Introduction to Apache Spark

What is Apache Spark?

Apache Spark is a parallel data processing engine for big data and machine learning applications designed to run on a cluster of computers.

History of Apache Spark

Features of Apache Spark

- Polyglot
- Flexibility
- Unified Engine
- In-memory computation
- Real-time Stream Processing

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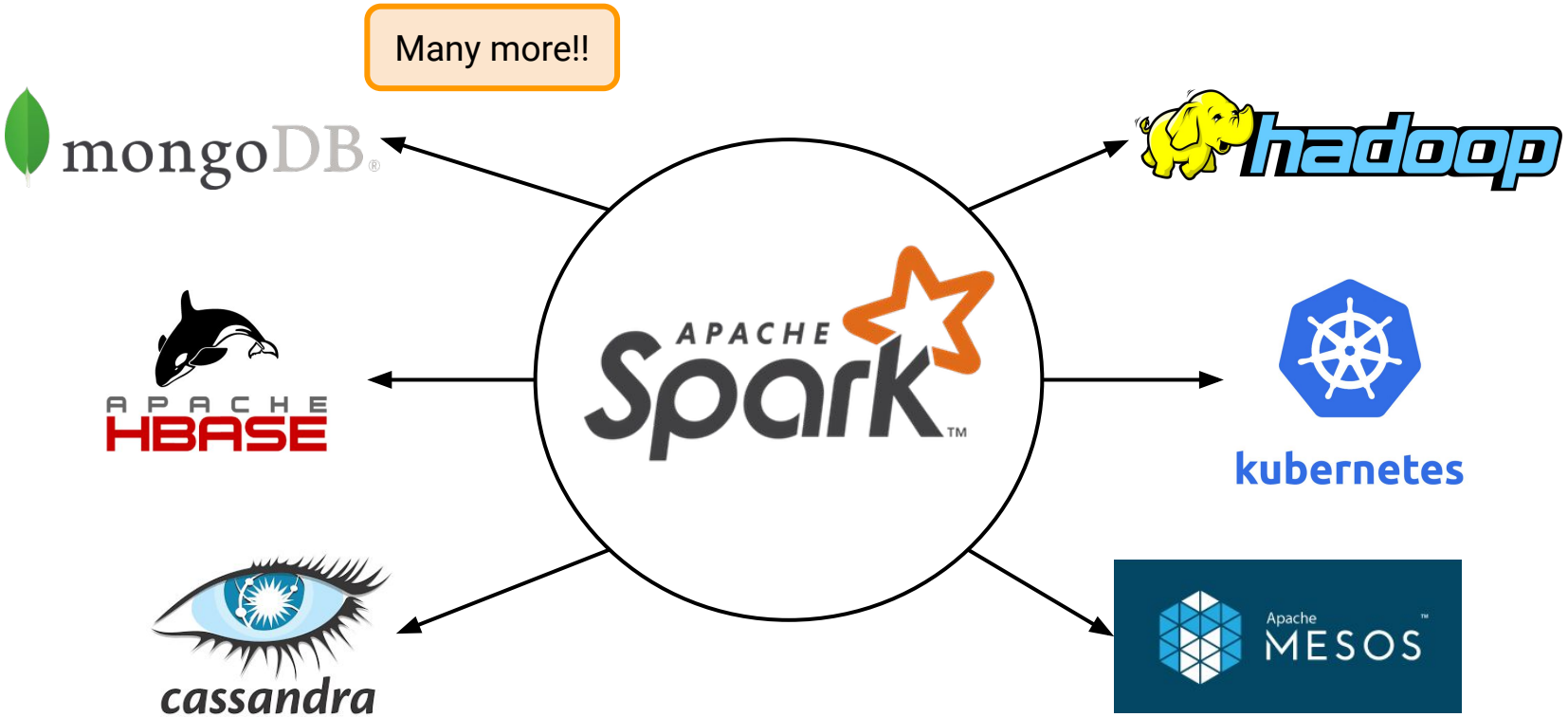
Polyglot

Flexibility



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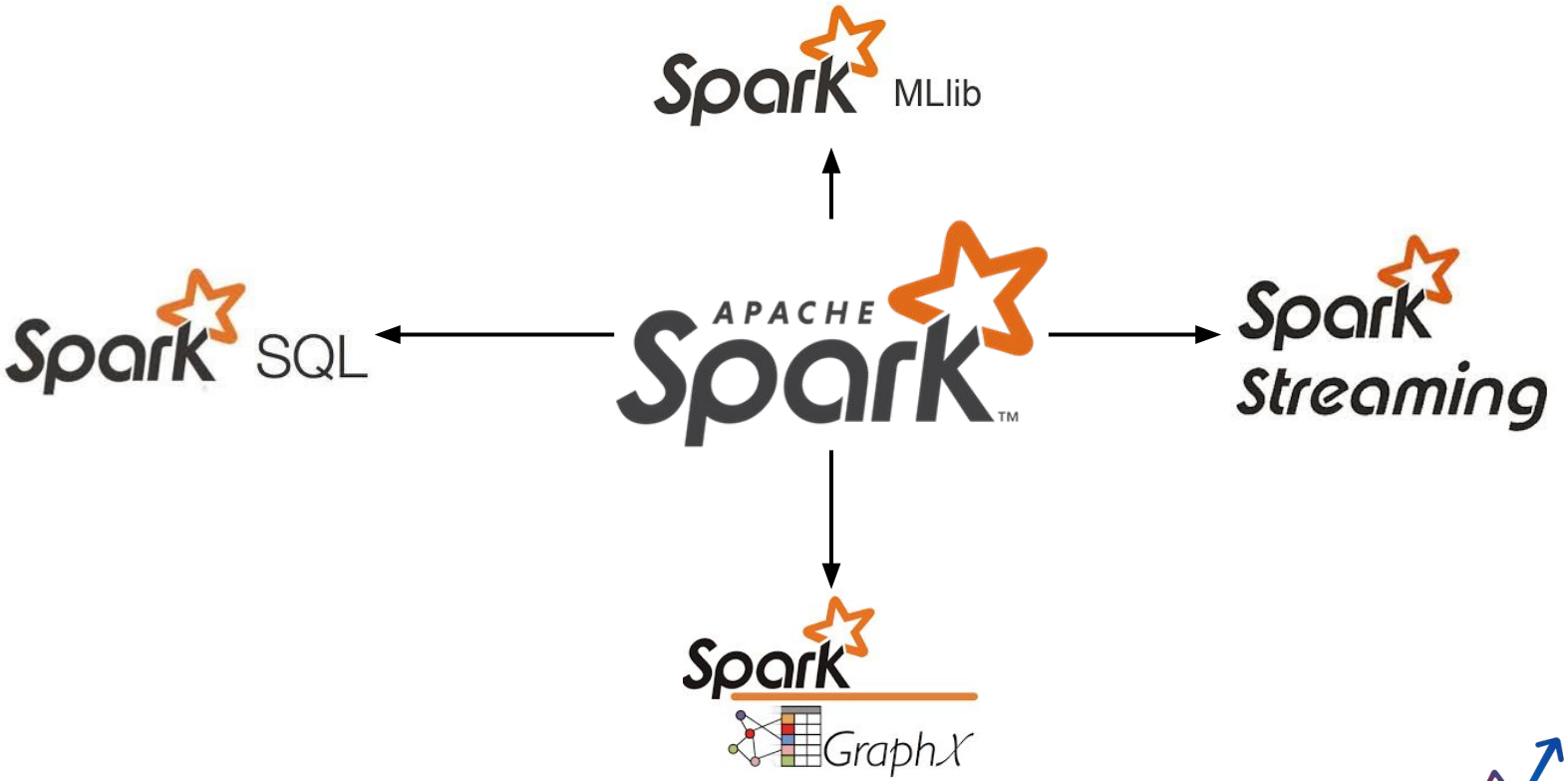
Unified Engine



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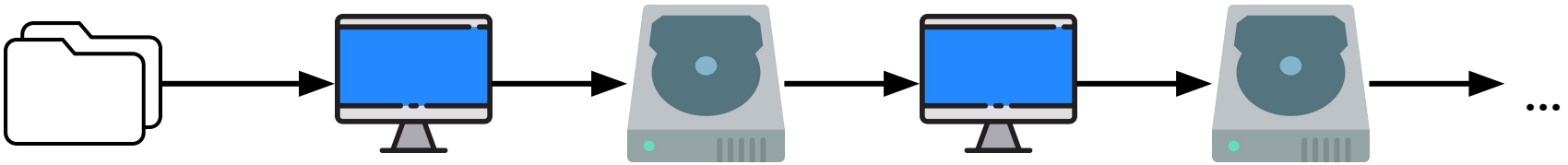
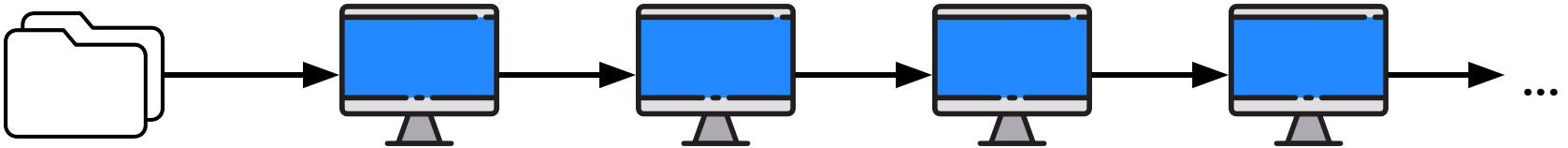
In-memory computation

Hadoop MapReduce



Apache Spark

100x faster!!



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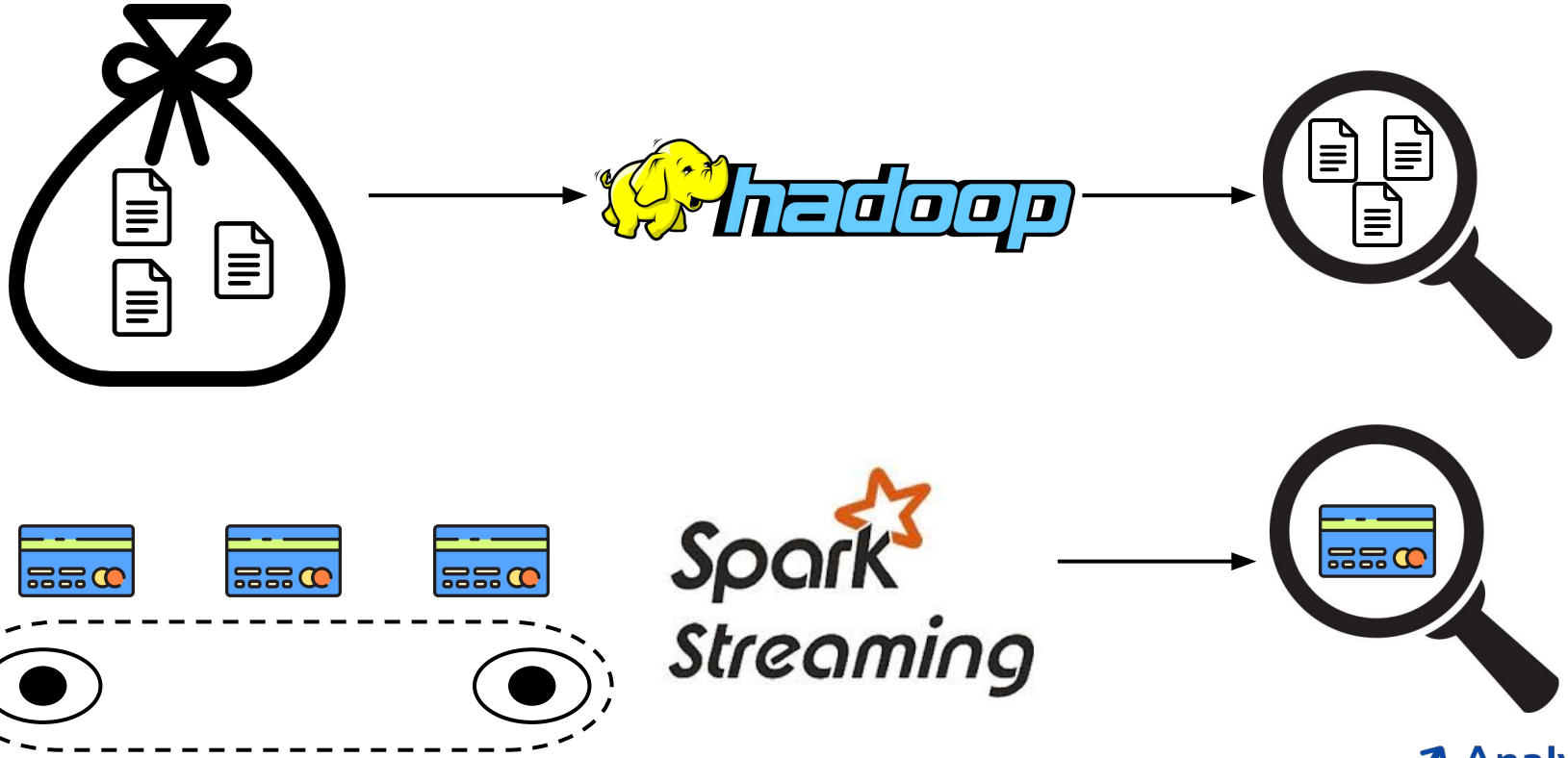
Real-time stream processing



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Use cases of Apache Spark

Use cases of Apache Spark

- 103 millions monthly ride hailers in over 900 cities worldwide
- 100, 000+ Spark applications run everyday
- Diverse data sources: HDFS, Hive, Cassandra, MySQL, and more

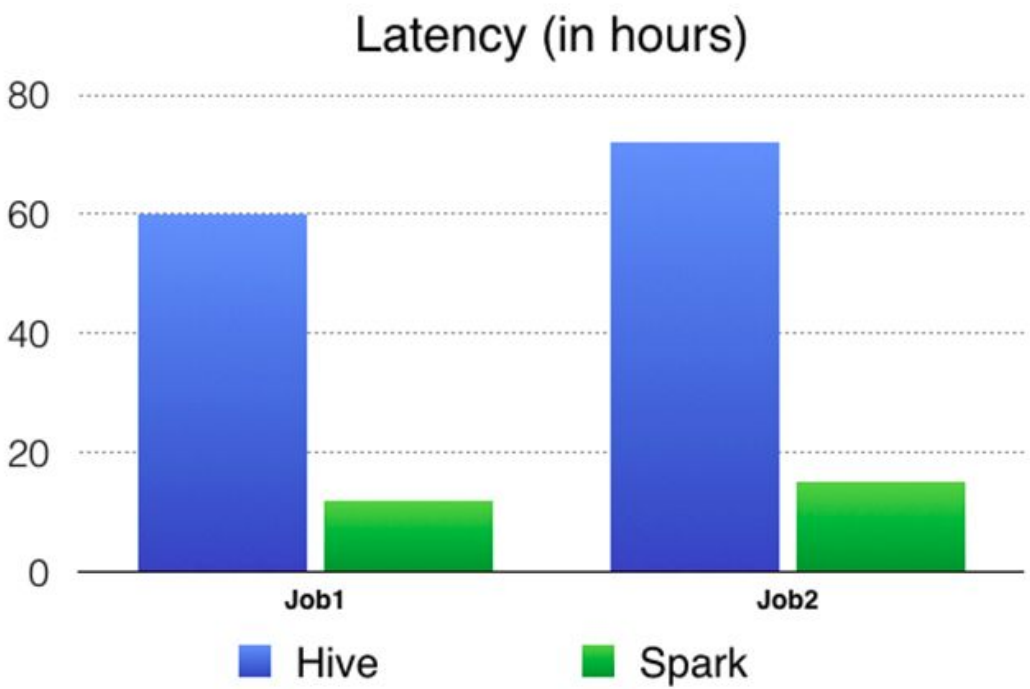
Use cases of Apache Spark

- 200 million paid-subscribers
- Content personalization
- Spark streaming for personalized videos on homepage

Use cases of Apache Spark

- More than 2 billion monthly users
- Hive for multiple analytics tasks
- Hive vs Spark

60 TB data handled with Hive and Spark



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Thank you!

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