

Article review:

Structured vs Unstructured Data: Compared and Explained by AltexSoft

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1 Introduction

1.1 What is the article about?

The article focuses on what structured and unstructured data are. It describes their main differences, what their key attributes are and how they are used in the present by giving specific examples. The author starts by analyzing the significance of data in today's world and follows it up with how the data are shaped.

2 General definitions

The structured data are organized into a formatted repository that is typically a database, usually with rows and columns. Unstructured data is a data which is not organized in a predefined manner or does not have a predefined data model. The structured data are generally stored in tables, they are considered quantitative often used by companies in data warehouses and are also read with the sql programming language. The structured data are stored in their native formats (ex. videos, texts), they are placed in data lakes, which are storage repositories for large quantities. They are accessed by the nosql programming language and the ratio between structured and unstructured data is 20 / 80 percent accordingly.

3 Key differences

As said briefly in the previous section, both structures are stored in different formats where the unstructured data is much more abstract and can be extracted from social media, movies, emails, songs and many more. Moreover, the unstructured data are more scalable and flexible whereas the structured have very strict rules. The storage they are deposited are also much different, the structured are stored in data warehouses which have a lot of space because of the minor bytes

the data sustain, whereas unstructured use data lakes which are used for storing raw information. Moreover, the tools used for structured data are plenty since the technology for accessing sql storages has existed since the 1970's. Usual tools used are mysql, oracle database and olap applications in addition to unstructured data that use mongodb with the help of nosql, Apache Hadoop which is an open source framework for data processing and Microsoft Azure which is a cloud service for accessing large data centers.

4 Examples for each and semi-structured

Structured data uses can vary from reservations of services (ex. accommodation), to saving banking data, to companies statistical data. On the other hand, unstructured data uses can be sound or image recognition, text analysis from pdfs to social media posts or chatbots for replying to customers using ai. Also, the author explains what semi constructed data are and how they combine both technologies.

5 Conclusion

Both structures have a grate use for businesses of all sorts. Picking a data source may depend on the structure of data. Usually there is no conflict between choosing one of the two because both have different uses. Unstructured data rise has been enormous the previous years due to the increase efficiency of artificial intelligence algorithms. On the other hand, most businesses use semi structured data to store their information.