

APIs as  
a Journey

## INTRO

# APIs are a journey not a destination



APIs have become essential for companies, and the number of APIs, and with it their importance, continues to grow. As a result, APIs are no longer a matter of technology strategy alone. Rather, APIs must become an integral part of every company's business strategy. APIs must be brought into focus as part of an API First strategy and thus form the basis for further planning, always bearing in mind that planning often replaces chance with error. For this reason, it makes sense and is advisable to resort to an iterative or agile-dynamic project setup and to view the transition of the business towards an API First culture as a journey that does not necessarily follow a straight path and can be approached in different ways.

To realise the full potential of an API strategy and successfully embark on this journey, this Whitepaper addresses the five key challenges and describes the critical success factors that accelerate the path to technological modernisation and new digital business models alike. With the right partner and the right tools, this journey will be a sustainable success for any organisation.

## A SUCCESSFUL JOURNEY

# The key elements for your API Management

- 1 Strategic View on API Management:**  
APIs are a product, so product lifecycle management is essential, based on the digital factory approach and combined with the insights of lean manufacturing.
- 2 Ecosystem of Data Planes:**  
For every API use case, there is the right gateway technology. Thus, it is important to know the essential players in the API landscape, both in breadth and depth including their advantages and shortcomings.
- 3 API Control Plane:**  
Leveraging a central API control mechanism as a single and unimpeachable source of truth to provide a unified and consistent view on the API landscape.
- 4 Continuous API Operations Automation:**  
API and automation are inseparable, so API Automation Experts are the ones who really know the subject of API operations. Therefore, a focus on constantly training your experts is essential to enable them to
- 5 Value Model:**  
Sustainable realization of the economic potential that lies in API Management with the help of a transparent and holistic value model. This creates a learning and continuously improving intelligent API Management approach that benefits the organisation in the long run.

## OPEN EXCHANGE

# API Fabric

## STRATEGIC API MANAGEMENT

# APIOps as a foundation

## HOW TO FIND A SOLUTION

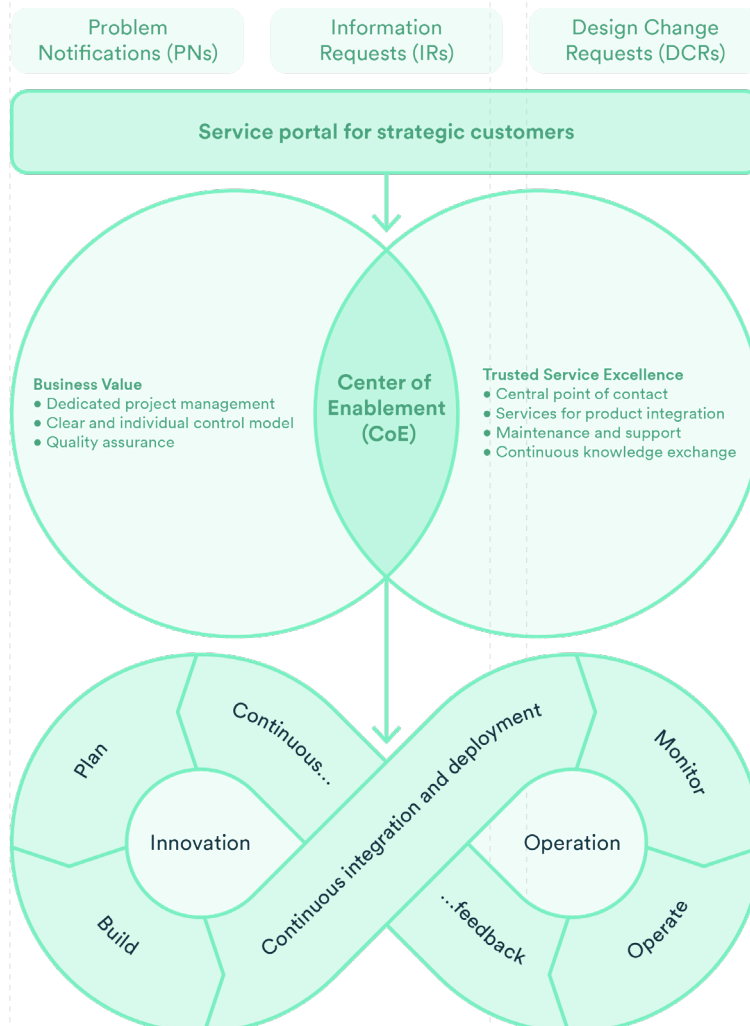
# Center of Enablement

We see ourselves as enablers and therefore attach great importance to intensive knowledge transfer to ensure the independence of our customers. For this reason, our API engineering approach is based on the digital factory model. With our experienced API experts who have at least 7 years of experience with business-critical API projects and are involved in the ecosystem in many high-tech initiatives from research institutes and standardisation initiatives such as the European Cloud Gaia-X, Bitkom's OpenAPI and many more, we help you become sustainably successful with your journey to strategic API Management. At the heart of this success is our unique solution for federated API Management.

APIs have to become a product, so a digital factory is the right way to implement this strategy sustainably. The digital factory includes some evolutionary approaches that come from the transformation of actual manufacturing. Kaizen, continuous improvement, zero waste are elements of lean efficient manufacturing. Standardization, platform concepts, value networks have not only revolutionized the real manufacturing industry but also stand as recipes for success of a successful transformation for the agile API life cycle based on continuous improvement.

APIOps is about bringing people, processes and tools together to achieve better business outcomes by continuously delivering reliable, well designed API products for consumers. APIOps is based on applying the practices of DevOps and GitOps to the API development lifecycle. By implementing a mature process and establishing API Management as a strategic discipline the development speed will be increase while increasing the product quality and reducing risks. With higher automation, it is not only possible to reduce costs significantly but to innovate faster and speed up the time-to-market.

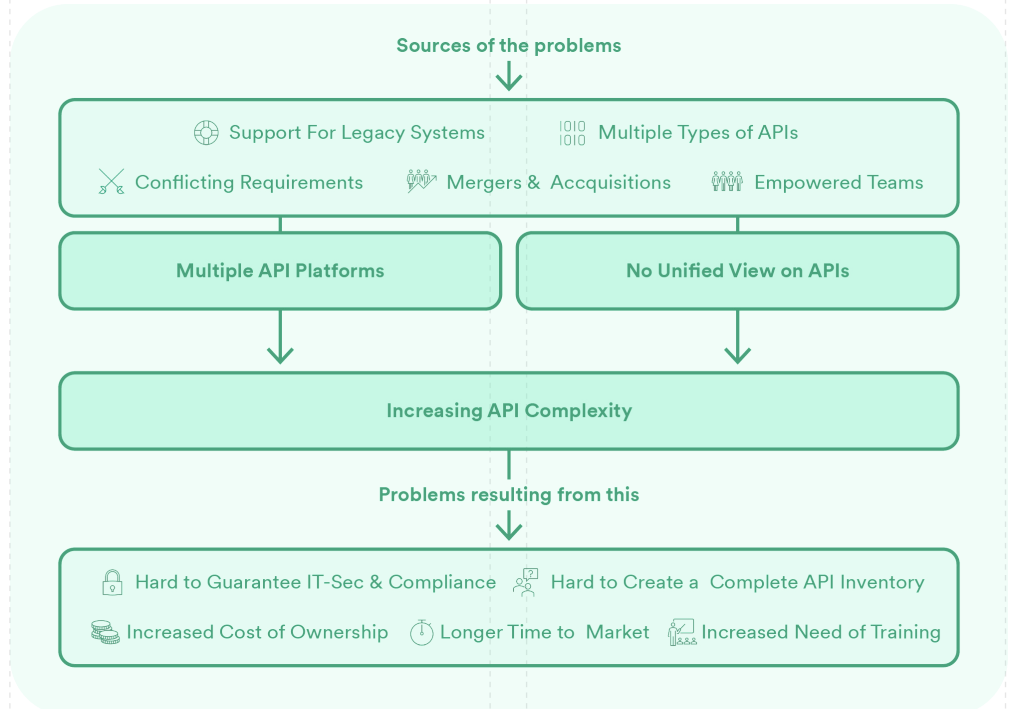
As mentioned before, it is necessary to have a good API strategy, which can only be implemented with the right API Management. APIIDA clearly positions itself for success factors on a broad and deep API experience base. This wealth of experience is the result of numerous business-critical API transformation engineering projects with international market leaders that have been implemented with great success. The methodology derived from this is in line with the guidelines of a Digital Factory and can be described as pragmatic „best practices“.



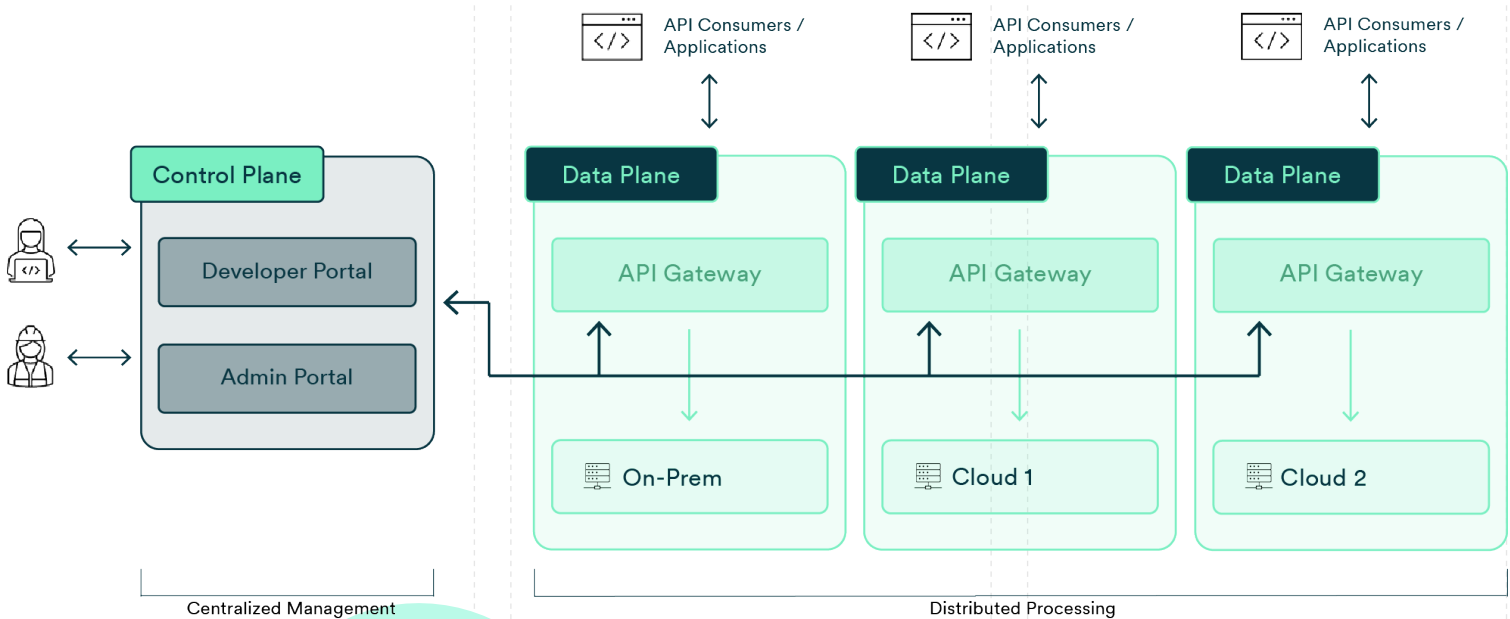
# Federated API Management

By using such a centralised API control mechanism as a single and unquestionable point of truth, universal API Management questions are answered, creating a unified and consistent view of the API landscape.

The journey towards API First and API Management as an organisational strategy often leads to an exponential growth in the number of published APIs. Along with this, the API ecosystem is expanding into new areas and standards, and API Management solution providers are struggling to keep up with the new requirements and technologies. As a result, many teams are turning to highly specialised API Runtimes or Gateways to get the job done. At the same time, many companies want to modernise their infrastructure components without sacrificing their legacy systems.



With federated API Management, the focus shifts back to the APIs themselves and administrative overhead and vendor lock-ins are eliminated. A unique platform that can provision, discover and secure all of your APIs in one central place. This allows a vendor-agnostic administration of the whole API lifecycle and can be adapted to the requirements of your company. Taking the complexity out of API Management.



## CUTTING-EDGE ARCHITECTURE

# API Technology Stack

Designing and developing state-of-the-art API technology with proven software engineers based on a customer-centric product development process with the unwavering principle of vendor independence, source openness, and cloud nativity is key to a successful API strategy.

In this context, an engagement of API experts in the ecosystem in many high-tech initiatives of research institutes and standardisation initiatives such as the Open API Initiative is of vital importance. This makes it possible to stay on the pulse of time, to actively shape the future of APIs and API Management and to achieve the best results when working with APIs.

## RELIABLE PARTNERS

# API Ecosystem

APIs offer the unique opportunity of isolated solutions and data silos. This transformation or modernisation goes hand in hand with a fundamental paradigm shift: away from a point-to-point architecture towards a service-based architecture or API first strategy. This creates the basis for the implementation of new business models. Partnerships are necessary for this, especially since considerable investments have certainly already been made in existing technologies, methods and processes. These must be transformed in the sense of a clearly defined partnership with existing suppliers in an evolutionary manner based on the model of the digital factory and the digital value creation partnerships or the digital value creation network.

## ENGINEERING EXPERTS

# API Automation Expert Teams

In the realisation of such strategically pivotal modernisation initiatives, it is advisable to decide between a highly centralised team approach and a decentralised team approach, and ideally to choose a hybrid form. This decision should be aligned with the strategic importance of the specific API. It is recommended to keep APIs centralised if they have a particular strategic value for the organisation and potentially have APIs that do not allow for strategic differentiation managed by external service providers.

Proven API expert engineers guide in determining appropriate modernization initiatives such as:

### Data access and data integration

APIs can make data available for a wide range of tasks, regardless of whether they are centralised, decentralised or cloud-based. Based on this, data can be extracted and condensed into new insights using sophisticated analytical systems.

### Cloud migrations

The cloud world will be hybrid. APIs play a central role in this, because APIs are what make an elegant and resilient hybrid IT landscape possible in the first place. Regardless of whether it is a public or private cloud.

### Core IT Transformation

APIs play a major role in IT-Transformation/Modernization because they can connect core IT-Systems with the specific data inside them, to achieve a digital platform. Furthermore, APIs serve as building blocks and as a synchronization mechanism across all IT-Systems to bridge different cycle times and speed.



## VALUE MECHANISM

# Return on API Model

A good strategy can be aimed with focusing on training and supporting your experts. Empowering people to support themselves is a guiding principle. The so-called Future Mode of Operation, which is created individually for each client, is the essence of transformation and project experience from an enormous number of successful API projects for international corporate clients and local champions alike. It is an immensely pragmatic and proven approach that has been applied and improved together with leading IT organisations.

Separating APIs into eight different value categories, which is a good set of criteria for targeting new customer business, is necessary to enable the entire organisation to build and implement a central API strategy and API maturity level. Business value increases as the maturity level increases, with API monetization starting at the highest maturity level. In addition to the current and target level, the current mode of API Management, the future mode of highly effective API Management, and the transition mode of operation are of significant importance. The more precise the understanding of the desired target mode operation is, the better and more effective the implementation will be.

