for exchanging data and capabilities between the different departments. It reflects the understanding that APIs need a network effect to produce the best results (internally and externally) and offers a clear and simple dictate stipulating that APIs are mandatory.

FROM: JEFFBEZOS

SUBJECT: API MANDATE

Hi All,

Please read this memo very carefully....

1. All teams will henceforth expose their data and functionality through service interfaces.
2. Teams must communicate with each other through these interfaces.
3. There will be no other form of inter process communication allowed: no direct linking, no direct reads of another team's data store, no shared-memory model, no back-doors whatsoever. The only communication allowed is via service interface calls over the network.
4. It doesn't matter what technology they use. HTTP, Corba, Pubsub, custom protocols - doesn't matter.
5. All service interfaces, without exception, must be designed from the ground up to be externalizable. That is to say, the team must plan and design to be able to expose the interface to developers in the outside world. No exceptions.

Anyone who doesn't do this will be fired.

Have a nice day!

Figure 8: The Jeff Bezos API Mandate

THE ANALYSIS

Let's examine each of the requirements outlined in the Mandate:



All teams will henceforth expose their data and functionality through service interfaces.

The first requirement is the cornerstone of an API-first approach. Accessibility, speed, agility, innovation, and scalability all emanate from this foundational principle that access to data and functionality is to be provided through an API.

It creates an environment where design is always end user focused and the resulting API(s) will be available for both internal and external re-use on existing projects and/or ones that are potentially inconceivable at the time of development.

It is very important to "eat your own dogfood". A deep understanding of internal API design, development, deployment, and use is a must to enable further expansion into the API economy using private and public external APIs.



Teams must communicate with each other through these interfaces.

Where APIs are well designed, defined and documented, they can be easily leveraged. Stipulating that all inter-team communication must be done through APIs provides a necessary impetus to ensure that initial implementation is carried out effectively.

The idea is that by publishing an API, each team clearly communicates what it has built and what it offers, and other teams can build on that. This establishes an API product mindset, with all products being designed as consumable commodities which in turn promotes consistency of approach and simplicity.

This requirement applies to all teams within the organisation - not some, not most, but all. The buy-in and participation of the whole organisation is needed to gain the requisite results.

THE ANALYSIS (CONT'D)

3

There will be no other form of inter process communication allowed: no direct linking, no direct reads of another team's data store, no shared-memory model, no back-doors whatsoever. The only communication allowed is via service interface calls over the network.

Point 3 could simply state - "read point 2 again". However, additional emphasis was likely considered necessary as APIs are not a priority on all projects from a technology perspective.

Even where not a priority, it is important for the success of the overall business strategy to adopt an API-first approach. No exceptions in design or in development, and no exceptions in inter-team communication.

This ties into the short-term pain, long term gain ethos. Commitment to the API-first approach requires discipline and diligence throughout the adoption process.

4

It doesn't matter what technology they use. HTTP, Corba, Pubsub, custom protocols - doesn't matter.

In point 4, the focus again is on the development of an API product mindset. Each API should be designed around creating the most value and best experience for the end user.

Even a key consideration such as which technology to use is of secondary importance. If development is based around technology rather than purpose, it will inevitably introduce limitations and restrictions on interoperability, longevity, and audience size.

Remaining technology agnostic helps to future-proof business and takes account of the fact that underlying technologies and architecture can become obsolete.

5

All service interfaces, without exception, must be designed from the ground up to be externalizable. That is to say, the team must plan and design to be able to expose the interface to developers in the outside world. No exceptions.

The final requirement again places emphasis on developing an API product mindset which ensures that initial design, documentation, and deployment is carried out effectively. Where an API is made for external consumption, it must be self-describing and have a clear, specific purpose that can be easily leveraged by third party organisations.

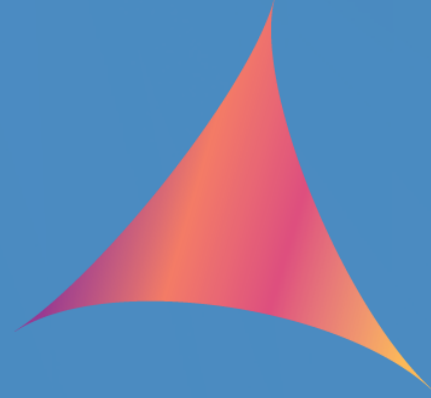
The express requirement that all APIs be externalizable also looks to the future, outside the boundaries of the organisation, to facilitate the expansion of the API ecosystem and greater access to the API economy.

!

Anyone who doesn't do this will be fired.

Motivation and clear communication are always required to implement an ambitious, organisation-wide plan. Having everyone align to an API-first approach and to achieve the same objectives and business outcomes is a herculean task. While the motivational tactic adopted here is on the extreme side, and not to be recommended, it does emphasise the importance of the requirements, and the mandate, to the success of the company.

When business capabilities are buried within a monolithic architecture that is accessible to only a handful of people, these people become the gatekeepers of innovation and essentially become a bottleneck to change and innovation. The API-first approach adopted by Amazon reduced the complexity developers faced on a day-to-day basis and kept the data flowing through the organisation. This resultant data flow and ability to collaborate and innovate was essential to meeting customer needs faster than the competition and to overall business growth.



API BUSINESS STRATEGY

”

If the rate of change on the outside exceeds the rate of change on the inside, the end is near.

Jack Welch

APIs are the digital surface of software services; the data and functionality that you can extract, expose, and deliver. Simply put, APIs represent the digital value of your company.

As we have seen, over 20-years ago, Jeff Bezos was one of the first to fully appreciate the business potential of APIs and he put in place an organisation-wide strategy to harness that potential value.

His strategy was to use APIs as building blocks that could be easily used and re-used within the Amazon ecosystem... and, quite presciently, to ensure that they were all suitable for external use. This technology-focused strategy is encapsulated by this formula:

Digital Value Formula

Data and Functionality

+ Interoperability

+ Composability

Capacity to Optimise and Deliver Value Through an API Ecosystem

Data and functionality, plus interoperability, plus composability represent your capacity to optimise and deliver value within your API Ecosystem. (Or more simply, your ability to adapt to a changing digital world.)

Data and functionality represent your digital value.

Interoperability allows that value to flow internally within your organisation and externally to partners, developers and end-users.

Composability allows you to mix and match digital capabilities (both internally & externally) to create tailored / personalised services.

This formula covers the fundamental technology requirements for your API Ecosystem; the ability to mix and match digital capabilities to suit evolving business needs.

While the digital value formula illustrates your capacity to adapt to a changing digital world through the interoperability and composability of data and functionality - this should not be confused with your digital strategy.

For digital strategy, you must add and prioritise User Experience.

Digital Strategy Formula

Data and Functionality

+ Interoperability

+ Composability

+ **User Experience**

Digital Strategy / Competitive Advantage

There are 3 key tracks of user experience - that encompass Total Experience (TX) - to consider when implementing your digital strategy:

1. End-User Experience (UX+)

First and foremost concentrate on the value of the end-user experience. Not simply UX/UI, rather how your service integrates into the daily lives and needs of your customers. How soon to "now" can the service be consumed and/or how closely does it match the consumers' needs.

2. Partner and Developer User Experience (DX)

Partners and developers can add great value to your API Ecosystem and the ultimate end-user experience. They are the initial 'end-user' so optimising their onboarding experience creates opportunities for both innovation and revenue generation.

3. Internal (Organisation) User Experience

Designing your API and API Implementations and expanding your API Ecosystem is a team game. Ensuring that your business and technology teams (and related) can easily and effectively collaborate is another fundamental requirement to designing your API Ecosystem and optimising end-user experience.

MINDSET



The Digital Value and Digital Strategy formulas just outlined provide a framework to define and implement your API business strategy. Sounds straightforward. Moreover, inspiration and motivation can be taken from highly successful, high profile companies that have harnessed the value of APIs.

So why is it that while virtually every company (99%) runs on APIs, very few have turned them into a strategic lever?

CONSUMPTION V. PRODUCTION

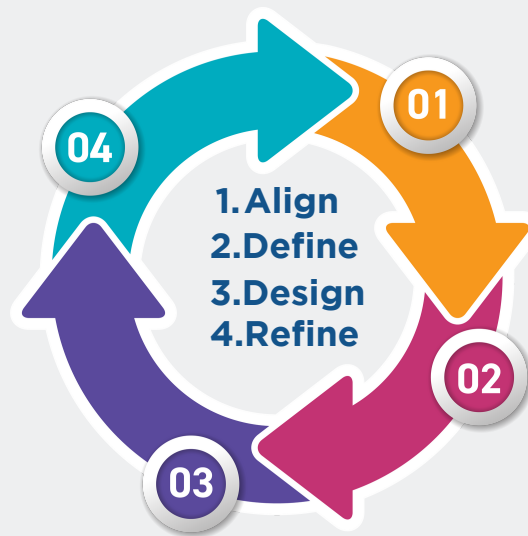
A very large part of the answer to this question is - Mindset. Most organisations focus on maintaining things as they are and protecting existing revenue streams, existing product lines and existing business processes and practices.

This 'protect what you have' approach is eminently reasonable. It reflects many years in which successful strategy placed the product/service at the head of the supply chain. It also reflects a lifetime of education that positioned the product at the centre of business planning - think the 4 Ps of Product, Price, Place, Promotion.

There is, however, a big problem with this approach. It is based on an old paradigm; one that is pre-API. APIs not only open a new channel to market (and most often a significantly larger market), they also enable real-time feedback, NextGen customer support, the opportunity to cross-sell and upsell (both directly and indirectly) and to incorporate a powerful network effect for both innovation and revenue generation.

To benefit from the API Economy thinking needs to change from production to consumption, and from the old product-based approach to a new consumer focused, user-centric strategy.

COLLABORATION



"Strategy is an integrative set of choices that positions you on a playing field of your choice in a way that you win" - Roger Martin.

People are required to both define and implement strategies. Similar to the saying "it takes a village to raise a child", it requires the close collaboration of a wide range of stakeholders to design APIs and develop an API Ecosystem.

IT TAKES A TEAM

The roles typically involved in API Design sessions may include, but are not limited to the following:

- Product Managers
- Business Analysts
- Subject Matter Experts
- API Designers and Architects
- Technical Leads
- Standards Teams
- Infrastructure and Operations
- Security Teams
- Technical Writers
- Marketing and Legal

To fully incorporate the needs of customers, it is also advisable to involve them (external developers/partners and end-users) in the design and deployment process as early as possible.

As you can see, developing an API Ecosystem is very much a team game and one that involves continuous innovation and continuous design. Initial ideation and innovation predominantly comes from the efforts and skills of your team. However, ultimately, it is desirable to cultivate a situation where the evolution of your API Ecosystem is driven by changing usage patterns in API and service consumption.

STANDARDISATION

OPEN BANKING



There is growing awareness that your API Ecosystem does not stop with your own APIs. The network effect that promotes innovation and revenue is optimised where there is seamless interoperability and composability across third party providers, partners and, indeed, industries.

There are many collaborative technology-led, industry-led, auditor-led and regulatory-led initiatives looking to promote and standardise the use of APIs. And it is very important to keep up to date with these standardisation efforts in order to safeguard your ability to compete (and collaborate) in the marketplace - both now and in the future.

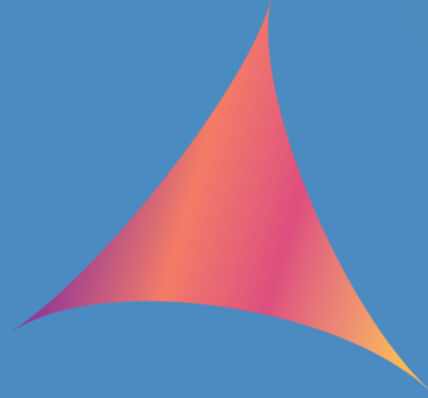
PROJECT-APPROACH V. STANDARDISATION STRATEGY

When it comes to maintaining standards in API design and deployment, many organisations use a project-based approach rather than adopting an organisation-wide strategy. Utilising such a project-based approach can have a seriously, deleterious impact on your capacity to optimise and deliver value through your API Ecosystem.

A key first step in promoting the standardisation of design and deployment across your API Ecosystem is to appoint a Standards Team: a multi-disciplinary team who is tasked to ensure that optimal (templated) standards are used in all APIs and API implementations throughout your organisation/industry.

This is optimally achieved where the same team:

- devises the API Standards/Guidelines for use across all projects
- tracks all key standardisation initiatives
- audits all APIs and API Implementations on an organisation-wide basis
- monitors and reports on the efficacy of API business strategy



NO-CODE IMPLEMENTATION

//

Everything should be made as simple as possible, but not simpler.

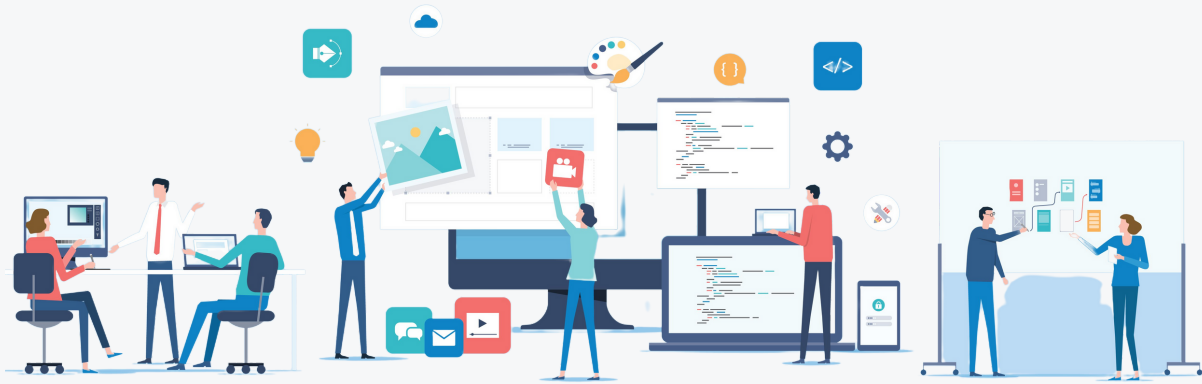
Albert Einstein

NO-CODE

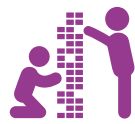
Ostia's No-Code SaaS Service is designed to simplify and improve enterprise-level API Ecosystem design and deployment.

No-Code building blocks enable the standardisation of API Implementation across organisation ecosystems and promote interoperability and composability.

No-Code configuration facilitates greater collaboration across internal and external stakeholders with varying levels of technical knowledge - from technology architects to business leads.



SERVICE HIGHLIGHTS



Standardise and govern development practices across your organisation using Field Templates - the core building blocks for API design.



In 1 minute - rather than 15 to 20 days - you can create your baseline API Implementation. You can then use No-Code configuration to fully design and test your business case.



Effective collaboration across business and tech teams (and partners) is facilitated through No-Code configuration and an intuitive user interface.



Deploy all your environments - Sandbox, Testing and Production - using the same configuration to ensure consistency of experience for partners & developers.



Greatly reduce your go Go To Market time using a service that facilitates continuous innovation & design. Your ability to adapt quickly is vital to competitive strategy.

NO-CODE BUILDING BLOCKS

05

API Ecosystem

Your Organisation's complete portfolio of Digital Capabilities / Digital Assets

03

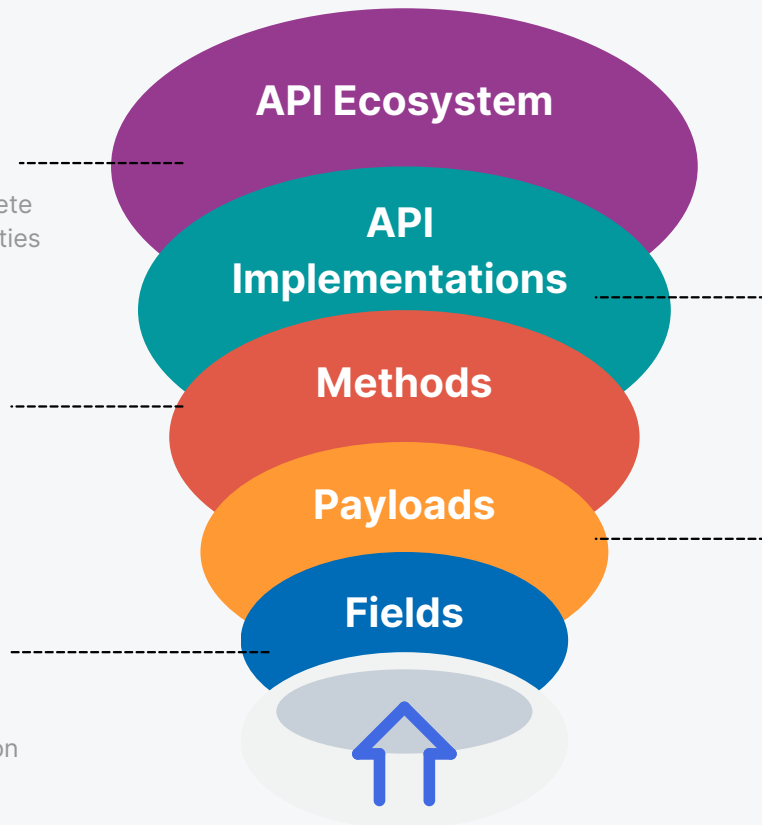
Methods

Post, Put, Get, Delete,...

01

Fields

Name, Format and Validation Rules



04

API Implementations

Package of Digital Capabilities that represent Digital Assets.

02

Payloads

Parameters, Request Body, Data Object, Response Body, Errors

FIELDS ARE THE BUILDING BLOCKS OF PAYLOADS

Creating 'Field Templates' allows you to ensure design and deployment consistency across your entire organisation. Field templates are the building blocks of Payloads and, indeed, are the core building blocks of your API ecosystem.

PAYLOADS ARE THE BUILDING BLOCKS OF METHODS

Within the service, by processing an OpenAPI Specification (OAS) document you can create a baseline replica of any existing or proposed API Implementation. The constituent Payloads are automatically configured using the Field Templates.

METHODS ARE THE BUILDING BLOCKS OF API IMPLEMENTATIONS

Each API Implementation consists of a number of Methods. Again these are automatically configured on processing the OAS Document using the templated fields and baseline Payload configuration.

API IMPLEMENTATIONS ARE THE BUILDING BLOCKS OF API ECOSYSTEMS

Each API Implementation represents your organisation's digital capabilities. These digital assets are the building blocks of your API Ecosystem and when combined represent your digital asset portfolio - which can be mixed, matched, and tailored according to your evolving business needs..

NO-CODE BUILDING BLOCKS

05

API Ecosystem

Your Organisation's complete portfolio of Digital Capabilities / Digital Assets

03

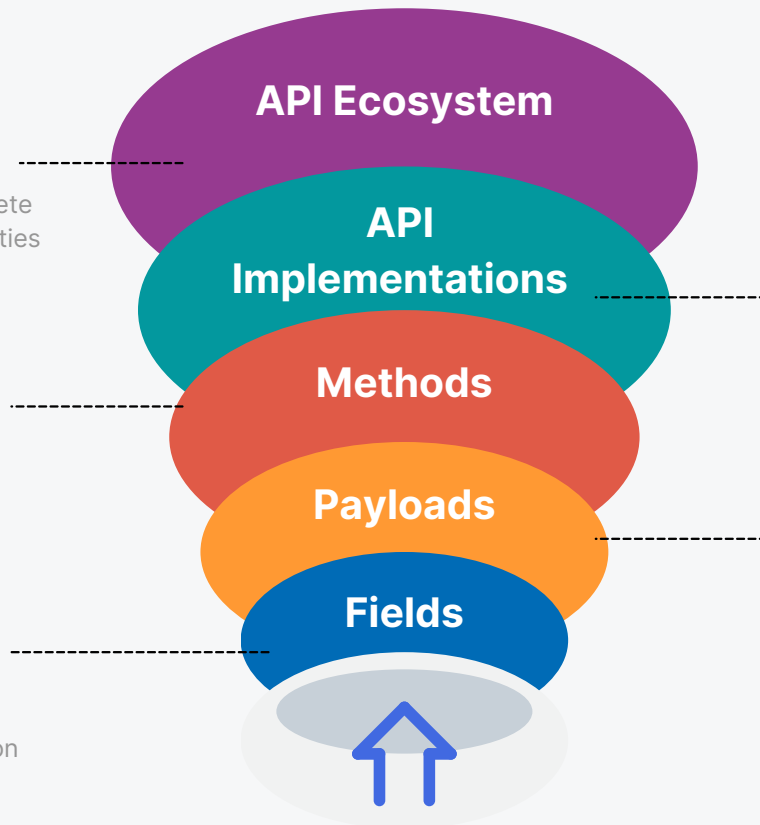
Methods

Post, Put, Get, Delete,...

01

Fields

Name, Format and Validation Rules



04

API Implementations

Package of Digital Capabilities that represent Digital Assets.

02

Payloads

Parameters, Request Body, Data Object, Response Body, Errors

FIELDS ARE THE BUILDING BLOCKS OF PAYLOADS

Creating 'Field Templates' allows you to ensure design and deployment consistency across your entire organisation. Field templates are the building blocks of Payloads and, indeed, are the core building blocks of your API ecosystem.

PAYLOADS ARE THE BUILDING BLOCKS OF METHODS

Within the service, by processing an OpenAPI Specification (OAS) document you can create a baseline replica of any existing or proposed API Implementation. The constituent Payloads are automatically configured using the Field Templates.

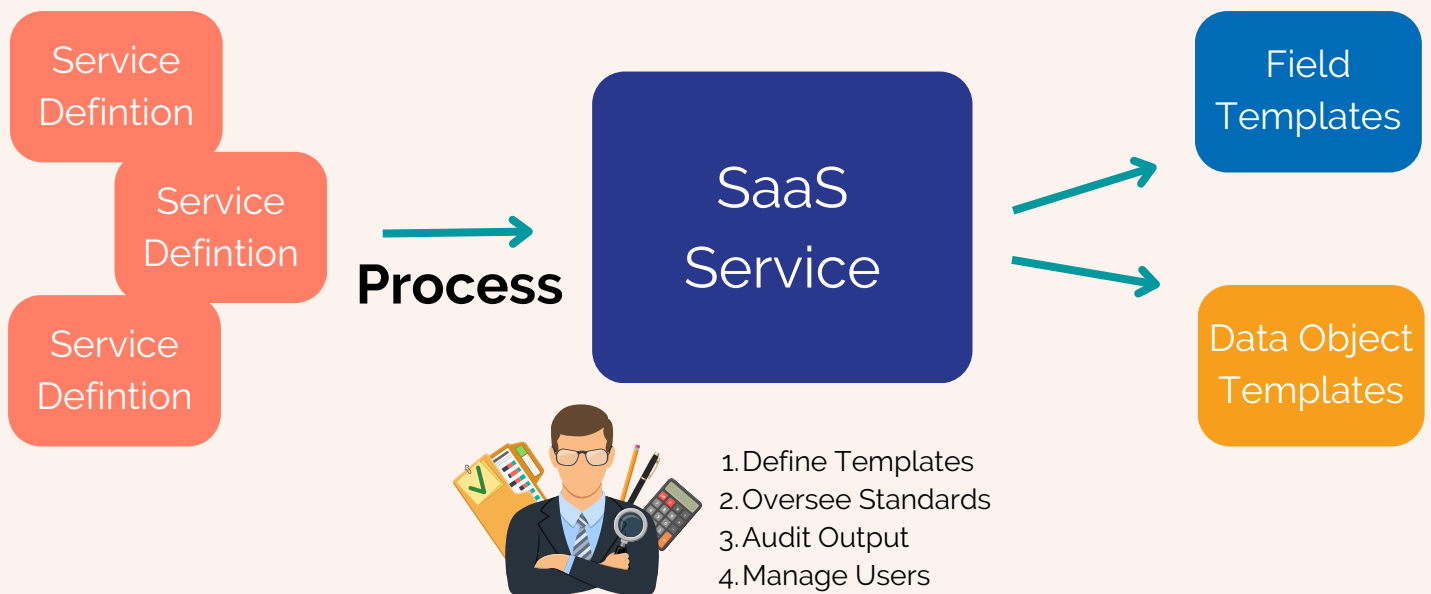
METHODS ARE THE BUILDING BLOCKS OF API IMPLEMENTATIONS

Each API Implementation consists of a number of Methods. Again these are automatically configured on processing the OAS Document using the templated fields and baseline Payload configuration.

API IMPLEMENTATIONS ARE THE BUILDING BLOCKS OF API ECOSYSTEMS

Each API Implementation represents your organisation's digital capabilities. These digital assets are the building blocks of your API Ecosystem and when combined represent your digital asset portfolio - which can be mixed, matched, and tailored according to your evolving business needs..

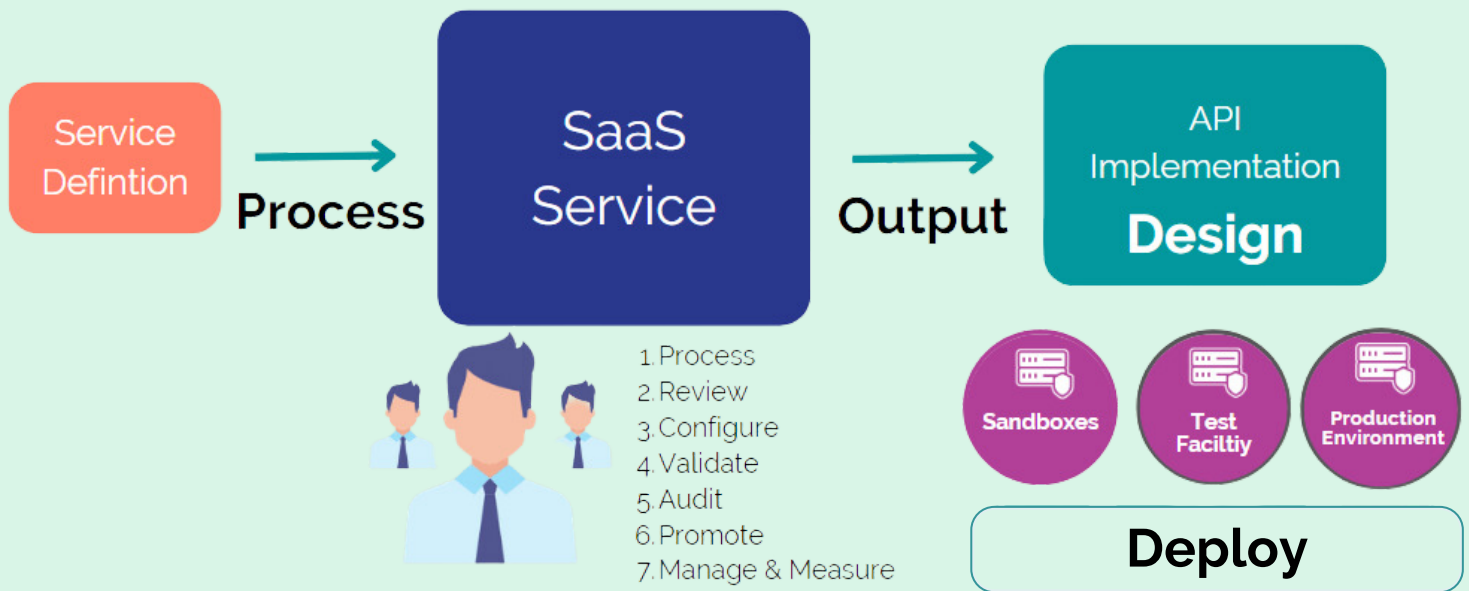
STANDARDS TEAM



No-Code: Standards and Auditing

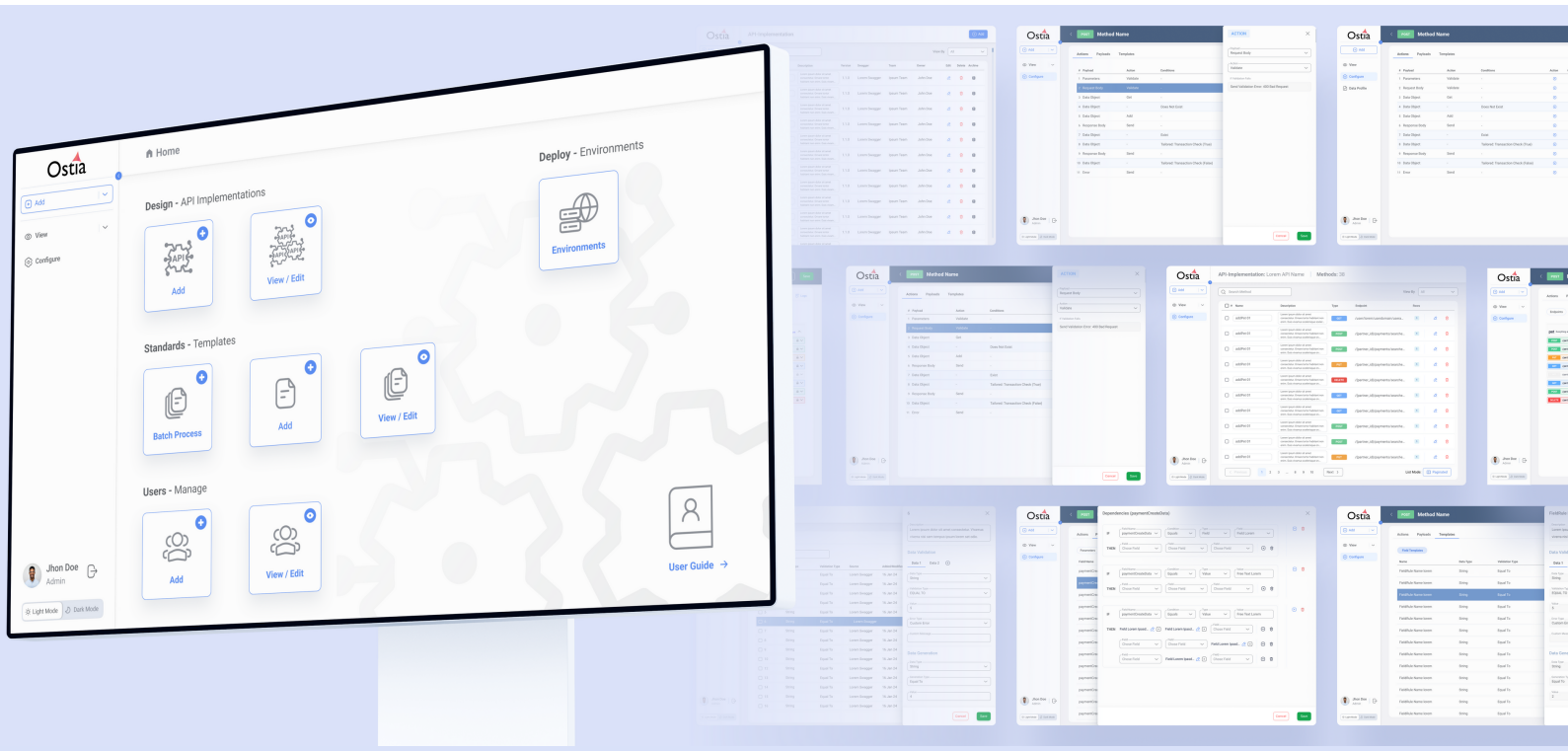
- 1 Batch process all organisation Service Definitions ([OAS Documents/Swaggers](#)) to generate a full library/taxonomy of Field Templates.
- 2 Review all Fields to ensure that they meet the required in-house standards for field validation and remove any duplicate, redundant or unnecessary Fields.
- 3 Invite the requisite team members to validate and finalise the taxonomy/library.
- 4 Once the taxonomy for Field Templates is fully defined, it is possible to define the Data Object Templates using the same process.
- 5 When the Templates are fully defined, it is time to invite the Design Teams as the service is ready to create your API Implementations.
- 6 The Design Teams are restricted to using the Templates in all API Implementation design and deployment unless the Standards Team allows otherwise.
- 7 The Standards Team has the ability to easily audit all API Implementation designs at any stage.

DESIGN TEAMS



No-Code: Design and Deployment

- 1 Process a Service Definition ([OAS Document/Swagger](#)) to generate a baseline API Implementation design environment.
- 2 Review the environment to ensure that it meets all design and business case requirements.
- 3 Make any required changes using No Code configuration.
- 4 Invite all requisite parties (business / tech / partner / other) to review.
- 5 A final audit of the design can be conducted by the Standards Team.
- 6 The design is ready to be sequentially promoted to Sandbox, Test and Production environments. Using the same configuration across each of these environments ensures a consistent user experience for third party developers and partners.
- 7 The design can be amended as required and is fully version-tracked across all environments.



No-Code: Simple and Effective

We have spared no effort to ensure that our no-code configuration makes API Implementation design and deployment “as simple as possible but not simpler”.

No-Code simplicity allows you to better manage your development resources while expanding the audience that can effectively collaborate on API design and deployment issues.

Programmers, technologists, business analysts and citizen developers can use a common vocabulary and understanding to define and implement business strategy - in a manner not possible when discussing lines of code.

AND THE +

The ability to design and manage all environments (Sandbox, Test and Production) using the same configuration, greatly simplifies and accelerates the software development life-cycle for API Implementations/API Ecosystems.

The consistency of design across all projects is matched by the consistency of developer and partner experience across all environments and constitutes a vital ingredient towards achieving improved end-user experience/revenues: the desired outcome for your API Business Strategy.

TAKE THE TEST DRIVE



[Ostia.io/test-drive](https://ostia.io/test-drive)

LIVE
DEMO

14-DAY
TRIAL

1-Hour
AMA



REFERENCES

Design and Build Great Web APIs, by Mike Amundsen

<https://www.amazon.co.uk/Design-Build-Great-Web-APIs/dp/1680506803>

The API-First Transformation, by Kin Lane

<https://www.amazon.com/API-First-Transformation-Kin-Lane/dp/B0BLRCXMQ3>

Building an API Product, By Bruno Pedro

<https://a.co/d/eXpgjAF>

Principles of Web API Design, by James Higginbotham

<https://a.co/d/3SlrEGc>

The Jeff Bezos API Mandate... 20 Years Later, by Shannon Eastman

<https://vimeo.com/866068412/477917e9a0?share=copy>

Jeff Bezos' API Mandate: What the Five Rules mean and do: Erik Wilde Podcast

<https://www.youtube.com/watch?v=h1P7mHRog4o>

API University: The Thinking Behind The Amazon API Mandate

<https://api-university.com/blog/the-api-mandate/>

TechTarget: Guide to Building an Enterprise API Strategy

<https://www.techtarget.com/searcharchitecture/Guide-to-building-an-enterprise-API-strategy>

Radical: The 6 Key Benefits of Being an API-centric Organization

<https://www.radical.io/ideas/why-we-develop-api-centric-solutions>

Mulesoft and Deloitte Digital: 2022, 23, 24 Connectivity Benchmark Reports

<https://www.mulesoft.com/lp/reports/connectivity-benchmark>

Nordic APIs: The API Economy - Disruption and the Business of APIs

<https://nordicapis.com/ebooks/the-api-economy/>

RapidAPI: State of APIs Developer Survey 2022 Report

<https://rapidapi.com/learn/trends/2022-state-of-apis-what-developers-are-saying>

APIdays: API Economy Journey Map, Alan Glickhouse, IBM

<https://www.youtube.com/watch?v=4P11RE66UAM>

API Business Models: 20 Models in 30 Minutes - John Musser, API Science

<https://www.youtube.com/watch?v=gfguGS8HYvM>

LIST OF FIGURES

Figure 1: API Ecosystem Abstraction	1
Figure 2: The API Value Chain	3
Figure 3: API Value	4
Figure 4: API Revenue Models (Derived from John Musser's / ProgrammableWeb's Revenue Models https://www.youtube.com/watch?v=gfguGS8HYvM)	5
Figure 5: API Maturity Scale (Derived from IBM's / Alan Glickenhause's API Maturity Scale https://www.youtube.com/watch?v=4P11RE66UAM)	7
Figure 6: Survey Results (Company-Wide API Mandate) (Source: Mulesoft and Deloitte Digital's '2022 Connectivity benchmark report' https://www.mulesoft.com/lp/reports/connectivity-benchmark)	7
Figure 7: API Ecosystem (Source: Mulesoft White Paper: How to choose the right API business model https://www.mulesoft.com/lp/whitepaper/api/business-model)	9
Figure 8: The Jeff Bezos API Mandate (It is not known whether the Mandate existed as a single document, was extracted from numerous communications, or, indeed, did not exist. The text of the 'Bezos Mandate' used within this report is often quoted for educational purposes and is extracted from a post by ex-Amazon employee Steve Yegge on: GitHub https://gist.github.com/chitchcock/1281611)	10

ACKNOWLEDGEMENTS

Collaboration is at the heart of the API world. Many experts work tirelessly to share knowledge and promote the advancement of APIs. Some of the experts whose work has inspired us over the years, and in the writing of this report, include [Alan Glickhouse](#), [John Musser](#), [Mike Amundsen](#), [Erik Wilde](#), [James Higginbotham](#) and [Bruno Pedro](#). Thank you! And thank you to all who are committed to sharing knowledge to enhance and expand our collective understanding of this fascinating space.

Authors:

[John Power](#)

[Leo Cullen](#)

Contributors:

[Gerard Clinton](#)

[Phil Codd](#)

[Michael Brookbanks](#)

Reviewers:

[Gerard Clinton](#)

[Sean Rowland](#)

Design & Production:

[NB3](#)

Editor:

[Leo Cullen](#)

CONTACT

Ostia

Unit 6, The Mill Building,
The Maltings,
Bray,
Co. Wicklow,
A98 XV40, Ireland

www.ostia.io

info@ostia.io



