## Being An API Provider

The world of APIs starts with an individual, company or organization, with some sort of content, data, or other digital resource, wanting to make it available, on the Internet, in a machine readable way, so that others can build sites, and applications around it. Even though APIs use the Internet for communication, it doesn't mean that they are openly accessible to anyone. Providing APIs, is very similar to providing websites, you can control which users have access to it, where they can go, and what they can do—APIs are just meant for other websites, web applications, and mobile developers.

## Solving a Problem

APIs are all about providing solutions, to everyday problems in our increasingly digit worlds, from sharing data with partners, developing mobile applications, to disrupting an entire legacy industry who refuses to change and evolve.

#### **Access to Resources**

Providing APIs is about open up access to content, data and other complex objects, or systems that exist within a company or organization, in a way that anyone can use the resulting resources in any programming language or external system.

#### **Alternative Solutions**

APIs are about the path of least resistance when making content, data, and other resources available, and in the world of APIs you see a lot of initiatives that are born in the shadows of existing company efforts, scraped from existing websites, and are often organized by rogue groups outside of normal business or even IT groups. APIs are about getting things done.

#### **Design First**

Providing APIs has evolved beyond just exposing an interface that exactly reflects the content, database or other resource being made available, and establishing a design first approach where you mock, share, and collaborate around the value an API delivers, before any code is even written.

## **Efficient Deployment**

There are many roads an individual or company can take when providing APIs, from DIY approaches using open source API frameworks, to gateways provided by IT that access internal resources, and a new breed of cloud based solutions for deploying APIs from any existing systems. Whichever path a provider takes, deploying APIs is about finding the quickest, most efficient way to making API resources accessible, being used, and moving forward.

## **Managing Operations**

Once the API is deployed, the work doesn't stop. Over the last decade, API pioneers have establish some pretty proven ways to manage API operations, by providing documentation, code resources, support, monitoring, communication and other resources that consumers of an API will need to be successful.

# **Flexible Service Composition**

A single API, is an opportunity to provide multiple internal, external, and public consumers the ability to access resources in a variety of ways. Service composition provides a way that API providers can allow for a wide variety access to resources, to only the groups of consumers they want, charging for services in optimal ways that meet their business goals.

#### **Sustainable Monetization**

API providers have established some new, and innovative ways for monetizing APIs, ranging from API consumers paying for use in a utility style approach, paying API consumers for driving traffic, to other more indirect ways of generating value, while covering operational costs, and monetizing usage beyond.

As part of evangelism, there are emerging approaches to ensuring APIs are discoverable, by generating machine readable API definitions, and making sure APis are available to API search engines and directories. Discovery by design, is emerging as the way that API providers reach API consumers.

## Meaningful Evangelism

There is no "build it and they will come" in the world of APIs. Even for internally focused APIs, it will take a solid amount of evangelism to make consumers aware that an API exists, as well as achieve successful integration into any website, web application, or mobile apps.

#### **Emmbeddable Everywhere**

Some APIs lend themselves to driving data, content, and other functionality across web sites, applications, and spreadsheets. JavaScript, plus APIs, are a common way to provide embeddable, API driven functionality that any site owner, social media user, and other Internet user can find API driven solutions to their problems.

## **Security a Priority**

Since APIs employ HTTP, the same communication protocol as the World Wide Web, security becomes a big priority in API operations. Most APIs are NOT publicly available, employing SSL, application keys, and other approaches to securing API access, including new standards like oAuth for handling both identification, and access to valuable API resources.

## **Web Hook Relationships**

APis don't just receive information, they increasingly are making calls to outside URLs, allowing API consumers to receive real-time notifications, when any data, content or other event occurs around the API resources their applications and system deepened on—making APIs a two way street.

#### **Balanced Terms of Service**

In our online, digital worlds, terms of service dictate all relationships, and this is no exception in the world of APIs. API terms of service make or break API operations, allowing for adjustments that protect API providers interest, but also enable API consumers to successfully integrate, and put API resources to use. Some API providers have found a balance to API terms of service, while others struggle finding the balance that will bring in API consumers, and keep them integrated.

#### **Privacy Baked In**

The privacy of everyone involved with providing APIs, consuming APIs, and ultimately the websites, applications, and systems that end-users are depending on is critical. Whether it is purely internal corporate systems, federal government applications, or a publicly available social network application like Facebook, privacy will set the tone for all platform operations.

#### **Observability As Part Of Your DNA**

Finding success with APIs takes a different breed of business and organizations, requiring a certain amount of observability in operations that some people just aren't ready for. However, many companies and organizations find that by becoming an API provider, they experience a transformation, that teaches them to be more transparent, open to external ideas—resulting in changing culture.

## **Providing APIs**

Providing APIs will be something every company, non-profit organization, and government agency will be doing after 2015. APIs will be how content, data, and resources shared, and consumed in the future. In 1995 every company, organization, and government agency was faced with the question of whether or not they should have a website, and by 2000 that question was yes. In 2010 every company, organization, and government agency was faced with the question of whether or not they should have an AP.