



The explosive growth of “Big Data Technology” has enabled companies to solve problems never thought possible. In health care, hospitals are leveraging next generation analytical technologies to align staffing levels with patient demand. In finance, advancements in large scale data collection enable firms to gather online customer reviews, click streams, and other unstructured data sources to measure customer sentiment and tailor offerings. Traditional Business Intelligence has undergone monumental technical transformation; allowing analysts to query petabytes of data in seconds at a fraction of historical costs. Enterprises see the value of investing in “Big Data Technology” but are faced with a vast landscape of technology choices.

Silverlines Data Engineering Services provides a set of advisory and delivery offerings that guide organizations through the big data landscape. Helping companies choose and implement the appropriate solutions depending on the business need.

Advisory and Delivery Offerings

The advisory and delivery offerings assist in the following key areas:

Build

Hardware and vendor selection of on premise, cloud, and hybrid big data deployments. Proper sizing of an implementation up front prevents under and over provisioning of assets and reduces operational costs.

Acquire data

Best practices and standardization of data ingestion. Standardization and management of metadata extraction and discovery ensures consistency across data sets.

Optimization and Governance

Standardize transformations for optimal performance semantic consistency, and model performance. Informational governance is key to ensuring correct output and maximizing business value.

Data consumption

Optimize the consumption of results for various user audiences and tools.

Security and Reliability

Designing for security and reliability up front saves time and reduces risk.

Solution Benefits

Data Lake

Collecting raw detailed data in a central store such as hadoop from disparate data stores littered throughout an organization is a first step towards performing rich analytics.

- Ingest
- Transform
- Model

Data Warehouse

Legacy data warehouse implementations and ETL pipelines are a prime candidate to offload into modern distributed data stores and frameworks.

- Transform EDW to cloud
- Schema design
- ETL Optimization

Real Time Systems

If SLA's for data delivery are tight and the business needs that real time dashboard of operations, streaming architectures are necessary.

- Publish Subscribe Architectures
- Streaming design patterns
- Framework selection

Analytics

Dashboards coupled with traditional reports are an effective way to gain quick insight into analytical outcomes. Exposure of rich result sets via API's is a standard part of any data platform.

- Dashboarding
- Reporting
- API's

Transactional Systems

Certain categories of business problems require transactions and a relational model. Next generation cloud technologies are a boon to Geo redundant highly available relational footprints.

- Relational Data Modeling
- High availability relational implementations

High volume high velocity data architectures

High volume high velocity data problems such as IOT that require millisecond response times at scale warrant vastly different solutions than traditional relational databases.

- Modeling for time series data
- High availability key value store designs

Security and compliance

Because of the immaturity of some big data technologies designing for security can be challenging and require bolt on products. Design up front for security.

- Identity management in a Big Data architecture
- Design for encryption

Machine Learning architectures

Machine learning pipelines require different tooling and deployment models than traditional data pipelines. Sometimes a pre-trained model is already available for use.

- Large scale model deployments
- Pre-trained models

Artificial Intelligence

Out of the box API's provide quick time to market for specific artificial intelligence challenges.

- **Video analysis**
Make videos searchable and discoverable
- **Image analysis**
Quickly classify images and extract text
- **Speech recognition**
Convert speech to text across 80 different languages
- **Text Analysis**
Measure customer sentiment with natural language processing
- **Translation**
Translate text into a supported language
- **Job search and discovery**
Improve candidate matching and conversion

Rather than going to numerous vendors for point solutions and services for data processing needs; Silverline's Data Engineering Services team has a wide breadth of experience to advise and deliver some of the most complex data solutions.



About Silverline

Silverline is a Salesforce Platinum Cloud Alliance Partner headquartered in New York City with experienced, innovative consultants around the world. They are focused on developing powerful solutions, deployed on the Salesforce Platform, and robust third party apps. Silverline's results-driven methodology leverages best practices acquired by over 1,100 implementations, with significant expertise in industry verticals such as Financial Services, Healthcare, and Force.com solutions. Additionally, Silverline offers popular AppExchange applications and industry-proven Fullforce Certified accelerators.

