RETAIL & E-COMMERCE
BENCHMARKS REPORT

INTRODUCTION

THE AGE OF DATA BEGINS

Amazon.com is still a good place to buy books online. Other than that, pretty much everything has changed in the world of e-commerce.

Direct-to-consumer brands have eviscerated slow-moving middlemen of the past. An entirely new sector—the two-sided marketplace, led by companies such as Uber and Airbnb—sprung up on the idea of taking a small cut of transactions between individuals rather than corporate entities. This shift injected liquidity into markets such as housing, transport, and other things you could try to get on Craigslist, but with an added layer of safety and credibility.

Online shopping has gone from clunky to seamless to mobile. A ride home and a pizza delivered to the same address can easily be ordered as a user switches from one app to another. (Throughout this report, we refer to these digital products—by which we mean apps, and websites that retailers use to sell—as products. Though it can be a touch confusing for an industry used to physical products, which we refer to as "goods" or something similar).

Smart companies have learned from their data. User behavior-informed targeting allows for more efficient ad spend as marginal advantages in the digital space become harder to find.

Retail & e-commerce is always going to be fundamentally about connecting customers with real-world goods and services. But learning from user and customer data in order to build the digital products that make those connections work better is going to separate the winners from the also-rans.

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Why did we make this report?

After releasing our inaugural Mixpanel Product Benchmarks Report, the question we got most often was: "This is great, but what about my industry?" This is the third in a series of industry-specific benchmarks reports that will try to answer that question, following up on our Media & Entertainment Benchmarks and Financial Services Benchmarks Reports.

Retail & e-commerce has long been an industry where the margin between success and going out of business can be razor-thin, with the right information making all the difference. So we aggregated over 20 billion user events from September 2017 through August 2018 to get a clear picture of user behavior in three key sub-verticals: lifestyle, grocery and food & beverage, and two-sided marketplaces. We consulted with experts and leading analysts in the field to track the metrics that matter most to product leaders in the retail & e-commerce space.

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Are people using my product?

Foot traffic has been a key metric as long as retailers have existed. The modern equivalent, product usage, tells the same story. It doesn't matter how fantastic a retailer's wares are if nobody is looking at them.

USAGE METHODOLOGY

Men lie, women lie, but daily active users (DAU) and monthly active users (MAU) do not. There are no ifs ands or buts about it; there is merely using a product and not using a product.

For our purposes, **we counted someone as a daily active user if they recorded an action of any kind in a product over the course of a given day.** That is not necessarily the way we would recommend doing it, but given the scope of this report, it was the most consistent metric we could track. (Part of working with data is understanding the limits of your dataset). If you can define "active" to only mean users who are performing certain key actions, that is preferable.

Monthly average daily active user (ADAU) growth is determined by taking the average of daily active users per day in a project over a month and then calculating how many more or less are there the next month. It's basic division and multiplication.

We also focus on "stickiness," or how active a product's user base is. This is calculated as average DAU over the course of a month divided by MAU for that month, expressed as a percentage. So, let's say your average DAU over the course of a month is 120, divided by its MAU, which is 2000. That would mean its DAU/MAU is 6%. Conversely, it implies that the average visitor is using the product 1.8 days out of a 30 day month (30*.06=1.8).

Across all metrics, percentiles are determined based on the distribution of products we analyzed. So the 90th percentile stickiness is the DAU/MAU of the product for whom that metric is greater than or equal to the DAU/MAU of 90% of all products in the set. You can think of the 90th percentile numbers as best-in-class, and the median, or 50th percentile, as middle-of-the-pack.

50%

42.7%

40%

30%

20%

10%

4%

0

Median   90th percentile
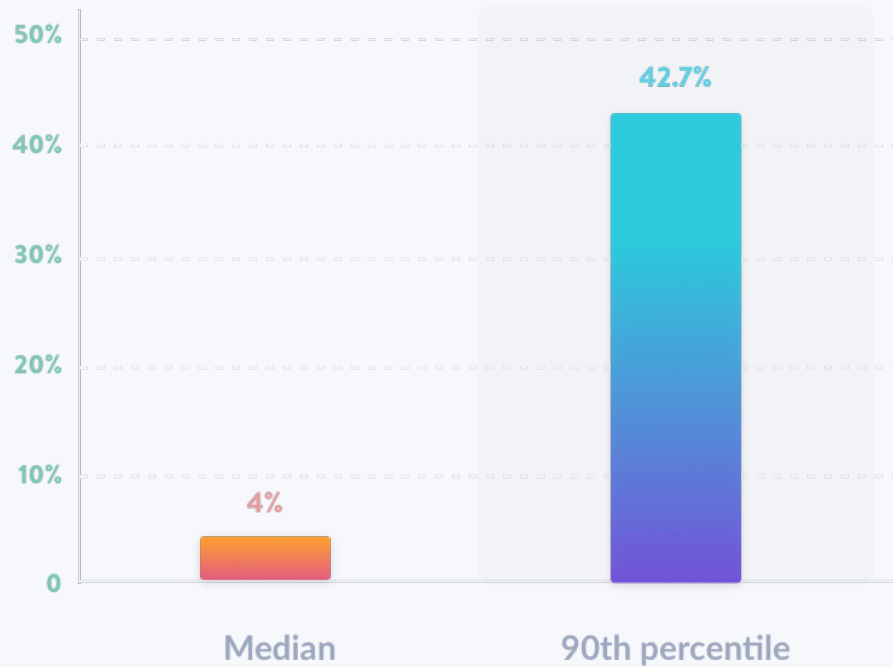
Mixpanel Behavioral Cohorts helps you group users together based on shared characteristics or activities, allowing you to better understand new users.

01 ——— MONTHLY ADAU GROWTH RATE

How should your growth look?

Average daily active user (ADAU) growth is the metric any product owner has to answer for at parties. (Boring parties where people are talking about ADAU growth, but technically parties all the same). Are there more people in your product this month than there were last month?
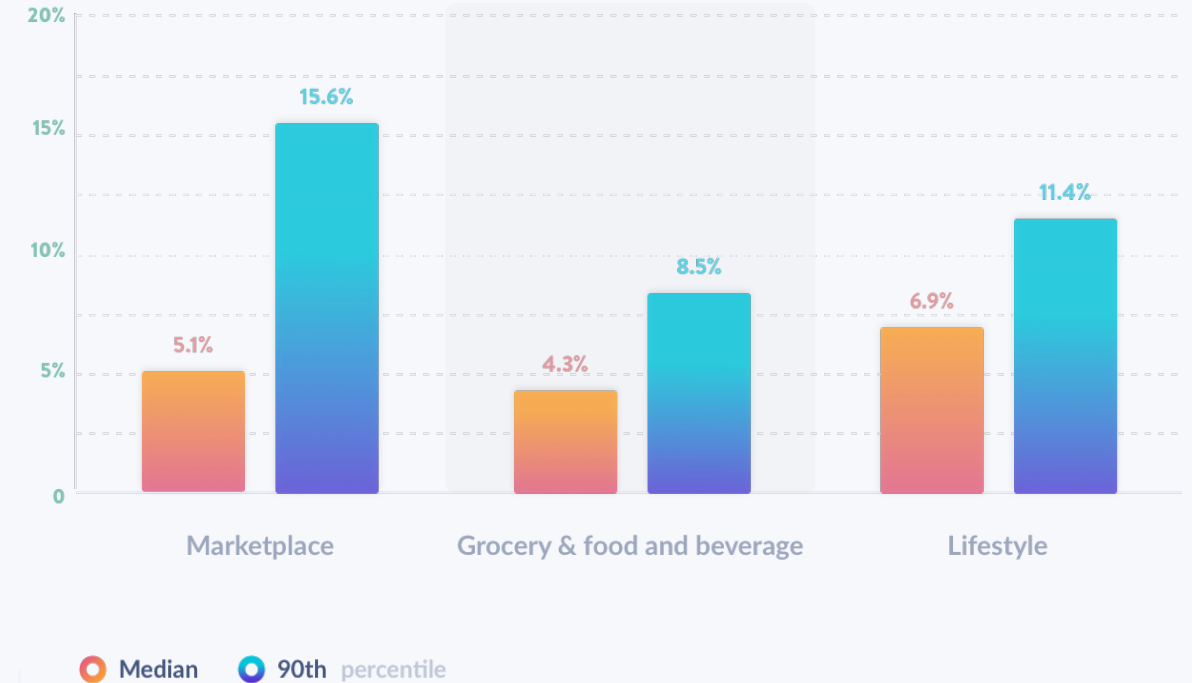
In general, yes, there are. That the median product is still growing at a 4% per month clip implies that the market for retail & e-commerce products is still forming and maturing. Maintaining that growth means a 54% increase in users after a year. 42.7% growth is not sustainable, but shows what elite early-stage companies should be targeting.

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02 ——— **DAU OVER MAU BY SUB-SECTOR**

How sticky is your product?

DAU divided by MAU, or "stickiness," tells us how frequently users return to a specific product. Across all sub-sectors at the median, 1-2 visits per 30-day month from users is average. At the higher end, elite two-sided marketplaces command the most loyalty, getting users to return 4-5 times a month.

At their best, marketplaces tend to be higher-frequency, lower-cost purchases, so getting more value out of individual users is an essential part of building a business. Network effects require active networks.

20%

15%

15.6%

11.4%

10%

8.5%

6.9%

5.1%

5%

4.3%

0

Marketplace   Grocery & food and beverage   Lifestyle

○ **Median**   ○ **90th** percentile

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What are these sectors?

For this report, we broke retail & e-commerce products into three sub-sectors. None of these definitions are perfect or wholly encompass everything in a given sub-sector, but they should give you an idea of our framework.

Marketplaces are any product that serves as a platform for buyers and sellers (or service providers), with the marketplace's business model generally involving taking a percentage of each purchase.

Grocery and food & beverage products are ones that bring food and drink to users. This one is pretty straightforward, but the main product categories are one-time meal deliveries and grocery orders, which can be either one-time or recurring.

Lifestyle encapsulates a wider range of products, but their shared characteristic is that they are physical goods being sold online. These products—from selling clothes or jewelry or books—are what people tend to think of when they think of e-commerce.

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04 ——— DAU OVER MAU BY PLATFORM

Which platform is stickiest?

Whenever we break down by platform, there needs to be a hearty "correlation is not causation" caveat. Users on a mobile app, by dint of having downloaded a given app, have effectively self-identified as the most dedicated segment of the three observed platforms.

All the same, mobile app stickiness is around double that of the other platforms, surpassing mobile and desktop web performance at the 90th percentile.

● Median   ● 90th percentile

09
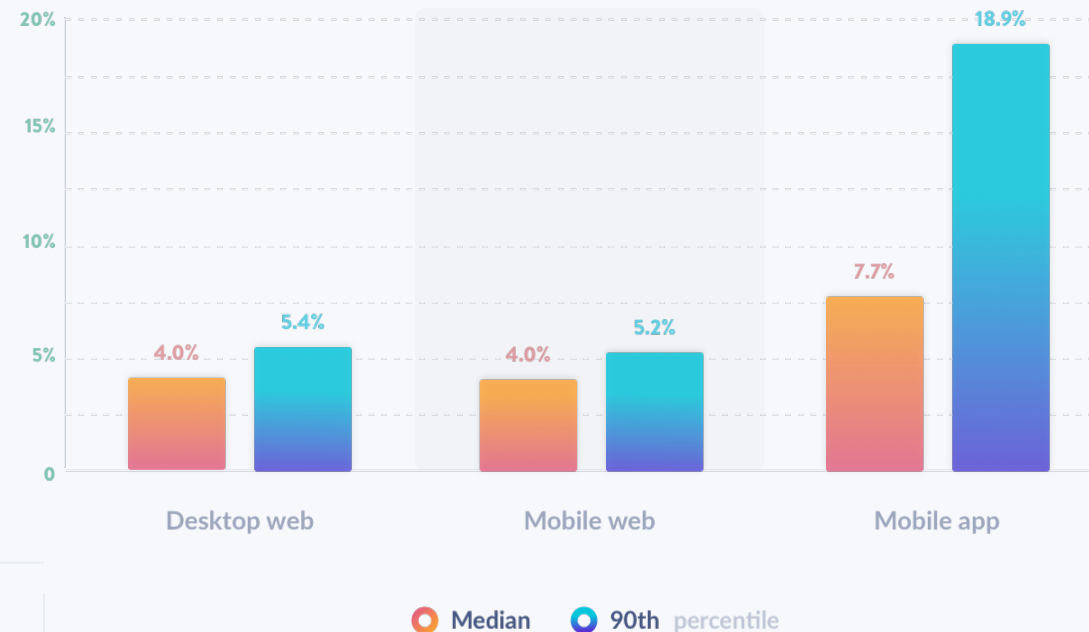
Are they coming back?

Retention is the metric for lovers. It's also the one that product owners take most personally. Anyone can bloat up their paid acquisition to grow usage, but retention answers quite clearly and in no uncertain terms the question anyone in a relationship has: **is this for real?**

RETENTION METHODOLOGY

Retention in this case means: **did a person perform a key action—specifically an event around a transaction such as adding an item to a cart, entering a promo code or completing a purchase—and then come back and perform another such action again?**

That means the initial sample is everyone who performed such an action on a given day. When calculating retention rates, the time windows matter. For a monthly retention graph, that means we start by measuring the number of users who show up in a month, and then we see how many of them come back over the following weeks. (Similar logic applies to daily and weekly retention graphs).

Say you visited a website on June 1st at 2pm. If you return once or more between July 1 at 2pm and July 30 at 2pm, you will be counted as being retained one month later in a monthly retention graph.

If a product's retention number in Month 2 is 27%, it means that out of every 100 users who appeared in the initial month-long measurement period, 27 returned at some point between two and three weeks from the time of initial visit.

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100% | 80% | 60% | 40% | 20% | 0%

0 | Month 1 | Month 2 | Month 3 | Month 4

○ **Marketplace**   ○ **Grocery and food & beverage**   ○ **Lifestyle**

—— *Mixpanel tracking allows you to zoom in on users who appear on more than one platform, and then take action to keep your most loyal users engaged.*

What does average retention look like?

Building a product that attracts people is nice, but building one that keeps them is nicer. In this case, retention measures users who performed a key action—either add to cart or purchase—and then did so again after a number of months, segmented by industry.

Grocery and food & beverage is strongest, retaining nearly over a quarter of users after a month and one in eight users after four months. For lifestyle and marketplace companies at the median, expectations should be a bit more measured.

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02 ——— 90TH PERCENTILE MONTHLY RETENTION BY INDUSTRY

What does elite retention look like?

For lifestyle brands, even the best of the best are only able to keep one-fifth of users after a month. This makes sense—purchases like sneakers and clothing are going to necessarily have longer timeframes. For some types of purchases in this sector, a longer retention window probably makes more sense.

Grocery and food & beverage and marketplaces show similar retention numbers at the elite level. Keeping one-third of users after one month represents an ambitious retention target in these sectors.

○ Marketplace ○ Grocery and food & beverage ○ Lifestyle

——— *Quick tip: pair retention and usage metrics. Keeping users is a lot easier if you're not growing. Data can only help you if you interpret it honestly.*

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03 ———— **A CLOSER LOOK**

From good to great

For marketplace products, 90th percentile products retain considerably better than average ones. What does that actually look like? After one month, for every user a median marketplace app retains, an elite one retains three. After four months, that multiple increases to 5X. It's not a stretch to say that all else equal, marketplaces with elite retention levels are able to get five times more from each person that comes into their product than ones with average retention.

5x

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What are they doing in my product?

If usage is the "who," and retention is the "when," engagement is the "what." What do they do? What do they like? What keeps their attention? What makes users happy?

With retail & e-commerce products, window shopping isn't the goal. Smart product managers track key user actions that correlate with desirable business outcomes, and figure out how to make sure the user journey follows the right path.

ENGAGEMENT METHODOLOGY

"Engagement" is a broad term that generally refers to how users behave within your product. What constitutes "good behavior" is, of course, very particular to each product and experience, so you should be suspicious of any blanket engagement metrics. That being said, understanding overall activity patterns can give a company an initial sense of what their user engagement looks like.

In this report, we look at normalized usage by day of the week. In this case, **engagement is performing an action. These graphs show, by percentage, how much above or below average a given day's total usage is relative to the entire week.** That way, product engagement numbers are being compared to their own averages rather than another (vastly different) company's average.

So if you see a bar at 15, it means that on that day, the product saw 115% of its average engagement, and if the bar is at -15, it means that on that day, the product only got 85% of its daily average. If you sum all the bars together, they'll add to zero (go ahead, we'll wait).
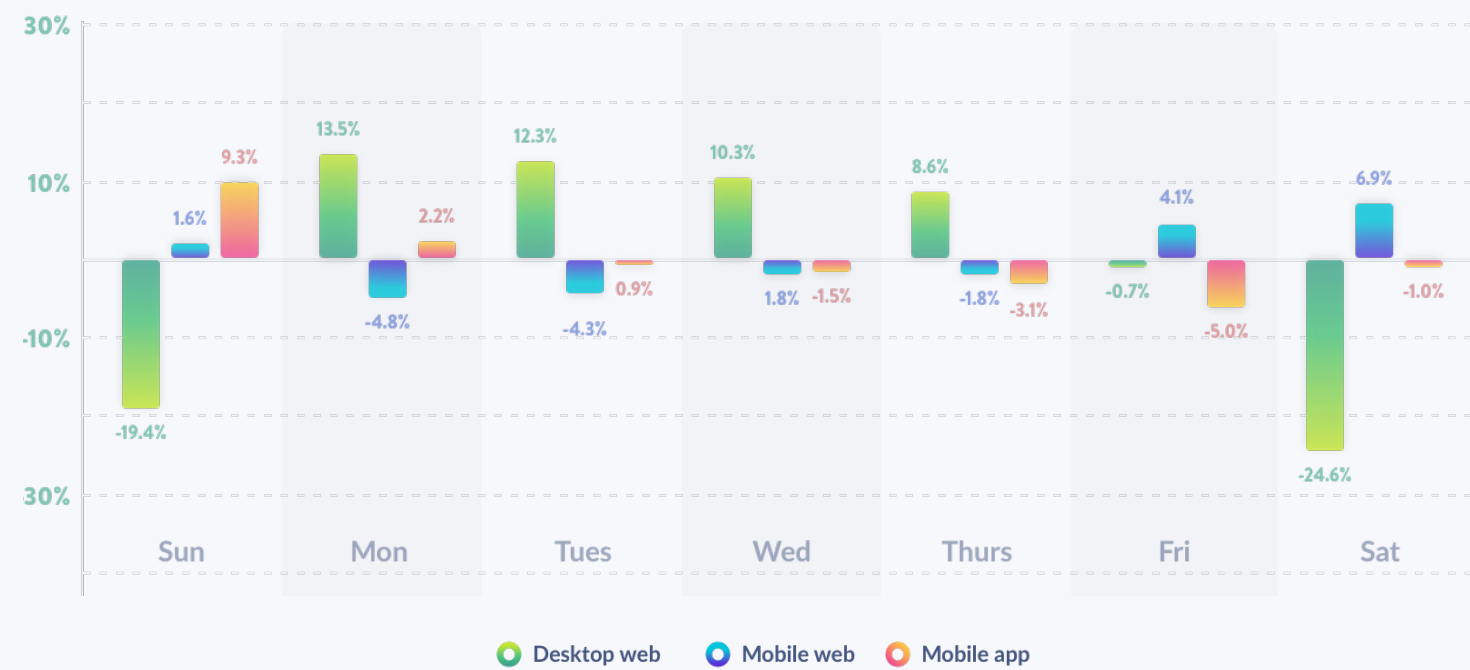
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How does engagement change by day of the week?

Shopping on the clock! Users are accessing retail & e-commerce websites through their computers an average of 11.2% more from Monday through Thursday than they are the rest of the week. The pattern is reversed with

mobile apps, a trend perhaps buoyed by marketplace services and late-night mobile food orders.

While this data is useful for giving a sense of user flows across platforms, each company should know its own data well enough to understand when user activity hits peaks and valleys, and react accordingly.

Chart: Activity by day of the week by platform

Day	Desktop web	Mobile web	Mobile app
Sun	-19.4%	1.6%	9.3%
Mon	13.5%	-4.8%	2.2%
Tues	12.3%	-4.3%	0.9%
Wed	10.3%	1.8%	-1.5%
Thurs	8.6%	-1.8%	-3.1%
Fri	-0.7%	4.1%	-5.0%
Sat	-24.6%	6.9%	-1.0%

Legend: ● Desktop web ● Mobile web ● Mobile app

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Is money moving?

Without decent conversion numbers, your pipeline isn't full; it's clogged. Conversion, like from moth to butterfly, or from mid-market sedan into Optimus Prime, is that ineffable change from becoming into being. In the less metaphorical sense, it's when a collection of goods and services becomes a business.

To get anyone to use your product, you have to be loud. To retain them, the product has to offer something compelling so they're knowingly returning to it. To engage them requires an ever-changing product. Conversion is the idea that they should pay you for the privilege.

CONVERSION METHODOLOGY

Conversion: every boss's favorite metric and every PM and marketer's most feared. After convincing folks to use your product regularly and engage with it, can you finally get them to pay you?
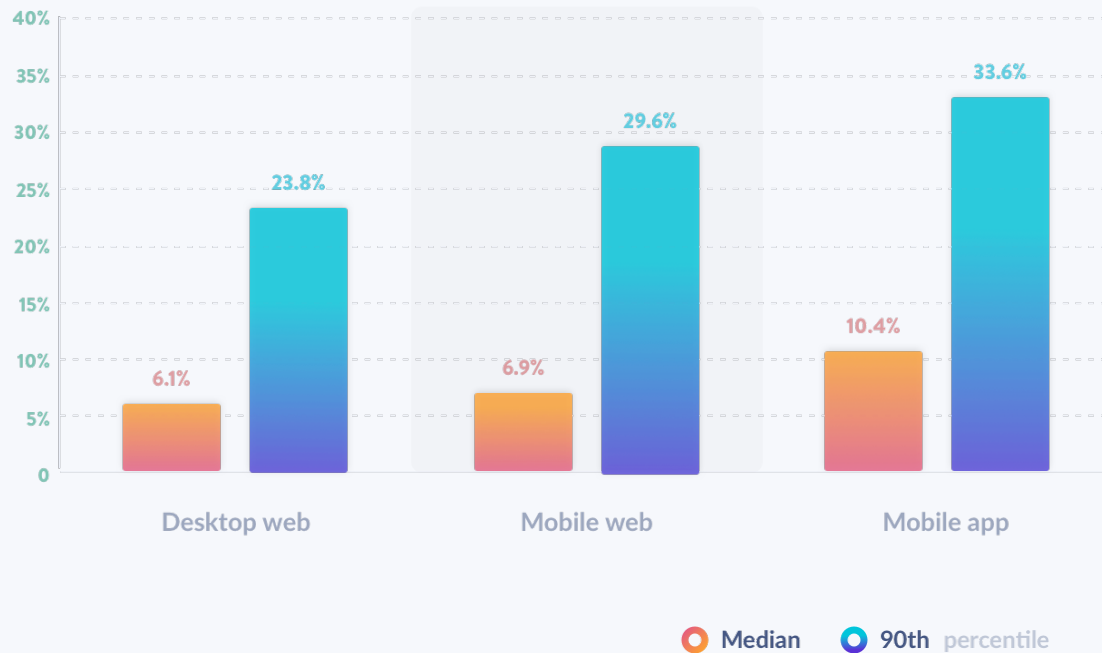
On a philosophical level, our definition of conversion is: **a user completes an action that produces revenue.** For retail & e-commerce products, that is blessedly simple. **Conversions means purchases.** If users make their way to the end of the funnel and the payment is transacted, that is a conversion.

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Which platform converts the most users?

To answer the question posed above, mobile apps show the highest conversion rates at both the median and 90th percentile.
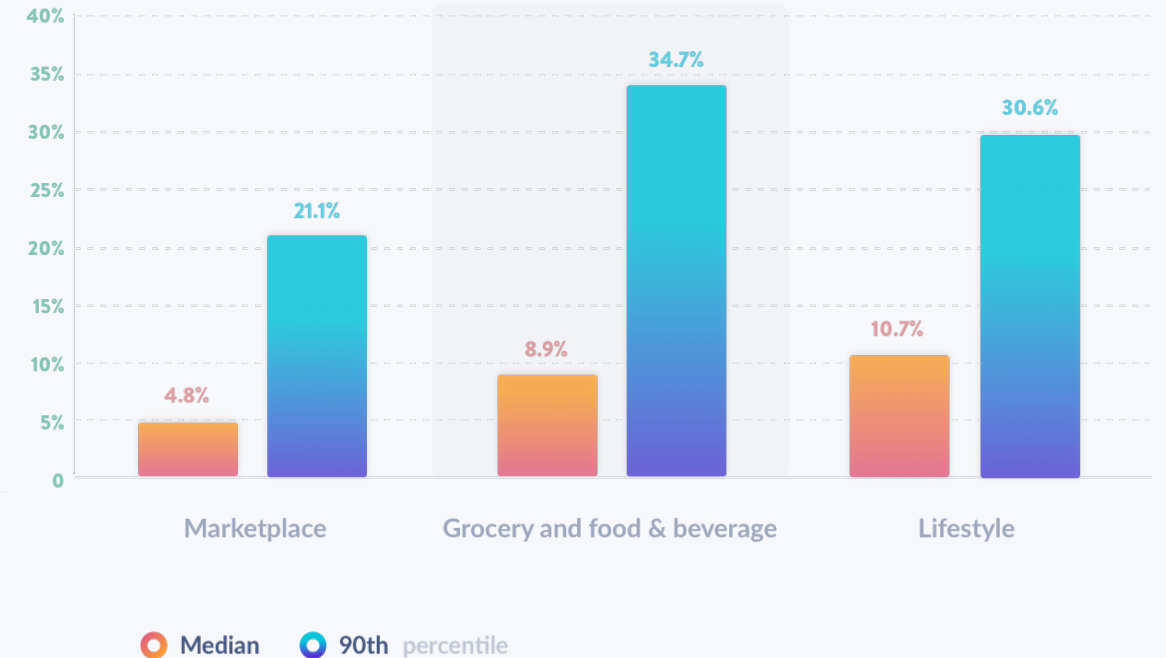
When it comes to driving conversions, getting your product in front of the right users can be as important as anything else. The conversion funnel is just that: a funnel. If there are kinks at the beginning, it might be a rocky ride.

Chart data:

Platform	Median	90th percentile
Desktop web	6.1%	23.8%
Mobile web	6.9%	29.6%
Mobile app	10.4%	33.6%

● Median   ◯ 90th percentile

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02 ——— CONVERSION BY SUB-INDUSTRY

What's a typical conversion rate?

Typically, it can be expected that conversion rates are inversely correlated with how much users are expected to spend. Less research and caution is required to order dinner than a new car, for example. Keep this in mind as you analyze which end of the spectrum your product's conversion rate should be expected to target. The best of the best are the elite grocery and food & beverage products, which convert over one-third of users into buyers.

Marketplace: Median 4.8%, 90th percentile 21.1%
Grocery and food & beverage: Median 8.9%, 90th percentile 34.7%
Lifestyle: Median 10.7%, 90th percentile 30.6%

○ Median   ○ 90th percentile

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04 ———— A CLOSER LOOK

How much likelier are the converted to re-convert?

We also did a bit of cohort analysis in which we looked at repeat buyers, i.e. those who converted from users to buyers, and then did so again, separately from that initial purchase. The results? For median products, there is a great deal of variance between how much likelier people who have already purchased are to re-convert than the overall user base. For grocery and food & beverage products, users who have already converted are 4.75 times as likely to convert again, and similarly, for marketplace products, they are 4.4 times likelier to re-convert. For lifestyle brands' products, the boost is only 40%, which is not nothing, but shows that fashions can be fleeting.

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Last data point

If you liked this report, or if you have any other ideas or data you'd like to see us analyze, reach out over Twitter or email us at benchmarks@mixpanel.com. We'd love to hear the way you're using this report, as well!

Although this report is filled with benchmark metrics that apply to companies in the retail & e-commerce industry, you can only learn so much from seeing how the other guys are doing. Ultimately, your own users are telling you everything you need to know through their actions in your apps and products. The question is, are you listening?

That's where a user analytics tool like Mixpanel comes in. More than 20,000 customers rely on Mixpanel not only to develop a fuller picture of user behavior, but also to take action on those insights and improve user experiences every day.

Get a free demo of Mixpanel and a consultation with one of our analytics specialists to learn how the right user analytics solution can help you move your key metrics up and to the right.