

Navigating the IT Audit Landscape: A Comprehensive Overview

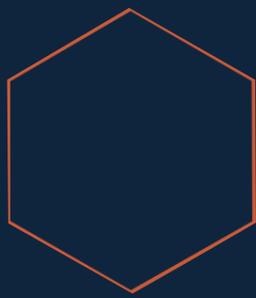
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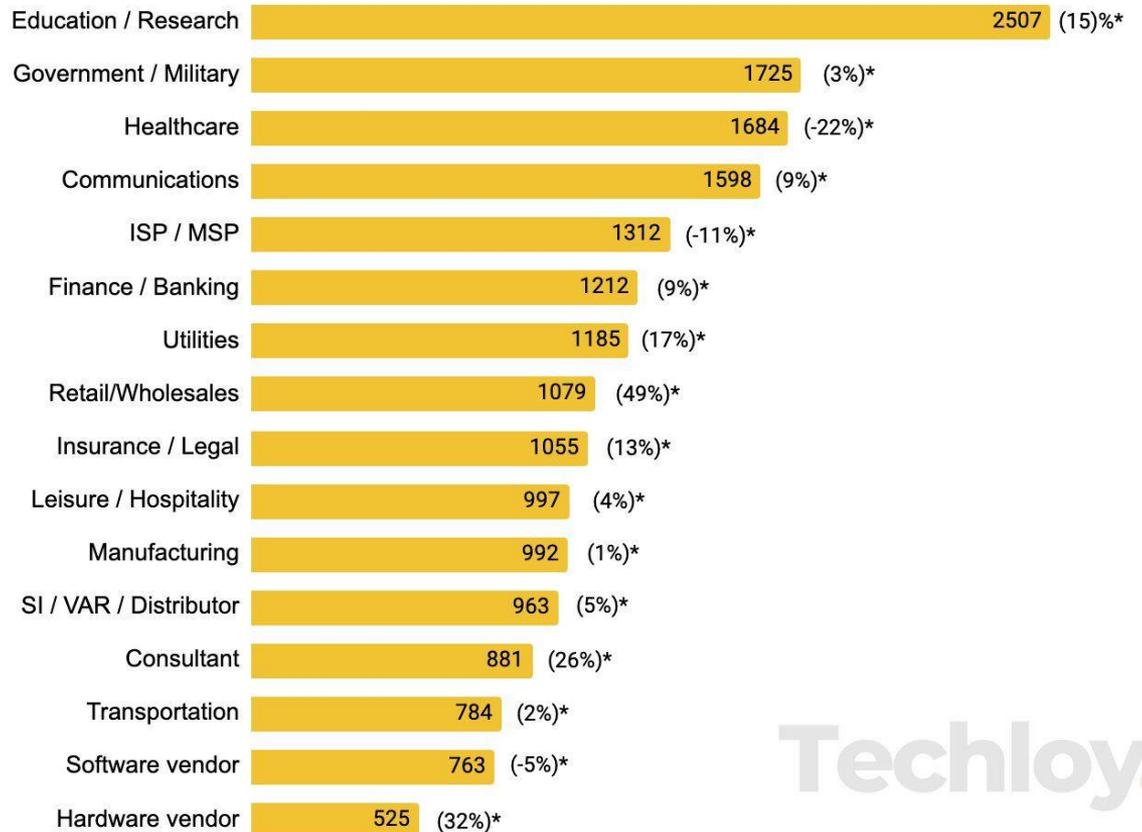
- * IT risk management
- * Importance of IT audit
- * The IT audit

No one is spared

Global Average Weekly Cyber Attacks Per Industry

during the Q1 2023 period

* YoY growth from Q1 2022



Techloy.

Technological risk

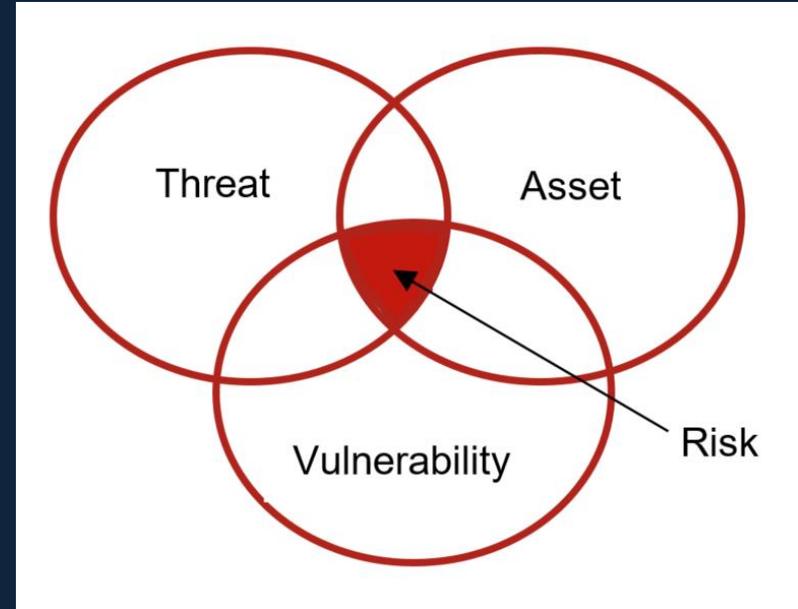
- hardware and software failure
- human error
- spam, viruses and malicious attacks,
- natural disasters such as fires,

Understand and identify the types of IT risks that may disrupt your business.



Risk Assessment

- Identify and assess IT-related risks.
- Prioritize risks based on impact and likelihood.

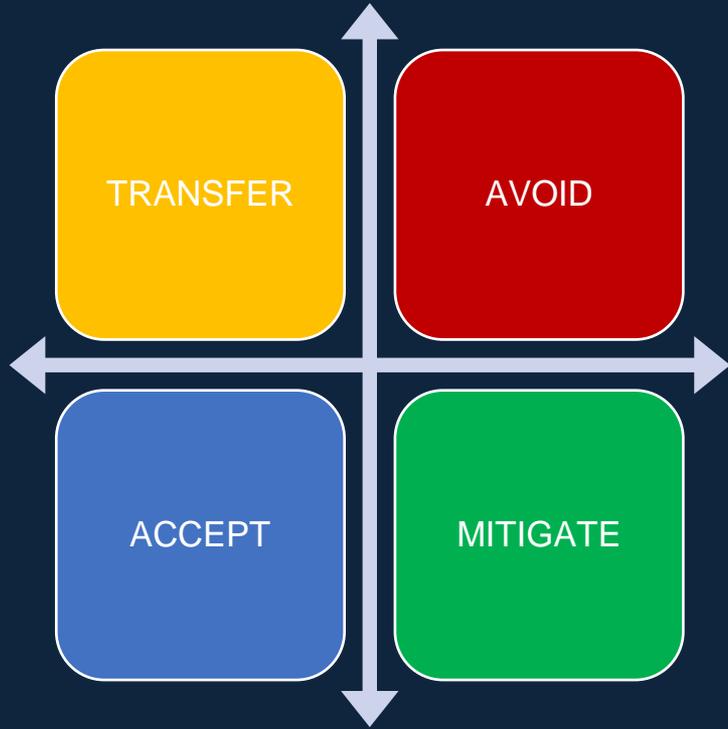


Risk = Likelihood × Impact.

Security control

		CONTROL FUNCTIONS		
		PREVENTATIVE	DETECTIVE	CORRECTIVE
TYPE OF SECURITY CONTROLS	PHYSICAL CONTROLS	<ul style="list-style-type: none">> Fences> Gates> Locks	<ul style="list-style-type: none">> CCTV> Surveillance Cameras	<ul style="list-style-type: none">> Repair Physical damage> Reissue Access cards
	TECHNICAL CONTROLS	<ul style="list-style-type: none">> Firewalls> IPS> MFA> Antivirus	<ul style="list-style-type: none">> IDS> Honeypots	<ul style="list-style-type: none">> Vulnerability patching> Reboot a system> Quarantine a virus
	ADMINISTRATIVE CONTROLS	<ul style="list-style-type: none">> Hiring & termination policies> Separation of duties> Data classification	<ul style="list-style-type: none">> Review access rights> Audit logs & unauthorized changes	<ul style="list-style-type: none">> Implement a business continuity plan> Have an incident response plan

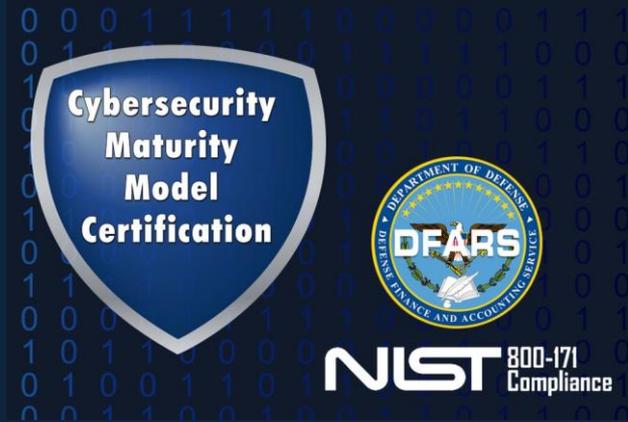
Source : infosectrain.com





Importance of an IT audit

COMPLIANCE REQUIREMENT





A decorative graphic on the left side of the slide consists of five hexagons. The largest is a solid orange hexagon in the center. To its top right is a smaller, light blue hexagon. To its bottom right is a very small, solid orange hexagon. To its bottom left is a white outline of a hexagon. To its left is another white outline of a hexagon, partially overlapping the large orange one.

The IT audit process

IT audit

- **Risk Exposure:** Organizations are at risk due to inadequate IT governance structures, exposing them to potential cybersecurity threats, regulatory non-compliance, and operational inefficiencies.
- **Vulnerability Gaps:** Without a robust IT audit framework, companies may overlook vulnerabilities in their systems, leaving them susceptible to data breaches and other security incidents.
- **Regulatory Compliance:** Lack of adherence to regulatory requirements can result in legal consequences. Our service addresses the need for comprehensive IT governance and audit practices to ensure compliance.



Audit planning

- Clearly define the objectives of the IT audit.
- Determine the scope, including systems, processes, and locations to be audited.
- Develop a detailed audit plan outlining tasks, timelines, and responsibilities.
- Consider using established frameworks such as NIST 800-53, HIPAA(Health Insurance Portability and Accountability Act), CIS v8, ISO 27001:2022, PCI v4 , CMMC (Cybersecurity Maturity Model Certification)



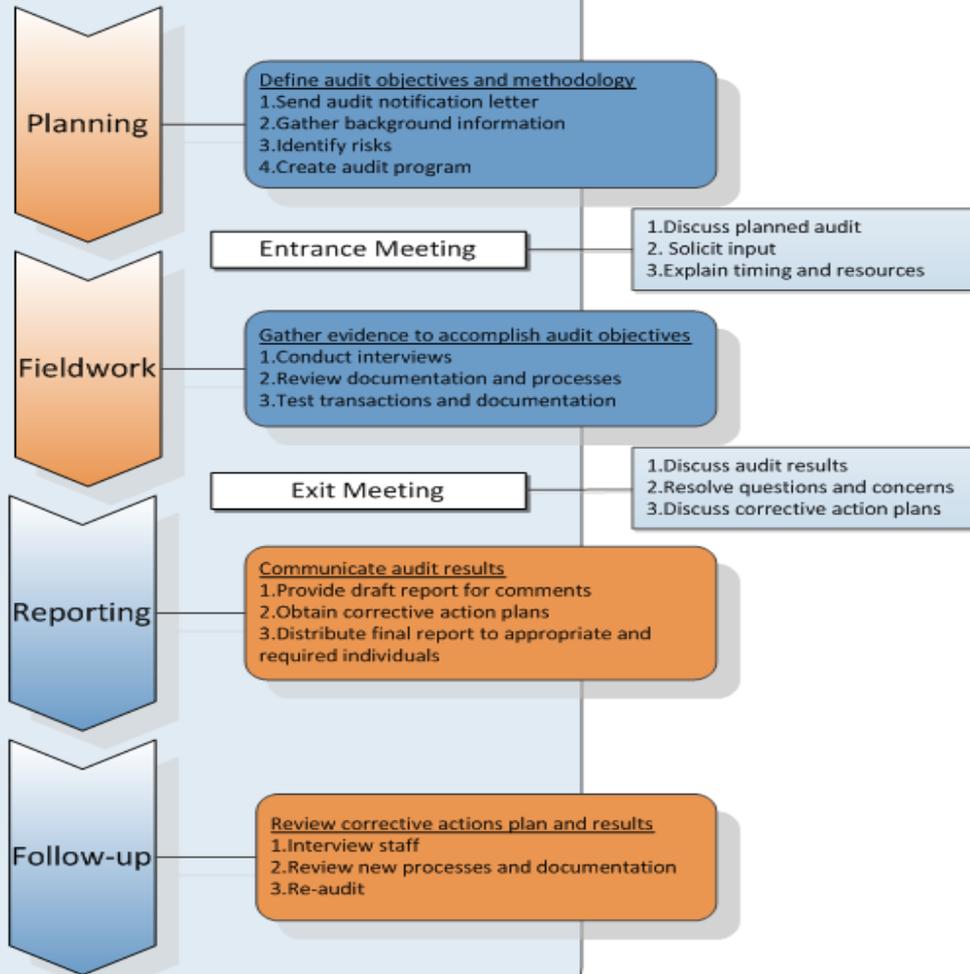
Understand the Business Environment

Gain a comprehensive understanding of the organization's business processes and goals.





Audit Process



Source <https://audit.utexas.edu/>

Fieldwork (1)

Review IT Policies and Procedures

- Evaluate the effectiveness and adherence to IT policies and procedures.
- Verify that policies are aligned with industry best practices.

Access Controls

- Assess user access controls, ensuring proper segregation of duties.
- Review user account management and provisioning processes.

Network Security

- Evaluate the security of the organization's network infrastructure.
- Assess firewalls, intrusion detection/prevention systems, and network segmentation.

Fieldwork(2)

Physical Security:

- Evaluate physical security measures for data centers and critical IT infrastructure.

Vendor Management:

- Assess the security controls of third-party vendors and service providers.
- Ensure compliance with contractual security requirements.

Security Awareness Training

- Evaluate if a cybersecurity awareness program is in place with training content that addresses industry-specific threats and aligns with employee roles

Fieldwork (3)

Data Security

- Review data protection mechanisms, including encryption and data loss prevention.
- Assess data backup and recovery processes

Vulnerability Assessment

- Conduct a vulnerability assessment to identify weaknesses in systems.
- Evaluate the organization's patch management process

Incident Response

- Assess the incident response plan and capabilities.
- Review the organization's ability to detect, respond to, and recover from security incidents.

FINAL REPORT

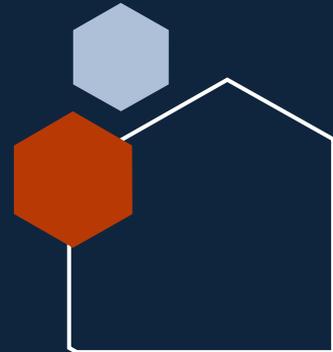
Provide a comprehensive and understandable report to stakeholders.

Document audit findings, including strengths, weaknesses, and recommendations



TOP AUDIT FINDING

- Incomplete or Outdated IT Policies and Procedures
- Weak Access Controls/Review
- Insufficient Data Backup and Recovery Procedures
- Outdated Software and Patch Management
- Inadequate Network Security
- Lack of Security Awareness and Training
- Inadequate Incident Response Planning



Thank you

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