# Data Driven Marketing for E-Commerce and Online Business

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**Abstract - It is a word that refers to marketing plans, methods, and campaigns that are all guided by consumer data gathered through digital analytics, qualitative insights, and customer behaviour. All of these areas of marketing are linked. To get a solid start and preserve that edge, businesses and E-commerce Online merchants must keep their data-driven marketing methods up to date. As a direct result, there has been a rise in the usage of data-driven marketing. Data-driven marketing not only improves conversion rates, but it also allows marketers to create more engaging campaigns and, most importantly, increase the amount of money they generate from E-commerce. Data-driven marketing is a marketing technique that focuses on the information that firms gather about the individuals to whom they want to sell their products or services. In data-driven marketing, the approach is defined by cold, hard facts rather than an executive's best guess. While it is obvious that using data-driven marketing would help your E-commerce firm improve conversions, obtain helpful insights into product development, and follow the customer journey, actually implementing data-driven marketing is notoriously tough.**

**Keywords - E-commerce, Online Business, Digital Analytics, Data Driven marketing.**

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## 1. INTRODUCTION

In days gone by, marketing mostly involved making informed assumptions about what customers were looking for in a product or service. On a few cases, unanticipated efforts have resulted in the generation of new leads and the successful conversion of prospects into customers. On other cases, even advertisements that were exceptionally well-designed were unsuccessful, the market exhibited no indications that it would change, and the only thing that could be heard after the beginning of a campaign was silence. [1]

The aches and pains of this uncertainty gave birth to data-driven marketing, which made advantage of the exponential development of data as its major source of support and formed as a result of the marketing industry. It is a term that is used to describe marketing plans, procedures, and campaigns, all of which are directed by the data acquired from consumers through various channels, including digital analytics, market research, qualitative insights, and customer behaviour. It is a term that is used to describe marketing plans, procedures, and campaigns, all of which are directed by the data acquired from consumers. [2]

## 1.1 Data-Driven Marketing for E-commerce

Is it possible that a personalised advertisement has ever convinced you to take action? It's tough to compete with a company that is succeeding with its data-driven marketing strategy. Whether they feature a model who looks very similar to you, address an issue you had no idea you had, or offer a solution to the kind of difficult use case you and your coworker had been discussing, the best commercials make you feel like they were designed specifically for you. So, what exactly is driving these extremely successful commercials? Data.

Thus, data-driven advertising has become increasingly popular. Increased E-commerce sales is only one of the many benefits of data-driven marketing. In fact, 44% of marketers place the most focus on ROI measurement for demand creation projects in 2022. However, just 15% of marketers evaluate the performance of their content campaigns based on the number of leads they provide.

Brands and E-commerce Online Stores need to regularly update their data-driven marketing

**Mohammed Ashfaq Hussain[1]*, Prof. Dr. Narender Singh[2]**

477

strategy in order to be ahead of the curve and remain competitive. We'll break into what data-driven marketing is, how it may help brands, and the best methods E-commerce marketing organisations employ to boost their clients' online profiles.[3]

**1.2 Data-driven marketing: what exactly is it?**

Data-driven marketing is an approach to advertising that relies heavily on data gathered about a company's ideal clientele. Data-driven marketers base their decisions on empirical evidence, as opposed to the hunches of a company executive. By collecting and analysing massive amounts of data, businesses may get insights into their customers' and prospects' profiles, preferences, and behaviour patterns with regards to communication channels, products, and services, and more. This is crucial because if material is irrelevant, half of customers won't bother reading it or interacting with it.

Marketers that have access to consumer data are better able to target specific audiences, increasing conversion rates. Data-driven marketing is a cyclical process since customer behaviour evolves over time and fluctuates depending on a variety of circumstances (the items they buy, the number of new rivals entering the market, etc.). Marketers need real-time data on consumer actions in order to fine-tune their strategies and spend wisely on advertising to get the highest possible lifetime value customers. Although data-driven marketing requires more work, it is more effective. [4]

**1.3 Data-driven marketing boosts E-commerceonline business**

The first and most obvious advantage of data-driven marketing is, of course, having enough "particular" data to work with. To avoid a "one-size-fits-all" approach, E-commerce digital marketers should instead divide their consumer base into smaller groups based on shared interests and preferences. E-commerce marketers may use this information to determine the best times to post on social media, send out email campaigns, and release new advertisements, based on the likelihood that certain demographic subsets would respond favourably to specific distribution channels.

More than that, data-driven marketing helps online shops anticipate and prepare for emerging consumer preferences. Marketers may better predict and address future client demands if they examine data such as the length of the purchase cycle to identify trends such as seasonality or other patterns in product usage. Using this information, E-commerce marketing teams may create new designs, expand existing ones, rethink prices, and plan forward.

Online merchants may demonstrate their commitment to their clients by responding to their needs, providing a personalised purchasing experience, and anticipating emerging trends. The bottom line is that higher sales outcomes may be achieved through targeted marketing.[5]

**1.4 Data to improve digital marketing**

Today's marketing world would not function without digital marketing initiatives. Without them, you'll have a much harder time attracting customers and building a brand for your online shop. Data-driven marketing is the next logical step for digital marketing, since it pinpoints the most effective material to grab viewers' attention and the optimal frequency to keep them interested.

By analysing performance indicators and keeping tabs on how customers react to each campaign, marketers can see what's working and where there's room for improvement. A successful campaign may indicate that a given piece of content resounds well with a certain demographic and should be featured more prominently in future efforts.[6]

The optimal keywords for a company's specialty may be discovered with the use of consumer behaviour analysis, allowing for the creation of SEO-friendly content and effective paid search advertisements at at the right moment. To further complement their personas, some digital marketers use data such as cookies or demographic information about their target audience to speculate on future purchases.

However, you'll need useful information in order to reach this stage. Therefore, many businesses use E-commerce marketing services that focus on digital marketing platforms such as HubSpot. Marketers may publish and track the performance of content marketing, social media marketing, and email marketing with the assistance of the appropriate agency and the proper platform. Gathering all of this information in one place can allow you to streamline your marketing efforts.[7]

**1.5 Guidelines for Effective Data-Driven Marketing**

There are several inflexible guidelines that must be followed while engaging in data-driven marketing:[8]

**i. Collect the right data -**A reliable database of client information is essential for any data-driven marketing campaign to succeed. You must be aware of the sources that your current and future clients use to gain insight and motivation. Learn their demographics (such as age and gender), purchasing habits (such as frequency), and product preferences. After creating a customer persona, it's time to think about what information would be most useful to your business and how you can get it. You shouldn't be reluctant to solicit the assistance of your clientele. Asking clients where they heard

**Mohammed Ashfaq Hussain[1]\*, Prof. Dr. Narender Singh[2]**

about you through quick surveys may pay huge dividends.

**ii. Manage that data -**As the old adage goes, "garbage in, trash out," so it is with customer data that isn't accurate and up-to-date. Establish data governance processes and think about hiring an E-commerce marketing firm to aid you when developing your data-driven marketing strategy so that your campaigns may be built on the most up-to-date information possible.

**iii. Segment your audience** - There will be a wide variety of customer personalities and habits among those who purchase your goods. So it's important to divide your target audience into subsets defined by shared characteristics and behaviours, and then provide each subset with content and advertising tailored to their specific interests. The next step is to figure out how to divide up your clientele in a way that will allow you to get a certain subset of them to take some sort of action. Location, buyer journey phase, age, gender, and so on are just a few such instances.

**iv. Learn from your performance -**Learn more about your consumers' behaviours and preferences with each campaign, piece of data, and key performance indicator. Don't accept it as a given. Instead, you should evaluate your previous marketing efforts and incorporate the lessons you've learned into your current strategy. Your content may be refined over time to the point where it anticipates and solves problems for consumers and proposes things they are sure to enjoy.

**v. Retarget prospects and customers** - Maintaining contact with previous clients or leads through retargeting campaigns is highly effective. Whether they've clicked on an ad, read a blog post, or left a remark on social media, they've shown interest in your online presence. You can probably get them to take action if you give them another push, especially if you make them an irresistible offer.

## 2. TECHNIQUES & METHODS FOR EFFECTIVE DATA-DRIVEN MARKETING

Customers that have been with you for a while don't always act like new ones, and the greatest ones won't always act like the worst ones. You may utilise the recurring trends in your clientele as early warning indicators if you observe them closely enough. It's possible, for instance, that your greatest customers all shop at about the same intervals. If you see a rise in the interval between orders, you know there's a problem. Creating reactivation campaigns can help bring back dormant clients by serving as a gentle but persistent prompt to make a transaction.

Metrics like customer retention and churn or the number of free trials might serve as comparable standards. If you can use this information to get people hooked on your first product, it might completely alter your marketing approach. Naturally, though, you'll also want to zero down on the most useful information and do all you can to collect more of it. A common practise is to provide a survey to new users as soon as they sign up for a website. Multiple items in that survey could be good predictors of high lifetime value. One great technique to increase engagement and sales is to direct visitors to a survey and then send them automated emails based on their responses.[9]

### 2.1 Data do Businesses Collect

Keeping an eye on how visitors use your website may tell you a lot about them as potential buyers. The average time spent on each page during their session. What exactly are people looking at on your site? Is there any interest in the things you've recommended? What, if anything, have they put in their shopping cart? Customers' and visitors' behaviour on your site may provide insights on how to enhance the user interface and user experience, as well as highlight the kind of content and items that resonate best with your audience. The next time a customer visits your online shop, they should be presented with tailored recommendations of what they would like.

The findings of A/B tests should be combined with data from your website to fuel your marketing machine. It's not always the case that the initial draught of an email, advertisement, or an Instagram post is flawless. In order to polish your messaging and elicit greater reaction and engagement rates from your social media audience, it is important to do A/B testing on similar material. It might be intimidating to consider the sheer quantity of data that could be gathered. However, E-commerce marketing organisations can help you choose the most fruitful data-driven marketing techniques based on your company's size and stage of development.[10]

### 2.2 Analytics and Tools for Data-Driven Marketing

When dealing with a large amount of data, it is helpful to have resources available that can analyse and present the information for you. In order to translate website data and create personalised dashboards, Google Data Studio is a data visualisation tool. There's a paid enterprise version, but for individuals and small groups, it's free. Datasets from multiple sources, including Google Ads, Search Ads 360, and Google Analytics, may be linked and analysed with minimal to no coding.

A further tool for companies interested in data-driven marketing is HubSpot's Marketing Hub. It integrates with several systems, including HubSpot

**Mohammed Ashfaq Hussain[1]*, Prof. Dr. Narender Singh[2]**

CRM, allowing you to centralise and distribute client information. Email marketing, content creation, retargeting campaigns, and the management of social media may all be improved with the help of Marketing Hub's user-friendly interface and granular controls. Analytics of a campaign's performance based on data might be difficult to interpret. Hiring a HubSpot Solutions Partner and Digital Marketing Agency like IronPlane, however, may greatly increase conversions and raise E-commerce income.[11]

In addition to Google Analytics, Facebook Ads, Moz, and HubSpot, Data box is another marketing analytics software that lets you see key performance indicators and produce reports from the cloud. Using the REST API and SDKs provided by Databox, users may import data from their existing databases. Alerts, scorecards, and weekly summaries of key performance indicators are all available to executives in real time through the Databox mobile app. IronPlane, as a certified databox technology partner, can assist your business in making informed, data-driven marketing decisions by providing insightful analytics, campaign metrics, and key performance indicators.

You may utilise any of these tools to transform user information into actionable E-commerce digital marketing tactics. Understanding campaign success, customer behaviour, and consumer qualities through data analysis may help you see trends early and maintain a competitive edge. Having a professional E-commerce marketing firm on your side may help you expand your reach, discover new avenues for conversion, and ultimately boost your online sales. [12]

### 2.3 BigE-commerce customers are data-driven

Companies who engage in data-driven marketing to increase income from E-commerce have experienced some remarkable outcomes as a consequence of their efforts to remain ahead of the competition. Let's take a look at some real-world instances of clients that have made great strides in their data-driven marketing strategies as a result of utilising BigE-commerce Web Development.[13]

### i. Origin

Origin is a nutrition and clothing company that needs a scalable IT stack to keep up with its rapid expansion in the retail channel. The Origin marketing team was able to accurately and efficiently blend customer data from numerous sources by using Google Data Studio and BigE-commerce. Origin is able to make long-term investments in both content and advertising because of the consolidation of its data.

### ii. Garrett Wade

Tools for the garden are a specialty of Garrett Wade's woodworking and hand tool business. The marketing team at Garrett Wade, like that at Origin, combined its customer data manually, which resulted in both human error and a lag in the data. But by using a digital marketing platform, Garrett Wade was able to cut down on the time it took to ensure that their data was clean and accurate before releasing it to production. Furthermore, Garrett Wade's analysis of its customers' buying habits has helped the company gain insight and personalise its marketing material, generating returns that more than cover the price of the solution.

### iii. Fore Ladies Golf

Shop for premium women's golf apparel at Fore Ladies Golf. The CEO recognised some years ago, when the firm was still relatively small, the importance of implementing a data-driven marketing platform in order to prepare for future growth. The CEO and her team were able to see where their Facebook and Google Ads approach needed improvement right away thanks to BigE-commerce. In addition, Fore Ladies Golf could better control inventory, provide VIPs with exclusive deals, and allocate funds for digital marketing.

## 3. DATA-DRIVEN ECOMMERCE PLATFORMS CAN BOOST SALES

Several powerful tools to assess data-driven insights are available on the Magento development platform, and both BigE-commerce and Magento may be used to improve a website for conversions using data-driven marketing. Find out why Magento is the best platform for E-commerce development and learn more about the Adobe / Magento Open Source project.[14]

### 3.1 Data-driven marketing has certain challenges.

Advertising based on data is not a simple task. Indeed, ninety-one percent of businesses say they have trouble maximising data's potential for illuminating new avenues of profit. The sheer volume of available data can be overwhelming; selecting relevant information is essential for making sound judgments. Thus, a successful plan relies on the ability to sort through information and recognise pertinent questions to ask. In addition, you'll have to standardise your massive dataset. This may include normalising data for time, date, and other characteristics that may vary from person to person, or breaking down a huge dataset into smaller ones.

Data-driven marketing's greatest strength also represents one of its greatest weaknesses: the need for interpretation of the collected data. To effectively implement your marketing strategy as a whole, you need a firm grasp of the concepts of

**Mohammed Ashfaq Hussain[1]\*, Prof. Dr. Narender Singh[2]**

connection definition, linking, and interpretation. You also need to know why certain things are changing in these data points while they are being collected. Effective tracking, optimization, and translation of data into actionable steps requires the use of the correct marketing tools and the services of a professional E-commerce marketing firm.[15]

## 4. MULTIPLE BENEFITS OF DATA-DRIVEN MARKETING

Success in business that is even better than before. Using data to guide your marketing strategy may have a positive impact on your bottom line in a number of ways.

Clarity in operations has been increased. There are three ways in which data increases clarity in operations: [16]

**i. Campaign success is obvious:** In data-driven marketing, you analyse the effectiveness of a campaign by evaluating the success of the campaign using data. For example, have you attained the target number of new prospective consumers, or have prospects been converted into customers?

**ii. This eliminates guessing:** When you are planning a marketing strategy, you should always keep in mind that there are several routes to take to achieve your objectives. When using data-driven marketing, there is no need to fight over whose creative is superior; instead, you can just select your leading candidates and let the market decide. Data-driven marketing analyses many creatives and uses data to determine which one works best for our clients. Examples of data-driven marketing include A/B tests, machine-learning algorithms incorporated in ad-buying software, and so on.

**iii. Strategic alignment:** Leaders used to have to make educated guesses about which marketing channels would yield the best results going forward, but now they can rely on data to guide their decisions. While some said that the numerous conventions they attended were responsible for bringing in clients, TV advertising were generally held responsible. Directly attributing leads and sales to specific channels is only possible with data-driven marketing. This makes it easier to decide which channels to prioritise in your future advertising efforts.

### 4.1 Data-driven advertising and its game-changing potential

The marketing that is driven by data has a great many advantages. However, its worth also extends to a somewhat deeper level, in that it alters the organisational structures of businesses and the ways in which they conduct their operations.

You make the decision to offer your consumers a voice when it comes to the shaping and development of your brand, communications, and product rather than letting egos and HiPPOs (highest paid person's opinion) control your strategy. This allows them to contribute to the creation of your brand.

This paves the way for greater customer-driven business growth and gives staff the ability to speak their minds on how to improve the company. When data, not high-powered people in positions of authority, is the ultimate judge, any concept may be tried out and win over the customer's heart. [17]

### 4.2 Beyond the scope of conventional advertising

#### i. Digital Advertising

**a. Personalize your ads:** Making adverts more relevant to a certain audience with the use of collected data is a breeze. Google AdWords, for instance, inserts relevant keywords into search adverts. Using similar terms to those recently entered by a potential consumer increases the relevance of the ad to their query and, by extension, the likelihood that they will click on it.

**b. Retarget web visitors:** Online customer behaviour may be monitored with the help of Google Analytics. Use Google Analytics in tandem with your advertising platforms to zero in on site visitors who have already shown an interest in your products or services (by, for example, reading three or more of your blog articles or spending a considerable amount of time on your website).

**c. A/B test your creatives for maximum results:** Produce a number of different creatives (for example, advertisements), then utilise the machine-learning algorithms that are already ingrained in ad-buying software (such as Facebook advertising) to conduct A/B testing and discover which of the candidates performs the best.

#### ii. Email Campaigns

**a. Personalize content:** You should export the email addresses from your email marketing solution, then match those addresses with other information you have in-house (such as previous purchases from your CRM, social media, sign-ups to your conferences, and so on) in a central location. Make use of the richer information in order to provide tailored content. Utilizing your organization's internal data to automatically fill in blanks in an email might be an easy way to implement personalization. For instance: "Dear [your first name], I am writing to inquire about the quality of the [your most recently purchased product]," etc.

**Mohammed Ashfaq Hussain[1]\*, Prof. Dr. Narender Singh[2]**

**b. A/B test email flows:** The behaviour of one's customers might be difficult to forecast. Which email, the one with the lovely design, or the one that is just simple text, do you think they will prefer? Which email will result in higher click-through rates as well as more purchases? Instead of making educated guesses, put a tiny sample of your clients through an A/B test. The outcome of the A/B test may be sent to the other email addresses in an automated fashion.

**c. Use customer behaviour analytics:** You may learn a lot about your customers' buying habits by analysing their transaction histories and profiles. The study of the data may be used to determine which items are frequently bought together. Send an email marketing campaign to consumers who bought one of the goods but not the others. Three times as many sales may be expected from product recommendations made using machine learning and micro-segmentation as from those made using traditional methods.

**iii. Social Media**

**a. Get inspired by search results:** Google Search Console and other web analytics tools can help you learn about the queries that led people to your site. Refer to the most popular search terms as a starting point for your social media updates. Be sure to create a social media post answering the question "How to accomplish X?" if you saw that a large number of your website visitors were looking for it. Improve your content marketing with the same method.

**b. Follow the trends**: Although it is famously difficult to forecast consumer behaviour, you do not require extensive predictive analytics to maximise the effectiveness of your social media. Determine which themes and post types generate the most social media activity among your target audience by doing an analysis of the engagement levels (likes, comments, and shares) on various posts. [18]

**4.3 Implementing a data-driven marketing approach**

- Establishing goals for the company should be your first step.
- Develop marketing strategies that are aligned with the business's goals.
- Determine which kind of data are essential before beginning work on the marketing efforts.
- Set up a system to keep track of relevant information.
- Conduct the advertising campaign.
- Analyze the data to see how effective the marketing effort was.

**5. CONCLUSION**

Marketers may then choose to modify their advertisements so that they are more relevant and targeted for the target audience, all the while keeping customer profiles and behaviours in mind. Even while it is evident that employing data-driven marketing may assist your E-commerce company in optimising conversions, obtaining beneficial insights into product development, and following the path of the consumer, putting data-driven marketing into practise is notoriously difficult. Many E-commerce organisations seek the aid of a digital marketing agency to monitor, report on, and evaluate the findings of data-driven analytics. This is due to the large amount of data that has to be sorted through as well as the large amount of space for mistake that exists.

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483