DEPLOYING APPS THAT MATTER

An Analysis of Two-Million
Enterprise App Deployments

Enterprise Mobile App Deployment

How many workers have mobile devices? The truth is, nearly all of them. If you are not providing apps to your workers, you are missing an opportunity. It's likely that they're already using apps to get work done. A recent Apperian survey of 1,200 people asked where they get their work apps. Nearly 60% said that their organizations are providing or planning to provide them with workplace mobile apps, while others are turning to publicly available workplace apps.

Furthermore, your workers expect to be mobile-enabled and they want to use apps. When asked if a mobile app would help, nearly half of those surveyed said that a mobile app would make their lives a lot easier.

If you haven't already, it's time to start your mobility program. In this report, you'll get actionable advice to do just that. It's too easy to sit on the sidelines developing the perfect rollout plan. The industry is changing so rapidly that you need quick wins. Start with pilots, get close to end users, and treat them as your customers. Pilots will teach you a lot about what capabilities and which mobile apps will make a difference in your organization.

If you have a growing mobility program, this report will help benchmark your efforts, show how you can improve your mobile strategy, and give ideas for where mobile apps make a difference.

At Apperian, we host apps for enterprise deployments, and have enabled nearly 2 million mobile app installations (figure 1). For this report, we analyzed apps from our customer install data to gain insight into what apps are trending and which industries are embracing mobile apps. We examined what it takes to create "apps that matter" and manage them to produce a thriving program of mobility.

Figure 1. Global Distribution of Organizations with Active Mobility Programs

What are "apps that matter"?
Apps that matter are mobile applications with business impact. They drive particular business metrics, whether increasing revenue, reducing costs, driving efficiency, or increasing employee and customer satisfaction metrics.

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Here are some of the questions examined in this report:

- How many apps are organizations deploying?

- Which platforms do they run on?

- What kinds of apps are organizations deploying?

- How are organizations identifying and creating apps that matter?

Key Findings

How Many Mobile Apps Are Enterprises Deploying, On Average?

Most companies are developing multiple apps to serve their employees and deliver value to the extended enterprise, which includes partners and contract workers. When looking across our entire data warehouse, we see that the mean number of apps across all companies is 35, while the median number is 13. The difference in these numbers indicates there are some very large deployments in the sample, with some groups deploying hundreds of apps across their employee and contracted-worker base.

Which Operating Systems Are Leading The Way?

Across all worldwide production deployments, iOS is the dominant operating system, with 73.1% of all apps running on that platform. Android accounts for 26.5%; only 0.3% of all apps currently run on Windows. The distributions shifts for data by region, with iOS being more popular in North America and Android in Europe and Asia. While Windows data is still relatively small, we expect this number to increase in 2016 due to inbound inquiries into our field.
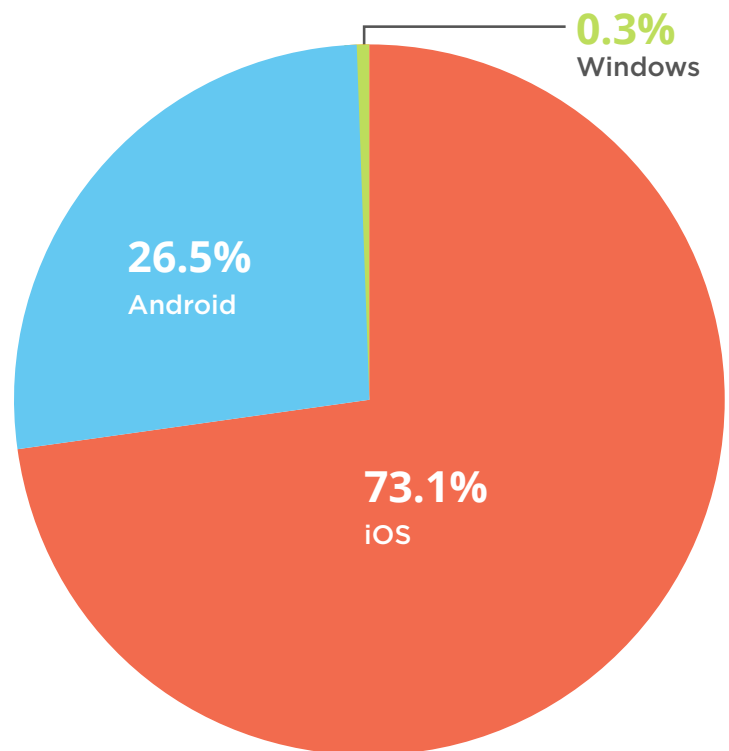

0.3%
Windows

26.5%
Android

73.1%
iOS

**Figure 2.
Distribution of Mobile Apps by Operating System**

Which Industries Are Rolling Out Mobile Apps?

Some industries are clearly ahead in terms of their enterprise mobility programs. Technology companies—companies that develop and sell technology products such as semiconductor chips—lead the pack in app deployments. Their leadership in mobility is not surprising since tech companies hire tech-savvy workers who expect to leverage technology in support of their jobs. The percentages in the chart below show that technology companies and IT services and consulting together comprise about a third of total apps deployed. These industries are heavy users of mobile apps and they traditionally have a large proportion of mobile and field-based workers. Other industries leading the charge are Public Sector (11.0%) and Financial Services (8.4%), Healthcare (7.4%), and Communications (6.3%).
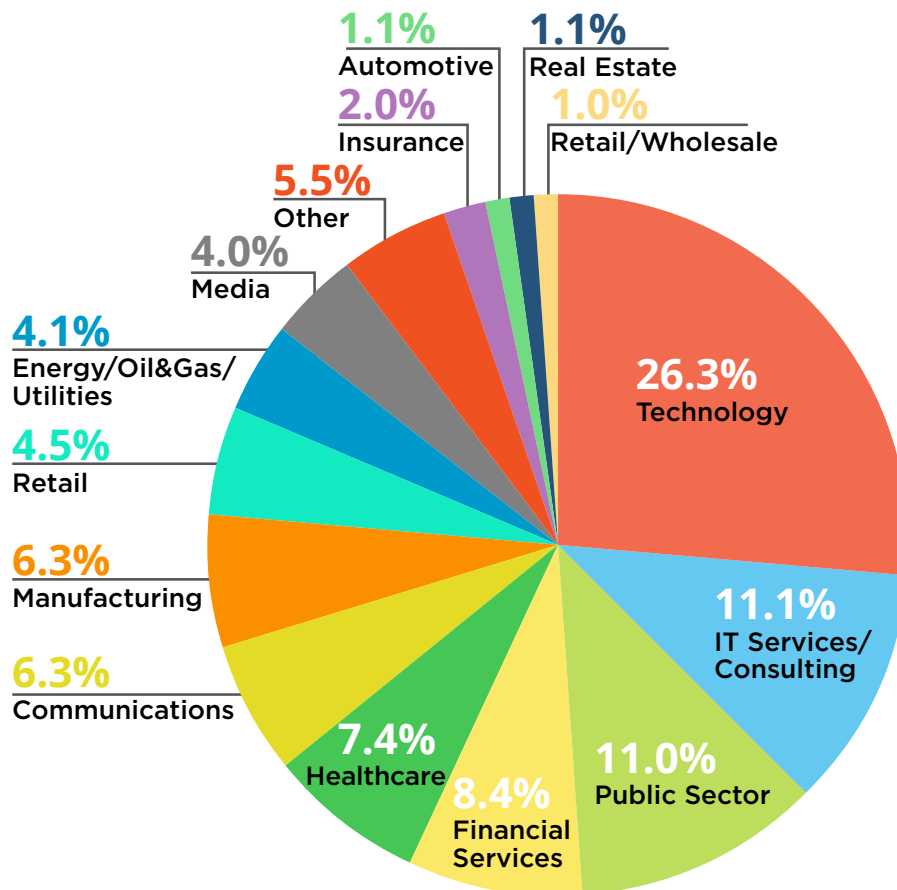

1.1% Automotive
1.1% Real Estate
2.0% Insurance
1.0% Retail/Wholesale
5.5% Other
4.0% Media
4.1% Energy/Oil&Gas/Utilities
4.5% Retail
6.3% Manufacturing
6.3% Communications
7.4% Healthcare
8.4% Financial Services
26.3% Technology
11.1% IT Services/Consulting
11.0% Public Sector

Figure 3. Mobile Apps by Industry

What Types Of Mobile Apps Are Enterprises Deploying?

After breaking down apps by industry, we looked at apps by category to better understand the functionality they provide. We concentrated our analysis on custom apps developed for both internal employees and the extended enterprise: employees, contract workers, business partners, independent agents, value added resellers, and others. We focused on these custom apps because we believe they suggest areas where organizations are investing heavily in mobility, and where they expect mobility to change the way organizations run their businesses and achieve their missions.

The distribution of the high-level categories may not be surprising, since, for example, sales and marketing and field services professionals are generally mobile workers. However, digging into the sub-categories yields very interesting trends.
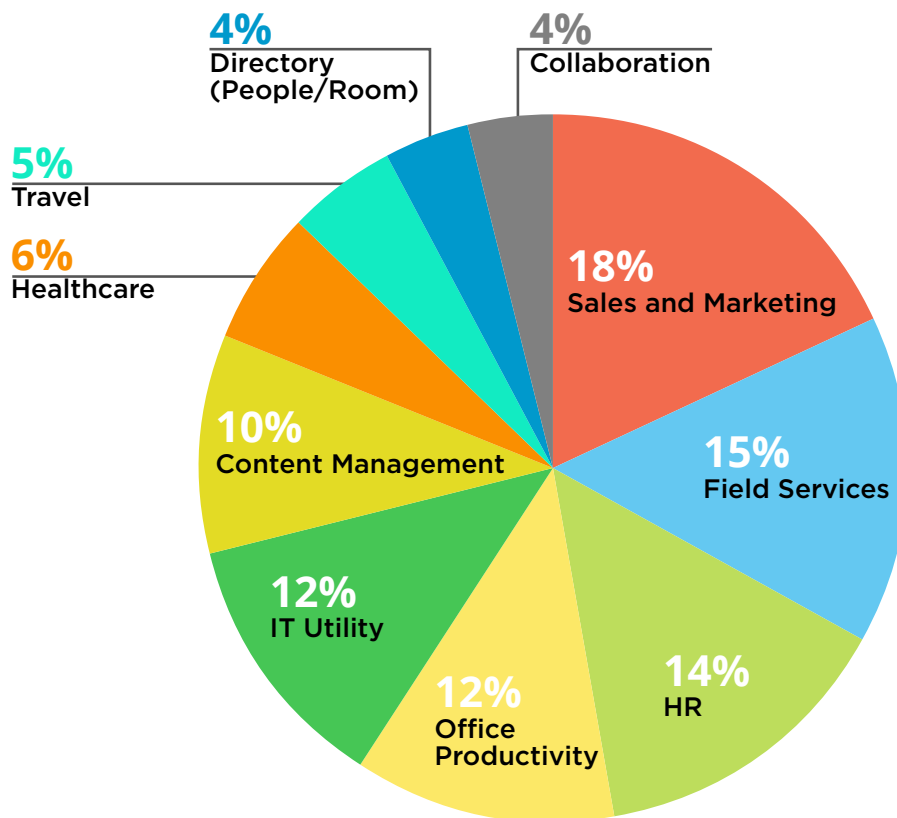
4%
Directory
(People/Room)

4%
Collaboration

5%
Travel

6%
Healthcare

18%
Sales and Marketing

15%
Field Services

10%
Content Management

14%
HR

12%
IT Utility

12%
Office
Productivity

Figure 4. Mobile Apps by Category

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Sales and Marketing Apps

Sales and marketing apps comprise 18% of all apps. Apps in this category support the selling process for business-to-business and business-to-enterprise transactions. Highly adopted apps have "side by side" selling capabilities, which enable a salesperson to sit next to the customer to explain a product or solution, and allow the two to interactively view product information and create a custom configuration on the fly. These apps universally tie into back-end systems, such as CRM systems, product catalogs, and inventory systems, and often lead to real-time quote generation. Other top-ranked apps in this category include salesperson training tools, pricing tools, competitor research tools, deal approval apps, and sales management apps. These apps are being deployed to full-time workers as well as to contracted salespeople, dealers, franchisees, and sales consultants.

Field Services Apps

Field service apps comprise 15% of all apps. They include apps being developed and deployed to assist field workers in part number-lookup and machine configuration, technician dispatch, work order processing, incident reporting, safety training and checklists, and field project planning. These apps tie into critical back-end systems such as ERP systems and other service and product systems. Given the apps' roles in safety and compliance, we see a strong emphasis on app adoption in this category, with organizations running training programs on mobile apps to ensure 100% reach and usage.

Human Resources Apps

In this app category, we see a very broad range of apps being developed to improve everyone's productivity and enable mobile access to frequently used corporate systems. Some apps offer corporate benefits information, such as healthcare coverage information, new employee orientation materials, and employee handbooks. We see vacation planning and tracking as well as worker scheduling to help managers better plan for staffing. Increasingly we see companies providing maps to corporate office parks and buildings as a way for mobile workers to get around and schedule office resources during a visit. Interestingly, several of the most popular apps in this category assist workers in ordering catering from their corporate cafeteria and local caterers!

Office Productivity Apps

Like human resource apps, this category is aimed at improving general employee productivity. Here we see apps for expense reporting, project management, document creation and editing, business intelligence (BI) reporting, meeting tools, and survey/suggestion apps. The single most frequently downloaded and used app across our entire data warehouse belongs in this category; it is an app for expense management at a large multinational bank.

IT Utility Apps

These apps are broadly deployed by IT organizations to help users leverage IT services, such as VPN apps, user authentication, IT help desks, and IT policies.

Content Management Apps

Content management apps are deployed across many industries and nearly every company in our database has one. These apps support easy access to professional journals, content libraries, corporate portals, company news feeds, and corporate communications.

Travel Apps

With many mobile workers being, well, mobile, it's not a surprise that a top category of app assists workers with travel. Travel apps help employees book and manage travel by integrating with the organization's travel system. We also see travel and expense management apps as well as some customized apps to help workers coordinate with corporate campus shuttles or local transportation providers.

Collaboration Apps

The last category we highlight is collaboration, which encompasses apps such as enterprise instant messaging, private SMS, enterprise social collaboration, team messaging, and secure video collaboration.

Best Practices

When we look across our data warehouse at app adoption metrics and review ROI metrics supplied to our Customer Success Team, interesting and consistent themes emerge about what the most successful organizations are doing. Successful organizations:

- Establish ownership to drive apps that matter

- Prioritize ideas for apps that matter by business impact

- Develop apps that matter by working closely with app customers

- Deliver apps that matter effectively and drive adoption

- Use analytics to identify and nurture apps that matter

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Act Like The Mobile App's General Manager

Some of the most successful app projects have project sponsors that act like GMs for the app. Regardless of their business function, these leaders are concerned about all aspects of the app, including functionality, internal promotions, support processes and help desk, user feedback, and the financials around the app. The apps are managed like products (or services) and the end-users are considered—and often called—"customers."

In addition to app owners, mobility itself needs ownership and executive sponsorship. A person on staff should effectively become the face of mobility. Some call that person a mobility evangelist or a director of mobility. The title is less important than the ethos: the person in this role should be actively going out and talking to business unit leaders and showing them what is being done in mobility.

If your organization is large enough, create a corporate Mobile Center of Excellence (MCOE). An MCOE provides a way to develop and evolve your mobile strategy and to look across your organization and identify gaps. It also serves as a source for promulgating best practices and supporting reuse. When business units want to develop an app, they don't have to start from scratch.

Deploy Mobile Apps That Matter

When looking at thousands of apps across millions of installations, we see that apps tend to fall into one of three categories: apps that help, apps that improve, and apps that revolutionize.

Apps That Help bring needed information to users where they are. This is the low hanging fruit: apps that aid employees in their daily lives but do not necessarily contribute directly to the bottom line. They might replace a paper process or make it easy to book a conference room. Other examples from the sample include corporate newsletters, reference materials such as benefits information, or the ability to file an expense report via an app. Such apps put information at users' fingertips and help them make good use of their time.

Apps That Improve help people do their day-to-day work and improve on existing processes. For example, an easy corporate directory and conference call app might streamline how employees connect with each other and collaborate from their mobile device without having to deal with remembering extensions or dial-in and conference numbers.

Apps That Revolutionize provide competitive advantage and may change the way you do business and your corporate culture. Apps that revolutionize can speed up business processes. They almost always integrate directly with key backend systems of record.
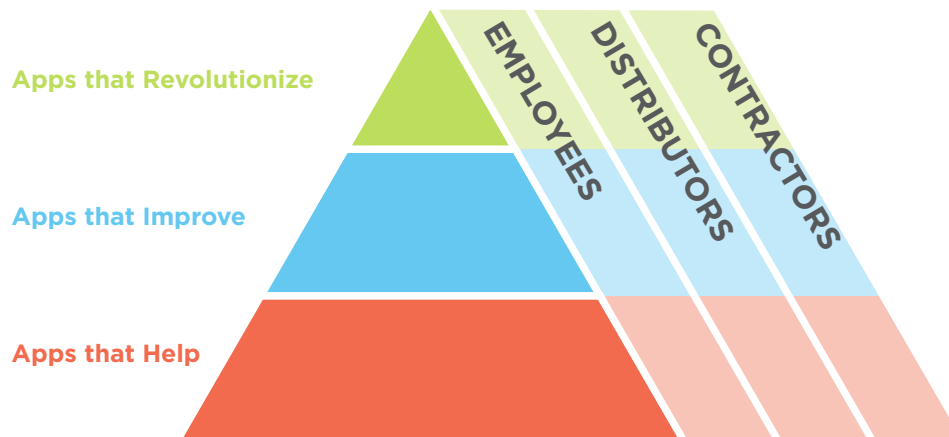

Figure 5. Enterprises mobile apps deliver a wide range of value across the extended enterprise

Apps that revolutionize are powerful, but are a small percentage of apps deployed. Not every mobile app that you deliver will completely reinvent the way a particular function is performed. Focus on putting together a strong portfolio of apps and listening to your customers. Create a pipeline of app ideas and a process for evaluating those ideas. Inspiration for apps that revolutionize will bubble up as you create an effective program of mobility that is monitored through powerful app usage analytics.

Faster approvals drive sales
At one high-tech firm, nonstandard discounts required approvals from as many as 6 people. Those approvals had to be handled from a laptop. With employees travelling and working in different time zones, approvals could take 10 days, and deals were frequently lost. With a mobile app, employees could process their approvals on the go. Deals were approved in hours versus days. Even dealers and distributors took note. When deals can be approved quickly, customers take you up on the offer. The app drives substantial revenue.

Develop Mobile Apps That Matter

Your app customers are already using apps. They have high expectations based on intuitive (and fun) consumer apps. In fact, they may be using apps from the public app store in an effort to mobilize their work.

That's why being close to your customers and understanding the business area where you are trying to move the needle is essential to building an effective mobile app.

The most successful mobile apps support a business process that aligns to strategic initiatives and drives key performance indicators. The business use case is often unique to each company or business unit. That's why working with your app "customer" is essential.

Before you build an app, create a mock-up or proof-of-concept (PoC) to show people how it would look and work. Ask them how they would use it. Iterate based on their suggestions. Creating a mockup before you code, or even an early PoC can result in a more effective app that will be more readily adopted by your target audience.

Even if your organization is not already using agile development processes for its own technology, your development efforts for mobile apps must be managed this way. Your development teams should be delivering narrow "slices" of functionality and incremental app features based on feedback from users.

Pay attention to change management during development. The more impactful an app, the more important change management is. If there's resistance to changing a process or handling it via an app, listen to the objections and address them.

With some 25% of the application development budget going toward mobile apps according to IDC, there's a natural shift taking place. Apps require a different mindset. Here are some fundamentals to keep in mind when creating mobile applications:

Narrower in scope than traditional applications. The scope of a mobile app is much more narrow. One enterprise application may naturally translate into four or five mobile apps. It's a human tendency to think there's a one-to-one relationship between a corporate application running in an enterprise setting and a mobile app, and that is never the case with apps that we see adopted.

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Glean context from the device. Apps can gather contextual information from the device they are running on. For example, a claims processing app can use the device's camera as well as the location and timestamp, leaving less information for users to fill in.

Not just sales and service. Don't restrict yourself to traditional mobile workers, such as sales and service. Although that's an important segment, many information workers can be made more productive. Think about workers who are between meetings or commuting on public transit. A few minutes with an app may help them get some core processes completed. Find pockets of users where you can demonstrably change the way that they work and make an impact on their productivity, whether driving revenue for the organization or saving costs and delivering efficiencies of scale.

Not just employees. Consider offering apps to the extended enterprise, which encompasses contract workers, hourly workers, consultants, dealers, distributors, and business partners. Mobile provides an opportunity to bring a broad base of users into corporate processes and equip them with appropriate access to backend systems. This will enable a broader range of people to get work done, whether it's clocking into work associated with an HR system, opening or closing service tickets, presenting sales information, logging data in CRM systems, entering expense reports, or configuring and placing sales orders.

Make It Easy For Users To Get Mobile Apps

Organizations should make it easy for end-users to download their app. There are a few different ways to distribute apps. If there is only one critical app at hand, a download link might do the trick. Our research highlights that a well-instrumented app store can drive the highest levels of adoption and user experience, while also serving as a source of analytics to help you manage ongoing app health.

Reach all your users. Organizations typically want to reach a wide range of users, which may include employees, contractors, and business partners. Effectively reaching all users requires acknowledging their desire to use their own devices (BYOD) and implementing an official program to support that. A private enterprise app store fueled by a best-in-class MAM platform enables you to securely deliver apps and content to your entire user base on their preferred device and mobile operating system.

Reach only your users. By distributing your apps in an enterprise app store, your apps (which encapsulate key business processes) are not on the public app store, where competitors and others can download them. Offering your own app store prevents you from having to deal with the likes of Google or Apple while still providing users a familiar environment. Users can also review apps, alert you to problems and request features.

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Consumerization drives adoption. Enterprise app stores provide an important adoption boost. They're natural for end users because it's where they get apps in their personal life. Choose an enterprise app store that closely mimics consumer app stores to make the experience intuitive for users. You want users to come in, identify what's relevant, download the app, and keep going, the same way they do in their consumer life.

Users say, "We want apps from an app store."
Stephen Wheat, Chief Information Technology Architect at Emory University, spoke at length about the university's mobility program. When asked what surprised him, Wheat cited a strong user preference for obtaining apps from an app store. Although some apps being offered were web apps that could be linked to from an email and stored as a bookmark on the user's mobile device (circumventing the need for an app store in those cases), users still wanted to obtain those apps from an app store. "They like being able to search for the app, to get push notifications about new features, and to see demos of the app in the app store," said Wheat in a recent webinar.

Security and governance. By offering an enterprise app store, you provide assurance to users that the app is secure, approved for work, and the latest version. More importantly, if the app store is part of a best-in-class mobile app management platform, it will act as a central source for governance and security of the mobile apps for app administrators and owners.

Highlight useful public apps. In addition to offering your own custom apps, an enterprise app store enables you to curate public apps so that more people in your organization can make use of them.

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Use Analytics To Nurture Mobile Apps That Matter

Make sure the apps and the environment are instrumented so that you can keep close tabs on who's using apps and in what way. You can then use metrics to find out which apps are being adopted, which are not, which are used heavily, and which are not. Establish an agile process around continuous improvement so you can take user feedback and usage data, and continually evolve and refine the apps so that they add more value over time. This is all part of the process of finding and actively nurturing apps that matter.
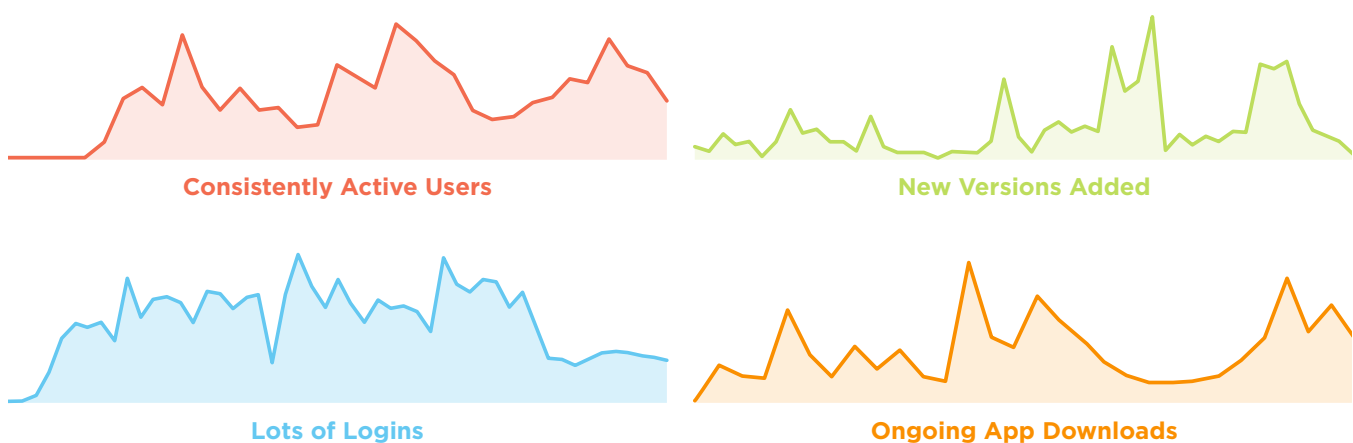

Consistently Active Users

New Versions Added

Lots of Logins

Ongoing App Downloads

Figure 6. Metrics of a Healthy App

Keep track of metrics for each app to ensure that it is healthy. Some metrics include the number of active users, the number of versions, and the number of downloads. Update apps with new versions to accommodate new features, fix bugs, and support mobile operating system upgrades.

Although user growth is a sign of app health, important apps may reach a relatively small segment of users, but impact them in a powerful way. We find that there's nearly no correlation between the impact of an app and the overall number of users. The key is high levels of adoption within the user group the app is intended for.

An app owner or "app GM" should be familiar with app customers to ensure the app is meeting their needs and making work easier. Make an effort to understand what they need, how they work, and how mobile can augment or transform the way they work.

App owners should also market their apps, running promotions internally to drive usage and adoption.

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Final Recommendations For Enterprise Mobility Programs

The time to start your mobility program is now. We consistently hear from leading mobile practitioners who are making a real impact on their companies and industries that the most important thing you can do is get started. Your users are already using mobile devices and chances are good that they want to use apps to work better, faster, and from anywhere.

Do internal research to find out where mobility can have an impact. Start to develop apps in an agile process and work with your app customers. Observe how they work, show them mockups or PoCs, and talk to them about what they need and want.

Create a standardized process for app testing, security, and distribution early. This will help ensure the apps developed are secured, meet quality standards, and remove any barriers to app adoption by end-users. It will also make life easier for app owners, administrators, and developers so they can focus on creating apps that matter.

At Apperian, we have been privileged to support a wide range of organizations across many industries driving transformation with mobile apps. We hope that sharing our experience with you will aid you in identifying and nurturing apps that help, apps that improve, and apps that revolutionize—your apps that matter.

HOW TO

FIND OUT MORE

Want to find out more about how your organization can master 'app culture,' and put the power of mobile apps to work?

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