Title : HBZ – portable, object-oriented banking solution

Source : SYBASE – Case Study (Internal Magazine)

Dated: March, 1999

SUCCESSFUL WITH SYBASE

Habib Bank Zurich - portable, objectoriented banking solution

As a universal bank Habib Bank offers a broad range of services. The main sources of the return are the interest business, the commission and service business and the trade in foreign exchange and precious metals. The bank has developed a global banking solution based on the Sybase SQL Server and JDBC (Java Database connectivity) technology. Habib Bank selected Sybase SQL Server because of its performance, scaling bareness and, above all, interoperability. Sybase is the core of the whole solution. APLUSTM wouldn't have functioned without Sybase!



How to reach us: Sybase (Schweiz) AG Sinzmuhlestrasse 15 8050 Zurich Tel. 01/308 63 63 Fax. 01/308 63 99 http://www.sybase.ch http://www.sybase.com



Project report on page 3

detail..

Habib Bank AG Zurich hPLUSTM - one of the first portable, object-oriented Banking Solution. on Technology of Sybase.

As a universal bank Habib Bank offers a broad range of services. The main sources of the return are the interest business, the commission and service business and the trade in foreign exchange and precious metals. The bank has developed a global banking solution based on the Sybase SQL Server and JDBC (Java Database connectivity) technology.

Habib Bank selected Sybase SQL Server because of its performance, scaling bareness and, above all, interoperability. Sybase is the core of the whole solution. **APLUS**TM wouldn't have functioned without

Modern Banking from the

The roots of Habib Bank go back to India, where a family bank under the name Habib Bank Ltd. was established over a century ago. With the 1947 partition, the bank emigrated to Pakistan where the enterprise played an important role during the establishment of the state. Habib Bank grew up to a size of approximately 2000 branches in Pakistan an 60 outside of the country and was nationalized in 1974.

Today's Habib Bank AG Zurich was incorporated in 1967 in Switzerland by the founder family and it followed up all commercial activities after the nationalization. The bank consists today of the head office, Habib Bank AG Zurich, and two 100% subsidiaries Habib European Bank Limited, Isle of Man, and HBZ Bank Limited, South Africa.

Outside of Switzerland the bank operates mainly in Great Britain, the Gulf States and Pakistan. The bank possesses further branches in Sri Lanka, Kenya and the United States. HBZ Bank Limited operates exclusively in South Africa, while Habib European Bank Limited resides on the Isle of Man. On 31st December, 1997, Habib Bank employed 1114 people and had 37 branches world-wide.

As a universal bank, Habib Bank offers a broad range of Bank offers a broad range of services. The main sources of the return are the interest business (56%), the commission and service business, and the trade in foreign exchange and precious metals (16%). The head office in Zurich offers an extended range of services within the area of Private Banking.

An Innovative Banking

Solution on Sybase
The bank has a global banking solution based on the Sybase SQL Server and JDBC (Java Database Connectivity) technology. The new solution, APLUSTM, permits information exchange between the branches and faster processing of transactions to satisfy the needs of the customers in strongly globalised circumstances. "Today we can handle double the volume of business without increasing the number of employees" says Reza Habib.

The new solution processes all activities of the bank in commercial transactions, personnel administration, credit and loan business and foreign exchange transactions. It provides the employees in various countries and branches with account information and other data faster which enables the bank to serve the customers with several accounts in different regions

The Starting Point: A Complex System Landscape The information technology of

the bank is managed from Dubai, Habib Bank checked the technologies of the organization for the first time in 1994. The expansion into new countries resulted in a complex computer network and a fragmented approach to information technology. For each service in each country there was a separate system used - thousands of software applications and mostly different hardware - isolating the applications from other branches. The branches relied on time-consuming and paper-based systems in order to exchange information internationally and to handle transactions between different branches. In addition, each country had its own IT supplier. The entire IT structure was inefficient and expensive.

ÅPLUS[™] on Sysbase SQL Server - internally Developed Solution

After an evaluation of the existing IT structure, the IT management of Habib Bank opted for a unique solution: the development of its own banking solution which could be used world-wide in the long run. The IT team created an objectprotected language with which the unique banking solution was developed and named **APLUS**TM.

The bank replaced its existing NCR system by a multi-layered system. A Sun server with Sybase SQL Server connected the branches, which operated the business applications, using Wide Area Network (WAN). The team developed the front-end team developed the front-end of the banking solution based on the rational database system Sybase SQL Server that was used in the back-end. Habib Bank selected Sybase SQL because of its performance, scaling bareness and, above all, interoperability, "The bottom line is simple: we needed a simple and high speed platform" says Reza

For the same reasons Habib Bank also decided for Sun as its network server. The commitment for open network computing and outstanding results in its benchmark tests proved that Sun was the perfect supplement of Sybase.

The data is transmitted by the Sybase SQL server over the WAN to the local servers. Since want to the local servers. Since only data and no application logic is transmitted via WAN, the network operates significantly faster. With the winning performance of Sybase SQL, a manager could now access all information about a customer with accounts in different branches within seconds. The banking solution was also developed with the objective to handle complex transactions between individual offices (using various currencies) without special alignment. In addition, all Forex positions are transferred automatically at Treasury.

Subase SQL Server permits APLUS™ to use once entered data in all applications of the bank (such as in calculations of production costs or financial analysis) while the data integrity remains fully protected. The data remains accurate and consistent across all addresses and functions. In addition, the effect of an authorized transaction is processed in the entire system. The appropriate managers are even informed automatically in the Event monitor if transactions are defined or specific account operations take

The monthly and end-of-year procedures and all functions of the head office are today possible without intervention of the branches.



With $\mathbf{APLUS^{TM}}$ all processes take place automatically and are significantly more efficient **∆PLUS™** is substantially more economical owing to its simple maintenance architecture and the reduced need for various IT suppliers. In addition Habib Bank utilizes the Sybase SQL Server for its personnel database to handle organization, shift-work, holiday plans and qualifications.

Habib Bank in the Internet As one of its options, Habib Bank uses Java technology which enables customers to read account information via a web browser. The JDBC web browser. The JUBC technology permits this irrespective of the software installed on the respective computers. The IT team converted the front-end of **APLUSTM** to Java using a simple

conversion tool. The utilization of Sybase technology ensures that the complex **bPLUS**TM code remains simple and safe.

The bank builds on the concept of "thin clients" in order to keep the computer outputs manageable without reducing the performance and quality of the IT structure. Because the information, such as rate changes, interest modifications or share quotations, is routed directly without searching the Internet on the respective computers, the appropriate banker can report and make suggestions to the customer immediately in a custom-made manner.

For the advancement of its Internet activities Habib Bank further utilizes Sybase. The Sybase adaptive Component Architecture was already checked for an application which extends Habib Bank's server

Sybase is a visionary enterprise which the new adaptive which the new adaptive Component Architecture and Internet development tools prove. **APLUS**TM is given a lot of attention due to its use of Java but Sybase is the core of the whole solution. "APLUSTM wouldn't have functioned without Sybase!" says Reza Habib.

As a result of the success of its in-house solution, Habib Bank plans to sell **APLUS**TM to other . financial establishments. The bank has become Sybase Commercial Application partner.

"We decided for a co-operation with Sybase because the with Sybase because the technologies are coordinated with our demands for business, owing to the open standards and the high performance solutions which are perfectly scaleable. Sybase not only supplied better performances than the competition but the innovative beginning has in addition enabled to create an easy, elegant solution which will lead us reliably into the future" Reza Habib summarizes.

