Bank on them to Manage Banking Technology

September 01, 2003, was a very special day for us. On this day, we took yet another major step towards meeting the technology manpower requirements of the Banking Sector by starting the First Batch of the Post Graduate Programme in Banking Technology Management [PGPBTM].

The programme was formally launched by Dr. V.P. Gulati, Director, IDRBT. Addressing the students and their parents, he assured them that this programme is designed to be an ideal launch pad for a successful career in financial services. Pointing out that there is already a huge demand for trained manpower in the sector, he said the Institute would strive to provide the best of inputs, resources and facilities to the students.

"Since you constitute the inaugural batch, you'll have to set the standards and make this course a brand. There isn't any time to let your guard down and all of you must concentrate from day one and perform consistently to come out with flying colours," he said, encouraging the students to put in their best.

The Institute received over a thousand applications for the programme and thirty students, including two sponsored candidates, were selected. The admission process included a nationwide Entrance Test, followed by Group Discussion and Personal Interview.

This fast-track course aims at providing the students managerial mastery over the entire gamut of Banking Technology: Banking Technology Management, Financial Information Systems, Financial Networks, Information Security, Quantitative Techniques for Management, IT Infrastructure Management, Electronic Payment Systems, Affordable Technology Solutions, Business Intelligence, IT Laws and Cyber Crimes, Information System Audit, Technologies for Marketing Financial Products and Services, Networking Management etc.

Classes for the course commenced right away, after the inaugural function.

The Next Batch: The Second Batch of the PGPBTM (2004-05) commences in July 2004. The sale of prospectus and application forms for the programme is on. We invite you to visit our website at www.idrbt.ac.in for more details and downloads.

The Inaugural Batch of the Post Graduate Programme in Banking Technology Management

SPEARHEADING TECHNOLOGY ABSORPTION IN BANKING

STRATEGY SESSION

Workshop on Technology Initiatives and Challenges for Senior Officers of Reserve Bank of India

This workshop was organised on June 23-24, 2003, to update the Senior Officers of the Reserve Bank of India on developments in IT, Technology Initiatives of IDRBT / RBI and deliberate on the various issues and challenges, specifically from the point of view of the Reserve Bank of India.

Dr. V.P. Gulati in his welcome address briefly outlined the rapid strides made in technology implementation in the Banking

Shri Vepa Kamesam, Chairman, IDRBT and Deputy Governor, Reserve Bank of India, delivering the inaugural address at the workshop. Dr. S. Ramani, Smt. Usha Thorat, Dr. V.P. Gulati, Shri S. Sankara Subramanian, and Dr. A.M. Pedgaonkar (from left to right) are also seen.

Sector in India and the pivotal part played by the Institute in this regard. Pointing out that the Banking Business is undergoing a radical change, he emphasised that technology will be the key enabling factor in the changing scenario.

"All banks have to become IT-savvy and adopt the Glocal (global services in local environment) approach, which calls for new attitudes, strategic alliances and development of efficient networks. PSBs have to go in for technology not out of threat from new-age banks but out of the need to provide the customers the best," he said.

Shri Vepa Kamesam, Chairman, IDRBT and Deputy Governor, Reserve Bank of India in his inaugural address emphasized the need to be focused and action-oriented. Stressing that time is an important factor and the sector would lose heavily if various technology projects were not completed in time, he advised that

top priority be accorded to implementing various projects on time.

He advised that a detailed road map should be drawn up for each project and its progress monitored on a regular basis to ensure no slippages. Shri Kamesam also took the opportunity to review the progress of various technology projects such as RTGS, PDO-NDS, CFMS, CDBMS, SFMS, INFINET etc., and expressed his concerns on timely delivery of services, thereby setting up the tempo for further deliberations.

This was followed by a demonstration of SeeItFirst - a streaming video software. In the next session on "RBI's Technology Initiatives – Perspectives and Issues," Shri R. Gandhi, Chief General Manager-in charge, DIT, RBI, provided a broad overview of the state-of-the-art technology initiatives being implemented in the Reserve Bank of India. He explained the various policies in place and shared the roadmap for technology implementation in the Bank.

Smt Usha Thorat, Executive Director, RBI, started off the proceedings in the post-lunch session with the presentation on "RBI's Concerns – DGBA, DEBC, IDMD and ECD". Outlining the various benefits of Technology such

as prompt and efficient customer service, real-time functionality and safe and sound payment systems, she emphasised that the business strategy should drive technology. "Technology has brought in a paradigm shift in the way we conduct business and we should take full advantage of the immense range of possibilities that technology is offering," she suggested.

The proceedings of the day concluded with the talk on "Technology Management Strategy" by Dr. S. Ramani, Former Director, NITIE, Mumbai. He touched upon the various facets of Technology Management such as choosing the Technology, Technology productivity, Technology planning, evaluation and forecasting, role of training and Technology management strategies and shared his views based on his vast experience.

The second day began with the session on "Financial Network Infrastructure - Update and Issues" by Dr. V.P. Gulati, which highlighted the fact that competition among banks is bound to intensify and that banks need to be more proactive and improve infrastructure and operational efficiency to retain the competitive edge. "IT remains the key to Differentiation, Competitive Advantage and Institutional Survival and Banks must go in for Centralised Banking Solutions," he emphasised.

This was followed by the presentation on "E-Governance Initiatives of Government of Andhra Pradesh" by Dr. P.K. Mohanty, Executive Director, Centre for Good Governance, Hyderabad. Elucidating the salient features and benefits of the Online Performance Tracking System (OLPTS) being implemented in the state, he pointed out that Policy Making and Programme Implementation should go hand-in-hand with regular Assessment. "Performance Indicators have been adopted for more than 200 Departments, which are monitored monthly, quarterly and annually by the Chief Minister and at the levels of Ministers and Secretaries to the Govt. through the OLPTS. Regular monitoring and assessment is integral to the creation of a Knowledge Society," he added.

Change Management is now a critical issue with Information Technology being increasingly used in almost every sphere of activity, especially in the Indian Banking and Financial Sector. In the next session, Prof. D.B Phatak, IITB, explained how to effectively manage change in the emerging IT Scenario. Making a case for demolishing hierarchical thinking and promoting flat culture, he drove in the urgent need for knowledge sharing mechanisms and also pinning responsibility. "Our performance never exceeds our dreams. So we need to think linear, innovate and revolutionize and more importantly, we need to plan to accommodate new things," he advocated.

The workshop concluded with the valedictory address by Dr. R.B. Barman, Executive Director, RBI, who shared his views and concerns regarding IT Projects in RBI and the various issues to be addressed on a priority basis.

Shri S.Sankara Subramanian, Adviser, IDRBT, proposed the vote of thanks.

A view of the delegates during the two-day workshop

Devising HR Strategies

A workshop for Personnel and HRD Chiefs and Principals of Staff Training Colleges was organized on July 07, 2003. This workshop was of particular significance since the focus was exclusively on HR Issues in the emerging technology scenario.

Dr. V.P. Gulati started off the proceedings with his inaugural address, wherein he stressed on the need for creating a resource pool of trained manpower and striking a balance between Specialists and Generalists. Explaining the changing facets of banking business in terms of various technology alternatives and delivery channels, he emphasized on the need for HR Chiefs to address the following: -

- Expand the scope & methodology of training to upgrade the large employee base

- Campus recruitments to infuse technology-savvy talent

- Redefine & design jobs that have appropriate career paths

- Competitive incentives to reduce movement of trained employees

- Retrain the existing workforce while balancing morale concerns

Dr. Gulati also proposed a three-tier framework for technology manpower planning: Network/ Database/System Engineer/ Administrators (Bottom Layer); Application Managers (Middle Layer) and Core Technology Team of Professionals (Top Layer). Advocating the need for adopting a planned approach for creating techno-savvy manpower, he said that Banks and FIs need to provide:

- Technology training in phases

- IT exposure to all employees through local IT Institutions

- Intensive training for a select few, who could be deployed at all levels

In the next session, the participants were briefed about the various initiatives of IDRBT such as CA Services, SFMS, INFINET, Networking, Intranet and Internal Workflow, with a special focus on the need for recruitment and deployment of trained manpower and succession planning in these mission critical areas.

The post lunch session included a Panel Discussion on Technology Upgradation and Need for Change Management, which deliberated on issues like Balancing between Specialists and Generalists, Performance and Learning Management, Redefining the Training System, Need for Networking and E-learning Initiatives.

Shri D. P. Singh, Punjab National Bank; Shri A. S. Raman, Bank of India; Shri S. M. Pattnaik, State Bank Staff College; Shri S. Rajamani, Union Bank of India Staff College; Shri A. K. Dhar, Indian Bank; and Shri V. Venkatesh, IDRBT; were on the panel chaired by Prof. C. Balaji, Satyam Limited. The lively presentations and highly interactive discussions brought the following factors into limelight:

- Need for training and competence building of employees for multi-tasking

- Using technology tools such as e-learning and broadband-based education to meet the frequent training requirements.

- Create awareness on Information Security/Systems Security through sensitization and specialized programmes.

- Outsourcing of routine HR matters such as leave, salary etc. to enable the HR Dept. to focus on core HR issues.

- Create groups of Specialists and Generalists to ensure continuity of domain knowledge and expertise.

- Need for career planning for specialists and their integration with the mainstream based on organizational needs.

- A competency based promotion policy may be considered

- Cross-synergisation and collaboration among training colleges to leverage mutual strengths

Shri V. Visweswar, Coordinator of the workshop, proposed the vote of thanks.

Security Solution Implementation for Reserve Bank of India

The Institute conducted two six-day programmes on Security Solution Implementation, exclusively for the Reserve Bank of India. While the first programme was held from June 16-21, 2003, the second was held from July 07-12, 2003.

Networking Concepts, Accessing and Configuring Routers, Security Overview, Basic Attacks, Security Tools, Sniffer Policy, Firewall Concepts, VPN Technologies, Intrusion Detection Systems and Load Balancer were some of the issues and tools discussed. The programmes also included extensive hands-on and demonstration sessions.

Shri N. Rajendran, Faculty, IDRBT, co-ordinated both these programmes.

Business Continuity and Disaster Recovery Plans

This two-day programme suggested ways and means for effective implementation of Business Continuity and Disaster Recovery Plans from a bank specific point of view. It also deliberated on the best practices adopted by various organizations for similar implementations.

Executives from the Information Technology Division of Public and Private Sector Banks including Bank of Baroda, Punjab National Bank, Canara Bank, State Bank of Bikaner and Jaipur, United Bank of India, Karur Vysya Bank and Karnataka Bank Ltd etc., participated in this programme held on June 25-26, 2003.

This programme was co-ordinated by Shri A. R. Dani, Faculty, IDRBT.

Encryption and Certifying Authorities

This workshop, conducted on July 02-03, 2003, attempted at making the participants understand in practical terms what Encryption and Decryption is, what it can and cannot do, how it helps secure the vital information assets, the areas that it can be applied to in the future and the role of Certifying Authorities. It scanned the entire domain of Public Key Infrastructure and helped the participants zero in on what needs to be done to make PKI implementation successful.

Cryptography, Smart Cards, Encryption Policy Design, Security Set-up for CA, Steganography and IDRBT CA Services were some of the issues discussed. EnDeSign – the Encryption, Decryption, Signature Software developed by IDRBT was also demonstrated. Dr. Ashutosh Saxena, Faculty, IDRBT, co-ordinated this workshop.

Volume 6   Number 3

EXECUTIVE DEVELOPMENT

SFMS Installation for Reserve Bank of India

Three customized programmes on Structured Financial Messaging System (SFMS) Installation were organized for the officers of Reserve Bank of India. The first programme was conducted from July 28-August 02, 2003, the second from August 18-23, 2003 and the third from September 01-06, 2003.

Apart from providing extensive hands-on experience, these programmes discussed every aspect of SFMS including Message Formats, Security, PKI, CA, INFINET, Network Issues, SFMS & RBI Applications, Implementation Strategy, Installation and Troubleshooting.

All these three programmes were co-ordinated by Shri R.Mani, Faculty, IDRBT.

Software Engineering for Banks

A three-day programme on Software Engineering for Banks was conducted at the Institute from August 25-27, 2003. Focusing on Banking Software, Risk in IT Projects, Application Integration, Management Issues in Centralised Data Centre, Implementation Issues in Core Banking Software, OOAD & UML, Software Engineering, Outsourcing of IT Products and Services, and Software Standards etc., this programme attempted to familiarize the participants with the current developments of Software Development Life Cycle from a bank specific point of view. Shri A. R. Dani, Faculty, IDRBT, co-ordinated the programme

Initial IT System Training for Reserve Bank of India

The Institute conducted a two-week programme on Initial IT System, exclusively for the newly recruited officers of the Reserve Bank of India. It introduced various conceptual and functional aspects of Information Technology to the participants.

IT Policy, IT Architecture, Procurement Policy and Procedures, Trends in Banking Technology, Local and Wide Area Networks, Networking Protocols, Routing, Network Management, Voice over IP, Mail Messaging, Strategic Management, and Electronic Payment Systems were some of the concepts deliberated upon.

Eighteen participants attended this programme conducted from Aug 25 – Sep 06, 2003, and co-ordinated by Shri A. R. Dani, Faculty, IDRBT.

Digital Certificates and SFMS for Vijaya Bank

This workshop on Digital Certificates and SFMS was conducted exclusively for the Vijaya Bank from August 26-29, 2003.

IDRBT CA Services, Functions of RA, PKI-enabled e-mail, Subscriber Functions, Smart Cards, EnDeSign, Network Issues, and SFMS Installation and Implementation were some of the topics discussed. The participants were also provided extensive hands-on experience during the workshop.

Dr. N.P. Dhavale, Faculty, IDRBT, co-ordinated this workshop, which had twenty-nine participants.

Digital Certificates for Reserve Bank of India

Three customized workshops on Digital Certificates were conducted for the Reserve Bank of India from September 09-11, 16-18 and 23-25, 2003.

Focusing on providing extensive hands-on experience, just about every aspect of Digital Certificates was discussed threadbare during these three-day workshops. Issues such as Public Key Infrastructure, IDRBT Certifying Authority Services, Registration Authority, PKI-enabled e-mail, Smart Cards, SFMS, Message Formats and RTGS were dwelt upon in detail.

These workshops were co-ordinated by Dr. N.P. Dhavale, Faculty, IDRBT.

SFMS & Digital Certificates for Bank of Baroda

A customized workshop on Structured Financial Messaging System and Digital Certificates was conducted for the executives of the Bank of Baroda from September 29 - October 01, 2003.

The participants were trained on Public Key Infrastructure, Certifying Authority, Certificate Lifecycle, Registration Authority, SFMS Message Formats and RTGS Messages on SFMS etc. Functioning of Registration Authority, SFMS Offline Branch Server, and Troubleshooting in SFMS were demonstrated to the participants and they were provided extensive hands-on experience during the workshop.

Twenty-two Executives participated in this customized workshop, co-ordinated by Shri R.Mani, Faculty, IDRBT.

M.Tech. IT – Banking Technology and Information Security

The M.Tech. Programme in Information Technology (with specialization in Banking Technology and Information Security), offered by the Institute in collaboration with the University of Hyderabad, is becoming increasingly popular among the students and the academia. Classes have already commenced for the third batch, which consists of 21 students including two sponsored candidates from the Banking and Financial Sector.

The admission process for the programme has been modified from this year onwards with qualification in the Graduate Aptitude Test in Engineering (GATE) becoming a compulsory criterion for the Direct Candidates.

Meanwhile, the students of the second batch are pursuing their projects [the second year of the programme constitutes a year-long project] in various areas of urgent relevance to the Banking and Financial Sector such as Security, Networking, SFMS, Data Warehousing, Asset Liability Management and Risk Management etc.

The Institute accords special emphasis to interaction with reputed academic Institutes/Universities and the Industry. Renowned academicians and Practitioners from the Industry are invited twice a week to deliver lectures on areas that have a direct bearing on Banking Technology to the students. A range of industry-oriented electives are also offered and in fact, quite a few students pursuing other courses at the University of Hyderabad have opted for these electives.

A course in Business Communication has been introduced from the current academic year to enable the students to put forth their viewpoints effectively. They are also being provided with the best facilities including Wireless Laptops to ensure a modern learning experience.

Banks/FIs/IT Companies/and other Institutions may contact the M.Tech. Coordinator, Dr. P. Radha Krishna, at prkrishna@idrbt.ac.in for conducting Campus Placements.

The M.Tech. Class of 2003

Ph.D (Research Fellow) Programme

The Institute, in association with reputed Universities/Institutes, offers a Research Fellow Programme leading to a Ph.D in the areas of Computer Science, Information Technology and Management Studies. IDRBT is recognised by the Central University of Hyderabad (UoH) and Indian Institute of Technology, Bombay (IITB); as a centre for pursuing Research leading to a Ph.D.

IDRBT started this Research Fellow Programme from the academic year 1999-2000 and offers Research Fellowship to the candidates joining under this Programme. The Institute selects Research Fellows every year and awards them a fellowship of Rs.11,000, 12,000 and 13,000 per month in the first/second/third year, respectively.

The Research Fellows work at IDRBT on research projects related to Banking Technology, specifically in the focal areas of Security Technologies for the Financial Sector; Electronic Payments and Settlement Systems;

INdian FInancial NETwork

The Institute has initiated the task of commissioning redundant 2 Mbps links as per the new network design of the INFINET Leased Line Network. In the first phase of implementation, 20 Nos. of 64 Kbps links are being upgraded to 2 Mbps capacity and in the next phase, commissioning of 32 Nos. of 2 Mbps links will be taken up. The first phase is expected to be completed by October 15, 2003.

We are also in the process of implementing redundancy at the router level along with Multi-protocol Label Switching (MPLS) on the INFINET Leased Line Network. ISDN/PRI links are being commissioned at all RBI locations so as to provide back up to the Leased Lines already existing at these locations for all CUG members. Further, INFINET support facilities at Hyderabad and Mumbai will now be available round-the-clock.

In order to facilitate smooth implementation of Security Solution (Firewalls, IDS and VPN Concentrators) at all the INFINET nodes across the country, RBI officials were imparted training and provided the necessary inputs.

Commissioning of Broadband
The IDRBT VSAT network is now in the process of migrating its operations to INSAT 3A, Transponder No.14. With operations commencing on the new transponder, higher bandwidth would be available to the remote VSATs.

The Institute is putting in place 1.2-meter antennas for the remote VSAT units. This would help reduce the cost of the VSAT equipment resulting in huge savings for the financial sector.

We also propose to have video broadcasting enabled on the network and with collocated web/application hosting at IDRBT already functional, VSATs can receive information at higher speeds.

IDRBT Certifying Authority

The IDRBT Certifying Authority has issued 3750 Digital Certificates (Class 1 - 1149, Class 2 - 2161 and Class 3 - 440) as on September 30, 2003. Banks and Financial Institutions are using these certificates for Corporate E-mail, SFMS and Settlement Applications of Clearing Corporation of India Ltd.

Further, we have created 90 Registration Authority Offices, which include 26 Public Sector Banks, 14 Private Sector Banks and One Financial Institution. We are also in the process of creating RA Offices for all Regional Offices of RBI. During the visit of these banks' RAs to IDRBT, extensive hands-on training was imparted to them. The Institute also organised three-day customised programmes on Digital Certificates focusing on providing extensive hand-on experience for the Executives of Reserve Bank of India, Vijaya Bank, and Bank of Baroda.

Annual Audit: M/s CyberQ Consulting Pvt Ltd, New Delhi, conducted the annual audit of IDRBT CA during the month of July. As part of the audit procedures stipulated by CCA, IDRBT conducted the audit of RBI and SBI RA Offices located at Mumbai and the audit-cum-observation reports have been submitted. A CCA empanelled auditor also audits these RA Offices.

Preliminary work on network connectivity and system requirements for setting up the proposed Disaster Recovery Site (DRS) at National Informatics Centre Certifying Authority (NIC-CA) site in New Delhi has been completed.

The SCPC PAMA VSAT equipments that would meet the connectivity requirements between NIC, Delhi and the Institute have already been received and would be installed shortly. The leased line link between New Delhi and Hyderabad will also be upgraded appropriately.

Volume 6   Number 3

Banking Technology Digest

Mobile banks look to Java

Mobey Forum, the industry body set up to promote and develop mobile financial services, has put its weight behind a new mobile banking solution developed by Meridea, the Finnish IT company specialising in multiple channel management.

The solution takes advantage of the growing proliferation of Java capable phones, utilising secure mobile PKI login and Java technology to offer functionality which includes share dealing, account balance, transaction information and funds transfer facility. The application is downloaded onto the phone and offers a much improved user experience over the WAP based solutions that have so far proved to be unpopular amongst both banks and their customers.

The solution, which uses onboard PKI identification as well as PIN based log on and transaction confirmation security, is easy to implement and, according to Meridea CEO Essa Tihila, can be up and running at a bank within 2 months.

(Source: Banking Technology; July-August 2003)

The Show Continues

September 11 made Banks and Financial Institutions around the world take their Business Continuity and Disaster Recovery Plans, seriously. So, when there was a severe power failure across the United States and Canada recently, commerce didn't stop. Business Continuity Plans, designed to last through Y2K and battle-tested on

September 11th, came to the rescue, resulting in a smooth transition to backup systems throughout the financial system.

"Every bank in the country has, and is required to have, a disaster recovery plan and multiple back-up systems," says Charlotte Birch, American Bankers Association, Washington D.C. "Banks really didn't miss a beat in terms of transitioning over to back-up systems. The way the banks have responded and continued operations during the blackout has shown the resiliency and the preparedness of the banking system."

(Source: www.banktech.com; August 18, 2003)

Consumers are ready for Voice Authentication

A recent study examining consumers' attitudes on Voice Authentication Technology (VAT) conducted by TouchPoint Consulting and FSTC discovered that if the technology is properly presented, consumers would react positively to it. The study is the industry's first in-depth and independent study of consumer views on voice authentication, the technology that utilizes unique characteristics of a caller's voice to verify his/her identity.

"The study has provided the much needed objective information for financial service companies that are leading the adoption of voice authentication," says Paul Heirendt, CEO of TradeHarbor. "Several institutions that were waiting for

confirmation of consumer acceptance are now moving forward with pilots and projected rollouts based on the positive consumer response in the study." The study found that convenience is the most important element for consumer acceptance and that security concerns must be addressed at the earliest.

Jack Carroll, TouchPoint partner and director of the project, compares Voice Authentication Technology now to that of ATM Technology in the early stages of its development. "While some of the benefits are apparent, successful solutions are yet to be developed. Consumers intuitively recognize the convenience, but are concerned because they don't understand the technology or how it may affect their security. Therefore, the path to successful implementation will require design, communication and tuning efforts that are responsive to the changing nature of user knowledge and concerns."

(Source:www.collectionsworld.com; August 27, 2003)

Banking Online is Cool

Consumer attitudes towards the safety and security of Internet Banking have improved dramatically since 2001, according to a recent survey conducted by New York-based Barry Leeds and Associates.

The survey reports that attitudes toward Internet Banking have improved in 2003, compared to attitudes revealed in previous studies. Seven in 10 consumers completely or strongly agreed with

the statement, "Internet-based transactions handled by financial institutions are safe and secure."

Consumers are also starting to view Internet-based transactions handled by financial institutions as equally safe as those that take place over the phone, according to the survey. Only 32 percent of respondents agreed that Internet-based transactions were more secure than telephone-based banking transactions in 2000; this percentage rose to 41 percent in 2001 and continued to rise to 47 percent in 2003, this year's study revealed.

(Source: www.banktech.com; September 01, 2003)

Technology of Touch

Researchers at SUNY Buffalo have completed experiments in which they were able to transmit, from one person to another over the Internet, the sensation of touching a hard or soft object. "As far as we know, our technology is the only way a person can communicate with another person the sense of touch he feels when he does something," said Thenkurussi Kesavadas, director of the Virtual Reality Lab at SUNY Buffalo.

The scientists have called their technology "sympathetic haptics" because it enables one to "feel what another person feels." The technology works by using a virtual reality data glove to capture the softness or hardness of a particular object and then communicate that information to another person, instantly. Transmitted data can also be captured and replayed later.

Haptics technology could be a boon particularly for assisting the blind when using computers and in learning certain skills, such as sculpture or surgery, remotely.

(Source: www.technewsworld.com; September 10, 2003)

Check Truncation Act

The Check Truncation Act is now a reality in the United States. This Act, also known as Check Clearing for the 21st Century Act, or Check 21 Act, allows banks and other financial institutions to process consumer checks electronically eliminating the need to physically send paper checks from bank to bank, transmitting the image instead.

In cases where a hard copy of a check is needed, a "substitute check" could be downloaded from the electronic image and delivered to the bank.

(Source: www.theorator.com; September 25,2003)

Security-Consciousness Gap

A recent Ernst & Young survey of 56 financial institutions reveals that there's room for improvement in companies' information security practices, particularly in the frequency and quality of communications about incidents, security policies and business unit requirements. The survey included 22 insurance companies, 17 commercial or consumer banks, 13 investment banks, and four other financial firms.

The top five reported problems are: viruses/worms, employee

misconduct, denial-of-service attacks, loss of customer data, and amateur hackers. From these threats, security has attained a higher profile within the industry. "There has clearly been an elevation of information security to a senior leadership position within the organization, as well as to the board level," says William Barrett, partner at Ernst & Young.

But the topic may not make the agenda often enough. "It's still a little surprising that 43 percent do [board-level security reports] annually or longer," says Barrett. "Where you have identified gaps in information security or vulnerabilities...you would want to have a quarterly update to the board of directors around how you're closing those gaps."

(Source: www.banktech.com; September 30, 2003)

Ph.D Programme

Financial Networks and Applications; Technology Based Education, Training and Development; and Financial Information Systems and Business Intelligence. The Research Fellows also need to fulfill the respective University's/Institute's admission criteria and register with them.

Applicants should possess *First Class M.Tech. (IT/CS/Related Area) or MBA (Systems or related area)* with Graduation in Engineering. Interested candidates may look out for the advertisement from the Institute in leading newspapers or apply online at our website www.idrbt.ac.in.

IDRBT welcomes
Dr Y. V. Reddy

Dr Y. V. Reddy assumed charge as Governor, Reserve Bank of India, on September 06, 2003. IDRBT welcomes him and expects to benefit greatly from his leadership and administrative acumen.

IDRBT thanks
Dr. Bimal Jalan

Dr. Bimal Jalan, Governor, Reserve Bank of India, relinquished office on September 06, 2003. Dr. Jalan was associated with IDRBT as Chairman of the Governing Council and later became the Visitor to the Institute.

IDRBT places on record its sincere gratitude for his valuable contribution to the development of Banking Technology in general and the growth of IDRBT in particular. IDRBT wishes him success in all his endeavours.

National Conference on Hardware and Software Solutions for Secure Networks

CALL FOR PAPERS

The Conference Committee of HsecNet 2004, the National Conference on Hardware and Software Solutions for Secure Networks, being organized by the Computer Society of India (CSI) in association with the Institute for Development and Research in Banking Technology (IDRBT), at Hyderabad, India, invites original papers on all aspects of Hardware and Software Solutions for Secure Networks.

Submissions may broadly confirm to one of the following subject areas but are not limited to:

- Wireless Networks
- Firewall Technologies
- M-Commerce
- Smart Cards
- Public Key Infrastructure
- High Speed Networks

- Virtual Enterprise Networks
- Back Office Security
- DRP/BCP
- IDS/Routers
- Security Standards
- IS Security

This two-day conference, being held on January 23-24, 2004, will be preceded by a one-day tutorial on January 22.

The conference will bring together eminent and experienced Speakers from the Academia and Industry.

Authors are requested to submit the extended abstract, not exceeding two pages, of their paper on or before November 10, 2003. Authors of accepted papers will be intimated by December 05, 2003 and Papers not exceeding eight pages must be received latest by December 10, 2003, through e-mail in MSWord/PDF format at publisher@idrbt.ac.in.

It is a condition of acceptance that one of the authors must attend and present the paper at the conference. The proceedings of the conference will be published by the Computer Society of India.

Parallel Tutorials

◆ **Protecting Networks in Hackers' Paradise:** G. Sandeep, Area Manager, CMS Computers Ltd.

◆ **Digital Security for Banks:** Dr. Ashutosh Saxena and Dr. N. P. Dhavale, Faculty, IDRBT.

IMPORTANT DATES	
Tutorials	January 22, 2004
Conference	January 23 – 24, 2004
Deadline for Submission of Abstract	November 10, 2003
Author Notification	December 05, 2003
Deadline for Paper Submission	December 10, 2003

INSTITUTE FOR DEVELOPMENT AND RESEARCH IN BANKING TECHNOLOGY

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SPEARHEADING TECHNOLOGY ABSORPTION IN BANKING