Data is *your* business's most valuable asset…

Make it RealTime ready, with Quadrical Ai's Big Data Platform!

Implementation: 8 Weeks
Cost: $ 40,000

You want an easy centralized view of *your* business and the ability to do cool analytics, but, the volumes of data from CRM / Transactions / Clickstream / Campaigns / SCADA and IoT you migrate, is just lying in multiple siloes.

We at Quadrical Ai are Data-Engineers, with a 'Business First' attitude. Founders, Dr. Hugh Hind and Sharat Singh, have broad and deep experience in making your data clean, complete and in context. They also know how to utilize cutting edge AI with it, but that's later on. Our entire team understands the right modelling techniques on the Azure Data Lake which will enable you to monetize your data; receive reports in real-time and not just be ready, but AI prepared.

The Actuals:

a. **Ingest Data from Multiple Sources**: Ingest data from multiple properties (website, mobile app) and enterprise apps (CRM, transactions, ERP) to get a complete picture of user activity and take action across every business interaction to increase conversions and efficiency.

b. **Create a Reliable, Optimized Data Repository**: Using Change Data Capture, (CDC), data is validated by uniform schemas. Next, schemas are applied to incoming data from multiple sources and with ACID transactions; making sure data used for Real Time reporting and application of AI platforms is completely reliable.

c. **Plug and Play**: The platform has connectors for ingestion from - website, mobile app or SQL/ NoSQL database or CSV/Excel files with libraries which can seamlessly keep adding multiple new data sources. New data can be used for ETL and to provide reports and

visualization on Tableau, Power BI or to prepare custom reports. Connectors for Google Analytics, Adobe Analytics, SAP, Shopify, and Salesforce are available.

   d. **Time Travel for Large-Scale Data Lake**: The platform automatically versions all the data stored in the Data Lake, enabling access to any historic version of that data. All you may need, to actually use your data better, will always be available with a couple of clicks.

- **Audit Data**: Auditing data changes is critical in terms of data compliance and debugging to understand how it has changed over time.
- **Roll Back Data**: Data pipelines may create accidental bad writes. Multiple updates and deletes make this very complicated. The corrupted data can be rolled back easily using our platform.
- **Reproduce Experiments:** Data scientists, typically work on hundreds of models before putting one in production. Since data may be continuously modified, the original data on which the experiment was conducted can be reproduced by the platform.
- **Time Series analytics**: This is easily done with a simple command to answer queries like, how many new customers were added last week?

   e. **AI ready**: Feed high-quality data RealTime (or batch from Data Lake) onto your AI platforms OR run the AI tasks directly in our server-less compute infrastructure.

   f. **PowerBI Custom reports –** Real-time consolidated custom reports can be generated to identify and drive additional revenue/customer service opportunities.

   g. **Extensible –** Automated code-gen libraries supported by server-less infrastructure and CI/CD pipelines enable seamless extension of new data sources and schemas.

Value: As you deserve value for your spending, Quadrical Ai uses an optimal blend of managed and open-source technology, which offer the best fault tolerance and reliability.

Tech Stack: Kubernetes, Kafka, KSR, KSQL, CDC, ETL, Delta Lake, Azure Data Lake

Deliverable: One Azure Data Lake PoC.

1. Real Time Unique Reports/Insights, powered by your own data
2. Consolidated view from Multiple Sources of your business's data
3. Schema Validation to ensure your Data Lake is always sacrosanct
4. Scalable infrastructure with automated CI/CD pipelines
5. AI ready to allow you to further drive business value quickly…

Hindsight is always easy. Let *your* data become available to be your foresight with Quadrical Ai's Big Data Platform.