

# Navigating the IT Audit Landscape: A Comprehensive Overview

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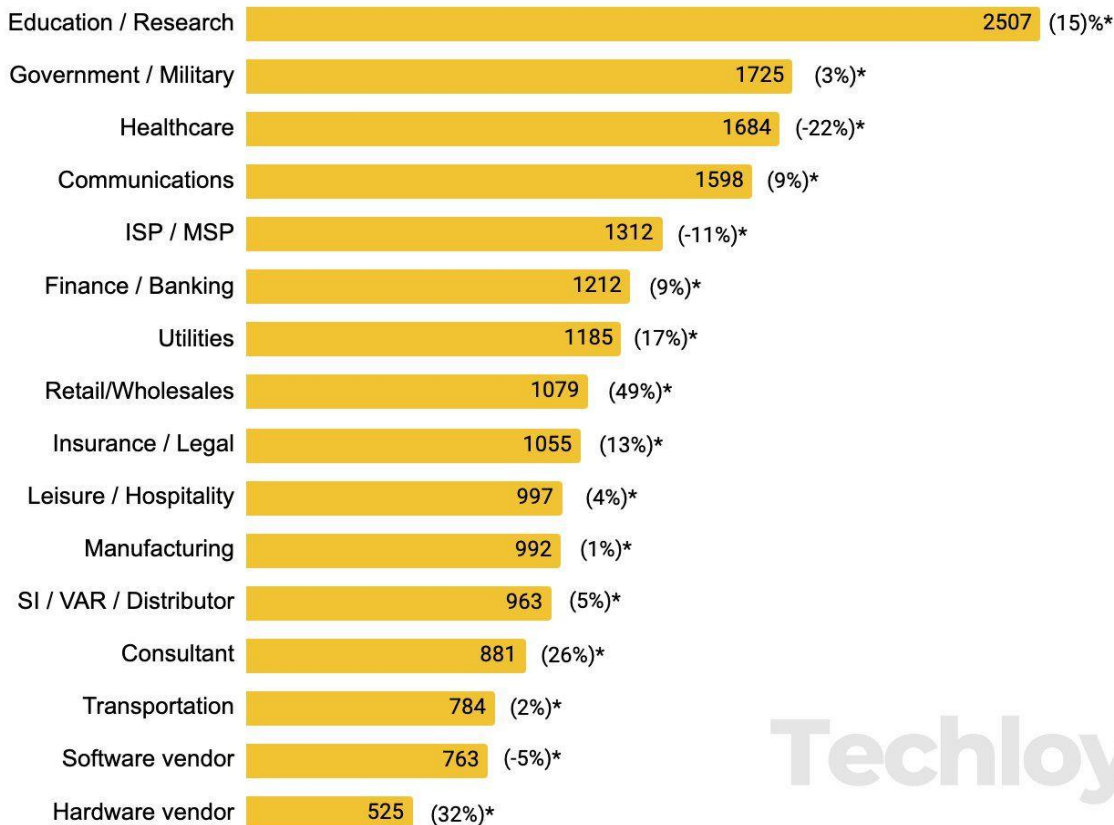
- \* IT risk management
- \* Importance of IT audit
- \* The IT audit

No one is spared

# Global Average Weekly Cyber Attacks Per Industry

during the Q1 2023 period

\* YoY growth from Q1 2022



Techloy.

# Technological risk

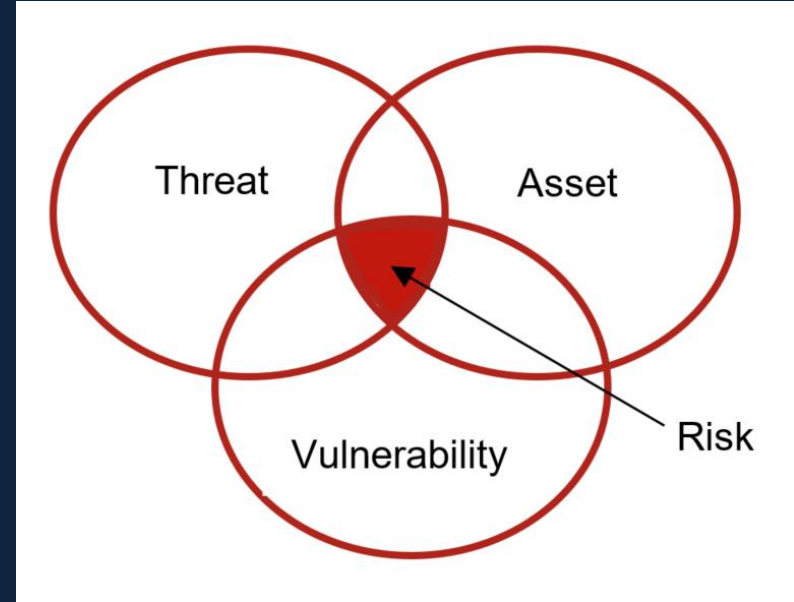
- hardware and software failure
- human error
- spam, viruses and malicious attacks,
- natural disasters such as fires,

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.

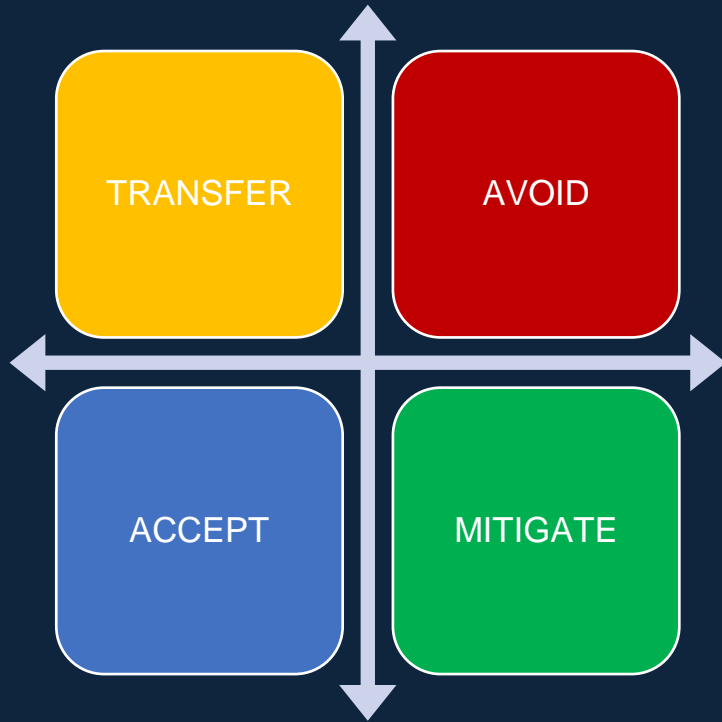


$\text{Risk} = \text{Likelihood} \times \text{Impact}.$

# Security control

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

Source : infosectrain.com







# Importance of an IT audit

# COMPLIANCE REQUIREMENT







# 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

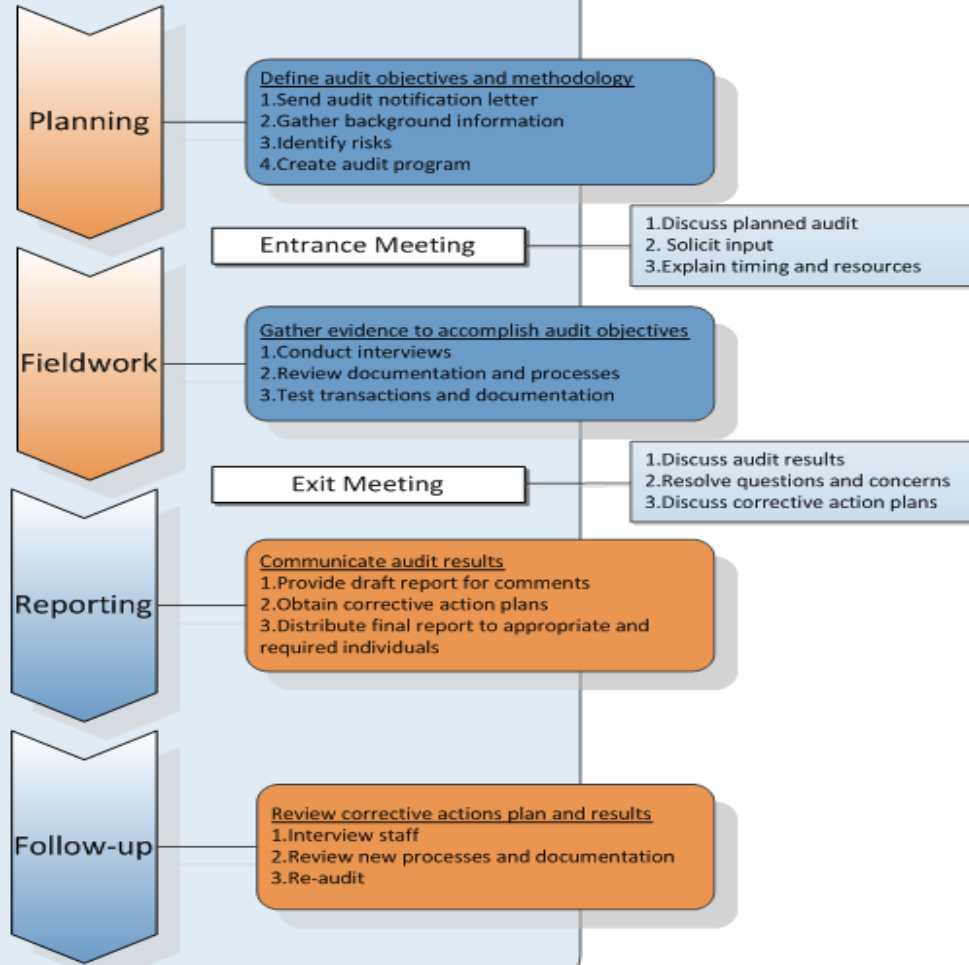
Gain a comprehensive understanding of the organization's business processes and goals.







# Audit Process





# 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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