# What Project Managers Need to Know About APIs

**Published on 7 April 2025 at 13:21**

**Author: Kimberly Wiethoff**

In today’s digital ecosystem, APIs (Application Programming Interfaces) are the invisible threads that tie systems, platforms, and applications together. Whether you’re managing a mobile app launch, a website redesign, or an enterprise-wide system integration, chances are you’ll come across the term “API” at some point.

As a project manager, you don’t need to be able to code one—but understanding what APIs do, why they matter, and how to manage projects involving them will help you communicate effectively with your technical teams and deliver better outcomes.

**So, What Is an API?**

Think of an API as a digital waiter. You (the client) place an order (a request), and the waiter (API) brings the food (data/functionality) from the kitchen (server) back to your table (application). It’s how two systems talk to each other securely and efficiently.

In practical terms, an API allows different software components to interact. For example:

* A travel app pulls flight data from multiple airlines using APIs.
* An e-commerce site uses a payment API to process credit card transactions.
* Your internal HR system might use APIs to sync data with a third-party payroll service.

**Why APIs Matter in Projects**

APIs can impact your project in a few big ways:

* **Integration:** APIs are key to connecting systems. If your project involves integrating software tools (CRMs, ERPs, payment gateways, etc.), APIs are how that happens.
* **Scalability:** APIs allow your product or service to grow by tapping into other systems' functionality instead of building everything from scratch.
* **Time and Budget:** A well-documented API can save time and money. A poorly documented or unavailable API can delay timelines significantly.
* **Security & Compliance:** APIs handle sensitive data (like user credentials or financial info), so understanding API security best practices (like token-based authentication or encryption) is essential.

**What PMs Need to Understand (Without Getting Too Technical)**

Here are some basics that help you guide the team and manage stakeholder expectations:

1. **Endpoints:** These are the URLs through which data is accessed or sent. Know what endpoints are required for your use case.
2. **Request and Response:** APIs work on a request-response model. A client sends a request, and the server sends a response—usually in a format like JSON or XML.
3. **Authentication:** Learn how the API secures data. Common methods include API keys, OAuth, or bearer tokens.
4. **Rate Limits:** Some APIs restrict how many requests can be made per minute or hour. This affects scalability and performance planning.
5. **Error Codes:** Familiarize yourself with common status codes (e.g., 200 = OK, 404 = Not Found, 500 = Server Error). It’ll help when interpreting logs or user issues.
6. **Documentation:** Always ask for comprehensive API documentation early in the project. It’s the blueprint for your developers and a huge time-saver.

**Questions PMs Should Ask in API Projects**

* Is the API publicly available, or is it internal/proprietary?
* Is it RESTful, GraphQL, or SOAP? (You don’t need to know how to use these, just know they exist.)
* What dependencies does the API have?
* Are there any limitations or licensing costs?
* How are versioning and updates handled?
* What’s the plan for testing the API? (e.g., sandbox environment, mock services)

**Your Role as a PM in API Projects**

Your job isn’t to *build* the API—it’s to make sure it’s planned, integrated, and supported correctly across the project lifecycle. Here’s where you come in:

* **Coordinate** between frontend/backend developers, QA, product owners, and external vendors.
* **Clarify requirements** around what the API needs to do.
* **Manage expectations** around performance, timelines, and dependencies.
* **Track risks**—like unstable third-party APIs, lack of documentation, or poor support.
* **Facilitate testing and validation** to ensure APIs deliver as intended.

**Final Thoughts**

APIs are powerful tools that can unlock innovation, streamline operations, and enhance user experiences. For project managers, having a working knowledge of how APIs fit into the project puzzle is no longer optional—it’s essential. You don’t need to code, but you *do* need to understand the context, ask the right questions, and translate technical information into actionable insights for your team and stakeholders.

With the right mindset and curiosity, you can bridge the gap between business needs and technical execution—and make sure those API-powered projects run like clockwork.

Let me know if you’d like this tailored to a specific industry like healthcare, finance, or e-commerce—or if you’d like to post it on your blog, *Managing Projects the Agile Way*!