

Preparing and Responding to a cyber incident

Tips for keeping your company's operations coordinated before and after a disruption.



Cyber crime is a reality for businesses of every size and in every industry. As work processes evolve and become increasingly digitized, criminals are leveraging a variety of methods to target weaknesses in companies and their partner organizations. An effective response to a cyber breach may be the difference between an incident that creates a minor disruption and one that cripples a business.

While each cyber event creates unique challenges, businesses can institute processes around response, communication and recovery that can help contain the extent of data loss and system infection while helping protect the organization from follow-up incidents. Here are key elements that can be adapted to your company's distinctive response plan:

1 Preparation

Consider what types of cyber incidents are most likely to impact your business, and tailor response plans to address them.

Identify and prioritize your most valuable company data and create protocols for protecting or recovering it following a cyber event.

Gain buy-in from key decision-makers, especially those whose response during an event will be critical to recovery.

Create effective chains of command protocols and have decision-makers regularly review recovery scenarios.

Secure the services of preferred legal and recovery experts prior to any event and establish how you'll contact them if normal communications are interrupted.

Establish strong communication protocols outside of normal channels. Make sure that all decision-makers have provided multiple ways to contact them, including personal phone numbers and email accounts.

Make sure the cyber response plan is available to all decision-makers in formats that can be accessed even when primary company networks are compromised.

Cyber
Security
by the
Numbers

44%

Percentage of businesses with established plans for preventing and responding to cyber security incidents.¹

¹ McAfee, "The Hidden Costs of Cyber Crime," December 2020.

\$1 trillion

Global financial losses related to cyber events in 2020.²

² Ibid.

1st

Rank of phishing among actions that lead to cyber breaches in 2020.³

³ Verizon, "Data Breach Investigations Report," 2020.

2 Detection and assessment

Gather all information about when and where the incident was first reported.

Determine the type of incident: e.g. ransomware encryption, data exfiltration, malware infection or release of proprietary information.

Scan all company networks to determine the extent of the intrusion or compromise.

Notify all decision-makers on the incident response team, even if the nature of the incident has yet to be determined.

Begin a log of the response effort and record any information about the nature of the incident to facilitate forensics and recovery.

3 Response and threat eradication

Disconnect all affected devices and network segments from company systems and the internet.

Determine if any business-critical data has been compromised, stolen or released.

Eradicate any files that are not mission-critical or can be restored through backups.

Perform updates or patches to company software and network security components to collect more information about the incident and prevent criminals from exploiting vulnerabilities a second time.

Coordinate the response team around internal and external communications.

Consult with legal experts concerning possible compliance implications, engagement with law enforcement and public accountability.

Notify relevant partner organizations or customers with factual statements that provide only details available at that moment, with assurance that more information is forthcoming.

Prepare questions for your IT security team, and be prepared to resolve issues that are not covered in the existing cyber response plan.

\$3.86 million

Global average cost of a data breach in 2020.⁴

⁴IBM Security, "Cost of a Data Breach Report," 2020.

\$3.58 million

Average cost savings of fully deployed security automation vs. no security automation.⁵

⁵Ibid.

81%

Percentage of organizations that rated cyber incident response as "very important" in 2020.⁶

⁶Ponemon Institute, "Second Annual Study on the Economics of Security Operations Centers: What is the True Cost for Effective Results?" January 2021.

4 Recovery

Instruct all affected personnel to reset passwords and system access controls, preferably while utilizing multi-factor authentication or other similar authentication methods.

Conduct a system-wide scan of the company, led by either a designated recovery team or outside experts.

Restore all systems to their pre-incident status via backups once all evidence of the intrusion has been eradicated.

Continue to collect any forensic evidence of the incident that can inform a follow-up report and contribute to remediation.

Update all affected personnel when a report on the event is complete and incorporate relevant findings from it into the existing response plan and training procedures.

Maintain communication with partner organizations, customers or the public and inform them of remedial steps the company has taken to defend against future incidents.

Incorporate revised best practices around security, network access and cyber awareness into company culture and encourage all employees to remain alert to potential threats.

Global Information Security at Bank of America

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