WHAT IS CROSS PLATFORM APP DEVELOPMENT?

If your business is wanting to build an app, learn more here about what cross-platform app development is, why it's important and the general principles you need to know to make your decision on whether to use it.

## What is Cross Platform App Development?

In today's world, many platforms exist across a multitude of devices, each operating in their own unique way. For example, in the world of mobile phones, operating systems range from Apple's iOS and Android, to Windows and Blackberry. This extends into the realm of tablets as well as laptops and personal computers, where even more operating systems are found. These include Linux, Ubuntu, OS X and Windows, etc. Cross-platform software which is compatible with these systems comes in two guises. Firstly, a separate software build for each particular platform and secondly, a build that runs on several platforms without any modifications required.

### Cross Platform Development Options

For a little background info in cross platform app development, there are three main development options which have been used:

- **Mobile Website**

Although similar to the design of a regular website, mobile website development has one major difference. A website built with a mobile component ensures that the site, through using a responsive design framework, can be viewed on any sized mobile device. This includes mobile phones and tablets and is achieved by adjusting the size of the various pages of the site to fit the screen of the mobile device.

- **Mobile Web App**

Here an app is designed to be similar to a standard [mobile website](#), yet it functions and is used in the same way as a native app. In other words, although all the design and technology used is web-based, the user interface will look like a native app.

- **Hybrid Mobile Application**

A Hybrid Mobile App again is similar to a native app as they can be downloaded from various sites – such as the Apple Store or Google Play – and then installed, stored and used on a mobile device. A major difference with these apps, however, is that portions of their code incorporate other programming languages including JavaScript, CSS3, and HTML5. Because these apps are simply web-pages, they have all the same functional limits, as a website.

# Considerations for Cross-Platform Apps

## What is important within a cross platform solutions?

The following pieces should be taken into consideration:

- The excellent experience a user finds when using an app on a desktop device should be found on portable devices when using the mobile version of the app.
- Three key areas should be the same across all platforms – the look of the app, the feel of the app and how it functions.
- Select a development plan for their app. This helps to ensure that it can work on every platform they intend it to be available on.
- Apps should be brought to the market simultaneously across all platforms as this will help to lower development costs significantly.
- Ensure that the app contributes to increased revenues.

When it comes to [building apps](#) for multiple platforms, different builds of the app are not only time consuming, but wasteful. This is where a multi-platform development plan and a cross-platform app developer ensures the app will work on the platforms required by the business while maintaining the same look, feel, and functionality.

# Approaches to App Creation Process

If you search in Google for "cross platform app development", you will come across a long list of tools available to help with this task. While these can be used effectively, they are best for creating simplistic apps for one platform. One of the major things to consider here is that these tools effectively allow the production of cross-platform apps but without being able to plug into the specific nuances of each operating system the app might appear on.

By using the standard set of tools, it's impossible to create a valuable and convenient app. Cross platform development can be used only for standard procedures and it's implementation is limited by the technology. Even when these apps are created personally by the top developers, such applications are more prone to have some hiccups because of the internal conflicts of different platforms.

**Why is Cross Platform Development Important for Business?**

With a multitude of mobile platforms and devices on the market, developing cross platform apps is imperative for those businesses wanting to accommodate them. What is a business to do if they have an app built for Android, and then find out a percentage of their users have iPhones and need an iOS app? With the wide diversity of devices available it only makes sense for a business to accommodate them all, or those relevant to their users.

## Pros and Cons:

Creating apps for different platforms is always a compromise between quality and cost. Lets consider some of the issues at play in cross-app development:

- The task of creating 2 separate applications is much simpler than creating a universal one because of internal conflicts which arise from different operational systems.
- These limitations negatively influence the usability, the speed of the app's operations, the demands to the hardware, and they increase the vulnerability of the system
- Cost of support for such a complicated project will be much higher, as programmers qualifications must be at the top of the industry to do this kind of work.

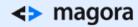We have such specialists, but the question is... do you really need such solution?

## Bespoke Mobile App Solution

When it comes to more customized, sophisticated and intricate [mobile apps](#) which are needed to perform specific tasks for your business on multiple platforms, a bespoke solution is needed.

Why? Consider this. When you use a special tool, it always work better than the universal solution. Have a look at a screw driver - it's much more convenient than the swiss knife because it's made for a specific purpose.The same is true in app development. If you are looking for a program which can just get the job done to a satisfactory level… and partly answer your needs - the cross platform solution could be it.

However, if you are a serious corporation with strong demands for functionality and usability - you need a separate app for iOS and for Android. We, as experts, recommend this approach as cross-platform development can be complicated and breed functionality issues.

With all things considered, it is time to ask yourself if your company really needs a cross-platform solution.If you really need the app to work with different platforms, we, as an industry experts, strongly

recommend you develop separate applications for each of them. This will result in a stable working app with wide functionality and it will be exactly as you plan, with perfect compatibility on each platform.