

Real time Systems

Recap Data models

Traditional Data model

- ① flexibility Based on fixed schema
- ② Analytics More comprehensive
↳ on Sizable Data
- ③ Architecture (view) Working with centralized Database.
- ④ Sourcing of Data Less complex as Data is at rest
- ⑤ Nature of EDA Generate insights based on the questions at hand.
↳ Report generation

Big Data Data model

Based on Dynamic schema ^{accommodates both structured and unstructured data}

→ Data is stored in 'raw' form;
→ Schema is applied only when accessing it

Instantaneous analytics

↳ as the examples arrive;
analytics is performed on moving data

Working with Distributed

↳ Highly Scalable

more complex compared to traditional Data model

↳ multiple Data sources, variety of formats
Data is fast moving

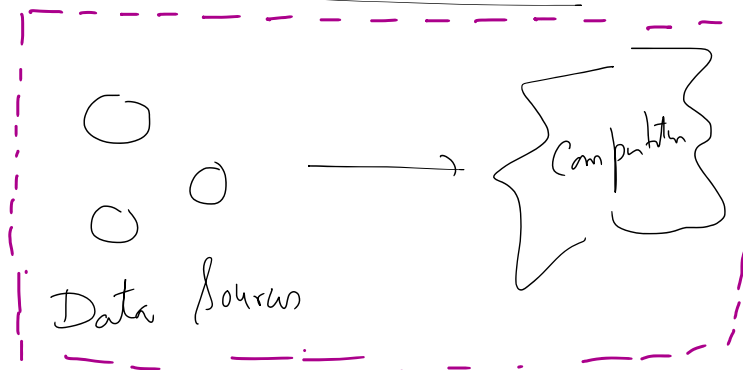
It is iterative and incremental approach

↳ towards preventive maintenance

↳ Sentiment analysis

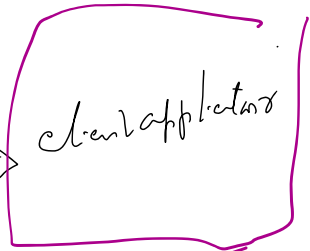
c.N RT, ...

Stream processing Data



Not hard real time.

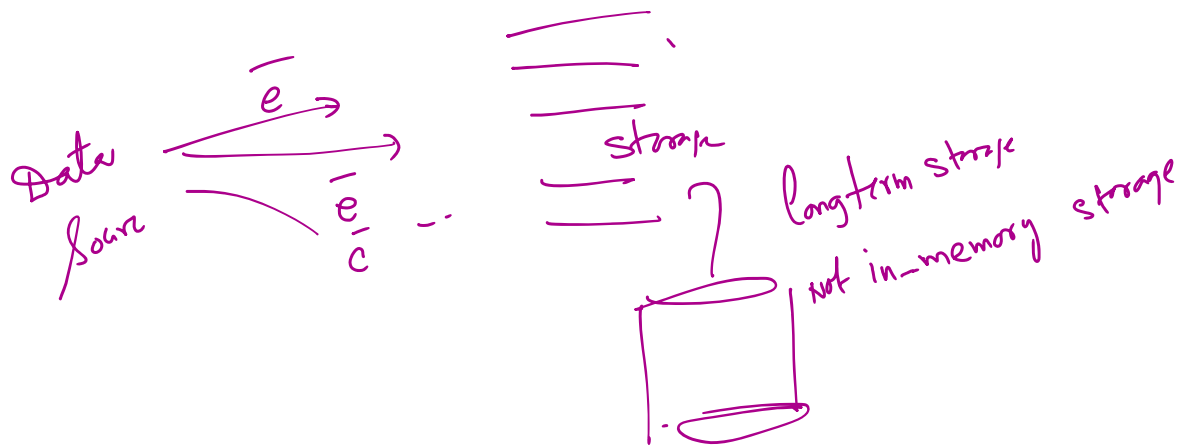
Soft RT, Near RT,



Not necessarily be

hard real time

Consumption can happen based on Down stream requirements



Batch processing require

lot of storage (for data)

Data is at rest.