Devil’s Advocate for the Ethical Implications of Data Science in Consumer Marketing

David D Berberena

Bellevue University

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Nasheb Ismaily

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Data science has many uses in today’s society and has been involved in a myriad of different facets of business for the last couple of decades. Businesses and consumers alike have been affected by the use of data science in consumer marketing strategies, fraud detection, human trafficking, and many other hot-button issues in today’s society. I wish to expound specifically upon data science and its ethical implications in consumer marketing. This means that businesses are employing data science techniques (data collection, data sorting, and predictive learning strategies) to appeal to the customer in a new way that has some consumers feeling that there could be a question of ethical standards when employing data science. Applying data science to companies’ consumer marketing strategies has positive and negative consequences. I have listed a few of these results of data science integration to raise the argument for or against this issue below.

Pros:

1. Data science allows businesses to more accurately target their customers by suggesting products that are closer to the customers’ needs based on their past purchases and predictive machine learning techniques
2. Consumer marketing using data science increases business-customer relations since the customer has a more secure sense that the business is interested in the customer’s actual needs as opposed to selling the customer whatever they think the customer wants, while the company has a much more informed idea about the customers they serve
3. Data science helps consumers voice their opinion directly to the company by allowing customers to provide feedback on the products/experiences they purchased from the business almost instantly after the consumer completes the purchase
4. Advertisements that pepper the consumer’s online presence are more relevant to the consumer, diminishing the consumer’s previously held notion that advertisements are annoying and insensitive (an example of this would be going on a website with an advertisement for the most popular abortion pills when the user has struggled to become pregnant and has spent a large amount of money to finally achieve a successful pregnancy)
5. Data science positively influences the company’s reputation amongst consumers and businesses as consumers know with increased accuracy that the business can provide the products/services needed by the consumer over long periods of time as well as the short term via consistent data collection and tailored advertisements, while businesses are better assured that their contractual obligations will be met with other wholesaler/manufacturers as the targeted consumers are more likely to purchase their products

Cons:

1. Advertisements that come too close to what the consumer needs at a given time may feel creepy or too invasive to the customer, potentially driving away their business to a competitor
2. Certain outlier consumers may be grouped into incorrect clusters during data mining, leading to product advertisements that may not be geared toward those niche customers
3. Data science may actually worsen a business’s reputation as advanced predictive analytics can be viewed as spying on their customers’ intimate buying behavior, especially if the products/services that are purchased are of a publicly questionable nature which the customer wishes to remain private
4. Data science prompts businesses to send tailored advertisements to consumers, yet these prospects of future sales may not wish to receive any advertisements at all, potentially leading to mass disillusionment with the business’s marketing strategy actually taking their customers into consideration or simply marking them as numbers to take advantage of their preferences for financial gain
5. Due to consumers’ lack of knowledge as to what data science entails, these new advertisements geared toward the customers’ preferences could be taken as a potential scam or security fraud tactic, as the mishandling of data at a national level, like the Edward Snowden incident in 2013, has been propitiated by reputable media sources that consumers gravitate towards

***Conclusion:*** Playing devil’s advocate on this issue helps to realize that as aspiring data scientists, our work has many ethical implications to be considered. How we handle data and how data is collected is extremely important. Consumers have the ability to make or break a business based on how data is ethically used and perceived (among other things of course).