

Legacy Software Modernization For a US Top Market Research Holding

How shifting from an outdated system to Apache Spark and AWS cloud services allowed a leading market research company to speed up data processing **threefold** and decrease software maintenance costs by **34%**.

Challenge

Succeeding in today's market is tough. Innovation - that's where breakthrough opportunities reside. But an innovative approach is impossible without using up-to-date technologies.

Our customer embraces innovation just as we do. To work properly they need to be on the cusp. That's why it has been decided to **migrate from legacy technologies to modern cloud infrastructure**.

Tasks

- **Migration to Spark.** Spark is used at a wide range of organizations for large-scale data processing. It allows running workloads faster, writing applications quickly in Java, Scala, Python, R, and SQL, combining SQL, streaming and complex analytics. Spark runs on Hadoop, Apache Mesos, Kubernetes, standalone, or in the cloud. It can access diverse data sources.
- **Validation of business logic,** which is critical to keep things running smoothly. Publishing data is actually pretty easy. There are lots of ways to do that. While securing and organizing your data is an important bit that requires some thought.
- **Data correctness verification.** Accurate data is the backbone of any database. Rigorous, objective and transparent verification processes are vital to establishing and maintaining high-quality data.
- **Performance improvement** in general and **reducing data processing time in particular,** which, by the way, speak for themselves.

Solution

The solution implies taking the data prepared by the company's different teams from the cloud storage (S3) and executing the project code to message, consolidate and filter data to perform further calculations. Code execution results are recorded in a file that can be used either for the company's other projects or for making reports.

The solution includes:

- orchestration of all jobs (tasks);
- migration to AWS cloud services;
- refactoring of the code to handle increased data volume;
- the possibility of sharing the transformed data with different teams and using it within various company's projects.

Key features



Data verification
(data qualitatively and clearly coincides with what is expected)



Each job (task) gives the expected result



Runtime reduction



Maintenance cost reduction



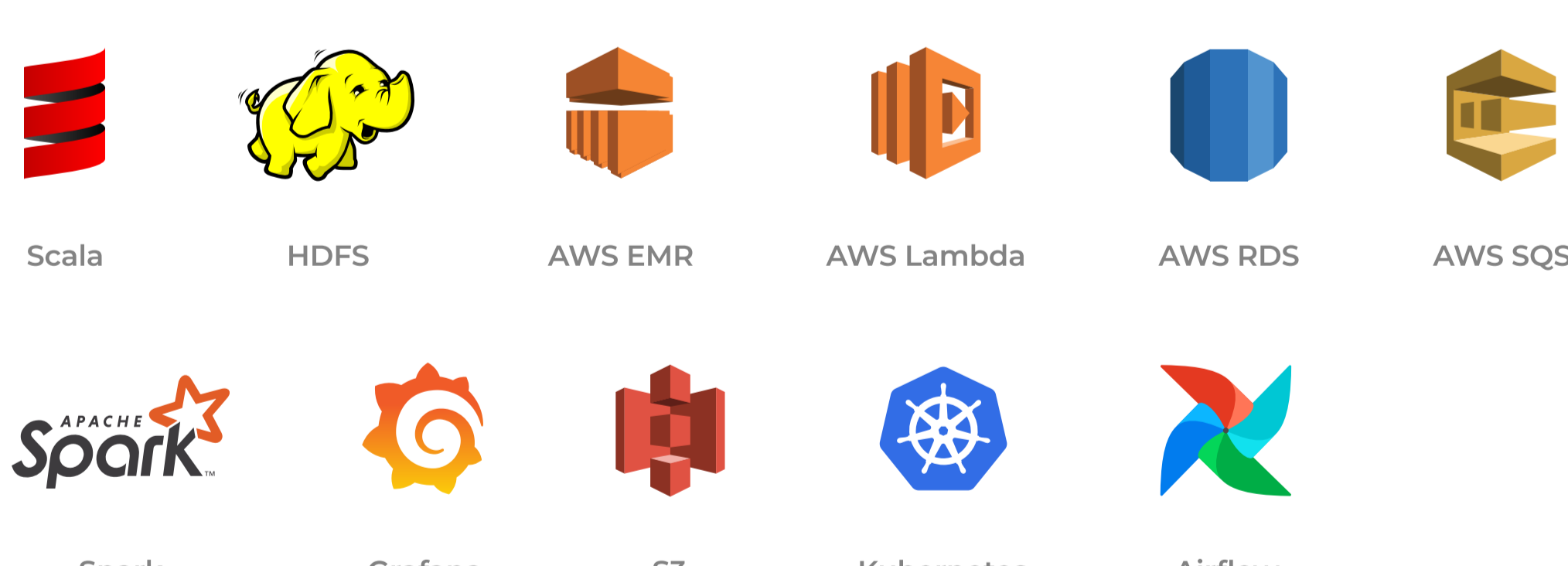
Modifiability improvement



Value

Thanks to the solution implemented by *instinctools, the users got an opportunity to manage the revisions of documents and correlate them with all the necessary regulations in a more efficient way. It allowed our customer to attract more clients, which increased the business profitability

Technologies



Legacy software modernization

is the key to adapt, grow and remain competitive for any organization. In close cooperation with your company, we will work out the best strategy for this process!

[LEARN MORE](#)

Do you have a similar project idea?

Contact us — and we will estimate your projects costs for free!

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