



The Complete Guide to Adopting Mobile and Apps in Your Company



Introduction

1. Understanding your business goals and audience needs	4
2. Mobile devices and operating systems	8
3. Security	13
4. Apps	22
5. Development options	29
6. System integrations	35
7. App updates	41
8. Deployment	45
9. Building a business case	53
10. How to build apps	60
Conclusion: Next steps	73

Introduction

Welcome to The Complete Guide to Adopting Mobile and Apps in Your Company. In this eBook, you will learn everything you need to know to understand, build and roll out your mobile strategy and start taking advantage of the potential that **enterprise mobility*** and apps can have for your company.

Enterprise apps are becoming a “must have” rather than a “nice to have,” as the benefits of apps continue putting companies significantly ahead of their competition. With **the global BYOD and enterprise mobility market set to be worth \$284 billion by 2019** and enterprise apps reported to lead to **productivity gains** and many other benefits, there has never been a more important time for businesses to invest in mobile.

The eBook will cover everything you’ll need to know to create a complete long-term enterprise mobility strategy, including mobile security, app design and development. You will have the tools you need to convince both the business and IT of the value of your strategy and to empower your teams and customers to begin using mobile because one thing is clear: the future of business is mobile.

Read on to begin your enterprise mobility journey.

Enterprise Mobility - The act of empowering employees to get work done more conveniently and efficiently by using mobile devices. Being able to perform work tasks on mobile devices means that employees can access work resources and carry out tasks no matter where they are, whether on their commute or in a meeting. This results in a number of benefits, such as increased productivity



1. Understanding your business goals and audience needs

Understanding your business goals

The first aspect you need to consider is how implementing an enterprise mobility strategy will help your company meet its business goals.

Being clear on business goals is crucial when it comes to putting together a convincing business case. It will also help you stay on the right track when making key decisions about mobility initiatives and when it comes to evaluating success.



Key questions and considerations:

- ✓ Why does your company need enterprise apps?
- ✓ What business processes and workflows will mobile apps support, optimise or replace?
- ✓ How can mobile apps create new sales or revenue opportunities for your business?

Defining what your audience needs

Consider who would be using your apps and what they will be using them for. This should include looking at which business processes you intend to support with mobile apps and how making process mobile can support employee needs and help resolve problems.

By determining the needs of your audience, you will find out if an enterprise mobility strategy is suitable for your company. You will also have a much clearer idea of the kinds of apps you should be creating.



Key questions and considerations:

- ✓ What processes does your audience carry out daily that could be shortened with an app?
- ✓ Are there times when your audience doesn't have access to the information they require, such as in meetings or during their commutes?
- ✓ How can apps solve the issues your audience faces?
- ✓ How does your audience want to use apps?
- ✓ In what ways can you meet your audience's needs and improve access to information?
- ✓ In what ways can you personalise the app to reflect your audience's highest priorities?

***Companies gain an extra 240
hours of work per employee each
per year from employees due to
mobile working***

iPass



2. Mobile devices and operating systems



Key Mobile Statistic

41% employees say corporate mobile devices are too old and too slow. [↗](#)

Mobile devices and operating systems

Corporate mobile devices vs BYOD

One of the major considerations that needs to be taken into account when creating an enterprise mobility strategy is which mobile devices employees will be using. Will they be given corporate mobile devices, or will they use their own under a Bring-Your-Own-Device (**BYOD***) policy?

Choosing between rolling out corporate mobile devices or introducing a BYOD policy will depend on a number of factors, including the size of your company, your security initiatives and the operating systems to which you will be catering.

If your company already has mobile devices and/or if you are planning to use developers to build your apps, providing corporate mobile devices is the best idea. The main benefit of this approach is that it will be less costly and time-consuming to develop a version for a single operating system.

Even if you don't already have mobile devices, if you would still like to dictate a single OS, you could instead implement a Choose-Your-Own-Device (**CYOD***) policy, offering employees a suite of pre-approved mobile device choices.

BYOD (Bring-Your-Own-Device) - A policy which allows employees to use personally owned mobile devices (laptops, tablets and smartphones) for work and to access corporate information and applications.

CYOD (Choose-Your-Own-Device) - A policy of allowing employees to choose the corporate mobile devices they would like to use, usually from a limited number of options provided by the company.

BYOD, on the other hand, is best for companies that do not wish to pay for mobile devices to roll out for every employee. It is also ideal for companies that choose to use an **app builder*** for app development, as these often allow you to create apps for more than one operating system at no greater cost.

In the case of BYOD, to determine which devices you will need to support, we recommend that you conduct a survey across the company. Most employees will likely use iOS and Android mobile devices, but some may use Windows and BlackBerry.

If you find that only a minority of employees are using the last two, it may be more cost-efficient to provide them with corporate mobile devices, as the cost incurred by this is likely lower than the cost to accommodate additional operating systems.

Future-proofing your strategy

Another important aspect of any enterprise mobility strategy is that apps and mobile devices are flexible enough to accommodate future OS updates and the launch of new mobile devices.

As time passes, you may encounter issues linked to an increased number of users or apps, or to the arrival of newer platform versions, app upgrades or new app features.

By thinking about these potential issues now, you can ensure that you have the right infrastructure to accommodate growth.

App builder - A tool that allows users to design apps without any programming or development skills, commonly using drag-and-drop and visual editors.

One way of doing this is to ensure that your development technology and quality assurance processes are open to growth. This may also include the ability of apps to integrate with native technologies which you may need in the future.

This also applies to security; companies should ensure that mobile security solutions implemented will be flexible enough to account for future mobile devices or apps, as these will rely on the same infrastructure.



Key questions and considerations:

- ✔ What operating systems and mobile devices does your audience use?
- ✔ What mobile devices and operating systems do your prospective audiences use?
- ✔ In the future, how will you support a growing number of platforms?

***60% of employees already
use apps for work-related activity***

Digital Strategy Consulting



3. Security

Introduction

For IT the #1 weakest link in security is seen as mobile devices. This is an understandable concern if you consider that **5.2 million smartphones were lost or stolen in the US in 2014**.

In this section, part of our Complete Guide to Adopting Mobile and Apps in Your Company, we cover the main threats to security and how they can be combatted through mobile security technology. Understanding the risks will better equip you to either choose the appropriate technical solution or participate in internal discussions with the relevant team.

The section gives you an overview of some of the security concerns and solutions that should be kept in mind, but your IT team will be able to advise you on the exact needs depending on the nature of the apps you are creating and the data they will include.

Security risks

Securing how employees can use mobile devices and apps to access corporate content is becoming increasingly important, especially with the proliferation of Bring-Your-Own-Device (BYOD) initiatives where employees can use their own devices, which may not have any security software installed.

The table below outlines the major risks that the use of mobile can create and how these can be mitigated.



Risk



Solution

! Sensitive data is leaked via unprotected apps or networks

- > Encrypt all data passing between the network and the user's browser
- > Limit mobile devices to access only certain safe resources, such as corporate email or internal documents
- > Block undesirable apps from being downloaded

! Employees leave the company and still have access to corporate apps on their mobile devices

- > Delete mobile data contained on the device remotely
- > Remotely lock down the app until the device can be fixed
- > Implement a login system that ensures the account belongs to a valid employee

! Mobile devices are lost or stolen

- > Require users to regularly change the password on their mobile device
- > Delete mobile data contained on the device remotely

! Sensitive data contained in mobile apps is accessed by external parties

- > Add additional layers of security and password protection to apps
- > Use enterprise app stores to distribute apps privately to employees only

How can devices be secured?

Your security device requirements will depend on how sensitive data is. There are three main options:

- 1 The user is responsible for their own device.** This usually involves educating users on how to secure their device, but involves no complex IT systems. This is usually the option taken by organisations that are not heavily regulated, as the risk of lost data to the company is limited.
- 2 Certain built-in security features are required,** such as device locks (passcodes, pattern codes, touch ID) and device encryption. This can be enforced through training, manual checks or setting policies with software, such as a mobile device management system (MDM).
- 3 Additional security is provided by a Mobile Device Management (MDM) system.** An MDM system provides additional security features that can be controlled by your IT department, such as device encryption, password strength standards, auditing and many other security features. This solution is recommended if the data accessed by devices and apps is of a sensitive nature or the above solutions are not suitable for your company or organisation.

How can apps be secured?

There are many options available when it comes to securing app data. The main areas of focus are:

1 Distribution

App distribution involves ensuring that users can easily access and download apps without compromising the security of their data. Security requirements will vary depending on whether apps will be distributed via the public app stores or a private enterprise app store.

Public app stores

Companies often share apps with employees by submitting them to public app stores and asking them to use a login for access. But this may not be the most suitable option if the app contains sensitive data or if you want to have control over who can download the app. In that case, a private enterprise app store will provide better security.

Enterprise app stores

The main benefit of enterprise app stores is that they ensure apps can only be downloaded by people who are given access, often employees. Using an enterprise app store rather than the public app stores also means that apps are not subject to the public app stores' guidelines for submission and approval times, that can take as long as 15 days for Apple.

Password policy and Single Sign-On

To decrease the chances of hacking and virus attacks, a password policy can be implemented, requiring employees to set strong passwords for their mobile devices and to change them regularly.

Single Sign-On (SSO)* is a secure and convenient way of doing this because it allows employees to log into all their apps and accounts using a single password and it enables IT to centrally manage all accounts.

2 Network and data encryption

Network encryption

Network encryption secures all data passing from a mobile device to a server and back, preventing external parties from being able to read it. Common types of encryption include **Virtual Private Networks (VPN)*** or **Secure Socket Layer (SSL)*** depending on the type of service that needs to be secured.

It is also important to ensure that the servers storing app data are secure.

SSO (Single Sign-On) - An authentication technology that allows users to enter one username and password to access multiple apps or accounts. For example, using Google or Facebook details to sign into news or media websites.

VPN (Virtual Private Network) - A VPN allows the creation of a private network that users can access even if not connected to their corporate network. For example, when users are travelling or working remotely they can connect to their company's private network to access necessary files and data.

SSL certificates - A security technology used to encrypt network transactions and communications. For example, payment transactions on e-commerce websites are often encrypted using SSL.

Device encryption

Your company may also benefit from encrypting the app on the mobile device. This means that if the device is lost, the data on the device cannot be accessed with an app username and password. Instead, the account can be disabled centrally, rendering the thief unable to access the app.

Security audits

Full security audits, which assess the device's health and highlight if the mobile device or app is affected by a security issue, can be done remotely.

They can be conducted either by your internal IT team or external security professionals and can establish if data is at risk, check for any security gaps and determine if additional measures are required.

Partial or remote wipe

MDMs offer the ability to wipe all corporate data remotely from a mobile device. This means that if an employee loses their mobile device or if they leave the company, all sensitive app data can be deleted – and if the mobile device is found, content can easily be restored.

MDMs also allow for only corporate content to be deleted, leaving personal content untouched. This is highly desirable particularly in the case of companies running BYOD initiatives where employees use the same mobile device for work and personal tasks.



Key questions and considerations:

- ✓ How and where will mobile devices and apps be used?
- ✓ What data will be used on the mobile devices?
- ✓ What security is right for your business and users?
- ✓ Are there existing systems used by your company that can secure the apps, such as MDM or **Mobile Application Management (MAM)***?
- ✓ What questions and tests need to be reviewed before each app is launched?
- ✓ Is app data secured on mobile devices?
- ✓ Are transactions between mobile devices and servers encrypted?
- ✓ How can the impact security measures have on user experience be minimised?

***71% spend over
two hours a week accessing
company information on mobile***









Fierce Mobile IT



4. Apps

Apps

Enterprise apps can be used in many business areas:

-  **Sales.** Sales apps can help your company increase lead generation by allowing customers to make enquiries via the app, by presenting your products and services to clients in engaging visual ways and by empowering your sales team to access the latest sales information more easily.
-  **Marketing.** Marketing apps allow you to engage with prospects directly on their mobile devices, to promote your products in a visual, interactive way and to gather data about your audience's engagement with your content.
-  **Internal communications.** Internal communications apps can help you communicate with your clients and employees better and gain insight into whether your employees have read the latest announcements and newsletters.
-  **Events.** Event apps allow you to communicate more easily with attendees before, during and after your events, give them access to additional content and gain insights into their event experience.
-  **Reporting.** Reporting apps are great ways to deliver the latest reports to clients and stakeholders in interactive and visually engaging formats.
-  **Training.** Training apps make employee learning easier and better by offering an interactive and engaging platform for the acquisition of knowledge. By including gamification elements, these apps can increase employees' motivation and interest in learning.
-  **Project management.** Project management apps can help teams connect better by delivering the latest information and reports to everyone's mobile devices and enabling all participants to access and update the app with new project information.
-  **Health & Safety.** Finally, health and safety apps enable all employees to file incident reports and complete audit checklists, with the option of uploading images and video to provide more details and automatically including GPS coordinates.



Key Mobile Statistic

39% of organisations cite improved efficiency as the greatest benefit of mobile technologies, followed by business process improvement (21%) and reduction in paperwork (21%). [↗](#)

What are the benefits of enterprise apps?

How exactly can these enterprise apps help? Here are some of the key benefits:

1 Increased productivity

Enterprise apps can bring increased productivity to business processes.

Internal mobile apps have been shown to **increase productivity up to 40%**, an incredible figure considering the amount of extra work that employees can get done thanks to them.

Enterprise apps do this by allowing employees to get work done with more flexibility.

Flexibility

By always being available on portable mobile devices, apps enable employees to get work done whenever and wherever they are, for example during “pockets” of free time such as commutes.

Performing daily tasks more easily

Enterprise apps can also increase productivity by allowing employees to incorporate them directly into daily business processes.

An example is employees who need to submit data daily while on the go, whether as part of routine checks or lead generation.

Traditionally, employees would have to record this data on paper or on a computer and submit it to the right databases once they were back at their desks.



Key Mobile Statistic

IT teams will be spending at least 25% of their software budget to mobile app development, deployment and management by 2017. [↗](#)

An app can allow employees to submit data directly into the database via their mobile device, avoiding the need for double handling of information and saving time.

This can work even if employees do not have access to an internet connection, as an app with offline functionality can save the data on the mobile device until it becomes connected to an online network.

This approach also eliminates the risk of misplacing data that has been collected on paper.

2 Instant access

Another benefit of enterprise apps is that they make access to information faster and easier.

Apps enable employees to access documents almost instantly while they are away from their desks, making it particularly useful for employees working remotely or attending meetings.

Being able to access information on the go can help employees in many ways, for example, by reducing problem solving time or by allowing salespeople to check on information about company products and services before meetings.

This can help speed up sales processes, better prepare employees for meetings and reduce the amount of dead time caused by unexpected problems.



Key Mobile Statistic

60% of workers use apps for work-related activity. [↗](#)

3 Improved communications

Communications between employees are of key importance, but unfortunately they are often relegated to email. This makes it difficult for managers to ensure that urgent emails or requests are read instantly.

An app can speed up communications by offering an instant messaging channel that is much more effective than email.

For example, apps such as [Slack](#) offer internal communications in a chat room setting, providing push notifications to notify employees when they are receiving a message. This means that urgent requests can be responded to faster, reducing problem solving and support delivery times.

It also means that employees can stay in touch with colleagues while they are away from the office, ensuring that any urgent requests can be delivered quicker.

Enterprise apps can also be used to communicate with customers more effectively, enabling them to contact the company directly via an app. This allows companies to deliver information and support accordingly.

Not only does this speed up customer support, it can also make customers' experience much more positive thanks to its convenience.

4 Higher engagement

Enterprise apps can make content much more engaging by providing mobile-specific interactive features.

From videos and podcasts to interactive charts and infographics, some apps can incorporate a wide range of media and features, making information much more visually attractive and easier to engage with.

The apps themselves also contain features, such as zooming and swiping, that adapt themselves to user behaviour, leading to a more intuitive experience.

5 Customer insight

Finally, enterprise apps offer unique opportunities to capture customer data. Whether in the form of real-time app use data or direct feedback from users, this can give companies vital insights into their customers' needs and issues.

Companies can capture user data via apps by using **CRM*** and analytics software.

CRM (Customer Relationship Management) system - A collection of tools and technologies used to manage, improve and support lead generation, sales, support and interactions with customers, prospects and business partners. An example of a CRM system is Salesforce.

***People today are spending 86% of
mobile time on mobile apps***

Adweek



5. Development options



Key Mobile Statistic

By the end of 2017, market demand for mobile app development services will grow at least five times faster than internal IT organizations' capacity to deliver them. [↗](#)

Development options

Recent studies have suggested that the **demand for enterprise mobile apps will soon overwhelm the ability of internal IT teams to deliver them.**

When deciding on an app development solution or reviewing your existing processes, keep in mind – will your solution scale to meet your app requirements in the future?

Nowadays there are many options available for the creation of mobile apps of varying cost, flexibility and speed of development:

1 Having your apps built by developers

The most common way companies choose is to use developers to create apps that meet their exact needs. Some large companies have their own internal development teams, while others hire external developers.

While this approach allows companies to create optimised apps, it normally comes at a high cost, which can be multiplied over time because of the need to deliver updates.

In the case of internal teams, it also means that business-critical apps are prioritised; therefore, it can take a long time until a desired app is developed. In general, apps developed using this approach can take six months or longer to be delivered, an incredibly long process compared to other solutions.

This solution is ideal for companies with internal development teams or large budgets and for niche apps that are unique or that require particularly high performance.



Key Mobile Statistic

The top three reasons CIOs cite for causing their inability to advance their mobile strategy are: lack of budget (67%), lack of mobile infrastructure (53%), and lack of the right tools (50%). [↗](#)

Pros

- ✓ Highly customised apps
- ✓ Can use internal development team if available
- ✓ Branding available, such as company logo, icons, fonts, images and colour schemes

Cons

- ✗ Time consuming, often taking in excess of three to six months
- ✗ Costly; the average app costs **\$70,000**
- ✗ Can be de-prioritised
- ✗ Making updates can be difficult and costly because it requires re-engagement with the app developer, who may require additional costs and who may be unable to deliver these updates immediately

2 Building your own apps using an online app builder

Companies that do not wish to engage with developers because of budget constraints or previous negative experiences may choose to use an online app builder such as Fliplet. Online app builders provide companies with the tools to build their own apps, with no coding or design skills required.

This allows anyone within a company to build their own apps tailored to their needs. There's no need to turn to external resources or to a potentially slow internal development process.

It is also a faster solution, as most app builders will have a simple interface that allows users to create apps quickly. Updates and edits can likewise be easily made via the platform, speeding up the process.

This solution is more affordable than traditional development solutions and so is ideally suited to app projects with smaller budgets or to larger companies looking for a solution that can help them with growing demands for mobile apps.

**Key Mobile Statistic**

By 2018, more than 50% of all mobile apps will be created without coding. [↗](#)

Pros

- ✓ Affordable
- ✓ Anyone within your company can create apps
- ✓ Faster design and updates
- ✓ Branding available, such as company logo, icons, fonts, images and colour schemes
- ✓ Some offer single build for multiple mobile devices
- ✓ Some can integrate with existing systems
- ✓ Can be used for multiple use cases from events to internal communications

Cons

- ✗ Some app builders are less customisable
- ✗ Some app builders offer little assistance in building apps, meaning that you have to do everything yourself

3 Using existing apps

There is also a wide range of apps in the market created by third-party providers that might be suited to some of your needs. While this is the more affordable option, it is also quite limiting with respect to meeting your exact needs and providing a high degree of branding. However, this option is ideal when existing third-party providers are already offering a specialist system that wouldn't be worth rebuilding (e.g., internal communications software such as **Slack**).

Pros

- ✓ Cheap
- ✓ No need to develop apps

Cons

- ✗ Very limited
- ✗ Not customisable

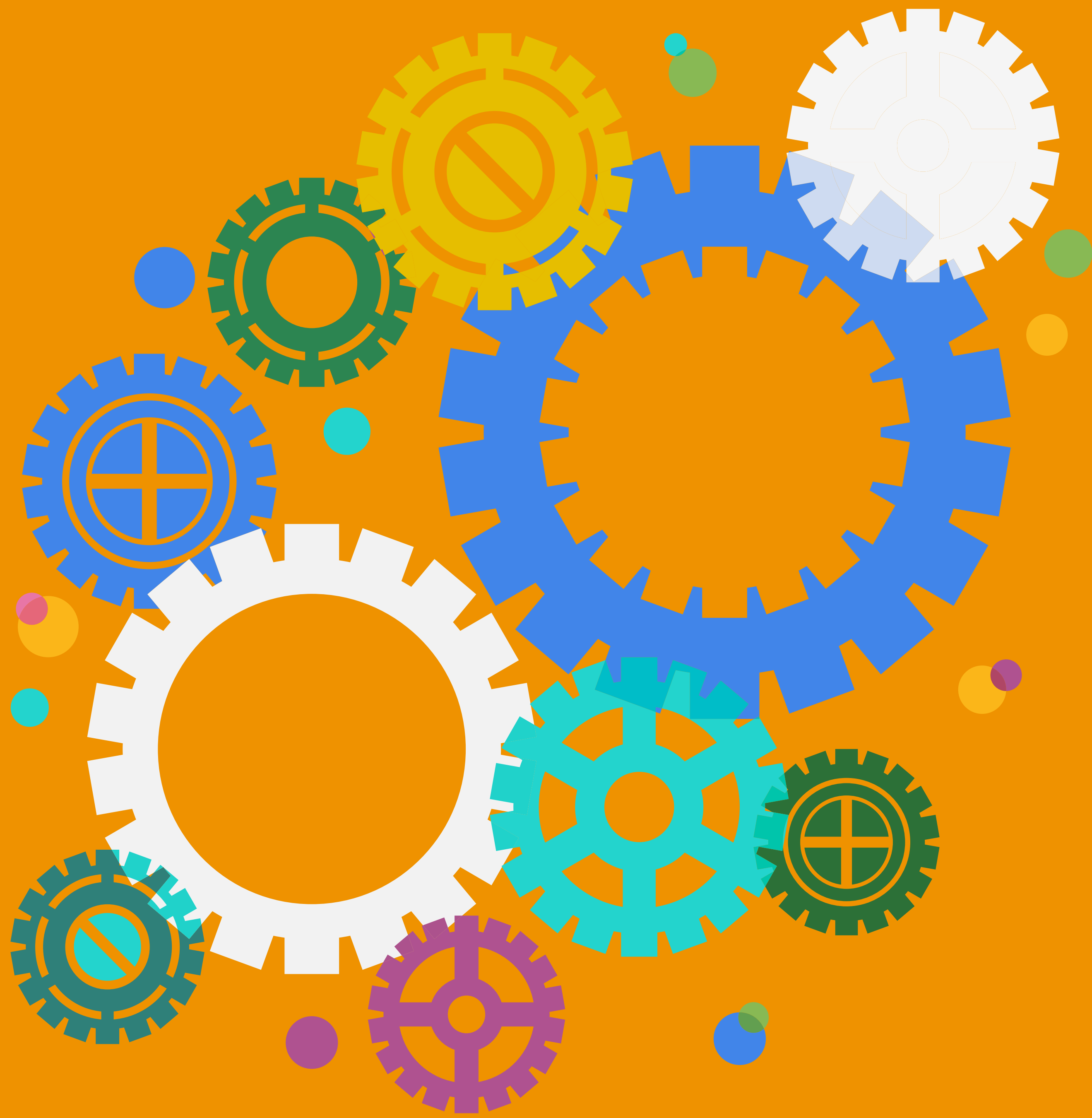


Key questions and considerations:

- ✓ What development option is appropriate for your app project in terms of time and budget?
- ✓ Do you need highly customisable apps?
- ✓ Will you need to regularly update your app?
- ✓ Are there any existing apps in the market that will meet your needs?
- ✓ Can your solution scale with your business?
- ✓ Is your solution flexible with respect to growing market, deployment and technology changes?

***There's been a 91% growth in use
of mobile during B2B
research & buying process***

Google



6. System integrations

System integrations

Integration with backend systems is an essential part of any enterprise mobility strategy because it allows you to take full advantage of data provided by apps to optimise and inform your strategies, gain insight into your business processes and better manage them. Apps integrate with these systems via application programming interfaces (**APIs***).

In this section we look at the types of backend systems that will likely be an essential part of your enterprise mobility strategy and how these systems can help you take full advantage of mobile data.

There is an endless number of backend systems with which your apps could potentially integrate depending on your needs. Here we have chosen to cover the most common ones.

Enterprise Resource Planning systems (ERPs*)

Mobile apps can integrate directly with ERPs to deliver more accurate data about the ways in which employees and customers engage with various business processes. You can use the insights to improve these processes and automate them to make them more efficient.

API (Application Programming Interface) - A collection of programming tools that allow information stored on one system to be shared with another. This means developers can quickly connect two systems such as an app to read information from a database, or an app to write information into a database.

ERP (Enterprise Resource Planning) - Software that allows an organisation to manage and automate business processes by collecting, storing, managing and interpreting data from many business activities including: product planning, cost, manufacturing, service delivery, marketing and sales. Two examples of ERPs are SAP and Oracle.



Key Mobile Statistic

76% of CSOs believe that mobile CRM improves sales performance. [↗](#)

Customer Relationship Management systems (CRMs*)

If you want to be proactive in capturing and engaging with leads, apps can help by giving you useful data on customers' and prospects' personal details and user behaviour.

One way of doing this is to encourage users to enter personal information into the app. Interactive features such as personality tests, sweepstakes and trivia quizzes are great ways of doing this while delighting users.

Salespeople can also capture lead information by logging it directly into the app during meetings and events. This data can be automatically saved in your CRM system, eliminating the need for salespeople to transfer it to a computer when they return to their desks.

Analytics software

Analytics software is essential when it comes to analysing data collected via mobile devices and using it to inform and optimise business strategies across the board, from sales to reporting.

Among other things, analytics software can provide insight into where visitors came from, how long they stayed on your app, how they interacted with the app, their geographical location, whether they carried out any transactions, etc.

There are many possibilities, and each company can optimise its dashboard and metrics to access whatever data is most relevant and useful. More importantly, they can use the results to optimise the user experience of the app.

Content Management Systems (CMS*) & file sharing

Content Management Systems allow companies to better manage and organise their content. Integrating apps to a CMS therefore allows you to better create, manage, share and restrict access to app content.

A great benefit of CMS systems is the ability to enable collaboration so that different users can work on documents together from separate mobile devices.

For example, you could integrate mobile apps with a CMS to allow employees to upload documents onto the app via a form feature. The CMS system would then store this data centrally, enabling employees to access and manage it from any device whenever needed.

CMS (Content Management System) - CMS systems enable users to publish, edit, format, organise, delete and maintain content from a central interface, including text documents, graphics, photos, video, audio and code. CMS systems also allow content to be indexed and made searchable, creating a more user-friendly experience. An example of a CMS system is Box.



Key questions and considerations:

- ✔ Will your mobile apps benefit from connecting with backend systems?
- ✔ If so, which backend systems will be essential to your enterprise mobility strategy?
- ✔ What kind of data will these backend systems collect and how will it be used to optimise your strategy, improve your customer relationships and better manage business processes?
- ✔ Which existing backend systems can be integrated to optimise workflows?

***Tablet users spend 20% more
than desktop shoppers, twice as
much as smartphone users***

Econsultancy



7. App updates

App updates

Many people don't realise that for an app to be successful, it needs to stay relevant and up to date. Companies that decide to build mobile apps need to be prepared to deliver updates with the necessarily agility to ensure that the app continues to meet business goals and audience needs.

Many mobile apps get deleted because they stop being relevant, usually due to a lack of updates. You should aim to ensure that your app users always have the right information on hand at the right time.

Your choice of app development solution will also need to be agile to deliver technical and content updates promptly. This will mean that front-end, back-end, testing and deployment tasks will all need to be carried out and maintained simultaneously.

For example, if you require regular updates, you may wish to opt for an online app builder to ensure that you can push these any time without relying on a developer.

Even if your developer is able to update the app as and when you need it, sharing the updated version of the app to iOS mobile devices may be delayed if it needs to be re-submitted to the Apple App Store. Again, an app builder may help here; some types of online app builders (including Fliplet) do not require re-submission to the Apple App Store with every update.

Finally, to ensure that users continue to enjoy using your app, you will need to be reactive at addressing and resolving technical issues. Apps that have bugs or that are slow to use will quickly lose users.



Key questions and considerations:

- ✓ When will you need to deliver updates? For example, when new platforms and mobile devices are introduced, or to implement bug fixes and update content?
- ✓ How quickly do you want to be able to make changes to the app and how quickly should this be pushed to the end user?
- ✓ Will changes incur additional charges? Will you need to set aside a budget for that?
- ✓ Who will be in control of app updates?
- ✓ Who will be responsible for providing technical support for any issues?
- ✓ What skills or knowledge will be required to update the app?
- ✓ Will app updates require app resubmission into public app stores?

***Spending on mobile will top £53
billion by 2024 in the UK***

Barclays



8. Deployment



Key Mobile Statistic

Around 33% of enterprises are planning to build enterprise app stores. [↗](#)

Deployment

An app is useless as a channel unless you can efficiently share it with your employees, clients and potential clients. The next step will therefore be to ensure that your chosen audience are able to access your apps easily.

Public app stores vs. enterprise app stores

Choosing between a public app store and an enterprise app store to share your apps will depend on, among other things, the nature of the app and whether it includes sensitive data. Here is a summary of the key benefits and features of each:

Public app stores

Public app stores, such as the Apple App Store and the Google Play Store, are best suited for apps intended for public audiences, such as customers.

If you have a customer-facing app, then a public app store will be the easiest way to share it, as anyone will have access to it.

Public app stores are also brilliant app distribution services, as they give apps visibility to a high number of potential users. This is ideal if you have an app that's intended to generate leads or to offer customer support or extra features.

Public app stores can be used to share employee apps, too. However, it's important to bear in mind that anyone with a mobile device will be able to access the app, whether they work at your company or not. Therefore, it may not be the best idea to list it in a public app store if the app contains sensitive information.

That said, there are ways to make the information in your app accessible only to certain users, for example, by requiring users to log in with a username and password.

Submitting your app to the Apple **App Store**

The Apple App Store caters to all mobile devices running the iOS operating system, including iPhones, iPads and the Apple Watch.

To submit your app to the Apple App Store, you need to:

- 1 Ensure your app has been tested
- 2 Create an iOS Developer license (\$99/year)
- 3 Get your developers to prepare the app. They will need to wrap it into an **IPA*** file, which is the required format for App Store submission.
- 4 Prepare your app listing information on iTunes Connect, including design assets such as the logo and screenshots.
- 5 Upload your app
- 6 Your app review process will take between seven and 15 days
- 7 Prepare your app listing information on iTunes Connect including design assets such as the logo and screenshots.
- 8 Upload your app
- 9 Your app review process will take between seven and 15 days

IPA - A file format that is used to distribute iOS apps. When apps are submitted to the Apple App Store they need to be provided in the IPA file format.

Submitting your app to the **Google Play Store**

The Google Play Store caters to all Android mobile devices, from smartphones to tablets.

To submit your app to the Google Play Store, you need to:

- 1 Ensure that your app has been tested
- 2 Create a Developer account with Google (\$25 one-off payment). You will need a Gmail account for this.
- 3 Get your developers to prepare the app. They will need to wrap it into an **APK*** file which is the required format for Google Play Store submission.
- 4 Prepare your app listing information on Google's Developer Console
- 5 Upload your app
- 6 Your app review process may take a couple of hours

Enterprise app stores

Many companies opt for using enterprise app stores to distribute their apps, particularly when the apps are for internal use.

The main advantage of enterprise app stores is that they allow apps to be accessed and downloaded only in-house, preventing anyone external to the company from accessing them.

On the other hand, this creates some restrictions by making the apps less accessible to employees, who will be unable to find them in a simple search on Google Play or the Apple App Store.

APK (Android Application Package) - A file format that is used to distribute Android apps. When apps are submitted to the Google Play app store they need to be provided in the APK file format.

Apps in an enterprise app store can also be made available only to certain employees, depending on their department or role. This helps ensure that employees are able to access only those apps that are relevant to them.

Enterprise app stores have the added benefit of grouping all the company's available apps so that employees can easily find them.

Enterprise app stores are best suited for apps that contain sensitive information.

Submitting your app to an enterprise app store

For enterprise app stores, the app submission process will vary depending on your MDM (Mobile Device Management) system. Some MDMs have strict security requirements when it comes to submitting your app, while others don't.

The first two steps for submitting your app will be similar to those covered for public app stores:

- 1 Ensure your app has been tested
- 2 Prepare and package your app in an IPA file (iOS) or an APK file (Android)

After that, the process will vary depending on your MDM solution, so you should refer to their set process.

Apple, Android and Windows Phone enterprise app stores

There are also iOS, Android and Windows Phone platforms available that allow you to build your own enterprise app store using a similar infrastructure and design as their public app stores. The benefit of this is that users will already be familiar with the app stores and may find them more intuitive and easier to use.

iOS Developer Enterprise Program

The iOS Developer Enterprise Program allows you to create an enterprise app store which is not accessible to the public.

The usual app review process, which normally takes between one and two weeks, is not necessary for this app store. This allows your company to distribute your own apps directly 'in-house.'

The license to use the iOS Developer Enterprise Program costs \$299 per year and is intended only for use by employees of the licensed company.

Android Private App Stores

Android Private App Stores are similar to the usual Google Play store, except for the fact that they are completely inaccessible to the public.

Google offers the option to create these private app stores within their Play marketplace, but this is limited to private apps.

This means that the app store looks and feels exactly like the regular Google Play store, a great benefit for the audience's ease of use.

It also means that audiences can use the regular Google Play search features, such as the discovery tool, but this is limited to the company's enterprise apps.

Keep in mind that Android Private App Stores are available only to companies using Google Apps for Work, Google's suite of productivity and collaboration tools (\$5/user/month). A \$25 Google Play Developer Console registration fee is also needed.

Windows Phone Company Hubs

Windows now offers a portal that allows employees to discover, install and launch apps created by their company.

The store also allows companies to push key apps directly to their employees' mobile devices, ensuring that they are installed and encouraging employees to use them.

Company Hubs can also be used for other internal purposes, such as displaying corporate news, listing upcoming events and sending employees important alerts from IT.

To use Company Hubs, companies will need to have a company account on the Windows Phone Dev Center (\$99) and an Enterprise Mobile Code Signing Certificate (\$299 per year).



Key questions and considerations:

- ✓ Does your app contain sensitive information that you would like to keep away from public app stores?
- ✓ Would your employees find it easier to download apps from public app stores or from an enterprise app store?
- ✓ How sensitive is the data? Would you like the app to be found in a public domain?
- ✓ Will your app require a login?

***68% of mobile users are
engaging with brands via apps***

Flurry Mobile



9. Building A Business Case



Key Mobile Statistic

61% of employees want to work in an organisation where they can use the very latest technology. [↗](#)

Building a business case

Introducing enterprise apps to your company can be a challenge if management or key stakeholders are sceptical or reluctant.

In this section we provide steps that you can follow to build a successful business case for your enterprise mobility strategy. You can use it to convince key stakeholders of the value of investing in mobile and apps, the long-term benefits for your company and the ways in which you will gain return on investment.

Here are three key steps to create an effective business case:

1 Talk about the app market and benefits of apps

Begin your business case by offering an overview of the enterprise app market. This is a great way to provide a context for your business case.

You can create a sense of urgency by pointing out other companies in your industry that are already using apps and the potential benefits they are reaping. No team wants to lose a competitive edge, so if you can demonstrate that some of your competitors are already using apps, this may be enough to win them over.

Another important element here is that introducing enterprise mobility will position your business as an innovator in the eyes of your target audience.

There are countless benefits to using enterprise apps, but the most common can be found in the [Apps section](#) of this guide



Key Mobile Statistic

Three in every four Generation Y workers would value greater use of mobile technology and mobility practices at work. [↗](#)

2 Look specifically at the apps you would like to create and their impact on your business

Once you have demonstrated the great value of apps, the next step will be to look specifically at your business and consider the ways in which apps could impact it positively.

You can do so by following these steps:

- 1 Identify business processes.** Identify all the areas of your business in which processes could be made more efficient using apps. When assessing this, think about how an app could help increase productivity or revenue within that particular area. For example, using a tablet could help your sales team increase the volume of sales away from the office.
- 2 Maximise existing devices.** If your company is already providing mobile devices or if many of your employees are actively using them, look at how enterprise apps could maximise their use. This will help ensure that the costs of introducing mobile apps are lowered and demonstrate that apps can make more efficient use of the resources already available.
- 3 Take advantage of existing security solutions.** The same goes for your security solutions. One of the most important and costly parts of introducing enterprise apps is the need to ensure that they are securely wrapped. If your company has already used any particular security solutions, find out if they can be extended to cover your enterprise apps; demonstrate that you are capitalising on existing infrastructure.

4 Ensure that apps are maintained.

Finally, a major part of building enterprise apps is not only designing them but ensuring that they are regularly updated. It is likely that you will need someone to take this over in the long term, but companies can be put off by the idea of having to hire additional employees to implement app strategies. If you demonstrate that existing employees could take over this process, you will once again be demonstrating how apps can make more efficient use of existing resources and personnel.

As there are enterprise app development solutions today that do not require coding skills, it is quite likely that a non-technical person within your team – in some cases even an intern or a temp – will end up in charge of designing and updating the app.

3 Demonstrate real return on investment

No one will embrace your business case unless you can demonstrate real return on investment (ROI).

It is here that you will need to look at each specific app you are hoping to build and to determine how exactly it will provide you with return on investment. This could be in the form of additional revenue, but it doesn't have to be – it may be that the app indirectly contributes to increased revenue or decreased costs by improving productivity.

As an example, if you are hoping to create a sales support app, some of the ways in which you can demonstrate ROI are:

- Existing statistics show that selling to prospects using a tablet can increase return on investment considerably. For example, **70% of executives in sales organisations are seeing favourable ROI after equipping sales teams with tablets.**
- Statistics showing the intentions of other competitors in the industry could also be a good hook to win over stakeholders who are concerned about losing a competitive edge. Using the same sales example, statistics show that **90% of sales organisations plan to increase their investment in tablet sales solutions.**
- Beyond statistics, it will also be important to come up with more specific ideas as to how the app will lead to the proposed benefits, such as increased revenue or higher productivity. To continue with the same example, you could demonstrate the ways in which accessing sales documents from a tablet takes much less time as compared to paper-based or Intranet-based methods.
- The time saved could lead to an increase in sales efforts, for example, in the form of additional appointments. Making any such claims as detailed as possible with supporting information such as financial projections will, of course, increase their legitimacy.
- Finally, you could point out the potential benefits you would be missing out on if you didn't adopt apps: missing out on revenues and productivity gains, falling behind on innovation as compared to competitors, losing clients with high expectations about innovation, failing to maximise the potential of current company mobile devices and failing to streamline existing workflows.

Bonus point – use a mobile app to create your business case

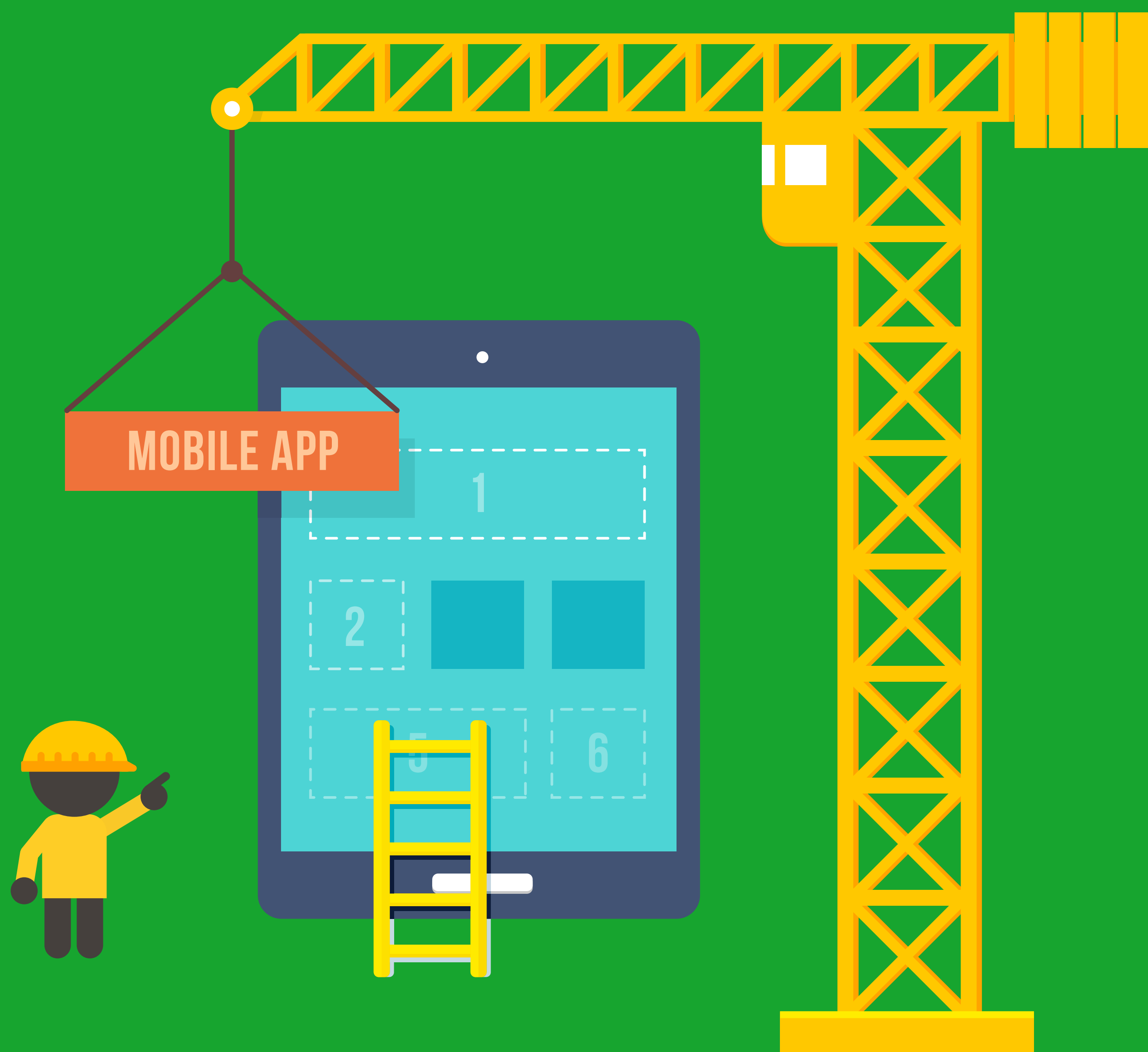
If you want to go that extra mile, you could consider delivering your entire business case via an app.

Whether you create a custom app exclusively for this purpose or use the existing apps out there, using an app as your proposal platform will give you a special edge and “wow” your stakeholders.

Not only will using an app be more visually appealing than your old-fashioned PowerPoint or flat PDF, it will also allow you to more clearly explain the kinds of use cases you are actually proposing.

***On average, users are
spending 3.3 hours a day
on their smartphones***

Exact Target



10. How to build apps

How to build apps

Congratulations, you now have an effective enterprise mobility strategy ready to start providing employees with all the benefits of mobile!

But first, of course, come the apps. Only once you have covered all the elements above and have ensured that strategies for each are in place should you turn to creating the apps. In this way, any possible mishaps encountered along the way can be avoided and, as soon as your apps are completed, you will be able to secure, share and update them efficiently and effectively.

By following a careful plan when developing your enterprise apps, you will be able to ensure that they are appropriate to your business goals and that they help ensure ROI. In this section we'll take you through the key steps your plan should include:

1 Think about business goals and audience needs

We talked about business goals and audience needs earlier in relation to your overall enterprise mobility strategy.

Before you begin developing your app, your first step should involve going back to these goals and needs, ensuring that you understand how your app will meet them.

As with your enterprise mobility strategy, keeping these goals and needs in mind throughout the app development process will help you stay on the right track when making key decisions about the app.



Key questions and considerations:

- ✓ Why does your company need the app?
- ✓ What business processes will it support?
- ✓ Does it create new opportunities for your business?
- ✓ What information would employees like to access via the app?
- ✓ How can the app solve the issues employees face?
- ✓ How do employees want to use the app?
- ✓ In what ways can the app meet needs and improve access to information?
- ✓ In what ways can you personalise the app to meet all needs?



Key Mobile Statistic

Nearly 80% of enterprise mobile apps are abandoned after their first use. [↗](#)

2 Think of your content

If you have completed the step above, you will already have an idea of the kind of content you would like the app to include.

However, there are a few key considerations you should keep in mind to make your content as relevant as possible.

First, ask yourself whether the proposed content is appropriate and accessible. Is the amount of content optimal for the mobile medium? Bear in mind that your target audience will be accessing it on a small screen. Have you included only the most essential content? Avoiding long chunks of text whenever possible will be key.



Key questions and considerations:

- ✓ Is your content appropriate to the type of mobile device, use case and workflow?
- ✓ Is your content role-targeted?
- ✓ Does your content meet needs and solve issues?

Objective-C - A programming language. It is the main programming language used by Apple for the OS X and iOS operating systems.

3 Determine your design and user experience

The first step in determining your app's design will be deciding what kind of technology you will be using to develop the app: native, web or hybrid. This will depend entirely on the purpose of the app, whether you'd like it to work offline and the budget available for development.

As a brief summary, here is a description of each kind of technology:

Native apps

Native apps are apps built using programming languages such as **Objective-C*** (iOS) and **Java*** (Android).

These apps reside within mobile devices, so they are very good at accessing data provided by some of the functionalities in mobile devices, such as push notifications, GPS information, accelerometer data, contacts, etc.

Native apps are also constantly working in the background whether or not the app is open, which means that they will continue to process data and receive updates even when you're not using them. Native apps are also optimal when it comes to offline working.

Although native apps have the highest performance out of the three, they are also the costliest, so many companies opt for hybrid apps instead.

Objective-C - A programming language. It is the main programming language used by Apple for the OS X and iOS operating systems.

Java - A popular programming language, particularly for web applications.

Pros

- ✓ Good at accessing data from a mobile device's native features
- ✓ Always processing data and updates in the background
- ✓ Good offline working

Cons

- ✗ High development cost
- ✗ Long development cycle
- ✗ Code for different platforms (iOS & Android) need to be maintained separately

Web apps

Web apps are developed using web technologies such as **HTML***, **CSS*** and **JavaScript***. They exist entirely within browsers such as Safari and Chrome, and are essentially mobile websites.

Web apps lack a lot of the benefits that native apps provide; they work only online and they don't have access to as many phone features as native apps do, such as push notifications. However, they do have access to some essential features such as GPS, camera and phone calling.

The reason why many companies opt for web apps is that they are generally considered easier and cheaper to develop, as more developers are familiar with web than with native app technologies.

HTML (Hypertext Markup Language) - A coding language that developers use to create web pages and websites. More recently it is also used in the creation of web apps and hybrid mobile apps.

CSS (Cascading Style Sheets) - A feature that developers can use in conjunction with HTML to design and style web pages and hybrid mobile apps.

Javascript - A computer programming language commonly used to create interactive effects and features such as games, audio and visual effects on web pages or web apps.

Web apps are also readily scalable and a coding language that developers use to create web pages and websites. More recently it is also used in the creation of web apps and hybrid mobile apps in the same manner. In addition, the same code can be reused across different operating systems. Native apps, on the other hand, always need to be built from scratch, taking up more time and resources.

Pros

- ✓ Easier and cheaper to develop
- ✓ Easily scalable to a variety of operating systems and mobile devices
- ✓ Integrate with some mobile device native features

Cons

- ✗ Only work online
- ✗ Access to only a few mobile device native features

Hybrid apps

Hybrid apps combine the power of native and web apps to take advantage of the benefits of each.

At their core, hybrid apps are web apps wrapped in the shell of a native app. This means that while the basic infrastructure of hybrid apps is native, the content is web-based.

By combining both technologies, hybrid apps can take advantage of the features of native apps – accessing data from other apps, offline working, the ability to be downloaded from an app store – while the actual content relies on HTML. Because HTML technology is more widely used than native technology, there are far more people available to develop it.

Hybrid apps are slower than native apps and they contain more glitches – although this is improving every day. However, they also offer much more flexibility as compared to native apps and are easier and less costly to develop.

Pros

- ✓ Combine benefits of both native and web apps
- ✓ Easier and cheaper to develop than native apps
- ✓ Integrate with mobile device native features
- ✓ Work offline

Cons

- ✗ Slower than native apps
- ✗ Contain more glitches than native apps

Navigation

The user experience will determine whether users actually use the app and keep it on their mobile devices. A positive user experience depends on how users interact with the app; therefore, ensuring an intuitive app design is of key importance.

Making content easy to navigate, not asking for too much information from users at sign-up and allowing users to arrive at the required information in an intuitive way are some of the ways in which design could strengthen the user experience.

For example, asking yourself what specific journey employees expect to take through the app to access information and then adapting the user experience to this behaviour will help make the app as seamless and intuitive as possible.

Also think about the ways in which the app will prioritise high performance and stress task completion so that employees are able to carry out tasks as efficiently as possible.



Key Mobile Statistic

64% of employees cite poor user experience as the reason for rarely using enterprise mobile apps. [↗](#)

Adapted to mobile

Another thing to consider is that mobile devices render content very differently to computers; therefore, it is not appropriate to present content in the same way you would on a web page or document.

Mobile devices themselves also vary in size and functionality, and users tend to access smartphones or tablets in different situations and for different purposes. Therefore, it is important to think about what sort of information or features will need to be accessed from each mobile device. For example, sales support apps and training apps will most likely be consulted on a tablet, whereas crisis management and internal communications apps will more often be accessed from a smartphone.

Here you will also need to think about whether different operating systems will require different content layouts or design features.

Offline working

Finally, it will be key to think about whether app content will need to be accessed offline; for example, if it is an app designed to be used in crisis situations, employees may need to access it while they are away from an internet connection.

If you can think of any information you would like your employees to be able to access under any circumstances, for example, at a meeting or on their commute, ensuring that it can be accessed offline will be key.



Key questions and considerations:

- ✓ Would native, web or hybrid apps be most suitable?
- ✓ Is your user experience intuitive?
- ✓ Is your app accessible from all relevant types of mobile devices?
- ✓ Does your app need to work offline?



Key Mobile Statistic

33% of businesses admitted that they never test their mobile apps. [↗](#)

4 Test and launch your app

Before you launch your app, you will need to test it. We cannot emphasise enough how important this is; if you launch an app and your users don't find it useful or encounter too many glitches, they will quickly give up and probably not return even after it has been optimised or fixed.

To successfully test your app before launch, follow these steps:

- 1 Share your app with a select group of employees ensuring that you cover all target mobile devices and operating systems
- 2 Ask for feedback – or, even better, observe them while they are using the app and note any blockage points
- 3 Determine what obstacles they are facing and how to solve them
- 4 Use their feedback to improve the overall user experience
- 5 Repeat the previous steps as appropriate
- 6 Launch your app

5 Analyse and optimise

Feedback loops will be essential to any enterprise mobility strategy.

App usage data can be tracked using software such as Google Analytics and gives companies insight into how their users are using the app. By looking at metrics such as number of users, frequency of app use and the content that is most or least used, companies can determine how the app's user experience can be improved.

Another way to receive feedback is to ask users directly, whether via a survey or a form located directly within the app.

Once this data is collected, you can analyse it to determine whether the app is meeting short- and long-term goals and ways in which it could be optimised.

By creating these feedback loops, you can ensure that the app continues to benefit users while meeting business goals.



Key questions and considerations:

- ✓ Look at metrics such as number of users and frequency of app use.
- ✓ Use statistics to determine metrics in the short and long term.
- ✓ Continue asking users for feedback.
- ✓ Ensure that the app continues to benefit users.

***If mobile changes everything then
start by reexamining everything***

Michael Disabato, Gartner



Conclusion: Next steps

Conclusion: Next steps

In this eBook we've given you an overview of everything you need to know to begin your enterprise mobility journey. We've provided all the steps you need to take to ensure that you have covered every aspect of your strategy.

At this stage, you may feel a little overwhelmed by the apparent complexity of this process. You may be wondering what steps to take next in order to get started. To make this process less daunting, we have come up with a few options in terms of where to go from here.

The first step will be to ensure that you prioritise whatever is most important. What's at the top of the pile? Apps or mobile devices? Infrastructure or mobile device policies?

The next element will be to decide how you are going to approach your enterprise mobility strategy design. This eBook gives you the basic information you need to build your own enterprise mobility strategy, but you may choose to engage with consultants, industry experts or IT resellers to help you select the necessary technologies for your strategy:

1 Individual vendors

If you have an in-house IT resource, you may wish to approach and engage with individual vendors on your own according to your enterprise mobility strategy needs. Your IT team will be able to research appropriate vendors and advise you on which ones would be most suitable for your needs.

2 Consultants

Alternatively, if you do not feel like you possess the necessary resources to make decisions about vendors or if you would like to pull in someone to advise you as to which would be best according to your strategy needs, you can approach an external consultant who will have a high degree of knowledge about the vendors who are available.

Although the costliest of the three options, a consultant will give you a long-term view of your strategy, which could save you money in the long run.

3 IT resellers

A middle-ground option would be to engage with IT resellers. IT resellers are experts in mobile technologies and will be able to provide you with a technology stack containing all desired or recommended technologies for you to buy in one step. IT resellers are also generally able to get a better deal across different technologies and vendors.

You could also potentially select this approach in combination with a consultant if you have the resources.

And that's it! Now you are really on your way towards enterprise mobility, productivity gains and more efficient business processes. With these tools, you can empower your teams to work better, easier and more conveniently than ever before, as well as prepare them for a future that is, without a doubt, mobile.

Please do not hesitate to contact us if you have any questions about anything covered in this eBook or about enterprise mobility at hello@fliplet.com.

About



At Fliplet our mission is to revolutionise the ways in which companies use mobile by helping them streamline business processes, increase productivity and improve communication between employees.

With that in mind, we created an enterprise app builder that allows anyone within your company to create and distribute enterprise apps quickly, securely and with no need for development skills.

Using Fliplet, you can create enterprise apps in a variety of departments, including:

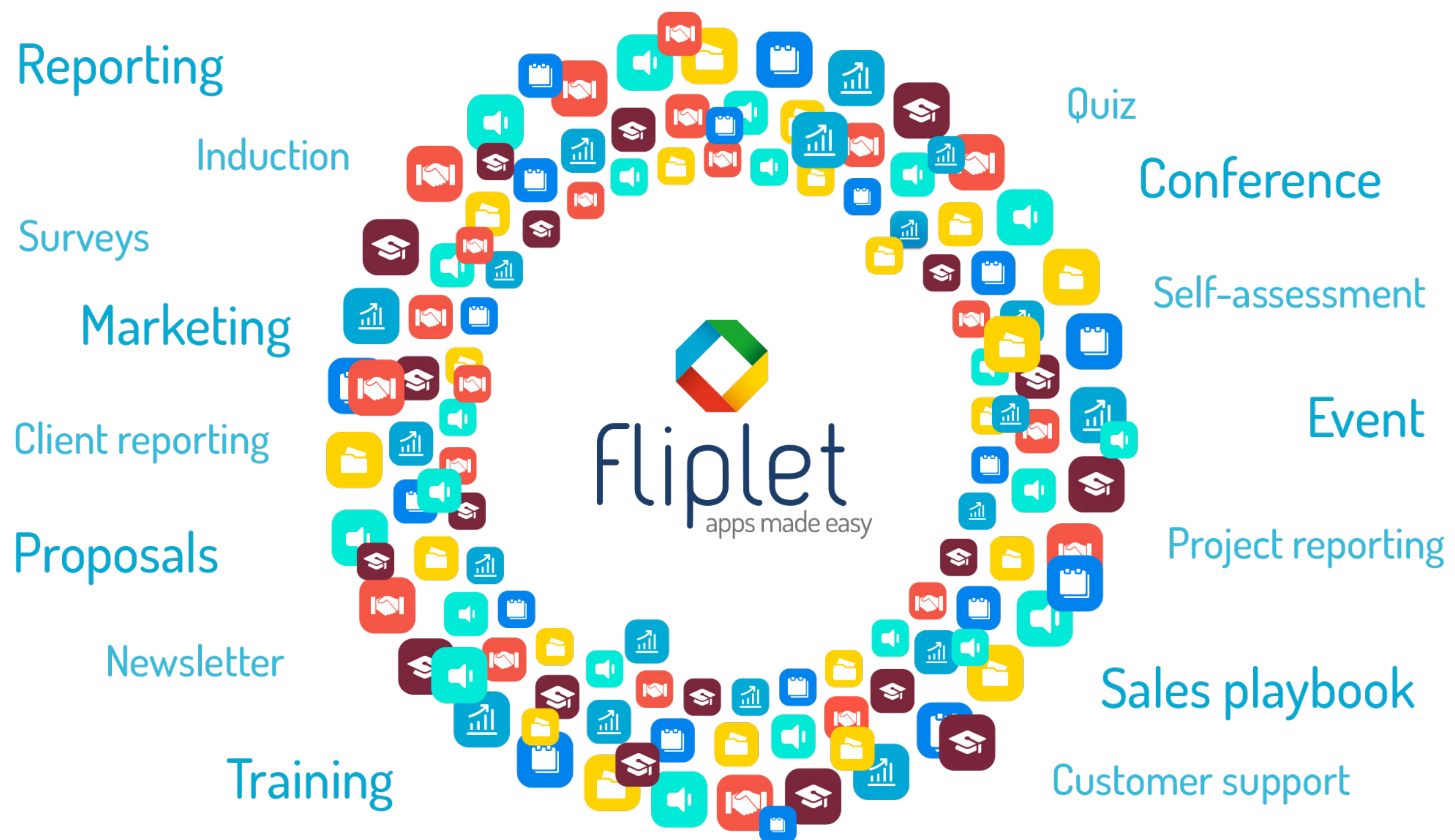
- Sales
- Marketing
- Events
- Internal communications
- Reporting
- Training
- Project management
- Health & safety

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“We’re democratising the app revolution”

Ian Broom, Fliplet CEO & Founder



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hello@fliplet.com