

Managing APIs—the Building Blocks of Digital Transformation

The Role of APIs in Digital Transformation

Just how much has API use grown?

According to ProgrammableWeb, an online journal chronicling the daily evolution of the API economy, there were around 100 public APIs listed in 2005; today, there are more than 16,000.¹

The digital revolution is upon us. Today, successful organizations change their product and service offerings as fast as customers' needs require. They quickly adapt to competitors—new players leveraging technology to redefine what the ideal customer experience looks like. And, they are extending the boundaries of their enterprise, exposing core competencies as digital assets that can be consumed by customers, partners and third parties.

These are the characteristics of the modern enterprise, and companies across all industries are embarking on digital transformation journeys to lay the groundwork for future success. In this pursuit, APIs are key.

Think of them as indirect digital channels that provide access to previously untapped data assets. Through APIs, you can add features, reach and context to your products and services. You can quickly take advantage of emerging technologies, like wearables and the Internet of Things (IoT), as well as artificial intelligence (AI). In addition, you can create APIs, products and services themselves by simply metering access.

But externalizing data to apps and a network of internal and external developers does not come without challenges. While APIs open up new channels of opportunity, they can also expose an organization to significant data exposure risks. In fact, the IRS was recently in the headlines for the wrong reason: More than 720,000 taxpayer accounts were illegally accessed using the “Get Transcript” API.² Such instances raise significant questions, like: Can you protect what is opening up? Can you trust what's coming in? And can you control what's going out?

Beyond security, the increased demand for speed of delivery and a lack of integration between the tools to create, monitor and optimize APIs present numerous obstacles for delivering high-quality end-user experiences.

In light of these challenges, what is becoming increasingly clear is this simple fact: The success of digital transformation is not just about whether you use APIs, but how you implement, manage and secure them.

¹ ProgrammableWeb, API Directory, November 2016, <http://www.programmableweb.com/apis/directory>

² Paul Bronner, Journal of Accountancy, “Still more accounts found hacked in IRS ‘Get Transcript’ breach,” Feb 26, 2016, <http://www.journalofaccountancy.com/news/2016/feb/irs-get-transcript-data-breach-worse-201613967.html>

Managing the Transformation

Digital disrupters exhibit a range of traits that are closely aligned with their success.

Compared to their mainstream peers, digital disrupters are:

- More likely to leverage APIs to optimize internal development by 2x
- More likely to use APIs to enable a third-party developer ecosystem by 2.8x³

The competitive business, the one that will keep its edge, will find a way to capitalize on the opportunities of digitization by opening up its assets to internal and external developers to build apps that will differentiate the business.

The API is the fundamental piece in this digital transformation puzzle. But to realize the value of APIs and avoid the pitfalls of exposing enterprise systems, it is vital to deploy technology that enables and simplifies key API management (APIM) processes.

Together, Hewlett Packard Enterprise (HPE) and CA Technologies help enterprises achieve business transformation through innovative APIM solutions tailored to address the unique needs of specific verticals, including financial services, insurance, retail and consumable products.

The alliance layers CA Technologies market-leading APIM software on top of HPE's digital transformation framework and Helion managed cloud platform to help businesses:

- Expose enterprise data and functionality in API-friendly formats.
- Secure the open enterprise.
- Unlock the value of data.

Expose Enterprise Data and Functionality in API-Friendly Formats

Enterprise data and applications typically comprise a complex web of standards, protocols, programming languages and file formats. The first stage of APIM is presenting these diverse information assets in a format that developers can understand and leverage. Fail to do so and you may struggle to deliver new applications at the speed the market requires.

But by using HPE's Helion managed cloud platform with integrated APIM solutions from CA, you can present legacy enterprise services as RESTful APIs in minutes rather than months. The solution decomposes large applications into self-contained units with everything necessary for app delivery, including data integration, business logic and a robust API layer. This means enterprises can more easily integrate and mobilize their core capabilities, accelerating their digital transformation journeys.

Secure the Open Enterprise

Opening up enterprise information assets for use in new applications exposes them to many of the same security threats that plague the Web (e.g., viruses, DoS attacks). Additionally, APIs create a range of new and unique security challenges that go beyond what enterprises are used to dealing with.

APIs are windows to applications and data, potentially providing hackers with a view into the inner workings of enterprise systems and a route to accessing those systems. This creates the increased possibility that hackers will be able to steal confidential data, hijack public-facing interfaces for nefarious purposes or crash critical systems.

But with CA Technologies integrated APIM solutions on HPE's Helion digital transformation platform, you can rest assured knowing all API traffic is filtered through an API gateway that identifies and neutralizes common or emerging threats, such as SQL injections, denial-of-service (DoS) attacks and viruses. What's more, APIM solutions from CA integrate seamlessly with leading identity and access management systems to effectively gate access to APIs for developers and users alike—all without compromising or complicating the end-user experience. As a result, you can let the right users, apps and partners in, while protecting your data against external threats.

Unlock the Value of Data

APIs create new business opportunities and routes to market. But without the proper controls, managing growing developer communities, executing monetization plans and continuously monitoring and optimizing API performance can quickly become all-consuming tasks. The result—not realizing your full digital potential.

Together, CA Technologies and HPE aim to minimize these challenges by providing a robust and integrated suite of APIM capabilities to consolidate and simplify your management efforts. You'll have the capabilities needed to package, price and sell data products or services via any combination of consumption models. And through granular controls, you can support the expansion of digital value chains across a wide range of platforms, apps, devices, partners and third parties. What's more, you'll have the instrumentation and analytics needed to continuously evaluate and optimize API performance. By using an integrated and powerful set of APIM tools, you can deliver better customer experiences faster and capitalize on new opportunities by unlocking the value of your data.

About the CA Technologies- Hewlett Packard Enterprise Partnership

HPE and CA have partnered and worked together for the past 20 years, with a successful history of cost-effectively addressing the unique business and technology needs of our clients. HPE, together with a dedicated CA team, deliver a powerful combination of HPE and CA Technologies that take advantage of CA software and HPE's ability to deliver full enterprise APIM solutions. Our combined and proven approach allows our customers to successfully integrate their diverse technologies and processes to achieve better results, even for the toughest enterprise challenges. Together, CA and HPE have developed several key offerings that consolidate toolsets and maximize efficiencies for end customers.

To learn more about our partnership, connect with a representative from CA Technologies or Hewlett Packard Enterprise:

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