AI at Scale

Deploy a big data technology strategy

fractal

INTELLIGENCE FOR IMAGINATION

The Big Picture

A leading US health insurer wanted to improve its existing big data infrastructure to support its future big data analytics use cases. The company wanted to evaluate its current big data use cases and the underlying infrastructure, and benchmark it with industry standards.

It wanted to understand its business needs and identify a list of existing and new big data use cases to execute. The client also sought to develop a blueprint for building big data infrastructure to support the execution of use cases, the scope of which would be clinical analytics.

Transformative Solution

To solve the company's challenges, a big data technology strategy roadmap was created. The data strategy components included data shape, data volume, data latency, analytics development, analytics operationalization, insights consumption, and integration. The analysis stages included determining key business objectives, identifying use cases, evaluating existing capabilities, identifying gaps, and proposing a new architecture.

Four steps were taken to deliver big data recommendations and a roadmap, over a ten-week period:

- Finalized use cases: The approach identified current and new use cases, and then finalized the use cases that fit the big data use case definition. A scope and project plan document was provided.
- Performed gap analysis: The solution created detailed requirements and evaluated existing capabilities. This provided a current data component architecture, identified data sources, and identified components to replace or upgrade.
- Evaluated architecture patterns to bridge the gap: The activities in this step included assessing the feasibility of platforms, evaluating alternatives, and outlining short- and long-term investments. This resulted in a gap assessment document and benchmarking. Big data components were proposed such as Hadoop, Spark, Storm, Kafka, and Spring XD Platform.
- Provided final recommendations: A detailed recommendation and implementation roadmap was created. Best practices for big data setup and governance were provided, along with a guide for advanced visualization techniques and tools.

The Change

As a result of the engagement, the client gained several key benefits. These included: Final recommendations and a roadmap; design and best practices; a risk mitigation and governance plan; and a big data implementation plan. This blueprint provided the company with an approach to support its future big data analytics use cases.