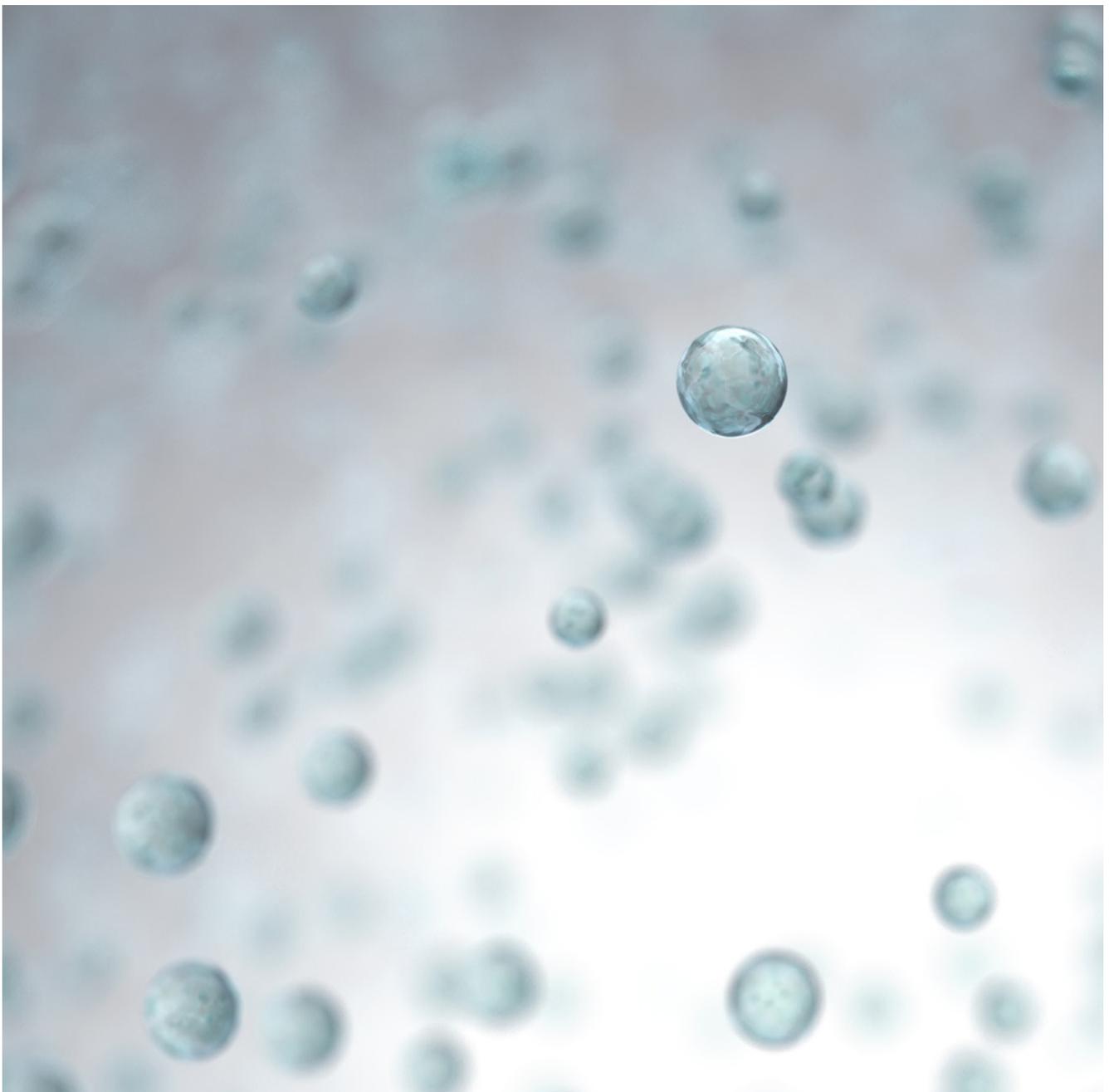**TEMENOS**
Analytics

Temenos
Data Lake

Unleash the power of big data with the Temenos Data Lake to unlock
the value of real-time structured and unstructured data.

Temenos
Data Lake

We are living in a fast-moving digitally connected world where data is at the heart of everything we do. Processing large volumes of data in real-time to deliver real business benefit means that banks require robust big data and advanced analytics capabilities to compete with the analytically driven new market entrants. Customer expectations are also much greater today fueled by experiences across financial and non-financial service providers where preference is often given to those brands offering relevant and personalized products and services. The challenge that banks face today is with the ingestion, cleansing, blending, and optimization of their data in real-time, to deliver both insights and efficiencies back to the business.

Many banks are attempting to build internal data lakes to solve these issues which takes time, is highly costly and often comes with high failure rates. Unlocking the value of their data is key to delivering more personalized customer engagement, improved fraud detection and risk mitigation.

Temenos Data Lake is a next generation modern data management product built as a foundational platform for Temenos Analytics to help banks manage and future-proof their capabilities in the ever-changing landscape of data and analytics.

Solution Overview

Temenos Data Lake can harness real-time, structured and unstructured data as well as curate, ingest and blend large volumes of data at scale. With Temenos Data Lake banks can now implement a single, governed, data hub for their downstream systems be it analytics, AI, AML, Temenos analytics, Temenos reporting.

This allows banks to be able to store and process all the data they need to power smarter applications from a single source and achieve higher performance at a very low TCO, as opposed to building data lakes in-house with the high development and integration risks that come with it. Banks can also power AI-based applications to tailor recommendations to each customer and offer contextualized advice.

- A robust, productized data lake that integrates big data and analytics capabilities into its banking software products.

- Delivers out-of-the box data integration, preparation and optimization to power AI-driven banking applications, including pre-existing integration with Temenos T24 Transact and Temenos Infinity.

- Supports multiple underlying database and processing platforms, including Apache Hadoop, Apache Spark and cloud based platform services

- It is also pre-integrated with NuoDB, the enterprise-class, distributed, cloud and container native database, offering banks combined Temenos core banking and analytics functionality on a single database architecture. This dramatically accelerates deployment, eliminates complexity and removes integration costs.

- Provides a robust set of data engineering tools, allowing banks to blend and enrich Temenos source data with other data sources, including unstructured data. Data engineering workloads leverage the Apache Spark in-memory processing engine which is the leading platform for large-scale SQL, batch processing, stream processing, and machine learning.

- Deployable as an enterprise data lake or as a point solution, embedded within the Temenos banking software products.

- Can be used with third party core banking solutions as well as Temenos T24 Transact

- Part of the Temenos Analytics product which is embedded into cloud-native, cloud-agnostic Temenos Infinity and Temenos T24 Transact.

- Available on premise and on cloud

Platform Components

- Data Event Stream

- Operational Data Store

- **Designer**: An intuitive collection of data engineering, processing, ingestion and egress components that reduce the complexity of implementation

- **Deployer**: Unified graphical interface to author, execute build and migrate projects.

- **Scheduler**: Combines multiple sequential jobs into one logical unit of work and enables users to orchestrate workflows.

- **Administrator**: A user-friendly graphical interface to manage projects, repositories and user accounts

- **Data Lineage Explorer** : A comprehensive module helps to explore data life cycle from source to destination.

- **Data Centre Manager**: Helps to manage replication in a big data ecosystem for data ingested in data lake.

Why choose Temenos Data Lake?

- **Big Data Engineering**. Eliminate cost of 3rd party ETL and Data Engineering Tools.

- **Streaming Data**. React in real-time to customer events increasing sales and customer loyalty.

- **Analytical Models** Reduce development time by 90% and enable efficient data science development.

- **Data Compliance**. Reduce risk and cost of regulatory penalties.

- **Cloud & Platform Agnostic**. Reduce platform costs by up to 90%.

- **Cloud Native**. Increase scale and performance whilst decreasing platform costs.

- **Centralized data lake** with pre-prepared data models, populated by complete, accurate and timely data that is available in real-time and on-demand.

- **Integrated metadata** management tools accelerate compliance with legislation such as BCBS 239. Temenos Data Lake alleviates the need for banks to engage in lengthy and expensive data integration projects, with a potential reduction in risk and compliance costs of up to 80%.

- **Rapid application development**. An intuitive extensive library of prebuilt transformation components for Apache Spark and Apache Hadoop with codeless graphical development environment that increases productivity.

- **Extraction**. High-performance connectivity through native APIs to source and target systems with in-memory parallel processing.

- **Unlimited Scalability**. Terabytes to petabytes with no specialized coding on distributed computing and storage platform.

- **No special skill required and minimal implementation time**. User-friendly generic interface needs limited knowledge of Hadoop and its eco-system.

- **Avoid Version Locking**. De-risk the investment in Hadoop and frees from potential lock-in with a specific open source versions. Leverage the rapid innovation that comes from constant, concerted collaboration in the community without having to re-write the existing applications.

"Temenos Analytics is mission critical for us in executing our unique strategy and differentiating our value proposition. The ability to integrate and combine many types of data is essential to gaining full business insights. The use of Temenos Analytics has enabled us to surgically execute our strategy, by defining customer micro-segments and tailoring our products and services specifically for these segments. This has led to an increase of 138% of assets under management over 8 years. Temenos Data Lake and the integrated data analytics and engineering tools will help us continue this aggressive growth strategy."

Fred Cook, Chief Information Officer at BlueShore Financial

Temenos AG (SIX: TEMN), headquartered in Geneva, is the world leader in banking software, partnering with banks and other financial institutions to transform their businesses and stay ahead of a changing marketplace. Over 3,000 firms across the globe, including 41 of the top 50 banks, rely on Temenos to process both the daily transactions and client interactions of more than 500 million banking customers. Temenos offers cloud-native, cloud-agnostic front office and core banking, payments, fund management and wealth management software products enabling banks to deliver consistent, frictionless customer journeys and gain operational excellence.