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IN ACTION

Homegrown remedy

HABIB BANK AG ZURICH'S hPLUS BANKING APPLICATION, WHICH HAS RECENTLY EARNED KUDOS FROM NWME SISTER PUBLICATIONS COMPUTERWORLD AND BANKER MIDDLE EAST, CURED THE BANK OF LEGACY MALADY AND SPURRED OPERATIONAL EFFICIENCIES TO NEW LEVELS.



Habib Bank, in addition to becoming a Computer laureate, also received the Best Use of Technology Award from Banker Middle East for driving the use of leading technology solutions throughout the organisation and beyond, specifically in its provision of mobile solutions for its customers.

Pictured above: Amer Farid (center left), Assistant VP HBZ receiving the award in Dubai from Vinod Totawat, Regional Manager, i-flex Solutions, the banking solution specialist, which sponsored the Technology Award. Also pictured are Dr. Omer Bin Sulaiman (left) DG, DIFC and Dominic De Sousa, Publisher, CPI.

TECHNICAL INNOVATIONS, says Computerworld commenting on its Honours Programme, have become commonplace. "While we accept such advancements without hesitation, we should nonetheless take time to honour those individuals and institutions that bring them to the world."

The Computerworld Honours Programme aims to do just that. It recognises the men, women, companies and institutions that drive the IT revolution and records their positive impact on society. Habib Bank AG Zurich was one such institution. It was one of 48 global companies to receive a Computerworld laureate recently for its in-house hPLUS™ banking application.

"At the end of the day it is our customers and employees who win. The hPLUS™ technology that is recognised by this Computerworld Honours Programme enables HBZ customers to benefit from greater service with security for their personal, corporate and trade accounts

whilst empowering greater efficiencies within the banking environment," said Reza Habib, Joint President, Habib Bank AG Zurich.

"It allows over 100 user driven transactions and queries, greater control over funds and enables trading of US capital markets in real time, from the comfort of our customer's home, office or while on the go with a smart phone or PDA over GPRS and 3G."

Faced with competition, banks have embraced technology at both the front and back office, often through integration with legacy systems. This, in turn, has resulted in massively complex IT architectures and soaring costs.

Many banks are now striving to modernise their IT infrastructure to make their operations more responsive to business drivers and reduce cost. But, only a select few have turned to homegrown applications to improve

operational efficiencies. Habib Bank AG Zurich is a case in point.

In 1994 Habib Bank AG Zurich (HBZ) wrote and developed a unique language and banking application called hPLUS™. Based on a tiny virtual machine and a Sybase database, this powerful concept allowed the bank to scale its applications on thin clients. Six months after that, hPLUS™ became the world's first JAVA™ based banking system.

The hPLUS™ team believed that interoperability would become the single most important aspect of the architecture. "This bold new approach to transaction processing cured the most fundamental issues plaguing legacy systems, reducing costs and enhancing efficiency to unprecedented levels," says Reza S. Habib, Joint-President, Habib Bank AG Zurich. As a result, today hPLUS™ allows HBZ to support all areas of the modern banking enterprise including seamless deploying new technologies as they emerge.

GENESIS

HBZ incubated hPLUS™ from 1992 to 1994. The objective of the project was to replace multiple localised systems and integrate diverse retail and commercial banking operations while complying with the multi-regulatory environment the bank operates in.

The hPLUS™ team custom-built the solution believing that interoperability would become the single most important aspect of the architecture. This bold new approach to transaction-processing cured the most fundamental issues plaguing legacy systems to reduce costs, improve deployment of new solutions and improve efficiency.

The solution utilises a single secure global log-in that provides an extensive Web and mobile offering to corporations, small-medium enterprises (SMEs) and consumers. This, coupled with its event-based SMS messaging system, created a new push/pull business management methodology far ahead of the curve. The motto of 'service with security' is well demonstrated by the application's unique Web security log-in CRAM system, which was ported to run on cell phones, another first in the world.

WIRED TO THE FUTURE

With the Sybase database as the only commercially licensed component, hPLUS™ is said to be truly the most efficient enterprise solution for the banking vertical.

Most importantly, by using JAVA™ and open-source technologies, the solution has taken an institution with a 160-year banking tradition, along with its legacy systems, and catapulted the bank into the 21st century in terms of performance and the implementation of a leading technology, all in an extremely cost effective and streamlined manner.

This is a major vote of confidence for open source technology. The solution provides tremendous benefit for banks, particularly those banks whose clients demand first-class service. This not only holds true in the developing world, where resources are limited, but also in the developed world, such as the thousands



of community banks in the US that also have limited resources.

RICH DIVIDENDS

hPLUS™ is a tightly integrated system that addresses multiple needs. It has dramatically reduced the time IT and management spend on monitoring and making sure the system operates properly, which is often not the case with banks that run disparate systems. Globally, HBZ has only 12 people in IT who support 50 branches in 10 different regulatory environments. This in itself is a tremendous human resources savings. As result, the majority of IT time is spent on development rather than monitoring the existing system.

The hPLUS™ solution has also led to significant reduction in total-cost-of-ownership through lower technology and operational costs in several areas:

- Client hardware
- Server hardware
- Software maintenance
- Software implementations due to seamlessly-integrated functionality
- Reduced the need for stand-alone third party modules
- Reduced operational costs
- Lower staff costs via a highly centralised solution

Other key benefits of hPLUS™ include enhanced security, rationalised traditional channel and product restrictions, easier reconciliation, and the highest straight through processing (STP) rate possible. It has also lowered operational risk, providing higher system performance, and the seamless integration of new products.

BANG FOR THE BUCK

The efficiencies of hPLUS™ for HBZ have been phenomenal in terms of ROI. The bank's employees have been freed from many onerous and time-consuming tasks due to STP. HBZ IT now focuses on innovative and new-product development while management focuses on growth and new business development. What's more, customers also benefit from increasingly better service. Apart from increased customer service and service differentiation, the bank has also been able to expand its product portfolio, and improve its business and transaction-flow management.

For HBZ management perspective, hPLUS™ has brought in better decision-making capabilities, which reduces risk and increases margins. The IT department of the bank has also reaped rich dividends from the system, as the infrastructure, as well as the application itself, provides flexibility, greater security and scalability. Due to its flexible object-oriented architecture, developers are able to create and rapidly deploy products and functionality utilising emerging and new technologies seamlessly.

CRAMMING MORE SECURITY

The security feature is called challenge-response-authentication-mechanism (CRAM). CRAM eliminates the need for customers to carry specialised hardware encryption devices since the hPLUS™ HBZ CRAM program runs on any JAVA™-enabled mobile phone or PDA device. The basic CRAM system is an image-token presented on a screen that the user is asked to re-enter. This process is separate from the standard user-name and password and thus adds a third feature to enhance security.

The purpose of the token is to prevent computer programs from guessing passwords. HBZ CRAM takes security to a new level by accepting this token as an input and dynamically producing a new code in response. This new code is now entered on screen, and this unique combination of the code, user-name and password is then used to validate the user.

"This bold new approach to transaction processing cured the most fundamental issues plaguing legacy systems, reducing costs and enhancing efficiency to unprecedented levels."

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Computerweek award ceremony

Since HBZ CRAM runs on a device not connected to the computer, it provides an unprecedented level of security for customers. The combination of code, user name and password keeps changing with each use so the possibility of somebody stealing the security features and using it in their favour is eliminated.

TURNING THE TIDE

hPLUS™ has fundamentally changed the way the bank, its staff and its clients interact with each other. Without affecting productivity processes such as memo routing, on-line approvals, transaction authentication and risk management have been streamlined while compliance has increased. The technology has allowed the bank to essentially take the functionality available to the bank and give it to the client to use over secure Web and mobile platforms.

As a result HBZ is now in the forefront of electronic banking and has launched a security feature in order to rule out any possible security risk while logging onto the bank's electronic banking portals - HBZweb and HBZmobile.

HBZweb is the bank's highly secure, Internet-mobile banking service that allows everything from paying bills to transferring money worldwide. The launching of HBZweb made HBZ the first bank in the United Arab Emirates to offer e-letters of credit on-line. With HBZweb, the power of more than 80+ transactional and querying options are now in the hands of clients.

WINDS OF CHANGE

HBZ believes that the branch network will never disappear, however effective electronic banking solutions are. "It will rather help banks increase their radius of service. As our customers become increasingly mobile, they are demanding 24-hour management of their accounts wherever they may be worldwide. These new channels offer more than eighty user-driven options at the user's fingertips with the highest security in the region.

Additionally, if technology is used intelligently, it should decrease the overall operational costs and increase efficiencies. Banks then pass this savings on to their clients, and better service standards will develop overall," says Habib.

Given the unique, robust and cost-effective architecture of its technology platform, HBZ believes that these types of efficiencies and customer service levels can now be deployed in banks across the world, regardless of their size and budgets. "Internal requirements and customer demands are increasing in a rapidly competitive world. We therefore believe and have proven that rapid development and deployment is possible," adds Habib.

BUCKING THE TREND

There are many challenges facing banks all over the world - existence of segregated solutions, poorly built customer databases that lead to lost cross-selling opportunities, expensive decision support systems, to name a few. But, HBZ has bucked the trend and succeeded. hPLUS™ has helped HBZ to deploy one of the most efficient IT operation models in the banking sector. HBZ adopted JAVA™ at its inception and uses open-source technologies in one of the most sensitive enterprise verticals. This proves that organisations do not have to rely solely on large IT vendors and their expensive solutions.

In the process, HBZ has shown the way for others in the emerging markets to emulate.

The hPLUS™ application can be tuned so that greater efficiencies can be attained. Banks which operate in countries with poor communications infrastructure can deploy such a solution by using a combination of satellite/radio linking, PTC networks to leased lines, while

still allowing for massive amounts of straight-through-processing. This innovative and accepting architecture leads to efficiencies and customer satisfaction. HBZ points out that institutions in developing nations have the opportunity to operate robust, secure, cost-effective world class banking systems compliant with the Swiss Banking Commission, Bank Of England, OFSI, and the central banks of several countries.

CROWN JEWEL

The hPLUS™ application, in many ways, is one of its kind. It is the world's only fully-integrated JAVA™ banking system. HBZ believes this is also the world's only integrated JAVA™ based ATM switch. HBZ has also developed a MIMS (multiple inexpensive machines) approach by essentially using off-the-shelf PCs, a modified Linux Virtual Server for secure session management and the power of grid computing for internal applications. This has had a tremendous impact for small to medium banks across the globe as it is affordable and allows tremendous scalability.

hPLUS™ has been operational since 1996 with new releases and versions being continuously deployed. The bank now has a robust base transaction platform and the ability to develop changes rapidly. The bank also has an integrated functional and technical development core that reduces the layers of complexity. The thin client and integrated channels reduce the costs of multiple channels.

From the customer's viewpoint, hPLUS™ has given them an integrated account information and the convenience of being able to access and control their personal and business accounts anywhere, anytime - from mobile or at-home devices. hPLUS™ also broadcasts financial information to customers on a timely basis. Teller time for customers has reduced dramatically - HBZ's average turnaround time is 4.5 minutes versus the UAE national average of 9 minutes.

HBZ is developing a new version, which is expected to be complete this year. The bank says its flexibility, modularisation and inherently greater analytical tools will increase the benefits even further, resulting in greater cost savings and operational efficiencies.