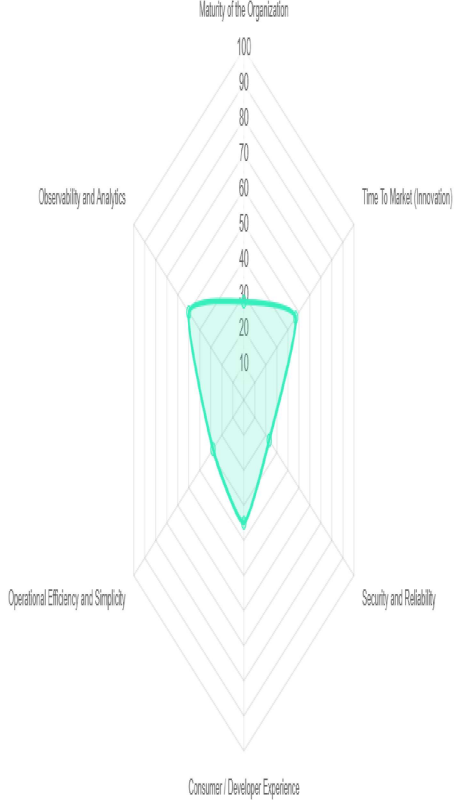
API Management Maturity Assessment

APIs are the fundamental building blocks of today's fast paced and interconnected world. From simply connecting systems and data, to implementing new business models and generating real competitive advantages. Managing your APIs is shifting from a tactical necessity to a strategic opportunity. Where does your company stand when it comes to managing APIs? You may be surprised by how much your organization's current level of API Management maturity impacts the success and sustainability of their efforts. Take our interactive assessment and see where you stack up across 6 different dimensions.

Your API Management Maturity

Overview



Maturity of the Organization	Poor
Time To Market (Innovation)	Mediocre
Security and Reliability	Poor
Consumer / Developer Experience	Mediocre
Operational Efficiency and Simplicity	Poor
Observability and Analytics	Mediocre

Details

Maturity of the Organization

This category evaluates the maturity of an organizations API strategy and its ability to execute it on an organizational level. The main point to drive home here, is that APIs need to be regarded as a strategic topic making or braking the digital supply chain. The responsibility for the API strategy needs to be at the top executive level with enough resources to be able to execute it.

Your Assessment: Poor

API Management is treated as a purely tactical discipline that is needed for operations but has no value from a strategic point of view. There is no link between the API strategy and the corporate goals, or there is no API strategy.
At this level we would recommend to:

- Have a look at how the services and data in your organization contribute to your corporate goals and how you provide those services and data.
- Check how your API management team fits into this category and how it might be included into the overall process of publishing new data and services securely to customers (inbound and outbound).
- Check where API management in terms of processes is positioned right now and identify the major bottlenecks / pain points that limit your operations at the moment and set goals for

the next year on which elements you want to improve.

Time To Market (Innovation)

The questions in this category test for the ability to move fast. To be able to move fast and shorten the time to market cycle, a proper API management and APIOps based processes need to be in place. The organization needs to optimize for a steady flow, removing as many constraints or bottlenecks as possible.

Your Assessment: Mediocre

You've taken the first steps into a faster time-to-market. To achieve your goal you need to optimize your API (Management) processes further.

- Do you have a prioritization framework for your API development (and deployment) tasks?
- How are requirements and use cases translated to information needed by your team to satisfy business requirements on a technical level? Is there a documented process you follow?
- Are there process steps in your API lifecycle which are redundant (same process that needs to be executed every time) that you would like to automate?

Security and Reliability

APIs are becoming the most frequent attack vector in the enterprise in 2022 (according to Gartner). Because of that all APIs must be secured to the highest standard possible without negatively affecting performance. At the same time reliability is crucial to the customer experience and needs to tracked across the whole API landscape of an organization.

Your Assessment: Poor

Your elementary focus should be on providing highly secured APIs. This is the primary way to protect APIs from attacks. APIs are commonly used and the access to sensitive data make them a primary target for attackers. Therefore, it is recommended that you pay more attention to API security within your organization.
If you are not sure what to look for, we would recommend to start here:

- Is there a documentation and process to recovering API definitions in case of an emergency?
- Do you have basic security controls in place (like schema validations, authentication schemes and signature checks) that secure APIs on your API Management layer?
- Can you identify and roll back to the last stable version?
- Are you aware of a plan on how to react in case of a security breach? If yes, is it documented and accessible to the employees?

Consumer / Developer Experience

The developer experience is crucial for an APIs adoption and for its reuse ability. Only when these two goals are met the return on investment for APIs is positive. Especially important is the documentation of an API combined with the possibility of consumers to get access fast and in a self-service manner. Again this reduces constraints and increases the flow of work.

Your Assessment: Mediocre

Not there yet, but you are on the right path. To reduce the flow of work you need to use your consumers/developers experience for an APIs adoption and for its reuse ability. You could check the following elements to improve on this topic:

- Overall Documentation: Are your API Catalog and API Documentation up-to-date? Do you have a process in place that can be followed? What are the potential bottlenecks of that process?
- API Access: How fast can new customers access your API documentation? How does your monetisation step work? Are there any manual steps that could be sped up?
- Testing Speed and Deployment Processing Speed: Do you have automated standardized testing and deployment processes? How many steps of these processes are automated yet?
- Workflow Quality: What are the biggest hurdles for your developers to publish an API or an API update? What can you do to allow them to focus on their core job and reduce the amount of redundant work steps?

Operational Efficiency and Simplicity

Over time API landscapes tend to become more complex. This complexity must be managed as good as possible. The key ingredient for operational simplicity and efficiency are a hassle free management of the whole API landscape, no matter how many API platforms are involved (Federated API Management). All processes should be automated to a high degree, and process models like APIOps need to be deployed within the organization. Also the API management needs to be a good citizen within the existing infrastructure and play along with common tools used in organizations (no data silo).

Your Assessment: Poor

Some work ahead! You need to automate your processes to control the complex API landscapes. A federated API Management is needed to automate them, no matter how many API platforms are involved.

- Automate as many processes as possible to make them repeatable
- Switch to modern technologies like CI/CD pipelines to get the job done
- Invest in an API control plane to benefit from even more operational simplicity

Observability and Analytics

APIs are a living thing and interact with the outside world. This means that there are always things that can go wrong. Tied to the category of security and reliability, the API platforms need

to be constantly monitored for service degradation or possible attacks. The data also needs to be collected in order to enable product managers to optimize the API along the road, based on real measurements and not on a gut feeling.

Your Assessment: Mediocre

You are aware of how important it is to monitor your APIs in order to measure performance and gain visibility of your infrastructure but you have gaps in your views which could become critical. You could check these points to improve:

- Do you have KPIs defined for each API and monitor them? How do you review this data and decide on potential changes?
- Do you have a list of thresholds you measure for your APIs in general? Are there alerts and warnings in place if any of these thresholds are breached?
- Do you have a risk assessment report for your API infrastructure? Is your monitoring implemented based on the recommendations of this report?