

A Web API Study: The Benefits of APIs in the App Economy

Fern Halper
Judith Hurwitz
Marcia A. Kaufman



**HURWITZ
& ASSOCIATES**
Insight to Action

Sponsored by Apigee Corporation



Introduction

The way businesses reach customers is changing dramatically. Consumers are rapidly moving to a world where services are available on devices ranging from smart phones to mobile tablets running a new generation of dynamic and agile applications, or “apps.” These apps can be an engine for business growth and channel expansion, allowing a company to reach customers and partners in new market niches beyond those traditionally served through browser-based Web applications.

Underpinning the vast majority of mobile and Web apps today are Web APIs (Application Programming Interfaces). A well-known example of a Web API is Google Maps. Through the Google Maps API, Google makes it easy for any third-party developer to integrate Google Maps into websites and mobile applications. To cultivate app development, a business must provide an API for its online services.

But it’s not just technology companies like Google that are courting developers to create apps for their platform with an API. Many smart businesses ranging from online educational services to package delivery companies and financial services organizations are offering Web APIs to spark an ecosystem of partners that expands the reach for their content and services. The momentum toward an economy built on apps – an “App Economy” – is undeniable. One of the primary characteristics of the App Economy is the need to launch and evolve services at the speed at which business requirements change, instead of at a traditional enterprise development pace.

While the value of Web APIs to spur the development of apps is well understood among software developers, there has been little research on the business impact of a well-designed API strategy. In this paper, we report the perspective of 24 companies that are using API technology to expand their market reach. The objective of this study is to provide insight into how a variety of organizations are creating business value today by utilizing Web APIs across multiple platforms and devices.

Web API Benefits Study – Key Findings

Hurwitz & Associates surveyed 24 leading-edge companies that are using Web APIs to help transform their businesses. These companies included traditional large enterprises as well as smaller start-ups. All of the respondents leverage Web APIs as part of their business strategy with partners, suppliers, and customers. The results have been significant. Hurwitz & Associates research indicates when using Web APIs, on average, these companies have experienced benefits in the following areas:

- **Reach:** A greater than 70% increase in partner/customer reach
- **Volume:** An increase in Web traffic by more than 70% and in Web service usage by 50%

The momentum toward an economy built on apps – an “App Economy” – is undeniable.



**HURWITZ
& ASSOCIATES**
Insight to Action

- **Productivity:** A 30% decrease in the amount of time to onboard partners and a 30% increase in the ability to bring new ideas to market quickly

A key finding of the research is that APIs have a major impact on a company's ability to quickly add partners to their ecosystem with a modest investment. In addition, it was relatively quick for these companies to enable their applications to support emerging devices and platforms before their competitors.

The results indicate that enterprises can harvest significant value in terms of reach, agility, and innovation using APIs to increase distribution through a third-party ecosystem. What does it mean to leverage an API? A business partner or third-party developer can use a well-defined API to build apps that extend a business' online services, content and brand to new markets and new users. Because a Web API can make the process of integration painless, developers and potential partners are more likely to engage and experiment.

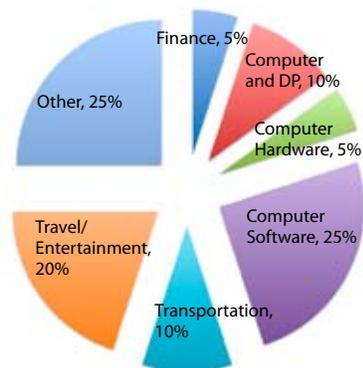
Web API Study Methodology and Results

Each of the 24 respondents in our study completed a detailed on-line survey addressing the following:

- Business and technical drivers for using Web APIs
- API usage
- Tracking of API metrics
- Business and technical benefits achieved as a result of the API strategy

After respondents completed the survey, Hurwitz & Associates followed up with interviews with a number of the participants to gain further insight into the benefits of APIs. All of the companies surveyed were using or planned to use software from Apigee, a provider of API products and technology for enterprises and developers. Survey participants came from a range of business types including traditional Fortune 500 enterprises as well as Internet-based start-ups. Figure 1, below illustrates the industries that participated in the study:

Figure 1: Industries represented in study.



Source: Hurwitz & Associates 2011

A key finding of the research is that APIs have a major impact on a company's ability to quickly add partners to their ecosystem with a modest investment.

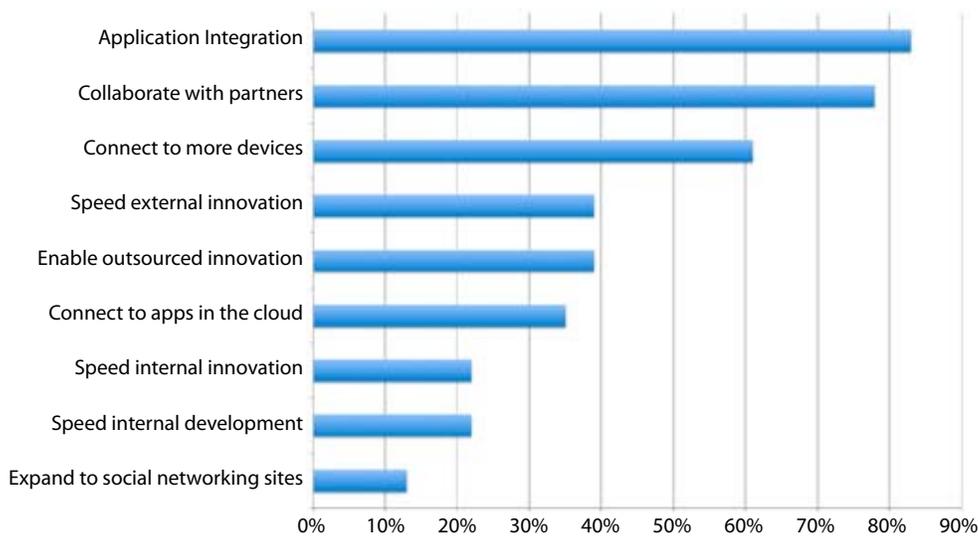


**HURWITZ
& ASSOCIATES**
Insight to Action

Technical and Business Motivation for Web APIs

Respondents were asked a series of questions about their motivation for using APIs from both a technical and a business perspective. In these questions, respondents were asked to rate each reason for deploying APIs as “Not Important,” “Somewhat Important,” “Important,” or “Very Important.” Figures 2 and 3 below illustrate the percent of respondents that rated each driver as “Very Important”.

Figure 2: Technical Motivation for APIs



Source: Hurwitz & Associates 2011

As shown in Figure 2, the top three technical drivers for using APIs include: application integration, partner collaboration, and connecting to more devices. With over 80% of the respondents indicating that application integration is a key driver, these companies recognize that providing a quick and easy way for developers to integrate applications leads to a stronger application ecosystem and increased value to customers.

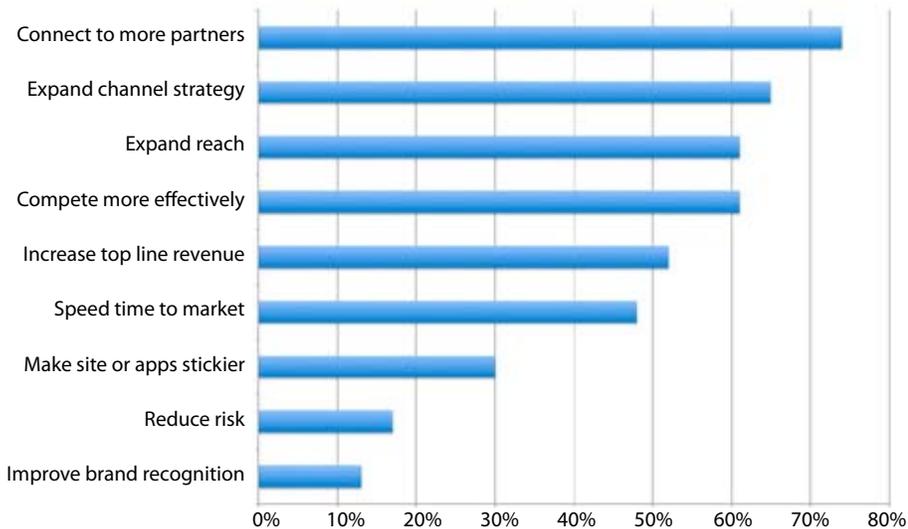
Additionally, companies are looking to APIs to help them collaborate with partners. These companies realize that they can expand the reach of their content and Web services if partners are also utilizing them. Therefore, being able to seamlessly work with these partners to make it easy for them to integrate to their applications is critical. In fact, close to 75% of the respondents listed this as a key driver.

Finally, organizations are also looking for APIs to connect to more devices. More than 60% of the respondents stated that this was a very important driver for utilizing APIs. Companies need to be able to deliver applications to customers – no matter where they are and what devices they use to connect.

... the top three technical drivers for using APIs include: application integration, partner collaboration, and connecting to more devices.



**HURWITZ
& ASSOCIATES**
Insight to Action

Figure 3: Business Motivation for APIs

Source: Hurwitz & Associates 2011

... approximately 75% of the respondents indicated that the ability to connect to more partners quickly is a critical business driver for Web APIs.

As illustrated in Figure 3, approximately 75% of the respondents indicated that the ability to connect to more partners quickly is a critical business driver for Web APIs. By providing an API, companies make it easier for outside developers to connect with their content and services. This leads to an expansion in the reach of both companies' applications. In fact, other top business drivers for Web APIs including expanding the channel strategy and expanding market reach are also partner related. These companies see APIs as supporting business growth by helping to strengthen the partner ecosystem.

For instance, an entertainment company in this study created a partner and affiliate API that is used to expand its brand awareness and channel distribution. The API enables partner applications that are new business channels for the company and new sources of potential revenue for both parties. "We view APIs as a single, scalable pipeline that delivers content from internal content services to external devices. APIs enable us to quickly integrate our service to many platforms and this is expanding our channels and our reach," according to an IT executive with the company.

The Overall Benefits of Web APIs

The companies in this study realized significant technical and business benefits from their APIs. These benefits fell into three categories: increase in market reach, increase in connection and Web/device traffic, and increase in productivity and innovation around the apps. These benefits can also help to drive revenue. In fact, several survey participants were able to make the connection between the role that APIs play in creating new relationships with business partners and the positive impact on revenue.



**HURWITZ
& ASSOCIATES**
Insight to Action

Increase in market reach

As illustrated in Table 1, companies using APIs found that they ultimately increased their customer/partner reach by more than 70%. Why? An API can make it easier to do business with a company because it makes connections easier. It enables companies to open up their services to more platforms and devices. For example, respondents reported the average increase in mobile platforms supported because of APIs increased by close to 60%. APIs make it easier for partners to build innovative apps on a variety of platforms, which helps companies expand their channel reach.

Table 1: Reach Related API Benefits

Benefits	Average Improvement
Increase in customer/partner reach	>70%
Increase in number of platforms reached	57%
Increase in number of apps built from API	50%
Increase in number of mobile platforms supported	58%

Source: Hurwitz & Associates 2011

Respondents cited that APIs enable flexibility in terms of partners connecting to Web services. It takes a very simple API call to be able to perform complex functionality. According to an executive at a SaaS provider, "Using an API provides flexibility that allows companies to connect to more platforms because partners do not have to know a lot about the inside of the service they are connecting with."

This connectivity also extends to the number of mobile devices supported. For example, a senior engineering executive explained, "APIs let you put business logic and services in a centralized spot. This logic can be reused and it becomes incremental to expand to different devices."

Volume

Utilizing APIs also resulted in an increase in traffic and service usage by participant companies in our study. This is illustrated in Table 2, below. Respondents saw an average increase in Web and device traffic of 70% and the average increase in usage of their Web services by close to 60%.

The benefits are illustrated in the table below.

Table 2: Volume Related API Benefits

Benefits	Average Improvement
Increase in Web/device traffic	70%
Increase in usage of Web service	58%

Source: Hurwitz & Associates 2011

... companies using APIs found that they ultimately increased their customer/partner reach by more than 70%.



**HURWITZ
& ASSOCIATES**
Insight to Action

APIs enable an increase in traffic and usage by enabling developers and partners to more easily develop apps that tap into a company's online services. All of this can help to drive the usage of a given provider's service.

For example, in the online gaming industry it is important to differentiate the game because there is so much competition among game developers. An executive for a gaming services company views APIs as a critical element of the company's business model. The company provides APIs to its developers so they can embed services into their games to increase their value to players. For instance, services like matching correct players together, tracking a person's score, or determining which elements of the game are most popular can help differentiate a game and drive traffic to the gaming site. APIs can help to drive up usage and increase the volume of traffic. According to an executive at a gaming publisher, "Exposing these APIs can grow a platform and help to differentiate a game in the marketplace. These APIs create the connections that developers can use to create better games and provide a better experience for players. We use APIs to make our site stickier."

Productivity and Innovation Benefits

Finally, use of APIs leads to developer/partner productivity improvements and creates an environment that supports innovation. This is illustrated in Table 3. The companies we surveyed reported that the use of APIs led to more than a 30% decrease in the time it takes to onboard a new partner. This is because the API is flexible so that partners can make simple calls to obtain complex functionality. APIs can also help companies to implement new ideas more quickly as APIs make it simpler to broadly offer new content and functionality to companies and their partners .

Table 3: Productivity Related API Benefits

Benefits	Average Improvement
Increase in number of new ideas implemented	35%
Decrease in time to onboard partners	30%
Increase in partner productivity	30%

Source: Hurwitz & Associates 2011

For example, a SaaS provider of email services decided to white label its product. It decided to provide an API to its partners that would make it easy to embed the email app in the partner's app. The strategy is working to do more than improve productivity; it is also helping to generate new ideas and implement them quickly. For instance, it provided the email service to a social media company. The implementation resulted in new product innovations that can expand profits for both companies. According to an executive from the email services company, "The number of new ideas generated is a side effect of improving productivity of partners."

APIs can also help companies to implement new ideas more quickly as APIs make it simpler to broadly offer new content and functionality ...



**HURWITZ
& ASSOCIATES**
Insight to Action

Conclusion

In the emerging App Economy, successful businesses are using apps as an engine for growth as they innovate to expand their offerings and reach new customers. Many business leaders have realized they can no longer expect to connect with a sufficient number of customers only through a Web browser. They need to meet their prospects and customers in the context in which they now consume services - wherever they are and whenever they want to be reached.

The results of this study indicate that companies that are leading the way today are seeing that increasing reach via Web APIs, particularly through growing their partner ecosystems, is an important way to help them achieve their goals. APIs are enabling companies to work with more partners and add them more quickly in order to drive distribution through more applications to more customers. And while customers are able to identify many concrete technical benefits, an important result is that Web APIs increase the ability for the business to innovate and change.

These factors, in turn, help drive overall usage of services. Businesses increased usage of their services leading to increased revenue because they are better able to integrate across their channels, create new channels, and support new platforms in a timely manner.

...while customers are able to identify many concrete technical benefits, an important result is that Web APIs increase the ability for the business to innovate and change.



About Hurwitz & Associates

Hurwitz & Associates is a consulting, market research and analyst firm that focuses on how technology solutions solve real world business problems. The firm's research concentrates on disruptive technologies, such as Cloud Computing, Service Oriented Architecture and Web 2.0, Service Management, Information Management, and Social and Collaborative Computing. We help our customers understand how these technologies are reshaping the market and how they can apply them to meet business objectives. The team provides direct customer research, competitive analysis, actionable strategic advice, and thought leadership. Additional information on Hurwitz & Associates can be found at www.hurwitz.com.



© Copyright 2011, Hurwitz & Associates

All rights reserved. No part of this publication may be reproduced or stored in a retrieval system or transmitted in any form or by any means, without the prior written permission of the copyright holder. Hurwitz & Associates is the sole copyright owner of this publication. All trademarks herein are the property of their respective owners.

175 Highland Avenue, 3rd Floor • Needham, MA 02494 • Tel: 617-597-1724
www.hurwitz.com