



NOSQL

When RDBMS's don't cut it



Random Access to Planet-Size Data



Scaling up MySQL etc. to massive loads requires extreme measures

- Denormalization
- Caching layers
- Master/slave setups
- Sharding
- Materialized views
- Removing stored procedures



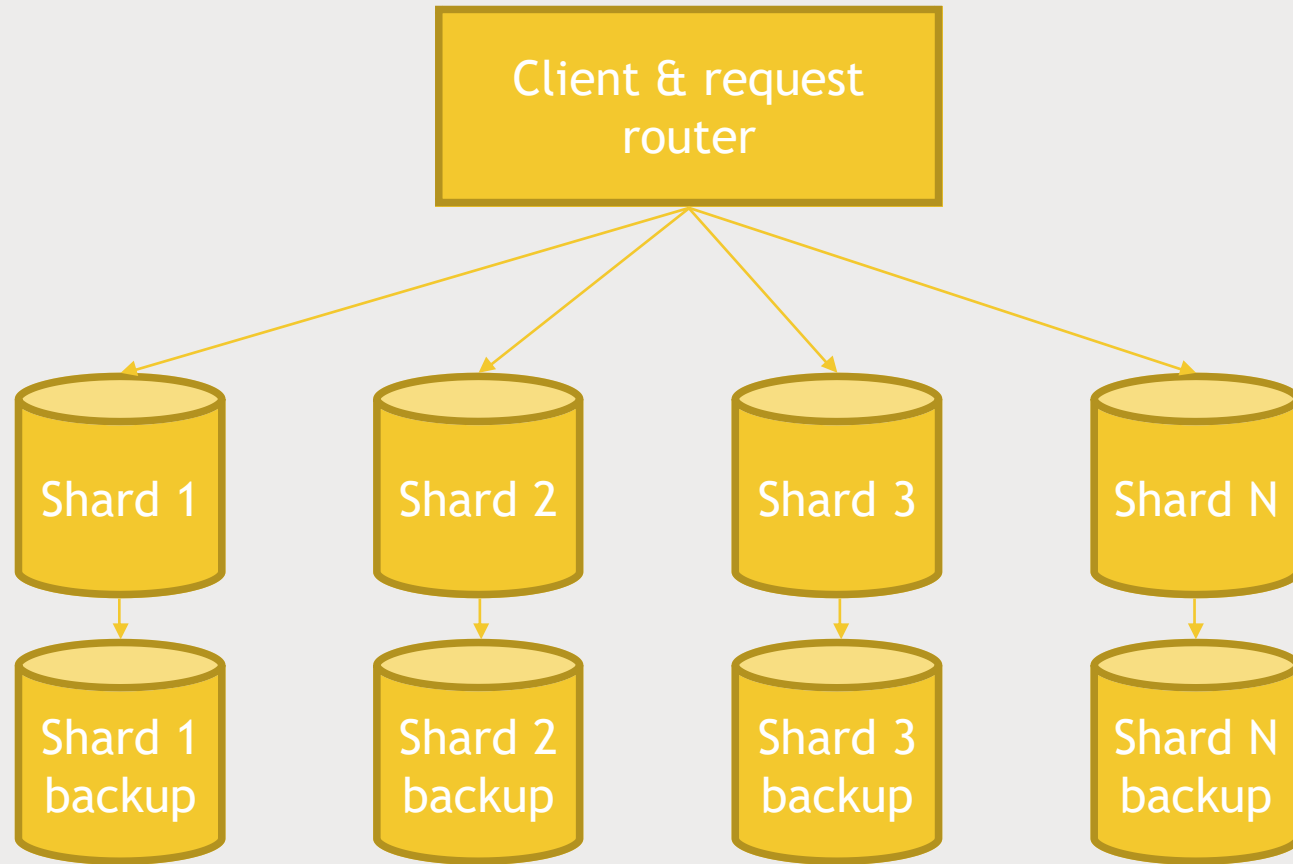
Support nightmare



Do you really need SQL?

- Your high-transaction queries are probably pretty simple once de-normalized
- A simple get / put API may meet your needs
- Looking up values for a given key is simple, fast, and scalable
- You can do both...

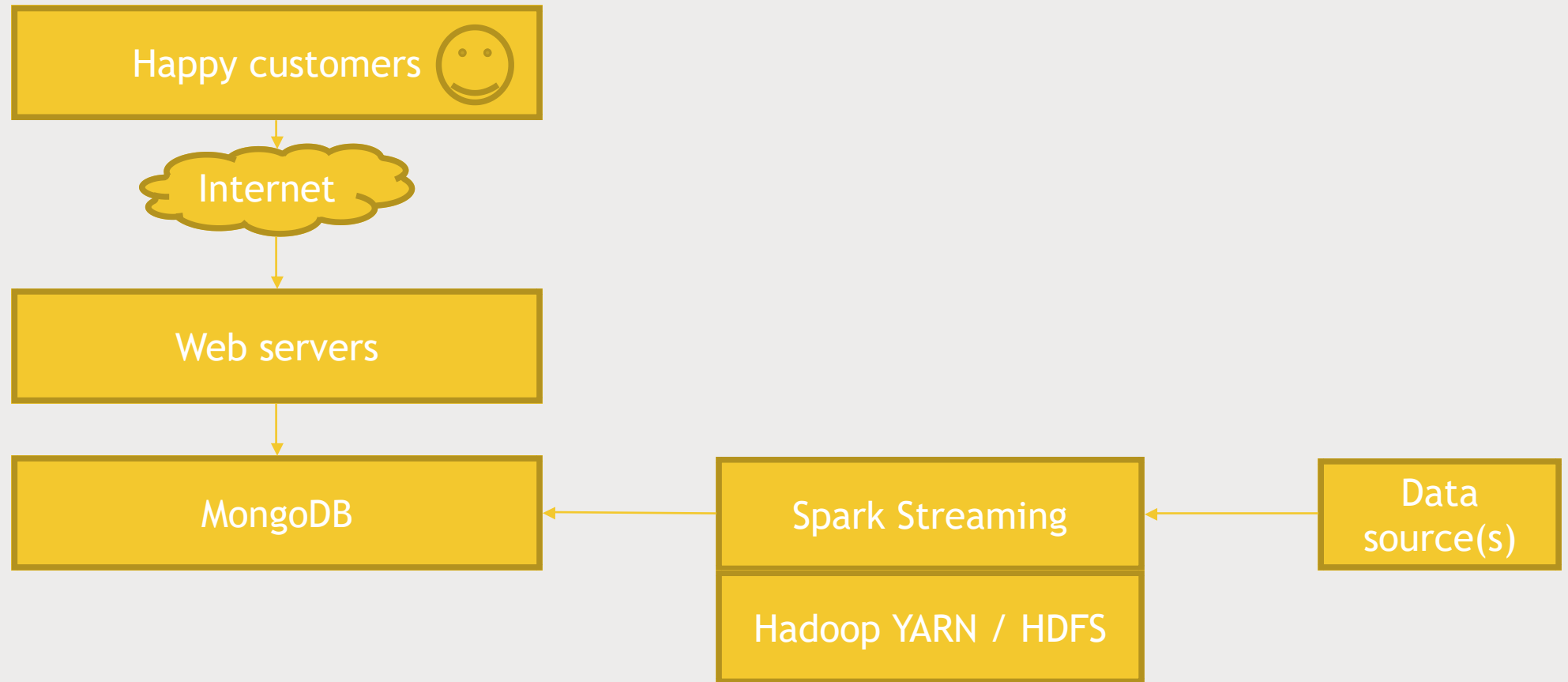
Sample architecture



Use the right tool for the job

- For analytic queries, Hive, Pig, Spark, etc. work great.
- Exporting data to MySQL is plenty fast for most applications too.
- But if you work at giant scale - export your data to a non-relational database for fast and scalable serving of that data to web applications, etc.

Sample application architecture (greatly simplified!)



Choose a database design that meets
your usage patterns