



What is an API?

Darren Hopper, 3 September 2018

What are APIs and what do they have to do with the future of payments experiences in NZ?

Searching, sharing, liking and shopping online is second nature and we rarely pause to consider the levels of technological complexity that lie beneath it.

As we go about our business online - using Facebook to sign up for something new, searching Expedia for the best flight and accommodation deals or enabling location services on an app or site - we are blissfully unaware of the mechanisms that drive these seamless experiences. And it's for a very good reason. It means the software that's running these sites is doing its job – that is, creating the seamless, integrated online experiences that we love so much.

But what is the secret sauce in the software that makes such experiences possible? It's a big little thing called an Application Program Interface, or API.

So, what is an API? Think about the last time you bought something online. First you might have done a wee bit of research and used a site that compares pricing from around the web, or you could have bought a concert ticket and blasted the news on all over your social channels directly from the ticketing site. Interactions like these are made possible thanks to APIs.

Very simply, an API is a tool used by computer programmers that allows different online systems to safely connect and communicate with each other, be they web-based systems, operating systems, databases, computer hardware, or software libraries. APIs are the translators, helping these systems talk to and understand each other.

In the same way that graphic user interfaces (GUIs) makes it easier for us to use computer programs or applications, APIs make it easier for developers and programmers to piece together and integrate the technologies that are needed to drive those applications.

As a user, you only see one interface – such as the concert ticket website – but behind the scenes, the various applications are busily working together using APIs. The result is a seamless experience, since you don't notice when software functions are handed from one application to another.

With such functionality, APIs are sometimes described as the “universal plugs” of the internet in the way they allow an app or website to plug directly into another system (like Google Maps or Facebook) and safely share data, even though both systems are set up in very different ways. Basically, it simplifies the creation of new technologies – and that means more and better ways for consumers to do business online.

Because APIs are designed to do very specific jobs, like identifying you or authorising payments, they can access deep data while preventing a third-party from seeing any private information they don't need. With abilities like this, it's no wonder that APIs are a hot topic the payments industry right now.

APIs are at the heart of the global movement towards a new approach to financial services called ‘open banking’, which says that everyone – banks, payment industry partners, fintechs, businesses – can develop, evolve and deliver innovative payment experiences all connected through APIs.

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With APIs operating as the hub for open banking, it means that the payments industry can rapidly develop and improve the ways we pay for stuff. It means removing pain points for paying your mates, paying your bills and even revolutionising how we shop and make payment instore.

While that might sound a bit futuristic, the exciting thing is that this future has already arrived in New Zealand. Paymark has created the Open Payments Enabled Network (OPEN), a centralised cloud-based hub that any bank or business or can connect to via some simple APIs.

A great example is Online EFTPOS, a new payment option that enables you to make payments with your mobile number and mobile banking app. Online Eftpos is available to over 1.5 million Kiwis through ASB, Co-op and Westpac (Westpac launch in October 2018)

It's not hard to grasp the benefits for the customer. Thanks to APIs, customers will ultimately have more choice and be able to access new markets, all with the highest levels of security. With tech like this already in our grasp, the future of the payments experience in New Zealand is looking bright.

So next time you're clicking and typing away on your computer transacting your business online, take a moment to appreciate the hardworking APIs working behind the scenes to make it all possible – and strap in for a future powered by the humble API. The spaceship is leaving now.

The question is, will you be on it?

To find out more about OPEN, and to connect with Paymark, visit paymark.co.nz/future



ABOUT THE AUTHOR

Darren Hopper is Head of e-Commerce, Digital Experience & Marketing at Paymark. Darren has worked for market leaders in the Telco industry prior to joining the Paymark team in 2017, where he has led the launch of OPEN and overseen the integration of Paymark's digital products into kiwi businesses looking to alleviate payments friction.

A little bit about Paymark

For almost 30 years, Paymark has been connecting Kiwi businesses with world-leading EFTPOS, eCommerce and business insights. We process 75% of the country's transactions, for over 80,000 businesses up and down the country.

