

## **ABSTRACT**

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**ANALISA PERBANDINGAN PERFORMA MAP REDUCE FRAMEWORK  
MENGUNAKAN HADOOP MAPREDUCE DAN APACHE SPARK.**

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(xiv+ 59 + appendix)

The amount of data that increase massively make the data can not be processed in traditional method as it exist today. If by any chance possible to do, it will need more cost and longer of time processing. This is not in line with the needed of Information Technology today which is demand on quick process with low cost.

IT practitioners then developing a new model that we called Map Reduce programming model. Beside offering a simple and fast of data processing, this programming model also have another advantage that is able to run on computer clusters paralelly.

Today there are several Map Reduce framework that can be used. Two of them are Hadoop MapReduce and Apache Spark. Both framework has a same concept of using Map Reduce method. The difference is in the use of resource specially in temporary storage resources. In Hadoop mapReduce is used HDFS (Disk) as a data temporary storage medium, while in Apache Spark is used RDDs (in-memory).

Usage of RDDs by Apache Spark makes the performance framework much faster than Hadoop MapReduce. Proven in this study the average performance of Apache Spark is 4,99 times faster than Hadoop MapReduce.

Bibliography (2004 - 2016)