ELCA

Smart Data Lake – Analytics Platform

Challenges

Siloed data, inadequate agility and flexibility to serve business needs, high operational costs, unsustainable security risks, on-premises scaling issues. ELCA solves these for better insights..

Organizations today face a series of data-related challenges that hinder their ability to harness the full potential of their information assets. These include siloed operational and analytical data, making it difficult to consolidate and analyze data efficiently. The lack of agility in accessing compute and storage resources inhibits rapid experimentation and innovation. High operational costs and efforts are tied to maintaining complex data stacks. Security and privacy concerns persist when transitioning to cloud-based data platforms. Lastly, integrating on-premise and cloud data sources securely and efficiently poses a technical challenge. Addressing these issues is crucial for organizations aiming to thrive in the data-driven business landscape.

The ELCA Solution

Optimize data operations with a unified analytics platform, AWS resources on demand, ELCA expertise, efficient automation and a unprecedented adoption flexibility to your today's business needs.

Unlock your data's potential with a single source of truth using modern data platform concepts like #lakehouse and #datamesh. Access unlimited, on-demand storage and compute through AWS offerings like #S3, #glue/athena, #databricks and #snowflake, minimizing upfront costs and operational commitments. Rely on ELCA's expertise in hybrid cloud integration, cybersecurity, iso27k, privacy and service management.

ELCA's solution focus on business decision makers and data consumers to address and adopt their needs in an agile, flexible and fast way to stay up to date with their day-to-day challenges. Streamline data pipelines using automation tools like #smartdatalakebuilder and #dbt. ELCA's AWS solution architects and DevOps engineers design and implement optimal, well-architected solutions for your data needs.

Benefits

Break down data silos, create a one truth and holistic view, prepare data foundation for AI/ML, cut operational costs, and ensure privacy and security with a cutting-edge Cloud Data Platform.

Benefit #1

Overcome data silos. Make informed business decisions by analyzing data along core business processes or across organizational units.

Benefit #2

Get your data foundation ready for AI/ML use cases by having up-to-date, well-organized and high-quality data ready to use to gain a competitive advantage for future decisions and market adoptions

Benefit #3

- Reduce costs and effort of your current data stack to operate and maintain your agile future data platform..
- The state-of-the-art Unified Analytics Platform meets your privacy, security and performance requirements.

ELCA Contact :

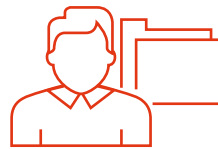**Mandes Schönherr**

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ELCA on AWS

Our solution seamlessly integrates AWS's powerful cloud infrastructure with our expertise, particularly highlighting the Smart Data Lake Builder as our core tool for creating and orchestrating complex data pipelines efficiently. By combining AWS's scalable data storage and processing capabilities with our specialized pipeline management tool, and Lakehouse and data mesh principles, we establish a comprehensive analytics platform. This partnership ensures efficient data management, analysis, and security using diverse data sources, laying a solid foundation for AI/ML use cases. AWS services such as Athena and SageMaker and Quick-Sight Dashboard then offer user-friendly access to this data, making it a truly "better together" collaboration for data-driven insights and innovation.

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Use Case: DWH modernization

› Challenges

Outdated on-prem systems often struggle to handle the growing volume and complexity of data, resulting in slow query performance and limited scalability. Further, high operational and license costs, as well as maintenance resources consume large parts of the budget and engages internal specialists with low value tasks. Additionally, data silos hinder cross-functional data access and collaboration.

› Solution

Automated process for data ingestion and transformation using the portable open-source framework SmartDataLakeBuilder as well as Infrastructure as ELCA's proofed experience and best-practice in multiple customer projects guaranties to provision and manage infrastructure and data pipelines efficiently.

› Results

Significantly improved query performance enable faster data-driven decision-making. The scalability of the cloud-based solution ensures the organization can handle increasing data volumes easily. Operational costs decrease as the organization no longer needs to maintain on-premises infrastructure. Overall, this modernization effort enhances agility, cost-efficiency, and data accessibility, positioning the organization for data-driven success in the future.

Features

Smart Data Lake Builder

Smart Data Lake Builder, an open-source product based on Apache Spark, empowers customers to conquer data challenges by facilitating the creation of metadata-driven data pipelines. It streamlines the process of ingesting, historizing and processing data from various sources, allowing for efficient consolidation and transformation. This automation reduces manual efforts and errors, ensuring a unified and readily accessible #lakehouse. As a result, organizations can make informed decisions, streamline analytics, have increased transparency about their data processing and accelerate their data-driven initiatives with ease.

Infrastructure as Code

Infrastructure and application releases on AWS enables organizations to define and manage their infrastructure using software development best practices, ensuring consistency, traceability and reproducibility. Changes are tracked and version-controlled using Git, enhancing collaboration and traceability. This approach streamlines resource provisioning, scaling, and maintenance, reducing manual errors and speeding up deployments. IaC on AWS enhances infrastructure, application adoption agility, cost optimization, and compliance, making it a crucial tool for efficient and reliable cloud management.

Visit AWS **AWS ELCA partner website** to purchase or start a Free Trial today.

Get started with ELCA solutions on AWS

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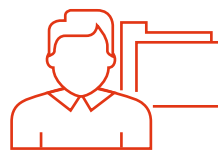mandes.schoenherr@elca.ch

ELCA
We make it work.

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Use Case:
Product Journey – 360º Analytics

❯ Challenges

You like to understand and optimize customer or product journeys, but data is distributed amongst many disjoined data sources (data silos). For efficient decision-making and analysis, you need to create a holistic data view along the whole value chain. This involves data from different locations (on-prem, cloud x), with different interfaces and formats (SQL, REST services, files with various formats), making it hard to start analyzing important business questions and optimization potential

❯ Solution

Cloud-based data platform leveraging modern data principles, like #lakehouse and #datamesh concepts. Using the open-source SmartDataLakeBuilder with metadata-driven data pipelines connecting various data sources to create a consolidated single-source of truth readily available for analysis

❯ Results

A holistic data view along the whole value chain. Having the data foundation ready to answer your business questions in time, uncovering valuable insights, e.g. to optimize product offerings and processes, leading to increased market competitiveness. Moreover, the automation introduced by Infrastructure as Code and Smart Data Lake Builder reduces operational efforts, enabling the company to focus on strategic growth initiatives.

Features

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