

# How do we prevent, detect, respond and recover from CRM breaches?

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# Q: What is a CRM breach?

A: Any event which results in the loss of availability or integrity of the RELATIONSHIP between you and your customers or clients

Good example of CRM breach -

<http://www.youtube.com/watch?v=IYDup1bguC4>

# Compare CRM Breach to Security Breach Impacts

## CRM Breach

### Results In:

- Loss of public image
- Loss of consumer confidence
- Direct loss of customer base
- Indirect loss of revenue

## Security Breach

### May Result In:

- Loss of Public Image
- Loss of consumer confidence
- Direct Loss of Assets or Revenue
- Indirect Loss of Customer Base

Q: So who or what causes CRM breaches?

# Human Threat Agents (HTAs)

## CRM Breaches

- HTAs
  - Usually not motivated
  - Almost always an internal resource
  - Few consequences if caught.
  - Most severe punishment loss of employment

## Security Breaches

- HTAs
  - Normally motivated (profit, power, political/religious views, revenge, etc)
  - Can be either “insider” or external agents
  - Often severe legal consequences including imprisonment

# Non-Human Threat Agents

## CRM Breaches

- Failure of communication channel
  - Phone, Email, Fax
- Failure of service or product delivery channel
  - Shipping/Logistics
- Failure of product quality
  - Product breaks or fails before expected

## Security Breaches

- Natural disasters
  - including fire
  - Flood
  - pandemic
- Environmental Failures
  - Power loss
  - Failed AC/Cooling
  - Broken water main
- Malfunctions of systems

Q: So how do we protect ourselves  
from CRM Breaches?

- A: The same way we protect ourselves from Security Breaches.



# Risk Management

- ISO/IEC 27001:2005 Information Security Management System (ISMS) & ISO/IEC 27005:2008 Information Security Risk Management
  - Define risk assessment approach
  - Identify the risks
  - Analyze & evaluate the risks
  - Identify & evaluate options to manage the risk
  - Select control objectives & controls to manage risk

# Introducing New Terms

- Customer Lifetime Value (CLV)
  - An estimated value (usually represented in \$\$\$) calculated as the sum of a customer's past & current consumption of products and services, with their estimated lifetime future consumption
- Customer Relationship Risk (CRR)
  - The risk that a Customer's Lifetime Value will be negatively impacted by an event
- Customer Relationship Risk Management (CRRM)
  - The processes used to identify, assess, prioritize, and remediate CRR.

# Define Risk Approach

- Identify a Risk Management Methodology
  - CSEC/RCMP HTRA (Canada)
  - NIST 800-30 Risk Management Guide for Information Technology (USA)
  - CRAMM (UK)
  - OCTAVE (cert.org)
- Identify the acceptable level of Risk tolerance
  - “Our organization will remediate all identified risks with a risk score of xyz or higher using the abc risk management methodology” signed CEO

# Identify the Risks

- Identify the Assets
  - Relationship between your organization and your customers
- Identify the threats
  - Client facing staff antagonize the client
  - Client is unable to reach a contact point at the organization
  - Service delivered to client does not meet the client's expectations

# Identify the Risks con't

- Identify the vulnerabilities to those threats
  - Client facing staff lack the required people skills
  - Client facing staff do not have access to information required to satisfy client demands
  - Client facing staff have a language & cultural barrier to overcome
  - Inbound calls frequently exceed call capacity
  - The SPAM filter habitually eats important emails
  - Service sold to the client was not defined well enough

# Analyze & Evaluate the Risk

- Identify the business impacts to the organization
  - Impact on payment for current goods & services
  - Impact on future or repeat business with same client
  - Impact on new business if client publicizes their dissatisfaction
  - Impact on public and corporate image as negative press circulates

# Analyze & Evaluate the Risk

- Assess the likelihood of a CRM breach taking into account the threat, the vulnerabilities, and the currently deployed safeguards and controls
  - Something that happens every day or will likely happen once a week/month/year?
  - Try to use historical data from same organization
  - If available compare with information from comparable organizations in similar industries or markets
- Estimate the level of Risk and assign it a score

# Risk Management Options

- Accept
  - If the assigned risk level is below the previously identified level of acceptable risk, no action is required. Accept the risk
- Mitigate
  - If the assigned risk level is above the acceptable risk threshold, then additional controls or safeguards should be deployed to reduce the risk to an acceptable level. Mitigate the risk.



# Risk Management Options

- Avoid
  - If no additional safeguards or controls can be deployed, and the business process can be re-architected to remove the component generating the risk, then the component generating risk should be removed, and the risk should be avoided.
- Transfer
  - Customer Relationship Risk cannot be transferred to a third party or hedged with the purchase of insurance or other contracts

# Safeguards & Controls

- Security Controls & Safeguards are divided into four categories
- Prevention/Reduction – Deployed pre-breach. Prevents or reduces the likelihood of a threat agent effecting a security breach
  - Example: A lock on a door
- Detection – Detects that a threat agent is committing a security breach
  - Example: A motion detector positioned behind the locked door, and a security camera outside focused on the doorway

# Safeguards & Controls con't

- Response – A safeguard usually triggered by a detection-class safeguard. Results in actions taken to minimize or reduce the severity of the security breach
  - Example: An alarm monitoring company dispatching a police officer to the scene after the motion sensor is triggered
- Recovery – A safeguard activated after the security breach. Reduces or mitigates the loss suffered from the security breach
  - Example: Police recover a stolen laptop outfitted with an assisted GPS/phone home safeguard

# Recommending Controls

- It is important to have safeguards or controls from each group represented. This supports the “Defence in Depth” or layered concept.
- Examples of controls to mitigate CRR:
  - Prevention/Reduction
    - All potential hires for client facing roles must be interviewed in person, and must complete an aptitude test
    - All new client facing hires must receive orientation training which includes conflict resolution, and how to effectively deal with clients

# Recommending Controls

## – Detection

- Communication channels to allow client feedback are present at every stage of the business process
- Customer satisfaction feedback is proactively sought from the customer after every significant transaction
- Independent customer satisfaction audits are conducted at regular intervals

## – Response

- Formal response procedures exist, and are documented
- Metrics are defined, including minimum acceptable response times to resolve CR issues
- Staff assigned responsibility to resolve customer relations issues are empowered with the authority to resolve those issues with a minimum amount of bureaucracy

# Recommending Controls

## – Recovery

- A root cause analysis is performed after each CRM breach, and additional controls, or modifications to the business process are made to prevent a repeat occurrence
- Feedback is solicited directly from the customer with questions like “What could we have done differently to improve your experience with us?”
- In cases where CLV is particularly high, a retention program should be developed. The program may have a negative ROI impact in the short term, but provide substantially greater long term ROI

# The CRRM Plan

- Cost out all the recommendations from your risk assessment
- If required, do a business case, and financial projections to justify the expenditure on the CRRM Plan to your senior stakeholders.
- Allocate existing budget or acquire approvals for costs
- Take the findings and recommendations from your Risk Assessment and create a plan to implement them
- Get the plan approved and signed off

# Executing the Plan & Monitor the CRRM program

- Deploy the controls identified in your CRRM plan
- Assess the effectiveness of the controls through regular audits
- Update and modify the processes to continuously improve them.



# Take Away's

- Your relationship with your customers/clients is an asset
- That relationship must be protected
- Security Risk Management processes can be applied to CRM to provide Customer Relations Risk Management (CRRM)

# Questions?

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