The NoSQL Landscape

Sun Seng David TAN

Couchbase

SERLI
What we’ll talk about

• Why RDBMS are not enough?
• What are the different NoSQL taxonomies?
• Which “NoSQL” is right for me?
Growth is the New Reality

• Instagram gained nearly 1 million users overnight when they expanded to Android
Does it work with RDMBS backend?

Application Scales Out
Just add more commodity web servers

Database Scales Up
Get a bigger, more complex server

Note – Relational database technology is great for what it is great for, but it is not great for this.
NoSQL database matches application logic tier architecture
Data layer now scales with linear cost and constant performance

Scaling out flattens the cost and performance curves.
NoSQL catalog

Key-Value
- Memcached

Data Structure
- Redis
- Coherence

Document
- Membase
- Couchbase
- Cassandra
- Neo4j
- MongoDB
- HBase
- InfiniteGraph

Column

Graph
What about Hadoop?
Conclusion

• One Size Does Not Fit All
• Overview of the NoSQL types
• Choose the right solution
  – Developer Productivity
  – Large Scale Data
Thanks!