

Working with APIs

When you want to start working with APIs, there is a lot to consider. From use case and stakeholder buy-in to technical implementation and execution. Therefore, we have created this document to help you think of everything.

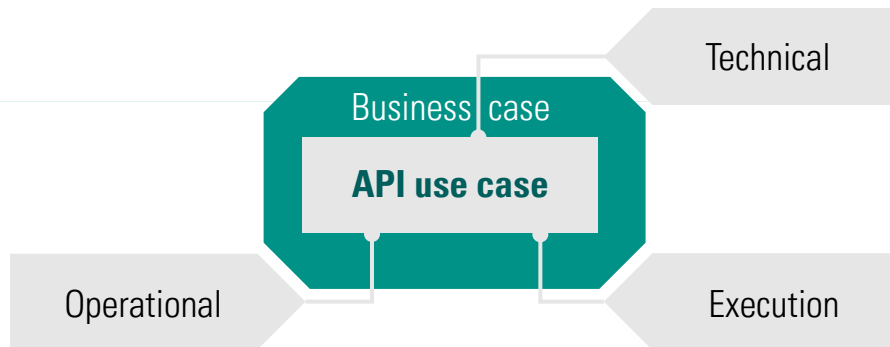
If you have any questions, feedback or want to discuss partner opportunities with us, please feel free to [contact us](#).

What is in this document?

- ✓ **API Fundamentals**
Provides an introductory explanation that helps you think about every aspect when you start working with APIs.
- ✓ **The Approach**
Provides a seven step guide to help you understand the API process. We offer you some triggering questions to help you think about every aspect of the process.
- ✓ **Implementation Checklist**
Provides a final overview by means of a list, containing all essentials to consider for API implementation.

API Fundamentals

APIs touch upon multiple aspects, so before working with an API there are several factors that are essential to consider. These key factors are illustrated in the model below and will be described briefly.



API use case

At the core of a successful API implementation is an API use case. It consists of:

- The purpose of using the API
- What challenge the API solves or to what opportunity it creates
- What value it will bring to the end user
- The interactions between the API application and your connected system(s)

Business case

After formulating your API use case, the business case can be built around it. The business case is about the reasoning behind the project and why it should be executed. It should contain:

- What the benefits will be, in what way is the solution quantifiable
- How the benefits connects to your organisation's strategy
- The link between the API and the value it will bring
- How much the project will cost and how to finance it

Technical, Operational and Execution

After having a clear understanding of your API use case and business case, it is time to make plans for actual implementation. It is helpful to approach this from multiple perspectives. This can be achieved by understanding your technological, operational and execution model. These models are outlined in the Implementation Checklist.

Next steps

Now that you have an understanding of what aspects are important for working with an API, we want to help you go through the process with a [seven step approach](#) and a [checklist](#) to see if everything is in place.

The Approach

Based on the API Fundamentals, we created a seven step approach, named UNCOVER. This approach will support the process of starting to work with an API by creating some structure. Each step consists of questions that will help you to get into the right mindset.

UNCOVER

1. Understand

Understand what value can be created for your organisation.

- ▶ Which challenges or opportunities do you see?
- ▶ How would you solve the challenge or seize the opportunity?
- ▶ What would be the desired result?
- ▶ Who would be your end user?
- ▶ What value will you bring to your end user?
- ▶ In what way would you shape your [API use case](#)?

2. Note

Note the nature of your API solution.

- ▶ Why are you thinking of using an API?
- ▶ What are the [benefits](#) of using an API?
- ▶ Why does it have to be an API?
- ▶ Is there an [existing API](#) that would suit*?

3. Convince

Convince your internal stakeholders by obtaining buy-in for your business case.

- ▶ Did you formulate a [business case](#)?
- ▶ How can you convince your stakeholders?

4. Organise

Organise the implementation by understanding the impact of the API on your IT landscape, interpreting how operations would work, and planning the execution.

- ▶ What is your [technological model](#)?
- ▶ Do you have the in-house resources to get it done?
- ▶ What is your [operational](#) and [execution](#) model?

5. Verify

Verify if all resources are in place and if you are ready for implementation.

- ▶ Did you think about everything on the [implementation checklist](#)?
- ▶ Are your stakeholders still in and ready to go?

6. Execute

Execute your implementation plan and analyse the change.

- ▶ Are you solving the challenge you wanted to solve or seizing the opportunity you wanted to seize?

7. Repeat

Repeat all of the steps above, the process will be easier and faster.

- ▶ Do you see other challenges or opportunities you can solve with an API?
- ▶ Are there any opportunities to extend the current solution and broadening your digital ecosystem?

* We are constantly developing APIs and looking for new ideas. If you see an opportunity we can help with or partner up, please [contact us](#).

Implementation Checklist

Based on our customer experiences, we have created an implementation checklist. This checklist helps you verify if you have everything in place for a successful API implementation. The different areas this checklist covers are the use case, business case, technological model, operational model and execution model.

API use case

1. Determine purpose of using the API:	<input type="checkbox"/> Done	Remarks
_____	_____	_____
a. Clear challenge or opportunity	<input type="checkbox"/> Done	Remarks
_____	_____	_____
b. Clear added value end user	<input type="checkbox"/> Done	Remarks
_____	_____	_____
c. Clear interaction API application and own system	<input type="checkbox"/> Done	Remarks
_____	_____	_____

Business case

1. Determine strategic fit with organisation	<input type="checkbox"/> Done	Remarks
_____	_____	_____
2. Determine benefits:	<input type="checkbox"/> Done	Remarks
_____	_____	_____
a. Improve experiences (employee/customer) / real-time insights / reduce cost / reduce risk / increase revenue / increase efficiency	<input type="checkbox"/> Done	Remarks
_____	_____	_____
b. Quantifiability	<input type="checkbox"/> Done	Remarks
_____	_____	_____
3. Determine costs:	<input type="checkbox"/> Done	Remarks
_____	_____	_____
a. IT implementation (one-time)	<input type="checkbox"/> Done	Remarks
_____	_____	_____
b. Yearly maintenance costs	<input type="checkbox"/> Done	Remarks
_____	_____	_____
c. Costs for versioning maintenance	<input type="checkbox"/> Done	Remarks
_____	_____	_____

d. Application hosting costs

Done

Remarks

e. Operational costs

Done

Remarks

Technological model

1. Determine IT readiness:

Done

Remarks

a. Documentation understood by developers

Done

Remarks

b. Developers checked out Sandbox

Done

Remarks

2. Determine architecture / IT landscape:

Done

Remarks

a. Connected systems / application clear

Done

Remarks

b. Clear data flow

Done

Remarks

Operational model

1. Determine operational rights:

Done

Remarks

a. Application ownership (team / department level)

Done

Remarks

b. Access and Identity management

Done

Remarks

c. Data ownership

Done

Remarks

d. Data analytics (if necessary)

Done

Remarks

e. Operational maintenance (team / department level)

Done

Remarks

f. Versioning maintenance

Done

Remarks

2. Determine operational practice:

Done

Remarks

a. Monitoring and failure management	<input type="checkbox"/> Done	Remarks
b. Data quality management	<input type="checkbox"/> Done	Remarks
3. Determine operational risks:	<input type="checkbox"/> Done	Remarks
a. Legal / cyber security / data compliance / monetary	<input type="checkbox"/> Done	Remarks

Execution model

1. Determine project scope:	<input type="checkbox"/> Done	Remarks
a. Project ownership (team level)	<input type="checkbox"/> Done	Remarks
b. Product budget in place	<input type="checkbox"/> Done	Remarks
c. Stakeholder management	<input type="checkbox"/> Done	Remarks
2. Determine planning:	<input type="checkbox"/> Done	Remarks
a. Clear planning of project roadmap	<input type="checkbox"/> Done	Remarks
b. Implementation time pace clear	<input type="checkbox"/> Done	Remarks

Disclaimer
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