A foundational understanding of the principles of consumer purchasing behavior, powered by Checkout
Because Checkout’s metrics and insights are new to many of our clients, we’ve designed this guidebook to provide a foundational understanding of what Checkout reveals about consumers’ behaviors and how consumers interact with the brands they buy across general merchandise and foodservice industries. It lays out five fundamental principles of consumer behavior revealed by Checkout, supported by real-life Checkout insights. By reading this guide, you’ll have a better reference for the types of questions Checkout can answer about your own customers and an understanding of why your customers behave the way they do.

The observations presented here may surprise you, or contradict your organization’s commonly held beliefs about your own customers. Your NPD team can share more about what Checkout can reveal about your own customers and your organization’s growth opportunities. If you’re interested in further exploring the consumer behavior observations and principles of this guidebook, we recommend the book *How Brands Grow*, by Byron Sharp (2010), which compiles insights from the past six decades of marketing science research. *How Brands Grow* was a fundamental resource in shaping the principles of this guidebook.

Alongside our point-of-sale and consumer tracking services at NPD, Checkout is a vital tool for developing your marketing, product, and merchandising strategies. We hope this guidebook is a valuable resource not only for understanding Checkout insights, but also for leveraging Checkout for your own competitive advantage through better evidence-based strategic decisions.

"How many different customers am I reaching, and how valuable are they?"

"What competitive brands are my customers buying when they’re not buying from me?"

"Are my customers loyal to me, or are they spreading the wealth to my competitors?"
**What is longitudinal data? And how does Checkout work?**

Longitudinal data, often called “panel data,” refers to informational sources that track the same people over time. Checkout’s longitudinal consumer insights are powered by the receipts we collect directly from the people on our consumer panel. Using our ReceiptPal app, panelists snap photos of their paper receipts and share e-receipts directly from their inboxes. For submitting these receipts, ReceiptPal panelists are given points they can exchange for gift cards.

Through the rich information we collect from receipts, we track consumers’ purchases and purchase behaviors, across all the categories and brands they purchase and the retailers from which they purchase. And because we collect purchase receipts from the same panelists over time, Checkout’s longitudinal data offers a number of advantages over repeated cross-sectional data sources such as “point-in-time” tracking surveys. Only through longitudinal analysis can you uncover insights like how many customers you’re reaching, how much they are spending with you (and your competitors), and how your relationship with your customers is changing over time.

Our panelists are projected to U.S. Census targets on key demographics like age, gender, household income, household size, ethnicity, and household presence of children. This ensures Checkout’s data and insights accurately represent the demographics and purchase behaviors of U.S. consumers.

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**Longitudinal Metrics Defined**

**Penetration**

The share of all consumers that a given brand, retailer, or category reaches during a given time frame.  
*For example, 70% of the U.S. population made at least one purchase at Walmart in July 2019.*

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**Purchase Frequency**

The average number of unique purchase occasions per buyer of a brand, retailer, or category during a given time frame.  
*For example, people who bought athletic footwear in the first quarter of 2019 made an average of 1.5 purchases.*

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**Spend per Buyer/Customer Value**

The aggregate spend per customer captured by a given brand, retailer, or category during a given time frame.  
*For example, among the 70% of the population that shopped at Walmart in July 2019, the average spend per purchase was $41.54. Because each person made an average of 5.2 purchases that month, each customer walking into a Walmart that month is worth an average of $216.00 to Walmart.*

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**Share of Wallet**

The distribution of spending across brand, retailer, or category made by a designated buyer group during a given time frame.  
*For example, Target accounted for 12% of total apparel spending among people who bought apparel at Target in the first half of 2019.*

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**Customer Churn/Retention**

The share of customers who return to a given brand, retailer, or category in a successive time period (e.g., month over month, quarter over quarter, year over year, etc.).  
*For example, 83% of Amazon buyers in June 2019 returned to make another purchase from Amazon in July 2019.*
Summary

Penetration Drives Loyalty
Larger brands reach more customers, and those customers are often more valuable and more loyal than customers of smaller brands. Marketers are often enamored by brands like Apple, Starbucks, and Victoria’s Secret; brands like these are frequently perceived to enjoy extraordinary loyalty from rabidly devoted fan bases. In reality, across all the industries we track, virtually no brand or retailer achieves unexpected size or growth through outsized loyalty or retention alone. Loyalty metrics are, in general, highly predictable and fall in line with a brand’s penetration (customer reach). Penetration and loyalty are so intertwined that it’s impossible for marketers to influence one without acting on the other.

Buyer Churn is Inevitable
Churn is natural, and the rate at which your customers are lost to other brands is predictable by your market size. A larger brand will lose proportionately less of its customer base than a smaller brand, but all brands lose buyers and gain new ones over time. It’s important to attract enough new valuable customers to offset the customers you will inevitably lose.

Light Buyers Matter
Light buyers make up a large share of your unique customer base and also a meaningful share of your dollars. Marketing strategy must not ignore the broad swath of lighter customers who are demonstrating their willingness to buy your brand and may well have significant opportunity to increase their relationship with you, given the right encouragement.

Heavy Buyers Fade
As the heaviest buyers satisfy their purchase needs in a given time period, and/or shift their purchase preferences over time, they tend to “regress to the mean” and become less valuable, on average, over time. Likewise, lighter buyers will also regress to the mean and tend to increase their purchase rate in a successive time period. To drive growth, marketing strategies and investments must focus not only on today’s heaviest buyers, but also on growing relationships with lighter buyers who present greater opportunity to increase their value to the brand.

Your Customers Aren’t “Yours”
Your customers probably aren’t all that loyal; they visit and purchase from your competitors, too. The proportion of customers you share with your competitors – and the share of your customers’ spending that “leaks” to those competitors – is predictable based on the relative market size of those competitors. Additionally, because your most frequent customers tend to be more frequent customers of the category, your heavy buyers are likely heavy buyers of your competitors, as well.

In the pages that follow, each of these principles is detailed with examples supported by Checkout data.
Penetration Drives Loyalty

Loyalty metrics like purchase frequency and spend per buyer are generally predictable and directly correlated with a brand’s penetration. Larger brands reach more customers, and they also earn more loyalty from their customer base than competing smaller brands. Larger brands reach more buyers than smaller brands because they’re more physically available or convenient to buy, address more customer need states, and they’re more often among a customer’s consideration set. For these same reasons, a larger brand earns more of its customers’ spending and retains more of those customers over time.

While it may be theoretically possible to grow your brand through increased loyalty and retention alone, in reality, it’s impossible to expand your relationship with existing customers in isolation from all other category buyers. Loyalty metrics inevitably follow penetration.

Given the outsized importance of penetration in driving growth, it’s often necessary that brands interested in growing adopt a broader, more “mass marketing” approach to their customer strategies. But expanding a brand’s mass appeal doesn’t mean delivering the same message or product to every potential buyer. Tactics like customer segmentation and micro-targeted advertising campaigns can be vital to uncovering and reaching new audiences.

Wherever you find exceptions to this direct correlation between customer reach and loyalty, it’s often because you’re comparing brands of different natures. A regional restaurant chain, for example, may appear to earn much stronger customer loyalty than might be predicted by its size relative to national chain competitors. The limited distribution of a regional player means it reaches many fewer customers than a national chain, but such a regional chain very well may be a top operator in the markets where it plays. In these “exceptions,” filtering only to markets where this regional player competes might reveal this regional chain to be quite dominant in reaching customers within its market, and its loyalty metrics likely will fall in line with expectations based on its penetration relative to competitors within its own geographies.

ATHLETIC FOOTWEAR PURCHASED ONLINE

<table>
<thead>
<tr>
<th></th>
<th>Online Dollar Share</th>
<th>Penetration</th>
<th>Purchase Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nike</td>
<td>11.5%</td>
<td>6.8%</td>
<td>1.6</td>
</tr>
<tr>
<td>adidas</td>
<td>8.5%</td>
<td>5.0%</td>
<td>1.5</td>
</tr>
<tr>
<td>New Balance</td>
<td>2.0%</td>
<td>2.1%</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Nike is the largest online athletic footwear brand. As expected, it reaches significantly more buyers than its competitors adidas and New Balance, and Nike also enjoys a slightly higher purchase frequency. As the dominant brand, Nike reaches more buyers, and those buyers are more loyal.
Likewise, similar “exceptions” may be found when comparing retailers or brands that sell to a niche customer segment (e.g., a women’s plus-size-only brand), or brands that sell a different mix of product categories (e.g., a footwear-dominant retailer vs. an apparel-dominant retailer). When benchmarking penetration and loyalty metrics among a competitive set, it’s important to analyze like competitors.

**Buyer Churn is Inevitable**

As consumers inevitably satisfy their purchase needs or shift their preferences among brands, some level of buyer churn is unavoidable for every brand. But, the larger your buyer penetration, the lesser share of customers you will lose over time.

### FOODSERVICE RETAILERS

<table>
<thead>
<tr>
<th>Annual Buyer Penetration</th>
<th>Annual Buyer Churn Rate</th>
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</thead>
<tbody>
<tr>
<td>88%</td>
<td>7%</td>
</tr>
<tr>
<td>60%</td>
<td>19%</td>
</tr>
<tr>
<td>58%</td>
<td>24%</td>
</tr>
<tr>
<td>57%</td>
<td>23%</td>
</tr>
<tr>
<td>42%</td>
<td>26%</td>
</tr>
<tr>
<td>38%</td>
<td>34%</td>
</tr>
</tbody>
</table>

McDonald’s reaches the largest customer base of any restaurant, and likewise loses a smaller proportion of its customer base year to year. It is important to understand your brand’s churn rate so you can employ the right marketing and advertising strategies to continually attract enough new buyers each time period to offset these inevitable customer losses.

**Light Buyers Matter**

Attracting dedicated, heavy-spending customers is no doubt vital to your success as a brand or retailer. But lighter buyers make up the largest share of your customer base and contribute more sales dollars than you probably expect. The commonly held 80/20 belief (Pareto’s Law), where the most valuable 20% of customers make up 80% of sales dollars, is rarely, if ever, seen in real life. In reality, the heaviest 20% of customers generally account for just over half of sales – usually about 60%. That means the remaining 40% of your sales – 40 cents of every dollar you earn – comes from this long tail of lighter buyers.

Heavy buyers are important to attract and retain, but lighter buyers matter a great deal to your brand’s performance and must be accounted for in your marketing and advertising strategies, too.

### AVERAGE OF INDIVIDUAL TOY BRANDS

For toy brands, on average, the top 20% of each brand’s buyer base contributes around 60% of the brand’s dollars.

% BUYERS  
80% 20%

% DOLLARS  
37% 63%
Heavy Buyers Fade

Heavy and light buyers aren’t static; consumers constantly uncover new wants and desires, satisfy other purchase needs, and shift their brand preferences over time. Many of your heaviest buyers in any given time period have fully satisfied many of their purchase needs. They’re very likely to decrease their spending and become lighter buyers in the next time period. Importantly, by the same token, lighter customers are more likely to have capacity to increase their spending, and they tend to become heavier customers over time.

Because lighter buyers also have so much more room to grow their relationship with you than already-dedicated, heavy-spending buyers, they’re critical to your brand’s growth. Your customer strategies and marketing investments shouldn’t focus exclusively on retaining your best customers; it’s also critical to continually develop your engagement with today’s lower-value customers.

<table>
<thead>
<tr>
<th>KOHL’S APPAREL BUYERS</th>
<th>Average Spend Per Buyer</th>
<th>% Kohl’s Apparel Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
</tr>
<tr>
<td>Year 1 Non-buyers</td>
<td>$0</td>
<td>$70 ↑</td>
</tr>
<tr>
<td>Year 1 Light Buyers</td>
<td>$65</td>
<td>$106 ↑</td>
</tr>
<tr>
<td>Year 1 Moderate Buyers</td>
<td>$271</td>
<td>$212 ↓</td>
</tr>
<tr>
<td>Year 1 Heavy Buyers</td>
<td>$644</td>
<td>$368 ↓</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Last year’s heavy and moderate apparel buyers at Kohl’s became less valuable to the retailer in the most recent year. Non-buyers and light buyers, on the other hand, increased their engagement with Kohl’s and accounted for more than half of Kohl’s apparel sales in Year 2.
Your Customers Aren’t “Yours”

Consumers tend to purchase from a portfolio of favorite brands or retailers – they’re rarely loyal to just one brand. That means you’ll inevitably share your customers with competitors at a rate proportional to the relative size of those competitors.

It’s important to recognize the more often consumers shop a given category, the more unique retailers or brands they’re likely buying from. This means your own heaviest-spending, best customers are even more likely to “cheat” on you with competitors than your lighter buyers. Because they are likely to make so many category purchases, your heaviest buyers simply have greater opportunity to also purchase from a competitor.

Additionally, because of their high category purchase frequency, your heaviest consumers are likely another brand’s heaviest consumers as well. This means that you’re competing against your competitors even among your most loyal customers.

Because Walmart is the largest brick-and-mortar retailer reaching the most customers, Kohl’s, JCPenney, Bed Bath & Beyond, and even Nordstrom all share an outsized portion of their customers with Walmart. On the other hand, Nordstrom is a much smaller retailer – competing retailers share a much smaller proportion of their customer bases with Nordstrom.
Summary

Checkout’s receipt-powered insights reveal fundamental truths about consumer behavior that are revolutionary to many of the retail industries we track. Understanding the principles of consumer buying behavior outlined in this guidebook will empower manufacturers and retailers to make smarter, evidence-based decisions to drive growth.

About Checkout

Checkout offers robust data for tracking and improving performance across all channels, plus buyer analytics to help businesses keep current customers and win new ones. The Checkout Omnipeanel tracks online and in-store sales for brands and retailers, including DTC. Additionally, buyer analytics deliver insight into consumer purchase behavior, providing information on brand loyalty, leakage, reach, purchase frequency, and more.

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