



How APIs can help transform your practice

WHITE PAPER

“Efficiency is doing better what is already being done.”

— Peter Drucker

Former management consultant¹

Improving efficiency, driving automation, and streamlining internal processes are essential for tax and accounting firms looking to better meet increased client demands and, ultimately, generate greater profitability. For today's firms, this is made possible through advancements in technology and the rise of application programming interfaces, more commonly known as APIs.

A far cry from just a buzzword, API use has surged in recent years and is changing the way tax and accounting professionals work and serve their clients.

To help firms better understand the technology, this white paper explores the key benefits, impact, and implementation of APIs.

¹ Peter Drucker (1909–2005) was an Austrian-born American management consultant. (n.d.). Inspirational quotations. Retrieved from inspiration.rightattitudes.com/authors/peter-ferdinand-drucker/

The ABCs of APIs

As described by IBM, an API “enables companies to open their application data and functionality to external third-party developers, business partners, and internal departments within their companies. This allows services and products to communicate with each other and leverage each other’s data and functionality through a documented interface.”²

To help illustrate, consider a restaurant setting. In a restaurant you have the kitchen, waiter, and customer. In this scenario, the customer looks at the menu (a developer portal) and places their order with the waiter (an API). The waiter (an API) then takes that message (the data) to the kitchen, which then processes the order, prepares the food, and delivers it to the table. This is essentially what an API is but with data rather than food orders — sending data and getting results back.³

APIs are extremely valuable in today’s business environment and are at the core of modern software development. In fact, many people today are using APIs in their daily lives and some may not even realize it. Consider these common examples⁴:

Google Maps: One of the most common examples of an API is Google Maps. For instance, you can communicate with Maps API, through geolocation and multiple data layers, when plotting travel routes or tracking items on the move, such as a delivery vehicle.

Universal logins: Another popular API example is the function that enables people to log in to websites using their Facebook, Twitter, or Google profile login details.

Travel booking comparisons: Travel booking sites aggregate thousands of flights, showcasing the cheapest options for every date and destination. This service is made possible through APIs.

Third-party payment processing: When purchasing an item on an e-commerce site, have you used or noticed the “Pay with PayPal” function? That functionality works through an API.

An API is a set of routines, protocols, and tools for building software applications. An API specifies how software components should interact and enables applications to exchange data and functionality.

² Application Programming Interface (API) [Web log post]. (2020, August 19). Retrieved from ibm.com/cloud/learn/api#toc-what-is-an-dhlDsqDX

³ Knighton, Michael, phone interview, March 18, 2021

⁴ Application Programming Interface (API) [Web log post]. (2020, August 19). Retrieved from ibm.com/cloud/learn/api#toc-what-is-an-dhlDsqDX

It is important to note that not all APIs are created equal. Here's a quick overview of four main types of APIs⁵:

Open APIs

Open APIs are also known as public APIs. They are published on the internet and shared freely. For example, Facebook provides an open API that allows third-party tools to create photo albums or post to a user's news feed.⁶

Partner APIs

These are APIs exposed to or by strategic business partners.

Internal APIs

These are private APIs that are intended to improve productivity and communication across different internal development teams. They are not available to users outside of the company.

Composite APIs

These APIs combine multiple data or service APIs into a single API call. They are useful in microservices architecture, where performing a single task may require information from several sources.

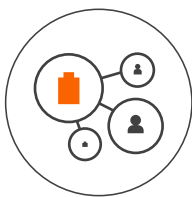
Consider this: according to one survey of more than 10,000 API developers, users, testers, and executives, 52.8% of APIs used are internal, 28.4% used are shared only among integration partners, and 18.8% used are public.⁷

THE BOTTOM LINE

APIs are extremely important in today's business environment. For tax and accounting professionals, APIs are helping transform the way they work and serve their clients.

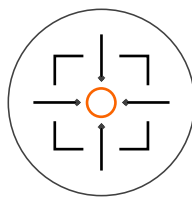
Words developers may say⁸

SOAP
Simple Object Access Protocol



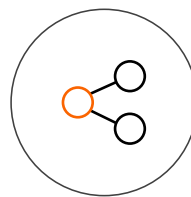
An API protocol built with XML. With SOAP APIs, it is easier to share information between apps or software components that are running in different environments or written in different languages.

REST
Representational State Transfer



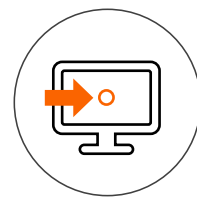
A set of web API architecture principles, which means there are no official standards. To be a REST API (also known as a RESTful API), the interface must adhere to certain architectural constraints.

Endpoint



The point of entry in a communication channel between two systems. It looks a lot like a web page address.

Token



This is essentially a key that is used to get access to the API, only by authorized computers.

5 Application Programming Interface (API) [Web log post]. (2020, August 19). Retrieved from ibm.com/cloud/learn/api#toc-what-is-an-dhlDsgDX

6 McKenzie, C. (n.d.). Open API (public API) [Web log post]. Retrieved from searchapparchitecture.techtarget.com/definition/open-API-public-API

7 Postman. (2019, December 10). 2019 Postman "State of the API" Report Reveals APIs Expanding Beyond Developers [Press release]. Retrieved from businesswire.com/news/home/20191210005254/en/%C2%A02019-Postman-%E2%80%9CState-of-the-API%E2%80%9D-Report-Reveals-APIs-Expanding-Beyond-Developers

8 Knighton, Michael, phone interview, March 18, 2021

Three Benefits of APIs

There are significant benefits to be gained when firms have the flexibility to connect the dots across systems via APIs. The reality is that when data is siloed in separate applications and disconnected systems, or if you're dependent on manual processes to enter and aggregate it, your firm is likely missing out on opportunities to leverage it between various tools and users. Let's take a closer look.

1. Drive greater efficiencies

One of the most notable benefits of using APIs is that they can save your firm time and resources, and many tasks can be streamlined or eliminated. This ultimately means greater profitability for your firm, as well as greater accuracy and mitigated risk.

Consider this: Traditionally, tax professionals have spent a great deal of time gathering data from clients, loading that data into spreadsheets, reviewing the spreadsheets, determining what data is needed in the columns, reformatting the spreadsheets to be fed into the tax software, and then submitting that file into the tax application. A time-consuming, manual process that, with the help of APIs, can be automated and reduced to just a few minutes.

"Every mouse click in a firm has a dollar value associated with it and the more mouse clicks you can reduce throughout the process, the less it is going to cost you to get that return done," Knighton said.⁸

[Using APIs](#), firms can enjoy improved data accessibility, process automation opportunities, and the ability to establish fully seamless, end-to-end workflows.

Consider the following efficiency gains:

- Integrate with existing business systems to reduce manual data manipulation and streamline your tax workflows
- Reduce internal controls risks that come with the manual upload and download of data files
- Use the same data across multiple solutions, meaning you only import once — saving you input time
- Export data to be used by your partners or in-house analytics team for additional analysis

"The API is used to provide a way for an organization to take multiple components, multiple applications, and integrate them as required by their business."⁸

– Michael Knighton
Vice President
Global Accounting Firms Technology
Thomson Reuters

⁸ Knighton, Michael, phone interview, March 18, 2021

⁹ Knighton, Michael, phone interview, March 18, 2021

It is also important to note the efficiencies that can be gained through standardization, especially with tax tools. Why? Because tax is subjective. Not every preparer will put the same number in the same place for the same reason.

“To gain efficiency, firms want to standardize their tax return process. Firms can leverage standardized workpapers tailored to their process and using APIs move the workpaper data directly into the tax software. This standardization of the process makes the returns faster to prepare and easier to review. Doing this means you can now move people between teams because not every client is going to be different,” Knighton said.¹⁰

2. Bolster your firm’s advisory opportunities

Faced with increased client demands, a complex regulatory and legislative landscape, and the commoditization of tax preparation, more firms are placing a greater emphasis on providing clients higher-value strategic advisory services.

In fact, a recent survey from the Thomson Reuters® Institute found that 95% of tax professionals believe their clients want business advisory services, a client demand that was further accelerated by the COVID-19 pandemic.¹¹

Building a tech stack that efficiently connects the dots across systems via APIs can support a firm’s advisory practice. With an integrated platform, where information from multiple sources is digitally connected, firms save time and resources. It also provides for more accurate, real-time business reporting.

Firms can then focus more energy on delivering clients higher-value, higher-margin advisory services that will increase client satisfaction and ultimately boost profitability.

“[APIs] are the vehicle you can use to tailor your process to something that is really efficient,” said Knighton. “As you get familiar with APIs, you can start expanding their use, interacting between multiple products, enriching people’s jobs, and allowing them to do more.”¹²

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¹⁰ Knighton, Michael, phone interview, March 18, 2021

¹¹ Thomson Reuters Institute. (2021, February 9). A Sizeable Majority of Tax Professionals See Future in Advisory, Thomson Reuters Study Finds [Press release].

Retrieved from [webwire.com/ViewPressRel.asp?ald=270132](https://www.thomsonreuters.com/webwire.com/ViewPressRel.asp?ald=270132)

¹² Knighton, Michael, phone interview, March 18, 2021

3. Differentiate through specialization

A growing number of firms are embracing industry specialization. Targeting a specific niche or vertical enables firms to differentiate from the competition. [Leveraging APIs](#) can help firms more efficiently meet the unique needs of those clients.

Consider this: When business professionals who purchase accounting firm services were asked what they would change about their accounting firms, 27% said they wanted more familiarity with the business and its industry, according to a survey by CPA.com, Hinge Research Institute and Bill.com.¹³

By leveraging APIs, firms can tailor software to meet their clients' unique business needs more efficiently.

"You can have the software help get the data right in those specialized areas," said Knighton. "You could also use [APIs across different products](#) ... to bring different pieces of information together for the users. One option may be incorporating specific guidance to a process. Through APIs you can take data found in Thomson Reuters® Checkpoint Edge and provide in-context information relevant to the subject area in which a tax professional is working. If the user needs more information, you can provide links using our API to go back into Checkpoint® Edge and run very targeted searches."¹⁵

The yoga of technology

When building their tech stack, firms today may opt for a best-of-breed approach that incorporates multiple vendors. Unfortunately, utilizing a variety of cloud-based applications and managing data across those applications can be difficult.

The good news for IT departments is that [API integration](#) enables tech staff to support integrations quickly and effectively. It also creates the flexibility to connect systems and processes and build streamlined systems. APIs are vital to addressing complex integration needs. Furthermore, API integration makes it possible for a single application to serve as a hub of sorts — pulling in critical data from other applications.

The top three industries served by accounting firms¹⁴



Professional, scientific, or technical services

60%



Real estate or rental and leasing

50.3%



Construction

49.7%

¹³ "Where Opportunity Meets Value: Business Model Trends for Accounting Advisory Services" (Rep.). (2020). Retrieved from accountants.bill.com/business-model-pricing/cpacom-billcom-hinge-businessmodelsurveyreport

¹⁴ "Where Opportunity Meets Value: Business Model Trends for Accounting Advisory Services" (Rep.). (2020). Retrieved from accountants.bill.com/business-model-pricing/cpacom-billcom-hinge-businessmodelsurveyreport

¹⁵ Knighton, Michael, phone interview, March 18, 2021

The impact of APIs

Effectively using APIs can cut costs, drive greater efficiencies, and help boost the bottom line, and the [impacts of APIs on firm leaders, as well as tech staff](#), should not be overlooked.

Perhaps summing it up best, a McKinsey and Co., article stated: “As the connective tissue linking ecosystems of technologies and organizations, APIs allow businesses to monetize data, forge profitable partnerships, and open new pathways for innovation and growth.”¹⁶

Using APIs can improve operational efficiencies, mitigate risk, and, by leveraging data, help firms unlock new growth opportunities, including new products and services. This ultimately means greater profitability for firms and a win-win scenario for firm leaders.

Consider, for instance, one financial institution, which according to the McKinsey and Co. article, developed a library of standardized APIs that software developers could use as needed for a variety of data-access tasks rather than recreating the wheel each time. The result: traditional product-development IT costs were reduced by 41% and it led to a 12-fold increase in new releases.¹⁷

“Seeing these kinds of tangible benefits makes it easier for business leaders to increase their expectations of their software engineers to develop better products more efficiently,” the article stated.¹⁸

FUEL INNOVATION WITH APIS

APIs enable tech staff to support integrations quickly and effectively and create the flexibility to connect systems and processes. This can prove especially beneficial for firms looking to bridge the gap between new technologies and their legacy systems. APIs can also help tech staff fuel innovation. As explained in a HubSpot blog, “By allowing developers — whether third-party or internal members of your workforce — to reuse software components, APIs empower them to focus on developing new solutions rather than repeat work that’s already been done.”¹⁹

¹⁶ Knighton, Michael, phone interview, March 18, 2021

¹⁷ Iyengar, K., Khanna, S., & Ramadath, S. (2017, September 12). What it really takes to capture the value of APIs. McKinsey Digital. Retrieved from mckinsey.com/business-functions/mckinsey-digital/our-insights/what-it-really-takes-to-capture-the-value-of-apis

¹⁸ Iyengar, K., Khanna, S., & Ramadath, S. (2017, September 12). What it really takes to capture the value of APIs. McKinsey Digital. Retrieved from mckinsey.com/business-functions/mckinsey-digital/our-insights/what-it-really-takes-to-capture-the-value-of-apis

¹⁹ Knighton, Michael, phone interview, March 18, 2021

Implementing APIs

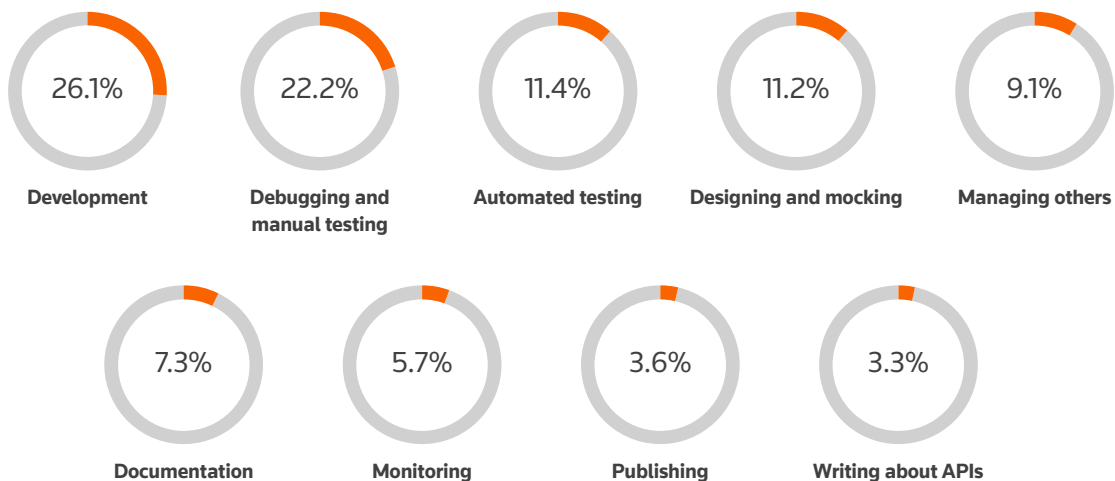
When it comes to implementing APIs, the degree of difficulty can vary.

“Usually you need a software engineer ... Any software engineers coming out of universities know how to use APIs. They are all expecting it because they are all being taught how to use iOS and develop apps for a [smartphone], which is all API. So, the world’s way of computing these days is to use APIs.”¹⁹

Firms that seek the expertise of a software engineer but do not have one on staff may want to turn to a consulting organization for assistance. In addition, sites like Freelancer.com, a freelancing and crowdsourcing marketplace that connects employers and freelancers, may be a good (and more cost-effective) solution for some firms looking to hire outside talent.

Consider this: A survey of more than 10,000 API developers, users, testers, and executives found that 46.6% of respondents identified as being either a front-end or back-end developer (compared with 58.6% the prior year), with QA engineers, technical team leads, API architects, DevOps specialists, and others rounding out the field.²⁰

The survey also looked at time spent on APIs and found the following²¹



²⁰ Postman. (2019, December 10). 2019 Postman “State of the API” Report Reveals APIs Expanding Beyond Developers [Press release]. Retrieved from businesswire.com/news/home/20191210005254/en/%C2%A02019-Postman-%E2%80%9CState-of-the-API%E2%80%9D-Report-Reveals-APIs-Expanding-Beyond-Developers

²¹ Postman. (2019, December 10). 2019 Postman “State of the API” Report Reveals APIs Expanding Beyond Developers [Press release]. Retrieved from businesswire.com/news/home/20191210005254/en/%C2%A02019-Postman-%E2%80%9CState-of-the-API%E2%80%9D-Report-Reveals-APIs-Expanding-Beyond-Developers

There are, however, tools available like Microsoft Power Automate, which aims to significantly simplify the creation of automated processes. With Power Automate, anyone from a basic business user to an IT professional can create automated processes.²²

Thomson Reuters partnered with Microsoft to release a [GoFileRoom connector](#) within the Microsoft Power Automate ecosystem. Using Microsoft Power Automate, GoFileRoom users can now automate more than 45 (otherwise manual) actions. And firms can combine these actions to create automation within their processes.²³

Examples of what you can do with Power Automate²⁴



Automate business processes



Move business data between systems on a schedule



Send automatic reminders for past due tasks



Automate tasks on your local computer like computing data in Excel



Connect hundreds of data sources or any publicly available API

Use cases include²⁵:

- **New staff onboarding:** Import a Microsoft Excel spreadsheet to create new GoFileRoom users.
- **Mobility/Automation:** Create a PowerApp that allows you to take a picture of a document, which then gets added as a PDF to GoFileRoom.
- **Integration:** Retrieve a document back from e-signature applications, then have it automatically saved to GoFileRoom.

²² Get started with Power Automate - Power Automate. (n.d.). Retrieved March 24, 2021, from docs.microsoft.com/en-us/power-automate/getting-started

²³ Leong, C. (2019, October 18). API and integration: Driving automation in tax and accounting firms [Web log post]. Retrieved from tax.thomsonreuters.com/blog/api-and-integration-driving-automation-in-tax-and-accounting-firms/

²⁴ Get started with Power Automate - Power Automate. (n.d.). Retrieved March 24, 2021, from docs.microsoft.com/en-us/power-automate/getting-started

²⁵ Leong, C. (2019, October 18). API and integration: Driving automation in tax and accounting firms [Web log post].

Retrieved from tax.thomsonreuters.com/blog/api-and-integration-driving-automation-in-tax-and-accounting-firms/

Conclusion.

Improving efficiency, driving automation, and streamlining internal processes are undoubtedly essential for today's tax and accounting firms. [Leveraging the power of APIs](#) can help your firm maintain its competitive edge and ultimately drive greater profitability.

The good news: You don't have to go it alone. Turn to a trusted solution provider such as Thomson Reuters, who can help.

Give your firm a competitive advantage with flexible technology from Thomson Reuters

Unlock endless ways to increase efficiency and better serve your clients with these **tax and accounting APIs**

FirmFlow Extract data from FirmFlow and bring it into more flexible reporting tools, including Microsoft Power BI, Tableau, and Zapier. Gain insight into workflow activity and where staff is spending time to better manage client projects daily.

More about **FirmFlow**

GoFileRoom is cloud-based electronic document storage software designed for tax and accounting professionals. Automatically upload and search documents for metadata to easily index your data at the batch level. With the ability to see and document user data at the firm level, you have the insights you need for analysis and decision support.

More about **GoFileRoom**

GoSystem Tax RS is the market leader for corporate tax departments. Highly scalable, it can handle your workflow no matter the size of your firm. The software serves clients filing all return types — including multitiered consolidated corporate returns, life insurance returns (including mixed group filings), and tax equalization returns. Save time and effort by automating manual tasks, such as printing and collating returns, as well as importing and exporting data into tax returns.

More about **GoSystem Tax RS**

ONESOURCE® Reduce the risk of errors by not replicating manual tasks such as exporting data. Plus, ensure you don't miss important deadlines with the due date calendar that integrates with ONESOURCE, Checkpoint, and FirmFlow – coming soon.

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Ledgible

Ledgible by Verady provides AICPA SOC assured tax reporting and portfolio tracking for crypto assets. The Ledgible platform is the proven crypto asset solution for professionals in use at leading accounting firms and major crypto companies around the world. Ledgible Tax Pro is used by hundreds of firms to make tax reporting easy for their professionals and clients. Through our collaboration, Ledgible integrates seamlessly with both GoSystem Tax RS and UltraTax and is the exclusive data provider for Thomson Reuters.