

Beyond Compliance: Managing Technology and Cybersecurity Risks

**Rural Bankers Association of the Philippines
60th Charter Anniversary Symposium
23 – 24 October 2017**



BANGKO SENTRAL NG PILIPINAS



VIDEO PRESENTATION



Cyber Threats on the U.S. Banking Industry



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Source: https://www.youtube.com/watch?v=YQTzh9VR_xU



WHAT STRIKES A CHORD?

“The sophistication and seriousness of the attacks on the financial system and elsewhere are ever increasing.”

“We could be heading towards a massive cyber-attack on our banks and insurers.”

“Armageddon”

“Those hacks cost a fortune and they run the risk of losing customers.”

“Within the next decade, we could very likely see a Wall Street hack that is big and bad enough to cause our next financial crisis.”

“A lot companies just focus on firewalls and keeping hackers out but not what to do if and when a hack breaks through”

“Two changes on Wall Street could make a big difference: 1) making sure that third-party vendors that banks do business with are up-to-snuff; 2) outdated password systems need an upgrade.”



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“It is no longer an IT problem, it’s a top issue.”



SMALL BANKS, VULNERABLE TO CYBER ATTACKS?

timeinc.net



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TECH

Hackers Prey on Smaller Firms as Big Banks Harden Security




JEFF JOHN ROBERTS
JUN 23, 2016 7:30 AM EDT

BANKVAULT
Cyber Security

How Small Banks Are at Risk from Cyber Criminals

Posted 31 MAR, 2016 by Graeme Speak



Every other few weeks, we hear of an online attack targeting the big banks. It is easy to be mistaken to conclude that the criminals solely attack the big international banks. The truth of the matter is that the smaller banks are more at risk at being



DIGITAL TRANSFORMATION & CYBERSECURITY LANDSCAPE



**Malware
Ransomware**



**Advanced
Persistent Threats
DDoS Attacks**



**ATM
Malware/ATM
Host Spoofing
CNP Fraud**



**Phishing
Spearphishing**

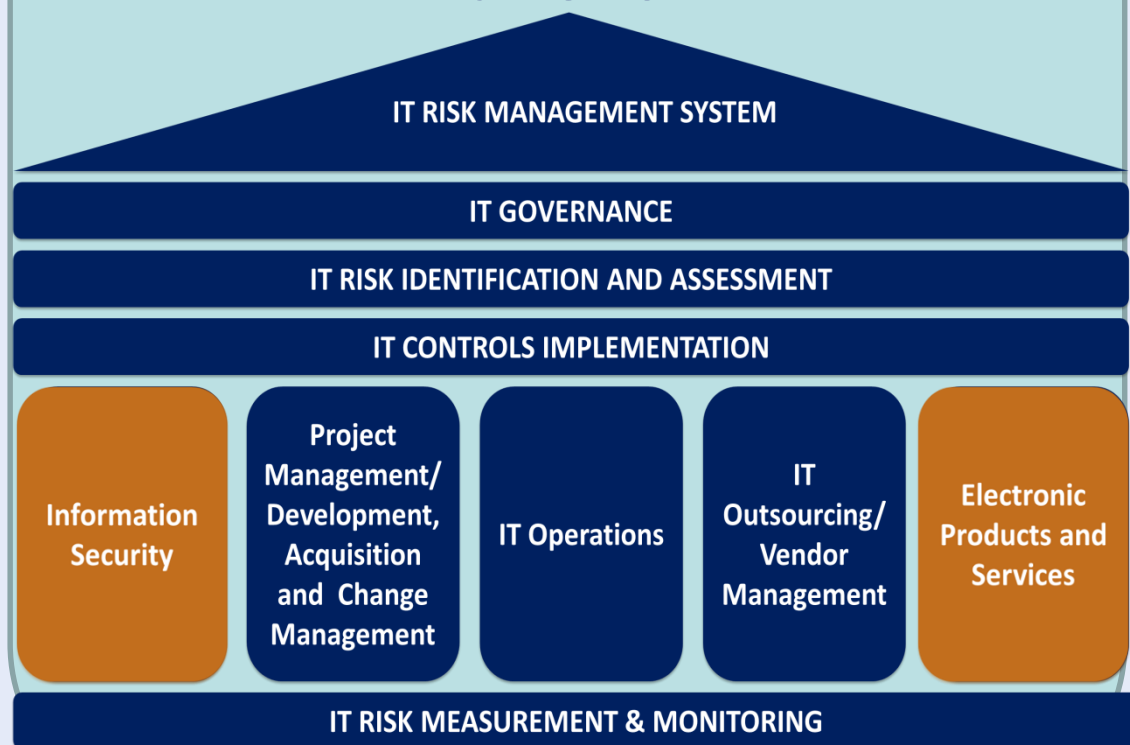


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BSP REGULATORY FRAMEWORK

Circular No. 808 s. 2013 ITRM Framework



Subsection X701.1 –
Prescribes minimum pre-conditions before banks can engage in e-banking services

Public Advisories and Memoranda–
To increase awareness on emerging threats

IT Examination

Licensing

IT Policy Development



BSP REGULATORY FRAMEWORK

Recent Policy Issuances

BSP Cir. 958 dtd. 25 April 2017 – Multi-Factor Authentication Techniques

BSP Cir. 951 dtd. 20 Mar 2017 – Business Continuity Mgt. Guidelines

BSP Cir. 949 dtd. 15 Mar 2017 – Social Media Risk Mgt. Guidelines

Various MAAB - covering EMV Migration, Phishing and Fraudulent Websites and Ransomware and other malware attacks, among others



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BSP REGULATORY FRAMEWORK

Enhanced Information Security Guidelines

Information Security Governance



Cyber Threat Intelligence and Collaboration

Key improvements:

- Alignment with NIST, FFIEC and CPMI standards/frameworks
- Definition of cybersecurity risk management controls and supervisory expectations
- Requirement for behavior-based threat detection, threat intelligence and collaboration



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IT PROFILE

C O M P L E X

- Uses technology extensively in supporting mission-critical business processes and delivering financial products and services
- Has ubiquitous branch network and offers a wide array of digital/electronic financial products and services
- Highly interconnected with external third party stakeholders and actively participates in e-payment systems and networks
- Business strategies are largely anchored on IT platforms and digital innovation
- Aggressively utilizing/exploring emerging technologies



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IT PROFILE

M O D E R A T E

- Uses technology to some extent, but not as aggressively as complex institutions
- Branch network, IT organization and structure, and extent of IT projects are relatively less significant than complex institutions
- IT applications and systems are integrated but primarily support traditional banking products and services
- Offers basic digital/electronic products and services, such as ATM terminals/card-based products, to a limited number of clients



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IT PROFILE

S I M P L E

- Has very limited use of technology with minimal interconnectivity to its clients and other institutions
- Branch network or geographic presence is confined to a specific locality
- IT applications and systems are stand-alone or are not fully integrated and e-banking products and services are rarely offered
- Has few IT personnel and customer base



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CS Risk MANAGEMENT PROCESS – CYBER GOVERNANCE

Strong Leadership



Tone at the Top

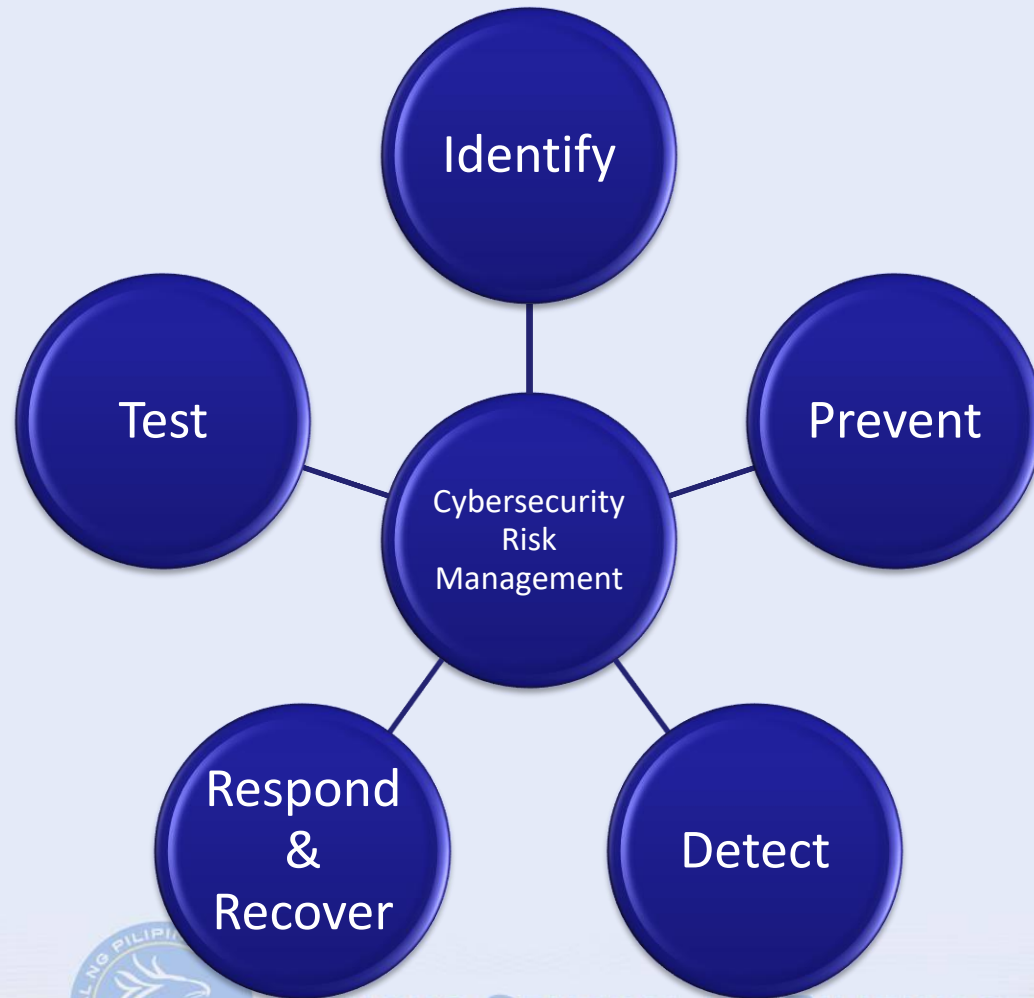


Cybersecurity Culture





CS Risk MANAGEMENT PROCESS



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CS Risk Management Process – **THREAT INTELLIGENCE & COLLABORATION**

- Situational awareness and threat monitoring
- Security Operations Center (SOC)
- Emerging technologies and innovations
- Information sharing and collaboration



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BASELINE REQUIREMENTS FOR SIMPLE BSFIs

- IS governance process
- Inventory of information assets
- Information security program (physical, administrative and technical controls)
- Perimeter security and end-point security
- User access rights management
- Understanding of baseline performance/behaviour
- Business continuity plan
- Security audits and compliance checks





BSP's CYBERSECURITY ROADMAP



**Continuously enhance
BSP regulatory
framework vis-à-vis
emerging cyberthreats**

**Undertake industry-
wide initiatives to
promote financial
system resilience**

**Adopt proactive
supervisory monitoring
and oversight**

#secure

#vigilant

#resilient

SALAMAT PO!



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