

Data and Information are two separate entities that are tied together and work interdependently to support their structures. Data are figures but not information. When data is understood, it becomes meaningful data which becomes information. An example of this would be list of dates, list of dates/data is meaningless without the information that makes the data relevant. The history of what day of the week Christmas falls on every year would be data. If the data is analyzed and organized to find that every Christmas the chance of snow varies then that is information. Information provides knowledge that is interpreted from data. A relational database is an assortment of data which is organizes data in tables, rows and columns. Data can be easily accessible and maintained which helps the relational database organized its data and information.

The hierarchical data model structures its data into a tree like diagram. Data is stored in a hierarchy; each data has a parent or a root and related data are sorted in order. The network model can show how data are related to each other by allowing many to many relationship between data. These two models are different from the relational model as the relational model sorts data into tables which consist of columns and rows. The relational model organizes its data that can be easily reached and analyzed. The XML database sorts in XML format which can be categorized as a form of NoSQL. Because XML can help sort big data I think it can be a helpful solution when looking for an efficient database, depending on your requirements and resources available.