

WHITE PAPER:

DATA DRIVEN MARKETING DECISIONS IN THE RETAIL INDUSTRY



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SUMMARY:

Data-driven decisions in retail need to rely on more than legacy analytics. In order to consistently make the most informed decisions, retailers need to take advantage of data science. The retail industry is changing quickly and those that adapt to making decisions using modern data science techniques already have a competitive advantage. Modern techniques help retailers understand their consumers' intent, behavior and purchasing patterns in order to promote the right products at the right price. The following white paper discusses ways to avoid the pitfalls of data-driven marketing by taking a smarter approach.

PROBLEM:








Retailers have access to more data than ever; yet, they find it harder to consistently make the right data-driven decisions. Many questions elude even the most sophisticated marketing teams, such as: "Who are my most valuable consumers and what motivates them?" Many retail marketing teams continue to rely on gimmicky discounts and promotional ploys to attract consumers and scratch their heads when their topline doesn't grow and their margins shrink. The cycle continues by blaming more efficient competitors such as Amazon. In reality many omni-channel retailers don't actually understand their consumers' behavior as well as they should and lack the sophistication to compete. Retailers fail to understand the different behaviors of an offline shopper versus an online shopper.

SOLUTION:

How can retailers predict their consumers' behavior? Retailers must understand their consumers at a deeper level in order to properly price, promote, and compete in their market. By analyzing the shopping behavior of consumers, smart retailers make more efficient decisions. Making the correct decisions regularly requires a complete view of consumers from all channels. In order to maintain a complete and accurate view of the consumer, retailers need to collect the most relevant attributes of their behaviors.

The following list of consumer attributes is a prerequisite before more advanced modeling can take shape. Data-driven decisions rely on the accuracy and relevancy of the underlying data.

Example list of measurable consumer attributes:

 DEMOGRAPHICS	 LOCATION	 BUYING HISTORY	 BEHAVIOR	 RETURN HISTORY	 SOCIAL	 NETWORK
gender income level race	postal code city region country	items brands price range aov lifetime value frequency	browsed items browsed price point browsed brands number of products browsed number of pages viewed browsed keywords searched internal keywords searched external keywords product review ratings	number of returns frequency of returns type of brands returned	brands pinned brands followed on twitter/fb keywords in twitter frequency of brands mentioned	other stores visited or purchased other brands purchased groups they belong to companies they work at

Persona:

The Mom



WHAT YOU THINK YOU KNOW:

Moms browse and buy baby milk and diapers with a low average order value.



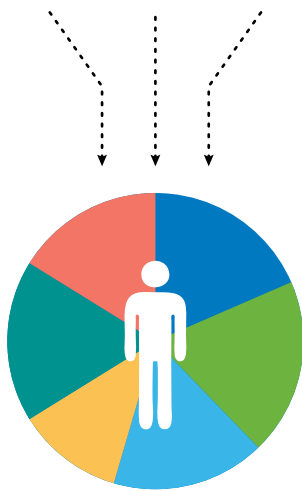
WHAT THE DATA TELLS US:

Moms are aspirational shoppers that browse items with 2x greater average order value than what they actually purchase.

Stop looking at historical reports to make future decisions. Just like financial statement disclosures caution: “past results do not guarantee future performance.” Just like the stock market, marketing decisions must be made by learning from the past to model future behavior. Consumer behavior changes over time and their motivations are influenced by market trends.

In order to accurately predict consumer behaviors, retailers should harness the power of data science. To take advantage of these techniques, retailers must prepare multiple relevant data sources for modeling. Depending on the volume of data and internal expertise, preparing multiple data sources may be nontrivial. Security and privacy concerns are also key factors in deciding the appropriate course. Outside data sources may also be valuable to enrich the current dataset depending on the type of models needed.

Once the data strategy becomes clear, retailers should consider various models when attempting to predict the future behavior and trends. RFM models help clearly segment valuable consumers from less valuable. RFM uses the recency (the most recent transaction), the frequency (how often within a given period), and monetary value (or transaction value) to determine the relative score of a consumer. More advanced consumer segmentation models should be used to understand the consumer’s behavior in order to predict their reaction to products, price points, and brands. Response models are used to predict whether consumers will have a positive or negative impact by promotions. Lift models help predict how much of an impact marketing campaigns have on consumer’s purchase patterns.



It is best not to rely on a single model or data point. The key to consistently making the right decisions is to understand consumer behavior at a deeper level by not relying on a single data model or historical report. Marketing decisions should avoid falling in the trap of the “sample of one” scenario. Data science can help influence the decision, but many models need to be improved over time. Early outputs must be tested, measured and improved upon. The benefit of many data models can be enhanced by linking the results of one model with another. For instance, retailers can use the results of RFM models combined with retention models to find if the most valuable consumers will have a negative impact to further email promotions. Linking multiple models gives a more complete picture of the consumer and helps retailers predict their consumer’s reaction to new products and promotions. Do not rely on a single KPI or data model to make an informed data-driven decision.

Start by asking questions about consumers and then the most relevant data strategy, data models and approach becomes clear. Some examples:

Who are my most valuable, least valuable, and most influential consumers?

Do those consumers behave similarly?

What price points did they browse versus buy?

What brands did they browse versus buy?

What type of promotions and messages will that particular segment respond to?

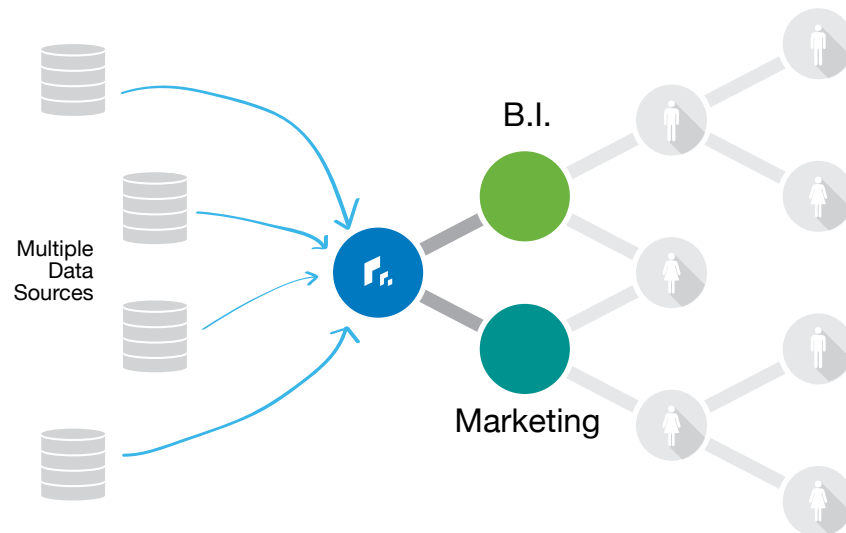
What did they buy most often together?

What marketing touch points influenced their decision to buy or leave?

How likely will those consumers be retained or churn?

It is time to stop making marketing decisions on an island. Retailers that succeed look at the problem holistically and work as a cohesive team. Retail data affects many aspects of decision making for omni-channel retailers. Data needs to be analyzed and disseminated effectively amongst all retail teams such as marketing, customer service, buyers, operations, IT, analytics, and finance. Insights that customer service may find based on returns or positive consumer feedback are just as valuable as the trends the analytics team identifies on Twitter.

Maintaining the culture of sharing information on a regular basis not only helps the individual team members perform their jobs smarter, but it also helps filter out misinformation. Marketing might see a positive sign from a new market where the brand is gaining traction, but the fraud department may see this sign as abuse from online scammers. Further marketing needs to be halted in these situations or else the organization incurs losses.



In conclusion, smart retailers should rely less on legacy analytics to make data-driven decisions. Data science techniques and concepts of linking retail models help improve retailers understanding of their consumer's behavior. Understanding their consumers at a deeper level can influence product, marketing, operations, customer service, and finance decisions. Retail teams that share these insights on a regular basis grow and learn faster than their competitors.

ABOUT RUBIKLOUD:

Rubikloud is a retail intelligence platform focused on turning retail data into revenue and insights. Using modern data science techniques we help omni-channel retailers know their customers at a deeper level. We believe the most valuable future insights lie at the intersection of the retailer, the customer, and the brand.

Most legacy analytics systems are unable to offer insights or track, process and analyze data from multiple channels. Rubikloud is able to do all these things and deliver actionable insights via our proprietary system - RUDI.

Rubikloud is rapidly growing and is processing data for over a dozen IR100 retailers.

About the Author: The author has over 10 years of experience helping retailers use analytics and conversion optimization tools to help them make the right data driven marketing decisions. He is now a co-founder of a Toronto based retail intelligence startup called Rubikloud.

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