

WHITE PAPER

## The Science Behind MaxShare™

### THE GROWTH IMPERATIVE

Growth is the common objective of virtually every CEO of every for profit company. The unfortunate reality, however, is that sustainable growth is a goal that is seldom achieved. Harvard Business Review published research finds that fewer than 1 in 20 firms achieve net income growth of five percent for five consecutive years.<sup>1</sup> Once growth stalls, the odds of achieving even marginal growth rates are very low.<sup>2</sup>

If the goal is share growth, then we need to begin by understanding what actually drives market share. There are three distinct components that drive the market shares of all firms:<sup>3</sup>



**Penetration:** This is the proportion of customers within an industry category who use your brand at least once in a given time period.



**Usage:** This is a measure of how heavily customers of your brand use products in the category relative to all customers in that same category.



**Share of wallet:** This is the percentage of your customers' spending in the category that is allocated to your brand.

Looked at this way, the formula for market share becomes:

**Penetration X Usage X Share of Wallet**

Viewing market share as a function of these different components points us towards three very different strategies for growth.

A **penetration strategy** is all about acquiring new customers. This means persuading potential customers to try the brand, and expanding into new markets. Without question, acquiring new customers will always be vital to the success of any business. But as markets become saturated, it gets more and more difficult to find new potential customers.

A **usage strategy** is about getting consumers of your brand to increase their total consumption in the category. In other words, if your brand can get its customers to buy more in the category than competitors do, your market share will increase. For most categories, however, getting customers to buy more is very hard to do. Need tends to drive most of our purchases. For example, we don't tend to buy more toothpaste when we start making more money.



Fewer than **1 in 20** firms achieve net income growth of five percent for five consecutive years.

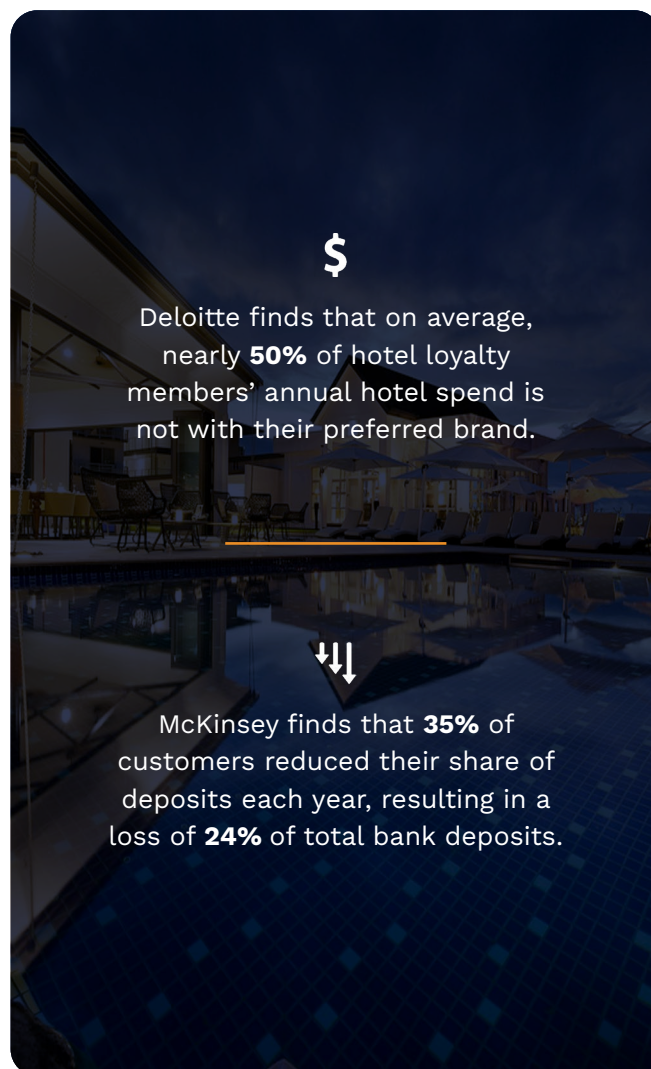
A **share of wallet strategy** is about getting your customers to allocate a greater percentage of their spending in the category to your brand. It is almost always easier and more cost effective to improve current customers' share of spending with a firm (i.e., share of wallet) than it is to acquire new customers. That is because in most categories today consumers are not loyal to "a" firm or "a" brand, but rather to "a set" of firms or brands.

This means that more customers alter their spending patterns instead of completely halting business with a firm. Therefore, efforts designed to manage customers' spending patterns tend to represent far greater opportunities than simply trying to maximize customer retention rates. For example, a study by Deloitte finds that nearly 50 percent, on average, of hotel loyalty members' annual hotel spend is not with their preferred brand.<sup>4</sup> Moreover, a study by McKinsey finds that the cost of lost wallet share typically exceeds the cost of customer defections. For example, McKinsey found that on average 5 percent of bank customers close their checking accounts each year; the impact of losing these customers results in a loss of 3 percent of the banks total deposits. By contrast, 35 percent of customers reduced their share of deposits each year, resulting in a loss of 24 percent of total bank deposits.<sup>5</sup> Moreover, they observed this same effect for all 16 of the industries that they examined.

While managers need to consider how each component of market share fits into their firms' overall growth strategies, share of wallet is the factor most directly affected by the customer experience. After all, share of wallet is arguably the most important gauge of a customer's loyalty. In fact, in their seminal Harvard Business Review paper, business consultant Thomas Jones and esteemed Harvard professor W. Earl Sasser, Jr. assert that share of wallet is *"the ultimate measure of loyalty."*<sup>6</sup>

## BROKEN COMPASS

In an effort to grow share of wallet, most managers measure and manage metrics like customer satisfaction, customers' likelihood to recommend the firm, and the Net Promoter Score (NPS).<sup>7</sup> The underlying reason is obvious.



Most managers believe that improving customer satisfaction, likelihood to recommend, or NPS levels will lead to customers devoting a higher share of their wallets to their firm or brand. It is easy to understand why they believe this. Unfortunately, it is not remotely true.



To be clear, there are numerous scientific studies that show that there is indeed a statistically significant positive relationship between satisfaction and customers' purchasing behaviors.<sup>8</sup> Unfortunately, there is a problem with this relationship. While it is *statistically significant*, it most definitely is not *managerially significant*.

Managers tend to misunderstand the concept of statistical significance. In everyday English, significant means "important." In statistics, however, it means "probably not a random occurrence." The problem for managers is that many things can be significant in the statistical sense without being important. That is definitely the case with the relationship between satisfaction, likelihood to recommend and NPS on customers' purchasing behaviors. In fact, the relationship is so extraordinarily weak that it is managerially irrelevant.

This is not an overstatement. These metrics are so weakly correlated to the share of spend customers allocate to the brands they use, the metrics are useless in driving higher share of wallet.

This naturally begs the question, "Exactly how weak is the relationship?" In our examination of relationship between satisfaction/NPS and share of wallet, looking at over 250,000 consumer ratings covering more than 650 brands from more than a dozen countries, we find that the average variance explained is around one percent.<sup>9</sup> In layman's terms, this means that 99 percent of what is going on with consumers' share of category spending is completely unexplained by knowing satisfaction or NPS. Worse still, the effect of the change in satisfaction on changes in share of wallet is even weaker. Our research finds that changes in satisfaction and NPS explain a miniscule 0.4 percent of the change in share of wallet over time.<sup>10</sup>

Given that managers measure and manage satisfaction and NPS because they are supposed to link to growth, this is disastrous.

It is easy for managers to see for themselves that the correlation between satisfaction/NPS and share of wallet is very weak by using simple spreadsheet software such as Microsoft Excel. Simply input customers' satisfaction (or NPS) levels for your firm or brand in one column, and their corresponding share of category spending (share of wallet) in another column. Then compute the R-square, the squared correlation coefficient. The percentage of variance explained (i.e., R-square) is almost always less than 5 percent and is typically around 1 percent.

### Easy to Prove that Satisfaction and NPS are Very Weak Predictors of Share of Wallet

	A	B	C
1	Customer ID	Satisfaction	Share of Wallet
2	1	9	30%
3	2	8	60%
4	3	7	15%
5	4	9	75%
998	997	10	35%
999	998	9	45%
1000	999	8	25%
1001	1000	8	50%
1002		R- square	1.13%

Columns B and C correspond to customers' satisfaction and share of wallet levels—when computing R-square it does not matter whether satisfaction is column B or column C in the Microsoft Excel formula.

Note: If you are using the Net Promoter Score, simply input "3" for Promoters, "2" for Passives, and "1" for Detractors.



When the relationship is this weak, there is no reliable way to predict financial outcomes from improving satisfaction and NPS. The result is that companies spend a great deal of time and money on efforts to improve customers' perceptions of the experience, but typically find that the impact on customers' share of spending shows very little improvement.

### FINDING A BETTER WAY

Given that the share of category spending (aka share of wallet) is the most important demonstration of customers' loyalty to a firm or brand, and that traditional metrics don't link well with share of wallet, there is an obvious problem with how we currently measure and manage customer loyalty. This reality forced us to do some serious soul searching. If there were no way to meaningfully link how customers feel about the brands or firms they use and the way they allocate their spending, then the overriding reason for focusing on the customer experience is wrong. And if it is wrong, then we had to find out why.

This led us to conduct a comprehensive investigation to uncover why satisfaction and other commonly used metrics do not link to the share of spending that customers

allocate to the brands they use. Our overriding goals were to determine the best approach to link customer metrics with share of wallet, and the best metric for managers to track. What we found shocked us. Our research uncovered a heretofore unknown relationship between customers' perceptions of the brands they use and their share of wallet that could be easily calculated using a simple mathematical formula.

Many readers are likely very skeptical. After all, quite literally thousands of researchers have examined customer satisfaction data for almost half a century. Furthermore, we have been burned before—every other highly touted new metric has failed to link to customers' spending behaviors.

But we have put the Wallet Allocation Rule® through numerous, rigorous scientific investigations.

At its core, the Wallet Allocation Rule® stipulates that a customer's share of wallet is a function of a customer's rank of the firm/brand relative to the competitors the customer uses. Mathematically, the formula we use to estimate a customer's share of wallet with a firm or brand is listed here.

**The Wallet Allocation Rule®**

$$\left( 1 - \frac{\text{Rank}}{\text{Number of Brands} + 1} \right) \times \frac{2}{\text{Number of Brands}}$$

To use the Wallet Allocation Rule to predict share of wallet, follow these steps:

1. Establish the firms/brands in a product category that customers use.
2. Ask an overall satisfaction/loyalty question to gauge performance for each firm/brand a customer uses.
3. Assign a performance rank for each firm/brand for each customer (e.g., the highest rated firm/brand based on the overall satisfaction/loyalty question used would be ranked 1, the next highest 2, etc.).
4. Calculate a customer-level Wallet Allocation Score (i.e., the customer's predicted share of wallet) using the rank and number of brands used by the customer.
5. If you want to calculate firm/brand level scores, simply average the Wallet Allocation Scores for each firm's/brand's customers.



## THE EVIDENCE

When we began this investigation, we expected that finding a strong relationship would require a computationally mathematical formula filled with Greek symbols. The Wallet Allocation Rule, however, is so simple that it was hard for us to accept that we were the first to discover it (particularly given the thousands of researchers who examine satisfaction data all the time). Given our skepticism we insisted upon rigorous testing of our findings.

First, we needed to be confident that the Wallet Allocation Rule would work across cultures. As a result, we surveyed over 7,000 customers in eight non-North American countries (covering four continents) about their usage of credit cards. We selected this industry to minimize the likelihood that industry structure and the uniqueness of competitors in the various countries would significantly influence our results. Our investigation found strong correlations between the Wallet Allocation Rule and share of wallet for all countries examined.

While these results were impressive, we needed to be certain that the Wallet Allocation Rule would reveal consistent results over time and prove to be a useful Key Performance Indicator for managers to track. Specifically, we needed to be certain that changes in Wallet Allocation Rule scores corresponded to changes in share of wallet over time. That need, however, presented us with a challenge. It was unreasonable to expect large shifts in customer metrics and share of wallet levels just a few months after completing our initial wave of surveys.

Instead, we needed to examine markets in which customers' share of wallet allocations were changing rapidly. This meant something disruptive had to have happened within a market. The difficulty from a research perspective is that we had to know exactly when this disruption would take place to ensure that we could measure share of wallet before and after the event.

To address this problem, we examined markets in which a new retail store was scheduled to open. Clearly, the opening of a new store dramatically disrupts competitive dynamics in a market area, quickly shifting customers' spending patterns.

We studied two different retail markets covering two distinct product categories, before and after the opening of new stores. The results of this test demonstrated a strong link between the Wallet Allocation Rule and share of wallet regardless of changes in market dynamics and corresponding shifts in customers' share of category spending. We also went back to five of the eight countries examined regarding credit card usage after approximately six months. The results between the two waves of data were essentially identical, all demonstrating strong correlations.

But the most important test had yet to come. We needed to know if changes in an individual customer's share of wallet matched changes predicted by the Wallet Allocation Rule. To do this, we had to do something rarely done in customer satisfaction research. Approximately one year after our initial investigation, we went back to the same customers to find out. The results unambiguously demonstrate that the Wallet Allocation Rule links strongly to individual customer behavior. By comparison, changes in other commonly used metrics show a very weak correlation to changes in share of wallet.

The findings of this research were published in the Harvard Business Review.<sup>11</sup> One month later, the research received the Next Gen Disruptive Innovation in Market Research Award.



Next we sought to replicate these findings through a large-scale study of the U.S. credit union and retail banking market.<sup>12</sup> In a survey of 4,712 banking customers across the country, we found that the Wallet Allocation Rule explained 55 percent of the variation in customers' share of deposits. By contrast, common metrics like satisfaction and Net Promoter explained less than 10 percent. The findings of this study were published in the *International Journal of Bank Marketing*, a peer-reviewed academic journal in the field of financial services marketing.<sup>13</sup> We also sought to replicate our findings using a large-scale, multi-country database and a team of leading academic researchers from Northwestern, Vanderbilt, Fordham, and Ghent universities. We examined 79,543 customers who provided 258,743 satisfaction ratings regarding the brands they use within a particular industry covering over 650 brands from 22 industries and in 15 countries.

In this investigation, we conducted a comprehensive comparison of the Wallet Allocation Rule and multiple alternative approaches that have either been proposed by other researchers or represent logical choices for comparison based upon prior scientific studies. The models were examined using multiple performance criteria. Again, the Wallet Allocation Rule was found to perform as well as other more complex models in linking to share of wallet. In fact, the absolute correlation between a change in the Wallet Allocation Rule score over time and a change in share of wallet was nominally the largest overall.<sup>14</sup> The findings of this investigation were published in the *Journal of Service Management*, a peer-reviewed academic journal in the field of service management.<sup>15</sup> The research received the Robert Johnston Outstanding Paper Award. Other researchers have also investigated the Wallet Allocation Rule and found similar results. In one of the most comprehensive investigations, researchers Alice Louw and Jan Hofmeyr compared correlations between the Wallet Allocation Rule and two more complex approaches with customers' actual share of category spending in three industries.<sup>16</sup>

Although the survey questions used were not the same across the three approaches investigated, the findings were. The Wallet Allocation Rule worked as well as these more complex approaches.<sup>17</sup>

Moreover, we continue to test the Wallet Allocation Rule to find its limits and advance best practices. And we continue to subject our ideas and findings to the scrutiny of the scientific community so that managers can have confidence that what we report is vetted and robust. While the Wallet Allocation Rule is not a panacea, to date all serious scientific research has found that it links strongly to share of wallet,<sup>18</sup> is based on rock-solid scientific principles,<sup>19</sup> and provides unique, managerially relevant insights into what drives share of wallet.<sup>20</sup>

Most new approaches rely on anecdotes to support their claims (e.g., "Firm X adopted this new approach and it transformed its business"). While it is always nice to have a story, anecdotes only mean something if they are proven to work across companies and industries. The Wallet Allocation Rule has undergone numerous, rigorous scientific tests. More importantly, it has passed them all!



## WHY IT MATTERS

Using the Wallet Allocation Rule approach has serious implications for identifying where companies should focus their scarce resources to improve the customer experience. That's because it turns out that what drives share isn't what drives satisfaction or NPS.

One of the key takeaways of the Wallet Allocation Rule is that if you want to improve your share, you need to improve your rank. Improving rank, however, is not the same as improving your overall satisfaction or NPS level. Satisfaction and NPS can be thought of as understanding what

needs to be done to keep customers happy. But the vast majority of customers are satisfied with the companies they use—otherwise, they wouldn't be customers. By contrast, improving your rank requires minimizing the reasons customers feel the need to use the competition.

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### The Proof: Strong Correlations to Changes in Share of Wallet Over Time

Wallet Allocation Rule

**0.407**

Satisfaction

**0.066**

Recommend Intention

**0.065**

Net Promoter Score

**0.067**



For example, Tim Hortons, Canada’s largest food service operator is ubiquitous throughout Canada. There is one Tim Hortons location for approximately every 9,700 Canadians. Compare this with one Dunkin’ Donuts for approximately every 44,700 Americans, or one Costa Coffee for every 53,800 Britons. This ubiquity, however, would appear to be a relatively unimportant aspect of Tim Hortons success when looking at what drives customer satisfaction or NPS. Instead, managers would be directed to focus on *Environment*, *Range of Offer* and *Customer Service*. Clearly, all of these factors are important to the customer experience. But do they really explain why Canadians devote a higher share of their wallet to Tim Hortons relative to competing coffee shops?

When examined using a Wallet Allocation Rule approach, however, it becomes clear that *Convenience* is the most important factor in customers’ decisions to allocate a greater share of their wallets to Tim Hortons. Although known for its coffee and doughnuts, choosing Tim Hortons is often based as much on its convenience and distribution strength as it is the quality of its fare.

## CONCLUSION

The Wallet Allocation Rule turns traditional satisfaction and NPS measurement on its head. The rule shifts the emphasis from internally focused measurement to your brand’s competitive position in the marketplace.

Brands exist in the market, not in a vacuum, and that’s the way to approach performance. Sounds elementary, right? But most managers treat satisfaction and loyalty metrics as if just achieving a particular score is sufficient. The reality is that simply boosting your brand’s satisfaction or NPS ratings rarely increases your share of wallet. But improving your brand’s rank does. The Wallet Allocation Rule allows you to build strategies that directly affect brand performance and then measure their impact on share of wallet.

By applying the Wallet Allocation Rule, managers get real insight into the money they currently get from their customers, the money available to be earned from them, and what it takes to get it.



## Contact Us

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# Footnotes

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14. It is important to note that the discrete distributions examined perform remarkably well. Nine of the eleven discrete distributions—including the Wallet Allocation Rule—have root mean squared error (RMSE) values that are within 1.5% of the best fit. Nearly all of the discrete distributions perform at the same level when predicting change in share of wallet. The Wallet Allocation Rule, however, was by far the simplest of the models examined.
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17. There is no statistically meaningful difference in the correlations of the three models investigated by Louwand Hofmeyr (2012). To quote Louwand Hofmeyr (p. 14), "The three wallet estimation procedures perform similarly." The maximum difference between correlations for any of the models investigated was .04, with the average difference across all industries examined being .02. Moreover, the improved performance of the Power of Mind measure investigated rests on its using two questions to gauge rank, as opposed to using one for the other models investigated. Had the same questions been used to test all models, we are confident that these small differences between the Wallet Allocation Rule, Attitudinal Equity, and Power of the Mind models tested would have been virtually eliminated.
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