

EMERGING TECHNOLOGIES AND THE COMMUNITY BANKER

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INTRODUCTION AND OVERVIEW



PRESENTATION AGENDA

- Introduction & Overview
- Selected Significant Emerging Technologies
 - XBRL
 - Data Aggregation
 - M-Commerce
 - Security
- 501(b)
- Summary and Conclusion
- Questions and Answers

JOEL'S PARADIGM

- Practicing CPA with prior experience as a Big 5 Partner leading the Metro NY Bank Technology Risk Consulting Practice and Internal Audit Vice President at a major Bank
- Graduate adjunct faculty member at the School of Computer Science and Information Systems at Pace University.
- MBA, CISA, CISSP, CFE, CITP
- Publications (e.g., CPA Journal, RMA Journal)
- NYSSCPA Emerging Technologies Committee



TODAY'S OBJECTIVE



XBRL



WHAT IS XBRL?

(Extensible Business Reporting Language)

- Under development by the AICPA with support from Microsoft, SAP, PeopleSoft, Dow Jones and Reuters
- Enables users to automatically access very specific bits of information from a company's web site reports and format to fit needs
- By making credit data “easier to digest” banks can more effectively focus their resources into credit analysis

WHY IT'S HOT?

- Customer credit-related financial reports can now be sent electronically and ready in analysis form within minutes
- Credit analysis will handle more analysis in less time
- Help banks deal with new internal credit risk methodologies being promulgated by BASEL
- Some regulators (e.g., Australia) have already instituted an XBRL program to gather regulatory data from smaller deposit-taking organizations and credit unions

CHALLENGES FACED

- Customer acceptance and use of XBRL report capability (only 15 business applications currently support XBRL)
- “Ying and Yang” (Build and buy)
- Banks convert their customer data to XBRL
- Implementation controls and change management

DATA AGGREGATION



WHAT IS IT?

- Provides a full “snap-shot” picture (financial or not) from one web site using a single PIN and password
- 24 million customers projected by 2003 (bill payment 5 million after 10 years)
- Focus of benefits tends to be toward the wealth segment of the market – yet tools are most efficient with the mass market
- A way for bank’s to manage more of their customer’s money??????

WHY IT'S HOT?

- Banks can protect their most tech-savvy customers
- Open a dialogue with new customers
- Generate customized advice and special offers
- A way for bank's to manage more of their customer's money??????

CHALLENGES FACED

- Consumer awareness and understanding
- Privacy and identity theft
- To scrape or not to scrape?
- Keeping up with the “Joneses”
- What’s the ROI?
- A solution in search of a problem????

M-COMMERCE



WHAT IS IT?

- The ability to purchase goods, anywhere through a wireless internet-enabled device using digital money
- Popular mostly in Europe, consumers use cell phones or other devices (e.g., PDA) to perform a variety of transactions (check account balances, view account history, transfer funds, pay bills, order statements)
- Approximately 8% of midsize and large banks offer this service

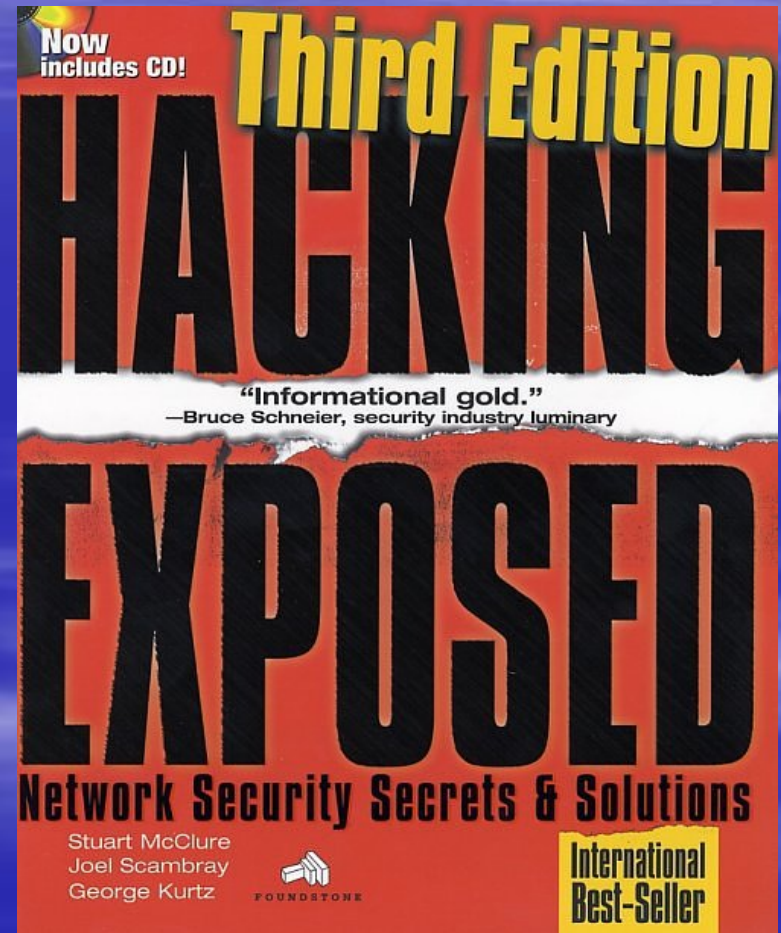
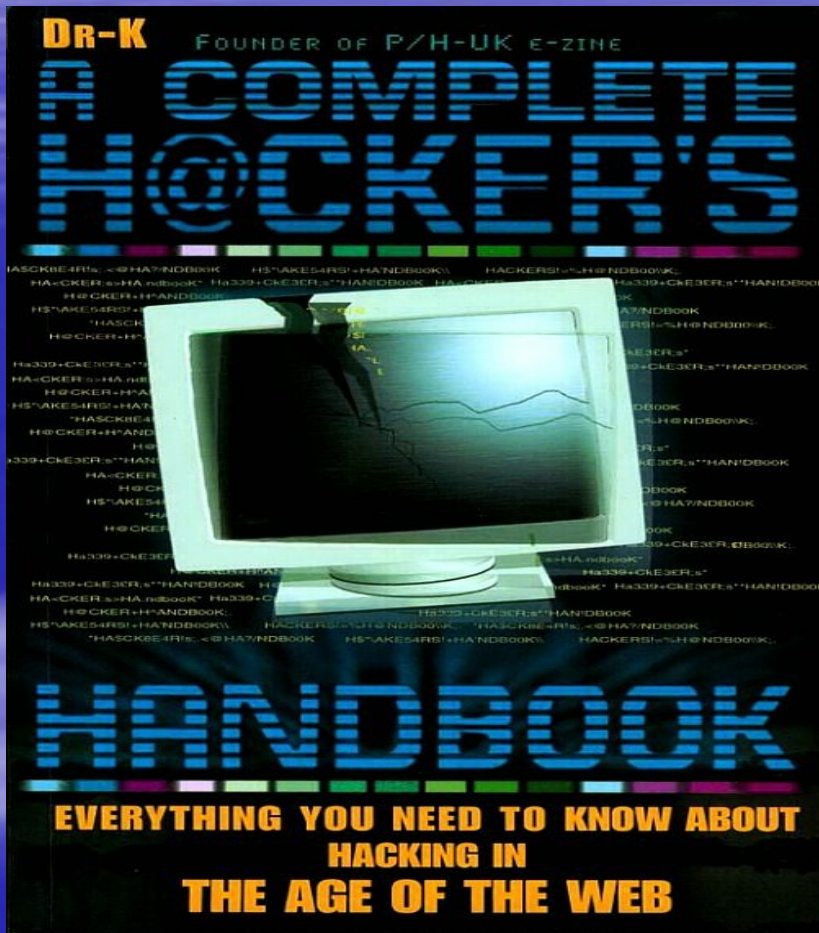
WHY IT'S HOT?

- Ongoing evolution of increasing use of web services
- 7 million projected users by 2005
- Rapidly increasing and lower cost technology
- Endless new ideas for wireless activities

CHALLENGES FACED

- Competing technology standards
- Effectiveness of handheld devices to perform transactions
- Security Issues
 - Authentication
 - encryption

SECURITY



“THE FUNDAMENTAL RULES APPLY AS TIME GOES BY”

- “it won’t happen here”
- “the security group (if you have one) doesn’t have the time or resources to implement patches”
- “we need the flexibility for cross-training or backup”
- “Mary’s been with us for over 30 years so she deserves to be a security administrator”
- “we bought the software from the vendor so we don’t need to worry about product defects or security holes”
- “we fixed most of the findings from last year’s penetration test”



POPULAR NETWORK SECURITY TESTING TOOLS

- Password Crackers
 - John the Ripper, L0pht(\$), IMP (Novell)
- Enumeration
 - Nmap (available hosts, ports, OS, firewalls, etc)
- Vulnerability Scanning
 - ISS(\$), Cybercop(\$), SAINT(\$), Nessus
- Web Pages
 - Whisker (CGI Vulnerability Scanner)

TYPICAL “FINDINGS”

- Inappropriate policies at the macro and micro levels
- Vendor provided patches not applied
- Exploitable files and services not removed or disabled
- Ineffective security configuration strategy
- Outdated vulnerability scanning and intrusion detection tools used
- Unclear understanding of responsibilities with service providers and vendors
- Ineffective monitoring of activity and new vulnerabilities
- False comfort relating to level of security and understanding of risks to the business

501(b)



WHAT'S 501(b)?

- FDIC/OCC Examination for Safeguarding Customer Information
- Key Questions or Considerations
 - Determine the involvement of the Board
 - Evaluate the risk assessment process
 - Evaluate the adequacy of the program to manage and control risk
 - Assess measures taken to oversee service providers
 - Determine if an effective process exists to adjust the program
- Ultimate Challenge
 - Not just a question of how you use customer information
 - Focuses on what processes banks take to ensure that customer data will not be misused (e.g., identity theft)

501(b) CHALLENGES

- Perform an information technology risk assessment
- Develop policies for:
 - Information technology risk assessment
 - Information and data classification
- Develop board reporting package
- Enhance policies to indicate accountabilities
- Develop incident response plan (including proper configuration to gather data)
- Implement vendor oversight and compliance
- Think “impact on customer information”
- Changed role of security and BCP
- Change management (including patches)

IN CASE YOU'RE IN A RUSH TO LEAVE AND HAVE A QUESTION

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