**20 Practical Ways to Implement Data Science in Marketing**



Over the past decade, online information consumption has drastically shot up due to the wide affordability of the World Wide Web. It is estimated that there are over 6 billion devices connected to the internet right now. Around 2.5 million terabytes of data are generated every single day. By 2020, for every single person, there will be 1.7 MB of data created every second.

For marketers, this staggering amount of data is a gold mine. If this data could be properly processed and analyzed, it can deliver valuable insights which marketers can use to target customers. However, decoding huge chunks of data is a mammoth task. This is where Data Science can immensely help.

Data Science is a field that extracts meaningful information from data and helps marketers in discerning the right insights. These insights can be on various marketing aspects such as customer intent, experience, behavior, etc that would help them in efficiently optimizing their marketing strategies and derive maximum revenue.

Let’s take a look at 20 practical ways in which Data Science can be implemented in Marketing:

**1. Marketing Budget Optimization**

Marketers are always under a strict budget. The main goal of every marketer is to derive maximum ROI from their allotted budgets. Achieving this is always tricky and time-consuming. Things don’t always go according to plan and efficient budget utilization is not accomplished.

By analyzing a marketer’s spend and acquisition data, a data scientist can build a spending model that can help utilize the budget better. The model can help marketers distribute their budget across locations, channels, mediums, and campaigns to optimize for their key metrics.

**2. Marketing to the Right Audience**

Generally, marketing campaigns are broadly distributed irrespective of the location and audience. As a result, there are high chances for marketers to overshoot their budget. They also may not be able to achieve any of their goals and revenue targets.

However, if they use data science to analyze their data properly, they will be able to understand which locations and demographics are giving them the highest ROI.

**3. Identifying the Right Channels**

Data science can be used to determine which channels are giving an adequate lift for the marketer. Using a time series model, a data scientist can compare and identify the kinds of lift seen in various channels. This can be highly beneficial as it tells the marketer exactly which channel and medium are delivering proper returns.

**4. Matching Marketing Strategies with Customers**

To derive maximum value out of their marketing strategies, marketers need to match them with the right customer. To do this, data scientists can create a customer lifetime value model that can segment customers by their behavior. Marketers can use this model for a variety of use cases. They can send referral codes and cashback offers to their highest value customers. They can apply retention strategies to users who are likely to leave their customer base and so on.

**5. Lead Targeting**

Marketers can use data science to narrowly target leads and know all about their online behavior and intent. By looking at historical data, marketers can determine their business requirements and the type of brands they’ve been associated with, in the past year.

**6. Advanced Lead Scoring**

Every lead that a marketer procures doesn’t convert into a customer. If the marketer can accurately segment customers as per their interest, it will increase the sales department’s performance, and ultimately, revenue.

Data science enables marketers to create a predictive lead scoring system. This system is an algorithm that is capable of calculating the probability of conversion and segmenting your lead list. The list can be categorized into the following: eager customers, curious prospects, and not interested customers.

**7. Customer Personas and Profiling**

While marketing a product/service, marketers look at creating customer personas. They are constantly building specific lists of prospects to target. With data science, they can accurately decide which personas need to be targeted. They can figure out the number of personas and the kind of characteristics they need to create their customer base.

**8. Content Strategy Creation**

Marketers always have to deliver relevant and valuable content to attract their customers. Data science can help them pull audience data that will in turn help in creating the best content for every customer. For example, if a customer came via Google by searching for a certain keyword, the marketer will know to use that keyword more in their content.

**8. Sentiment Analysis**

Marketers can use data science to do sentiment analysis. This means that they can gain better insights into their customer beliefs, opinions, and attitudes. They can also monitor how customers react to marketing campaigns and whether or not they’re engaging with their business.

**9. Product Development**

Data science can help marketers gather, aggregate, and synthesize data on their products for several different demographics. Based on the insights provided by this data, they can develop products and create highly targeted marketing campaigns to their intended demographic.

**10. Pricing Strategy**

Data science can help marketers when it comes to improving their pricing strategy. By focusing on factors such as individual customer preferences, their past purchase history, and the economic situation, marketers can identify exactly what drives the prices and the customer’s buying intent for each product segment.

**11. Customer Communication**

By properly analyzing data, marketers can determine the right time to communicate with their prospects and customers. For example, they may be able to understand that a customer reads and responds to emails but isn’t very receptive on SMS. Such insights can help marketers understand the right time and channel for communication.

**12. Real-Time Interaction Marketing**

Data science can produce information about real-time events and allow marketers to tap into those situations to target customers. For example, marketers of a hotel company can use data science in real-time to determine travelers whose flights were delayed. They can then target them by sending ad campaigns directly to their mobile devices.

**13. Improving Customer Experience Using Data**

Providing a rich customer experience has always been an important factor in achieving marketing success. With data science, marketers can collect user behavior patterns that will predict who may want or need specific products. This allows them to market efficiently and provide customers with enriching experiences.

**14. Customer Loyalty**

Loyal customers are those who help in sustaining a business. They are less expensive than new customer acquisition. Data science can help marketers improve marketing to existing customers and thus boost their loyalty. For example, Target used data science to gain a profile of pregnant women based on their purchases before pregnancy. The company then targeted these customers with product offers during their pregnancies. This marketing strategy turned out to be a huge success in terms of purchases and loyalty for the company.

**15. Social Media Marketing**

Nowadays, customers are highly active on social media sites like Facebook, LinkedIn, and Twitter. Marketers can use data science to see which leads are exploring their social media page, what content they clicked on and more. With insights such as these, they can formulate a proper social media engagement strategy.

**16. Community Groupings**

Data science can be used to target specific social media groups for accessing customer feedback. This is done by helping marketers identify the most frequently discussed topics based on keyword frequency.

**17. Going Beyond Word Clouds**

For analyzing social conversations, marketers always relied on word clouds. However, word clouds were useful when there was a high level of social activity. If the level of social activity was less, marketers often ended up using irrelevant keywords. With data science and natural language processing algorithms, they can go beyond word clouds by contextualizing word usage and delivering meaningful insights.

**18. Ad Offerings**

Marketers can use data science to specifically target ads to customers and measure clicks and results of campaigns. It can ensure that the right people are seeing the banner ads and improve the chances of being clicked.

**19. Email Campaigns**

Data science can be used to figure out which emails appeal to which customers. How often are these emails read, when to send them out, what kind of content resonates with the customer, etc. Such insights enable marketers to send contextualized email campaigns and target customers with the right offers.

**20. Digital Marketing Platforms**

Digital marketing platforms thrive on data. Marketers can garner better insights by feeding these platforms with refined data. Data science can improve digital marketing platforms by providing the right data and thereby enabling marketers to determine what they have to do to achieve their marketing goals.

## Bonus Tip:

You can get the following books to go from zero to expert in using Data Science for Marketing:

*1.*[***Marketing Data Science***](https://amzn.to/2EkFLaJ)*:*[*https://amzn.to/2EkFLaJ*](https://amzn.to/2EkFLaJ)

*2.*[***Hands on Data Science for Marketing***](https://amzn.to/2ROM6DB)*:*[*https://amzn.to/2ROM6DB*](https://amzn.to/2ROM6DB)

*3.*[***Data Science for Marketing Analytics***](https://amzn.to/2YLQswD)*:*[*https://amzn.to/2YLQswD*](https://amzn.to/2YLQswD)