CASE STUDY
BANK LEUMI – RETAIL BANKING

Accelerating Digital Innovation with an Operational Data Hub

About Bank Leumi

Bank Leumi, a publicly traded retail bank, was founded in 1902 and is Israel's oldest bank. It has 10,000 employees, and 200 branches throughout Israel, and several branches in New York. It is Israel's second largest bank in terms of equity.

The Israeli Financial Services Competitive Landscape

Israel's traditional retail bank landscape includes some top-tier banks such as Bank Leumi, and a number of midsize and smaller banks. For decades this list has been static, and there was little competition among banks.

The competitive landscape has been significantly challenged by two main drivers: new government regulations and advances in technology. On the regulation front, in 2020 the Israeli finance and banking regulator forced the banks to sell their credit card companies, which up until then were wholly owned by the large banks. And overnight, these credit card companies became direct competitors to their previous owner bank companies. Another regulatory move, known as Open Banking, forced banks to open their customer data to fintech companies so those businesses can now offer competing services to the banks' customers. From a technological perspective, digital payment services now offer complete financial services which were only available through retail banking, and now compete directly with traditional banks.

Business Objectives

To compete effectively, businesses must offer apps and services that provide remarkable digital experiences, by providing ultra-fast responses and introducing new digital channels and services. Much of the data that powers these apps originate in multiple systems that are challenging to integrate. Many of the Bank's legacy systems were not designed to support the speed, scale and volumes expected from contemporary digital channels.

The Bank's objectives in considering a DIH were:

- Build and launch innovative digital services (much faster Time-To-Market)

- Obtain a single consolidated view of customers and other bank entities (Single View of Bank Entity)

- As Open Banking provides more access to third-party fintech companies, the Bank wanted to protect its Systems of Record (SoRs) from too many external calls - from a security standpoint; also to minimize the costs of numerous requests to the mainframe

The Road to Digital Transformation

After a strategic analysis, the Bank concluded that it needed an operational data hub (ODH) to decouple digital channels from its systems of record, creating a common customer data model to enable the acceleration of its digital innovation. The Bank decided that rather than taking the Do-It-Yourself approach, a unified solution was needed.

Architectural Objectives

Decoupling of digital channels from systems of record

Obtain Active-Active replication for disaster recovery

Achieve high availability even during periods of large numbers of concurrent requests

Vendor Evaluation

The bank initiated an RFI process (request for information), which spanned multiple global vendors including Oracle, SAP, GigaSpaces, Tibco, Denodo, IBM and Informatica. After a thorough review, two leading vendors reached the RFP (request for proposal) stage and were invited to conduct a proof of concept (POC): GigaSpaces, and SAP.

Why Did Bank Leumi Select GigaSpaces?

After a lengthy POC review of both vendors, the bank selected GigaSpaces as a strategic partner to deliver the ODH. They understood GigaSpaces' strategic initiative of a more complete approach for the **following reasons:**

✔ **Performance**
GigaSpaces Smart DIH processed 8x TPS (transactions/second) above the requirements, with hundreds of concurrent users

✔ **Time-to-market**
Smart DIH allows much faster development of new digital services

✔ **Out of the box**
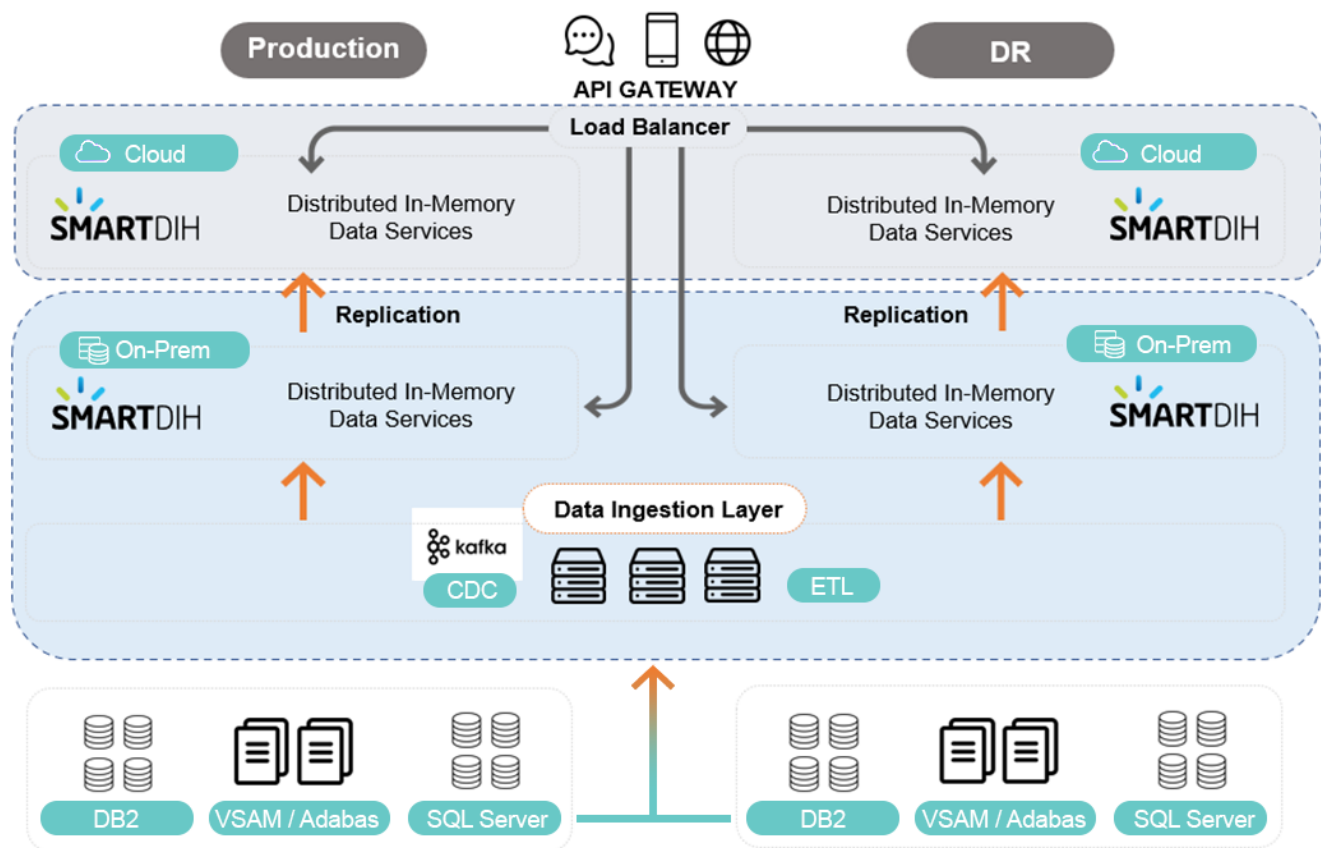Integration with DB2, via CDC (Change Data Capture)

✔ **Vendor commitment**
GigaSpaces demonstrated commitment, agility, and a customer-oriented approach

Smart DIH Architecture at Bank Leumi

Smart DIH at Bank Leumi provides:

✓ Data ingestion layer to integrate data from systems of record

✓ On-Premises Active-Active replication to a backup disaster recovery site

Integration and Interoperability

Smart DIH was integrated into the bank's existing IT ecosystem across multiple categories:

✓ DevOps tools such as Jenkins, Sonatype, Azure DevOps and Git

✓ Visualization and workflow tools such as ServiceNow, Grafana, Kibana and SCOM

✓ Security tools such as Checkmarx, Active Directory, CyberArk and Kerberos

✓ Data sources such as IBM DB2, VSAM, Adabas and MS SQL

Results

Smart DIH enables Bank Leumi to:

Reduce the time required to develop and release new digital services (TTM) from months to days, in some cases to a single day, by implementing low code development, reduced API replication and complexity, and SoR isolation

Meet Open Banking regulations by enabling a data-as-a-service model for third-party data consumption

Offer ultra-fast responses even during periods of high numbers of concurrent requests

Improved insights and analytics with the unified, centralized view of bank entities

About GigaSpaces

GigaSpaces is building on its in-memory computing and operational data store technologies to offer one of the market's first Operational Data Hubs, an out-of-the-box data platform that empowers organizations' digital transformation, while lowering legacy systems' TCO. Whether you need to accelerate one application with cache, or modernize your entire architecture, GigaSpaces can future-proof your investment. Never before has it been this straightforward to accelerate API-powered digital applications.

Smart DIH is part of the GigaSpaces Smart suite of products, alongside the award-winning Smart Cache solution. GigaSpaces offices are located in the US, Europe and Israel, with partners such as Capgemini and Cognizant around the globe; serving customers such as Morgan Stanley, Bank of America, BBW, CSX, Goldman Sachs, Societe Generale, Credit Agricole, American Airlines, Avanza Bank, Avaya, CLSA, and UBS.

For more information visit www.gigaspaces.com.