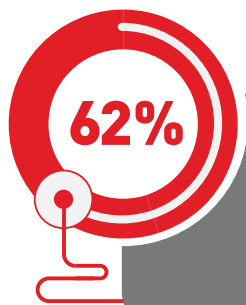


Building Better Applications with Software Analytics, Part 2

Few roles are as vital as the Product Manager (PM) in bringing a software product to market that will drive your company forward. Sure, many others contribute their skill, expertise and time, but the PM owns the definitive answer on key product questions that define the product strategy.

The Product Manager's vision and passion will carry the team throughout the long process to launch, but what's guiding the PM as he or she tackles strategic and operational challenges? Will the product meet customers' needs? Can you deliver it more quickly? What is driving feature prioritization? How will new technologies affect development? The answers will come through truly understanding your customers and their needs. You must align the product roadmap with the customer journey.



Will Customers Buy this Product?

62% of Product Managers at enterprise software firms say their biggest challenge is validating whether the market needs what they're building¹.



PM CHALLENGE

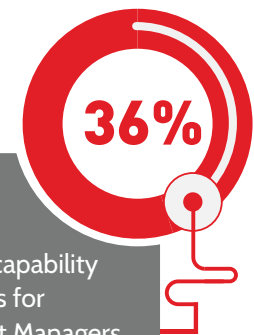
"How do I make customer satisfaction integral to our product development process?"



Customer Needs, Customer Obsession

A customer-obsessed process is essential to increased acquisition, as well as stronger adoption and retention. And, it forces refinements that support user satisfaction. But it's incredibly difficult to become customer focused without visibility into customer behavior.

Lack of data-driven insight can make it impossible to anticipate shifting customer needs. On top of that, competitive pressure means that your customers can be someone else's tomorrow. So how do you recognize the real needs and build the product they'll love? You must become customer obsessed.



Flying Blind

There's a lack of data at both the organizational and capability level. Only 36% of companies have a reliable process for understanding their customer², while 33% of Product Managers say they are not collecting any customer insight data³.

The Pitfall of Incomplete Data Collection

You may be gathering customer feedback as part of your workflow, but are you gathering enough of the “right” data? Is it both quantitative and qualitative? Is your collection method automated or manual? Is your sample size sufficient to draw valid conclusions?

Relying on an incomplete data collection and analysis process could waste valuable time, without even providing the insights needed to help prioritize customer requirements.

Even the most innovative Product Managers have often had to rely on inefficient, anecdotal data sources such as:

- Download logs and call-home statistics
- Sales channel and support staff feedback
- CRM and marketing automation systems
- Web analytics
- Customer surveys that don't ask the right questions

Product Managers need a process for identifying and understanding customer needs and systematically incorporating that insight into their product development.

Many organizations are unable to prioritize customer needs simply because they lack a systematic approach to capturing user data. They struggle to understand key insights, including:

- Will the product be valuable to customers?
- Which features are priorities to them?
- Are customers able to adapt to platform technology changes?
- Do all my customers have the same requirements?



Follow the Data

“Growth always requires data beyond those furnished by the accounting system—data on what goes on outside the business and especially data on what goes on in the marketplace⁴.”

Peter Drucker, The Changing World of the Executive



Bringing Analytics into Your Development Process

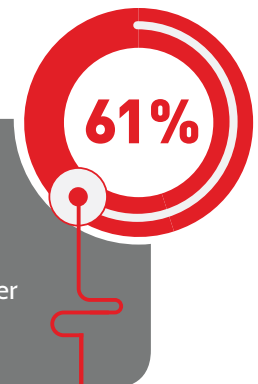
For companies that use a customer-focused approach to product development, software usage analytics provides real-time, detailed metrics to help identify and implement improvement opportunities.

Unlike web analytics or anecdotal information from sales and support calls, software analytics is actionable insight into who's using your software, what features they're using, and their behavior patterns when using them. By incorporating analytics throughout your development process, you can avoid:

- Sacrificing strategic vision for a set of features that suits only a few customers
- Veering from long-term strategy
- Accumulating technical debt through poor prioritization
- Prioritizing internal requirements over customer needs

Proof Point

Business leaders want to be more data-driven: 61% “acknowledge their companies could rely on data analysis more and intuition less... [and] don't consider their own organizations to be highly data-driven⁵.”



The Answers PMs Rely On, The Focus Developers Need

As software vendors become more data-driven across their organization, the PMs do too. You need accurate data to support your decisions, request adequate resources and direct development teams to success. Software analytics empowers you to:

- Analyze user flow to know what customers do immediately after download
- See which features are used most, filtered by geography, hardware, version, etc
- Communicate directly with specific users via in-app messaging

This insight allows you to know, not guess, what really matters to users, helping you prioritize your feature backlog and development roadmap.

Software analytics can deliver a wide range of data, with variable levels of specificity, helping development teams:

- Optimize workflows to improve UX
- Prioritize development while meeting customer requirements
- Quickly see trends and understand user behavior
- Understand adoption of new functionality

By streamlining the development process and ensuring a more valuable product for customers, software analytics can bring significant gains to software vendors of all sizes, including on-premise, distributed software providers.



PM CHALLENGE

"I have good product management frameworks in my toolkit, but can't make use of them without data."

GETTING STARTED: Software Usage Analytics



PM CHALLENGE

"I could be a lot better at my job if I had better customer insight, clear user data, agreement on priorities, precise definitions and a magic wand."

Actionable Data for All

Software usage analytics tools play an increasingly vital role for every member of a customer-obsessed organization, whether they're aware of it or not. It's often up to the Product Manager to demonstrate the value of bringing analytics into the development process. Fortunately, a good analytics tool can quickly provide actionable data to hands-on teams, and visualizations and reports to marketing and executive decision makers.

Let's look at how you can bring software usage analytics and a razor-sharp focus on customer needs into your software development process.

Start with Facts, Gain Internal Alignment

While anecdotes can distort the development of a must-have product, systematic data won't. Being able to collect reliable data in real time allows you to create actionable specifications that reflect user and marketplace realities. Every correct decision made at this early stage, for instance, on important OS needs and conditions, features, and architecture requirements, pays dividends down the line.

Moreover, a software product development process that leverages user behavior to validate and gain buy-in to the roadmap puts your entire team on the same page. Now you are more likely to achieve your goals, reprioritize more efficiently when required, launch on time and budget, and enjoy the rewards of having work built on a solid foundation to meet customer needs.

To illustrate real-world benefits of software analytics, consider trying to set pricing strategy based on product usage. Functionality (like feature usage tracking and user engagement reporting) helps product teams determine if a product is used consistently over long periods of time, or for short durations during specific projects. These insights can inform pricing and licensing strategies and whether pay-per-use pricing, tiered subscriptions, or other models will work best.

But without knowing how your software is being used and when key features provide optimal value to the user, it's easy to make a costly mistake when introducing a new model.



Data Validates Decision-Making

"If we have data, let's look at data. If all we have are opinions, let's go with mine."

Jim Barksdale, former Netscape CEO



Preserve the Product Vision

No one ever said that being the champion of the user would be easy. In fact, customer obsession may at times put a Product Manager at odds with organizational objectives and other internal challenges.

However, software analytics can keep product design heading in a direction that satisfies both customer needs and strategic goals. Since the roadmap is focused on user needs, it's easier to keep teams of developers, designers and QA engineers "bought in." By prioritizing goals and backlog management through feature usage metrics, teams can set their sights on unified big picture wins, rather than pursuing many small visions of what the product will be.

At this stage, there's no question that you should be incorporating customer feedback on current features, while anticipating the value of new ones. Proactive measures like this are critical in ensuring long-term product relevancy. Software analytics satisfies the agile approach's need for empirical feedback, with a continuous, automated feedback loop. This avoids wasted resources, helping to build thoroughly tested software increments.



Re-do? Re-Don't.

Up to 50% is the amount of time software teams spend on avoidable rework⁶.

Speaking of wasted resources, every development team has likely faced the prospect of carrying over an old feature that didn't fit with the new product version, or made the UX clunky. If no one cares about the old feature, it's dead weight. But what if people do?

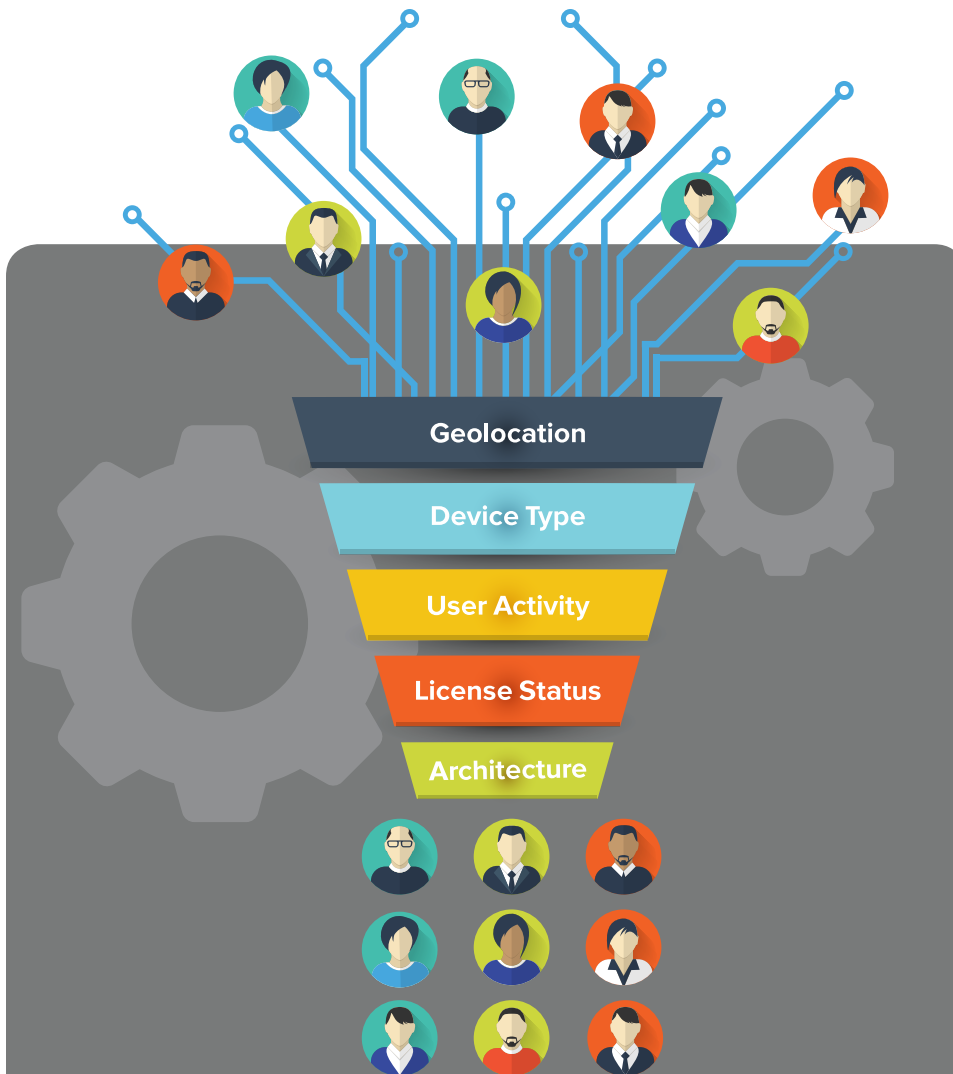
Incorporating software analytics allows useful A/B testing with feature usage and event tracking across separate builds. You'll quickly identify how users are finding and using key or "killer" features, and see the unique set of users who actively engage with any feature on a frequent basis – even the legacy features. If reports show that only a small number of active users are engaging with a feature or not finding it easily, you have data that can guide improvement efforts.

One benefit of software analytics that may get overlooked is the ability to streamline communication throughout the development process from pre-build to launch, with automated reporting that gets sent to everyone who needs it, or shared during stand ups.



PM CHALLENGE

"We have our ideal feature set, but what's the best way for users to 'discover' each piece as they use the product the first time?"



PM CHALLENGE

"I have tools that manage my testers, but none is delivering exactly what I need to know. And they're cumbersome to use."

Calibrating Releases for Real-World Success

Discovering and fixing defects quickly is an important element of a strong acceptance testing process, but short phases make it difficult to collect, analyze and share feedback with enough time to incorporate them. Software analytics can support rapid and flexible development through exception tracking with auto-distributed reporting to prioritize repairs.

Another benefit of tremendous value is the ability to profile users to understand how they're using the product and if they are struggling with a feature. This insight helps create a feedback loop where you can better understand positive and negative responses, pinpointing the customer behavior that led to the user experience issues or broken flow. This loop is key to continually fine-tuning your release, responding in meaningful ways with fixes that address user expectations.

With analytics tools that feature in-app messaging, you can survey users in the moment to gain clarity on the validity of the developed features, the usefulness of those features as implemented, as well as any missing elements that were not delivered as expected.

These tools make your beta process more efficient by shortening the feedback loop and providing specific insights to inform the next revision with needed improvements.

Delivering Software That Attracts Users

Now that your product is ready for release, the goal is the smoothest release possible from product positioning to release availability to customer impact.

Creating compelling product positioning is critical to drawing in potential buyers. Knowing how features are used, and the benefits your customers derive from them can inform data-driven go-to-market strategy and messaging. Not knowing - and getting the messaging wrong - can, at best, lead to sub-optimal marketing strategy and, at worst, lead to a significant impact on your business and potential competitive disadvantage. Software analytics bridges the Product Manager and marketing functions that often lead strategic and execution decisions.

For many companies that leverage free trial and freemium offerings, it's essential to glean data-driven answers into how trial customers will use your software and how to get them to convert to the full version. Software analytics can provide usage reports that detail user behavior in the first critical week, day, or even hour, after downloading the product trial. You can identify patterns for those who don't convert to paying customers or adopt your premium edition, or those who abandon the product entirely.



“When you’re trying to make an important decision, and you’re sort of divided on the issue, ask yourself: If the customer were here, what would she say?”

Dharmesh Shah, Co-founder, Chief Technology Officer, Hubspot



You can even quickly discover behavioral patterns among users based on their OS or machine architecture, region or language, and usage profile. Or, you may just see that real-world users are having a difficult time with some setup, configuration and UI flow, or particular feature usage. Now you have actionable data to make improvements.

Another possibility is that you might learn that users love the trial version because it does everything they need it to do for a specific project, but they're not buying it or they're making do with the freemium version. With user-behavior insight, you'll know what people are doing with their work product and whether they're exporting it out of your software application. In this case, you could use techniques such as adding a watermark to the exported data, encouraging users to purchase the full version.

\$52.2B

A New Revenue Stream

Compliance intelligence represents one of the least tapped revenue streams for software providers. Software usage analytics provides compliance data to verify who is using your software, where and how they are using it – and if they are licensed to use it. This intelligence enables you to act on unlicensed use to generate revenue and safeguard your intellectual property.

\$52.2B Commercial value of unlicensed software worldwide⁸.

Increasing Long-term Customer Value

One doesn't have to look too hard to find compelling statistics demonstrating the higher cost of acquiring new customers than retaining them. To increase user satisfaction, it's key to understand if they are adopting key features, using legacy versions, or are heavy users interested in providing feedback. This understanding, enables PMs to impact customer satisfaction and helps preserve the overall health of a product.

Maintaining multiple product versions can be expensive and resource intensive. But how do you validate which version yields the best ROI? Which features need to be continually refreshed? Or when a feature should be deprecated or a version sun-setted?

By collecting product metrics and building software usage analysis into your process you'll be able to make informed decisions by knowing, for example, who is using new features and versions and how many are still using legacy functions. These insights also help eliminate the uncertainty over whether longstanding customers are quietly using older product versions.



MAINTAIN, RETAIN & UPGRADE

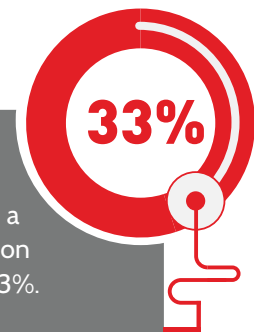


You wouldn't want to end support for a product that is being used by many customers, but moving them to a new version can save valuable maintenance resources. Having detailed data on customers usage helps create targeted information messages or upgrade offers focused on new features and capabilities. And when distributed via in-application messaging, you have virtually guaranteed open rates that ensure your messages are front and center when users are engaged with your software. In-app messaging and surveys within the product also allow you to collect specific feedback from highly targeted users.

By incorporating these approaches, you've found ways to focus your budget and resources more wisely, while creating a more streamlined, user-centric product lineup. This customer obsession increases satisfaction and retention.

Onward, Upward & Upgrade

Leveraging usage profiling and in-app messaging, a Revulytics customer increased customer conversion to premium maintenance package from 13% to 33%.



Getting Started with Software Usage Analytics:

Customer-Obsessed Products Create Customers Who are Obsessed with Your Product

All of us own products we absolutely love, and as varied as that list can be, they share at least one similarity: the intention of the team behind them was to build a product that addresses the customer problem, in the way the users want it done. Simple to understand, but hard to pull off.

Customer obsession begins with understanding user behavior as a guiding principle of product and business decisions. Focus groups don't uncover the details you need. Sales team feedback won't take a software product from good to great. You need a continuous stream of data and analytics of how people are really using your product throughout their work day.

Lastly, remember that no matter what your development methodology is, successful software requires improved functionality and stability with every release. The product lifecycle is a never-ending loop with the potential to delight users. Building software usage analytics into that process and getting actionable insight is the fuel that makes the most of that potential.





Give Software Usage Analytics a Try Today — Risk Free!

Are you ready to implement data-driven insights into
your product development?

Visit <https://www.revulytics.com/register> to register for a free account and download the Usage Intelligence SDK with no commitment.

In as little as 30 minutes, you'll be able to start tracking installations, user activity, feature usage metrics and conversion/churn trends; sending in-app messages; and collecting user feedback to support data-driven product decisions.

About *Take a Customer-Centric Approach to Product Management*

We hope that you've found Part 2 of our *Building Better Applications with Software Analytics* series valuable. *Take a Customer-Centric Approach to Product Management* is intended to provide actionable information that Product Managers (or anyone in a software vendor organization tasked with meeting customer needs and delivering revenue-generating products) can use to determine how best to bring real-time, customer usage data into their product development process.

If you missed Part 1 in the series, we invite you to read *Take the Guesswork Out of Product Management, Building Better Applications with Software Analytics, Part 1*. This ebook provides an introduction to software usage analytics and how software vendors, particularly of desktop, distributed software, have used product usage data to answer familiar questions on:

- Converting trial users to paying customers
- Measuring the impact of UI changes
- Making feature deprecation and product sunseting decisions
- Prioritizing product feature development

You can find the eBook at www.revulytics.com/take-the-guesswork-out-of-product-management-e-book



Revulytics Usage Intelligence: Better Software Begins with Better Data

Revulytics Usage Intelligence provides valuable insight into product runtime and customer usage patterns to help you make data-driven decisions that drive user engagement and accelerate adoption. This powerful solution helps you understand user activity and conversions after your product is downloaded by gathering intelligence on what platforms and architectures the software is running, which product features are used or ignored, and how usage and churn trends vary by user segment.

Usage Intelligence does more than just collect data and map raw statistics onto colorful graphs. Our advanced analytics engine provides valuable business intelligence via real-time interactive visualizations – with the ability to drill-down into reports that answer specific product questions. With actionable insights at your fingertips, you're empowered to shape your product strategy, roadmaps, packaging, and pricing models based on real-world facts about your software. Usage Intelligence integrates into your application development process quickly and easily for rapid ROI.

Endnotes

1. <https://www.mindtheproduct.com/2016/10/the-biggest-challengefor-product-managers>
2. Sirius Decisions. *Understanding Customer Needs: What You're Doing Wrong and How To Fix It*. ProductCamp Boston 2017
3. Revulytics. *The Science of Software: Developing Data-Driven Product Roadmaps*. Webinar Survey
4. Peter Drucker. *The Changing World of the Executive*. Harvard Business Press, 2010.
5. PwC. Global Data and Analytics Survey 2016, Big Decisions™
6. <http://spectrum.ieee.org/computing/software/why-software-fails>
7. <https://www.linkedin.com/pulse/20130703152147-658789-yourcustomers-are-not-ignorant-selfish-control-freaks>
8. BSA/The Software Alliance. *BSA Global Software Survey*. May 2016.