# Enterprise Data Analytics on Azure

## ABOUT SCIENCESOFT

ScienceSoft is a global IT services company headquartered in McKinney, TX, US. In data analytics since 1989, we help midsize and large companies in 30+ industries, including manufacturing, professional services, healthcare, telecoms, retail, education, and more, design and implement effective Azure-based enterprise data analytics solutions and ensure maximum ROI out of data analytics investments.

## DATA ANALYTICS AREAS WE COVER

### Financial analytics

- Revenue, expenses, and profitability monitoring.
- Profitability analysis and financial performance management.
- Financial planning and budgeting.
- Financial risk forecasting and management.

### Customer analytics

- Customer behavior analysis.
- Automated customer segmentation for tailored sales and marketing campaigns.
- Personalized cross-selling and upselling offers.
- Customer attrition prediction, customer churn risk management.

### HR analytics

- Employee performance monitoring and analysis.
- Employee experience and satisfaction analysis.
- Employee recruiting analysis.
- ML-based employee churn prediction for attrition risk management.

### Asset analytics

- Asset usage analytics, planning asset modernization/ replacement/disposal.
- ML-based predictive maintenance.
- Asset investment planning.

### Sales and product analytics

- Sales channel analytics.
- Pricing analytics and pricing strategy optimization.
- Identification and prediction of sales trends.
- Product performance analysis.
- Competitor benchmarking.

### Supply chain analytics

- Identification of demand drivers, consumer demand forecasting and planning.
- Supplier performance analysis.
- Inventory planning and management.
- Supply chain risks management.

## WHAT OUR CUSTOMERS SAY

*"When we first contracted ScienceSoft, we needed expert advice on the creation of the centralized analytical solution to achieve company-wide transparent analytics and reporting. ScienceSoft's consultants held a series of interviews, analyzed our workloads, documentation and the existing infrastructure and outlined a clear project roadmap for implementing the solution to get data-driven insights for tactical and strategic decision-making, planning and performance management."*

**Heather Owen Nigl,** Chief Financial Officer, Alta Resources

## LEARN MORE

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# Azure Data Analytics Solution Architecture

To build an enterprise data analytics solution capable of handling your unique data needs, we design a tailored architecture and choose an optimal tech stack based on the Azure Data Services ecosystem.

| Sample data analytics solution architecture | Azure services in use |
|---|---|
| **Data integration layer**<br><br>• Extracting data from diverse data sources.<br>• Batch and real-time data processing.<br>• Data profiling and cleansing.<br>• Transforming data into a predefined format. | • Azure Data Factory<br>• Azure Data Catalog<br>• Azure Event Hubs<br>• Azure IoT Hubs |
| **Data storage layer**<br><br>• Storing raw/pre-processed data of various formats in a data lake at scale for archiving, big data analytics, and data science use cases.<br>• Storing historical, integrated company-wide data in a data warehouse for in-depth analysis.<br>• Storing current consolidated data in the operational data store for prompt analysis. | • Azure Data Lake Store<br>• Azure Blob Storage<br>• Azure Synapse Analytics<br>• Azure Cosmos DB<br>• Azure SQL Database |
| **Data analytics layer**<br><br>• Online analytical data processing and data mining to roll up, drill down, slice and dice business data and identify unusual patterns and trends within huge data sets.<br>• Forecasting, what-if scenarios modeling, etc.<br>• Real-time data analysis.<br>• Big data analysis. | • Azure Analysis Services<br>• Azure HDInsight<br>• Azure Databricks<br>• Azure Machine Learning<br>• Azure Stream Analytics |
| **Data reporting and visualization layer**<br><br>• Creating reports and dashboards to make analytics results digestible and easily accessible within the company and among trusted external users.<br>• Running ad hoc queries with self-service BI tools.<br>• Embedding analytics insights into apps, web portals, etc. | • Microsoft Power BI |
| **Data security layer**<br><br>• Configuring conditional data access and user authentication.<br>• Managing user authorization.<br>• Managing sensitive data with end-to-end encryption and dynamic data masking. | • Azure Active Directory<br>• Azure Key Vault |

**Learn more:** https://www.scnsoft.com/services/analytics/consulting

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