

Why digital media agencies need a mobile app strategy

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It's hard to believe that mobile apps have only been around for the last four years. Apple has sold more than 315million iOS devices since the launch of the first iPhone in 2007 and recently celebrated reaching 25billion iPhone and iPad app downloads. And of course now that Google Android has risen to become the [best-selling](#) smartphone platform worldwide it is time to work out what your strategy is for addressing this user base and for developing your own mobile apps.

With this rapid growth in smartphone uptake fanned by the social media explosion, it seems like everyone has heard about apps. As a Digital Media Agency your clients will be thinking about whether they need an app. Knowing how to respond and advise your clients will be critical for sustaining your business relationship. If you can't advise them and provide them with apps then they may end up finding an app developer who can. Once you lose part of their custom it increases the risk to you for retaining the remainder.

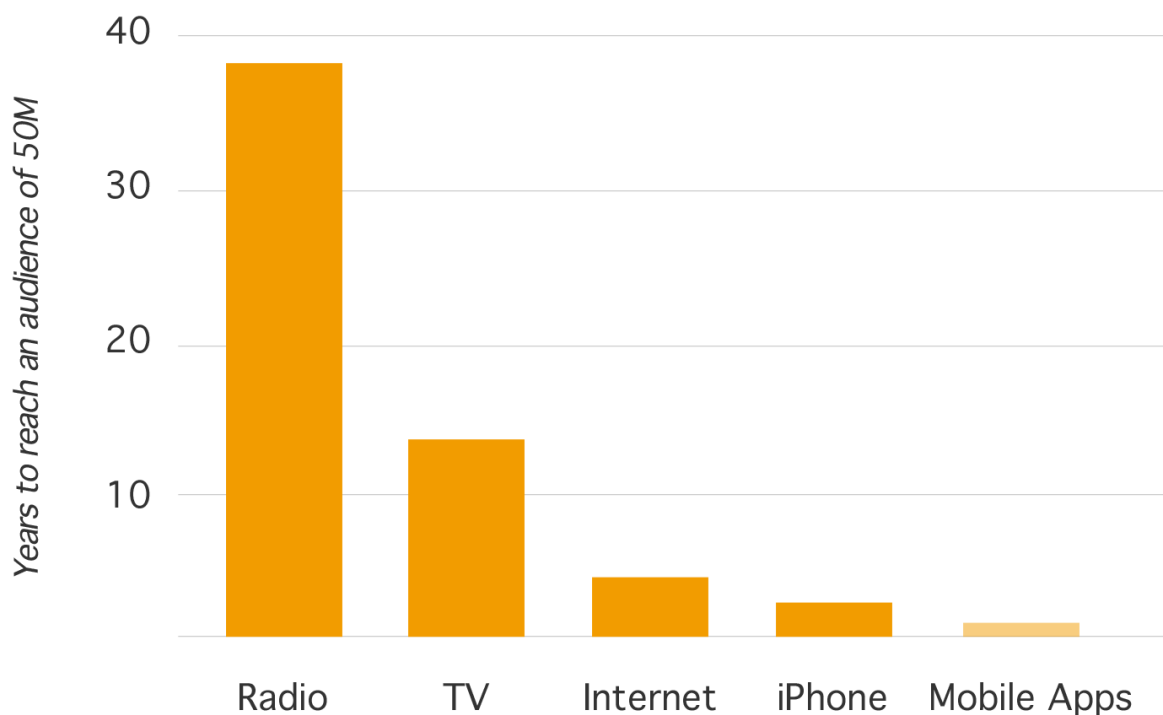
You need to develop a mobile app strategy to know how to advise your clients and to make sure they get the apps that they need.

In this white paper we provide a wealth of information to help you develop a strategy. In the first half of the paper we describe the reasons for developing apps and in the second section of the paper we outline the decisions you need to make to move your agency into app development.

Why Should a Business have an App?

1. Apps will soon be as essential as web sites

There is no universal “right” answer to the question “Should I have an app?” it depends on the business your client is in, the budget they have in mind and their expectations for what the app will do for them. The time for vanity apps is long past, just having an app will not boost a clients business, guarantee people will download it or become its own marketing vehicle unless it does something genuinely useful, distinctive or compelling. If this sounds familiar it is because it is the same story as website development.

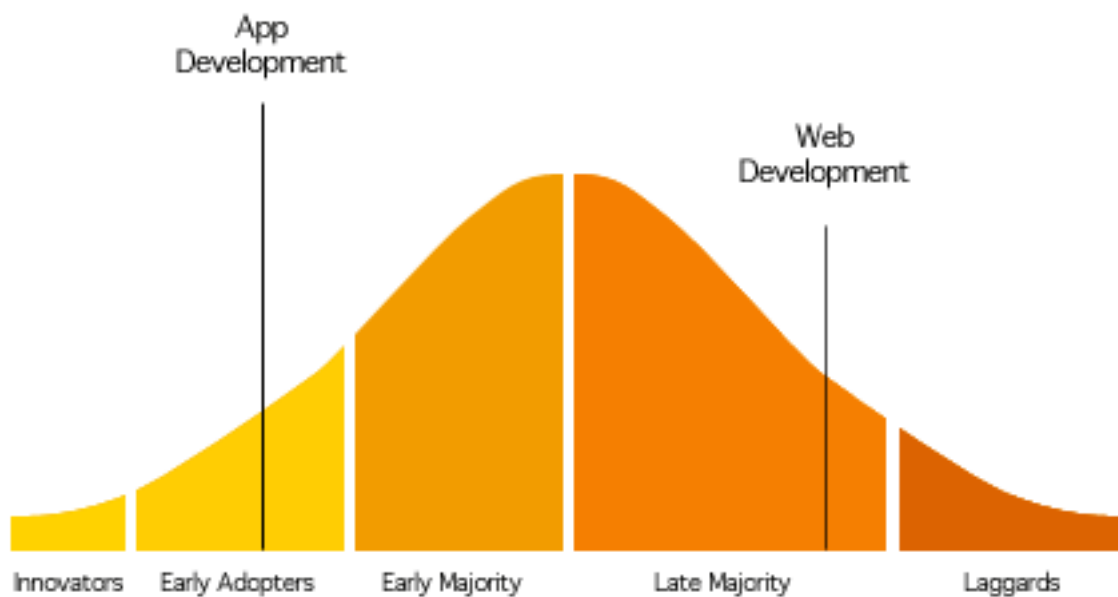


It took radio broadcasters 38 years to reach an audience of 50 million, television 13 years, and the Internet just four. It took Apple about [2 years and 9 months with iPhones](#).

But of course it is not all about the devices, uptake is really about the media that people are consuming on those devices and for that the software tools for making and publishing the media is the critical factor. The web has grown from modest origins in the 1990’s to

over 15 billion pages today as businesses, brands, products, attractions, events, pastimes, courses, campaigns, people and ideas all acquired web presences. We believe that the development of mobile apps will follow the same trajectory, though in a concentrated time frame.

App development is crossing the chasm



[Geoffrey Moore's](#) marketing book identifies a chasm between early adopters and the mainstream market for the uptake of high tech products. Many products never make it out of a niche early market of tech enthusiasts and evangelists. There is little doubt that smart-phones have leapt over this chasm but what of the tools for app development on the smart-phone platforms? We see a parallel here to that of early web development tools. In the early days of website development it was only programmers and technical specialists who could code websites. Eventually new tools were created that hid the technical complexity and presented an interface which designers or web developers could use. This led to an explosion of websites for all businesses large and small. App development will follow this same path. Already tools such as our own offering [AppFurnace](#), make it possible for designers, rather than programmers to make apps. This will help accelerate the trends we are starting to see in the kind of app that is being made.

2. Apps can boost a business

There's maturity and growth in the kind of apps being published.

In the early days of app development there was a kind of gold rush mentality similar to the dot.com boom of the 80s. Fuelled by a belief that, "there's gold in them apps" investors poured a lot of money into developing all kinds of apps assuming that app sales would cover costs and many developers agreed to get revenue share rather than payment up front. In reality very few apps make serious amounts of money and many of those that do are games. And for every best seller there are thousands of apps that never make it to the big time. The maturity of the market now means that apps should not just be seen as money making ventures in their own right but to see them as an additional vehicle for promoting an existing business, engaging better with your customers and increasing revenue. This is again the same as websites, in the early "dot.com" boom a lot of money was poured into website development in the belief that any website would make money. In reality only a few pure website businesses did and we no longer think that the website itself is the thing that you sell, they are vehicles for communicating your business and for interacting with your customers. Just as any new business now knows that it needs a web site it may not be long before it should have a mobile app as well.

Successful retail business such as Tesco have moved strategically into mobile and developed a range of apps to support their core business. The apps provide useful and time saving benefits to their customers and have also been backed up by extensive advertising and marketing campaigns to help educate customers in newer capabilities such as scanning grocery items to add them to an online basket.

The Debenhams app is another good example, that allows customers to improve their in-store shopping experience by being able to scan items in store to request sizes, as well as helping them find their way around the store. Their first iPhone app generated more than £1m of sales in its first five months, with more than 2.4 million "shopping sessions".

3. Apps can help productivity within an organisation

In addition to customer facing business led apps there is also a trend for enterprise apps to support internal processes. The beauty of mobile apps is that they encapsulate and present a well-defined function in a compelling, aesthetic and clear way. There is great value in being able to call up just the information you need while you are on the go, on the road or in a particular location. Enterprise apps are being developed for business intelligence, lookup and reference, supporting business processes, collaboration, training and communication, for more information see: <http://www.apple.com/iphone/business/apps/in-house/>

4. Apps are part of the marketing and promotion armoury within a business

Whilst apps that are core to a business can be a significant investment there are opportunities for a range of smaller investment apps for adding value to promotional events, new product launches or customer communications.

One class of these smaller investment apps are “popcorn” apps. Just as popcorn can enhance the experience of going to the cinema these apps are enjoyable to consume and enhance a bigger event. Characteristics of a popcorn app include:

- provides essential information instantly – useful in areas of weak wifi or 3G access
- is tailored to the venue and/or subject
- embeds social networking capabilities
- includes engaging features such as a quiz, game or useful functions
- targeted - the audience is well defined and reachable
- relevant – the content relates to the event and is designed to be simple, clear and immediate to access
- timely – they have a well defined window of use
- engaging – they provide beautifully crafted interactions relevant to the specific content and context
- useful – they have a well defined purpose

- disposable – popcorn apps really are for christmas – not for life!

In the case of an event app you can leverage ticketing, the web site, and emails to make the audience aware of the app. Promotion is thus possible without additional marketing, you simply add the app details to the marketing materials that you planned to produce anyway. The app becomes another piece of the marketing collateral that the design agency promoting the event can produce.

5. Rich located experiences can be delivered via apps

One of the obvious but key differences between an app and a full website is that an app is primarily for use “on the go”. The opportunity in using the context of your location to deliver services, games, promotions advertising and rich media experiences has been a hot topic for many years and may finally be turning mainstream.

One of the things people enjoy most in a location aware app is when the app connects you with the actual landscape around you; the story relates to something that you can see in front of you or it makes you notice something special in the environment. This personal and intimate connection gives you a brief but powerful magic moment and is one of the key values of a mobile experience compared to a desk bound, PC based experience. [Guardian Streetstories](#) is one such example of an app that connects you to the landscape you are walking through via a rich mix of audio stories.

These intimate and powerful located experiences are at the vanguard of a potential new industry in context aware entertainment where consumers can choose where, when and how they partake.

How do you move into App Development?

Having established the drivers for why a business might develop an app in we now turn our attention to how you, as a digital media agency, can move into app development.

There are a myriad of decisions that you will need to make such as:

- What platforms should the app run on?
- Should the app be native, cross-platform or a web app?
- How many different designs do you need?
- How much should you do in-house and how much to outsource to an app developer?
- Would a web app be better?
- How will the app be marketed and promoted?
- Should I invest in an app pipeline system?

The right choice depends on the purpose and budget of an app and whether you want to develop competence within your organisation or outsource everything. Let's examine each of these decisions in turn.

1. What platforms should the app run on?

A smart-phone platform is the combination of the handset and the operating system that runs on that handset. There are a large number of smart-phone platforms to consider. The big three operating systems are Apple's iOS, Google's Android and Blackberry's RIM. Between them they account for over 90% of the global smartphone market. But developing an app for these three different operating systems requires three different sets of programming expertise, development environments and tools. Creating an app using the software development environment provided by the operating system vendor is known as "Native development".

If understanding the differences between the native development environments wasn't challenging enough, there are also tricky design considerations when taking the number of

different handsets into account, as they all have different screen sizes, resolutions, and internal capabilities that need to be designed for. In the case of iOS there are two distinct devices, the iPhone and the iPad. With Android there are dozens of different devices, with several different screen sizes. The same is true of Blackberry. It is a skillful task to design an app that works well on a range of different screen sizes but some of those skills will have been developed in website design which may already be core to your business. Part of your strategy should be to understand how you might leverage your current skill base in app design for designs that will work across a range of different screen sizes. App design is also being aware of the emerging standards in design, the most common of which are outlined in guidelines for example [iOS](#) and [Android](#).

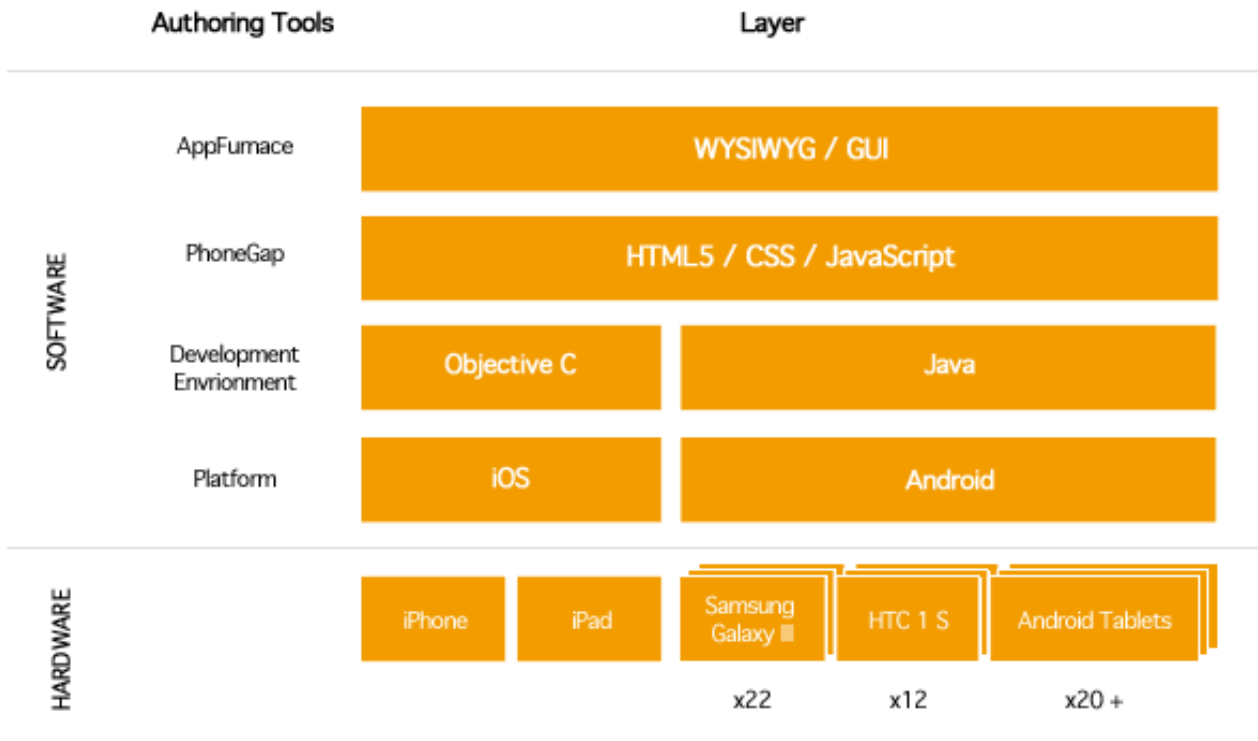
2. Should the app be native, cross-platform or a web app?

With unlimited time and budget you would develop native apps. Native apps can take advantage of the particular style and interactions supported on that platform. They can conform precisely to the design guidelines or industry standards for the particular platform which mean a different design for tablet devices to smart phones. In terms of design alone this means 5 different designs to cover iPhone, iPad, Android smart phones, Android tablet and Blackberry. In terms of implementation it means having developers familiar with three different programming environments and for them to make five different apps. It is therefore not surprising that native app development can be very expensive. Going with native as a strategy will most likely mean you need to develop a relationship with a good app development agency who can guide you through the process and be able to develop and test your app on all of the different platforms.

A cross-platform app is one that is designed to run across more than one platform. The obvious benefit with a cross-platform approach is that you can save time, and therefore money, in development and/or design costs. The most economical choice is to create a single design that uses a cross-platform development environment so that your app will run unchanged on all of the major platforms. The common denominator across all smart-phone platforms is the web browser and so adopting a single design and single

development mechanism approach will most likely lead you to consider creating a web app, which we describe later.

The technical approach for most cross-platform solutions is to create a common software layer of standards-based Web technologies like HTML, JavaScript, CSS on top of the native software layer. This means the developer can use this common programming layer for all platforms rather than having to use the different native development environments. The most common cross-platform developer solutions currently in use are PhoneGap and Sencha but the market is in constant flux with developers experimenting with many different solutions. The good news for agencies who already have web developers who are already proficient in coding with these web technologies then it may be possible for them to use these cross-platform solutions to develop apps in conjunction with your designers. Your designers would also need to understand what the developers need to make sure that the visual and interaction design meets your clients needs and for iOS apps that it passes the Apple review.



If you have more web designers than programmers then you should consider using a more designer-friendly app development environment such as [AppFurnace](#). AppFurnace adds a designer friendly visual interface on top of PhoneGap that allows you to quickly and easily create professional apps that will run on both iOS and Android smart phones. The learning curve for using AppFurnace is very short, within a few hours you would be able to create a fully working demonstration of a wireframe design. AppFurnace allows you to preview how your app will look on iPhone and on the major different Android smart-phone screen sizes.

AppFurnace also provides a player utility app that lets you try out your app on your phone simply by scanning a barcode, no need for provisioning profiles or emailing round files.

3. How many different designs do you need?

You need to decide whether you create significantly different designs for each smart-phone platform and their equivalent tablet versions. There is a strong argument for the tablet version of an app to be different from the phone version to take account of the much larger screen size. With the latest iPad now supporting retina screens the visual impact and use of on screen gestures contribute enormously to the enjoyment and feel of an app. Whilst people carry their iPADS with them they are less likely to use them while they are moving, they are more likely to be used when sitting down and dedicating attention to them. In contrast people will use phones whilst actually on the move and so making your app clear, quick and easy to use is important.

The argument for making iOS apps different from their Android equivalents is about making the design conform to any interactions and behaviours that users will have become used to. For example there are more physical navigation buttons on Android handsets and the back key is used in most apps. In iOS all buttons are within the interface and in a typical iOS app the Back button will be placed in the top menu bar.

If conformity to standards is very important then it is worth creating different designs. They may not be radically different, but just conform to styling nuances that are

However if you decide that it is important for your app to use the very latest specific features of a particular device you limit the reach of your app to just those with the very latest devices.

If you decide that widening your potential user base is more important than making use of the very latest new feature then the argument for native development becomes less clear.

Fragmentation within the Android platform is becoming more acute as each handset manufacturer brings out different hardware features and screen sizes. And to compound the issue, the base Android operating system is often extended to incorporate device specific code, that mean that there isn't really one Android platform, but several hundred slightly different Android platforms.

And of course it is not only new hardware features that get introduced in newer phones, software features are also introduced with a new version of an operating system. Apple helps mitigate issues with legacy phones by forcing users to upgrade their handset when a new upgrade is released. However there is no such upgrade path for Android. Since its first launch there have been five significant operating system updates to Android (Donut, Eclair, Froyo, Gingerbread, and Ice Cream Sandwich). And so guaranteeing that your app will run on all Android handsets is a real challenge. Testing all variants is also time consuming and difficult, and native development does nothing to mitigate problems with fragmentation, if anything, it makes the problem worse.

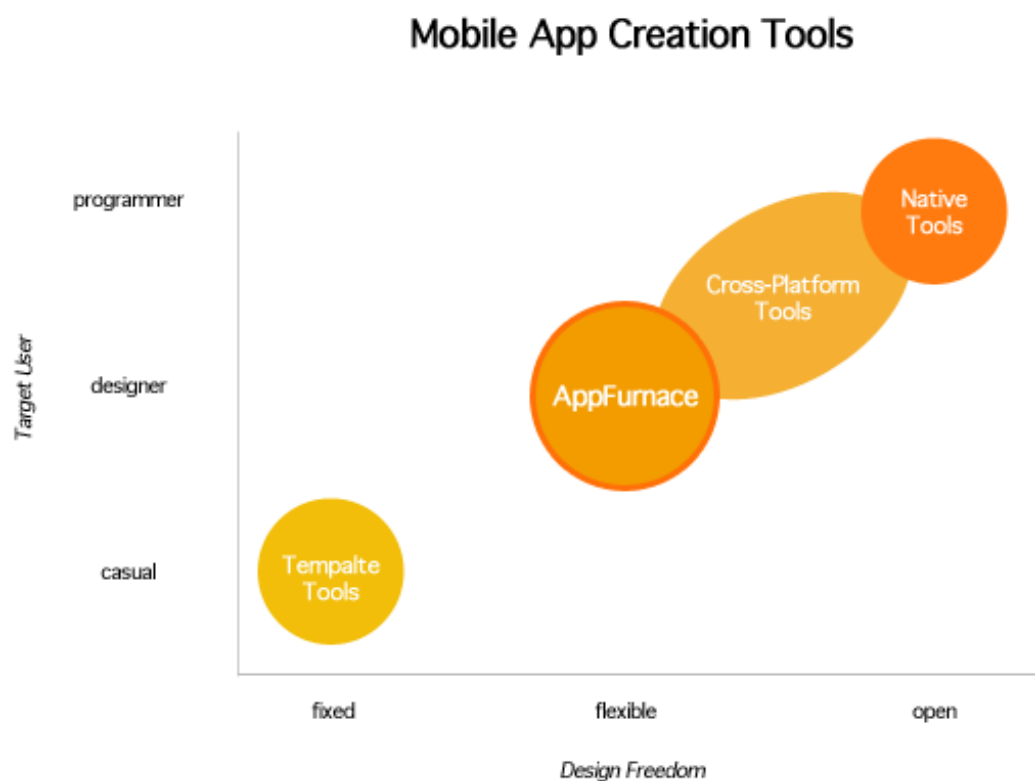
In summary the decision you make in the choices of app development comes down to who your app is intended for and what its purpose is. If you want to reach the widest number of people with an app or the value in the app is more about the content than fancy interface interactions then a cross platform approach might be best. If on the other hand the app has to have the best possible interface that will use the affordance of a particular platform then native development is the best approach.

4. How much should you do in-house and how should you outsource to an app developer?

When you have decided on your approach to development then you can evaluate the skills you have in-house to determine the appropriate investment to make internally or externally.

The skills needed to develop an app are:

- interaction design
- graphic and media design and creation
- interface specification and design
- project management
- programming



In cross platform development the programming skills required are more similar to that of website development as the programming language used is JavaScript with HTML5 and CSS scripting.

With native development the programming skills required are different for each platform. For iOS the programming language developers need to use is Objective-C, whereas Android uses Java.

If your core competence is in design then giving your designers the opportunity to expand their skills to include mobile app design would be a logical business choice.

If you already have competent web programmers again it might make sense to let them develop skills in cross platform development.

It is unlikely that a web developer could easily branch out into native app development without a considerable amount of development time. And there are significantly different techniques and skills in each of the platform software development environments to make it difficult for even the most competent of programmers to be expert in more than one. The native route would therefore most likely mean that you would need to find an app developer who can perhaps take your designs and implement them for you.

5. Would a web app be better?

As far as the user is concerned the main difference between a web app to a native or cross-platform mobile app is the way that you find it and install it. Web apps do not yet have dedicated portals for distribution, unlike iPhone apps which can only be distributed via the Apple app store. Web apps can be downloaded directly from a web site and once you have installed the web app on your phone it can appear as a dedicated icon just like all of your other apps.

A web app is literally a re-packaged web site and so using hardware features on the phone itself such as the media player, GPS or the camera is not easy. However if your app is purely a series of web pages then a web app gives you the advantage that it will run on all phones that have a browser and the skills you need are knowledge of app design, HTML5, CSS and JavaScript. The Financial Times started out with a native app, but recently killed it to focus on their web-app instead. The rationale for why publishers may be better off with web-apps is outlined in this recent article "[Why Publishers Don't Like Apps](#)".

6. How will the app be marketed and promoted?

Publishing apps is no field of dreams. If you build it they will not come. There are around 3,000 new apps being published every week and the app store mechanisms for finding apps aren't nearly as sophisticated as that for a web page. Unless you have a clear plan on how your target users will find your app then it is not just going to happen.

If your client already has an established customer base then you can make sure that they use a regular communication channel, such as email or newsletter, to make them aware of the new app. If your client has retail stores then you should promote the app within the store via the assistants, posters or even announcements.

Perhaps the app is actually part of a PR campaign that you are running, in which case you already act as the PR agency for your client, so incorporating an app within the campaign is something that you can plan.

7. Should I invest in an app pipeline system?

As app development can be very expensive you need to ask yourself if there are ways to provide apps to all of your clients without needing to pay full development costs on each app. This might be something that you are already doing in providing web services. Whilst every client site you develop will look unique it is likely that you will have optimised common capabilities so that you are not doing bespoke development for each new web site. Is there an opportunity for you to do this with apps? Can you identify a type of app that everyone of your clients would find valuable and it is the form rather than the function that changes. If you can then it makes a lot of sense to develop an app creation pipeline or app template that you can use for each of your clients. For example at Calvium we created a system for turning paper based Treasure Trails into apps so that our client can easily offer an app version for every trail in their current portfolio of over 500 different locations. If you are interested in this kind of app pipeline capability, Calvium would be delighted to talk to you about it.

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