



As a mobile product manager, you have one of the hardest jobs in your entire organization.

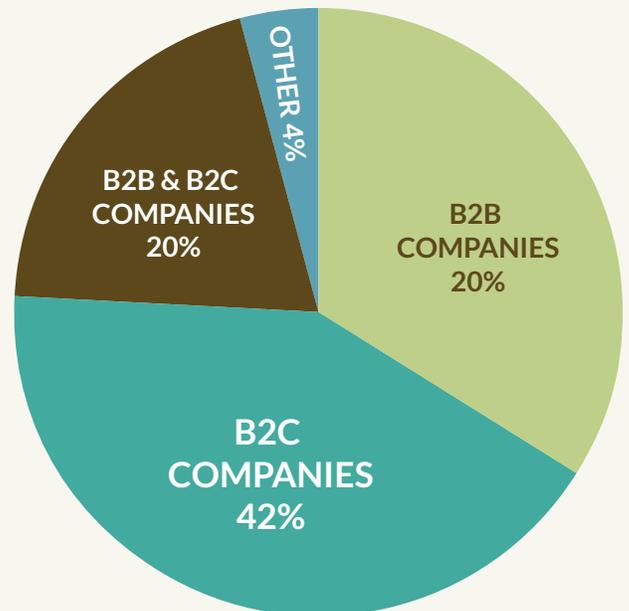
You have to manage people from top to bottom, keep everyone motivated and on track, argue for what's best for your customers, and make tough calls on what to build and how to build it. Since mobile product management is still relatively new, working your way through uncharted territory adds a layer of complexity that can be difficult to navigate. But don't worry, we've got your back! This guidebook was created to help you set yourself, and your organization, up for mobile product management success.



## We cover many parts of mobile product management in this guidebook, including:

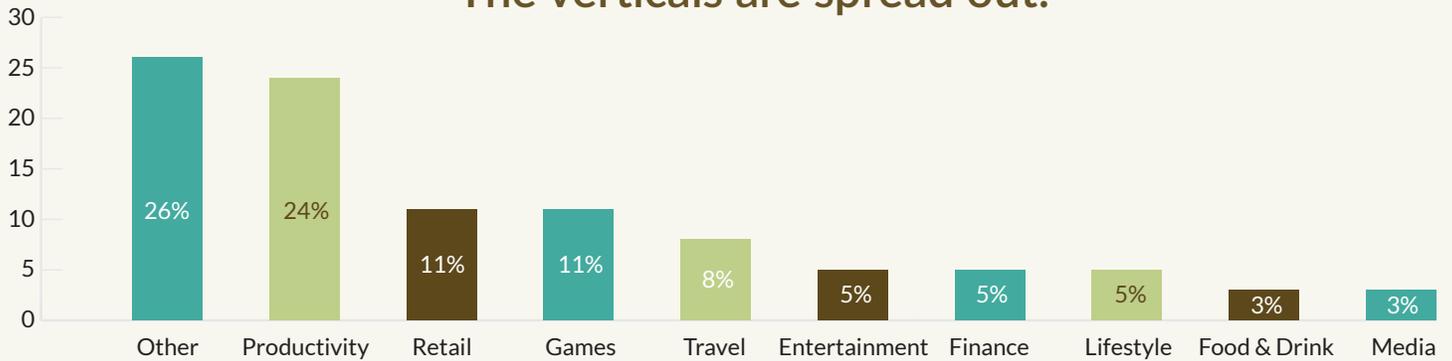
- How to choose which metrics matter most to your team
- What tools and resources are most useful for mobile product managers
- How to prove the ROI of your mobile product to leadership
- How to solve your revenue modeling problems
- How to boost your technical skills to take your career to the next level.

We also share brand new data from a survey we conducted of 65 mobile industry professionals (including many of your fellow mobile product managers) in an effort to understand the mobile app revenue landscape. A wide range of mobile professionals were generous enough to share details about their companies' mobile apps to provide you with a high-level look at the state of mobile app revenue. Our survey audience works for B2B companies (34%), B2C companies (42%), and companies that are equally B2B and B2C (20%).

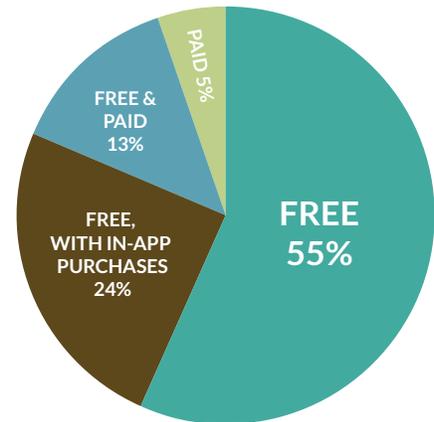


To understand the types of apps our survey audience works on, we asked which app vertical they fall under.

## The verticals are spread out:



The apps fall mainly into the free category (55%), with several offering in-app purchasing options in their free app (24%). Only 13% have both a free and a paid version of their app, while 5% of respondents offer only a paid version of their app.



The majority of the mobile professionals surveyed work on apps that drive revenue (71%), but 29% have yet to monetize.

Although challenges and goals vary for individuals, this guide speaks to how mobile product managers can be more effective in their roles, and offers tips to help close gaps based on specific company goals. You can easily navigate between sections by jumping through the anchor links below, or start at the top of the guide and work your way through (our recommendation for best results!).

## Jump ahead to the following sections:

- [Setting Up a Dashboard](#)
- [Tools and Resources](#)
- [Proving ROI](#)
- [Mobile Revenue Modeling](#)
- [Technical Skills](#)

We hope this guide helps you level up your mobile product management skills, and are confident you'll take away something new that helps make your job easier. Now's the time to grab a cup of coffee (or tea, of course) and settle in—we're about to dive deep into the complex world of mobile product management!

## Chapter 1

# Setting Up a Mobile Product Management Dashboard

An important element of any mobile product is being able to track, measure, and report on its progress, and a product management dashboard is a great way to do so. In this section, we discuss selecting metrics to track, dashboard setup, and tips for creating an effective dashboard, no matter the size of your mobile product.

**At a high-level, setting up a mobile product management dashboard has three primary steps:**

- 1. Select your metrics and define your data:** Identify the relevant metrics and what questions they help answer. Also, define the layout that will be the final product. Your final layout should have presentation worksheets and raw data worksheets, which define the format and granularity in which data needs to be pulled from the system.
- 2. Data instrumentation and/or consolidation:** For the data that **is not captured today**, enlist your engineering team to help instrument data capture going forward. For the data that **is captured today**, your engineering team should help produce outputs in the requested raw data format. A key objective is to automate raw data generation at a click of a button. This is to cut down time spent on generating data and instead spend time on uncovering insights.
- 3. Compile and share the metrics report with your team:** Start with a few team members in the beginning and expand to a larger team as more data becomes available. Your report should be compiled and shared at weekly frequency to ensure all team members are in-the-know.

We cover all three steps at length across the following sections, but let's start with the first point: **selecting your metrics and defining your data**.

# Start by gathering metrics



Metrics are the backbone of all product decision-making. Without looking at how our metrics fluctuate over time, we have no way of knowing whether or not our mobile product is a success outside of educated guessing—and with the endless amounts of data product managers are able to capture, there's no room for guessing anymore!

However, endless amounts of data may lead to confusion around where to start when selecting metrics to track for your new mobile product. Rather than jumping right into data options you can collect, it's best to look at the problems your product is attempting to solve and how you'll use your data learnings over time.

To start, **there are four steps to selecting the right metrics for your product dashboard:**

## First, think about what questions you're trying to answer.

At the end of the day, your product exists to try to help your company solve a business problem. Business problems typically arise out of questions your company has yet to answer, which is the best place to start when you're thinking about a new product/feature. **Begin this exercise by looking at the BHAG (big hairy audacious goal) your company has set out to solve, and build out the questions your new product/feature is answering on top of it.**

You'll have more success in ensuring your new mobile product stays on-track when you look at how it fits into your greater business. Understanding the acute questions your product will help your company answer will help you cut unnecessary features and minimize scope, which will help your team bring the product to fruition in a timely manner.

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## Second, brainstorm metrics that will help you find answers to those questions.

Once you know the question(s) your mobile product will help you answer, it's time to select the metrics that will tell you whether or not you've hit your goals. We'll dive deep into metrics in the section below, but we urge you to remember one important point about metrics: **Success looks different for everyone, and so will the metrics that define it.** Feel free to model your metrics after what other companies have done in the past, but don't let their experience cloud your judgement. If you feel like a standard metric has no place in the success of your new mobile product, explore your hunch and present your findings accordingly.

### Third, decide what types of visuals will best display the data from the metrics you track.

Great data matters, but the way you present the data is equally important. Depending on your product, you may even have multiple groups you're presenting data to who will digest it differently. It's important for mobile PMs to remember their audience as they put together visuals to help display their data. **Data exists to help you tell a story, and the number one rule in storytelling is to read your audience before you begin.** Be sure you're telling the story in the most compelling way to the audience it's being delivered to. If the audience isn't hooked by the way the story is presented, you may as well have not given the presentation at all.

There are endless options when it comes to data visualization and presentation, so it's a good idea to start planning early and to consider all options before you select a delivery method. For example, is your data better shown in a graph, chart, scatter plot, interactive element, snapshot into a deeper dashboard, or something else entirely? Check out this list of [38 tools that help with data visualization](#) for some inspiration before you begin.

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### Fourth, consider how you'll instrument new data into your existing process.

Now that you have your data, how can you act on it? **The best new products are presented with a plan for instrumenting their data and learnings into a company's existing process**, and this holds as true for mobile as it does for any other type of software. It can be easy to get wrapped up with your products "shiny new object" feel, but it's imperative that you look at your starting point before you get carried away with the new learnings your product will bring.

### Begin by considering how your data flow is currently set up, and ask yourself the following questions:

- Who needs access to this data?
- Is this data presented in a way that is meaningful to all parties?
- Do I need to combine this new data with existing data? If so, what's the best way? Who needs to be involved?

Now that we know the stages of metric gathering, the big question is: What metrics do I start with? Below, we go over how to select the metrics you should pull through the lense of the three stages outlined above.

# Types of metrics



There are many types of metrics mobile PMs can monitor to tell them whether or not their product is hitting its goals. Because each product serves a specific, individual function, it's important for mobile PMs to spend time understanding what metrics will really tell them how their product is succeeding, and to not get caught up in what type of metric monitoring has worked for other products. Your product is unique—your metrics should be, too!

To help you select which metrics may work best, we present metrics broken down into categories based on what they can tell us for easy selection. Each section includes key product questions mobile PMs should start with, and offers metrics to choose from in order to help PMs answer the questions. The metrics suggested are a comprehensive list of what typically works well for mobile PMs. Not all metrics will work for every product, so be sure to select accordingly.

## 1 Customer/org segmentation and growth

Metrics in this category will help you better understand what customer data you should be looking at to gauge product success and growth. Whether you look at customers by individual or by org, there is plenty of data to consider.

### QUESTIONS TO ANSWER:

- What's the profile of customers (orgs) using our system, and how do we segment them?
- How many new customers (orgs) are we adding in a given period?
- How many new collaborators are we adding in a given period?

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### DATA TO CAPTURE:

- Org name
- Tier
- Industry
- Country
- Count of collaborators by job function (e.g. product manager, marketer, developer, etc.) and role (administer, collaborator, etc.)
- Count of iOS and Android Apps

## 2 Onboarding and activation

This section is all about product adoption and ease of use. It's crucial your customers find your product easy to integrate and begin using, and data in this category will help shed light on their current perception.

### QUESTIONS TO ANSWER:

- How much time does it take for customer to start using the product?
- What stage(s) is(are) taking the most time?
- Where are the drop off points in getting activated?
- Who are the early adopters and why?

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### DATA TO CAPTURE:

- Org creation date
- Integration date (if applicable)
- Time for an account to launch (if applicable)
- Time it takes main profile to add collaborators

## 3 Engagement

Engagement is a massive indicator of product success. No matter your industry, the primary goal of all products is to have highly engaged customers. The data below may look the most familiar to you out of all the categories.

### QUESTIONS TO ANSWER:

- How much value do we provide to customers on a regular basis?
- What does "engaged" look like?
- How frequently do customers visit our product?
- Are there consistent gaps between customer visits to the product?
- How often is a feature used by how many customers (or orgs)?
- What features are typically used in a single session?
- Where are there points of friction within the product?
- How much time are customers (orgs) spending with our product in a single session?

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### DATA TO CAPTURE:

- Downloads
- Daily Active Users (DAU)
- Monthly Active Users (MAU)
- In-app actions
- Session interval
- Time in-app

## 4 Conversion and retention

Conversion and retention may be among the most ambiguous metrics to define, but they are also two of the most important. Understanding how to retain customers once they convert is what turns good mobile products into great ones, and it's important to consider tracking metrics around conversion and retention as early as possible to help you understand your customers' journeys.

### QUESTIONS TO ANSWER:

- What does "conversion" mean within my product?
- Are there multiple points of conversion, or one singular point?
- What does my customer journey look like?
- Which of my customers do I consider "loyal?"
- What customer actions define loyalty?
- What does it cost to create a loyal customer?

### DATA TO CAPTURE:

- Conversion rate
- Churn
- Retention
- Cost Per Loyal Customer

For more on metrics and data to consider tracking, check out our recent blog post on [16 metrics that matter for mobile product managers](#).

## Creating a mobile product dashboard



Product dashboards exist to help you make sense of all of your data, but some mobile PMs are still averse to using them. At Apptentive, we're huge fans of dashboards to help give us a high-level view of our products' progress. **Here are four reasons why we recommend creating a dashboard for your mobile product:**

1. They're an **easy-to-understand snapshot** to help you manage almost any mobile product.
2. Makes it **easier to communicate product status and issues** with management. Plus, most executives seem to like dashboards :)
3. **Improves your own team's understanding of your product** by having one streamlined place to check in.
4. Last but not least, **helps you prove your product's worth**. For more on this, jump ahead to our [Proving ROI](#) section of the guide.

Let's look at some tips to help you create your own mobile product dashboard.

## Tips to create an effective dashboard

### 1. Use the “traffic light model” to indicate the state of your metrics.

The traffic light model is one of the easiest indicators of product progress as most people understand its universal color assignment. In the traffic light model:

- **Green** is on target
- **Yellow** is at risk (being monitored)
- **Red** is behind schedule, needs immediate attention

No matter how you lay out your product/feature progress, green, yellow, and red are strong indicators of how each piece is going at a glance.

### 2. Update at a consistent frequency.

The frequency in which you update your dashboard depends on your development schedule. We recommend updating your dashboard in alignment with how your engineering team structures its sprints. If they're weekly, update weekly; if bi-weekly, update bi-weekly; etc. Whatever frequency you decide, make sure you update your dashboard on a consistent basis that is communicated to all stakeholders. Better yet, you can go one step further and timestamp your updates so anyone can peek in at the dashboard and see the last time the data was updated.

### 3. Explain the metrics behind your data.

Every metric included in your dashboard should be based on additional data or information that is easy to understand. Make sure there are short descriptions around the data being pulled right on the dashboard itself, especially if multiple people will be accessing the dashboard at all times. That way, you save your colleagues time in deciphering the data you pulled together to get each metric, and save yourself time in not having to answer one-off questions about the same metric time after time.

## 4. Make your dashboard data readily-available.

The biggest point to remember about your dashboard is as follows: You should be able to pull the metrics from your dashboard at any time based on your management team's needs. At the end of the day, your dashboard serves as a quick snapshot for how your product is doing, which is your management team's primary interest. The easier and quicker you can make pulling metrics to help them answer questions, the more impactful your dashboard will be.

## 5. Break dashboard metrics into categories.

Too much data shown in a running list can be overwhelming. Be sure to categorize your metrics in your dashboard to make it easy to read.

For example, here's a snapshot of what your categorized dashboard could look like:

# MOBILE DASHBOARD

### ACTIVE USERS

	YESTERDAY	MAU	VS LW	VS 30 DAY
<b>TOTAL</b>	1M	5M	+5%	+5%
<b>NEW   REPEAT</b>	40%   60%	40%   60%		

### PERFORMANCE & QUALITY

	24 HRS	VS 7 DAY	VS 30 DAY
<b>CRASHES</b>	1K	+5%	+5%
<b>NETWORK RESPONSE TIME (sec)</b>	0.5	+5%	+5%

### TRANSACTIONS

	YESTERDAY	VS LW	VS 30 DAY
<b>MOBILE PAYMENTS</b>	100K	+5%	+5%
<b>MOBILE ORDERS</b>	100K	+5%	+5%
<b>MOBILE RELOADS</b>	100K	+5%	+5%

### ERRORS (LAST 24 HRS)

<b>APP SLOWNESS</b>	<b>200</b>	<b>NETWORK ERRORS</b>	<b>200</b>
<b>LOGGED OUT</b>	<b>200</b>	<b>CRASHING</b>	<b>200</b>
<b>TIP NOTIFICATIONS NOT WORKING</b>	<b>200</b>		

Additionally, you could choose to show your dashboard metrics in the following way, which gives you the ability to add more color:

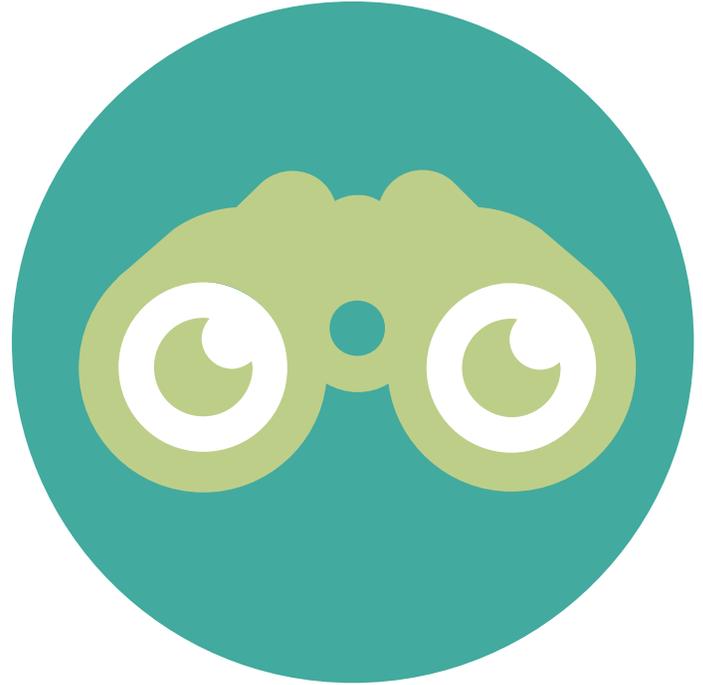
PRODUCT METRICS			
CATEGORY	METRICS	STATUS	COMMENTS
PRODUCT	Strategy	<span style="color: green;">●</span>	Overall strategy is still sound. Made a strategy change to focus on mid-market customers last quarter.
	Roadmap	<span style="color: yellow;">●</span>	Product roadmap is currently in flux as we've decided to reposition the product to address mid-market needs.
	Product/Market Fit	<span style="color: red;">●</span>	In line with the roadmap change, overall capabilities are being re-evaluated. There were no major issues with those capabilities, but with the repositioning and roadmap changes we are not making assumptions about product/market fit.
	Gaps	<span style="color: green;">●</span>	One of the reasons for the repositioning was the large gap for required "enterprise" features and our ability to address them in the near or medium term. This will likely change once the roadmap is defined.

GO-TO-MARKET METRICS			
CATEGORY	METRICS	STATUS	COMMENTS
Go-to-Market	Positioning	<span style="color: green;">●</span>	Positioning against competitive products is clear and well understood.
	Competitive Analysis	<span style="color: yellow;">●</span>	Continuing to investigate latest release of competitors. No major threats found, but process is not complete.
	References	<span style="color: red;">●</span>	Short of our target of 5 reference customers. 3 new customers in reference pipeline but delays encountered due to pushback by legal departments.
	Social Media	<span style="color: green;">●</span>	Social media campaigns are in place and active.
	Analyst Relations	<span style="color: yellow;">●</span>	Working with major analyst firms and a few 2nd tier firms. Some pushback on our roadmap from 2nd tier firms. Working through MQ and Wave processes.
	Demand Generation	<span style="color: yellow;">●</span>	All demand generation programs are underway and delivering expected results in terms of inbound website activity, and lead generation.

# Looking ahead

Tracking, measuring, and reporting on your mobile product's progress is key to understanding its success, and a mobile product dashboard is a great way to help you effectively accomplish all three tasks. The more inviting and easily digestible you can make your dashboard, the more impact it will have on your mobile product's stakeholders.

For even more information or assistance in setting up a mobile product dashboard, we recommend taking a look at [LiquidPlanner](#) or other tools to help get you started.



## Chapter 2

# Tools and Resources



The tools and resources available to mobile product managers can serve as a lifeline for those looking to gain an edge. Tools are meant to save you time and boost efficiency, while resources help to expand your knowledge base so you can make more informed decisions in your day-to-day work. We tapped into the mobile product management community to find out what tools they rely on most, and which resources they find the most valuable.

Let's take a look!

## Top tools for mobile product managers

To give you a better sense of the tools mobile PMs are using to make their app a success, we compiled the top 10 most used SDKs for iOS and Android apps in the top charts using [Apptopia](#). Depending on your needs, this list can serve as jumping off point to make sure your app is able to stand out.

### Top 10 most used SDKs in iOS Top Charts

- [Admob](#): AdMob by Google is an easy way to monetize mobile apps with targeted, in-app advertising.
- [DoubleClick](#): DoubleClick by Google is product suite for that manages ad-serving, ad delivery, and behavioral targeting.
- [Facebook](#): Facebook's SDK helps you build engaging social apps and get more installs.
- [AFNetworking](#): AFNetworking is a networking framework for iOS, OS X, watchOS, and tvOS.
- [Unity](#): Unity is a development platform for creating 2D and 3D multiplatform games and interactive experiences.

- [Bolts](#): Bolts is a collection of low-level libraries designed to make developing mobile apps easier.
- [Fabric](#): Fabric is a suite of tools that help you build the best apps with ease.
- [Chartboost](#): Chartboost is the leading marketplace for you to maximize revenue and acquire new players.
- [UnityAds](#): UnityAds allows you to monetize and engage your entire player base with video ads.
- [Twitter](#): Twitter's SDK is a part of the Fabric product suite, and is called MoPub.

## Top 10 most used SDKs in Android Top Charts

- [Unity](#): Unity is a development platform for creating 2D and 3D multiplatform games and interactive experiences.
- [FMOD Studio](#): FMOD Studio is an adaptive audio tool and engine for games.
- [GoogleFit](#): GoogleFit is an open platform that lets users control their fitness data, developers build smarter apps, and manufacturers focus on creating amazing devices.
- [Apache Flex](#): Apache Flex is for the development and deployment of cross-platform rich Internet applications based on the Adobe Flash platform.
- [Android Studio](#): Android Studio provides the fastest tools for building apps on every type of Android device.
- [GoLauncher EX](#): GO Launcher EX is a popular Android launcher with thousands of themes and features to customize each user's home screen experience.
- [Google Cloud Platform](#): Google's Cloud Platform allows you to run your application using the same technology and tools used at Google.
- [Google Mobile Ads](#): Google Mobile Ads SDK helps app developers gain insights about their users, drive more in-app purchases, and maximize ad revenue.
- [Admob](#): AdMob by Google is an easy way to monetize mobile apps with targeted, in-app advertising.
- [Facebook](#): Facebook's SDK helps you build engaging social apps and get more installs.

For a list of the what SDKs specific top apps use, including Starbucks and Uber, [check out this comprehensive list](#).

# Best mobile product management resources



Just like your app needs tools to take it to the next level, there are a plethora of resources mobile product managers can rely on to step up their game. We asked the product management community where they turn when they want to learn more about their line of work. Here's a compilation of the best resources, including reading material, conferences, and courses that are popular in the mobile PM community.

## Reading Material

The day you stop reading is the day you stop learning—isn't that how the saying goes? Well, you won't have a shortage of reading material with these blogs. Here are your fellow PM's top picks:

### **Product Hunt**

Product Hunt is the place to discover new tools, resources, lifehacks, and pretty much anything else you can think of. Searching for a solution to a product problem? Chances are you can find it on Product Hunt. Keep your eye out for the up-and-coming on Product Hunt to always be on top of your game.

### **Quora**

Similar to Product Hunt, Quora is a place you can go to find an answer to almost anything you can think of. It's a hub of crowdsourced knowledge. Are you looking for an answer to a question that hasn't been asked in other communities (quite the feat in and of itself!) yet? You can post your question to Quora, and even ask specific people to answer. You can even share your wealth of knowledge and help other mobile product managers out, too.

## **PM Subreddits**

PM Subreddits are similar to Quora in that people post questions and answers, but PMs also post relevant articles, popular Q&As with fellow PMs, webinars, and other mobile product news you should know about. It's a great one-stop-shop for PM centric resources.

## **The Art of Product Management**

Run by Jackie Bavaro, a PM at Asana, and Co-author of Cracking the PM Interview, The Art of Product Management is a blog that provides practical advice on how to be a better product manager. Jackie posts about a wide range of PM focused topics. You're bound to find something worth reading on this popular blog.

## **Mobile App Management Blog by Apperian**

Tailored for product managers focused on enterprise apps, this blog is a great resource for PMs to learn about new techniques, upcoming webinars, mobile app industry analysis, and case studies. PMs will walk away with clear insights into their industry, and a deeper understanding of how to cater to their app's needs.

## **Apptamin Blog**

Apptamin is a place for mobile product managers to learn about the app industry as a whole. It's not focused specifically on product management, but does share meaningful information on how to make your app successful.

## **TechCrunch**

As with any profession, it's smart to stay up to date on the latest mobile industry trends and news. TechCrunch can be a go-to source for anything related to the inner workings of the tech industry.

# Conferences

Conferences are not only a great place to learn, they're also a great place to network and meet new people in your industry. We asked the mobile PM community what conferences they've enjoyed and learned from the most; here's what they had to say:

## [Mobile Future Forward](#)

This mobile focused conference is unrivaled in terms of the data presented, which allows attendees to gain a deep understanding of where the mobile industry as a whole is headed. This conference attracts speakers from some of the world's largest mobile-oriented companies, including T-Mobile, Oracle, and Google. If you're interested in learning from the best in the business, this is the place to be.

## [ProductCamp](#)

ProductCamp calls themselves an “unconference” because it's free, user-driven, and collaborative. It focuses on topics related to product management, product strategy, and product marketing. The most fun part about this event? Any participant can present a topic or lead a group discussion. On the day of the event, attendees vote on which session they're most interested in, and the sessions with the most votes win. ProductCamp events are set up all over the world, but if they don't have an event scheduled near you, you can organize one for your city.

## [Delight UX/Product Conference](#)

If you're seeking to learn more about how to create exceptional experiences for your mobile customers, this conference is a must-attend. This event draws big-name speakers who are known for their optimal customer experiences, including Facebook, Target, and Capital One.

## [Open Mobile Media Summit](#)

Regardless of what industry you're in, Open Mobile Media Summit will have presentations that are relevant to any mobile product manager. Topics include app and mobile tech; commerce and brands; media and advertising; and M2M and enterprise. The conference is designed to deliver insights to help businesses who are a part of the mobile ecosystem to expand and succeed.

## Mind the Product

Mentioned above in our reading section, Mind the Product also puts on an impressive conference for product managers. Presenters are brought in from around the world, giving attendees a chance to hear about new solutions and strategies that don't exist in their corner of the world yet. Hailed as one of the best product conferences around, it's hosted by product managers, so there's no shortage of relevant, engaging, and useful information presented each year.

## ProductTank Meetup Series

A brand of Mind the Product, the ProductTank Meetup series is hosted frequently in 75 cities around the world. Free, and welcome to product managers, designers, and developers, it's a gathering where professionals are encouraged to share their experience and knowledge to help each other learn and grow.

## Product Management, Innovation & Growth

This conference was created for product management to learn more about growth strategy, innovation, and shared experiences. The topics focus on innovation, business planning, product strategy, performance, and customer insights. Attendees get a full spectrum look at what's to come in the future of product management, and tactical advice for how to advance their company in the near term.

## MVP Conf

MVP, or Minimum Viable Product, is dedicated to helping professionals in the mobile world master the art of the MVP philosophy. Not only does the conference include experienced speakers, including product managers for Zappos and Uber, it hosts 17 workshops to kick it all off.

## Mobile World Congress

Undoubtedly the biggest mobile conference of the year, attendees get a full-scale view of where the mobile industry is heading, as well as tactical advice on how to make the most of the mobile revolution. Since this conference attracts tens of thousands of attendees from all over the world, it's one of the best places to network, expand business development opportunities, and learn from the best of the best.

Taking your career to the next level requires continued learning. There's a course here for everyone, whether you're just starting out or you're an industry veteran. This comprehensive list will help you expand your skillset and open new professional opportunities through learned skills.

## [Coursera](#)

Coursera lists product management courses for specific niches within the profession from a host of different schools around the world. If you're interested in changing industries, or simply expanding your skill set, chances are Coursera has what you're looking for. Courses range in difficulty and cover topics from software product management to running design sprints.

## [General Assembly 10-week Product Management Course](#)

If you're just getting started, or if you're interested in becoming a product manager for the first time, this crash course by GA will get you up to speed quickly. You'll learn the skills and tools needed to be a successful product manager, production standards, and the big picture to make your customers and stakeholders happy.

## [Udemy Product Management Certification](#)

Similar to GA's 10-week PM course, Udemy offers a product management certification for those interested in becoming a PM focused on B2B. The course contains 34 lectures and covers a wide variety of skills required of PMs, including conflict management, how to define a new product, and how to build a business case.

## [App Success Pro Course](#)

While mobile product managers don't need to possess a ton of technical skill, it does help your ability to communicate with the engineering team. Learning how to create your own app will build a level of skill that will enable you to communicate more effectively with your team, and create more empathy for your team now that you have a better understanding of what an app requires.

## Stanford Swift Courses

Similar to the App Success Pro Course, learning how to code Swift will make you a better product manager because you'll be more equipped to understand what's required of your engineering team. Better communication, empathy, and technical skills will take your mobile product management career to the next level.



Tools and resources, including conferences, blogs, and courses, exist to help you become more effective in your current role, and take your career to the next level. The above list has something for everyone, whether you're seeking to boost your app's success, network with fellow mobile product managers, or brush up on your technical skills. Take advantage of these PM approved resources to give yourself, your team, and your product a competitive edge!

## Chapter 3

# Proving ROI



Sooner or later, you must dig in to uncover the truth about your product, which comes directly from its Return On Investment, or ROI. Proving ROI for a mobile product is no different than proving ROI for any other product, but there are metrics you must look at in order to gain the full picture before sharing your ROI hypotheses. Mobile PMs can generally apply the same models and tactics they're familiar with when it comes to mobile product ROI, but even though proving ROI is a necessity, it can be tricky, no matter the size of your team and mobile product.

This chapter shows you how to model ROI before your product work begins, shares tips on how to gauge ROI over time, and shows you how some of the biggest brands in the world approach mobile product ROI.

## Why proving ROI is important

Proving ROI is an important step for all product managers, but it's especially necessary when it comes to mobile product management. Because mobile teams typically struggle to acquire budget, even at large companies, every dollar spent and returned on the mobile product is under incredible scrutiny from executives. **By supporting your product through proving ROI ahead of time, you have a stronger business case for scaling your scope, team, budget, and product positioning within the company.** If there ever was a “magic bullet” for opening doors within mobile product management, ROI is it.

For example, you might think your ROI story is obvious: “When customers engage with our mobile experience through product X, it will result in an immediate savings of time, frustration, and money.” But how do you know? How can you be sure without testing and hypothesizing ROI before product X's release?

In some instances, it's not possible to isolate ROI on every single feature, especially those which include non-functional engineering requirements. Most mobile products include a handful of these scenarios, so it's important not to get caught up in the features you can't necessarily pull metrics together for until after they're launched. A good guideline is the 80% rule: **If you can model out 80% of your product's ROI, the outstanding 20% should be aligned and/or close to your hypothesis.**

Let's move onto what modeling ROI looks like.

## How to model ROI



Now that we understand the importance of ROI, we can now set out to model our hypothesis.

### **There are two main ways mobile teams can prove ROI for their product:**

1. By using internal business data and product knowledge
2. By hiring an external ROI expert to lead the project

Because hiring an expert to outsource modeling ROI comes with its own set of challenges (e.g. budget, time, knowledge gaps, etc.) and isn't the option most teams select. Let's focus our time on the first option of using internal knowledge and data to help prove ROI. However, know that if your mobile team is struggling to prove ROI, hiring an expert could be a good way to escalate.

To start, let's look at some time-saving tips meant to help simplify the ROI exercise. You'll want to **begin with feature prioritization and grouping.**

The first step is to make a list of all the features your new mobile product will include. The exercise's main goal is to help you and the rest of the mobile team (or other involved departments) understand what the project scope will look like, and ultimately, give you an opportunity to add or cut pieces that you may want to reconsider. To create your list, pull in members from all teams that will be involved in the product, including engineering, marketing, customer success, and so on. This brainstorm can take as little as one hour or as long as a week, depending on the scope of the product and complexity of the features you're attempting to build.

## Sample Feature List

FEATURE	DESCRIPTION	DIFFICULTY
Login	Users will log in via SSO	Medium
Location	GPS integration	Hard
Camera	Camera accessibility	Mild

Once you have your list, begin grouping features into categories based on the business problem they will solve (i.e. productivity, cost reduction, increased time spent in-app, etc.). Looking at features categorized by business problem will not only help you understand priorities within the product, but will help you recognize features that might not be worth building in the first iteration of the product, speeding up the process for your entire team.

The most important point to keep in mind is that **new mobile features and products exist simply to solve old business problems**. If you keep your ROI exercise focused on the business problems the product/feature is meant to solve, the conversation will be easier to translate across teams and with executives.

Now that we have our feature list, **let's move on to modeling the ROI equation**. There are four steps to modeling ROI:

### 1. Estimate increased profits

Once you've outlined the business problems the product/feature will solve, the next step is to identify how much money your company will save or pull in as new revenue because of the solution. In order to make this conversation quicker and more accurate, use what you know about your existing products/solutions to help begin your calculations.

To start, think about how much money having this product will save your business, how much revenue it will generate from customers, etc. All products are different, so there is no one "right way" to pull this number together. We recommend working with your executive team, if possible, to ensure you're thinking about the numbers correctly as you work through the math.

## 2. Estimate profit loss if the product/feature is not built

This step in the ROI process is the inverse of the previous step (estimating increased profits). You've already looked at how much money the product/feature could save your business, but it's just as important to look at how much money you could potentially lose if you decide not to build it.

Pulling this number is similar to understanding increased profits. If you don't build this product, how much money could you potentially lose through competition in the market, customer churn, etc.?

## 3. Estimate cost of the build

In this step, take a step back and look at the full picture of the product's project scope. How much time it will take your team to build it can give you an idea about how much it will cost the company (in salaries, etc.). Additionally, think about how much it will cost if you need to outsource pieces of this product to contractors to help complete the work. Understanding how much your company will spend on resources is a great way to estimate how much the total cost of the build will be.

## 4. Finalize the equation

You now have three important variables to consider:

1. Revenue you'll gain by releasing the product/feature
2. Revenue you'll lose by not releasing the product/feature
3. How much the product/feature will cost your company

Now, it's time to put them all together.

Add the revenue you'll gain with the solution plus the revenue lost if you don't deliver the solution. Then, divide the total by the cost of bringing the product/feature to market. In short, the equation looks something like this:

*Revenue Gained from Release + Revenue Lost if not Released*

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*Cost of Release*

## **PRO TIP:** | When metrics are hard to come by

The four steps above rely on some heavy data pulling, which we know isn't always easy to get. Even if you aren't able to collect specific revenue numbers from your executive or business teams, there are still ways you can come up with an idea of how much revenue you'll gain/lose by releasing the product.

### **For ways to guesstimate metrics outside of hard revenue numbers, consider the following:**

- Your mobile product's relation to increased foot traffic in your stores, and what that might do for overall revenue.
- How many new people your product will drive into your app, and what their average in-app spend may look like.
- How your product may affect in-app purchases.
- How your product may affect referrals, and what those referrals are worth.
- The demographic of your mobile customers (e.g. for airlines, their MVP business customers are heavy users of the app).

Start by thinking about the metrics above if it's taking your team some time to pull the revenue numbers you need, and leverage them as a placeholder if you need to make progress on solidifying product ROI while you wait.

Congratulations! You've now successfully attached ROI to your new product. This is a big step, but it's not the last one in the process. Let's continue with presenting your findings to the rest of the stakeholders on your team.

## Presenting your findings



Now that you have ROI attached to your product, it's time to present your findings to the other involved stakeholders.

When presenting your data, be sure to only present one key conclusion at a time. Presenting them all at once will dilute the power of the findings individually, which can be key to explaining why this mobile product is the next one your company should focus on.

Also, be sure to keep your audience in mind. Just like any other form of storytelling, delivering data in the way that will speak to the audience is key to the story clicking, which is where you'll get your support for product approval, mobile team growth, budget, etc.

**Brainstorm the following questions ahead of time to ensure you're prepared to deliver your findings:**

- What types of questions will your audience have? What can you prepare in advance?
- What will your audience do with the information you present? How will it affect their day-to-day?
- What listening style does your audience have? Is the information presented better through charts and graphs, or should you deliver your findings in packet-form?

Once you've done your homework, not only will you feel more prepared going into your meeting, but you'll be able to deliver your findings in a more informed way.

## Remember: It's ok to start small

Even if the mobile product you're working on isn't the next million dollar idea for your company, know that **the industry titans we all compare ourselves to started by making incremental progress with the resources they had.** Big companies didn't get to where they are overnight.

For example, Apptentive works with one of the biggest coffee retailers in the world, and even their mobile product management team still struggles to show ROI from time to time. Recently, they removed a feature in their app at the request of an executive, without justifying the decision based on data. Customers were unhappy with the update, reducing the company's app ratings to 1-star and negatively impacting retention. The product team was at a loss for data around how the removal of this feature was impacting their app store ratings, and needed a way to capture actionable customer feedback in order to justify future product roadmap decisions and to stop internal debates from derailing progress.



Rather than wasting time pulling metrics that would take weeks to gather, the company implemented our software and utilized our [Surveys](#) tool. They designed questions (e.g. “What would you like improved in the app?” and “Which feature should we build next?”), defined segments, and collected results. Automatic, real-time reports were created and shared amongst the teams involved. Within the first week, the team was able to collect 10,000 automatically organized responses, revealing two clear winners from the list of features customers wanted improved. The mobile product manager used this customer data to back up their roadmap decisions, make their app better for customers, and prioritize features, backlogs, and bugs.

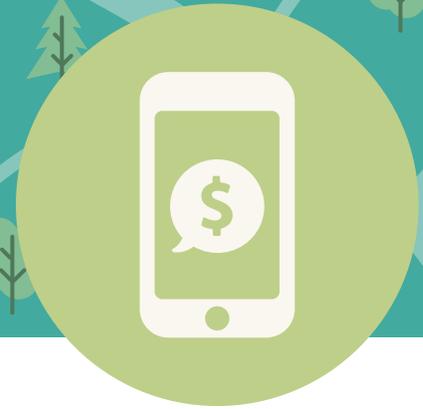


If you are able to prove some form of positive ROI for your next mobile product, you’re in a good place. From there, think about how you can iterate on the product to really pull in the revenue cross-team support—for both your team and company.

In the next chapter, we dive deep into mobile monetization strategies, and additional value propositions to help you boost ROI for your mobile product.

## Chapter 4

# What Does the Mobile Revenue Model Look Like?



If you have a mobile app, chances are you've spent a great deal of time trying to understand how to drive revenue. Your customers are flocking to mobile, but the money isn't following—yet. The easiest way for teams' to justify the budget required for mobile app development and maintenance is to tie it to revenue, but that's easier said than done. **What are you supposed to do when customers go mobile, but revenue does not?** If mobile is where customers are interacting with your brand the most, it is unwise to actively choose to avoid investing in the mobile channel because the executive team doesn't see the ROI in dollars.

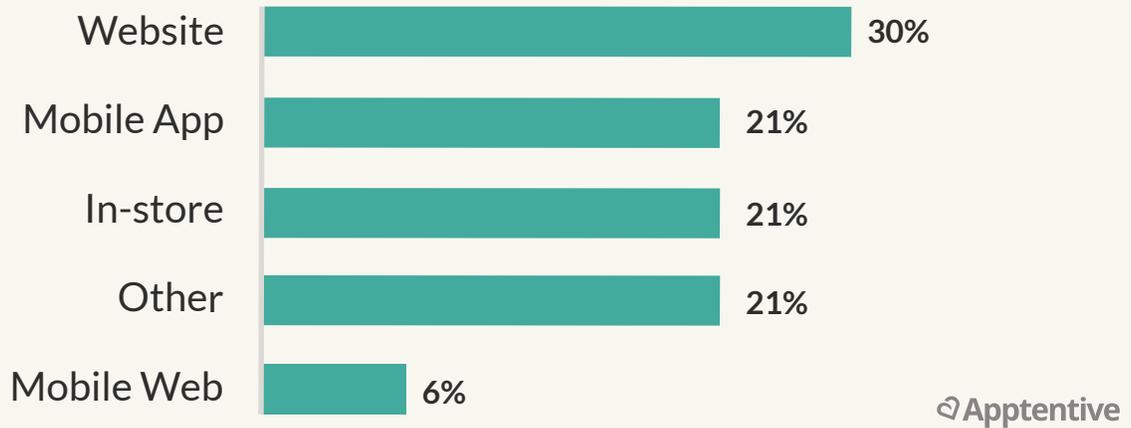
In this chapter, we share data about how other mobile professionals tackle mobile revenue, the value propositions beyond direct revenue, the role customer loyalty plays in the success of apps, and how you can keep your customers more engaged to drive revenue and increase loyalty.

## Cracking the mobile monetization code

When you're struggling to monetize your app, it can be frustrating to realize your app has power-users that would be easy to capitalize on if they visited other channels as frequently. So, what's a mobile product manager to do?

We asked respondents what channel drives the most revenue for their companies. This is what we found:

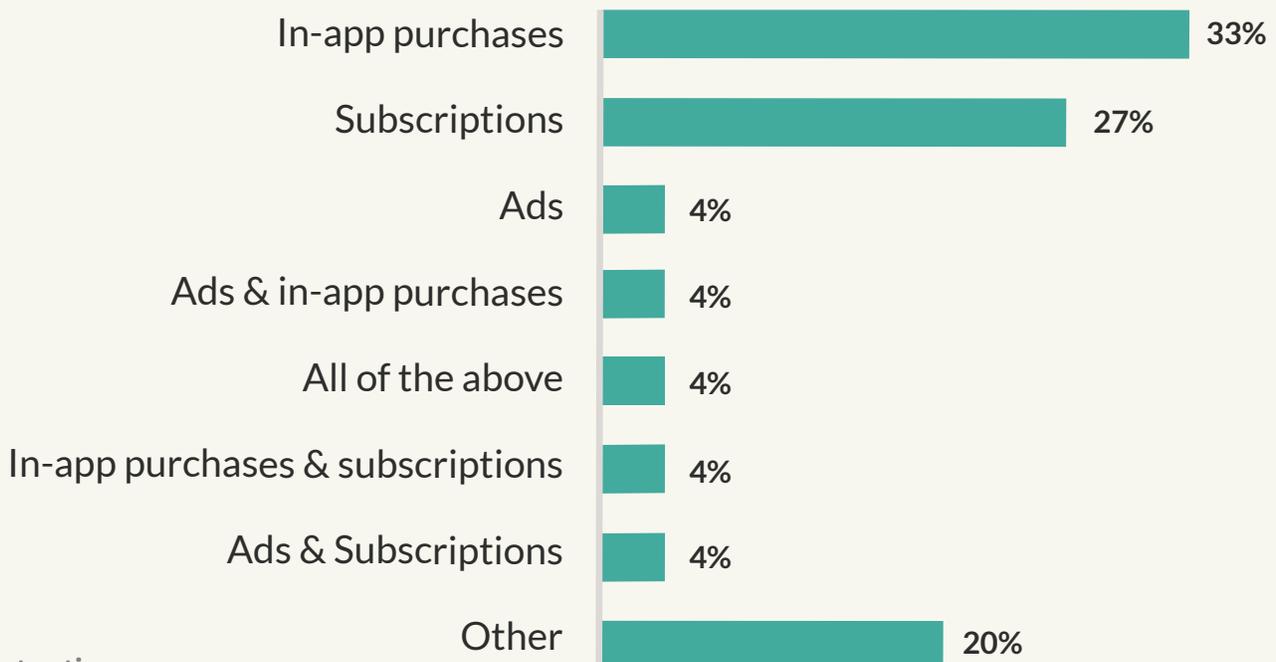
## Which channel drives the most revenue for your company?



**Mobile apps as a channel drive almost as much revenue for the companies surveyed as websites, and nearly as much revenue as in-store.** This is surprising considering so many companies are still trying to understand how to drive more revenue through their mobile apps. On the other hand, the contrast between mobile apps and mobile web is stark; It demonstrates the opportunity mobile apps provide to give customers a more personalized experience as compared to the web.

While there are many strategies to drive in-app revenue, we identified three main ways: in-app purchases, subscriptions, and ads. Of those, here are the most popular strategies mobile PMs chose:

## What's the biggest driver of in-app revenue?



Sometimes selling directly through a mobile app doesn't make sense, but that doesn't mean a mobile app doesn't present opportunities to connect with and give customers more value. Respondents who chose "other" said licensing and driving retention for their other core products by keeping customers engaged via their mobile app were the main drivers of revenue for their apps.

In-app purchases, subscriptions, and ads aren't the only way to generate revenue from an app. Depending on what works best for your customers, company, and brand, there's several different strategies that may be worth exploring.

**If you are still trying to figure out how to monetize your app in a way that doesn't disrupt your customers' experience, consider one, or a combination of, these strategies:**

### **IN-APP PURCHASES:**

This strategy essentially makes your app another sales channel. However, just because you're offering consumers a different purchasing path doesn't mean they're going to take it. The existence of the path itself isn't enough to push customers over the finish line; the entire experience needs to be seamless, more convenient, and more enjoyable than other channels in order to drive sales.

In-app purchasing options can range from selling goods and services, to installing paywalls that unlock new content or features within the app. Experiment with different offerings to see what your mobile customers respond to best.

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### **SUBSCRIPTIONS:**

Depending on the type of app, subscriptions are a great way to build up a consistent and reliable revenue stream. The key to success with a subscription model is to keep content fresh. Customers won't see the value in paying to subscribe to your app if content isn't updated frequently enough. Shortening your app's update cycle can provide more value to customers, entice them to visit your app more frequently, and encourage them to spend more time in your app.

## ADS:

If in-app purchases and/or subscriptions aren't a viable monetization option, ads are a smart alternative. The most important thing to keep in mind when implementing ads is to make sure your customers' experience isn't disrupted. Ads can prove to be a successful option if you collect data about your customers, because you have the opportunity to show them highly-targeted ads. Showing your customers irrelevant ads risks creating an unpersonalized experience, which will turn customers off.

Check out these [four tips on how to create high-converting mobile app ads](#).

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## SPONSORSHIPS:

If you haven't found success with ads, or are looking for a new strategy to experiment with, consider partnering with advertisers to "sponsor" your app. With this model, advertisers give your customers relevant rewards when they complete designated actions within your app. Revenue earned through redeemed rewards is then shared between you and the advertiser. This model takes ad personalization to the next level, which can lead to an increase in customer engagement and revenue by providing your customers with real value.

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## WHITE-LABELING:

If you didn't already go the [white-label route](#) when creating your app, this revenue model is worth looking into. Building great apps is time consuming and expensive, so people have begun to white-label and package the structure of their app to sell to other businesses. Once a company buys the code to your app, they can insert the appropriate branding and ship it off to their customers. You did the hard work building the app; why not reap the (monetary) rewards?

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## DATA MONETIZATION:

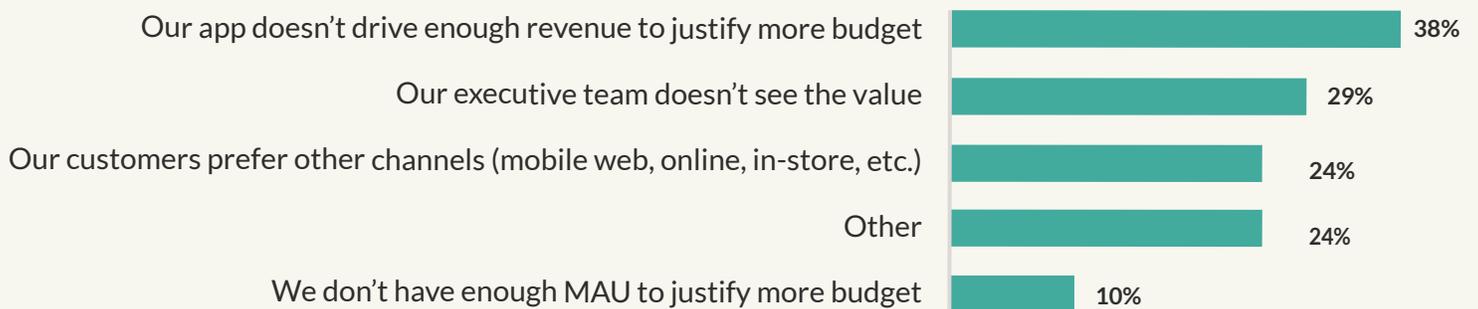
Keeping privacy laws in mind, there are legal—and lucrative—avenues for [selling the customer data](#) you collect. Even if you don't sell your data directly, it can still be used to influence non-mobile business decisions, and create hyper-targeted marketing campaigns for existing customers.

# Securing more budget for mobile



The majority of our survey respondents say it's challenging to get more budget for their mobile app (39%), while 33% said it's not. The remaining 24% said it's "sort of" challenging. The more important question, however, is why it's so challenging. The answers were split.

## Why is it challenging to get more budget for your mobile app?



Apptentive

What's interesting about these responses is that most of the issues could be solved by driving more revenue. Executives would certainly see more value in mobile apps if they were a top driver of revenue. If an app was generating a solid ARPU (average revenue per user), it's safe to say it'd be easier to get more budget to launch an acquisition campaign to gain more MAU.

Even still, revenue isn't always the most important factor when determining the value of a mobile app. If you're still trying to figure out how to generate more in-app revenue, consider focusing on the other (often overlooked) value propositions apps provide when you're trying to convince your leadership team to approve a bigger budget. It's important to communicate, and prove, to your executive team that your mobile app customers are often your most valuable. Mobile apps have the ability to impact all aspects of the business, even if they aren't driving revenue directly.

### Consider factoring in these value propositions:

## #1 CUSTOMER LOYALTY

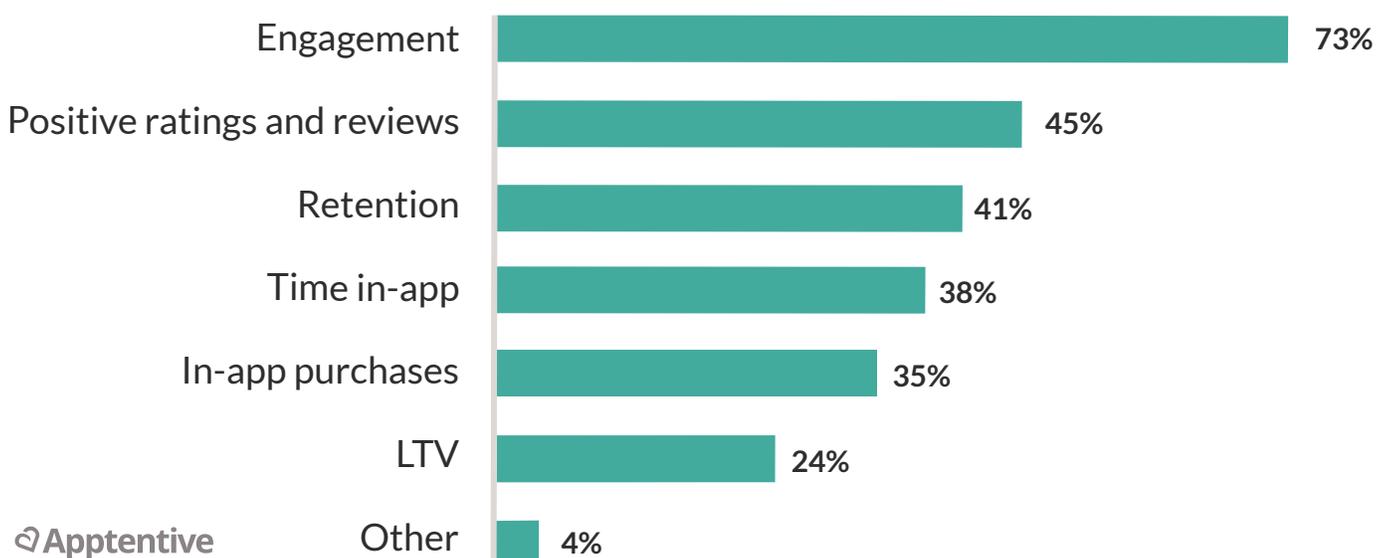
Mobile apps can drive customer loyalty, when done right. Since you control the channel, you have the ability to connect with and interact with your customers directly.

Take [InterContinental Hotels Group](#) (an Apptentive customer), for example: One of their customers had an unpleasant experience during their stay, but didn't have success fixing the unsavory situation when they spoke to the hotel's concierge before leaving in frustration. Instead of giving up, the customer turned to IHG's mobile app. The customer was able to reach out to IHG directly in-app, and IHG was able to quickly remedy the situation. Because of the communication their app enabled, they were able to turn a customer on the verge of churning into a happy, loyal customer.

Walgreens is another great example: According to [SurveyMonkey Intelligence](#), the Walgreens app is one of the fastest growing apps in terms of MAU (gaining 1,189,482 MAU from July 22 - August 22, 2016). While Walgreens does have in-app purchasing options available to customers, the success of their app doesn't depend on how much their customers buy in-app. Their app drives foot-traffic—and loyalty—by frequently updating coupons, and providing an easy way for customers to request prescriptions refills directly in the app. Their app may not drive a ton of direct revenue (it's not listed on [SurveyMonkey Intelligence's Top Weekly Revenue app list](#)), but it does encourage customer loyalty. By offering in-store coupons and easy refill options, Walgreens is minimizing the risk that their customers will turn to competitors by making their lives easier and more convenient through its app. Regardless of how much revenue their app drives, they're fueling in-store traffic while increasing customer loyalty.

When you're making the case for more budget, it can be helpful to know how other mobile product managers measure customer loyalty in their apps. Here's what they had to say:

### How Customer Loyalty is Measured In-App



## #2 BRAND VALUE

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Like it or not, mobile apps impact consumers' view of brands as a whole. If your app has negative ratings and reviews, the way your customers perceive your entire brand will take a hit. A recent [consumer study we conducted](#) found that 1-star or 2-star app ratings of a well known brand's app negatively impacts their view of the brand as a whole. The good news is that the reverse is true as well; 71% of consumers said a 4-star or 5-star app store rating positively impacts their view of the brand as a whole.

The moral of the story is this: If you're going to launch a mobile app, or have already, it's important to maintain it; otherwise, you risk damaging your company's brand, which can result in a loss in revenue. A team that decides to ignore investing in their mobile app because it's not directly tied to revenue can actually cannibalize themselves without realizing it.

### Bonus tip:

Increasing ratings and reviews can actually increase in-app purchases. A major retailer we work with saw a [40% increase in in-app initiated purchases](#) by going from 2-stars to 5-stars in the app store.

## #3 BUILT-IN FOCUS GROUPS

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Your mobile app customers are basically your own personal focus group, but better. Since they're actually your customers and not a randomly sampled group of people, the feedback you're able to extract is trustworthy, relevant, and applicable.

Are customers mysteriously dropping off in the middle of the purchase funnel, but you don't know why? Ask them directly! Use your mobile app audience to understand how to prioritize your product roadmap, and optimize your app.

For example, we work with one of the most successful coffee retailers in the world who used their mobile app to test and gather feedback on a new feature. Utilizing their app audience instead of a focus group allowed them to gather large amounts of feedback (from the people who will actually use the feature) in a short amount of time, enabling them to quickly iterate on the product. Thanks to the incredible volume of feedback they were able to receive quickly, the company shipped the feature an entire quarter ahead of schedule!

## #4 FREE PROMOTION FOR OTHER BRAND CHANNELS

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Your app isn't driving revenue, but other channels are? Get creative with your app audience by driving them to the channels that you know results in more dollars.

An international media company we work with was able to do exactly that when they promoted their live television content to their app customers. They sent an in-app message to their customers that an important broadcast was happening in real-time in an effort to encourage app users to tune in. It was a success—[70% of viewers clicked “Watch Now.”](#)

## #5 CUSTOMER ENGAGEMENT

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Engaged customers are the secret sauce to your mobile app's success. Not only are engaged customers likely to drive referrals and give your app love in the app stores, they're likely to be [more loyal and more profitable over time](#). Measuring and tracking the engagement of your mobile customers is far more telling about the health of your app than many metrics app publishers currently look at, like open rates or downloads.

**PRO TIP:** Engagement is the most popular measurement for customer loyalty in mobile apps.

Increasing customer engagement can be done through myriad ways, but let's take a lesson from the top three apps that earn the [highest weekly revenue](#): Pokemon Go (over \$15 million per week), Mobile Strike (over \$11.5 million per week), and Game of War - Fire Age (over \$9 million per week).

Notice that all three of these apps are games. These three apps make their millions on in-app purchases and ads, but in order to drive this (insane!) amount of weekly revenue, they have to keep their customers highly engaged.

How can you replicate their highly engaging apps, even if your app isn't a game? Here are a few tips:

**First, don't expect engagement to come naturally.** You need to proactively promote engagement by laying in place all the tools your customers could possibly need to see value in interacting with, and frequently returning to, your app. This comes down to developing your app with customer experience and engagement in mind. Whether encouraging engagement means building in peer-to-peer messaging, incorporating prompts and alerts ([that don't suck](#)), or providing a channel for collecting feedback within the app comes down to the needs of your individual customers.

Understand that engagement is not outside of your control. Customers can only engage with an app if there's something inherent to call them back again and again to see continuous value in your app. [Keep your app content fresh](#); mobile customers are looking for apps that are constantly improving, with regular updates based on customer feedback. [Apps that are frequently updated](#) with new content are seen to be of higher value, more customer-centric, and entice customers to keep coming back.

**Second, frequently step back and look for ways engagement can be improved.** What signals are your customers sending? How are they using your app, and how can their experience be improved? For your app, your answer may lie in [listening to the voice of the customer](#).

Asking for customer feedback is a quick way to understand how and why your customers are using your app. Understanding your customers will make it easier to figure out how to keep them engaged. Just as you should update your app frequently, you should also be in-touch with customers frequently; 38% of the people we surveyed said they collect customer feedback daily, and 34% said they do so weekly. These companies are likely in-tune with the pulse of their customers, increasing the probability their customers are more engaged compared to companies who don't collect feedback at all, or do so less frequently.



If your customers are heavy users of your mobile app, cracking the revenue code can be both time-sensitive and frustrating. It's likely that at least one, or some combination of the six in-app revenue strategies—in-app purchases, ads, subscriptions, sponsorships, white-labeling, and data monetization—make sense for your brand.

While you work to figure out the best way to monetize your app, tying the other value propositions back to metrics that matter for your business (customer loyalty, in-store traffic, brand management, feedback, free promotion to other channels, etc.) will help you secure the support you need from leadership to increase, or maintain your mobile app budget.

In the next chapter, we take a look at our favorite strategies to boost your mobile product management technical skills to help you be a more effective mobile product manager across the board.

# Chapter 5

## Boosting Your Technical Skills



There's a ton of variation in the role of a product manager across companies, or even across orgs within the same company. Some mobile PMs are focused on strategy, whereas others are focused on specific industry verticals, like eCommerce. The one skill that unifies all of these roles, regardless of their differences, is level of technicality; the more you have of it as a mobile PM, the more coveted your skills will be.

However, boosting your technical skills is not always easy, especially if you don't come from an engineering background. Below, we've outlined 10 of our favorite strategies to boost your mobile product management technical skills. Whether you're an industry veteran or are new to the mobile PM game, this list offers takeaways at every level!

### 10 Ways to Boost Your Technical Skills



#### 1. Surround yourself with mobile

The best way to understand what makes a good experience good, and a bad experience bad, is to surround yourself with the device your product will operate on. By immersing yourself in mobile, you'll begin to intuitively recognize product experiences that are worth emulating, and will have an easier time brushing up on the basics.

We recommend learning as much as you can about your company's current mobile presence, but not limiting yourself to just their view of the world. Take time looking at competitive and complementary mobile experiences to understand their similarities and differences. Ask yourself what resonates, what is intuitive, what is frustrating, and what is missing from each to give yourself a more holistic view of the experiences. The more you can gather ideas and form personal opinions about what others are doing on mobile through truly experiencing them as a user, the more knowledge you can store away and apply to your own mobile product.

## 2. Build your customer empathy skills

When it comes to building a product, empathy is everything. Understanding the “why” behind customer feelings and actions is what sets great product managers apart from good ones, and is what truly elevates products to the next level. However, in most cases, empathy is a learned skill that needs to be grown and exercised over time; there is always room for improvement.

To practice building empathy for your customers, try the following:

- **Ask to sit in on sales calls** to understand how people view your product before they even become customers. This will help give you a general sense of how they experience your product by understanding the baseline knowledge they bring to the table when they start the onboarding process.
- **Sit in on usability tests** with your user experience or design team. The best way to understand what a customer thinks about the product is to actually watch them use it. To get the most out of the test, ask your team members for a list of questions they typically use to run their usability tests ahead of time, and come up with a secondary set of questions you can ask the customer once they finish going through the controlled tasks.
- **Understand your customers’ journey** by working with your marketing team. A big part of marketing is mapping out the customer journey by lifecycle stage and actions, and we bet your marketing department has already spent a fair amount of time and resources putting this information together. Grab time with them to understand how people approach the product, convert into customers, and become loyal over time.

## 3. Use your devices often

The best mobile product managers are always on top of new trends, and the best way to see what’s hot or not is to use your device(s) as often as you can. If you can’t explain what makes your favorite apps great from a technical, marketing, and product perspective, chances are you have some learning to do. The more you challenge what you like and dislike in the mobile experiences you use consistently, the better it will translate to how you build your product.

## 4. Become an expert in mobile experience options

Understand what makes an app’s experience great across devices based on limitations and best practices. Not all mobile experiences are built the same way, and one method might be better for your mobile product.

For example, do you know the difference between a mobile website, a hybrid app, and a native app, and why you'd choose one over the other? Now is the time to dive in and learn. For your first quick lesson, here's the difference:



### Web apps

are not real applications; they are really websites that may look like native applications, but are not implemented as such. They are run by a browser and typically written in HTML, and are accessible in the same way all other webpages are.



### Hybrid apps

are part native app and part web app. Like native apps, they live in an app store and can take advantage of the many device features available. Like web apps, they rely on HTML being rendered in a browser, with the caveat that the browser is embedded within the app.



### Native apps

are installed directly on a device's hard drive and can maximize the capabilities of the hardware. Native apps are installed through an application store (such as Google Play or the App Store). They are developed specifically for one platform, and can take full advantage of all the device features.

Source: [Nielsen Norman Group](#)

## 5. Improve communication skills with your development team

All teams speak different languages, and becoming fluent in them all is a highly coveted skill. However, the language that may be the toughest to learn—and the most important—is likely the one your development team speaks. Increasing your ability to understand technical challenges will make suggesting educated trade-offs with your team as you build your mobile product easier and less frustrating for all parties.

Learn how they communicate by sitting in on meetings, attending their standups, asking for insight into ongoing projects they're working on, etc. The more you can learn about the language they use and the way they communicate with one another, the more friction you can take out of your requests once you start working with them on building your mobile product.

## 6. Learn how to build an app (yes, from scratch)

Sound crazy? You've got this! Not only will this exercise help broaden your coding skills, it will also help you understand your development team and process at a deeper level.

The more confident you are in your technical skills, the more trust your development team can put in your hands when it comes to assessing scope of work, solving challenges, ordering bug lists, etc. Plus, building an app from scratch can be tons of fun.

Check out these tutorials to help you start:

- [Start Developing iOS Apps](#) (Apple)
- [Building Your First Android App](#) (Google)
- [A Step-By-Step Guide to Building Your First Mobile App](#) (Entrepreneur)
- [The 2-Day Weekend Project Plan: Make Your Ideas Thrive](#) (LearnAppMaking.com)

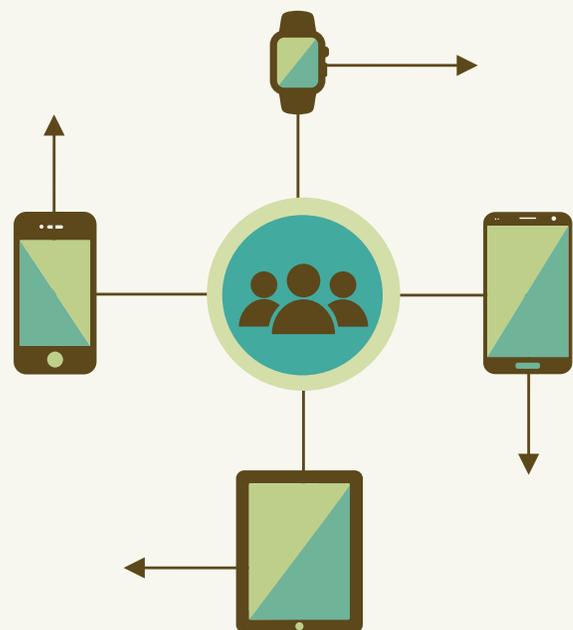
## 7. Find a mentor

Finding a mentor in the mobile PM space is a great way to learn from others' mistakes, and to get unbiased advice on challenges within your own mobile product. Getting an outside opinion may be just what you need to get you over a challenging product hurdle, or to get you thinking about how to solve an issue in a new way.

However, we know finding a mentor isn't always easy. We recommend checking out this [quick guide to finding a mentor](#) by Apptentive's own Emily Carrion for actionable tips on how to leverage your existing community, no matter the size, to connect with potential mentors right away.

## 8. Become a mobile usability expert

Customer expectations shift dramatically depending on device. Whether you help your team build for iOS, Android, tablet, wearable, or all of the above, having a deep understanding of how to use specific mobile devices will keep you a step ahead. People have different expectations depending on what device they use to engage with your product, and knowing how to “design for mobile” in a broad way is no longer enough. The more you know about customer usability expectations, the quicker you can make data-driven product decisions.



## 9. Change your mindset to mobile-first

To take on the world of mobile product management and build world-class app and mobile experiences, the only way to think is mobile-first (more specifically, you could go one step further and start thinking “screen-first” or “platform-first,” depending on your needs).

As mobile continues eating the web, many companies are beginning to take on the “mobile-first” mindset as their standard for designing new products and features. Is your company mobile-first? If yes, you should already be thinking this way (but there’s always room for improvement!). If not, be the change you wish to see across your company.

## 10. Continued education through reading, conferences, and courses

Taking in knowledge and news in your industry will help you pick up on tech trends and forecast changes in your industry to help shape your product roadmap. There are a ton of mobile product-focused blogs, conferences, and courses you can attend to help you brush up your skills and network with peers. We cover many of them deeply in the [Tools and Resources](#) chapter of this guide, and recommend starting there for a comprehensive list of places to start.



# Conclusion

Mobile product management is a complex job, no matter the industry. Between juggling people and task management, keeping product progress on track, being an advocate for customers, and everything in between, mobile PMs are pulled in a million directions at once—but there are myriad ways to cope with the chaos and come out on the other side with a beautiful, well-managed product.

We hope the topics covered in this guide help you level up your mobile product management skills, and that you're able to take away an actionable new skill (or a few!) you can implement into your strategy immediately.

At Apptentive, building great mobile customer engagement software that helps make mobile PMs' lives easier is our core competency. We've dedicated the last five years to helping some of the world's best brands listen to, engage with, and retain their mobile customers. And we'll work with you to understand your goals, come up with personalized strategies to drive you ahead of your competition, and boost your customers' happiness.

If you're looking for the art and the science behind customer engagement management, [set up a demo of our product today](#). We'll do the heavy lifting—letting you focus on what really matters to your product and business.

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## About Apptentive

Apptentive's mobile customer engagement software helps companies listen to, engage with, and retain their customers. The product gives brands the opportunity to identify who to talk to, intelligently engage user segments, and mobilize customers to take action through in-app messages, surveys, and ratings prompts. Integrated into thousands of mobile apps, Apptentive helps companies engage mobile customers, boost app ratings, drive downloads, and earn customer loyalty.

 **Apptentive**

*Build Loyalty, Spread the Love*