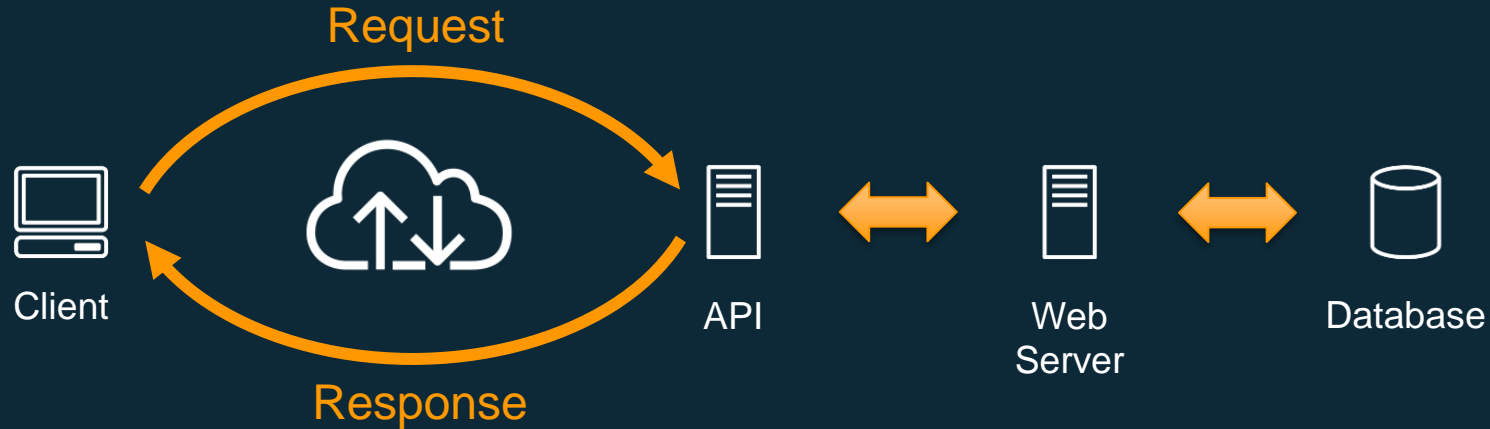# What's API?

API stands for Application
Programming Interface

# Application Programming Interface (API)



Web Services offer APIs for developers to use, e.g.:
- Social Networks – Facebook, Twitter, etc.
- Payment Processing – Amazon Pay, PayPal, etc.

## For Free

- Drives Adoptions of APIs
- Typically low valued assets
- Drive brand loyalty
- Enter new channels

*Example:*



Facebook Login API provides free authentication for any Web / mobile app

## Developer Pays

- Business Asset must be of high value to the Developer
- For example, marketing analytics, news,
- Capabilities such as credit checks

*Example:*



IBM Cloud – No cost trials, pay per use, scale up and down

## Developer Gets Paid

- Provides incentive for developer to leverage web API
- Ad placements
- Percentage of revenue sold product or services

*Example:*



Google AdSense APIs pay developers who include advertising content into apps

## Indirect

- Use of API achieves some goal that drives business model.
- E.g. Increase awareness of specific content, or offerings

*Example:*



eBay Trading APIs offer developers access to trading services extending the reach of listings and transactions

# The API economy

Total revenue of $1134 millions in 2019

Generates 60% of its revenue through APIs

Generates 90% of its revenue through APIs

Generates 60% of its revenue through APIs

10K third apps created by community

# Cloud Computing

As APIs were generating social buzz across the Internet, Amazon saw the potential of an RESTful approach to business, internalized and saw APIs in a way that nobody had seen them before - giving birth to an approach to using APIs that was much more than just e-commerce, it would re-invent the way we compute.

## RESTFul APIs

# A Mobile World

With the introduction of iPhone and Android smart phones, APIs had evolved from powering e-commerce ,social and the cloud to delivering valuable resources to the mobile phones in our pockets, that are quickly becoming commonplace around the globe.

APIs make valuable resources modular, portable and distributed, making them a perfect channel for developing mobile and table applications of all shapes and sizes.

# Connectivity



In 2015, we had 4.9 billion connected things, by 2020, the number of Internet-connected things will reach or even exceed **50 billion**.

According to estimations by the McKinsey Global Institute, the IoT will have a total economic impact of up to **$11 trillion** by 2025.

Modern vehicles are API consuming machines

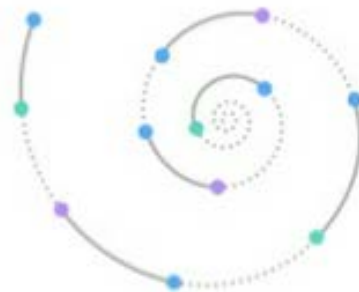# Use... as Cloud Logic Layer



AWS Lambda Functions     Azure Cloud Functions     Google Cloud Functions     IBM OpenWhisk