



Court Ventures Data Breach: Lessons Learned

Learn from Court Ventures' 2012 breach. Explore the 5 pillars of strong cybersecurity and tools to prevent attacks.

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Team Members:

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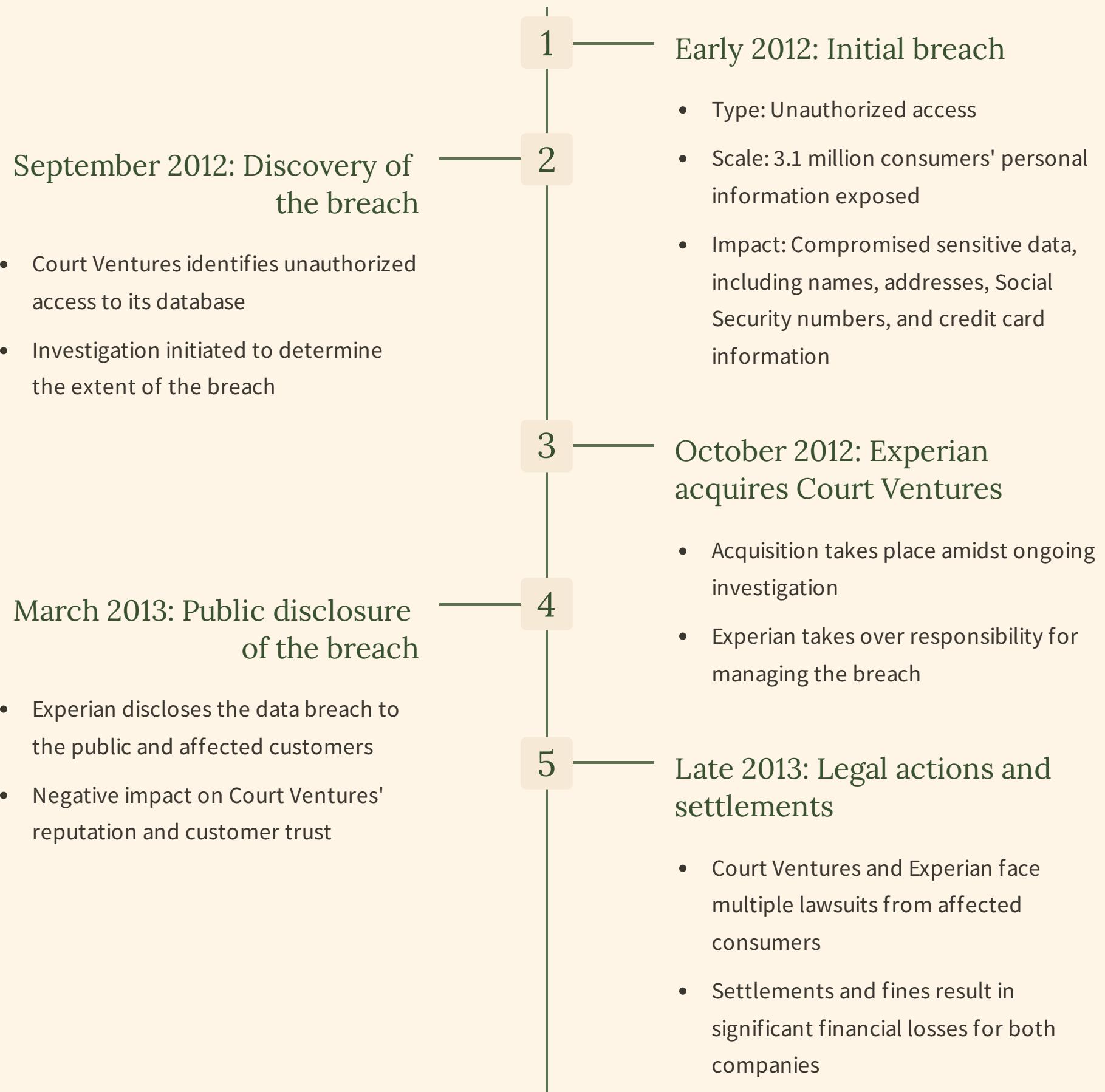
Abdu Kiyaga: Threat Analyst

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Brooke Symone: Information Security Officer

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Background



Identify



Asset Management

- Identify and manage physical and digital assets.
- Maintain accurate inventory and data assets.
- Use asset discovery tools to find vulnerabilities.

Are the Risk Categories		Risk	Risk	Risk	Risk
Frequency of Occurrence		Severity of Consequences			
Very Low Frequency	Low Frequency	Medium Frequency	High Frequency	Very High Frequency	
Very High Frequency	IT issue Very High Risk	Challenging Very High Risk	High Risk	Very High Risk	
High Frequency	IT issue High Risk	Challenging High Risk	High Risk	Very High Risk	
Medium Frequency		Challenging Medium Risk	Medium Risk	Medium Risk	
Low Frequency	IT issue Low Risk	Challenging Low Risk	Low Risk	Low Risk	
Very Low Frequency	IT issue Very Low Risk	Challenging Very Low Risk	Very Low Risk	Very Low Risk	
Extremely Low Frequency	IT issue Extremely Low Risk	Challenging Extremely Low Risk	Extremely Low Risk	Extremely Low Risk	

Risk Assessment

- Identify and prioritize potential threats and vulnerabilities.
- Conduct a risk assessment using FAIR or NIST SP 800-30.
- Scan for vulnerabilities using Nmap and OpenVAS.



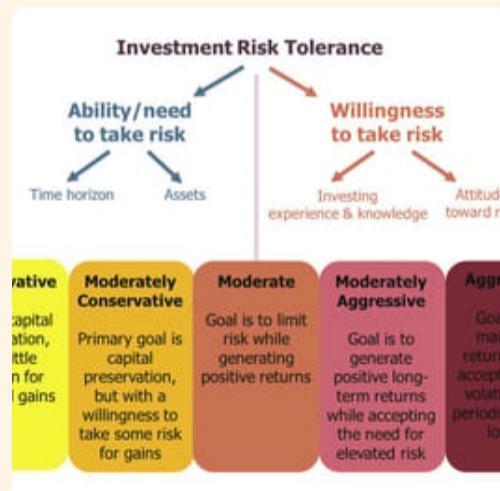
Governance

- Align cybersecurity policies with risk management strategy
- Enhance security initiative prioritization through clear governance
- Use NIST RMF and ISO 27001 to establish strong governance



Risk Management Strategy

- Develop a risk management strategy.
- Improve breach prevention and detection.
- Use risk management software and frameworks like FAIR.



Business Environment

- Understand business goals and risk tolerance.
- Increase sensitivity to potential risks.
- Encourage teamwork and conduct regular risk assessments.

Protect

Access Control



Multi-factor authentication and Role-Based Access Control ensure that only authorized individuals can access core systems and data. Implement MFA, strict access reviews.

Data Security



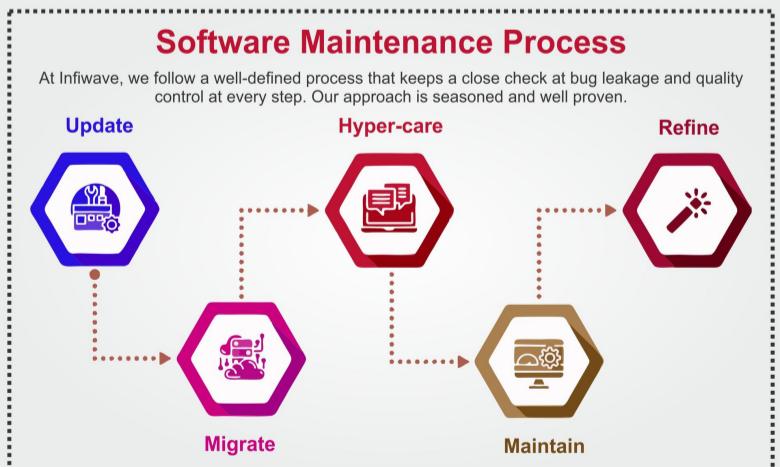
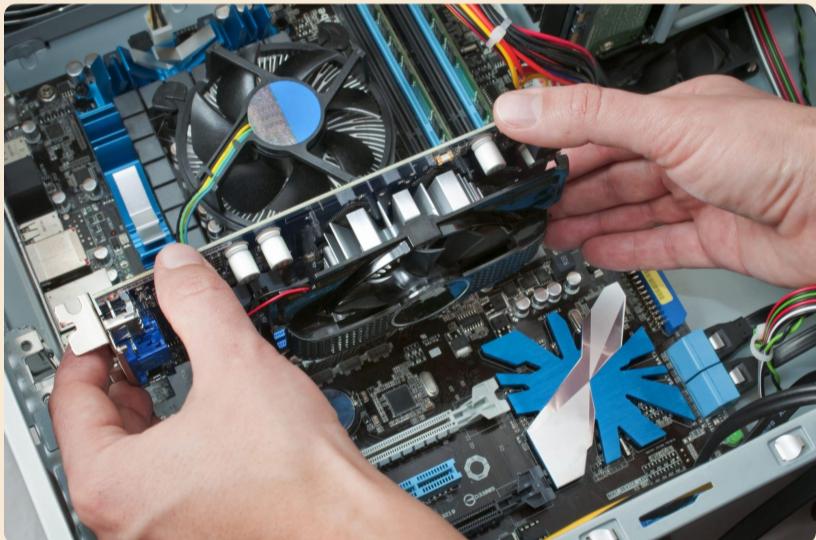
Implementing data encryption tools like AES or RSA for data at rest, and Transport Layer Security (TLS) for data in transit, ensures data is secure against unauthorized access or interception.

Security Awareness Training



Regular training sessions for staff using platforms like KnowBe4 or Proofpoint will help keep them informed about new and emerging threats.

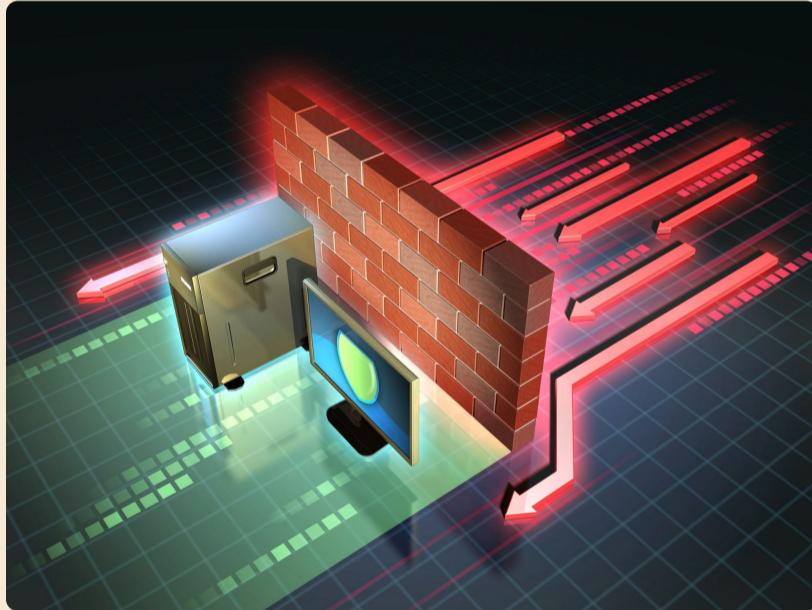
Maintenance



Maintain systems, hardware, software to ensure their security

Apply security patches and minimize vulnerabilities

Protective Technology

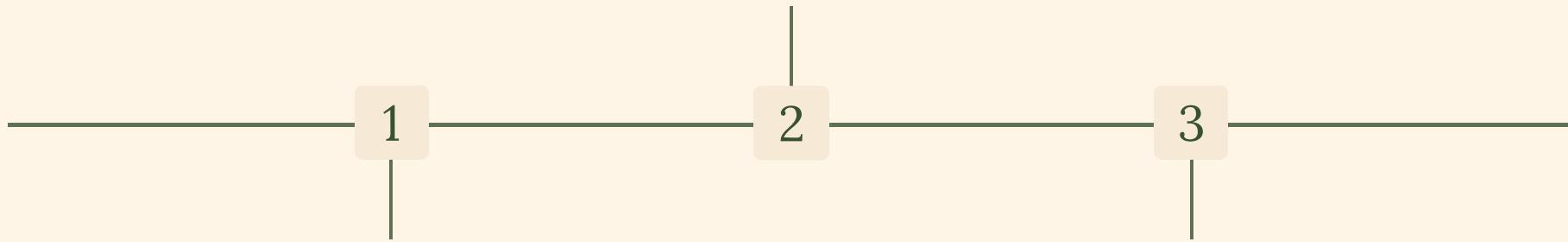


Firewall, IDS and IPS, and using SIEM to prevent and provide alerts in case of unauthorized access.

Detect

SIEM

Intrusion Detection Systems (IDS) like Snort or Suricata monitors network traffic and flag suspicious data, looking for signs of attack.



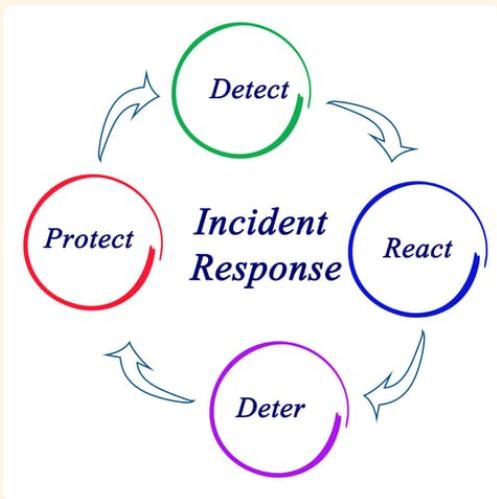
Continuous Monitoring

Security Information and Event Management (SIEM) tools like Splunk or LogRhythm provide insights into network traffic and system logs, finding suspicious activity or vulnerabilities.

Vulnerability Management

Perform regular vulnerability scans using tools like Nessus or Qualys to detect any security holes so they can be remediated quickly.

Respond



Incident Response Plan

Having an Incident Response plan in place that details the steps to take after a breach has occurred can help minimize the impact of an attack and stop the spread of malware.



Secure Data Backup and Recovery

A comprehensive and regularly updated backup and recovery plan is critical to mitigate the effects of a data loss event.



Disaster Recovery Plan

In case of emergencies, having a plan in place will help you continue business operations in the event of an unforeseen event.

Recovery

1 Communications



Establish clear and effective communication channels.

Present facts and offer fact-checking services to stakeholders.

Establish procedures for information sharing with internal and external stakeholders, including employees, customers, law enforcement agencies, industry peers, and partners.

2 Improvements



Assess the recovery process and identify areas for improvement.

Conduct After-Action Reviews (AAR) to identify what worked, what didn't, and what needs to be improved.

3 Recovery Planning



Outline the data recovery process and procedures.

Identify critical assets and the relevant tools needed.

Use recommended tools such as Veeam or Acronis.

Start with a fresh copy of the system after a data breach.

4 Integrity Checking

Run data integrity checks after data is restored to ensure it hasn't been tampered with or corrupted during transfer.

5 Testing the Recovery Plan

Run end-to-end tests to ensure the recovery process will be effective in case of disaster.

Conclusion

- Robust Cybersecurity
- Access Controls and Monitoring
- Security Awareness Culture