

project's success has paved the way to opening a virtual branch in the future, and there are exciting plans to provide an online bank functioning as an additional profit centre. Bank Leumi believes that it now has one of the best Internet banking solutions in Europe.

leumi online Technical Environment

leumi online has been deployed as an n-tier Web system, written using Windows® technology. As an n-tier system, it is deployed over several servers, where the data is separated from the mechanism to display it.

The system is deployed as follows:

Data: The data is kept in a Microsoft® SQL Server™ 2000.

Web site: The Web site is also based on Microsoft technology, written in ASP (VBScript as server side scripts and Jscript as client side scripts) enhanced with AJAX running on IIS server 6.

Middle Tier: The midtier module stores/retrieves the data to/from the database and forwards it to the Web site for display using XML format. This module is a DCOM object, which consists of DLLs written as ATL projects in C++. For communication with the database, the middle tier also uses ADO.

The system is installed on Windows 2003 SP2 servers, utilising the security features embedded within Windows 2003 in order to make sure there are restricted areas that are available only to leumi online for access.

The subnetwork, where the system is installed, is protected by a gatekeeper. This server protects the system from intruders by monitoring the requests arriving to the system.

FIS Applied Analytics' Strategic Alliances

Bank Leumi(UK), in partnership with RSA, has implemented additional security measures for authentication of the login and payment transfer approvals using a special RSA token. To log in or release payment, the user must use a passkey and the then-current number shown on their RSA token. Without this two-factor authentication, the user would not be able to access accounts or release funds.



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Case Study: Bank Leumi (UK)

History of Bank Leumi (UK)

Bank Leumi (UK) was founded more than 100 years ago and has established a reputation as one of the leading foreign-owned banks in London, offering a comprehensive range of commercial, general and private banking services with the expertise and knowledge that only a century's worth of experience can achieve. Service is based on traditional values and truly personal service, assisted by the latest technology.

Originally formed to service the Jewish and Israeli communities in the U.K., Bank Leumi (UK)'s customers now include a wide range of nationalities and ethnic groups across the globe. With its head office in London – Europe's leading financial centre – Bank Leumi (UK) also operates from a branch in Manchester. The Bank's services are further enhanced by Bank Leumi (Jersey) Ltd. and Leumi Overseas Trust Corporation (LOTIC). These subsidiaries offer advanced offshore private banking, family office and fiduciary services in a secure and reputable environment for effective tax planning. Leumi ABL Ltd., the newest addition to the Bank's range of commercial lending services, specialises in providing invoice discounting and factoring facilities that allow corporate customers to raise finance against receivables.

Bank Leumi (UK) is a subsidiary of the Bank Leumi le-Israel Group with assets approaching \$60 billion. The group has a dominant share of the domestic Israeli banking market and the largest overseas network of any Israeli bank, with more than 50 offices in 20 countries around the world.

Bank Leumi (UK) aims to be recognised as a leading provider of financial solutions in its specialist areas of activity. The Bank believes that the best way to achieve this is to fully understand the needs and aspirations of its customers and thus develop the closest customer rapport by providing relationship banking. This involves building an in-depth knowledge of each customer's financial circumstances and requirements, employing the highest calibre personnel – skilled in both financial and relationship abilities – and adopting short lines of communication to provide a rapid response to customer needs. The object of this strategic approach is to achieve outstanding service for all customers at all times.

A Customer-Focused Project

In 2006, Bank Leumi (UK) launched an initiative to provide an Internet banking facility to enhance its offering to clients. This facility, called "leumi online," allows business and personal clients to access details of their accounts and portfolios and manage their finances over the Internet, safe in the knowledge that Bank Leumi is protecting their information with the very latest security safeguards.

Bank Leumi (UK)'s approach has always been one of putting the customer first in all that it does. In line with its relationship banking philosophy, every customer has an account manager to whom they can speak with directly and who has the time and expertise to offer a truly personal service. As a result, bank staff are always in touch with customers' needs and aware of how customer profiles are changing and evolving. The trigger for the initiative came directly as a result of the Bank's relationship banking philosophy.

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Within the marketplace, whilst the need for corporate Internet banking was identified, the area of money transmission had been slow to develop. Bank Leumi (UK) began the search for an all-in-one solution to meet the needs of both their private and corporate banking customers.

In addition to the core cash management and money transmission facilities, a key issue during selection was the vendor's ability to expand and include the private banking and trade finance areas in the solution.

After a thorough selection process, the Bank chose Fidelity National Information Services, Inc.'s (FIS) TouchPoint Internet Banking solution. The decision was based on TouchPoint's superior breadth of functionality and FIS' ability to provide additional functionality centred specifically on private banking and trade finance.

Development and Implementation

The leumi online overall objective was to deliver an Internet banking solution to all client areas – private, commercial, cash management, funds transmission and trade finance. Bank staff representing all lines of business took part in a detailed analysis to identify all changes required to the base solution. After budget approval, the Bank did not take the traditional route by handing over the requirements to the vendor. Instead, the Bank was involved in the entire development process.

The development team was comprised of FIS specialists working in conjunction with key Bank Leumi staff. As questions and challenges arose, both parties were on hand to immediately provide answers and deal with any issues. By working so closely together, the team was able to fully understand the workings of the Bank and its clients in order to develop the best solution. It was a truly customer-focused project, completed with accuracy, flexibility and clarity over a six-month period in 2006.

A major challenge for the project was data security. It was vital to have an infrastructure that was reliable and totally secure. Throughout development, the solution was rigorously tested using a complex process whereby the team looked at the infrastructure in conjunction with the application. At the time, industry watchdogs highlighted a concern that most Internet banking facilities were not secure enough, and so it was important for the Bank's profile to make sure it was seen to be taking this seriously and getting it right. As a result, every client using leumi online has two-factor authentication through the use of a RSA token.

Empowering the Customer

Live and operational since April 2007, leumi online is currently being rolled out across all areas of the business. Most importantly, feedback from the customers has been extremely good, especially in terms of the solution's functionality. Careful planning at the project's design stage has led to the creation of a solution that brings many benefits to both the customer and Bank Leumi.

Customer benefits include:

- An automated means to execute all services offered by the Bank that were previously manual, including tools to make the service customer-friendly
- A full range of money transmission services: money transfers, BACS, CHAPS and foreign currency payments, payroll, etc.

- Multicurrency function whereby transactions can be carried out and information on screen can be viewed in multiple currencies, according to wherever the customer may be in the world
- The ability to customise the screen according to the customer's preferences; the screen will then automatically appear in the format of choice
- The power to make changes to services that are offered online, in alignment with specific requirements (for example, most U.K. banks set a standard single floor limit; leumi online limits are personal to those set by the individual customer)
- Assets valuation on demand, both for current and historic data; previously, customers had to request asset valuations
- The solution interfaces with customers' own accounting systems; customers can download accounting information for reconciliation purposes into their own accounting systems
- An interface with customers' own payroll system in order to automate salary payments and funds transfers,
- The ability to manage use of the Internet banking facility; a nominated director can be a 'super-user,' controlling their staff profiles – no requirement to request that the bank make such modifications

Bank benefits include:

- Secure e-mail correspondence with customers, which is important for marketing purposes and maintaining regular contact between the Bank and customers, in line with Bank Leumi's relationship banking philosophy
- Removal of manual and redundant processes, providing staff more time to focus on the customer experience

- Reduction of back-office involvement by use of straight-through processing
- Ability to attract new customers

Success for the Future

More than any other project, the operation of leumi online is one that is evolving all the time. Through ongoing investment and development, leumi online will continue to offer what the customer profile demands and will remain the Bank's most sophisticated electronic service. The solution is fully integrated with the Bank's back-office systems, so the information seen on screen is accurate and up to date at all times.

Phase 2 is currently underway, involving the development of additional services and the introduction of a trade finance module that will result in the decommissioning of the Bank's old dial-up service.

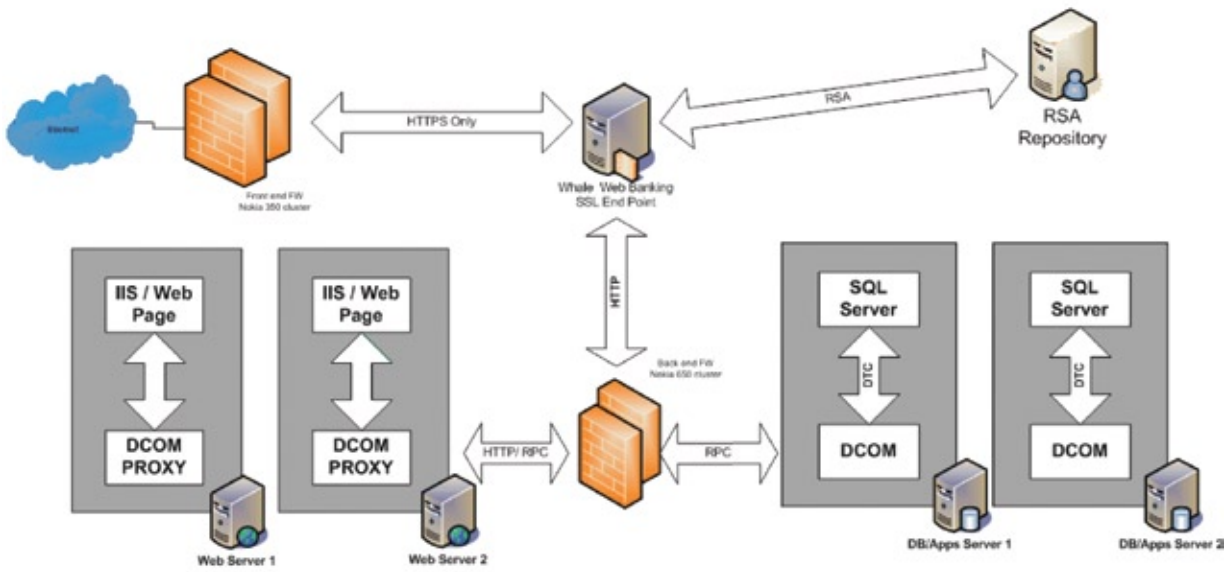
leumi online's success to date will allow the Bank to go back into its traditional marketplace (the Jewish community) and, for the first time, be able to offer individuals an Internet banking service on a low-cost basis.

It is important to Bank Leumi that all remote customers have online access to their accounts to take advantage of the same range of services that is now available to those across the U.K. Bank Leumi (Jersey) Ltd., a wholly owned subsidiary that specialises in offshore banking services to both personal and corporate clients, will introduce the solution to its customers in 2008.

The goal of the project was to deliver an Internet banking solution for all customers, giving the Bank the capacity to answer existing customer demands and the ability to bring in new business. The



Leumi Internet Banking Communication Topology



Leumi III Internet Banking Communication Topology

