

Audit Report

*This **scenario** is based on a fictional company:*

Botium Toys is a small U.S. business that develops and sells toys. The business has a single physical location, which serves as their main office, a storefront, and warehouse for their products. However, Botium Toy's online presence has grown, attracting customers in the U.S. and abroad. As a result, their information technology (IT) department is under increasing pressure to support their online market worldwide.

The manager of the IT department has decided that an internal IT audit needs to be conducted. She expresses concerns about not having a solidified plan of action to ensure business continuity and compliance, as the business grows. She believes an internal audit can help better secure the company's infrastructure and help them identify and mitigate potential risks, threats, or vulnerabilities to critical assets. The manager is also interested in ensuring that they comply with regulations related to internally processing and accepting online payments and conducting business in the European Union (E.U.).

The IT manager starts by implementing the National Institute of Standards and Technology Cybersecurity Framework (NIST CSF), establishing an audit scope and goals, listing assets currently managed by the IT department, and completing a risk assessment. The goal of the audit is to provide an overview of the risks and/or fines that the company might experience due to the current state of their security posture.

Controls assessment checklist

Yes	No	Control
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Least Privilege
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disaster recovery plans
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Password policies
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Separation of duties
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Firewall
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Intrusion detection system (IDS)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Backups
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Antivirus software
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Manual monitoring, maintenance, and intervention for legacy systems
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Encryption
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Password management system
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Locks (offices, storefront, warehouse)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Closed-circuit television (CCTV) surveillance
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fire detection/prevention (fire alarm, sprinkler system, etc.)

Compliance checklist

Payment Card Industry Data Security Standard (PCI DSS)

Yes	No	Best practice
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Only authorized users have access to customers' credit card information.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Credit card information is stored, accepted, processed, and transmitted internally, in a secure environment.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Implement data encryption procedures to better secure credit card transaction touchpoints and data.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Adopt secure password management policies.

General Data Protection Regulation (GDPR)

Yes	No	Best practice
<input type="checkbox"/>	<input checked="" type="checkbox"/>	E.U. customers' data is kept private/secured.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	There is a plan in place to notify E.U. customers within 72 hours if their data is compromised/there is a breach.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ensure data is properly classified and inventoried.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Enforce privacy policies, procedures, and processes to properly document and maintain data.

System and Organizations Controls (SOC type 1, SOC type 2)

Yes	No	Best practice
<input checked="" type="checkbox"/>	<input type="checkbox"/>	User access policies are established.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sensitive data (PII/SPII) is confidential/private.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Data integrity ensures the data is consistent, complete, accurate, and has been validated.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Data is available to individuals authorized to access it.

Recommendations: The assets are not properly managed and the risk score is 8 out of 10 which is really bad and shows that the data is at a higher risk due to lack of security controls and adherence to compliance practices.

There is some form of security with some user and data policies active. Proper monitoring, Antivirus, a dedicated IT department firewall and also for storage there are CCTVs, Locks and fire detection systems which does help in keeping data safe to an extent but it is very minimal.

It is highly recommended to work on the check list above and include Preventative controls like least privilege and password policies. Corrective controls like backups and disaster recovery plans should be established with immediate effect. It is highly recommended to include an Intrusion detection system (IDS), password management system to make sure strong passwords are used and encryption to secure the user data.

There are also some compliance issues that need to be addressed and taken care of with utmost urgency.