



# ***THE 8 PILLARS OF AN ENTERPRISE MOBILE APP***



# 1 INTRODUCTION

User-Experience 2

Back-End Data 3

Collaboration 4

Business Logic 5

Security 6

Container 7

Device Engagement Features 8

Offline Syncing 9

Key Take Aways 10

It's a pivotal time for mobility, as industry-leading enterprises continue to evolve from the legacy software mindset and transcend to a more sophisticated approach. In this new era, it's all about the enterprise mobile app. It may start with just one application in a single business unit, or with several hundred mobile apps centrally launched from IT. Either way, with proper execution enterprise mobile apps can fundamentally redefine how enterprises empower their customers, employees, and partners to interact, learn, connect, and perform.

However, designing and developing enterprise mobile applications has always presented a unique set of challenges. It is unquestionably more difficult than designing and developing traditional desktop or web applications.

This ebook comes directly out of all the experience and knowledge we have accumulated over the past couple of years helping our enterprise clients deliver transformative mobile applications. In this book, we've identified the eight core "pillars" that should be taken into consideration when designing and building an enterprise mobile app.



1  
2  
3  
4  
5  
6  
7  
8  
9  
10

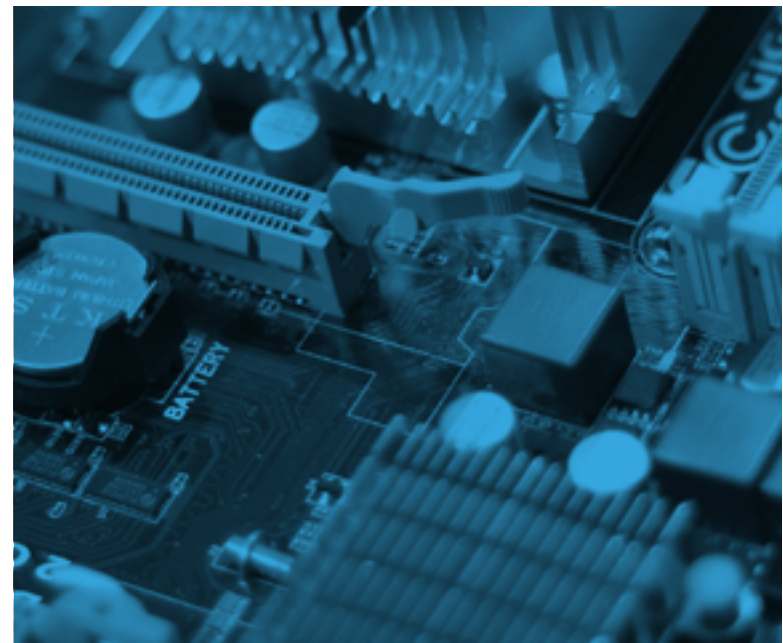
## **USER EXPERIENCE**

No factor is more critical to the success of an enterprise mobile application than the user experience (UX). This is simply how the application looks and feels to the end user. Exceptional user experience design is the primary driver of repeat usage. Creating a sophisticated and functional UX that meets your business goals requires a keen understanding of end user needs, key business drivers, and technical capabilities of platforms..



## **BACK END DATA**

All types of useful applications, from consumer-facing marketing apps to internal business process automation apps, must integrate with data sources. These data sources may reside in on-premise systems of record, in cloud platforms, or in mobile backend as a service platforms. It is important to keep in mind that data transforms enterprise mobile apps from transactions systems into sophisticated tools for business.







## **COLLABORATION**

Sharing content--whether audio, video, documents, images, or data--is critical to enabling customers, employees and partners to be productive and to actively contribute their ideas in discussions, creative designs, product plans, proposals, or even bills. In essence, collaboration is at the core of virtually every business process.

1

2

3

4

5

## **BUSINESS LOGIC**

Business logic is the engine that ties everything together. More specifically, business logic establishes the rules the app will follow to use data and keep the business moving forward. For business stakeholders, this may mean defining the workflow, as well as what type of information or files will be accessible through the app. On the other hand, IT stakeholders will have to think through the business rules, such as approval processes, that the app needs to follow.

6

7

8

9

10

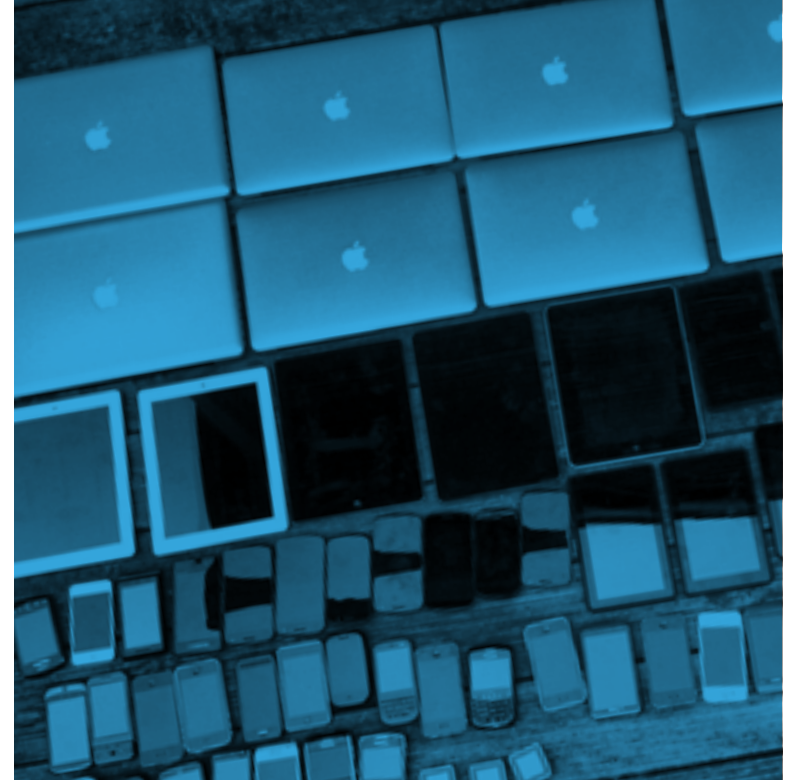




## SECURITY

Security is always a top concern for enterprise IT. Data within an enterprise mobile application must be built in accordance with security best practices: ensuring all data is encrypted whether at rest or in transit, and granting access to authorized users. IT stakeholders should keep in mind that if security is too stringent, the mobile application may be too restrictive to use.

1  
2  
3  
4  
5  
6



## CONTAINER

Containerizing enterprise mobile apps and data at the device level means that the apps and data live in a separate, encrypted zone on a user's mobile device. This means policy controls apply only to data and apps in the container, rather than to the entire device. Think of the container as the place where backend data, business logic, and user interface meet and interact with the actual mobile device. The container governs whether you build your enterprise mobile app using a native, hybrid, or HTML5 approach.

7  
8  
9  
10





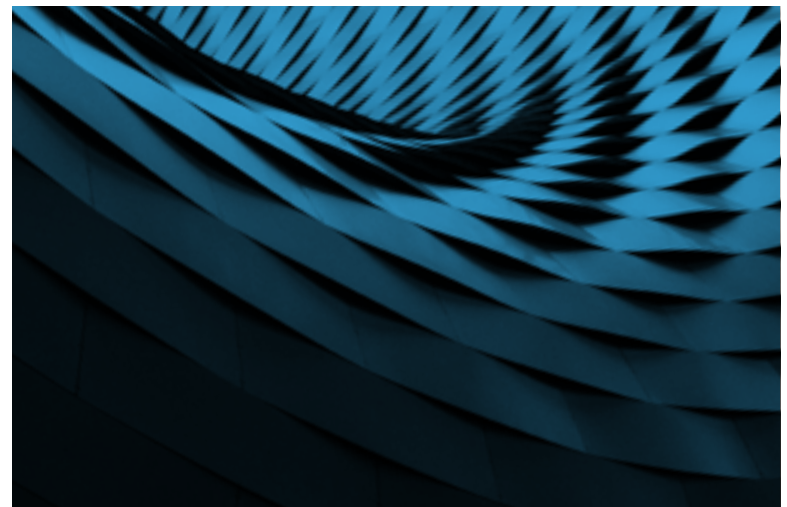
## ***DEVICE CENTRIC ENGAGEMENT FEATURES***

The unique, personal nature of a mobile device provides endless opportunities for end user engagement. Effective enterprise mobile applications capitalize on the use of features like SMS, email, and push notifications, as well as location-based services.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

Offline syncing for enterprise mobile applications can be thought of as the app's ability to react gracefully to the lack of a network connection. While the network contributes to an app not being available, it is not the root cause. The real problem is in where the app's data is located. If an app has to access the cloud every time it needs to read or write a piece of data, then it's going to encounter problems when the network isn't available. Without the network, the app won't be able to connect to the cloud or access its data and will be unable to function. Additionally, if the network is slow, then getting data from the cloud will also be slow, and the app as a whole will run slowly. What this means is that your app needs to store data both locally and in the cloud, and you need something that will securely keep those two data stores in sync.

## ***OFFLINE SYNCING***





1

2

3

4

5

6

7

8

9

10

There are few things more important to the future success of your business than the ability to support mobility for your customers, employees, and partners. The most innovative enterprises are already developing new mobile applications, as well as upgrading their legacy applications with mobile capabilities.

For any business, understanding the key pillars in the design and development of enterprise mobile applications is the first and most critical step towards becoming an industry leader equipped with cutting edge solutions for today's market.

## **KEY TAKEAWAYS**







## ***DELIVERING INNOVATION FOR TOMORROW'S BUSINESSES***

We help enterprises transform bold ideas into disruptive software solutions that reinvent the way they do business.

Renovatio Cloud Solutions  
[www.renovatiocloud.com](http://www.renovatiocloud.com)  
(512) 298-3328  
[info@renovatiocloud.com](mailto:info@renovatiocloud.com)

© 2016 Renovatio Cloud Solutions