Big Data Case Studies
Following are the interesting big data case studies –

1. Big Data Case Study – Walmart

Walmart is the largest retailer in the world and the world's largest company by revenue, with more than 2 million employees and 20000 stores in 28 countries. It started making use of big data analytics much before the word Big Data came into the picture.

Walmart uses *Data Mining* to discover patterns that can be used to provide product recommendations to the user, based on which products were brought together. WalMart by applying effective Data Mining has increased its conversion rate of customers. It has been speeding along big data analysis to provide best-inclass e-commerce technologies with a motive to deliver superior customer experience.

The main objective of holding big data at Walmart is to optimize the shopping experience of customers when they are in a Walmart store.

Big data solutions at Walmart are developed with the intent of redesigning global websites and building innovative applications to customize the shopping experience for customers whilst increasing logistics efficiency.

Hadoop and NoSQL technologies are used to provide internal customers with access to real-time data collected from different sources and centralized for effective use.

2. Big Data Case Study – Uber

Uber is the first choice for people around the world when they think of moving people and making deliveries. It uses the personal data of the user to closely monitor which features of the service are mostly used, to analyze usage patterns and to determine where the services should be more focused.

Uber focuses on the supply and demand of the services due to which the prices of the services provided changes. Therefore one of Uber's biggest uses of data is surge pricing. For instance, if you are running late for an appointment and you book a cab in a crowded place then you must be ready to pay twice the amount.

For example, On New Year's Eve, the price for driving for one mile can go from 200 to 1000. In the short term, surge pricing affects the rate of demand, while long term use could be the key to retaining or losing customers. ***Machine learning algorithms*** are considered to determine where the demand is strong.

3. Big Data Case Study – Netflix

It is the most loved American entertainment company specializing in online on-demand streaming video for its customers.

Netflix has been determined to be able to predict what exactly its customers will enjoy watching with Big Data. As such, Big Data analytics is the fuel that fires the 'recommendation engine' designed to serve this purpose. More recently, Netflix started positioning itself as a content creator, not just a distribution method.

Unsurprisingly, this strategy has been firmly driven by data. Netflix's recommendation engines and new content decisions are fed by data points such as what titles customers watch, how often playback stopped, ratings are given, etc. The company's data structure includes Hadoop, Hive and Pig with much other traditional business intelligence.

Netflix shows us that knowing exactly what customers want is easy to understand if the companies just don't go with the assumptions and make decisions based on Big Data.

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4. Big Data Case Study – eBay

A big technical challenge for eBay as a data-intensive business to exploit a system that can rapidly analyze and act on data as it arrives (streaming data). There are many rapidly evolving methods to support streaming data analysis.

eBay is working with several tools including **Apache Spark**, Storm, Kafka. It allows the company's data analysts to search for information tags that have been associated with the data (metadata) and make it consumable to as many people as possible with the right level of security and permissions (data governance).

The company has been at the forefront of using big data solutions and actively contributes its knowledge back to the open-source community.

5. Big Data Case Study – Procter & Gamble

Procter & Gamble whose products we all use 2-3 times a day is a 179-yearold company. The genius company has recognized the potential of Big Data and put it to use in business units around the globe. P&G has put a strong emphasis on using big data to make better, smarter, real-time business decisions.

The Global Business Services organization has developed tools, systems, and processes to provide managers with direct access to the latest data and advanced analytics. Therefore P&G being the oldest company, still holding a great share in the market despite having many emerging companies.

Big Data predicting the uncertainties

A groundbreaking study in Bangladesh has found that using data from mobile phone networks to track movements of people across the country help predict where outbreaks of diseases such as malaria are likely to occur, enabling health authorities to take preventive measures.

Every year, malaria kills more than 400,000 people globally and most of them are children.

The different type of data, including information provided by the Bangladesh ministry of health, are used to create risk maps indicating the likely locations of malaria outbreaks so the local health authorities can then be warned to take preventative action, including spraying insecticides and stockpiling bed nets and medicines to protect the population from the disease.

Conclusion

With the various technologies it holds, Big Data helps almost every company or sector that aspires to grow. Analyzing large datasets that are associated with the events of the company can give them insights to increase their customer satisfaction.