The Concept of Data Quality and Its Importance

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A Data Science Foundation Blog

December 2020

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www.datascience.foundation

Data has become an essential topic in the corporate world these days. Everyone needs to talk about the knowledge and quality that can be extracted from the results. There is a good explanation for this—data is among the essential tools available to today's advertisers, agencies, marketers, media organizations, and much more.

But the data is only beneficial if it is of top quality. Insufficient data is entirely insignificant. Under the worst-case scenario, businesses will make expensive errors. IBM reports that incomplete data costs the US economy $3.1 trillion a year. These costs arise from the time workers spend on fixing insufficient data and discrepancies that cause consumer error.

Data quality is the very first element you need to understand when establishing a company. If the data are not reliable, it is difficult for workers to link the dots, and ultimately the company can collapse. However, for the data to be beneficial and useful, it needs to be of high quality. The stronger the quality of your results, the more you could get out of it. If the data is of low quality, it may even be dangerous. If you base your judgment on inadequate data, you are likely to make the wrong decision.

Data continues to be incredibly valuable to every industry. Data will help with almost anything for companies. It can help determine which demographic to target, which supplier to choose, which faculty to hire, or which one to choose among various approaches. The database can only do it if the data in it is safe and new.

Business development requires a comprehensive approach, leveraging on strengths to boost trade as a whole. Low-quality data makes it increasingly challenging to achieve, which means that you waste precious resources in an unfruitful way. Therefore the more significant the quality of your results, the more you could get out of it.

Technological advancements such as marketing automation and AI are also affected by data quality. These tools have immense potential in modern business, but success largely depends on the value of data. The more valuable data that you have, the algorithms can generate quicker and effective results.

Similarly, the accuracy of data is critical due to unique compliance issues. Data privacy policy continues to evolve, requiring organizations to handle their data properly. This is particularly relevant for confidential information or sensitive financial details of the consumer and refers to

other types of data.

Collecting high-quality data can also be challenging. Problems may arise due to the need to incorporate diverse data systems throughout multiple departments or applications, the introduction of new technology, manual processes, improper tools to manage records, and much more. There are specific measures that companies can do to enhance the quality of data under these scenarios.

Generally, it's not challenging to get everybody in a business, even top management, to accept that good data quality is suitable for businesses. In the new age of information technology, support for data quality emphasis is much more vital than it used to be.

Though it's going to be difficult for the main issues over who is indicative of the quality of the results, who has to do something about it, and who is going to finance the required activities.

The standard of data is close to human health. It is tough to reliably test how any aspect of our diet and exercise will influence our health. In the very same way, it is also tough to precisely test how any part of our data will impact our business.

The standard examples include the following:

- In marketing, you over-spend and confuse your customers by submitting the same content over and over again to the very same person – with a different username and address. The issue here is duplicates from within the same database and through a variety of diverse sources.
- In online sales, you cannot have adequate product data to support a judgment on self-service sales. The problems here are all the correctness of product information in your databases and how product data is syndicated among trade deals.
- In the supply chain, procedures cannot be automated based on the accurate position information. The difficulties here are to use the same standards and to provide the requisite precision within the position data.
- You get different responses to the same issue in financial statements. This is due to conflicting data, differing data freshness, and vague meanings of data.

Data quality management aims to leverage a balanced collection of remedies to avoid potential data quality problems and clean up (or eventually purge) data that does not fulfill the data quality Key Performance Indicators (KPIs) required to improve organizational performance today and tomorrow.

Data quality KPIs will usually be calculated on crucial business intelligence and data resources

within data quality parameters such as data consistency, data completeness, data continuity, data compatibility, data precision, data significance, data timeliness, data accuracy, data validity, and data security.

The data quality KPIs must be linked to the KPIs used to assess business performance and effectiveness.

About the Data Science Foundation

The Data Science Foundation is a professional body representing the interests of the Data Science Industry. Its membership consists of suppliers who offer a range of big data analytical and technical services and companies and individuals with an interest in the commercial advantages that can be gained from big data. The organisation aims to raise the profile of this developing industry, to educate people about the benefits of knowledge based decision making and to encourage firms to start using big data techniques.

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