

Consumer Analytics: A Primer

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ABSTRACT

Consumer analytics is the process businesses adopt to capture and analyze customer data to make better business decisions via predictive analytics. It is a method of turning data into deep insights to predict customer behavior. It may also be regarded as the process by which data can be turned into predictive insights to develop new products, new ways to package existing products, acquire new customers, retain old customers, and enhance customer loyalty. It helps businesses break big problems into manageable answers. This paper is a primer on consumer analytics.

KEYWORDS: big data, consumer analytics, customer data analytics, customer behavior analytics

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INTRODUCTION

The idea that *Customer is King* has been around for a long time. The Internet has brought changes to almost every business process. Consumers are spending more time and money on the Internet. The amount of data businesses are collecting about their customers is enormous. Customer data is a cornerstone to a successful business strategy. Businesses have realized that unique customer experience is their competitive weapon that boosts conversions in the short term and builds customer loyalty in the long run. A burning desire to know the customers better is critical to many marketing and sales leaders. In this new big data era, those who make the effort to mine the data are distinguishing themselves from the competition.

Organizations adopt big data analytics to better understand their customers and differentiate their offerings from competitors. They combine rich data across the organization to deploy analytics that sense and respond to customers in a dynamic environment. Since it is not possible to integrate all available data, managers need guidance in locating which data can provide valuable and actionable insights about customers [1]. Making sense of the data requires understanding the five Vs of big data: volume, velocity, variety, veracity, and value [2].

WHAT IS CONSUMER ANALYTICS?

Consumer analytics (also known as consumer data analytics, customer data analysis, customer experience analytics, or customer behavior analytics) is at the focal point of a big data revolution. It helps capture data on consumer

phenomena in real time. It makes big data available from individual consumers.

Consumer analytics may also be regarded as a method of turning data into deep insights to predict customer behavior. This includes turning data into predictive insights to acquire customers, grow revenue, and maintain loyal customers. Consumer analytics can turn data into predictive insights for developing new products, new ways to package existing products, acquiring new customers, retaining customers, and enhancing customer loyalty.

Customer analytics seeks to answer the following common questions [3]:

- Acquisition. Which channels drive the most new customers?
- Revenue. What are our most profitable revenue channels?
- Retention. Where do we lose customers and why?
- Engagement. What features resonate with which customers?

Customer analytics often takes the form of a software that furnishes companies with insights into their customers' behaviors. For customer analytics, an algorithm is a formula used by the software program for analyzing data to predict customer behavior. To implement customer analytics requires two steps [3]:

- Capture, store, and organize their data. Companies must collect lots of data. This data is crucial for growth and

revenue. If data is unstructured, or incomplete, it may lead to misleading results. The data may be transactional data, data about product use, data from customer-created texts. Figure 1 shows seven ways to collect customer data [4]. A company can analyze every move that their website visitors make.

- Analyze and make decisions with that data. Analysis of the data can yield ideas for new products to develop and new ways to package existing products. By collecting data and using the right analytics tool, companies can reach new business heights and keep up their pace with their competitors. For example, Citibank uses big data and customer analytics for customer retention and acquisition. They do this by processing and analyzing customer data combined with machine learning algorithms.

APPLICATIONS

The consumer analytical tools are essential to manage all forms of business data. Consumer analytics can be applied to different areas such as advertising, marketing, ecommerce, forecasting, healthcare, and tracking the customers.

- **Marketing:** According to Peter Drucker, the purpose of business is to create and keep a customer. Marketing provides services in order to satisfy customers and keep them. It is continuously evolving from an art to a science. Big data is rapidly changing how we view and analyze marketing problems to make decisions in the marketplace. Big data has made a lasting impact on marketing because organizations are struggling to make sense of the enormous amount of data they are amassing daily. Using information on customers, competitors, and markets is critical for business planning and decisions. Data driven marketing also provides organizations with opportunities to change customer behavior, which is influenced by age and gender [5]. Customer analytics enables marketers to discover the customer insight by tracking consumers. It also enables marketers to predict future performance sales.
- **Ecommerce:** The spread of mobile devices like smartphones and tablet PCs are also fueling the dramatic increase in consumer activities on the Internet. Consequently, ecommerce is growing faster than ever. Given the growth of consumer online purchase and usage data, a business' ability to understand and utilize this data is becoming an essential competitive strategy. Big data analytics in ecommerce is growing [6]. As online businesses continue to grow and people spend more time on Internet, consumer analytics services become essential.
- **Healthcare:** The healthcare industry is decades behind other consumer-oriented businesses in using consumer analytics. There is growing use of consumer analytics in healthcare. Understanding a healthcare system's current state is a prerequisite to being able to forecast a desired future state [7]. Using consumer and clinical data to make decisions at the individual member level increases the value created for them.
- **Forecasting:** Traditionally, forecasting has been the basis for planning and executing supply chain activities such as sourcing and distributing products/services to

customers. Forecasting has become complex over the years due to several factors such as the globalization of supply chains, increasingly competitive markets, and the explosion of data. Using consumer analytics can generate accurate forecasts that will help not only to improve the efficiency of their supply chains but also to enhance their revenues [8].

BENEFITS

The adoption of data driven strategies encourage the exploitation of the diverse richness of consumer data, to gain deep understanding of customer behavior, motivations and expectations. Research shows that companies that use customer analytics are more profitable and outstrip their competition because it helps companies make better decisions on pricing, promotion, and management. Customer analytics gives companies full visibility into who their customers are and how the customers use their products [3]. No matter the company size, customer data analytics helps to attain the following 10 goals [9]:

Short-term:

1. Increasing conversion rates.
2. Segmenting customers based on similar behavior patterns to target their needs better.
3. Understanding customer journeys (what products and when they buy, what channels they prefer).

Mid-term:

1. Forecasting sales.
2. Predicting customers' response to marketing activities and offering them relevant products and promotions.
3. Reducing the costs of marketing campaigns.
4. Establishing targeted/personalized communication.

Long-term:

1. Improving customer satisfaction.
2. Increasing customer loyalty and retention.
3. Optimizing product portfolio to better satisfy consumer needs.

Figure 2 shows some of the benefits of consumer analytics [10].

CHALLENGES

A key challenge in consumer analytics lies in the collection and integration of data across functional silos both within and outside the organization. Poor consumer data management practices are crucial challenge impacting organizational health. The adoption of contemporary tools in customer analytics has been slow. In order for customer analytics to operate correctly, it is of paramount importance to collect quantity and quality data. Leveraging customer analytics and making the most out of it does not happen overnight. It requires a strategy, infrastructure changes, a team of experts, and passionate workers. Businesses that embrace consumer analytics must also address three key related management issues: privacy, security, and governance.

CONCLUSION

Businesses should realize that customers are the real assets and a key enabler in revenue generation. To offer the best to customers, consumer analytics tool is of utmost importance. The study of consumer analytics lies at the junction of big data and consumer behavior. Consumer analytics is no longer the daunting concept it used to be.

One does not need to be a rocket scientist to use or understand consumer analytics. It promises vital results for product management, marketing, and sales. Today, businesses depend on consumer analytics than ever before because it helps them keep pace with consumers who are increasingly sophisticated. For businesses looking for a competitive edge, consumer analytics is a necessity, not just a nice-to-have. More information on consumer analytics drones can be found in the books in [11-14].

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Figure 1 Seven ways to collect customer data [4]



Figure 2 Benefits of consumer analytics [10].