


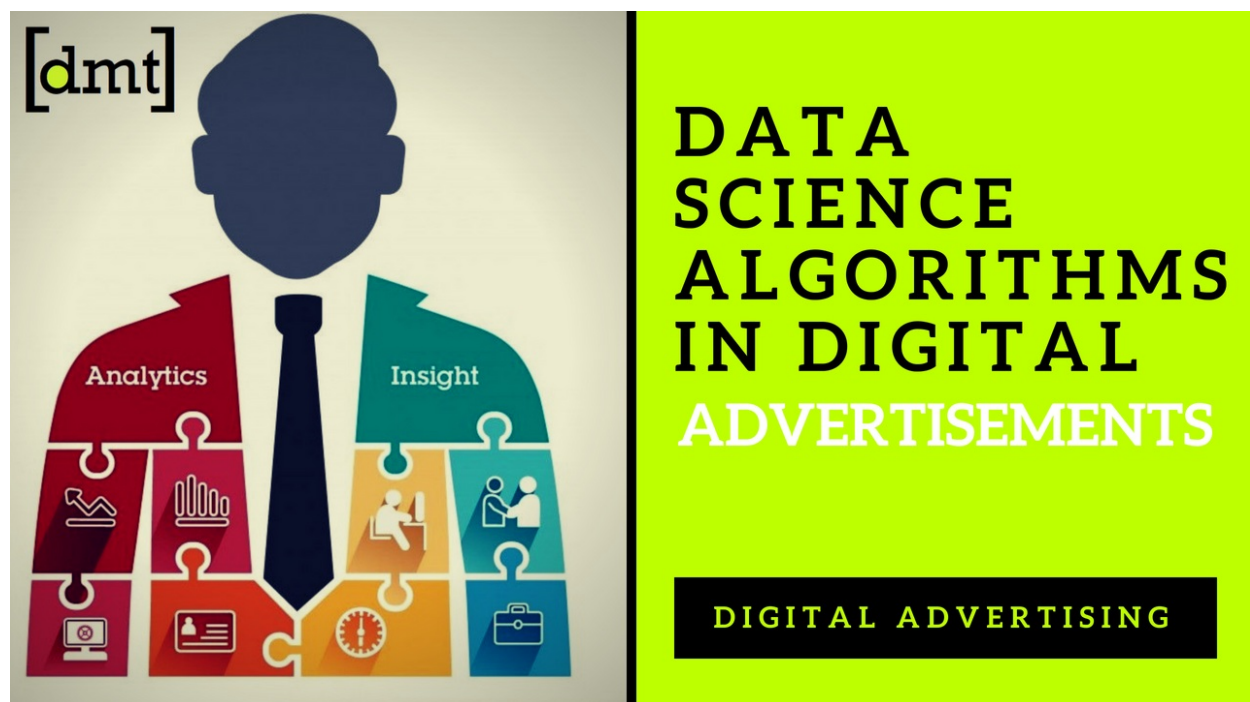
Digital Advertising: Data Science Algorithms in Digital Advertisements

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Digital Advertising: Data Science Algorithms in Digital Advertisements
(90%) Votes



Digital advertising also called internet marketing. The main aim of the digital marketing is to make your target audience get engaged with the advertisements and end up with successful product/service purchase. 😎

What is the role of Data Science here? Let us understand how data science is going to impact on digital ads.

Data science

Data science is a mingle of statistics, data analysis, machine learning principles and various algorithms. Its primary aim is to discover the hidden patterns from the raw materials similar to data mining.

Data science is the process of using the data to understanding different things. It extracts the data from both structured and unstructured.

“Data Scientist (n.): Person who is better at statistics than any software engineer and better at software engineering than any statistician.” by Josh Wills(Director of Data Engineering at Slack)



The need of Data science

In olden days, Most of the data was in structured and straightforward. You can be analyzed easily with simple Business Intelligence tools. Modern days most of the information is semi-structured or unstructured, as per the analysis the unstructured data will be reached to 80% at the end of 2020.

This unsaturated data mainly generates from the following sources:

- Multimedia forms
- Text files
- Financial logs
- Sensors
- Instruments.



The simple Business intelligence tools could not handle the vast and variety of unstructured data. It is the reason we go with advanced and sophisticated analytical tools and robust algorithms for analyzing and processing(Data Science). These are not the only reason data science become famous, and it also used in many other areas as those are:

- Image recognition
- Voice recognition
- Digital advertisements
- Fraud & risk detection
- Robotics
- Delivery logistics
- Self-driving cars
- Gaming
- Internet search, etc.

The above listed are applications of Data science that we use in our daily lives. By using the data science, companies analyze the customer purchasing power and interest than sell their products accordingly.

Related articles: [Machine Learning: What is the Future of Machine Learning in Digital Marketing?](#)

Here we will discuss in detail about **Data science digital advertisements**.

What are digital advertisements

A digital advertisement is a kind of online marketing. It uses the internet to deliver their product information to the end user/consumer. The digital advertising also called as web advertising or online marketing or online advertising or internet advertising.

Some years ago, online marketing was a bunch of banner ads placed on websites. It maddening the users and it results in “banner blindness.” Present day digital marketing is very vast, based on target users, website content and other things, different types of ads produced. Ad’s are the primary revenue for the internet-based companies.



As per statements of **David Meerman Scott**, we can say that an effective web marketing is to deliver appropriate content to customers anticipating they will need it the most.

Related articles: [Digital Marketing Campaigns: How To Bounce Back From Advertising Fails](#)

In the year 2016-2017 in the United States, the revenue of the online advertisement is more significant than cable television and broadcast television. The income increases to 14% then reached to \$83 billion. The digital marketing includes search engine marketing, social media marketing, display advertisements and mobile advertisements.

Data science in digital advertisements

In the digital advertising platform, data have been used for conversations, clicks and deliver the relevant data to the targeted web users. With the data science, you can use the following digital advertisements strategies very effectively.

- Bid price
- User segmentation
- Creative quality
- Attribution
- Fraud detection
- Targeting, etc.

Bid price:

Most of the paid digital marketing companies use auction model, where marketers compete with others to display their ads to the targeted consumers. Each advertiser participates in the auction and nominates bid amount for the ads. The main benefit of the sale(auction) is you can efficiently manage the advertising budget.

User segmentation:

Consumers divided into different groups based on factors like age, gender, habits, and interests, etc. Identifying the customers those are having the same properties then allow the advertisers to target them.

Creative Quality:

Creative quality is the most important for sales. In the advertising ecosystem, good quality ads get more value, i.e., by its brand, its advertiser, etc. With quality only you can maintain the customer base.

Attribution:

Some of the consumers came to the brand directly through the television. Consumer analysis the brand with their mobiles then purchase at home. Tracking of those customers is not possible. Data science algorithm will be helpful for tracking them.

Fraud detection:

Every company wants their target audience to get engaged with their brands, and not by the robots. Data science got algorithms for this to verify whether the audience is humans or not.

Endnotes:

Using data science effectively in digital marketing, you can see the better results while executing above discussed digital marketing strategies. The interactive nature of data science algorithms helps digital advertising companies to expand their business by

targeting more specific customers and grow their customer base within a short span of time. All the advanced methods would return aspired output using advertising budget as low as possible. 😊