

Everything You Need To Know Before Building A Mobile App

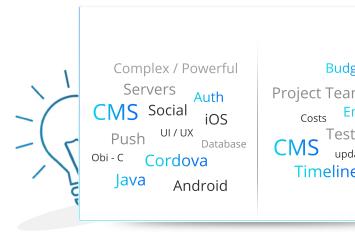
BuildFire's Mobile App Guide for Non-Technical, Creative Professionals



This guide is intended for non-technical creative professionals exploring mobile app solutions within their field of expertise. If this is you, settle in, as this is a long read. But I promise it will be worth it. When finished, your knowledge will have grown tenfold and you will find the process of mobile app development and deployment can be much simpler and far less costly than you ever imagined. In fact, *we believe you will be inspired to expand your mobile ideas.*

Innovation from Ideas

Enterprise customers and creative professionals from organizations of all sizes are realizing the opportunity that mobile apps presents for improved engagement and communication, yet the cost, technology and implementation barriers are daunting.





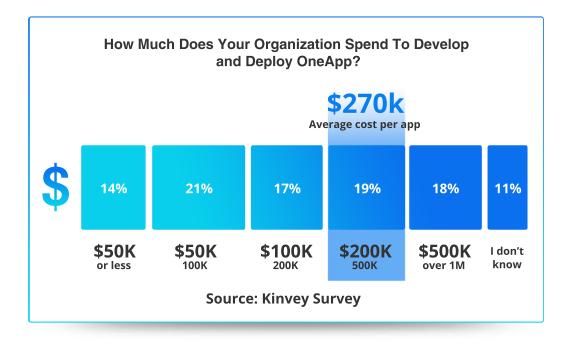
Demand for mobile applications is increasing as creative professionals in Human Resources, Customer Support, Field Support, Training, Employee Development, Marketing, Education, Medical, Loyalty, Event Management, Sales, etc. look to increase efficiencies and facilitate connectivity and communications with stakeholders. It only makes sense, the world has gone mobile; every stakeholder has an iOS or Android phone.

Studies show that for *every five apps demanded by professionals such as yourself, the IT department is able to deliver just one.* This bottleneck has businesses looking elsewhere for their mobile app solutions. However, the challenges facing non-technical creative professionals in navigating the mobile app landscape can be intimidating for even the most seasoned of executives.

Let's look at some of the more common statistics as they relate to the development and support of mobile business applications. Keep in mind, these statistic represent traditional methodologies; later we will introduce some newer concepts.

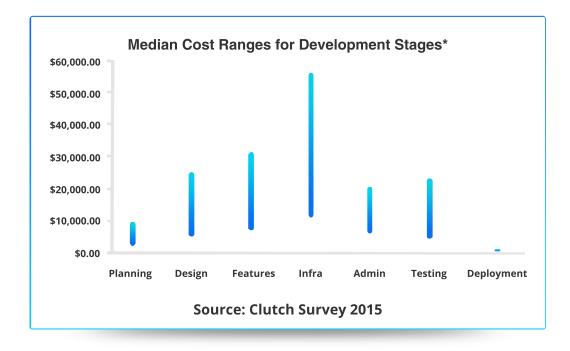


A Kinvey report based on a survey of CIO's and Mobile Leaders found that mobile application development is "costly, slow and frustrating" …. 56 percent of mobile leaders surveyed say it takes from 7 months to more than one year to build one app. 18 percent say they spend from \$500,000 to over \$1,000,000 per app, with an average of \$270,000 per app.



Development is only the tip of the iceberg. A Clutch survey found that the largest cost driver was not even the development costs, but the infrastructure.





Legacy costs end up to be far more than the app itself. Commentum.com in a 2015 study estimated the annual maintenance cost for medium-sized enterprise projects to be in the range of \$5,000 to \$11,000 per month. A Forrester Survey found that in the first two years of typical mobile application, development only represented 35% of the total cost.

Ok, I think you get the point. These projects can be a minefield of risk and, if you are looking at development only, you are missing the majority of the project tasks and costs. The good news, we are going to help you navigate through this and *show you how to reduce both development and legacy costs by as much as 90%?*

At the end of this guide, you will understand mobile app architectures, the development options, the relative cost of each option, pitfalls, hidden costs and what to expect in terms of ongoing support and maintenance





We will confirm some of statistics above and *introduce you to more efficient methodologies and tools that can reduce risk and save you hundreds of thousands of dollars.*

BuildFire provides a platform that is fundamentally changing the way mobile applications are developed and maintained; creating tools that empower you, the non-technical creative professional. We have helped thousands of people like you deploy thousands of mobile applications; from the smallest of organizations to the largest of the Fortune 500 enterprises. Learn from our experience.

The mobile app development world is changing rapidly. Remember in the 1990's when website development could run well into six figures and support was a nightmare? Then along came platforms like WordPress, WIX and SquareSpace. Not only did they reduce costs by a factor of 50X, but with simple click and edit interfaces, *they moved most of the development and support dependencies out of the IT department and handed control back to you.* Well the same is happening with mobile applications today and BuildFire is the catalyst.

What WordPress, WIX and SquareSpace did for web development, BuildFire does for mobile.





BuildFire Custom App Platform

BuildFire is a Software-as-a-Service (SaaS) platform designed from the ground up for scalability. One platform, designing, hosting and supporting thousands of mobile applications. We are really no different from many of the SaaS based services you use today. Services that provide economies of scale, reduce dependance on the IT department and hand control back to you, the creative, non-technical professional. The only real difference is that in the mobile application world, BuildFire is the first.



Until BuildFire, app development has been limited to expensive Mobile App Development Platforms ("MADP") or overly simplistic Do-it-Yourself ("DIY") app makers (see discussion below regarding mobile app architectures, MADP and DIY solutions).

The BuildFire platform provides the best of both worlds unlimited customization through a robust software development kit (SDK) as provided in the MADP world, combined with the simplicity and services associated with DIY app makers. Infrastructure, Functional, Administrative and IT Support Services are included in BuildFire's all-in-one platform, eliminating the need to purchase and manage them separately. With an open platform that enables an infinite combination of integrations, you can now develop, deploy, support and manage mobile application all within a single platform structure.

With an incredibly easy user interface specifically designed with the creative professional in mind, adding functionally, changing layouts, color schemes, adding graphics, connecting to social media is as easy as click and edit. They even have a library of templates to help you get those creative juices flowing.

The platform includes a huge suite of out-of-the-box open source functionality called plugins. With the functionality provided, you can likely complete 90% of your app without any coding. Where the functionality is not perfect for your situation, you can modify to your heart's content (modify the open source code in your own copy).



BuildFire SDK uses common programming languages known to most software engineers, (HTML, CSS, JavaScript) therefore, any engineer can create and develop on the platform using the skills they already have. Want BuildFire to help; they have a ProServices group that can provide you with any level of assistance and customization you require.

BuildFire is offered through a SaaS based model. In addition to app development, the platform provides all the services required to support and maintain your app; BuildFire is a full turnkey solution. *The results can be up to 90% savings over custom development and even larger savings with respect to legacy and support services.*

For larger organizations, the dashboard provides for various administrative levels, permissions and controls; great for multi-departmental organizations. BuildFire also maintains a robust security environment; they even permit their customers to conduct their own penetration testing and security audits.

For the small organization that is looking to grow, BuildFire offers the same basic pricing model, functionally and services of the DIY competitors. When ready, you can seamlessly migrate to a full development platform without losing any of your prior work.

For those organizations looking to deploy multiple apps, BuildFire is infinitely scalable. *You can add as many apps to the platform as you like and control them all from a single administrative dashboard.*



What is really cool, any customization, API's and connectors to backend enterprise services you create for your organization are reusable from app to app. You don't have to "reinvent the wheel" every time you want to deploy a new app; you can even clone apps. For example, if you create a great event app and have multiple events, the app can be cloned with the click of a button.

So what is the "secret sauce" behind BuildFire; how can it be that much more efficient? BuildFire is a single platform architecture designed for infinite scalability. A single BuildFire Platform is able to leverage the costs of Infrastructure, Functional, Administrative and IT Support Services over thousands of apps. To put this into perspective for a new iOS release, the BuildFire team might spend several weeks updating the platform. As a result, the thousands of apps maintained on the platform are automatically updated. Had each of those apps been created Natively or with MADP tools, each individual app would require several weeks to update thousands of times more expensive. That is the power and scalability behind BuildFire.

Apply these concepts to your organization. *Think about the mobile ambitions that could realize if 100% of the infrastructure and 90% of the functionality required for your mobile app deployment was completed prior to the start of a project!*

Additionally when developing an app on the BuildFire platform, an HTML5 version is automatically generated.



So if users prefer to access via a desktop or mobile web browser, this is an option. Also, should Mobile Web grow in strength and popularity, you are ready.

A basic understanding of the mobile application architecture will put the BuildFire value proposition into better context.





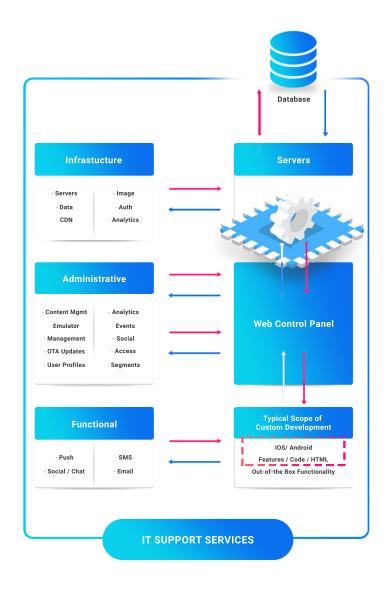
Let's Bring Your Idea To Life.



Mobile App Architecture

This overview will provide you with a solid foundation from which to better understand and evaluate development options, the value proposition provided by BuildFire and whether BuildFire is right for you. Most mobile apps architectures look something like this.





It is important to have a basic understanding of each of these components. When you look to a vendor(s) or your IT department for help in developing, hosting and supporting your app, it is critical to understand what they are providing and more importantly, what they are not providing. The importance of this will become clearer as we progress.

For most traditional custom app solutions, the majority of the above services need to be purchased and assembled separately. BuildFire bundles all these services in a simple Software as a Service ("SaaS") based platform.

Let's Review Each Of The Components:





Servers - Unless you are with the largest of enterprises, you will want to outsource hosting to the likes of Amazon, Google and Azure.

Data Storage - data is king and the app will contain and collect a lot of data, make sure you understand how and where the data will be stored.

CDN - A content delivery network (CDN) is a system of distributed servers (network) that deliver content to the app based on the geographic locations of the user, the origin of the content and a content delivery server. A lot of fancy language there bottom line, if you have users all over the world and they have to keep coming back to one far off location to access content, the app will perform poorly. CDN services are provided by companies like Akamai, Cloudfront and Dyn.

Images manipulation - most apps use a lot of images. You will need to have a place to download, process (resize, crop, etc) and deliver over cellular networks. Such services are provided by firms like CloudImage.io, cloudinary.com and ImageX.

Authentication - if you need your users to login and maintain a profile. This can be on a hosted authentication provider or an integration with your back end enterprise services, single sign on, etc.

Analytics integration - You will likely want to integrate with something like MixPanel, Amplitude, KissMetrics, Google Analytics etc.







iOS and Android - these are the operating systems that the app will need to operate on. There is really no decision here, almost all apps will need to operate on both platforms.

HTML5 (web version) - Not an operating system but it best fits in this category. Most likely you will want the app to be accessible via a web browser (phone, tablet and desktop browsers). Therefore, HTML5 should most certainly be considered as a use case.

A word on Mobile Web apps or HTML5. HTML5 enables the app to be viewed in a web browser. An important feature for some but not all. If you are the latter, don't be so quick to dismiss HTML5. There is a big push by some major players to bridge the gap between Native apps and Mobile Web. If this gap closes, Mobile Web will become increasingly more important. Best insurance for those investing in an app Have a Mobile Web version.





This is what you are paying the programmers to code/build. This is your app; built on top of the iOS and Android Operating Systems. In the development process, you generally start with app objectives (what you want it to do), then wireframing to document screens and workflows, moving to a high fidelity mockups (to get an idea of the look and feel) and then only after all of those steps, starting to write code.

When developing for iOS and Android, you have two app options 1) Native or 2) Hybrid.

Native - Writing and maintaining two separate code bases for iOS and Android. You are essentially developing two separate apps with the same functionality.

Hybrid - By using platforms such as Cordova or Titanium, developers are able to maintain one code base for both iOS and Android. These are commonly referred to as "Hybrid Apps". All MADPs develop some type of hybrid app.

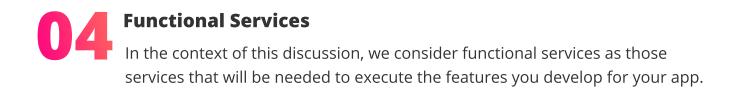
Engineers that develop Native apps for iOS and Android are among the most expensive to employ. The cost issues are compounded by the fact that you are basically creating and supporting two apps, almost always requiring two separate teams. This creates development challenges and inefficiencies as both teams need to work in parallel. As development is a reiterative process, one team cannot get to far out in from of the other. Native app development will generally cost 50% to 60% more than its Hybrid counterpart.



Hybrid apps have the obvious advantage of just a single code base. An additional advantage of hybrid apps is that they can be developed using more commonly used programing languages such as HTML, JavaScript and CSS, making it much more efficient and cost effective to develop, manage and support.

Only in the rarest of circumstances and with the biggest of budgets should full native development efforts be pursued. More on this decision later.





For example, your developer may provide you with Push Notification functionality, however, it will not work without subscribing to a push notification service (the delivery mechanism). Depending upon the feature, each of these services can cost hundreds if not thousands per month. The number of services to be considered is almost endless. Listed below are few of the more common ones.

Push Notification - hard to imagine an app that does not utilize this essential mobile capability. If you want push services, then you will need a service like UrbanAirship or PushWoosh.

Social/Chat - if you want social interaction, you will likely require a subscription to a service like those provided by Applozic and Disqus.

SMS - firms like Twillo will be needed

Email - firms like Mailgun or Sendgrid will be needed



Administrative Services (Dashboard) As a creative professional, you want to be in control.

Calling the IT department every time you want access to data or to update content is not an option. An intuitive, powerful and user friendly dashboard is a must. It should be accessible from any web browser. Consider the following essential dashboard features:

Content Management - changing content should be as easy as click and edit. If you can edit a Word document, you should be able to edit your app content. Demand this capability.

Dashboard Emulator - you definitely will want to see how changes you make look on the app before pushing them out live to the user community. An emulator is a must!

Manage Functional Services - sending push notifications, emails and SMS, monitoring social behavior, etc. Can you imagine not having this capability; or having to access multiple service dashboards to accomplish routine tasks?

Over-the-Air updates - if you are like most app owners, there will be constant updates; just the nature of business these days. Some apps require an elaborate resubmission process every time a simple content change is made. Make sure you build in a dynamic update process whereby a simple click of a button on the app dashboards pushes out the content changes to all apps automatically.



User Profiles - you will likely want the ability to manage profiles. Something as simple as password reset is easily forgotten in the design process and you don't want to have to go through the IT department to do it.

Analytics/Event Collector - do you want to be able to understand what activity is taking place in the app? How many downloads, what users access what screens, etc.. This information should be easily accessible.

Social Media Authentication - automatic interface with leading social media platforms. Social media has become such a part of life, this should be a given.

Access Controls - controlling roles and permission. It is unlikely all administrators or users will be the same. You will want to control who can access and change what within the app. Not just administratively, but what users can access what screens they see, private user information and/or viewing premium or private content.

Data Segmentation - for data mining and messaging; classifying users into different categories based upon activity, profile, etc.. Want to send a push notification to users based upon a segment they may fall into?





Available Development Options To Build Your App

Biggest variable in terms of cost, time and risk is the platform and related tools and/or libraries you choose to develop with. The app development world is evolving quickly. Like web development ... WIX, WordPress and SquareSpace were game changers, basically offering web solution that could be developed and maintained by the non-technical creative professional.



However, despite the enormous efficiencies, there are still those times when a website should be developed from scratch. But just like the web space, these type of app projects should be the exception, not the rule. The development method you choose will largely depend upon the type of the app you wish to deploy.

We discussed BuildFire above. Let's look at the other options you have in the app development world and then in the following section, the type of app that might be appropriate for each.

Native Code from Scratch - raw coding is the only option for Native apps, no shortcuts here. These type of development projects are high cost and high risk. But they can yield spectacular results or end up in a complete disaster.

Outsourcing On The Cheap - Warning: on the development side, we have seen cases where companies seek cheaper offshore develop ment to reduce costs. The results are almost always less than satisfactory and in many cases, a complete disaster. If you go in this direction, make sure you have someone who has a significant amount of experience managing offshore engineering resources and mobile application projects. App development is a complex process; language, cultural and time barriers do not help. Also keep in mind that the development work is only a small part of the total cost of ownership. If you develop a bad or buggy product, it will cost you more in the long run. Pay now, or pay later.



Mobile App Development Platforms (MADP) - most of the solutions in this category are not really platforms but tools and libraries that help speed up the coding process for Hybrid app development. Some vendors claim to produce native apps when in reality they are just different forms of hybrid apps. I would not worry too much about this distinction as most quality hybrid apps will perform very close to their native counterparts - see discussion on "Choosing the Right Development Platform" below for when pure native is warranted.

Most development firms using these tools will not even enter into a custom development engagement with a budget under \$100,000; budgets over \$1M are not uncommon. If you employ an agency or technical account manager, count on an additional \$15,000 to \$25,000 a month just for project management. For any reasonably sized enterprise project, you are likely well into the six figures just to get to a proof of concept. Time to market is 9 to 12 month, maybe more. Just the development platforms themselves are costly. Gartner analyzed 17 MADP vendors and found the following initial annual licensing costs:

- Four low-cost vendors of less than \$25,000 per year,
- Three vendors were at the midpoint between \$25,000 and \$100,000, and
- Ten vendors at the enterprise level at more than \$100,000 per year.

This is just the yearly cost for the tool to make the app. With some of these platforms like Kinvey and Kony, you are stuck with these costs for the life of the app! They noted that actual costs could be significantly higher depending on "other services" purchase from the vendor.



Since you are now familiar with the mobile app architecture, you know about these "other services". Platform solutions in this category generally do not provide for services outside custom feature development.

So if developing on an MADP, on top of app development costs, be prepared to add Infrastructure, Functional, Administrative and IT Support Services into your annual budget (all these services are included with BuildFire). As good rule of thumb, these cost will run about 30% to 50% of the initial development costs. So if spending \$300,000 on app development, plan on spending an additional \$90,000 to \$150,000 each year to maintain and support it.

Unlike BuildFire, MADPs have limited or no scalability; each app project is distinct and separate. Virtually all enterprise level organizations have multiple app projects in a given year. With each new project, you are essentially creating a whole new architecture from scratch. With multiple apps, a single iOS or Android update can absorb a massive amount of your company's IT resources.

DIY Platforms - these are at the total opposite end of the spectrum from their MADP counterparts above. There are lot of companies to choose from, GoodBarber, BiznessApps, Como, etc., each with some unique features with a SaaS based pricing model. Most provide very solid performance for the price. We have seen cases where apps have been developed in an MADP environment for a six figure price tag when a simple \$100/month DIY solution would have sufficed. So know your options.



Like BuildFire, these platforms also come with a boatload of great out-of-box functionality. Adding functionality is generally as simple as point and click.

The best aspect of these solutions is, like BuildFire, all services are rolled into one turnkey platform. No need to figure out who will provide the Infrastructure, Functional, Administrative and IT Support Services! As you learned in the architecture section above, this is huge. Cost are reduced to practically nothing because all apps are created and maintained on a single platform - economy through scale. As an example, they have their own push notification delivery service and leverage the cost across thousands of apps. From a cost perspective, it would never make sense to create a delivery service for a single app made Natively or with a MADP. This principle applies across most of their app services.

Bottom line You can create a pretty cool turnkey app with all the services needed to operate, support and maintain the app for as little as \$50 per month. Heck, a push notification service alone cost can up to \$400 per month or more. So for simple apps and small businesses needing basic functionality, this is definitely the way to go. But once you move beyond simple and graduate to larger entities, there are limitations and they are not insignificant.

All of these platforms consist of proprietary software within a closed system architecture. **So they are not development platforms; you can't develop on them**. Therefore, you are limited to the functionality and features provided; zero flexibility.



So the out-of-the-box functionality might get you as much as 90% of the way to your objectives. However, that last 10% usually ends up being critical for success. For more complex apps, there are generally too many tradeoffs and limitations when using these platforms. In addition, there is really no room for growth.

For those creating enterprise apps, there are no connectors for back end enterprise level services and security can be an issue; both non-starters for larger companies. One creative way enterprises are using these platforms creating proof of concept apps. Once they get the look and feel they like, they move development to another platform.

Bottom line, if you can live with the limitations, a DIY platform might be the way to go; it is definitely the lowest cost solution.





Choosing the Development Platform That's Right For You

The choice will largely depend on a number of consideration. Generally no one factor alone will be the deciding factor. It is more a weighting of a variety of items. We have listed some of them below:



App use cases:

External facing apps that are mission critical to your business - in some scenarios, the app is the business, something like Uber. Or, in a large enterprise, it is - THE app that much of the external world uses to engage with your company. What is critical in these apps is maximum performance and flexibility and you are willing to pay for it. I often use the analogy of a company like American Airlines. The app they use to connect with their customers, book flights, track frequent flier miles, etc. is mission critical to their success. They need it to be lighting fast and are willing to throw as much money and hardware at the project to make it perfect. Milliseconds count and they are not about to rely on anybody else to do this for them. Just like their website they should create a 100% native app from the ground up.

Apps focused on connectivity, productivity and efficiency - following on the American Airlines analogy, they may be considering and app for training, pilot scheduling, HR communication, an employee or customer event, etc. In all these cases BuildFire or an MADP vendor is appropriate.

SMB/Organization App - In 90% of the cases either DIY or BuildFire should supply more than enough capability. Coding for Native or MADP is generally not an option due to the high development and support costs that are a minimum of \$2,000 to \$3,000 per month per app.



App complexity:

Simple - if you are doing something as simple as hosting training videos on youtube, sending an occasional push notification, providing access to content, then a DIY or BuildFire is definitely the best option.

Complex/Enterprise - both MADP or BuildFire are options here.

Gaming - almost alway requires a native app. In general business use, native and hybrid app perform very similarly. You rarely notice the milliseconds of difference between the two. However, in gaming, milliseconds are important; code from scratch.

What is your budget?

The big one for so many of you. Especially the creative professional that must absorb all these development and support costs into their departmental budgets for years to come. There are so many variables here so permit us to use industry averages so you can make a relative comparison.

Native - Development will usually run you 50 to 65% premium over the cost of MADP. Legacy costs will generally run between 30 and 50% of development costs.

MADP - rarely under \$100K, averages \$270K for development and \$50 to \$135K for annual service and support.



BuildFire - rarely over \$100K, generally less than \$25K for custom features and \$5K to \$30K for an annual subscription to the enterprise level platform. As low as \$500 annually for the DIY only solution. BuildFire is easier on the budget from a number of perspectives. Since 90% of what you likely needs come out-of-the-box with BuildFire, you will have a very small amount of code to be written. Legacy cost are totally predictable and all covered by the subscription fee.

DIY - no custom development options. \$500 to \$1,800 per year for an annual subscription to the platform.

Time to market

Time can often be an important consideration ...i.e. an upcoming event. Again, so many variables here so permit us to use industry averages so you can make a relative comparison.

Native and MADP - Proof of concept app 3 months, complete development 9 to 12 months.

BuildFire - Proof of concept app 2 weeks, complete development 6 to 12 weeks.

DIY - NA.



Need for multiple apps:

Native and MADP - a big drawback to traditional mobile app development is scalability. Each app is created independently, each requiring their own support structure and separate subscriptions to the Function Services described above. At the end of the day ... how big can you make the IT department? This is the major reason for the app development bottlenecks in corporate IT departments

BuildFire and DIY - the whole concept behind these platforms is infinite scalability. Adding additional apps is easy. With the BuildFire platform, any custom functionality created for one app can be used for all apps..... while a different app, still the same platform.

Your skill set and time availability

Native and MADP - if you are going to tackle a big project, make sure you have the time and project management skills to oversee the process. If you lack the skills or time and are contemplating the Native or MADP route, get yourself an agency to help. Yes, they can cost upwards of \$25K per month but it is worth it. If you were building a home from the ground up, would you attempt it without a general contractor? Of course not, the same applies here.



BuildFire - less time, risk, cost and complexity. Most professionals can manage this; that is how the platform was designed.

Other considerations

Future room for growth - virtually unlimited with Native, MADPs and BuildFire. DIY is not an option.

Temporary apps - for things like events and prototyping both DIY and BuildFire are really the only options. The Native and MADP approaches are simply too expensive for something temporary.

Must have vs. nice to have features, layout, etc - there is some functionality that is not an option. Different DIY platforms have different features. Exhaust the DIY options first (a bit of leg work but worth it). If the DIY option is eliminated, move to BuildFire then MADP followed by Native.



Summary

Mobile app development, deployment and support can be an expensive and risky proposition. A little upfront planning can save you hundreds of thousands of dollars; even more. So before jumping in, spend a little time considering your development options.

DIY should always be explored first. If you need something custom that is not "gaming" or "mission critical" a close look at BuildFire and then MADP should follow. Native should be reserved for those rarest of circumstances.

In the majority of cases, BuildFire simply makes more sense. There is no app that can be built on an MADP that cannot be built on BuildFire. So why not look at the lower risk more comprehensive solution first? Development time and cost will always be lower with BuildFire; usually substantially lower - the exact amount will depend upon the amount of out-of-the-box features you are able to utilized. With respect to legacy costs, Native and MADP deployments cannot touch the level of services and economies of scale provided by the BuildFire platform. You need more than one app, the BuildFire legacy savings are massive.

So take some pressure off yourself and your budget - give BuildFire a try. The project costs can be defined within a very tight window. Time from development to deployment can be reduced from months to weeks and legacy savings are huge.



A final word to drive our point home A few months back we reviewed a MADP project where over \$300K was spent just to get to a proof of concept (an internal productivity app). Then another \$700K was spent to complete the app. In the end, the project was scrapped because the app never worked as anticipated. Now in this case, it was a Fortune 50 company, so they could afford it. Even so, it demonstrates the risk associated with MADP projects. By-the-way BuildFire delivered their proof of concept app in a few days and for less than \$2,500.

To assist you in further evaluating potential platforms, we have provided the matrix below. It provides an overview of most of the available platforms and their respective features.

If you have questions, please feel free to reach out to us at BuildFire. You can contact us at

So get started, get creative; let BuildFire take care of the rest.



Entity/Platform Matrix

All of the entities/platforms below can ultimately get you to where you need to go. If a platform is missing a feature, it will need to added from elsewhere to complete the app project. Kind of like a general contractor that is building a house. Most of these platforms offer some aspect of a foundation to build upon. But like building that house, your general contractor will outsource most of the work to other subcontractors and vendors. You can see the complexity of managing these projects.

The BuildFire platform is a fraction of the price of these other solutions while offering a far more comprehensive suite of services and features. BuildFire has everything you need to develop, deploy, maintain and support a mobile application. BuildFire can also host an unlimited number of apps. Your first app is incredibly cost efficient, thereafter, the savings are simply off the charts

As we stated earlier Think about the mobile ambitions that could realize if 100% of the infrastructure and 90% of the functionality required for your mobile app deployment was completed prior to the start of a project.



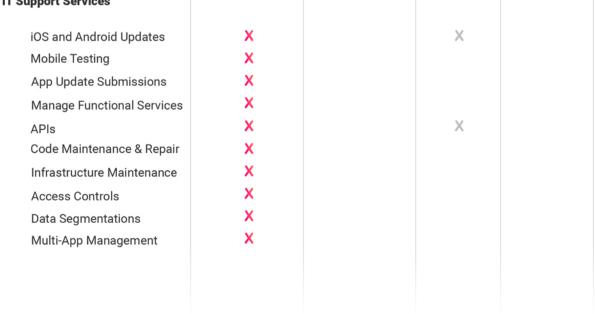
Mobile App Platforms

Features & Services Included

Front End Development Tools/ Libaries

Back End Frameworks

	BuildFire Platform	Appcelerator Xamarin	Kinvey/ Kony	Native Coding	RedHat	IBM
Infrastructure						
Servers	x		×		×	X
Data Storage	×		X			
CDN	×					
Image Manipulation	×					
Authentication	×		×		\times	
Analytics Intergration	×		×			×
Operating Systems						
iOS	×	×	×	×		
Android	×	×	×	Х		
HTML	×					
App Features						
Hybrid	x	X	×		(a)	(a)
Native				Х	(a)	(a)
Out-of-the-Box Functionality	×		Limited			
Click & Edit App Building	×		Limited			
Functional Services						
Push	x		×			
Social	×		×			
SMS	×					
Email	×				×	×
Administrative Services						
Web Control Panel	x		X			
Content Management	×		Limited			
Dashboard Emulator	×					
Manage Functional Services	×					
Over-the-Air Updates	×					
Analytics / Event Collector	×					
Social Media Authentication	×					
Access Controls	×					
Data Segmentations	×					
Multi-App Management	×					



 * two of about 10 small players in this space

(a) These are backend frameworks only. They do not have the development tools. So if you utilize these backend services you will also need to utilize one of the frontend frameworks in this chart.For example using IBM for the backend and Appcelerator for the frontend.

In the majority of cases, BuildFire simply makes more sense. **There is no app that can be built on an MADP that cannot be built on BuildFire**. So why not look at the lower risk more comprehensive solution first? Development time and cost will always be lower with BuildFire; usually substantially lower - the exact amount will depend upon the amount of out-of-the-box features you are able to utilized. With respect to legacy costs, Native and MADP deployments cannot touch the level of services and economies of scale provided by the BuildFire platform. You need more than one app, the BuildFire legacy savings are massive.

Start Building Your App Today!

Get Started