

New Hires

To join our technical and support Teams from January to March 2004:

Adeel Tufail	<i>Customer Support Coordinator</i>
Davina John	<i>Front Desk Officer</i>
Faisal Arshad	<i>Software Engineer</i>
Mahwish Waheed	<i>Trainee Engineer</i>
Shakir Hussain	<i>Senior Accountant</i>
Zubair Ahmed Mughal	<i>Trainee Engineer</i>

New Releases

Phoenix

Inter-Switch Connectivity: Development of an interface for 1-Link and its Member Banks to interface with M-Net.

912 Support: Diebold's native application support in Phoenix for increasing functionality for Diebold ATMs.

POS Interface Modules: Connectivity interface for POS terminals directly to Phoenix in conjunction with POS hardware and software provided by Rayyanco, a TPS solution partner.

ACCeSS

Multi-Client Support: ACCeSS has now been ported to a Server-Client model which allows for the actual ACCeSS Database to reside on a Server machine and Card Production can be at any other location which has access to the ACCeSS centralized database. Allowing for card production to take place at any remote location which can access the ACCeSS server.

Further more, the distributed client/server architecture allows the banks to balance load on their current Card Production machines. With the support for Off site Card Personalization, the Bank has the added advantage of increasing the response time for issuing plastic to the customer through their respective branches rather than sending requests to a centralized location and in turn increasing its level of productivity and efficiency.

SMART Suite

SMARTdeposit

Released for APTRA XFS 2.2

SMARTdeposit on Web Kiosk: Now successfully ported on web kiosk to offer non-cash, card-based financial transactions. SMARTdeposit Web Kiosk version allows for many advanced features such as internet/intranet browsing, soft Pinpad and automated end of day operations.

Most recently, the above mentioned solution was deployed at MTC-Vodafone for Balance Inquiry, Bill Payment and Pre-paid Top Up with Debit or Credit Cards. MTC directly interfaces with the SMARTdeposit on Web Kiosk solution which further interfaces with the Bank of Bahrain & Kuwait for approval and verification of the card transactions. Upon receiving approval from the Bank at the back-end, MTC-Vodafone undertakes one of the above mentioned transactions.

SMARTexchange

Released for APTRA XFS 2.2

InSight: The Web Monitoring and Management Solution

Enhanced Management Application: InSight has now incorporated a more intuitive user interface which allows information sharing based on the level of access for the user as defined by the Administrator. This in turn ensures that a user can only access information which they require, increasing the level of security and confidentiality for a Financial Institution.

Support in InSight for SMARTexchange Application: InSight having developed an interface with the SMARTexchange application, allows for automated updating of exchange rates at the SST. Further more, InSight provides live transaction monitoring for the exchange transactions taking place at the SST, along with the required reports for the purposes of future audit or record.

TPS Participates in Sun Microsystems Seminar

On February 16, 2004, Sun Microsystems organized a Sun Partners Sales Conference which brought together Sun partners from across the region.

The purpose of the seminar was to increase the level of understanding with regards to the solutions that are being offered by different Partners of Sun so that future product synergies can be made between their different partners.

Phoenix offering its solution on the Solaris platform has now increased its robustness through utilizing the computing power of the Sun line of servers.

TPS Speaks at IoBM Seminar

Our CEO, Mr. Mohammad Sohail was recently invited to IoBM as a Guest Speaker for the Centre of Computer Science at the Institute of Business Management.

The subject that was highlighted during the session was the Evolution of e-Banking in Pakistan and its Future Trends. The presentation highlighted the growth of the Banking Sector in Pakistan over the short span of time and the enabling factors which allowed it to happen. The importance of understanding the growth of our financial sector and the knowledge that is gained from the experience highlights ways in which other sectors may also achieve growth in their levels of automation.

The roles that the different institutions, (Government, Private and Financial), played in the automation of the Banking sector in Pakistan can be treated as a role model for the growth of the entire Pakistani economy. With each level of increase in the automation of the economy, Pakistan becomes a potentially viable target of global investment.

Through understanding the factors which came into play in creating a plastic based culture in Pakistan we can see the future of Banking taking a totally new track. By understanding the future growth, we can align ourselves today to be able to provide the requisite solutions for the industry.

TPS at IBA Jumpstarting the IT Industry

The Institute of Business Administration (IBA), organized a Seminar on Jumpstarting the IT Industry. Speakers at the seminar included Dr. Aamir Matin, Managing Director, PSEB, Dr. Roshan Sheikh, CTO, Aisoft Inc., USA, Ms. Jehan Ara, Preseident of PASHA, Mr. Owais Zaidi, COO, Arwen Technologies and our Marketing Manager, Azfar Azhar.

The concept that was being highlighted in the seminar was the importance of the local industry developing itself to International standards and therefore making its solutions more competitive.

Software companies which have gained recognition in the international markets should be sought for their guidance to promote a culture of international standards and to learn the mistakes that their predecessors have faced in order to avoid them. Taking advantage from the knowledge shared is not only in the best interest of the company, but also the country. The recognition derived would benefit the entire industry rather than an individual.

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TransZine

TRANSACTION PROCESSING SYSTEMS

April 2004 Issue 4

IESCO Bill Payments Go Online In Askari Commercial Bank Limited

Askari Commercial Bank Limited, being on the frontier of establishing the Online Utility Bill Payments culture in Pakistan has now gone one step further. Previously, ACBL was only accepting PTCL bills online via their Web Site as well as ATMs. Recently, they have established online payments for another giant, Islamabad Electric Supply Corporation (IESCO). TPS has been at the forefront with ACBL since their initial steps towards the Online Utility Bill Payment motion and together with their united vision, will soon be establishing the largest Online Bill Payment network on the 1-Link platform.

TPS technology has time and time again proven its capabilities of incorporating new and diverse systems to continuously enhance the level of service offering in any of their products and this is just another example of those continuous efforts. Going forward, we can see many new avenues opening up to allow us incorporation of other subsidiaries of WAPDA and other Utility Companies who wish to join the Online Bill Payment System.



INSIDE

1-Link and M-Net Interconnectivity

TPS at AFACT Conference

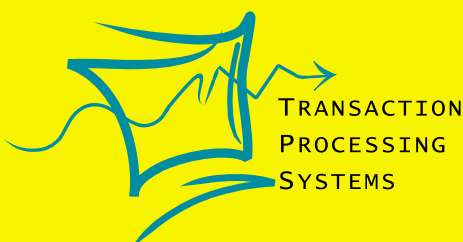
TPS in Syria

Phoenix Direct POS Release

Phoenix Supports 912

Technology *that drives*

Electronic Transaction



Where Technology Exceeds Expectations

For more information, check out our website

<http://www.tpsonline.com>

TPS Sponsors AFACT Conference

This year in January 2004, the annual AFACT Conference took place in Karachi, Pakistan. TPS in its continuous endeavor to promote the IT sector in Pakistan actively participated in this event by becoming the Platinum Sponsors.

AFACT is the Asia Pacific Council for Trade Facilitation and Electronic Business. It's a non-profit, Non-governmental organization that is open to participation from the representatives of member countries and experts from private sectors within the Asia-Pacific region.

Currently, there are 16 members from Australia, Chinese Taipei, India, Indonesia, Iran, Japan, Korea, Malaysia, Mongolia, PRC, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam. Each of which is represented by a local organization dedicated in promoting the application of standards and recommendations, e.g. UN/EDIFACT, developed by UN/CEFACT. ebXML Asia committee is an associate member of AFACT, which is to promote cooperation in implementing ebXML related standards in this region.

The AFACT Conference in Karachi was attended by representatives of all members of the IT community in Pakistan. Organizations such as the Government of Pakistan, State Bank of Pakistan and members of all Financial Institutions were all active participants of the event.

TPS Makes In-Roads into Syria

TPS Pakistan has now spread into new frontiers with their SMARTexchange solution which was just released in the last quarter as part of the SMART Suite of products. Most recently, SMARTexchange has been deployed at the Commercial Bank of Syria.

SMARTexchange is one of the latest releases in the SMART series of products, which enables banks to offer currency exchange transactions on their full function ATMs. The solution allows complete currency exchange transaction automation by accepting a bunch of currency notes from the customer and dispensing the equivalent amount in the target currency. A consumer receipt is issued at the completion of the transaction covering complete transaction details.

SMARTexchange allows banks to strengthen their service portfolio while offloading a growing number of currency exchange transactions to their self-service channel.

The SMARTexchange solution in Syria is working on an offline model except for its interface with InSight. The pre-requisite for the SMARTexchange is only that the SST must be able to interface with InSight over TCP/IP in order to retrieve the current updated exchange rates maintained by the InSight server.

This has been the first deployment for TPS in Syria and the first deployment of SMARTexchange internationally.

912 Native Support Built Into Phoenix

TPS recently launched native support for 912 protocol in their Phoenix Switching Middleware. The launch was followed by successful deployment of 912 drivers at Soneri Bank.

912 is the native ATM application protocol for Diebold ATMs. Until recently, customers desirous of connecting Diebold ATMs with Phoenix had to run their Diebold ATMs under NDC Emulation provided by Diebold. With introduction of native 912 support, the manageability and reliability of Diebold ATMs connected to Phoenix further increased. Moreover, customers can now benefit from enhanced features supported by vendors native environment.

History Made Through 1-Link & M-Net Interconnectivity Under State Bank Mandate

In a long and awaited fulfillment of the August 2002, BPD Circular No. 20, the SBP mandate, the two Switches of Pakistan, M-Net and 1-Link, have finally achieved inter-connectivity as stipulated.

This inter-connectivity has now brought together an alliance incorporating of a total 28 Banks (13 1-Link, 15 M-Net). Following the concept of a shared environment, each of these Banks will now be able to utilize the basic ATM services of ANY of these 28 Banks.

Speaking on the occasion, Dr Ishrat said that ATM/debit card holders of any bank can now access their accounts for cash and account information from the ATM of any bank in the country. He said that with the inter-connectivity of the two automated teller machines switches "the financial sector has moved closer towards achieving e-commerce framework in the country."

Muslim Commercial Bank President Aftab Manzoor and Country Representative of ABN Amro in Pakistan Naveed A. Khan also spoke on behalf of their respective networks of ATM switches - MNET and 1 Link, says a press release. "The combined strength of both switches with approximately 600 ATMs our mutual customers can now access any ATM in Pakistan," he said.

With a total transaction base of Rs. 426 Million monthly on 1-Link and Rs. 80 Million on the M-Net Switch it can safely be said that the combined figures would go a long way in promoting the plastic culture in Pakistan. Currently, 343+ ATMs are present on the 1-Link platform and 278 ATMs on M-Net, the combined strength surpasses 621 ATMs.

Support for the M-Net and 1-Link connectivity, on the 1-Link Switch, with regards to services and solution was provided by TPS. Through out this endeavor TPS has stood behind its commitment to assist this national step towards the automation of the Financial Sector by providing the enabling technologies which are at the core of the automation initiative taken by the Banks.

Phoenix harnesses the power of Oracle with new RDBMS Version : IRIS

TPS sets mid August 2004 as the release date for its next generation transaction switching middleware (code named "Iris") that will be based on the tried and tested scalable architecture of Phoenix.

"The architecture of Phoenix has withstood the test of time", said Mobushir Rahim, Chief Technology Officer of TPS. Over the last 7 years, through a process of continuous improvement, Phoenix has grown in capability and is now switching transactions to nearly a thousand branch hosts in Pakistan and managing a variety of financial touch-points. Iris will provide the enhanced security, reliability, robustness, power and flexibility demanded by financial institutions that have large and complex electronic transaction delivery and processing requirements.

Iris, which uses Oracle RDBMS, is targeted at financial institutes that have a large card base and high transaction volumes and provides highly optimized and flexible data management capabilities. Systems management capabilities have been enhanced through an integrated web-based management console that provides an intuitive environment for the administration and monitoring of the entire system. Built-in query and MIS tools are yet another feature that Iris will have available in its basic configuration.

"With Iris, banks can now also benefit from world-class performance, management, scalability and reliability provided by Oracle", said Zia Ansari, Product Manager for Iris and Phoenix. This new high-end solution backed by the experience and track record of TPS in the field of transaction processing and switching is bound to set new standards in the industry.

New Product Releases

Phoenix: Direct POS (Electronic Cash On Demand)

TPS always endeavors to stay in the forefront in developing and introducing new and cost effective services and solutions that not only help financial institutions in mobilizing their consumer banking but also contributes to growth of the financial sector automation and permeation of remote banking in Pakistan.

Now we are pleased to release yet another innovative solution allows banks to cost effectively extend the facility of cash withdrawals to its customers at any convenient branch locations close to them using their ATM/Debit card. The solution involves deploying POS terminals in branches connected to bank's Phoenix server. Any cardholder of the bank will be able to use the POS service as an ATM service. The only difference will be that instead of cash being dispensed by the machine, an authorization slip will be printed based on which the cashier will pay the requested amount to the cardholder. All transactional security as available in an ATM environment will also be present in this arrangement. **The entire offering is based on a lucrative cost model that allows banks to extend their services as well as revenues in the long term.**

In addition to requesting cash, the POS terminals can also be used for balance inquiry and PIN change, thereby increasing the convenience points for customers to perform such transactions without the necessity of an ATM. Going forward, for banks that are member of any shared switch, the facility can also be extended to customers of other banks that are member of the same shared network. Opening the POS access points to other banks increases the service revenue potential.

The "Direct POS" solution architected by TPS can provide a business edge to banks in following areas:

- Cost effective remote bank facilities to existing cardholder
- Cost effective cash access to own and other bank cardholders at strategic branch or geographic location
- Easy, secure and automated inter as well as intra branch transfer of funds between any account
- Easy, secure and automated payment from bank's premises or any other premises selected by bank.
- Separate cash request limit from ATM and Debit limits for facilitating higher value transactions.
- Inline with existing settlement, reconciliation and transaction processing environment for ease of deployment.
- Development of new and innovative Consumer Banking products revolving around transactional access to banks through cost effective touch point.

InSight Catches Heart Of Call Center Operations

TPS is proud to claim the status of a Product Based Company, initiating product innovations in each of their existing line of products that are tuned to the needs of its customers. InSight, which is the Core Remote Online Network Management Solution provided by TPS, has now incorporated a modular approach towards its feature enrichment giving more value for money to its clients. As banks venture more and more into providing various facilities for customers, we are pleased to offer yet another cost-effective solution to Financial Institutions to facilitate Banks who may or may not have an exhaustive Call Centre Solution.

With the InSight: Help Desk Agent, InSight has incorporated a secure mode of access to Phoenix which allows for up to date report on the Customer account and card status. Exhaustive information with reference to the client is gathered from the Customer database associated with ACCeSS. The ACCeSS database interfaced with InSight, allows for numerous search criteria through which customer account information can be retrieved.

InSight, which was previously offering services like Network Management, MIS Reporting, Campaign Management, Alert Notification Services now offers a solution which assists Banks in managing their Plastic population.

A list of features currently available through the InSight Help Desk Agent are:

Live Transaction Monitoring	Card Hot Marking	Card Cold Marking
Card Warm Marking	Viewing Card Status	Viewing all the Linked Accounts.
Fetching the Live account Balance		

Filter search on following Fields:

PAN	Name (First, Middle, Last)	Mobile Number
Telephone No. (Off)	Telephone No. (Res)	Tele Phone Number Home
New NIC	Old NIC	Passport Number

As always, we expect to offer an increasingly wide array of services through this interface.

InSight is now the only Management solution of its kind which is capable of offering such a wide spectrum of services. InSight aims to be able to provide for all the Business requirements of a Financial Institution for successfully utilizing their investments in promoting the online and plastic culture for their customers.

NCR Dubai Road Show

18-21st Feb 2004: TPS Pakistan (Pvt) Ltd participated in the SitExpo exhibition in Casablanca, Morocco to show case its line of products to the country's financial industry. TPS participated in the event in cooperation with NCRM; reseller of NCR Corporation in Morocco.

SitExpo is the premier quality Information and Communication Technology (ICT) exhibition in Morocco and North Africa and an authoritative showcase of digital-world business activities. Since its creation in the 80's, the "Association of IT Professionals" (Apebi), organizer of SitExpo, has been involved in the IT world in Morocco. Backed up with more than 20 year extensive experience, SitExpo 2004 in its 12th edition continued to build on past successes.

The thriving tourism industry of Morocco has presented a unique opportunity to the banks in Morocco to top up their transactions portfolio with automated currency exchange transaction on their existing ATMs. The banks realize this potential and were actively evaluating the solutions available in the event. Prime Minister of the Kingdom of Morocco Mr. Driss Jettou also visited the show and showed equally great interested in the automated currency exchange functionality of SMARTexchange.

Joining a Switch with Phoenix

Bank of Khyber	M-Net
Mashreq Bank	M-Net
Meezan Bank	1-Link

Congratulation to **Al-Baraka Bank** for coming LIVE on the 1-Link Switch.

Product Deployments

Phoenix

Additional features offered by TPS for Phoenix that have been deployed during this period:

Habib Bank Limited
- Migration to Hardware Security Module through Phoenix

Soneri Bank Limited
- Diebold 912 ATM Deployment

United Bank Limited
- Debit Card Launch - Third Party Funds Transfer
- UB Online

Union Bank
- Visa Electron - AMEX Card Acquiring

SMART

SMART deposit Deployments

- 1) Standard Chartered Bank, Bahrain
- 2) MTC-Vodafone Bahrain (first deployment on a NCR kiosk)
- 3) Qatar Islamic Bank

SMARTexchange Deployment

- 1) Commercial Bank of Syria

InSight

In the first quarter of 2004, InSight has made roads in the following Financial Institutions:

- 1) Qatar Islamic Bank
- 2) Commercial Bank of Syria

InSight, the web Monitoring and Management solution has come a long way locally and internationally. An extensive list of InSight clients globally includes the following:

ABNAMRO	Burgan Bank
Bank Al-Falah	Doha Bank
Bank Al-Habib	Dubai Islamic Bank
Citibank	Emirates Bank International
Habib Bank	Jordan Kuwait Bank
Soneri Bank	Mashreq Bank
Union Bank Limited	Mobile Telecommunications Co.
United Bank Limited	Oman Arab Bank
	Standard Chartered Bank

TPS Across the Globe

The various TPS clients across the Globe.

International

Banque du Liban
Citibank
Burgan Bank
Commercial Bank for Syria
Credit Lyonnais
Credit Libanais
Gulf Bank
Doha Bank
Dubai Bank
Dubai Islamic Bank
Fransa Bank
Emirates Bank International
Habib Bank (Global)
Jordan Kuwait Bank
Kuwait Finance House
Mashreq Bank
MTC - Vodafone, Kuwait
National Bank of Abu Dhabi
National Bank of Dubai
National Bank of Fujairah
National Bank of Oman
Oman Arab Bank
Standard Chartered Bank

Local

ABN Amro Bank
Al-Baraka Bank
Allied Bank of Pakistan
Askari Commercial Bank Limited
Bank Al Falah Limited
Bank Al Habib Limited
Bank Of Khyber
Bolan Bank
Faysal Bank Limited
Habib Bank Limited
Mashreq Bank
Meezan Bank
Pak Saudi Bank
PICIC Bank
Prime Bank
Soneri Bank Limited
Standard Chartered Bank
Union Bank Limited
United Bank Limited