

A person is seen from the side, working at a desk. They are wearing a light blue shirt. In front of them are several computer monitors. The monitors display lines of code, suggesting a programming or development environment. The background is slightly blurred, showing what appears to be a window or a wall with some papers or posters.

# Backend As A Service

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## **What is Baas/ MBaas**

Mobile backend as a service, or MBaaS, is an important tool for both web app and mobile app developers. It provides a means to connect those apps with cloud storage, as well as APIs for additional functionality and features. It also delivers the means to provide push notifications for apps, user management and more. It is sometimes called backend as a service, or BaaS, rather than MBaaS.

## **Five BaaS Solutions**

Back4App



## Back 4 App

People looking to host their Parse projects are found to be using Back4App because of its simplicity and exciting features. They also sought after due to their simple pricing structure. They also price according to the needs of the Developers.



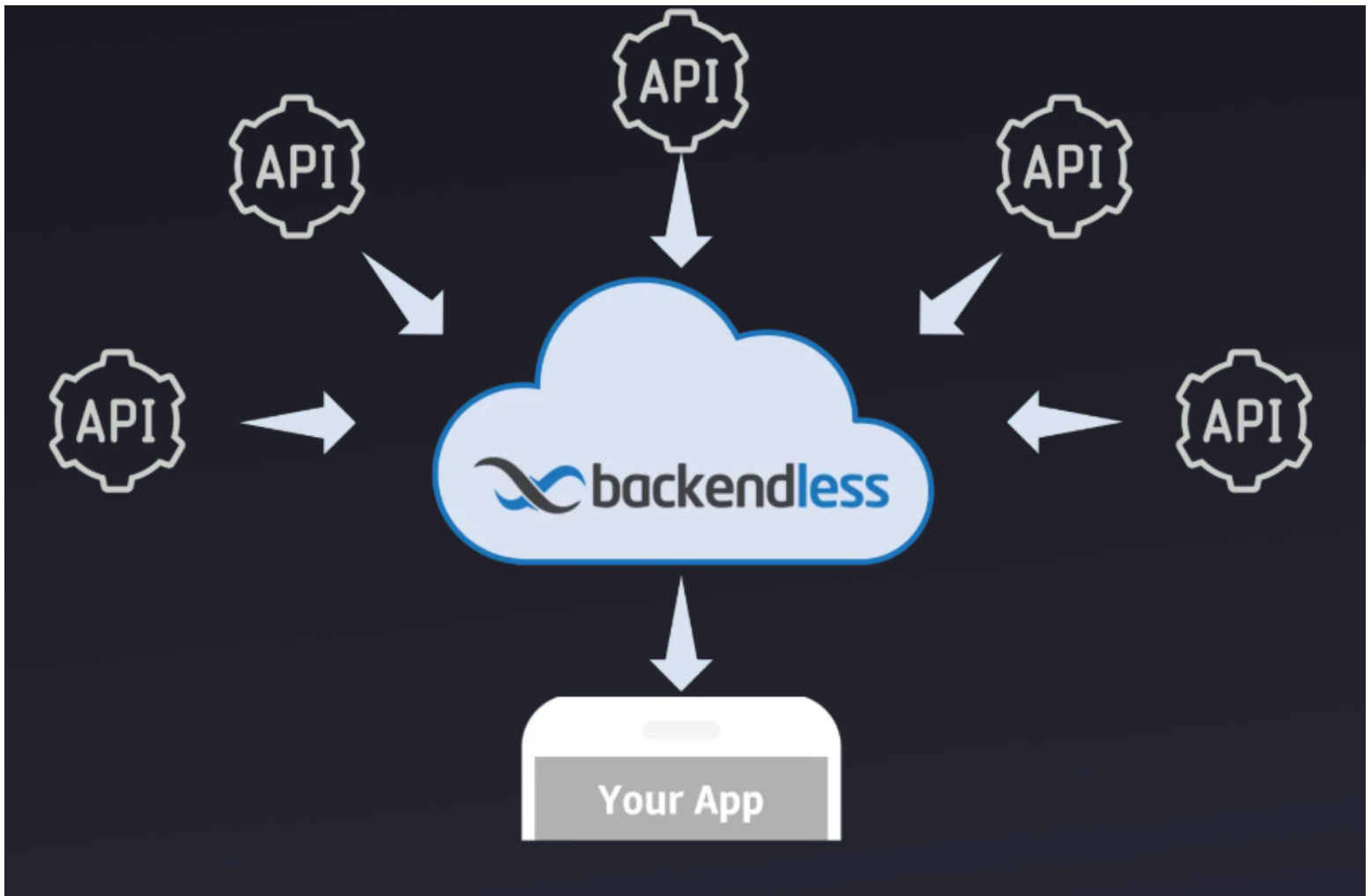
## FireBase

Fire Base is known globally due to it being purchased by Google in 2014. They have several different versions for users to choose from which makes them very user friendly. For beginners they recommend starting with the base FireBase.



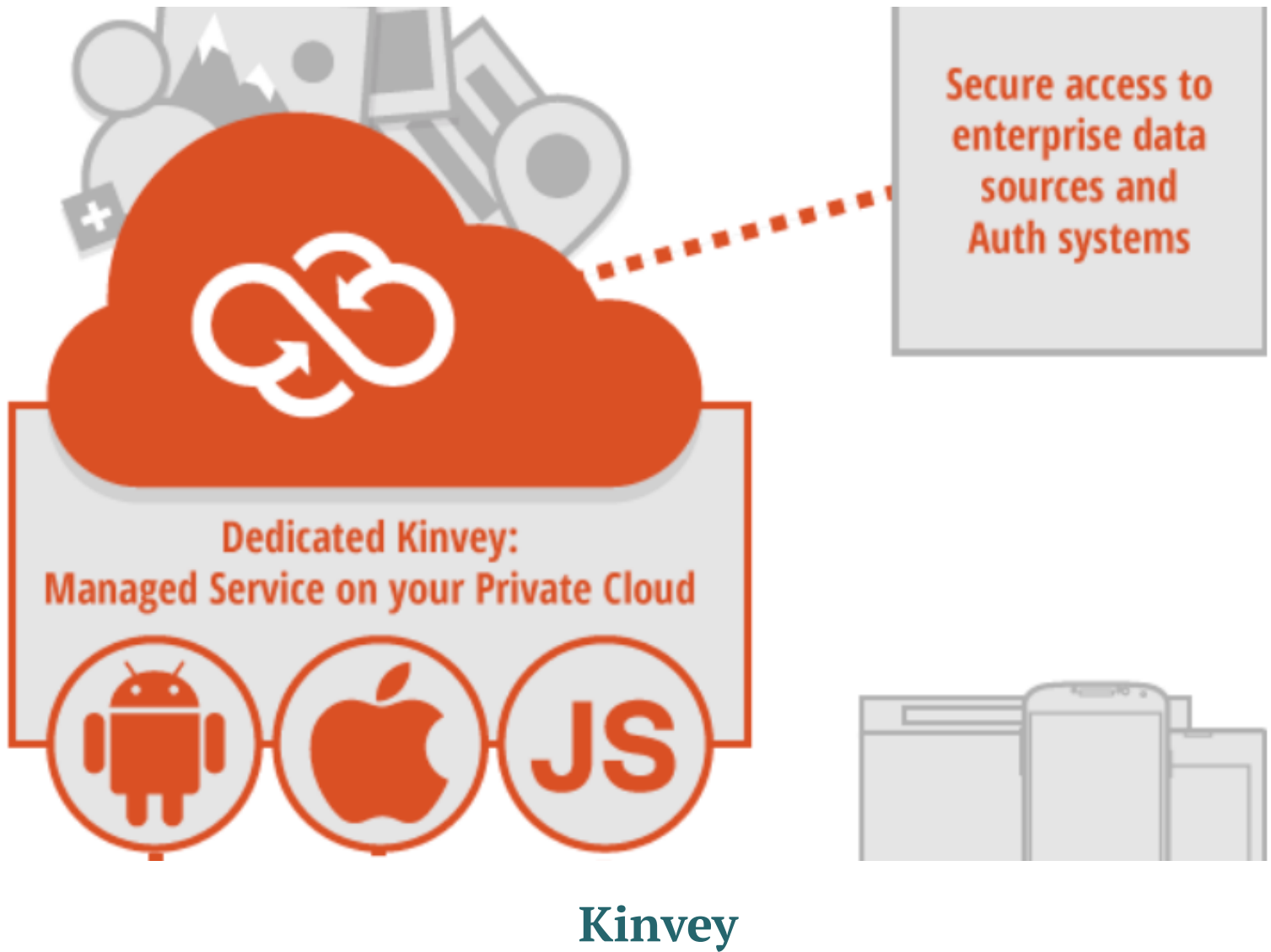
## **AWS Amplify**

Aws is the king of the MBaaS! Amazon web solutions. Although AWS's portfolio matches a lot with Firebase it is more about advance app development. AWS doesn't come free and is narrowing down its focus on mobile development teams that are managing apps for a large number of users.



## Backendless

Backendless is a cloud-based platform that gives an edge to developers to develop apps without getting in the hassle of server coding. It does this by allowing devs to make use of the programmable service that contains some of the standard server functions



What sets Kinvey apart from the rest of the BaaS companies is that they are offering a ton of more features, their most important being the use of dedicated private cloud or "on-premise" instead of the usual multi tenant platforms.

## Three Reasons To Use BaaS

- Reduce Time To Market
- Save Money Decrease cost of Development


- Assign Fewer Backend Developers to a Project
- Outsource cloud infrastructure management


## **Three BaaS Solutions With Pros And Cons**







### Build better apps


 **Cloud Firestore**  
Store and sync app data at global scale

 **ML Kit <sup>BETA</sup>**  
Machine learning for mobile developers

 **Cloud Functions**  
Run mobile backend code without managing servers

 **Authentication**  
Authenticate users simply and securely


 **Hosting**  
Deliver web app assets with speed and security


 **Cloud Storage**  
Store and serve files at Google scale


 **Realtime Database**




### Improve app quality

 **Crashlytics**  
Prioritize and fix issues with powerful, realtime crash reporting


 **Performance Monitoring**  
Gain insight into your app's performance

 **Test Lab**  
Test your app on devices hosted by Google


 **App Distribution <sup>BETA</sup>**  
Distribute pre-release versions of your app to your trusted testers





### Grow your business


 **In-App Messaging <sup>BETA</sup>**  
Engage active app users with contextual messages

 **Google Analytics**  
Get free and unlimited app analytics

 **Predictions**  
Smart user segmentation based on predicted behavior

 **A/B Testing <sup>BETA</sup>**  
Optimize your app experience through experimentation

 **Cloud Messaging**  
Send targeted messages and notifications

 **Remote Config**  
Modify your app without deploying a new version

 **Dynamic Links**

# PROS

## Firebase

1. There's a Free Version
2. They offer a pay as you go plan
3. Cloud Hosting

## Kinvey

1. Downloadable

2. Dedicated Servers
3. Technical Documentation(detailed docs and spreadsheets)

## **Parse**

1. Free Plan
2. Open Source
3. Self Hosting

## **CONS**

## **Parse**

1. No Cloud Hosting
2. No Dedicated Server Access
3. No Support Services
4. No Professional Services

## **Kinvey**

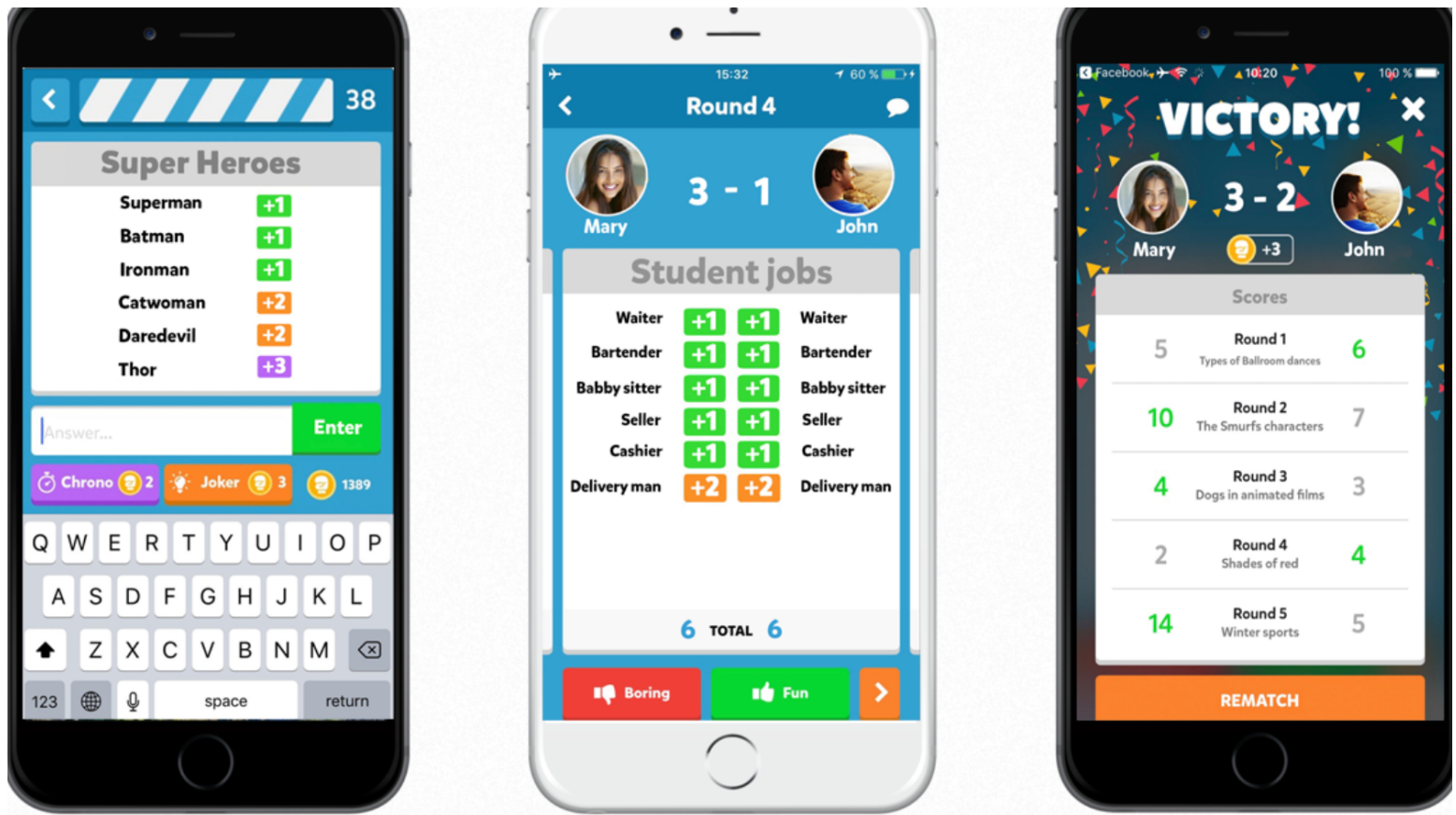
1. Not Open Source
2. Not Downloadable

3. No Free Plan. Free Trial but short lived

## **FireBase**

1. No Dedicated Servers
2. Not Open Source
3. Not Downloadable

## **One Company Using Baas And Why**



*Over 25 million players  
2015*

In France there is a company by the name of **Two4Tea**.

The development team's biggest hit is a mobile trivia game with over 55 million downloads, used in multiple languages and has thousands of simultaneous users.

Having a BaaS service allowed them to easily scale from a few users to thousands of concurrent users with no downtime.

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