Section 1: Week 1: Database Bibliography

Nate Bachmeier

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**Bibliography**

Data is the modern world's oil. It powers algorithms that can detect when we are falling into or out of love (Morris, 2016), secretly pregnant (Hill, 2012), and even topple national states (Cadwalladr, 2017). Oil begins its life as crude, and only through refining does it become much more. Similarly, data begins as sequences of unstructured bytes that Business Intelligence can unlock via statistical inferences (e.g., machine learning) and modeling techniques. Before formulating these predictions, a datastore needs to be chosen to host the data. Datastores come in various shapes and sizes to meet the needs of different access patterns requirements. Afterward, related facts and relationships transform into higher-order knowledge to enable decision processes.

## Data aggregation processes: a survey, a taxonomy, and design guidelines (2019)

The Data Aggregation Taxonomy (DAGGTAX) attempts to enumerate the different permutations of aggregation functions. These variations have (1) periodic, sporadic, or aperiodic timing requirements, as they (2) prepare, aggregate, and perform post-handling of data (Cai, Gallina, & Nyström, 2019).