



Your Data is Flawed



Uncover Truer Insights with Behavioral Economics & Silent Observation

How to Create, Capture, & Leverage First-Party Purchase Data to Drive Meaningful Growth

(part 2 of 2)

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With the proliferation of media channels that seem to be constantly changing, the days of making “gut decisions” are long gone.

As marketers, more and more of the decisions made from minor to major must be backed by solid data. But since most marketers have more of an interest in how people interact with ideas than they do in staring at spreadsheets, the question becomes: how can marketers easily combine the data we need with the inherent psychology that’s the foundation of marketing?

In other words, how do we combine insights with instincts? And in this data-driven world, how can we make sure we’re looking at the right data and using it in the best way?

One way is by leveraging behavioral economics principles and applying them to first-party purchase data.

Behavioral Economics – Measuring the Non-Logical

Behavioral economics is the intersection of psychology and economics. It captures and quantifies the non-logical reasons consumers act as they do. These reasons include non-monetary social, psychological, and emotional factors that often overrule logical decision-making.

In recent years, behavioral economics has become a widely-accepted framework for understanding consumer psychology.

In business, behavioral economists seek to uncover these non-monetary factors (such as scarcity messaging and reference pricing), creating insights that help marketers better influence consumer purchase behavior.

By applying behavioral economics principles and rigorous statistical techniques to first-party purchase data, you can derive conclusive and actionable insights that ultimately improve ROI.

First-Party Purchase Data – The Gold Standard of Data

You're probably receiving a lot of data on your campaigns already and may be wondering about the differences between data types.

Third-party data generally only provides demographic attributes such as age, income, and marital status. This can help you understand if a consumer falls within your target audience but doesn't help you understand the factors that impact their purchase behavior.

Second-party data is similar to third-party data in that it comes from another entity. It's generally shared between partner organizations and is often limited in its scope and granularity.

First-party data is data you own, generated from your owned and paid channels. It is often the most robust source of data. If leveraged appropriately, first-party data can generate the greatest insights and impact.

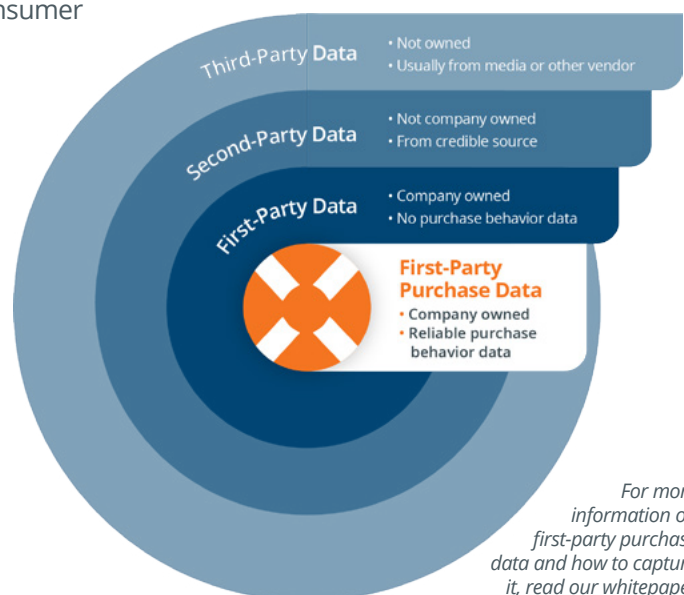
First-party purchase data – a subset of first-party data – contains purchase behavior that enables marketers to truly gauge the cause and effect of a marketing campaign. If robust enough (and with the right methods and approach) this data can also help you understand the multiple elements of a campaign and how each element impacts purchase behavior. At RevTrax, we create this data for our clients through our offer platform that ties online engagement to offline purchase, at the individual level. Clients can understand how specific messages impact specific consumers—the connection hardest to make and most valuable to observe.

This is the holy grail of marketing – gaining granular insight into the psychology of the consumer and the factors that drive or inhibit purchase. It's also nearly impossible to obtain a detailed and insightful view of consumer psychology without robust first-party purchase data.

The other sources of data just aren't granular or robust enough and can't always be tied to purchase, thus not telling the whole story.

Let's put this in the context of shopper marketing, specifically. We can reflect consumer intent at the shopper level for any offer in any digital channel by measuring:

1. Shopper views the offer, this represents "intent"
2. Shopper prints or adds the coupon to their retailer loyalty card, this represents "activation"
3. Shopper redeems the offer in-store or online, this represents a "purchase"



For more information on first-party purchase data and how to capture it, read our whitepaper "The Overlooked Gold Mine of First-Party Purchase Data."

The Drawbacks of Common Data Sources

Before discussing how to apply behavioral economics principles to first-party purchase data, it's important to understand the difference between first-party purchase data and data commonly used to understand consumer psychology.

In today's marketplace, the three most common methods marketers use to understand consumer psychology are focus groups, panels, and surveys. However, with these data collection methods, participants know they are being observed. This naturally creates a risk that their behavior and responses could be subsequently (and sometimes unintentionally) altered.

Additionally, there is no way to prove the validity of the data, since there is no clear tie between marketing message and purchase. All connections are inferred, and thus suspect.

To better understand the psychology of the consumer and to eliminate fraudulent or biased data, brands and retailers should apply behavioral economics principles to purchase behavior they have silently observed. Through silent observation, consumers' reactions to various messages are not impacted by the observation (since they don't know it's occurring), resulting in more accurate information.

At RevTrax, we enable this silent observation through our offer platform. Consumers engage with offers that tie online marketing messages to offline purchases, enabling the capture and analysis of robust first-party purchase data. Through appropriately designed and executed behavioral tests, brands can reach that Holy Grail of marketing and understand at a granular level the positive and negative impact of specific marketing messages. This is accomplished through rigorous experiment design via multi-variate testing that gets to the root of why consumers make their purchase decisions—both online and offline.

As a recap, while other methods do provide some visibility into consumer psychology, the methods themselves create issues with the accuracy of the data:

- (1) the data doesn't connect marketing messages to actual purchase
- (2) the data relies on self-reported data by consumers who know they are being observed
- (3) the data is collected in group settings or other unnatural environments that could affect the validity and accuracy of the data.

Understanding the psychology of the consumer is much better served by silently observing purchase behavior by capturing first-party purchase data like the data captured through the RevTrax platform.



The Application

At RevTrax, we've combined behavioral economics methodologies and discrete choice test scenarios with our core incentive technology platform that captures purchase behavior silently. This allows us to measure and analyze consumer behaviors that are unaffected by the tests we run.

The platform creates an ecosystem where first-party purchase data can be captured in real-time and observed with the test participants' behavior in an unobtrusive way. This is critical because it removes the risk of altered behavior due to group settings or an unnatural environment. We then apply rigorous statistical techniques and behavioral economics principles to ensure conclusive and actionable insights that ultimately improve ROI for our clients.

Example:

We wanted to test the overall savings "anchor" message on a beauty brand's website to see which one was the most effective in changing consumer behavior.

As background, anchoring messages are a key construct in behavioral economics. They are designed to anchor a consumer's attention to a concept that facilitates purchase behavior.

In the example scenario, we wanted to understand the impact that various anchor messages had on consumer activation of promotions on that site. We also wanted to see if including a reference price would increase print rates. The test messages were not specific to a single promotion but rather aimed to influence behavior for a category of products or an entire brand or retailer.

These messages were:

1 "You can print coupons and save money!"

\$4.00 OFF \$3.00 OFF Pink Brand	\$4.00 OFF \$3.00 OFF Blue Brand
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"You can print coupons and save money!"
Focus on the action, no dollar amount mentioned.

2 "The average person prints \$24 in coupon savings!"

\$4.00 OFF \$3.00 OFF Pink Brand	\$4.00 OFF \$3.00 OFF Blue Brand
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"The average person prints \$24 in coupon savings!"
References the average from a typical person which implies there has been a proven history. Also mentions a dollar amount of savings.

3 "Most people print at least \$15 in coupon savings!"

\$4.00 OFF \$3.00 OFF Pink Brand	\$4.00 OFF \$3.00 OFF Blue Brand
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"Most people print at least \$15 in coupon savings!"
Makes the generalization broader with "most people" which also shows success from past behavior and also mentions a dollar amount but it's slightly lower.

4 "You can print up to \$75.50 in coupon savings!"

\$4.00 OFF \$3.00 OFF Pink Brand	\$4.00 OFF \$3.00 OFF Blue Brand
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"You can print up to \$75.50 in coupon savings!"
References the possibility of savings, not actual results, but the dollar amount is much higher.

Test Constructs and Hypotheses

Behavioral Economics Test Constructs:

Anchor Groups

Does an anchor group message drive an increase in the average number of prints per consumer?

Reference Prices

Will incorporating a Reference Price increase prints rates?

Testable Hypotheses:

Anchor Groups

What is the impact of:

- Various Anchor Messages
- High vs. Low Offer Values by Anchor Group
- High vs. Low Offer Values by Product

Reference Prices

What is the impact on:

- Print Rates
- Print Rates by High vs. Low Offer Values
- Print Rates by High vs. Low Offer Values by product

Results

We observed how thousands of people reacted to each of these offers, tracking their online behavior after being exposed to the messages.

Instead of conducting a straightforward A/B test that unrealistically limits the factors that could affect purchase behavior, we used multivariate testing. This means we tested many variations at one time.

Multivariate testing is useful so we can understand the impact on individual elements on the creative's performance. When we run multivariate tests, we analyze the performance of many creative combinations to learn about the individual impact of each element (with A/B tests, you don't know which individual elements of each creative contributed to the creative's impact, just that one as a whole is better than the other as a whole). Multivariate testing is served best by first-party purchase data because it is usually the most granular, allowing us to test more variations and uncover more insights.

For the beauty brand example, the inclusion of an Anchoring Message that emphasized total possible coupon savings ("You Can Print Up To \$75.50 In Savings") and high value Reference Price Offers drove incremental prints amongst beauty brand buyers. With other product groups, we did not see a significant impact. We believe that the consumer's thought process which influences behavior is as follows:

1. The Anchor Message around total possible savings focused the shopper upon the total potential savings
2. The saving potential was reinforced by emphasizing the offer value via a reference to past offers
3. The combined effect of the two thought processes drove incremental prints

Results (cont.)

While the combined effect drives the greatest total impact on the consumer, we recommended testing Reference Price on its own in scaled channels such as FSI, coupon/discount websites, etc. to gain the maximum ROI from these learnings.



RevTrax has the capability to capture results in the form of views and prints in real-time and then validate these shopper actions with actual purchase data. The actual, real-time purchase data can be analyzed at a retailer-level thus providing much needed insights.

Conclusion

In conclusion, first-party purchase data provides us the keys to unlocking the behavioral economics insights in the path to purchase. Not just for a single promotion but for an entire category, brand or retailer. The findings from utilizing multivariate testing behavioral economics instead of straightforward A/B tests provide much richer insights that have a bigger business impact beyond the dollar impact of an offer on a group of shoppers. Using these methods empowers marketers to disrupt the outdated approach to promotional offers and redefine what they can do.