|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Data Model** | **Scalability** | **Flexibility** | **Performance** | **Complexity** | **Structure** |
| **Key-Value Store** | High | High | High | None | Primary key with some value |
| **Document-Oriented Store** | Variable | High | High | Low | Tree structured JSON Object Form |
| **Column-Based Store** | High | Moderate | High | Low | Rows and Columns |
| **Graph-Based Store** | Variable | High | Variable | High | Graph entities and relations |

|  |  |  |
| --- | --- | --- |
| **Basis** | **RDBMS** | **NoSQL** |
| **Software Distribution** | Both Open-source and Closed-source | Mostly Open source |
| **Cost** | Expensive | Cheaper |
| **Volume of Data** | Can Limited Data | Handles large volumes of data |
| **Scalability** | By upgrading hardware of a single server | Horizontal scaling using commodity servers |
| **Complexity** | Complex data is difficult to convert into tables | Relatively less difficult to store complex data |
| **Consistency** | Strong since uses strict schemas design | Poor since uses schema less design |
| **Performance** | Slow to process information | Better performance to process information |
| **Data Manipulation** | Most RDBMS only use SQL as the query language | NoSQL databases have its own manipulation language |
| **Security** | Strong mechanisms to protect the data | No built-in security protocols but can be handled by middleware programs. |