Data leak worksheet (My responses)

Incident summary: A sales manager shared access to a folder of internal-only documents with their team during a meeting. The folder contained files associated with a new product that has not been publicly announced. It also included customer analytics and promotional materials. After the meeting, the manager did not revoke access to the internal folder, but warned the team to wait for approval before sharing the promotional materials with others.

During a video call with a business partner, a member of the sales team forgot the warning from their manager. The sales representative intended to share a link to the promotional materials so that the business partner could circulate the materials to their customers. However, the sales representative accidentally shared a link to the internal folder instead. Later, the business partner posted the link on their company's social media page assuming that it was the promotional materials.

Control	Least privilege		
Issue(s)	What factors contributed to the information leak?		
	Some of the factors that contributed to the information leaks was that t		
	access to the internal folder was not limited to the sales team and the		
	manager. Additionally, the business partner should not have been given		
	permission to share the promotional information to social media.		
Review	What does NIST SP 800-53: AC-6 address?		
	Based on the notes and the videos, NIST SP 800-53: AC-6 addresses how an		
	organization can protect their data privacy by implementing least privilege		
	and it control enhancements to improve the effectiveness of least privilege.		
Recommendation(s)	How might the principle of least privilege be improved at the company?		
	The principle of least privilege can be improved at the company by restricting access to sensitive resources based on user role and regularly		

	auditing user privileges. These are based on the observations from the notes and the requirements.	
Justification	How might these improvements address the issues?	
	These improvements address the issues to prevent data leaks if the shared	
	links to internal files are restricted to employees only giving only authorized	
	access to some, while others cannot. Secondly, it can also be improved by	
	requiring managers and security teams to regularly audit access to team	
	files would help limit the exposure of sensitive information. These changes	
	can help overall the security on the systems and justifications of the	
	recommendations based on the notes and scenarios given.	

Security plan snapshot

The NIST Cybersecurity Framework (CSF) uses a hierarchical, tree-like structure to organize information. From left to right, it describes a broad security function, then becomes more specific as it branches out to a category, subcategory, and individual security controls.

Function	Category	Subcategory	Reference(s)
Protect	PR.DS: Data security	PR.DS-5: Protections against data leaks.	NIST SP 800-53: AC-6

In this example, the implemented controls that are used by the manufacturer to protect against data leaks are defined in NIST SP 800-53—a set of guidelines for securing the privacy of information systems.

Note: References are commonly hyperlinked to the guidelines or regulations they relate to. This makes it easy to learn more about how a particular control should be implemented. It's common to find multiple links to different sources in the references columns.

NIST SP 800-53: AC-6

NIST developed SP 800-53 to provide businesses with a customizable information privacy plan. It's a comprehensive resource that describes a wide range of control categories. Each control provides a few key pieces of information:

- Control: A definition of the security control.
- Discussion: A description of how the control should be implemented.
- Control enhancements: A list of suggestions to improve the effectiveness of the control.

AC-6 Least Privilege

Control:

Only the minimal access and authorization required to complete a task or function should be provided to users.

Discussion:

Processes, user accounts, and roles should be enforced as necessary to achieve least privilege. The intention is to prevent a user from operating at privilege levels higher than what is necessary to accomplish business objectives.

Control enhancements:

- Restrict access to sensitive resources based on user role.
- Automatically revoke access to information after a period of time.
- Keep activity logs of provisioned user accounts.
- Regularly audit user privileges.

Note: In the category of access controls, SP 800-53 lists least privilege sixth, i.e. AC-6.