



DATA
ANALYTICS
APPLICATIONS

In today's world, data rules are the most modern companies. Numerous packets of data are circulating all around the world due to increasing access to the internet. Business are aware that this data translates to information which they can use to improve their customer service, understand trends, or even find the market loopholes.

To gain such important insight into data as a whole, it is important to analyze data and draw specific information that can be used to improve certain aspects of a market or the business as a whole.



1. Security

Data analytics application or more specifically, predictive analysis has also helped in dropping crime rates in certain areas. In a few major cities like Log Angeles and Chicago, historical and geographical data has been used to isolate specific areas where crime rates could surge. On that basis, while arrest could not be made on a whim, police patrols could be increased. Thus, using application of data analytics, crime rates dropped in these areas.





2. Health Care

While medicine has come a long way since ancient times and is ever improving, it remains a costly affair. Many hospitals are struggling with the cost pressures that modern healthcare has come with, which includes the use of sophisticated machinery, medicines etc.

But now with the help of data analytics application, healthcare facilities can track the treatment of patients and patients flow as well as how equipment are being used in hospitals. It has been estimated gain achieved if data analytics became an integral part of healthcare services.



3. Fast Internet Allocation

While it might seem that allocation fast internet in every area makes a city 'Smart', in realty, it is more important to engage in smart allocation would mean understanding how bandwidth is being used in specific areas and for the right cause.

It is also important to shift data allocation based on timing and priority. It is assumed that financial and commercial areas require the most bandwidth during weekdays, while residential areas require it during the weekends. But the situation is much more complex. Data analytics can solve it.



For example, using application of data analysis, a community can draw the attention of high-tech industries and in such cases, higher bandwidth will be required in such areas.



4. Interaction with Customers

In insurance, there should be a healthy relationship between the claims handlers and customers. Hence, to improve their services, many insurance companies often use customer surveys to collect data. Since insurance companies target a diverse group of people, each demographic has their own preference when it comes to communication.

Data analysis can help in zeroing in on specific preferences. For example, a study showed that modern customers prefer communication through social media or online channels, while the older demographic prefers telephonic communication.



5. Digital Advertisement

Data analytics has revolutionized digital advertising, as well. Digital billboards in cities as well as banners on websites, that is, most of the advertisement sources nowadays use data analytics using data algorithms. It is one of the reasons why digital advertisement are getting more CTRs than traditional advertising techniques. The target of digital advertising nowadays is focused on the analysis of the past behavior of the user.



6. Risk Detection & Risk Management

DETECTION RISK

DR

IR x CR

Nature, extent, timing substantive tests

- Nature: more/less persuasive tests
- Extent: larger/smaller samples
- . Timing: balance sheet date or interim

CDW 9th and Ch. 13



One of the first data analytics application may have been in the discovery of fraud. Many organizations were struggling under debt, and they wanted a solution to this problem. They had already enough customer data in their hands, and so, they applied data analytics. They used 'divided and conquer' policy with the data, analyzing recent expenditure, information to understand any defaulting. Eventually, it led to lower risks and fraud.

Risk management is an essential aspect in the world of insurance. While a person is being insured, there is a lot of data analytics that goes on during the process. The risk involved while insuring the person is based on several data like actuarial data and claims data, and the analysis of them helps insurance companies to realize the risk.



Summary of our Activity and Data Analysis

It is clear that data analytics application are taking great strides in almost all avenues across the globe. If we are able to understand data and analyze it, it can help in increasing our overall job efficiency a lot. However, misuse or inefficient use of data can cause several problems and lead to the lowering of overall productivity.

So, it is important that data scientists know how to make use of data efficiently and engage in the right application of data analytics can bring about a major positive impact on our society and world at large and increase the overall productivity of specific sectors.



