

alooma

Let's stop obsessing about data infrastructure

Yair Weinberger, CTO at Aloomo

 @yairwein

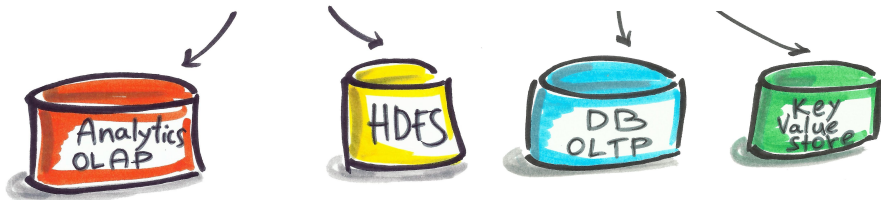
Agenda

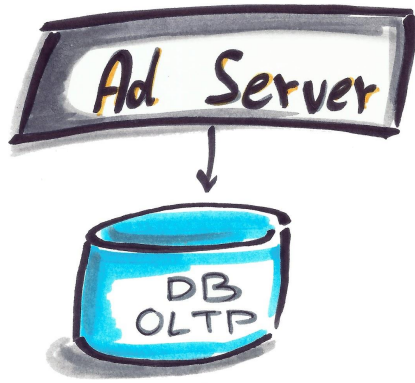
- whoami
- How we used to build applications (and still do)
 - Real-life example
- How it goes horribly wrong
- How we should build applications

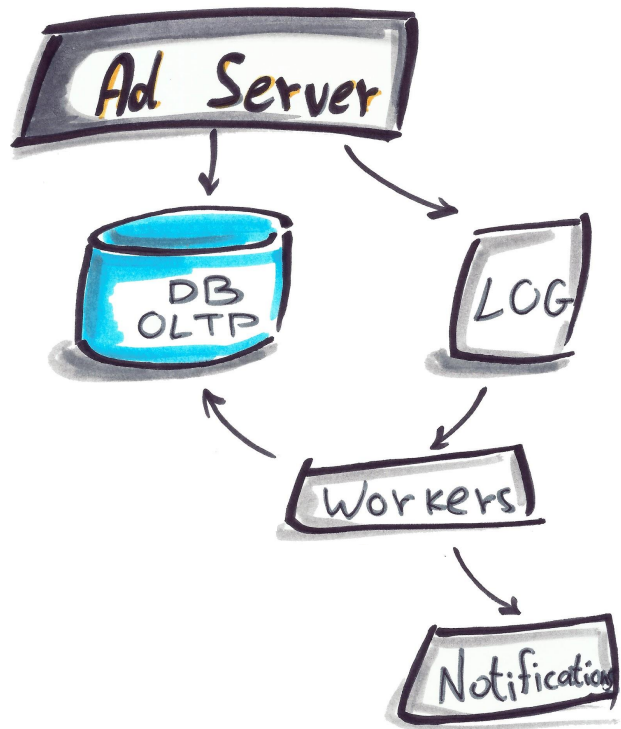


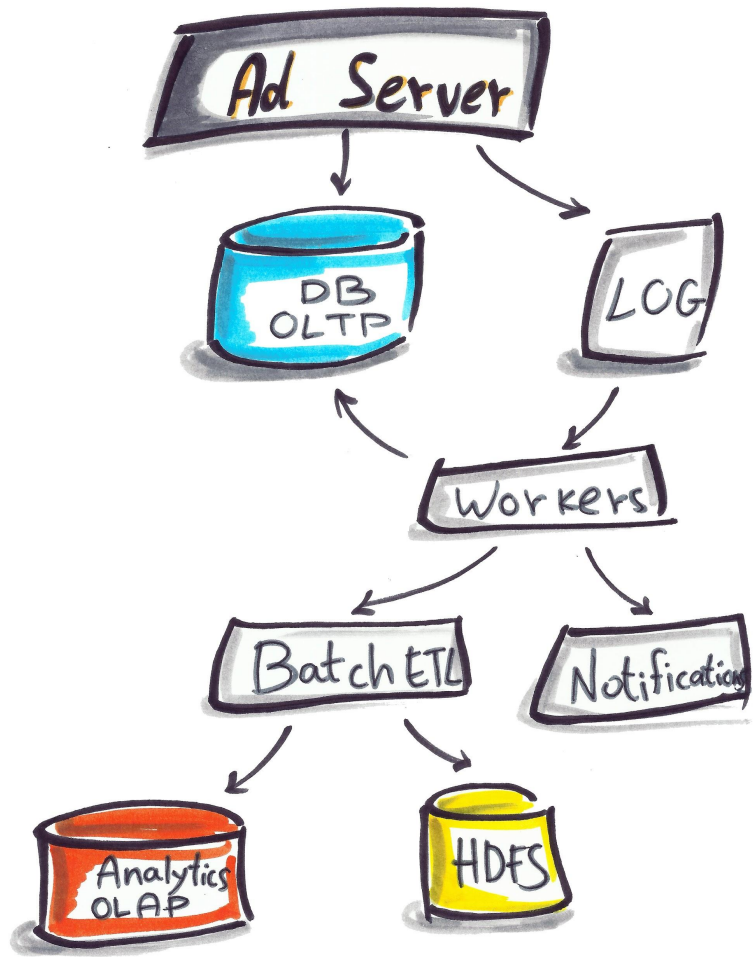
Whoami

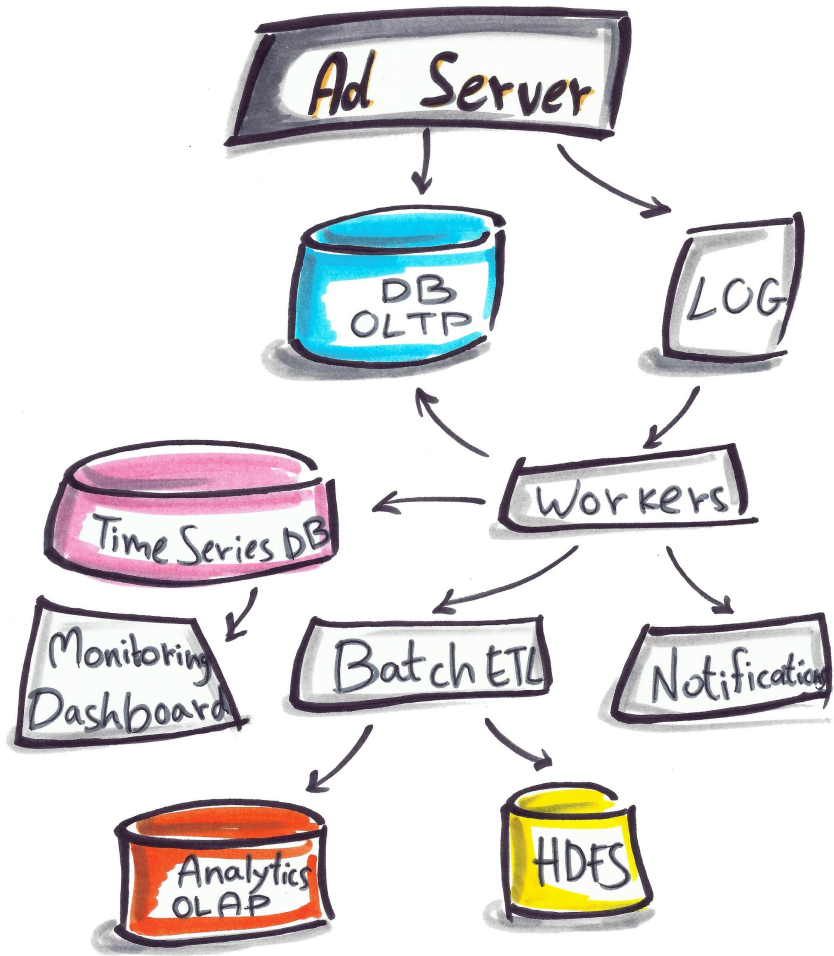
- Yair (pronounced Ya-ear)
- Obsessed about data infra. in the past 15 years :)
- Aloomo Founder & CTO
- Convert Media (acq. by Taboola)
- Military
- Excited to be here

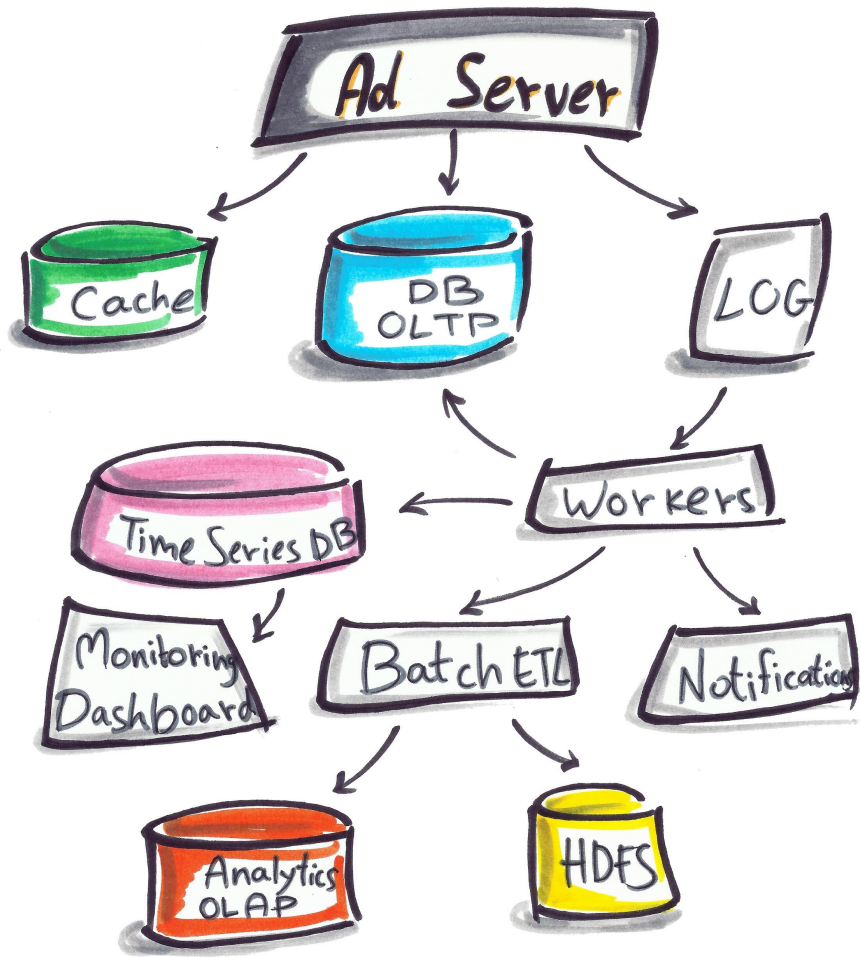


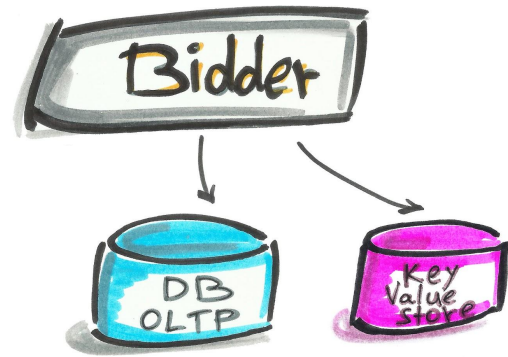
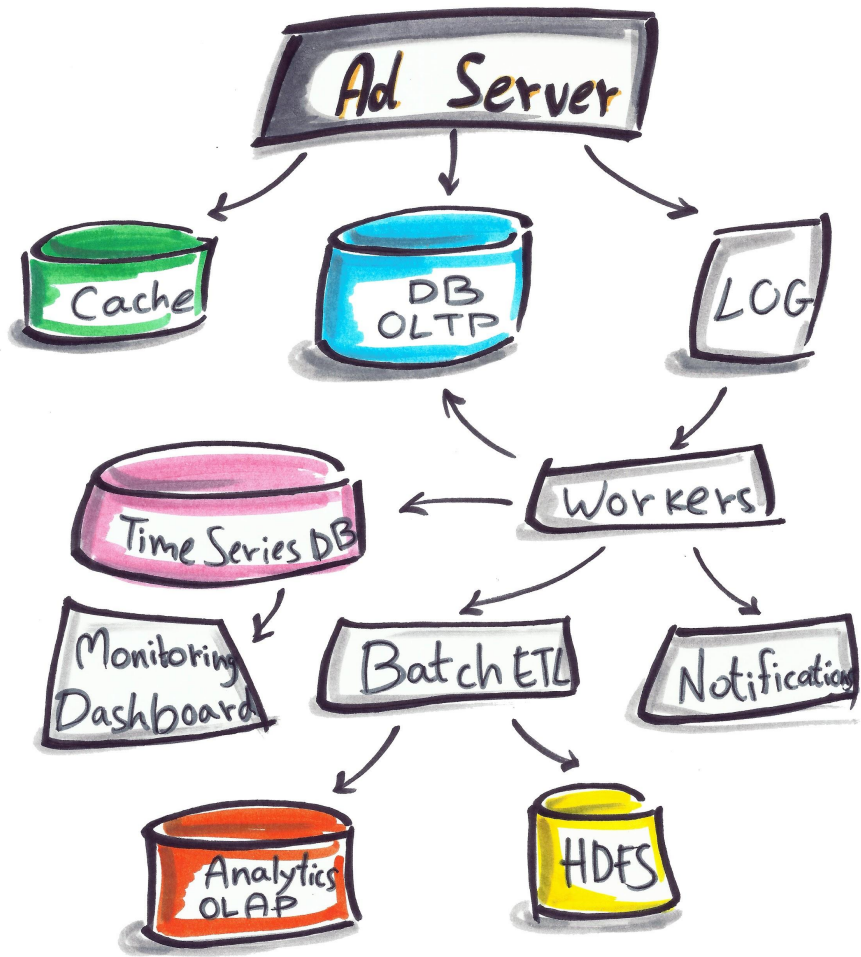


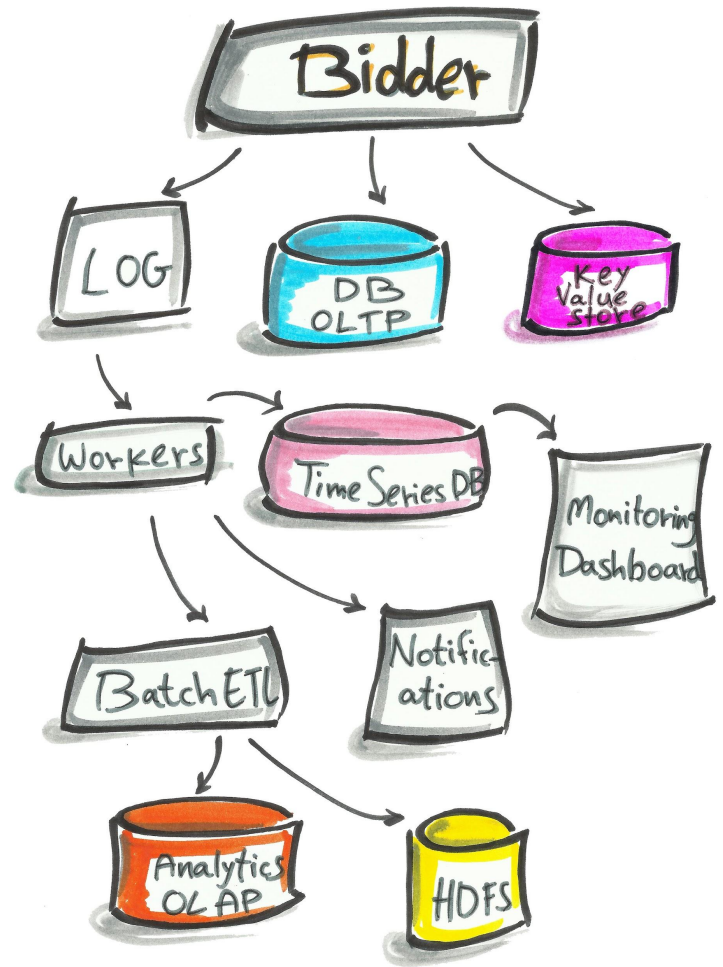
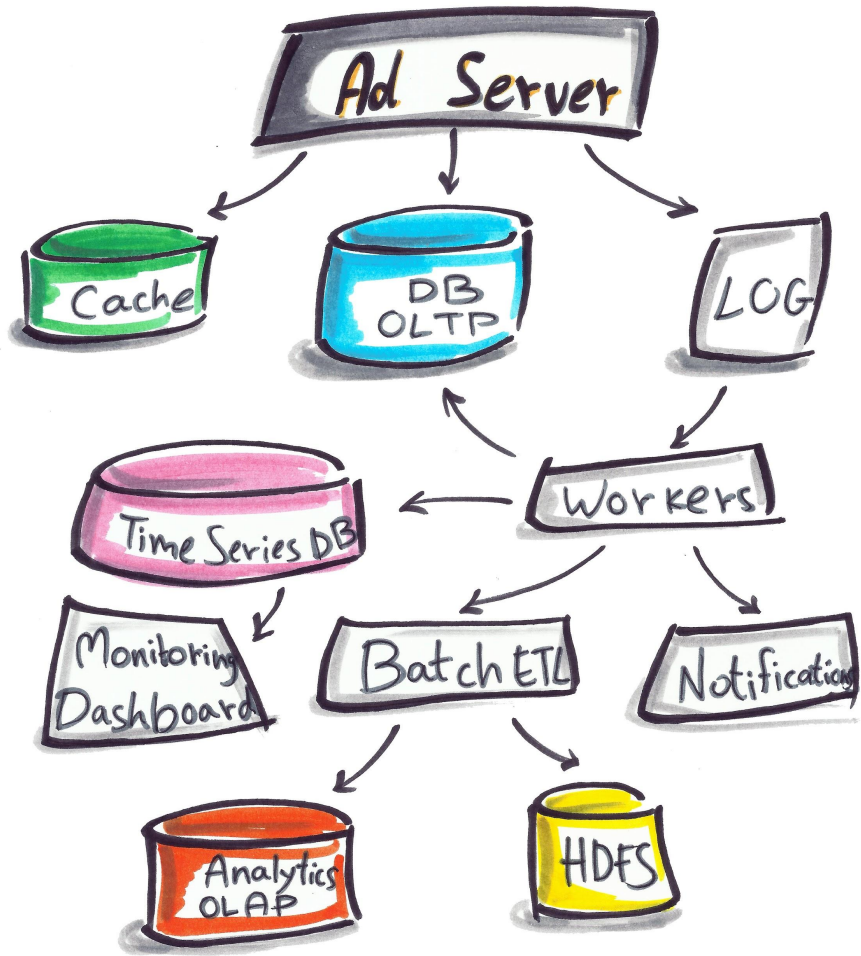


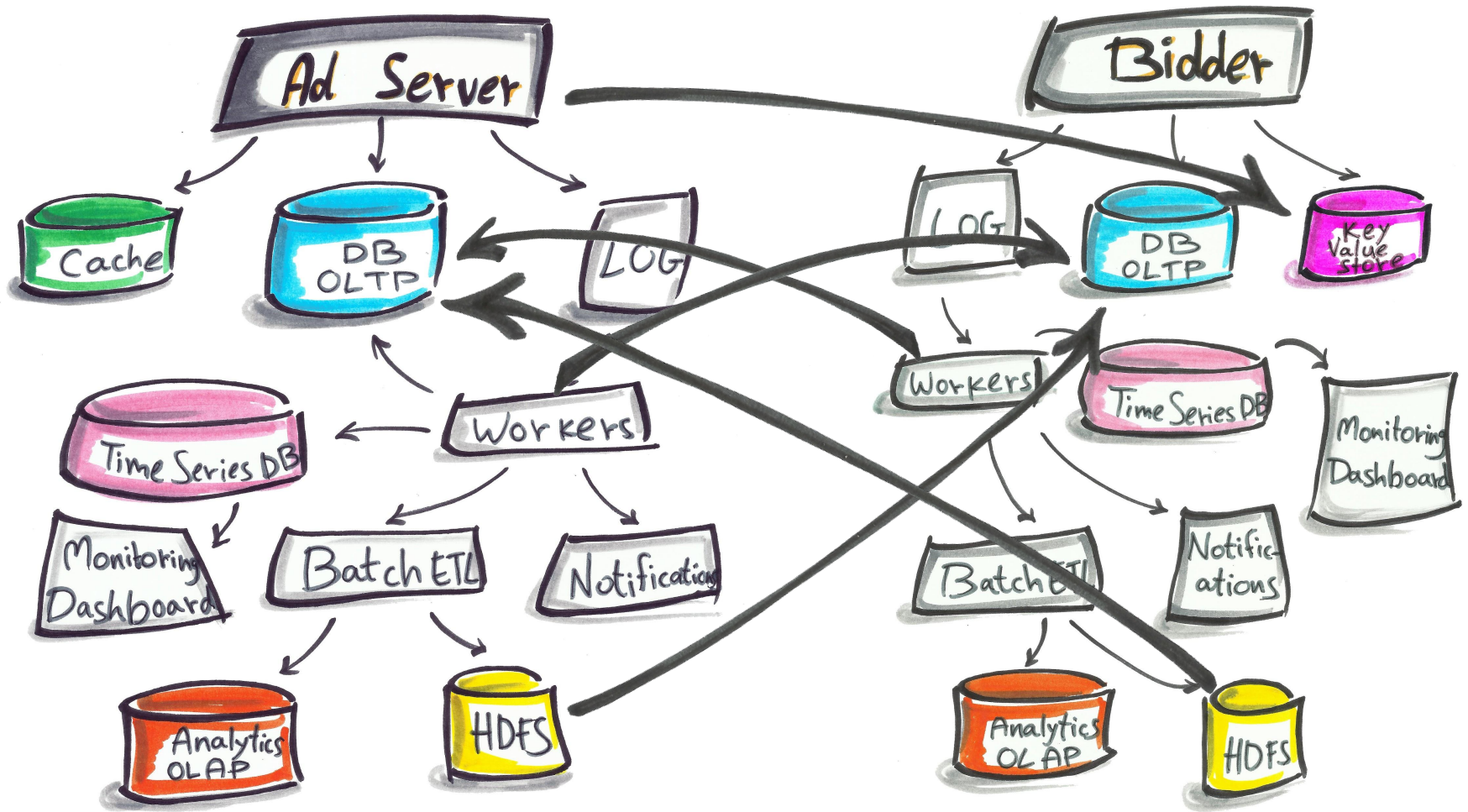












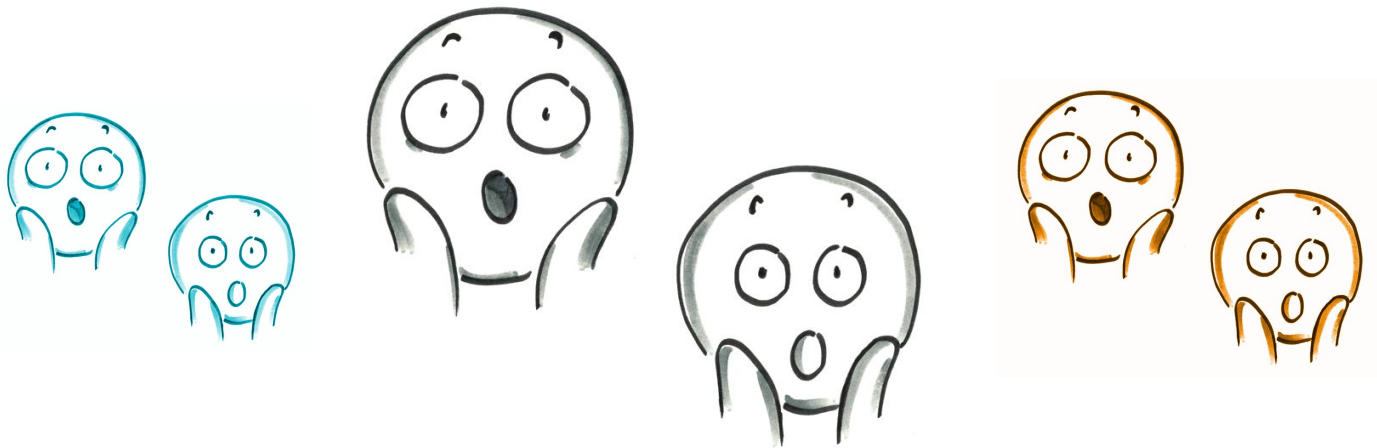


Discrepancy



Recovery from Failures

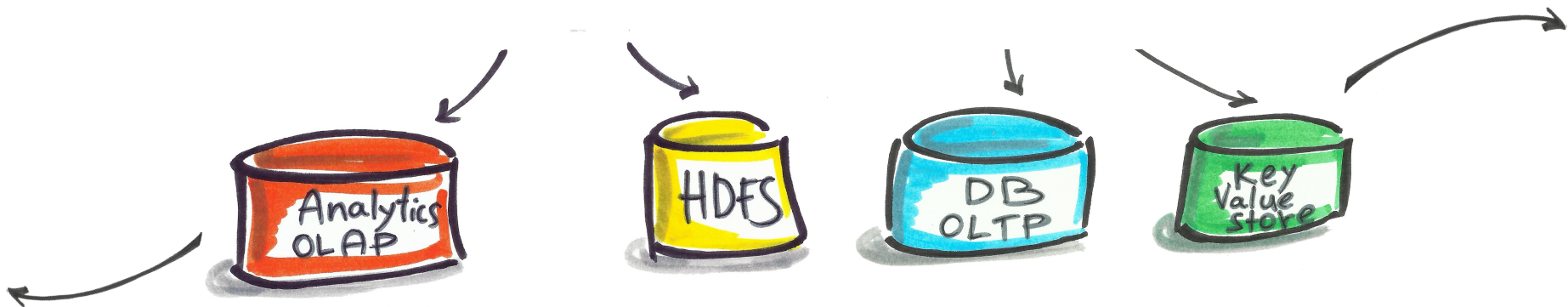
- For example (MySQL State DB)
 - Incorrect key file for table: '...'. Try to repair it



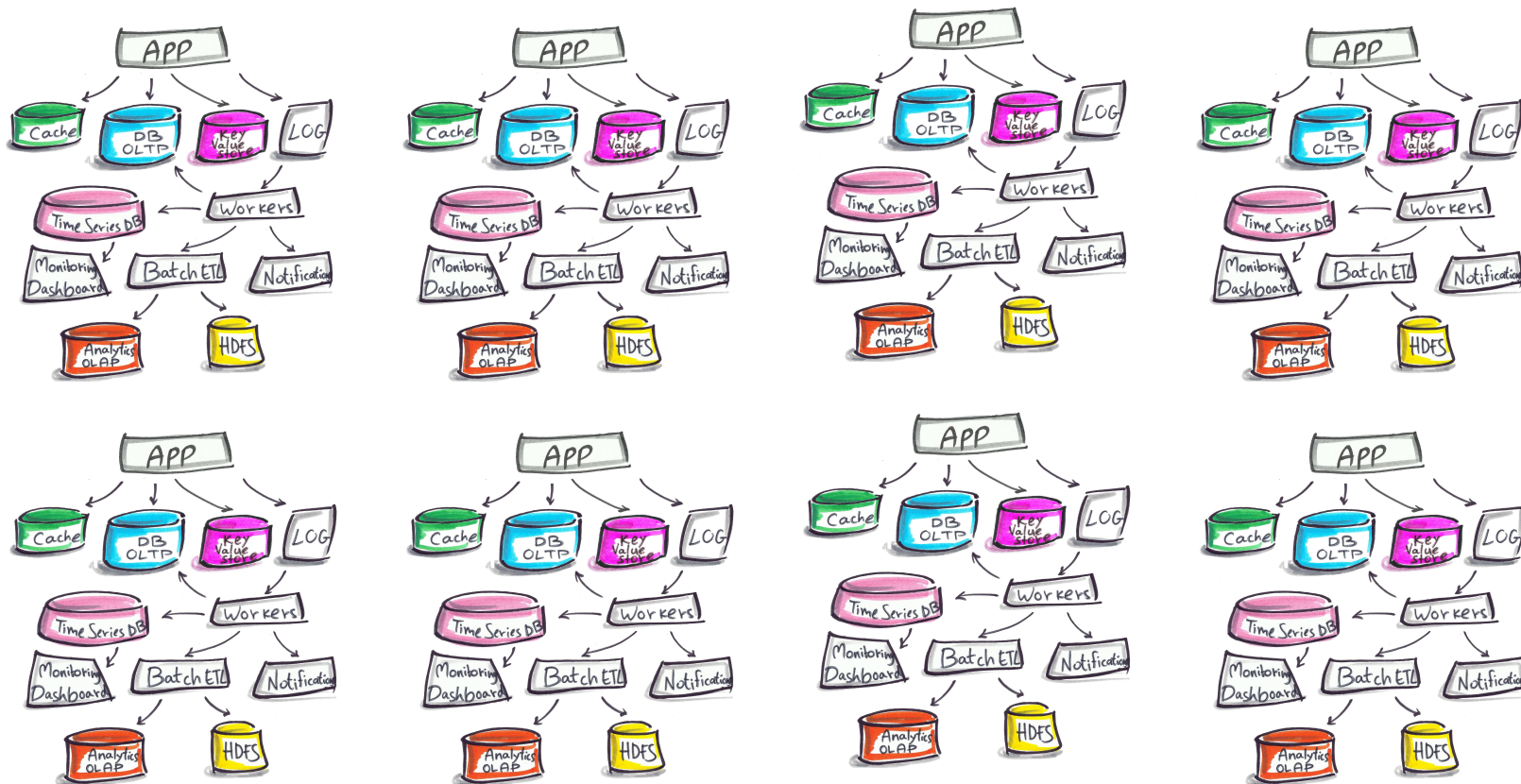
- Then you find yourself doing things like “[create slave with an artificial lag](#)”

Replacing a component

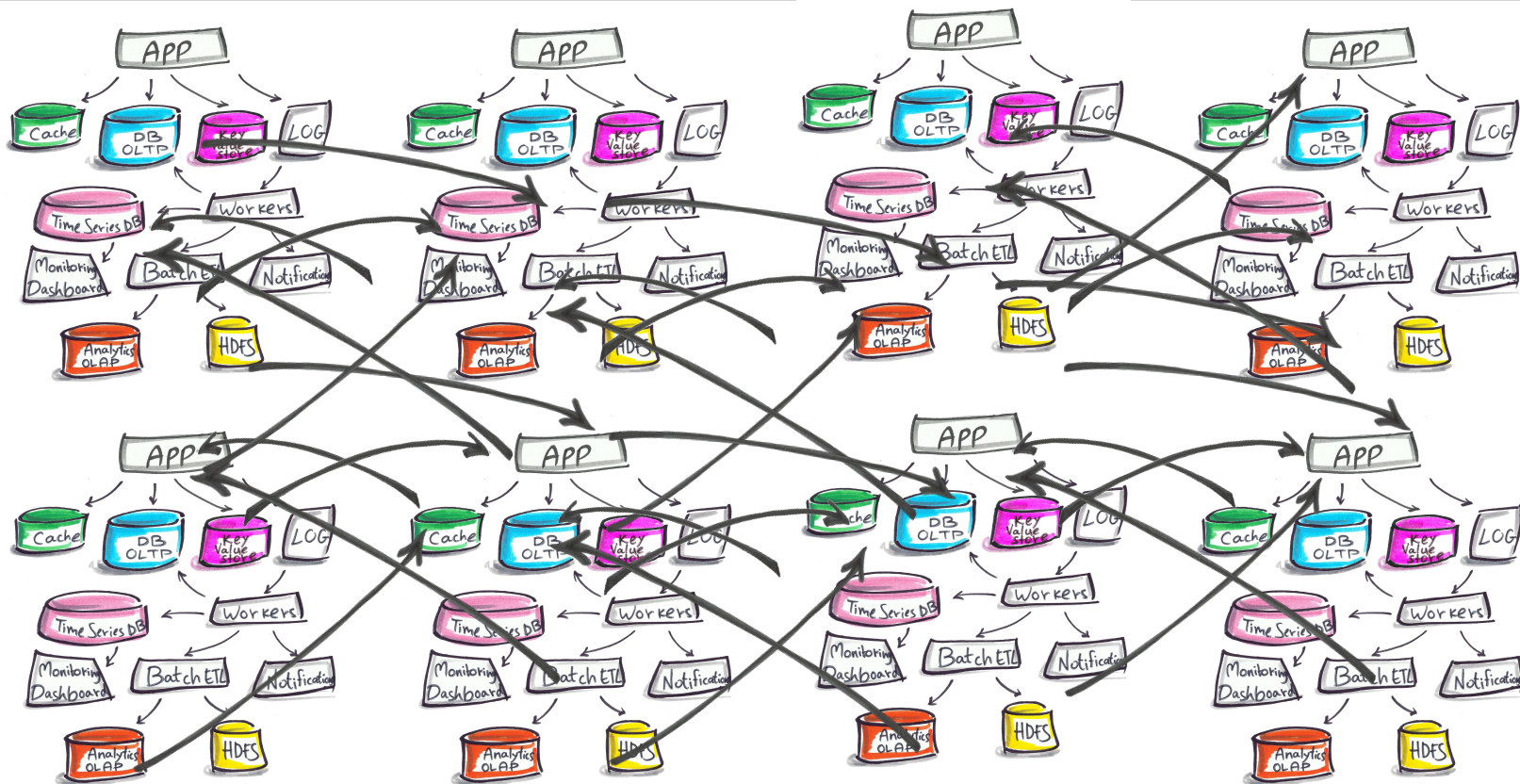
- We probably replaced all key components at some point



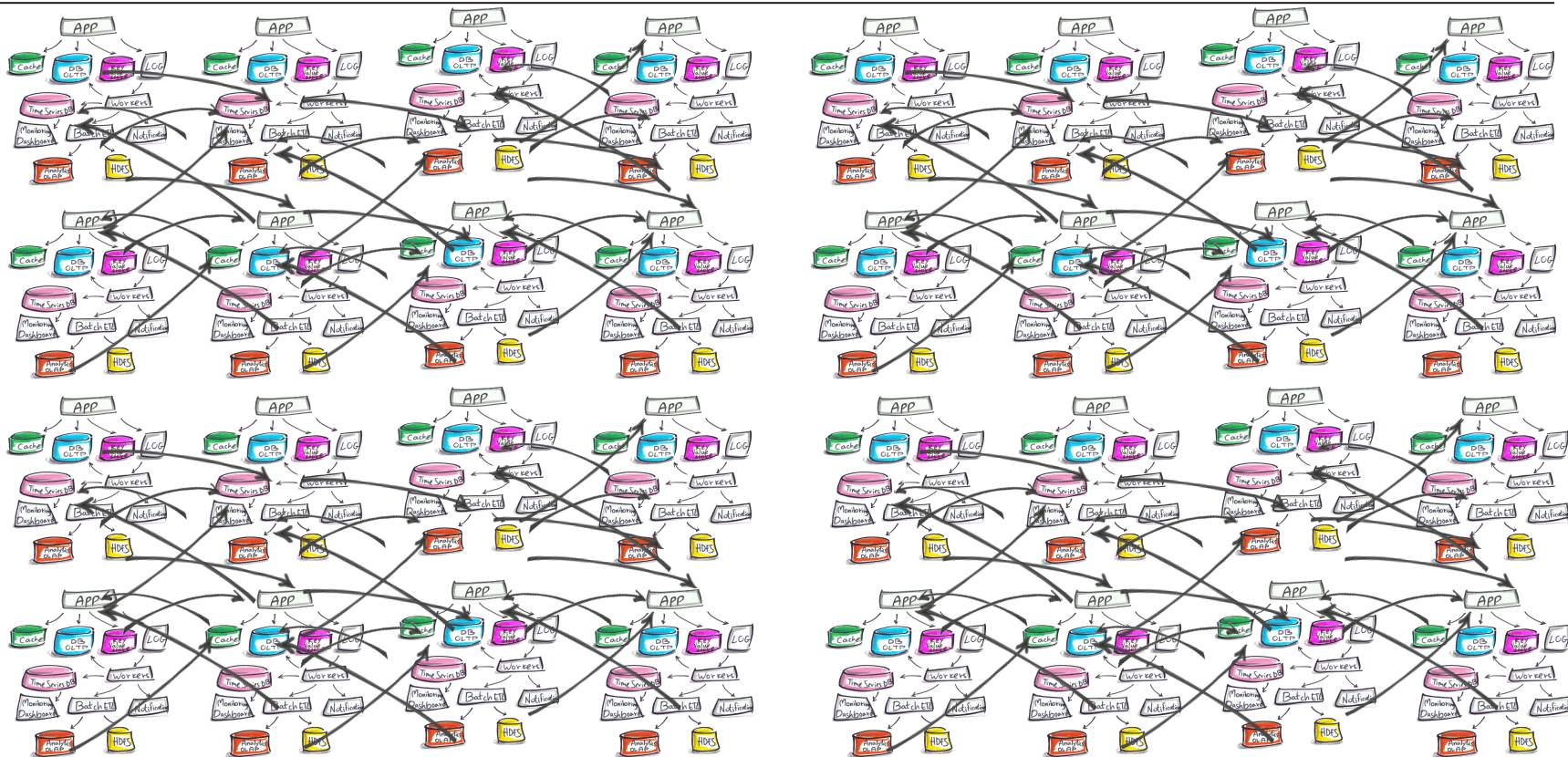
Welcome to hell



Welcome to hell #2



You can keep going like this...



The path to sanity #1

→ Event Sourcing VS State Stores

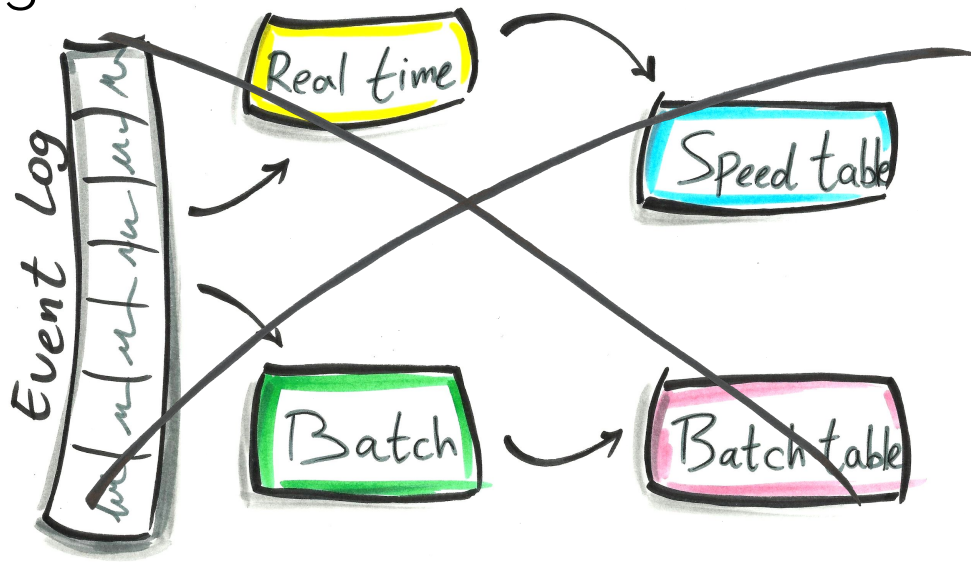


Materialized Views

Not a new concept - [@martinfowler, 2005](#)

The path to sanity #2

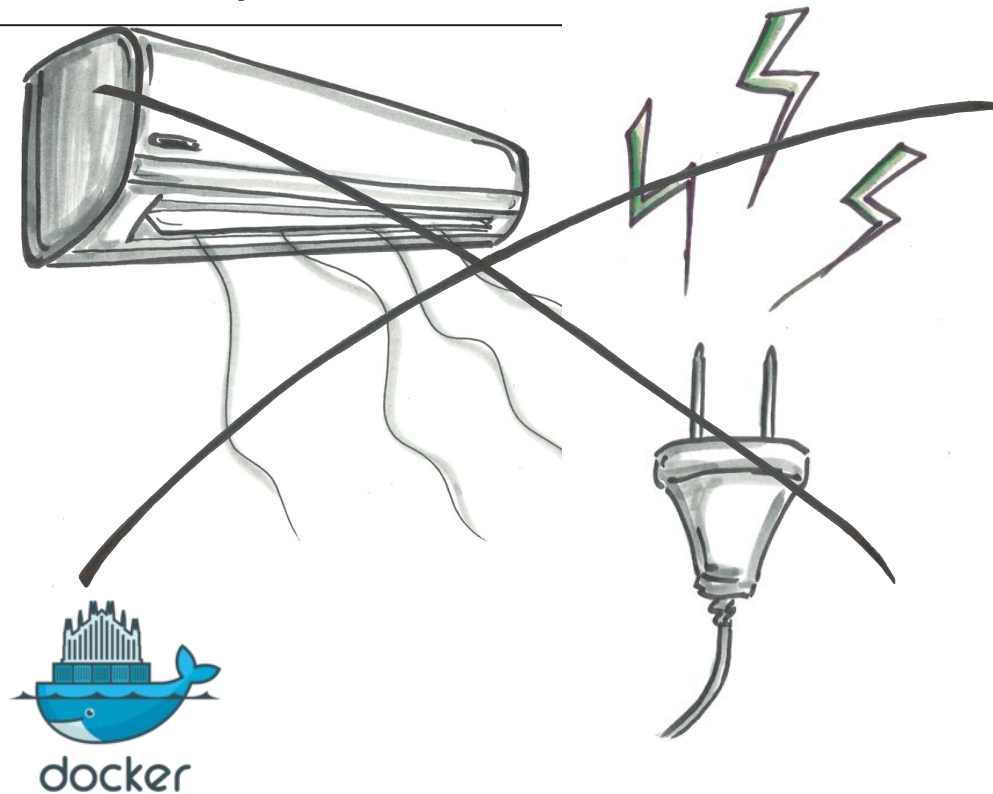
- Merge the real time data pipeline and the batch processing

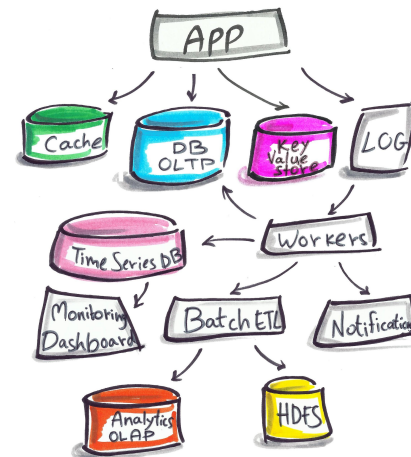
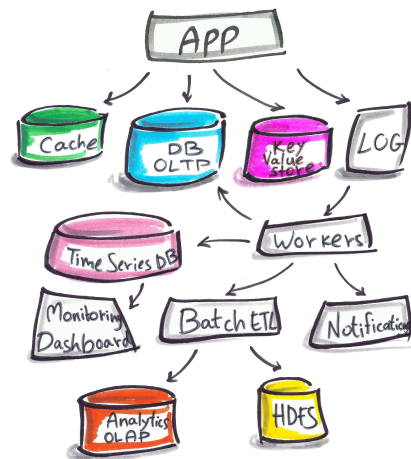


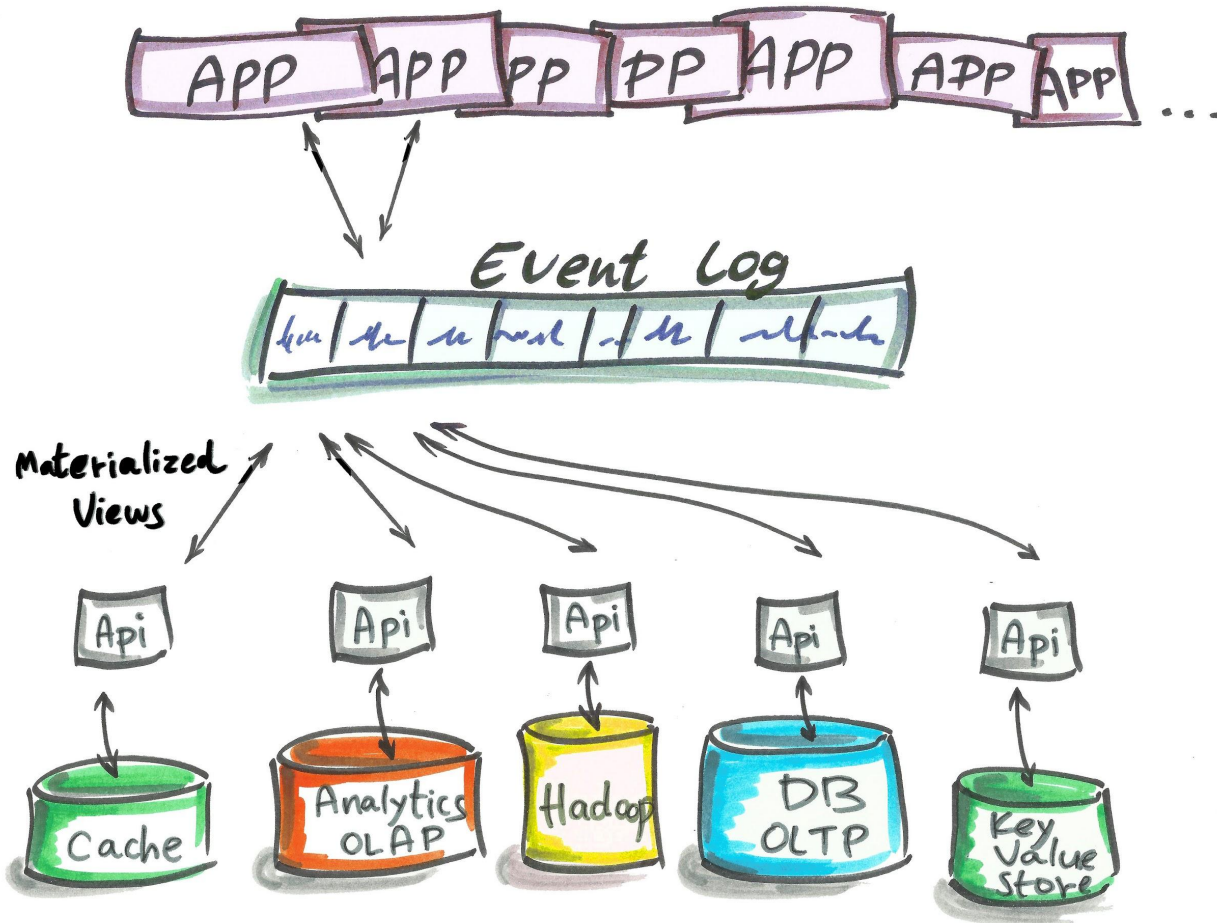
Not a new concept - [@jaykreps, 2014](#)

The path to sanity #3

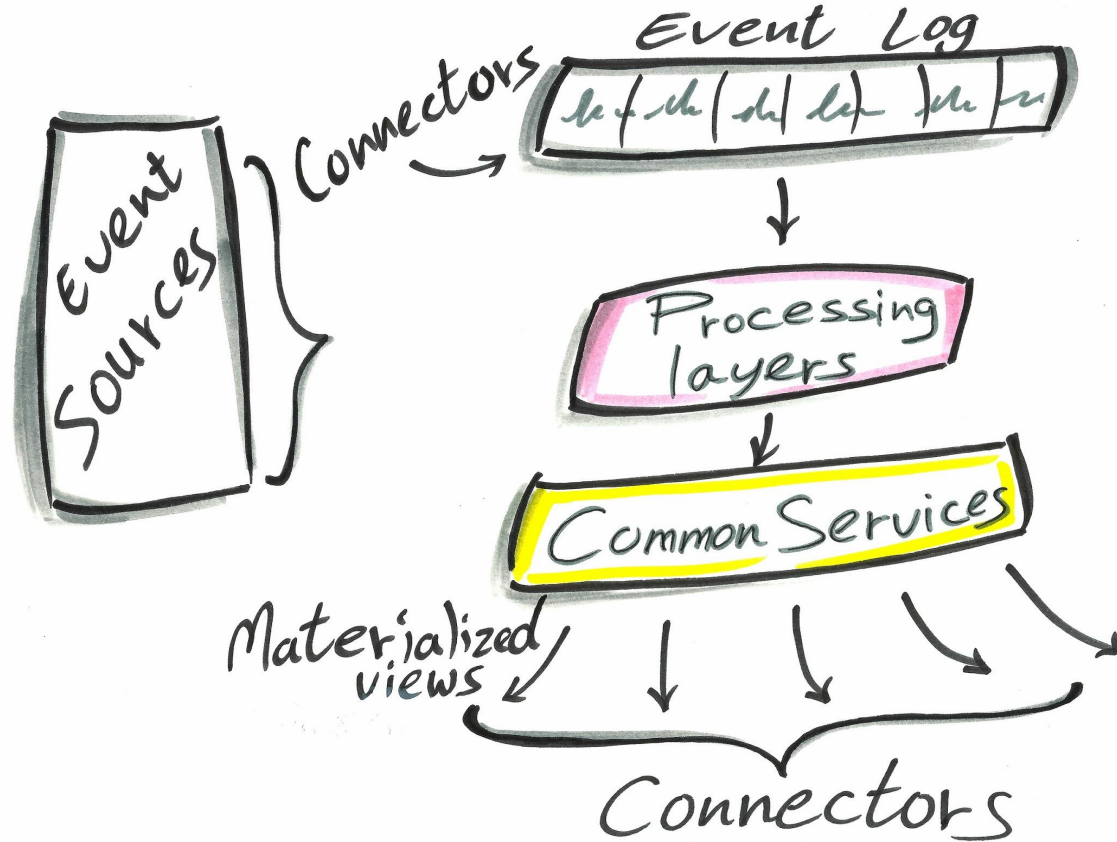
- Abstract the data layer
- Think of data access patterns, not data infrastructure
 - Same as we don't think on power and A/C for server rooms





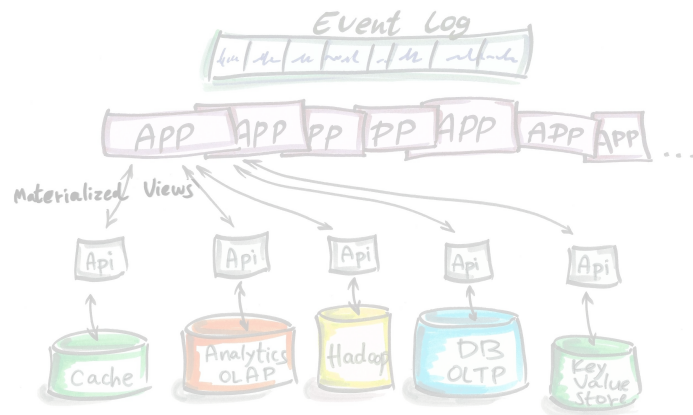


Layers of Abstraction



Key Takeaways

- Prefer event sourcing over state DBs
- Merge real-time and batch Infrastructure
- The time have come to abstract the data layer



A real-time platform that abstracts the data layer



- Scalable
- Flexible
- Reliable
- Fast
-

Questions?