

A”

Aalto University
School of Science

Some industrial and open source big data platforms for your tech radar

Hong-Linh Truong

Department of Computer Science

linh.truong@aalto.fi, <https://rdsea.github.io>

Hard decision in practice!

- **We need cloud technologies**
- **But you/your organization will need to decide**
 - Case 1: use free open sources and build everything
 - Case 2: use free open sources and build platforms but not infrastructures
 - *E.g. using Amazon VM*
 - Case 3: use enterprise versions and build everything
 - Case 4: use enterprise versions ...
 - Case 5: ...

**There are many constraints:
functionality, budget, data regulation,
skills, etc.!**

Let us walk around some stacks/ecosystems

- <https://cloud.google.com/solutions/big-data/>
- <https://cloud.google.com/solutions/data-lifecycle-cloud-platform>

- <https://azure.microsoft.com/en-us/services/#analytics>
- <https://azure.microsoft.com/en-us/solutions/big-data/>

Amazon Web Services

- <https://aws.amazon.com/products/databases/>
- <https://aws.amazon.com/big-data/datalakes-and-analytics/>

Apache *

- <https://hadoop.apache.org/>
- <https://cassandra.apache.org/>
- <https://avro.apache.org/>
- <https://hbase.apache.org/>
- <http://tinkerpop.apache.org/>

Elastic Stack

- <https://www.elastic.co/products/elastic-stack>

Tech Radar

Are you happy with your tech radar?

5

Pls. indicate the following technologies/frameworks that you have experienced with

Response	Average	Total
Hadoop	25%	33
Apache Spark	34%	46
Apache Nifi	1%	2
Apache Kafka	2%	3
Apache Flink	4%	6
MQTT	14%	19
AMQP	4%	5
ElasticSearch	21%	28
MongoDB	49%	65
Apache Cassandra	3%	4
Neo4J	4%	6
Kubernetes	25%	34
Docker	57%	77



Personal Techradar

- **Techradar**
 - <https://www.thoughtworks.com/radar>
- **Guide and Example**
 - http://nealford.com/memeagora/2013/05/28/build_your_own_technology_radar.html
 - <https://medium.com/@ckoster22/whats-on-your-tech-radar-9ad8769c8c1>
- **Remember for this course:**
 - only the Big Data Platform context for your big data platform story

Final remark

- **Can you build your tech radar and share it?**
 - Why do you think that the tools in your radar are suitable for you?
- **Homework: What about building a big data architecture based on the Lambda architecture with one of the following technology providers/stacks/sources?**
 - Google Cloud Platform
 - Microsoft Azure Cloud
 - Amazon Web Services
 - *(Do not confuse with Lambda serverless framework!)*
 - Apache *

Thanks!

Hong-Linh Truong
Department of Computer Science

rdsea.github.io