

# Understanding the power of APIs for your Insurance Software

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*When discussing Application Programming Interfaces or API for short, it is not usual to think of ordering food with a waiter at a restaurant. In this article our focus is on explaining exactly what an API is; using the above analogy.*

We'll then show the benefits of using APIs in conjunction with your Insurance Software and the difference between Stateless and Non Stateless APIs. Lastly, we highlight how APIs are the perfect solution for delivering excellent customer service using Uber as an example. But first, let's discuss the history of APIs and why they have become a game changing approach to software across today's digitised industries.

## HOW APIS ALL BEGAN

With the technological boom of the dot.com bubble in the early 2000s, there was a dramatic increase in different coding languages and software for consumers to use. This rapid adoption to the digital world was fun and exciting. But there was one problem, not every new piece of software could be enjoyed, as they didn't all connect with each other. Queue the invention of the API.

An API is essentially a maintained interface that exposes part or all of the functionality in a given system to be used by other systems in a pre-defined and constantly maintained way. This allows one to expose certain features or data of one's system for others to use and integrate with. With the ever growing development of third party APIs we have seen a symbiotic co-dependant interdependency between systems. If this above description doesn't explain it simply enough, we have a relatable one below.

## ORDERING APIS OFF THE MENU

To use a practical example to explain what an API is, we can use the restaurant analogy. The restaurant floor is the front end of the system. The food is cooked in the kitchen, and that is the part of the system that does the heavy lifting or what is known today as the "back-end".

The waiter or waitress is the intermediary or the API, they are the ones who take the order from the front end (based on the users instructions) and deliver these requests through to the kitchen (system). The kitchen will then prepare the food and the same API (in this case the waiter or waitress) will deliver the result (food) to the patron (user). This process continues all the way from drinks, to starters, through to mains and finally dessert. Once the patron is satisfied, they will pay and leave the restaurant; much like closing an App once the action or request has been completed.



## THE BENEFITS OF USING APIS FOR INSURANCE

We take for granted the interconnected digital world we live in. From booking flight tickets, to ordering food or simply posting an update on our social media. We are all using APIs to fulfill the necessary actions. APIs are essentially the unsung hero of the digital world. Since their creation they have endless amounts of benefits across all industries. For this article, we want to dive into the particular benefits brought about for the insurance industry.

## THE BENEFITS OF USING APIS FOR INSURANCE INCLUDE:

1. Allow Insurers to create tailored quotes to customers
2. Create a new business market: Insurance as a Service
3. Improves the user experience (UX) through hyper-personalisation
4. Improves customer engagement as the system is at their fingertips - they own their insurance journey

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5. Reduces the cost basis to deliver services
6. Increases speed of services using third party APIs
7. Allows for collaborations between different insurers to tailor the service to multiple customers
8. Barrier to entry for new insurance companies to enter the market is lowered
9. Removes the use of isolated silos and systems and amalgamates into one connected place
10. The data allows for the development of new products based on real time information

These 10 benefits allow applications, data and devices to work seamlessly together to connect the insurer and the insured in a way never seen before.

#### **THE DIFFERENCE BETWEEN STATELESS & NON-STATELESS APIS**

Now, we look to get a little more technical when explaining how the current APIs have evolved into two broad API types. These include:

- Stateless API
- Non Stateless API

The Stateless API is essentially where the primary/ initiating system will send a web request in a predefined structure to the receiving system’s endpoint. This request can be in various formats (JSON, XML, SOAP etc) and can be sent via various channels (SFTP, HTTPS etc). The basic premise, however, is that all the information the receiving server requires to fulfil its function is contained in one request. For example, the actual work payload as well as the login and/or authentication credentials. This is the preferred approach for an API to be created using a common example of this type of API, is a JSON based, REST API.

The Non Stateless API works by first initiating a login call to the receiving server and a response with login credentials, when an authentication token is received. Then, depending on the API multiple further calls need to be made to retrieve all the information required to perform the relevant action on the receiving system. This is obviously less ideal than the first API type and is not recommended. The requests can also be in various formats and can be sent via various channels. Some APIs even have different request methodologies and end points for the initial log in call as opposed to the actual payload call.

#### **WHY APIS ARE THE PERFECT SOLUTION TODAY**

They have been the root cause for an enormous shift across the digital industry. Without the pragmatism of software engineers creating these dynamic APIs, we wouldn’t enjoy the benefits that we do today.

These APIs allow companies like Uber to function seamlessly offering a service that has changed the way riders and drivers experience travel. What many people don’t realise when using the Uber App, is the total number of third party APIs assisting in the overall UX.

#### **THE LIST BELOW SHOWS HOW MANY DIFFERENT FUNCTIONS ARE INVOLVED IN UBER DELIVERING THEIR INDUSTRY BREAKING TECHNOLOGY:**

- The GPS positioning is done by the multiple operating systems like Apple’s iOS or Android
- Calculating the route and duration is done by Google Maps and MapKit
- The instant messages are sent by Twilio
- Receiving and making payment is done by Braintree
- You will receive your instant receipt courtesy of Mandrill
- And this is all hosted in the cloud by Amazon Web Services (AWS) with servers all around the world for speed

Now, when we shift our thinking to the Insurance Industry and its rapid adoption to technology you need to have software that you can trust. Software that delivers a UX that puts the consumer in control of their own policy. This is how insurance companies can create loyal customers for years to come, consistently increasing their lifetime value to the organisation. Implementing the right software to do just that, is your insurance company’s competitive advantage today.

OWLS™ Software is a proudly South African insurance administration software company utilising the benefits of APIs to give Insures, UMAs and Brokers the chance to connect with their customers. Our technology is designed to deliver the best customer experience using real-time data. This influx of information allows our clients to build adaptive products that resonate during a time of uncertainty.

**APIs are not the future, they are the present and the sooner your company adopts them, the sooner you can solidify your future in this digitised world.**