When Dashboards Aren't Enough

How Advanced Analysis Can Lower Churn, Increase Revenue, and Drive Growth

Philosophy **Benn Stancil**

Author **Laura Dambrosio**

Edited by **Jessica Schimm**

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01 Dashboards no longer give you a competitive edge

When your competitors are looking at the same type of dashboards, how can you come out on top?

When a new era of business intelligence (BI) took off in the mid 2010s, dashboards gave companies an advantage over those that couldn't access snapshots of their business-critical metrics. Now that dashboards have become table stakes (and sometimes security blankets), companies need new ways to explore their data and take swift action.

We put this guide together to show you how to do just that. We'll cover:

- How moving beyond dashboards can uncover new growth opportunities
- Tactics for deeper analysis based on churn, product, and pipeline data
- What type of solutions inspire faster, more collaborative analytics workflows
- How top companies use Mode to accomplish these goals

While dashboards are still important to inform "business as usual," the real value is in deeper and faster exploratory analysis that drives business improvements. In order to extract more value from your data and have significant impact on company-wide outcomes, you'll need to invest in technology and processes that eliminate the biggest bottlenecks facing analysts today.

02

The advantage lies in finding meaningful answers faster

You need more than dashboards to take swift action. The best companies invest in tools for advanced analysis and collaborative workflows.

Dashboards are just the tip of the iceberg—when they indicate something interesting, it's up to your team to further investigate the cause.

How you react to a spike in churn, a slide in revenue, or waning product usage is what sets you apart from competitors in your space.

The companies that get the most out of their investments in data and analytics often have several capabilities in common:

- **A few key dashboards** that each team uses as a high-level and view of performance, keeping everyone aligned on the company's top goals.
- **A modern, integrated analytics stack** that connects data warehouses, data loaders, event tracking tools, and business applications.
- **Collaborative, high-performance tools** that allow analysts to quickly share insights and reports with other team members.
- **Workflows that bring together** data experts and business stakeholders, allowing everyone to make informed business decisions.

The most successful organizations make strategic investments in tools that help them run deep analysis on trends and outliers found in dashboards. By following their lead you'll learn new secrets about your business and your market that competitors are too slow to discover.

03

Investing in advanced analysis yields impressive results

Learn how Mode customers generate growth and keep customers happy by acting on data.

The best data teams share their analysis with business stakeholders to make measurable improvements to company operations, customer and prospect communication, and product development.

Predict and lower churn

Analyze user activity patterns that lead to churn and use them to understand the best way to communicate with customers.

Read more

Capture more revenue

Get more value from customers by testing pricing, offering the right features, and finding your most lucrative segments.

Read more

Bring in new business

Find out which prospects are most likely to convert and use sales and support data to attract more of them.

Read more

Lower churn by analyzing retention

Most companies have at least one dashboard that shows user retention. Charts like the one below are great at telling you when customers churn and how it's changing over time, but not *why* customers churn.

That's where the deeper analysis comes in—you can see if a dropoff in usage is actually an indicator of churn, break down churn metrics in greater detail, then use the findings to lower overall churn or stop a sudden decline from hurting your business.

User retention by Signup date

Signup Date	New Users	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Jul 1, 2018	634	29%	22%	19%	16%	14%	13%	10%	9%	9%	8%	9%	9%	9%	8%	7%	7%	6%	6%	6%	4%
Aug 1, 2018	715	28%	23%	18%	16%	15%	12%	12%	11%	10%	9%	8%	9%	8%	6%	8%	7%	7%	7%	4%	
Sep 1, 2018	785	27%	22%	17%	13%	11%	11%	9%	8%	9%	9%	8%	8%	7%	7%	6%	4%	6%	4%		
Oct 1, 2018	814	26%	21%	18%	16%	13%	12%	11%	12%	10%	9%	9%	9%	6%	8%	6%	6%	4%			
Nov 1, 2018	971	26%	21%	16%	13%	12%	11%	11%	9%	9%	8%	8%	9%	7%	7%	7%	5%				
Dec 1, 2018	1,002	25%	19%	16%	14%	13%	11%	11%	11%	9%	9%	9%	7%	6%	7%	5%					
Jan 1, 2019	1,136	26%	21%	18%	13%	13%	13%	12%	11%	10%	9%	11%	9%	8%	5%						
Feb 1, 2019	1,288	27%	20%	17%	16%	13%	12%	10%	9%	10%	9%	9%	8%	6%							
Mar 1, 2019	1,413	25%	20%	17%	15%	13%	11%	10%	10%	10%	9%	8%	6%								
Apr 1, 2019	1,557	26%	21%	17%	15%	13%	12%	12%	10%	10%	8%	6%									
May 1, 2019	1,534	27%	19%	16%	14%	12%	11%	10%	9%	9%	7%										
Jun 1, 2019	2,016	26%	22%	17%	14%	13%	12%	10%	10%	6%											
Jul 1, 2019	1,945	26%	20%	17%	12%	12%	11%	8%	7%												
Aug 1, 2019	2,372	25%	19%	16%	12%	11%	10%	7%													
Sep 1, 2019	2,518	26%	20%	16%	12%	10%	6%														
Oct 1, 2019	2,713	25%	18%	14%	11%	7%															
Nov 1, 2019	3,098	24%	18%	14%	8%																
Dec 1, 2019	3,352	25%	17%	10%																	
Jan 1, 2020	3,679	26%	13%																		
Feb 1, 2020	4,165	18%																			

Find out if churn is really a problem

Dashboards alone won't reveal whether a dropoff in user activity is truly a churn indicator—you'll have to dig in and find out if inactive users are likely to return. For example, usage patterns vary greatly among different product lines and use cases.

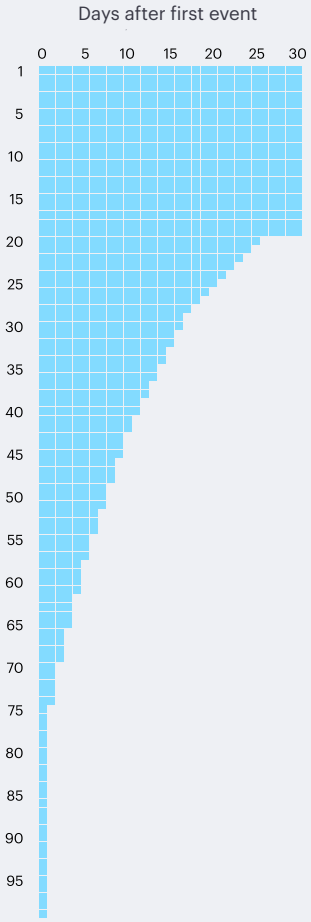
Users of habit-forming products like a fitness tracker might have daily activity followed by a quick drop-off, while apps that have more irregular usage like cyclical ecommerce apps or tax software might see periods of inactivity followed by a spike in usage.

The charts below show the hypothetical daily usage patterns of 100 users. The overall retention rates are identical, but users' behaviors are clearly different.

Retention rate charts like this can hide which patterns your users follow and have the potential to mislead a re-engagement strategy.

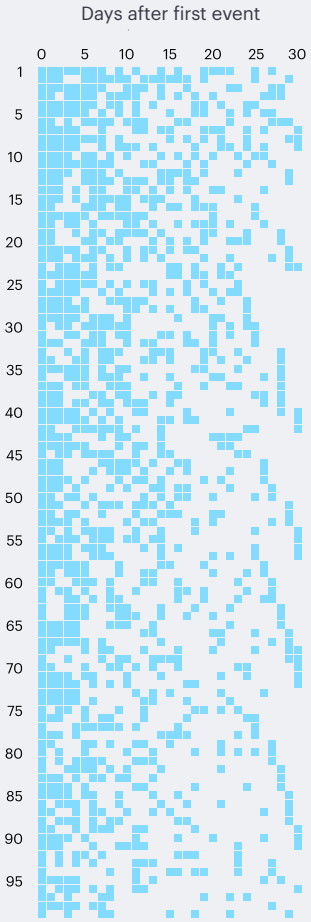
Scenario 1:

Users are checking their fitness stats every day and later dropping off completely. To lure them back, you might send a series of support emails and special offers.



Scenario 2:

Usage is sporadic, with people shopping in bursts but not every day. Since a pause in activity isn't always churn, sending them gift guides and promoting sales might be a better approach.



To figure out which users are actually churning and address the root causes, analysts have to better understand the dashboard dropoff they're seeing.

Analysts should drill down into churn data to find out which usage pattern their product follows. They can do this in a few ways:

- **To see if users are churning or just temporarily inactive,** compare usage to the previous period. If you find that a significant number of users are returning after a period of inactivity, it's likely you're dealing with Scenario #2.

- **To know when to reach out to inactive customers,** calculate the average time between active periods. If users tend to take short breaks or not miss days at all, it's important to reach out quickly when you see anything over the average.

- **To re-engage customers who come back after a long absence,** drill down into individual usage patterns. You'll be able to identify which users are only back briefly and try to recapture them with a last-ditch offer.

Deconstructing user retention rates this way shows us that while periods of inactivity may indicate churn, others simply illustrate user patterns for different product types or use cases. The deeper analysis you do the more you can tailor product development and marketing efforts to retain customers at a higher rate.

Move quickly when you see churn indicators

Dashboards are probably the first place you'll see fluctuations in usage patterns, customer interactions, or other behaviors that serve as a leading indicator of declining interest. When something warrants further investigation, moving fast can stop a major disaster from unfolding. In the most extreme cases (like this 2018 Amazon outage on Prime Day), interruptions to user activity can cost millions a minute.

The best tools for this type of rapid response let analysts work directly with data using whichever tools and languages they're most comfortable with. With Mode, for example, our customers can use their preferred coding languages (like Python + R) and share analysis with colleagues on a single platform.

Once you know what's causing downtick in user activity, you can launch a recapture campaign or start fixing the issue that's leading to churn.

A popular app finds a costly bug with Mode

The product team at a well-known consumer app suddenly saw a drastic dip in activity on one of their dashboards. It was a no-brainer to investigate—user activity at this company often translates to immediate revenue, so dismissing it as chance wasn't an option. After reviewing their dashboards and failing to find a cause for this potential churn, they began dug deeper by quickly pulling raw data from their database with Mode. This uncovered the truth: a bug was causing users to rapidly drop off. Being able to access raw data without modeling it first helped them resolve the issue and was the difference of losing revenue for hours instead of days.

Start building powerful predictive models to improve retention

Beyond finding the source of churn and moving fast on a correction course, data teams can start to predict it using machine learning models. If you have access to historical data outside of what's in your dashboards, (which you should be able to query via a connection to your data warehouse—here's how to do this in Mode), analysts can use libraries like scikit-learn or TensorFlow to start training churn models.

Start by talking to a wide stakeholder group, particularly product managers or customer success team leaders, to pick variables that are most likely to have an effect on churn. These might include:

- The type of plan purchased
- Devices and applications used
- Length of sales cycle
- Number of users on the team
- Support ticket volume and activity
- Gaps in usage during a given time period
- Acquisition channel

Machine learning models can identify which of these variables (or "features," in machine learning parlance) might predict churn.

As you find new variables to test, you can incorporate them into your model. While these models will never forecast churn perfectly, they can serve as useful tools for identifying churn-reducing opportunities for marketing, product development, and proactive support teams.

Predicting and reducing churn at Greenhouse

greenhouse

Greenhouse is an applicant tracking system that recruiting teams use to manage their job candidate pipelines. The company needed to know which customers were in danger of churning so account managers could reach out well before their contract renewal date came up. Analysts built a predictive model using Mode and shared it with the customer success team, giving them a chance to connect with customers and renew their relationship.

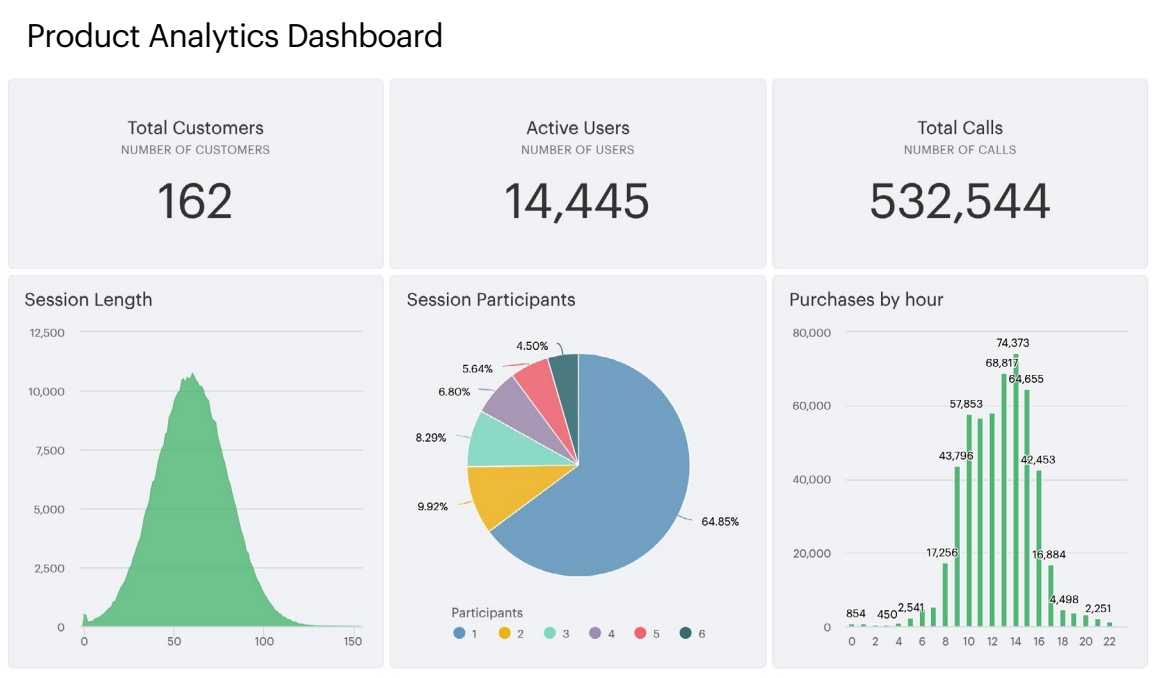
Instead of relying on reactive dashboards, the team used these predictive insights to take early action and save accounts that would otherwise churn.

Read the Greenhouse case study

Capture more revenue from current customers

Most companies use dashboards to track activity within their product, looking for trends that help them make improvements to the user experience. But fewer use this data to earn more revenue from their current customer base.

To learn what existing customers want and capitalize on expansion and upsell opportunities, run deeper analysis based on a typical product dashboard like the one below.



In this case, the company has chosen to track specific events that users can take. Once you find the most common events in your product, it's time to see if they can be used to increase revenue.

Understand your most valuable users

To focus on customers that can increase revenue the most, examine the usage patterns of your most valuable customers instead of looking at trends across your entire user base. For example, do your highest-paying customers tend to use a particular feature more than others or come from a specific acquisition channel or industry?

Though not necessarily causal, these correlations point to areas where you can experiment with new sales and marketing efforts.

Good Eggs connects with customers with forecasting analysis

Good Eggs uses Mode to improve operational efficiency, increase order accuracy, and better connect with customers. The company uses SQL-powered reports to create surprise-and-delight moments for customers based on their preferences. The Good Eggs team built a detailed data application in Mode that displays product inventory and forecasting to drive customer satisfaction.

Stakeholders see how order accuracy and delivery times affect the business, understand which improvements drive revenue, and find opportunities to delight customers. Instead of wondering why they missed a revenue target, they know where to make improvements.

Read the Good Eggs case study

Learn why freemium and trial customers upgrade

Non-paying customers can tell you a lot as well. By tracking free users' activity you can figure out which behaviors are most closely associated with eventually upgrading, then further explore to find out why.

You can also look for correlations between freemium activity and churn from your paid product to prevent your freemium product from cannibalizing users from your paid offering.

How Mode used advanced analysis to find new customers

When we launched Mode Studio we wanted to offer analysts the tools they needed to do their best work, even if they weren't able to pay. It was important to deliver a useful free product without losing paying customers.

After careful analysis of user behavior, we decided to provide a fully-functional freemium offering to analysts working alone, but require an upgrade when they wanted to bring on additional users.

This approach allowed us to serve a new audience while supporting our current customer base.

Read the story

Fine-tune your pricing

Pricing your product well is important, but dashboards aren't going to help you understand the complex interactions between price, adoption, and conversion.

To understand what users are willing to pay for and put features in the right pricing tier, try looking at which features different types of users adopt.

As you find patterns among those that upgrade, churn, or remain non-paying users in these tests, you can strike the perfect balance among acquisition, retention, and revenue goals.

DoorDash uses switchback testing to discover the right price

DOORDASH

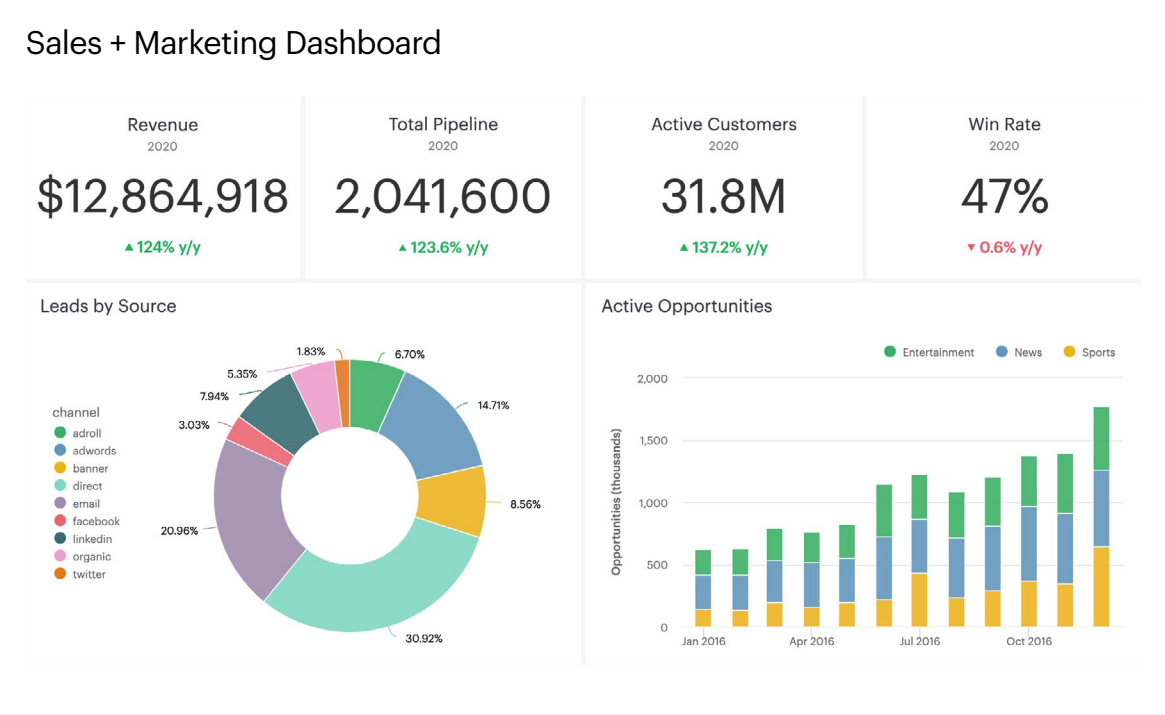
DoorDash wanted to test a new pricing algorithm that they hoped would lead to better distribution of demand. The plan was to test a form of surge pricing that would reduce delivery volumes during busy hours while incentivizing delivery drivers to pick up more orders. Because of the "network effect," a challenge that hinders A/B testing in marketplaces by making it harder to isolate variables, the company decided to run more complex experiments and analyze the results. This type of testing requires a great deal of customization, well beyond what a default A/B test dashboard can handle.

Read the story

Bring in new business by finding your best prospects

Sales and marketing teams are used to checking dashboards to understand the status of leads and prospects. While pipeline data helps you forecast and assess the sales team's performance, it doesn't shine light on how to win more new customers.

You'll need to dig deeper to find patterns and relationships among your most valuable prospects and find additional buyers who fit the profile. Here's a typical enterprise sales and marketing dashboard:



Predict which prospects are likely to buy

Analyzing sales pipeline data can help you target the prospects that are most likely to become customers. Using customer and company traits from your CRM, you can create profiles of your best customers and find new prospects that resemble them. Your sales team can use the results to focus their time and deprioritize poorly performing prospect segments.

DataHoliks uses predictive models to drive customer engagement

DataHoliks used Mode to do the advanced analysis they need to build predictive models for long-term customer engagement. The team ran and updated complex queries without tedious back-and-forth file sharing. Instead of exporting files or working on several devices, they relied on Mode to speed up and streamline their workflows.

With their newfound agility they were able to focus more on using their predictions to grow their business.

Read the story

Use customer service and user activity data to get new leads

Deeper analysis of customer interactions can help you better target new prospects. You can use data from your help desk solution to find out what customers want, including the most common issues they experience and how well they understand each feature your product offers. Then, build campaigns and focus sales conversations around the most relevant topics.

Product activity can also teach you about the needs of future customers. A media company, for example, might see a readership spike near the end of each month on one of their product dashboards. After diving in, they might realize users are coming from a competitor site once they've reached a free article limit there. In this case, the company could launch a highly targeted campaign to capture readers who visit that particular site.

Shopify digs into trends on customer questions

Shopify uses Mode to improve customer support, boosting metrics like customer ratings, interactions per day, and tickets successfully closed. By accessing data on customer questions, the entire team can see trends and build resources to solve the common issues they uncovered.

Once analysts were able to quickly build reports, the support team felt empowered to ask for more of the data they needed—this created a feedback loop that continuously improved customer interactions.

Read the story

04 Investing in data intelligence for future growth

When the traditional approach to business intelligence isn't enough, empowering your teams to do faster, deeper analysis lets you solve problems and improve growth metrics faster than companies relying solely on standard dashboards.

Advanced analysis gives data teams and their stakeholders a competitive edge.

The ability to deep dive into trends and outliers to find out the underlying cause lets you make decisions that boost revenue, lower churn, and expand your business.

Mode is designed to help companies do this kind transformative exploratory analysis:

- Query connected data sources using SQL Editor
- Visualize and manipulate millions of rows in seconds with our Helix data engine
- Run advanced analysis using Python and R in Notebooks
- Share reports and dashboards in hours, not weeks or months

Mode allows companies to work quickly and efficiently on analysis and grow twice as fast than those who don't.

To see how Mode can help you find your competitive advantage, get in touch with our sales team.

Contact us
Request a demo