

To Create a Successful API-Based Ecosystem, Look Before You Leap

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Initiatives: [Software Engineering Technologies](#)

Implementing an API-based ecosystem without well-defined and measurable business objectives can result in low traction and disappointing ROI. Software engineering leaders must understand the business steps necessary to make the ecosystem successful — before they create one.

Overview

Key Findings

- Ecosystems must meet clearly defined business objectives, such as improved retention or increased upsell revenue. Without agreeing to objectives, ecosystem stakeholders may disagree on whether the ecosystem results justify the investment, and they may abandon the ecosystem altogether.
- Creating an ecosystem involves much more than just publicly offering an API; it requires contributions from teams throughout the organization. Successful organizations manage and deliver their APIs as a product, with a strong customer focus.
- Many ecosystems do not get internal and external buy-in because they fail to demonstrate significant value for customers, developers and internal stakeholders.

Recommendations

Software engineering leaders responsible for API strategy and planning must understand and support the following business aspects before creating an application ecosystem:

- Validate the ecosystem business model by developing targeted business objectives, market assessments and measurements of ecosystem success that link clearly to measurable API metrics.
- Cost-justify the ecosystem by recognizing the value derived through the ecosystem either directly (for example, by measuring increased revenue) or indirectly (for example, by measuring increased customer retention).
- Promote the ecosystem's value to customers and partners by creating a go-to-market plan for each. An ecosystem evangelist can encourage greater engagement by developers.

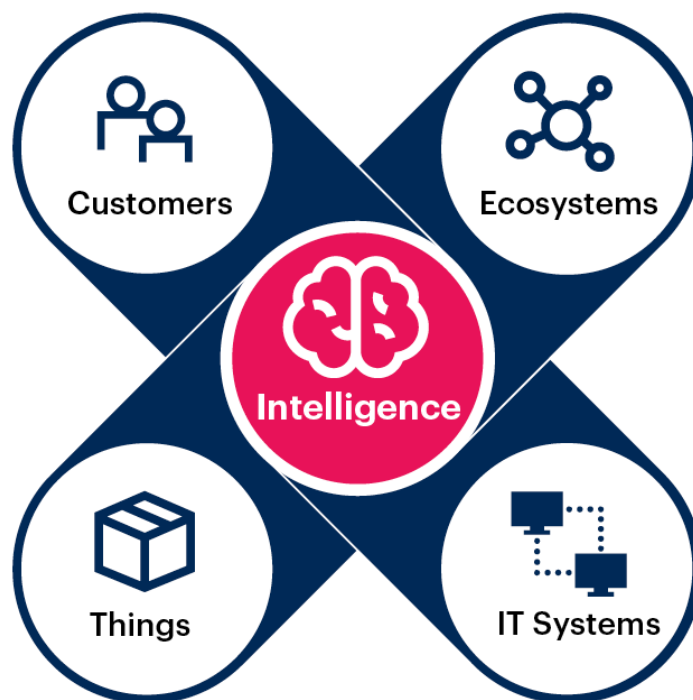
- Have the courage to not create an ecosystem. After evaluating the technical, financial and marketing commitments required by an ecosystem, the best direction may be to find another way to generate value from APIs, such as using APIs to add incremental value to existing customers and partners.

Introduction

Ecosystems continue to grow in popularity as an area of strategic focus, as platform ecosystems consisting of a core application combined with partner applications can create new products, services and customer experiences. Companies like the Ocado Group and Mambu have created ecosystems that offer innovative partners, a thriving marketplace and excited customers. An ecosystem based on APIs can enhance the power and reach of a digital business technology platform, either for internal or external partners (see Figure 1 and [Building a Digital Business Technology Platform Requires New Technology and Service Provider Support](#)).

Figure 1: The Digital Business Technology Platform

The Digital Business Technology Platform



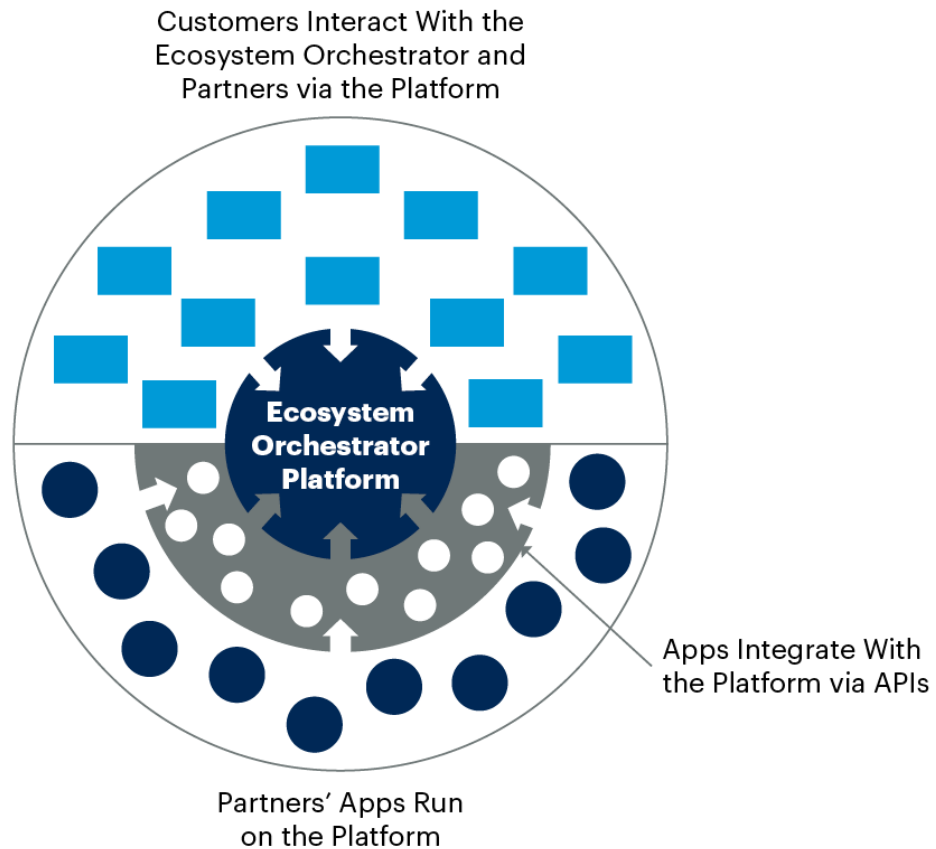
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In a platform ecosystem, the ecosystem orchestrator encourages partners and independent developers to build complementary applications that integrate with the application via a set of APIs (see Figure 2).

Figure 2: A Platform Ecosystem Enabled by APIs

A Platform Ecosystem Enabled by APIs



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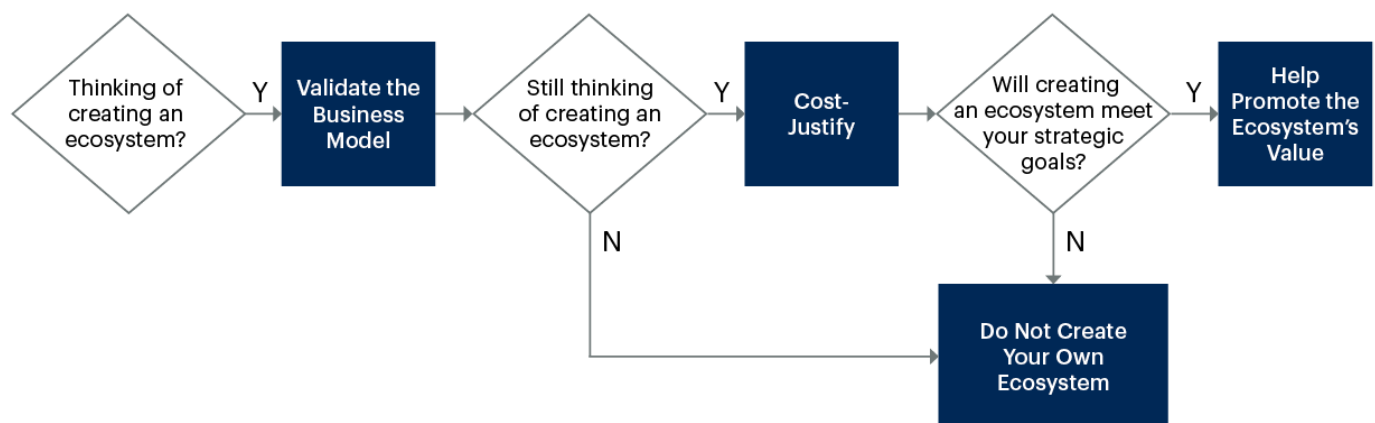
Ecosystem participants, partners and independent developers add value by invoking the ecosystem orchestrator's APIs to develop solutions that benefit all parties by making the solution more complete. Ecosystem orchestrators, in turn, gain competitive value from these solutions, as they can claim that their products plus their ecosystem collectively deliver greater innovation and choice than their products could by themselves. Customers benefit from these ecosystems by more easily finding integrated solutions that meet their needs, typically via a catalog or marketplace managed by the ecosystem creator.

Many companies will try to create their own ecosystem instead of participating in someone else's, as they believe that only by controlling the interactions between themselves and their partners can they profit as a digital business. However, creating an ecosystem requires a significant development and marketing investment. Most significantly, it also requires the end-user organization to adopt a technology provider mindset. If ecosystem orchestrators choose to offer partner solutions through a marketplace, they will need to create and manage the marketplace in addition to the APIs that they offer.

What steps should software engineering leaders responsible for API strategy take to create a successful ecosystem? (See Figure 3.) To begin, they need to assume a more business-centric leadership role instead of focusing only on the technical implications of the challenge. Working with business, marketing and development colleagues, they first should build the case for how the ecosystem will serve the company's broader goals. Next, they should determine how to recognize value through the ecosystem. Finally, they must help promote the ecosystem to recruit partners and to convince customers of the increased value the ecosystem creates.

Figure 3: Creating an Ecosystem Based on APIs

Creating an Ecosystem Based on APIs



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Analysis

Validate the Ecosystem Business Model

Software engineering leaders responsible for API strategy must recognize that creating an ecosystem entails significant investment and risks. Before creating an ecosystem, justify the endeavor using the following criteria:

- **Value** — Many software engineering leaders believe in their application's potential and assume (or hope) that the only obstacle preventing partners from joining their ecosystem is a set of APIs. Anticipate your customers' needs in order to assess the value of what your partners could deliver through your ecosystem. Then, translate these needs into measurable outcomes, such as upsell revenue and increased retention, to help recruit partners and market to customers.
- **Difficulty** — APIs serve only as connections in an ecosystem — the ecosystem is a product and a business unto itself. However, treating APIs as products, including addressing security, support and documentation, enables an API strategy to scale for the needs of an ecosystem (see [The Evolving Role of the API Product Manager in Digital Product Management](#)).

- **Profitability** — Internal stakeholders may expect that the ecosystem eventually (if not quickly) will become a profitable venture. Is it even the goal of your ecosystem to make money? Manage realistic profitability expectations before implementing an ecosystem. Agree upfront to a time at which the ecosystem will be reevaluated and discontinued if it is not meeting expectations (see [Choose the Right API Monetization and Pricing Model](#)).
- **Differentiation** — If you are trying to create an ecosystem, your competitors probably are too. A well-differentiated ecosystem is more likely to succeed than a well-architected one that lacks a competitive edge. Integration ease and cost are important ecosystem differentiators. Market your differentiation to partners and customers.
- **Governance** — Versioning, authorization and product roadmaps can complicate the creation of an ecosystem. Customers whose business depends on your ecosystem need the confidence that you will continue to invest in it. How will you listen to your customers' requests, and how will you decide what your priorities will be? Share your roadmap with existing consumers, and market it to potential customers.
- **Risk** — A failed ecosystem wastes money, diverts resources from more productive projects, and hurts the company's reputation with its customers and partners. If your ecosystem cannot attract customers, partners may not want to invest in it. If your ecosystem cannot attract partners, customers may not want to buy the solutions offered by it. Hackathons are great for estimating the risk, as well as identifying potential ecosystem participants, without committing to implementation of the entire ecosystem platform.

Cost-Justify the Ecosystem

Starting and sustaining an ecosystem will cost money. Developers must create and maintain the platform on which the ecosystem is based, product managers must govern life cycles and releases, and marketers and evangelists must build awareness and nurture interest. As a result, before you create the ecosystem, you should justify these costs by defining the value generated by it.

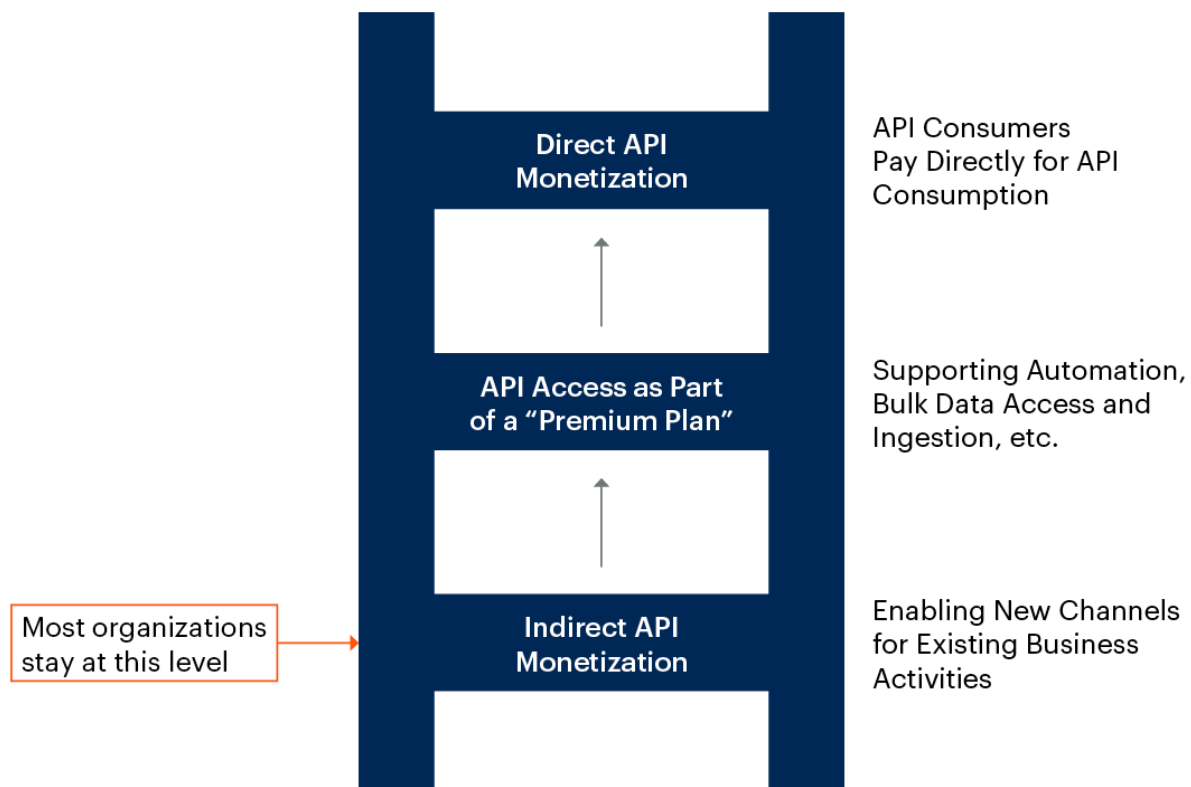
Many companies that provide APIs do not intend to monetize them directly. Instead of focusing solely on revenue as a way to justify the investment, they consider the indirect value that the ecosystem can provide. Partners produce value for customers by creating innovative, complementary applications. Ecosystem orchestrators then can market that their ecosystem offers greater innovation and more complete capabilities than they could deliver alone. In this way, ecosystem orchestrators improve their solution's appeal, allowing them to sell more products.

Improving the appeal of your solution is an example of indirect monetization. This indirect value arguably could justify the expense of creating the ecosystem as a marketing cost, so it becomes less important to maximize revenue collected from your partners. Participation is particularly vital in the early days of an ecosystem. Therefore, charging less (or nothing or even paying potential partners) to participate can increase the likelihood that partners will choose to join and build solutions that add value for your customers.

Charging participants based on the number of API calls or as a percentage of revenue from partner applications built on the ecosystem are two ways to directly profit from the investment in the creation, maintenance and marketing of the ecosystem. (See Figure 4 and [Choose the Right API Monetization and Pricing Model.](#))

Figure 4: Direct and Indirect API Pricing Options

Direct and Indirect API Pricing Options



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Besides monetization, key performance indicators (KPIs) provide a critical means of measuring the success and, thus, the justification of the ecosystem. Because not all API calls are equal, and registered participants do not equally participate, select KPIs with a clear sense of which metrics indicate that the ecosystem's goals are being met. See [How to Use KPIs to Measure the Business Value of APIs.](#)

Promote the Ecosystem's Value

Creating an ecosystem can improve your competitive story and contribute revenue to your bottom line, but what is the benefit to your customers and partners? An ecosystem requires vigorous promotion to convince all stakeholders of the value chains they can create with it. The burden of promotion should not fall solely on the ecosystem orchestrator. Enlist your customers (through customer advocacy) and partners to create a "chorus of voices," including case studies, that amplifies positive feedback.

Customers evaluating a solution need to see the ecosystem as a popular, dynamic marketplace for innovation. Ecosystem partners need to be assured that the ecosystem offers a broad enough customer base to justify their integration with it. Developers within your organization need to be convinced that the ecosystem is of strategic importance to your company and not just “marketing fluff.”

Ecosystem orchestrators and participants go to market together — each promotes the other as adding value to its solution. To enable this promotion, the ecosystem orchestrator must provide a marketplace or catalog to help customers find partners’ solutions.

Technology providers typically certify, rate, favorably list or actively market the solutions that they include in their ecosystem marketplace. When you create an ecosystem, you stake your company’s reputation on your partners. If your partner fails to deliver as promised or adversely affects your customer’s business, your customer will blame you. Therefore, ensuring quality solutions and satisfied customers does more to promote your ecosystem than any marketing campaign. You may also wish to “gate” ecosystem partners to ensure the solutions they build are approved. This may extend to assessing the security of potential third-party solutions using your APIs (see [API Security: What You Need to Do to Protect Your APIs](#)).

Besides evangelizing and certifying, an organization may need to actively grow the ecosystem by recruiting partners that can fill solution gaps. The ecosystem creator also may jointly market and sell the partner’s solution; doing so effectively promotes the ecosystem by demonstrating that the ecosystem fosters innovation and complementary capabilities.

Have the Courage to Not Create an Ecosystem

After evaluating the benefits, costs, commitments and risks described in this research, and possibly running a hackathon as a proof of concept, you may decide that creating an ecosystem is the wrong decision for you at this time.

If you want to generate value from your APIs now while building a foundation to create an ecosystem in the future, create an API marketplace (see [How to Derive Value From APIs Using API Marketplaces](#)). If you believe that you can better serve your customers with partner-developed solutions, instead of creating an ecosystem, try collaborating with selected partners to implement and market solutions without the investments required to create, manage and evangelize an ecosystem. Being part of an ecosystem, before starting one, can give precise indications on how your platform should look and how easy consuming its APIs must be.

Evidence

¹ Gartner API Usage and Strategy Survey

Gartner’s API Usage and Strategy Survey was conducted via an online survey from 30 July through 8 August 2019 with 112 Gartner Research Circle Members — a Gartner-managed panel.

In order to qualify for the survey, the participant's organization had to be using, implementing or planning to implement APIs in the next 12 months. Participants were screened for having involvement in the organization's API strategy.

The survey was developed collaboratively by a team of Gartner analysts and was reviewed, tested and administered by Gartner's Research Data and Analytics team.

Note: The results of this study are representative of the respondent base and not necessarily the market as a whole.

Document Revision History

[To Create a Successful API-Based Ecosystem, Look Before You Leap - 30 October 2019](#)

[To Create a Successful API-Based Ecosystem, Look Before You Leap - 26 March 2018](#)

Recommended by the Authors

[The Evolving Role of the API Product Manager in Digital Product Management](#)

[Choose the Right API Monetization and Pricing Model](#)

[Using Ongoing Hackathons to Accelerate Digital Transformation: A Practical Handbook](#)

[How to Derive Value From APIs Using API Marketplaces](#)

[How to Use KPIs to Measure the Business Value of APIs](#)

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