

# Pros and cons of cross-platform app development

By Nick Durrant, issued by Bluegrass Digital

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Businesses across the globe are investing heavily in mobile apps to easily drive traffic to their websites. However, it remains a challenge for business owners to choose between developing a native app or a cross-platform app.



Cross-platform mobile app development is proving to be the preferred choice for most mobile app development projects. This is largely due to faster development speeds and cost-effectiveness. It also enables businesses to target a wider range of audiences with one single code that is written for the apps to work on both Android and iOS platforms.

Developing a native app for both the platforms requires two sets of code whilst cross-platform apps are compatible with multiple operating systems and they can run on any mobile device. Although cross-platform app development may sound like the obvious choice, it does have its pros and cons.

Cross-platform apps are developed using a language that can be surrounded by native code and then deployed across all platforms.

With cross-platform app development, developers needn't write unique code for each platform. Instead, one set of code can be used and customised for all platforms. Parts of the code can also be used for future projects.

This ultimately means faster app development and reduced development costs. By using one code base that is functional

across different platforms means increased speed to market. Also, the high cost of app development, as well as the cost of ownership, is one of the key reasons why many businesses are not building apps.

However, cross-platform app development is changing this misconception, it is notably inexpensive compared to native app development. Apps can now be developed cost-effectively across all platforms without clients investing massive amounts in more development. The same applies to maintain the app because of the benefit of a single, centralised codebase.

As most cross-platform frameworks are dynamic, developers are also finding it easier to get the job done. In addition, changes to these apps are much easier and updates are automatically done across all platforms.

Finally, cross-platform apps allow business owners to keep the same level of UX on all the platforms simultaneously. Satisfied customers will be more eager to use your app.

The Amazon app has more than 700 million users across the globe, nearly five times more mobile customers than all its competitors combined. Its unbeatable deals, app-only promotions, exclusive mobile product launches and the promise of on-time delivery has changed the e-commerce market forever.

In our new agile working world, mobile apps are the future, business leaders need to leverage the benefits of mobile applications to promote their business online and provide improved customer experience. From retail to finance, every business needs an e-commerce site to unleash the potential of mobility.

There's an untapped online retail market, businesses need to develop mobile apps and e-commerce sites in order to compete in this growing economy. The massive upsurge in the smartphone market has given birth to many new always-on e-commerce sites experiencing around the clock sales with global prospects. These consumers are also constantly sharing personal data and preferences, making it so much easier to enable targeted sales.

Mobile apps and e-commerce sites are the gateways to connect to buyers across the globe. Through a seamless mobile experience on these platforms, businesses can easily understand the consumer's needs and then drive customer loyalty. Many businesses are missing out on the golden opportunity to engage with online consumers across their buying journey.

It's quite obvious that an e-commerce strategy is a catalyst for success in a complex customer acquisition process and there's a lot to benefit by developing an e-commerce mobile app. But where does one start when building a mobile e-commerce platform? It's not only about the look and feel, but rather understanding the business requirements, the apps performance and how to keep it flexible enough to add new features.

# Determine the viability

One first needs to determine the viability of building an e-commerce presence. This will depend on the specific industry and the demand experienced from existing customers. If existing customers are already demanding online shopping, it is worth considering building a mobile e-commerce app.

# Analyse the audience

By conducting a thorough audience analysis, new strategies for connecting with customers will be unlocked. The new platform will likely offer more than just products and services, the analysis will help define the entire roadmap. When designing these apps, one needs to learn as much as you can from the customer and not assume you know their requirements.

Knowing the customer is critical, it enables businesses to develop experiences that relate to the voice and emotions of the user. One needs to create a user persona that represents the ideal customer, this can be done based on market research and existing customer data. This is a complex task and will take some time to develop, but it is essential. These personas can change as the business and customer base evolves.

#### User experience (UX) is key

The most daunting challenge for any business is to create a lasting bond between a brand and its customers. Mobile apps and websites need to improve the customer's online UX and also have the ability to attract new business. Therefore, design is critical for every stage of the sales cycle.

In order to succeed in today's fast-paced e-commerce environment, business leaders must exceed customer expectations. This could be the greatest challenge and can only be achieved by giving customers more than they expect. Understanding UX and designing the entire UX towards exceeding them will certainly increase conversion rates.

UX design has become a critical part of business, it helps define customer journeys that attribute most to business growth. Engaging customers isn't an isolated event, it is part of a multistep process that only requires one bad designed touch point to lose a customer.

#### The look and feel

Mobile apps are designed to make communication more effective and mobility more powerful. Apart from the benefits to consumers, mobile apps are far more engaging and interactive than older business websites. With a visually appealing mobile app that is easy-to-use, it is easy for businesses to stay ahead of their competitors.

#### Choosing the right development platform

A growing number of popular apps in the app stores have been built on React Native, these include Facebook Messenger, Facebook Ads Manager, Airbnb, UberEats, Bloomberg, Discord and Instagram. With React Native, one app will run on all three platforms, it's no longer necessary to create three different apps for Web, Android and iOS. This will enable the business to reach the widest audience possible.

### **Deployment**

It is critical that the website or app is as available and responsive. Also, when deploying app or website, it is important to consider the right pricing tier. A growing number of businesses are using Azure to build applications faster and are using smarter tools to manage performance. Microsoft Azure is designed for developers to build the most innovative apps and is one of the best cloud platforms.

#### Competitors

When embarking on any new business venture, understanding the market and competitors is crucial. However, it's not only about understanding where you stand in relation to your competitors, but ensuring you are better in all aspects. It is therefore important to know what has worked for your competitors when developing your app.

Analyse your competitors' reviews and learn from their feedback and incorporate this into your app. Find out how apps have helped competitors grow their business, this could help you deliver a product that consumers would love to engage with.

# **Analytics**

It is also critical to understand what strategies have helped boost online sales, typical challenges your business has faced in the past, customer acquisition cost, revenue per visitor and conversion rates. One also needs to identify where new orders are coming from versus returning customer orders. This can certainly give business leaders insights that are valuable when designing their mobile ecommerce app.

For example, if customers don't complete orders after browsing for a considerable time, it could either mean they cannot find what they are looking for in the search options or they are struggling to process the payment. It is therefore critical to

discuss in detail the use of analytics and tools with your developer.

#### Apps versus websites

The biggest advantage of building an app is the speed and ease of connecting to customers in real-time. About 80 percent of time spent on smartphones is consumed by apps. So by tapping into this trend, it will help your business improve customer interactions and more importantly, boost revenues.

The largest portion of internet traffic comes from mobile, this means business websites are mostly accessed from smartphones. The fact is, apps run faster than even the most responsive websites and the user experience can be that much better. This means app users don't have to download data from servers each time they open the online store.

Apps are faster and more convenient and this is prompting consumers to browse content on apps as opposed to mobile websites. Despite these benefits your strategy should support multiple channels giving users choice on connecting with your business in the most convenient way, even if it is via your mobile app, website and appropriate social channels.

## ABOUT NICK DURRANT

Nick Durrant is MD at Bluegrass Digital, a digital solutions company with offices in Cape Town, Johannesburg and London. We are experts in crafting web and mobile products and platforms. After spending 17 years in working the tech industry in the UK and setting up the Bluegrass in London in 1999, Nicholas now runs the company from Cape Town, developing the business into Africa and Europe offering world class digital solutions.

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