

How to Increase the Value of AI with Data

mobilewalla



How Enriched Data Can Make AI and Your Organization Smarter

Artificial intelligence (AI) is changing the way companies do business, and early adopters stand to gain the most. The McKinsey Institute created a model that suggests that early adopters of AI could expect to increase cash flow by up to 122%, compared to only 10% for followers and a 23% decrease for non-adopters.[1] The model suggests that the benefit of adopting artificial intelligence isn't immediate – instead, it accelerates over time, creating a more significant advantage the longer it is used.

Because it is transforming the way companies understand and interact with their customers, an area of significant impact for AI is in marketing. Research shows that 68% of marketers believe AI and machine learning (ML) to be important trends in advertising[2], and 86% agree that using AI and ML will improve advertising performance.[3] Marketing professionals believe that AI in marketing will help companies to identify prospective customers (59%), and enhance the effectiveness of marketing to drive revenue (52.9%).[4]

Key Insight

Research from Salesforce found that high-performing marketers are 3.1 times more likely to use AI, with 57% reporting that artificial intelligence is essential in helping their company create one-to-one marketing across all touch-points.[5]

Enterprise marketers have been using first-party data to segment audiences and target customers for years. And while this has been useful in uncovering aggregate insights, today's marketer needs to use more sophisticated techniques to engage with their customer individually.

Understanding that 25% of 40-year-old, female Target shoppers run marathons, listen to podcasts, and purchase vacation homes gives a marketer a deeper understanding of a customers' current and future needs, and helps shape messaging and interactions. Better still, knowing which specific 40-year-old women are marathon runners provides invaluable opportunities to engage members of this group individually and to establish stronger footholds in their hearts and minds. However, marketers are often not natively aware of which customers run marathons or exhibit other behavior outside of the observational purview of their customer engagement channels. To gain this further understanding, marketers need to tap into additional consumer demographic and behavioral data, much of which exists in systems outside of their marketing stack.

Doing so not only augments a company's understanding of its customers but can be hugely beneficial to enterprise AI and Machine Learning (ML) programs.

Studies have shown that incorporating more data into marketing efforts and segmenting more frequently has a significant effect on company revenues. For example, the more frequently that companies felt that they were making sufficient use of data, the more likely they exceeded their goals. More than nine in 10 companies (92%) who had always or frequently made sufficient use of data said that they had met or exceeded their goals, while just 5% who said that they were making sufficient use of data said that they were falling short of their goals.[6]

Customer data generally comes from **three sources.**



Directly asking customers for it



Tracking customer activity as they engage with your brand



Partnering with a third-party data provider to augment existing data and create a comprehensive customer profile

The Benefits of Enriching Customer Data

When historical data is available, AI can be applied to analyze consumer behavior over time, identify trends, and create predictive models for future behavior. Marketers can use this information throughout the customer experience to increase the probability of sending customers the right message at the right moment, creating a positive impact on sales and revenue. Let's take a look at how AI can improve your personalization and predictive analytics efforts.

Personalization

98% of enterprise marketers agree that personalization helps to advance customer relationships, with 74% acknowledging a strong to extreme impact. And 88% believe that their customers expect a personalized experience.[7]

However, it can be overwhelming to imagine providing a personalized experience at scale. The enormous variety and volume of data, combined with the time required to process the data, presents a considerable challenge to marketers.

By analyzing historical operational data, AI techniques reveal specific patterns of consumer behavior that are strongly correlated to business outcomes. For example, an online vendor might wish to uncover patterns of website navigation that are predictive of purchases.

By using machine learning methods on historical website usage data, AI can provide valuable insights. For example, it might find that visitors who view a product over three or more separate sessions, and spend at least a minute each time on the product description page, are three times more likely to make a purchase than prospects on their first visit, regardless of the visitor's dwell time on the product page.

This knowledge can help a company deliver a more personalized experience to their customer by, triggering the personalization engine to directly route a customer to the product page for a dress she has looked at twice previously on her third visit.

Key Insight

Using AI, marketers can identify patterns in data and turn them into actionable insights. By enriching their data marketers gain additional data points and information that can help paint a fuller picture of the consumer, allowing for more personalized messaging at scale.



Predictive Analytics

Predictive analytics requires an understanding of the customer journey over time and uses AI to predict behaviors most likely to occur based on historical data.

While AI can reveal how behavior correlates with outcomes, it can only associate the behaviors that are made available for analysis. For example, you might assume that on her third extended visit to a product page Jane is three times more likely to make a purchase than another customer on her first visit. It might be the case, that if you knew Jane visited a brick-and-mortar store between her first and third online visits, the likelihood of her buying on her third visit jumps by a further 200%. However, the AI would not be able to surface this pattern, as the knowledge of her physical visits, especially without a purchase, would typically go undetected.

This scenario is quite common in that a company's visibility into customer behavior is often limited to individual channels or does not connect customer identities across different channels. Behavior patterns that can otherwise act as strong influencers of desired outcomes go undetected or are not connected.

These are the exact problems enrichment can address. By widening the base of information that can be analyzed by predictive techniques, brands can get a better understanding of their customers, deliver a more personalized experience and drive business results.

Key Insight

By working with a third-party provider to enrich customer data, marketers can significantly increase the accuracy of predictive analytics. Salesforce estimates that by 2020, 57% of business buyers will expect companies to anticipate their needs, providing recommendations and content targeted to their needs without customer initiation.[8]



Enrich Your Data to Increase the Effectiveness of Your AI

It's a common belief that to increase the effectiveness of artificial intelligence and maximize your return on investment, employing more sophisticated algorithms will lead to better outcomes. This belief has resulted in a competitive landscape where companies are battling over who can develop the most advanced techniques.

It's the depth (volume) and breadth (the attributes) of data that has the most effect on a positive outcome. When you compare two different techniques, one simple and one sophisticated, and feed different volumes of data into each algorithm, in time the accuracy of the simpler algorithm that is fed more data will eventually surpass the sophisticated algorithm with less data.

Case Study: How Data Impacts AI Results

Most businesses get 80% of their revenue from 20% of their customers. These high-value customers (HVC) are critical to the success of an organization, and as such are a segment that businesses need to continue to acquire, retain and grow.

To better identify and target their high value customers, a global food delivery company asked Mobilewalla to help them better identify the characteristics of this group - beyond what they were able to decipher from their own data.

With this data in hand, we used an RFM (recency, frequency, monetary) model and were able to create a high-value customer portrait to help drive improvements in average revenue per customer, average order amount and ROI related to acquisition costs. Some interesting trends that we identified were:



High value customers spend 3x what low value customers spend



Low value customers are 3x likely to churn vs high value customers



50% of high value customers transition to being low value customers in the next quarter

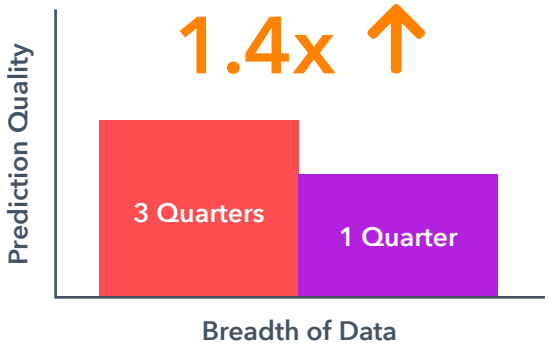
The company's ability to acquire and retain more of their ideal customers will have a significant long-term impact on their revenue. This work also led to some interesting insights around data enrichment and the impact that the breadth and depth of data used in the analysis had on the outcomes. In the following examples data depth and breadth are analyzed in the context of the sophistication of the AI technique used against the data.

As you can see in the first example, Mobilewalla analyzed three quarters of customer order history for the delivery company versus only one quarter of order history. The results show that the simple algorithm with more in-depth data beats the more sophisticated algorithm with shallower data by 40%, meaning that algorithm sophistication cannot compensate for lack of data depth.



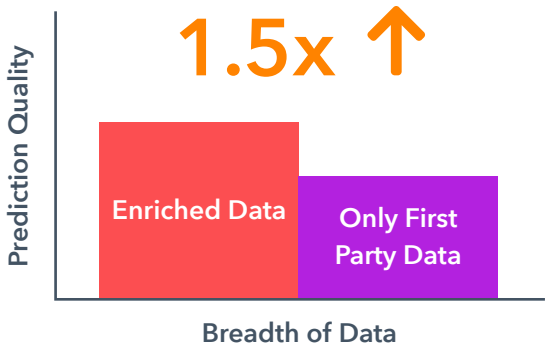
Two key takeaways to consider when comparing algorithm technique and data:

- The more data you can incorporate in AI training, the more you can gain from the AI techniques you apply.
- If you haven't incorporated enough data in training, you are likely not getting the best prediction possible.



Next, consider the breadth of data by comparing the constrained, narrow data that a company might be able to collect on its own (usually limited to demographic and order data), versus full-featured, comprehensive data that a business can gain by partnering with a third party.

The delivery company had some basic information taken from their records like the order amount and order frequency for each customer. In the second example, Mobilewalla then enriched the data with additional information like home and work location, age, gender, restaurant visit frequency, supermarket visit frequency, and more. This additional information increased the breadth of the data significantly.



One key takeaway when examining breadth vs. depth of data:

- As companies have limited breadth of customer information natively, enriching data sets are a must to drive high ROI of your artificial intelligence investment.

For organizations looking to increase the return on investment in artificial intelligence or machine learning, it's critical that companies enrich their owned data with data from a third party. This additional information will help to increase the breadth and depth of data, significantly increasing the effectiveness of the AI techniques that you apply.

Power Your Marketing With Mobilewalla

Mobilewalla combines the industry's most robust data set with deep artificial intelligence expertise to help brands better understand customer behavior. We collect, identify and analyze directly sourced application usage data from SDK integrations and supply-side platform partnerships. Through our extensive AI expertise, we deliver refined consumer insights that provide enterprises with unparalleled access to the digital and offline behavior patterns of their customers and prospects, as well as nuanced data about their competition.

Mobilewalla enables enterprises to build a complete picture of their customers and prospects and improve strategic decisions with actionable insights that you can apply at scale.

Mobilewalla By the Numbers



3+ Years of Data



50M+ POIs Mapped



Data from 75K+ Mobile Apps



Contact Us
to learn more about Mobilewalla and how our data enrichment can improve your marketing campaigns.

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Sources

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