

A Practical Guide to Platform Assessment

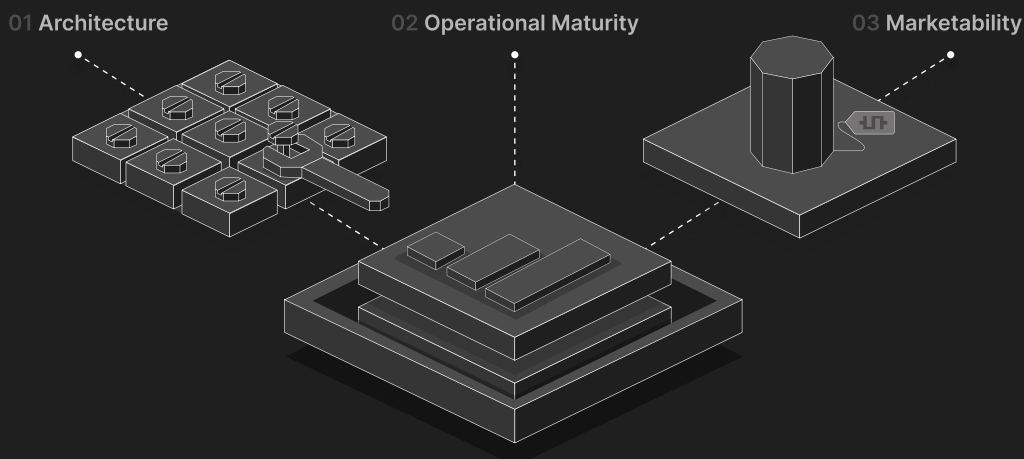
Enterprises who build software platforms often have one goal in common: they want to commoditize the development of certain types of applications.

They intend to simplify development by abstracting away as much commonality as possible, thereby freeing developers to focus more energy on the differentiated portions of the app. Inevitably, this leads to a boost in developer productivity. While technologically it's easy to understand what a platform intends to do, it isn't a straightforward exercise to measure whether a given platform is good at this task. In this guide, we'll share insights and techniques that you can use to assess a platform's potential to maximize the value of your ecosystem.

Establish Your Criteria

There is no single metric to “assess” a platform's capabilities and value. Some platforms may be technologically marvelous and capable of abstracting complex architectures, but are unapproachable by developers. Other platforms may make it really easy to get going, but do a terrible job at delivering value beyond the basics.

Assessing a platform's value and its gaps is a composite exercise that needs to happen across three axes.



01 Architecture

How a platform was built, and what core tenets were followed, will influence the value a platform can provide. A platform's architecture can dramatically impact its value potential, creating an artificial ceiling if architected poorly, or allow for exponential increases in value if architected well.

When thinking about this axis, consider these dimensions:

→ **Generalization**

The level of generalization within the platform's architectural support for target apps

→ **Adaptability**

Malleability of the architecture to incorporate new architectural tenets or to incorporate changes to existing tenets

→ **Extensibility**

Extensibility potential to the platform's core IP without requiring changes to the core itself

→ **Tenancy Model**

Isolation of client applications of the architecture, as well as isolation of data belonging to those client applications

→ **Coupling Requirements**

Application to platform coupling requirements (loose vs. strong)

→ **Scalability & Resiliency**

Scalability & resiliency of core architecture design (peer-to-peer, centralized control, monolithic)

→ **Infrastructure**

Infrastructure dependence/requirements

→ **Hosting Modality**

Acts as application host vs. integration endpoint for applications

There are no "right" and "wrong" answers. Platforms can cater to different outcomes, and the architecture varies based on those outcomes.

02 Operational Maturity

Platforms tend to have two interaction surface areas: one for developers who consume platform features, and another for operators who ensure the platform is available for the developers to actually use. If a platform is difficult to run, service, and maintain, it may kneecap value potential, disenfranchise users, and frustrate operators.

Some important dimensions to measure are:

- **Scope of Operational Controls**
E.g. Resource management, workload management
- **Upgradeability**
E.g. Zero downtime, downtime window required
- **Resource Onboarding**
E.g. Compute, storage, datasources
- **Diagnosability**
E.g. Logging, key event assessment, workload tracing
- **Scope of Governance & Risk Controls**

03 Marketability

The overarching goal of any platform is to maximize the number of developers using it—otherwise, what's the point in building it? Developers flock to easy-to-use, cost-efficient platforms that help them rapidly deliver new capabilities to their users.

Theoretically, the largest number of developers that can use a given platform is the total number of internal or external developers writing apps for it. The platform's marketability determines how readily it can attract and retain that upper bound.

Consider these dimensions:

- **Technology Alignment**
Alignment with generally-accepted technologies
- **Developer Onboarding**
Ease of developer onboarding
- **Developer On-ramp**
“Zero to competence” on-ramp for developers
- **Support Material**
Comprehensiveness of support material
- **User Experience**
Day-to-day developer experience
- **Case Studies**
Availability of exemplary case studies
- **Self-Service**
Capacity for self-service
- **Cost**
Hard and soft dollar cost

Although this list is non-exhaustive, it provides a reasonable foundation for your assessment.

Collect and Evaluate Your Data

Once criteria have been established, you can start to thoughtfully collect and evaluate data to support your assessment.

At Nuvalence, we've found that the most successful assessments use a combination of techniques.

1 Stakeholder Interviews

Identify all key stakeholders (developers, platform operators, infrastructure support, end user support, sponsoring executives) and perform interviews to document and assess the quality of the experience, operational task complexity, and a variety of other KPIs.

2 Productization Review

Review documentation, delivery packaging, support framework and experience, and other supporting information. Score each for completeness, approachability, accuracy, and any other criteria that are meaningful to your industry and organization.

3 Role-Play

Take on the role of platform (end-user) developer and platform operator. Perform a net-new application build, an app migration, and basic maintenance workflows (as an operator). This "hands-on" portion of an assessment allows for a level of end-user empathy and discovery that's required to score certain dimensions of a platform's value.

4 Technical Deep Dive

Review architecture documentation, perform code reviews, interview architects regarding technology choices, stress-test the platform via appropriate vectors, and score each dimension with the intent of highlighting strengths and weaknesses.

5 Marketing/Messaging Analysis

Review current technology support and compare it with general market-level technology trends. Then:

- a. Use the result to determine likely market appeal to the "average" developer.
- b. Review the platform's ability to deliver on promised outcomes to reality and identify gaps.
- c. Assess and score the platform's marketing message for palatability and likelihood to attract conversion.

Collectively, these techniques allow for the extraction of raw qualitative and quantitative data that can be used to synthesize the assessment output.

Capture Your Findings

The assessment output is defined by four components, one of which provides an actionable, product-oriented framework for what to do with the platform.

1 Executive Summary

A summary conclusion statement supported by an inventory of high-level findings and recommendations. This summary provides a complete, easy-to-digest view of the assessment outcome. Supporting detail is intentionally deferred to other components of the assessment outcome.

2 Product Roadmap

This is the most important part of the assessment output. A detailed product roadmap outlines the story details and engineering effort required to enhance value to a target state. The delta between the platform's current state and a "gap filled" target state underpins the roadmap definition. The roadmap will provide an iterative, timeline-based path to:

- a. Remediating gaps across all dimensions
- b. Shoring up strengths to help drive additional "low-hanging fruit" value
- c. Expanding the platform to take advantage of opportunities

3 Scoring Inventory

A listing of each individual dimension score, compared to an ideal score, and how to gap fill.

4 Raw Materials

All interview results (anonymized where appropriate), assessment notes, etc. This helps provide granularity necessary to interpret some of the results in **1**, **2**, and **3**.

These assets are tailored in such a way that they can be readily used to define an implementation strategy. An assessment is considered successful if these assets are leveraged as an objective guide to driving toward a future state for the platform in question. Regardless of whether the platform's future state is ever built, any assessment should prove valuable in understanding the current state and lead to a well-grounded go-to-market strategy.