

**Date:** 12 March, 2025

**Auditor Name:** Nazish Khalid

## **Project Overview**

- **Company:** Botium Toys
- **Objective:** Conduct an internal IT audit to assess security controls and compliance gaps.
- **Frameworks Used:** NIST CSF, PCI DSS, GDPR, SOC 2
- **Deliverables:**
  - Audit Scope & Goals
  - Risk Assessment Report
  - Controls & Compliance Checklist
  - Remediation Plan & Recommendations
  - Final Executive Summary Report

## Scope & Goals

- **Scope:**  
The audit covers all IT security aspects at Botium Toys, including employee devices, internal networks, software, and compliance with cybersecurity best practices.
- **Goals:**  
Identify security weaknesses, assess compliance gaps, and recommend improvements to protect data and ensure regulatory compliance.

## Current IT Assets

- **Hardware:**  
On-site office equipment, employee devices (laptops, smartphones, peripherals), warehouse/storefront products.
  - **Software & Systems:**  
Accounting, telecom, security, e-commerce, inventory, databases.
  - **Network & Storage:**  
Internal network, data retention, legacy system maintenance, internet access.
- 

## Risk Assessment

- **Key Risks:**
  - Poor asset management.
  - Non-compliance with U.S. & international regulations (e.g., data privacy laws).
  - Lack of proper security controls.
- **Risk Score:** 8/10 (High Risk)
- **Potential Impact:** Medium to High. IT lacks full understanding of asset risks, and fines for compliance failures could be severe.

## Security & Compliance Gaps

- **Major Issues:**
  - **Lack of Data Access Controls:** Employees can access sensitive customer payment data.

- **No Encryption for Credit Card Data:** Payment information is stored without encryption.
- **No Least Privilege Access:** Employees have more access than necessary.
- **No Intrusion Detection System (IDS):** System monitoring is weak.
- **No Disaster Recovery Plan & Backups:** No data recovery strategy if systems fail.
- **Weak Password Policy:** No strict password requirements, no centralized password management.
- **Unclear Legacy System Maintenance:** No clear update/maintenance schedule.
- **Moderate Issues:**
  - Data Integrity & Availability: Some security controls exist (firewall, antivirus).
  - EU Data Breach Notification Policy: In place, but overall compliance is unclear.
- **Strengths:**
  - **Physical Security:** Locks, CCTV, fire detection systems are working well.
  - **Firewall & Antivirus:** Properly configured and monitored.

---

## 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/>            | <input checked="" 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	Data is available to individuals authorized to access it.

---

## Remediation Plan & Recommendations

### Immediate Actions:

- 1. Implement Least Privilege & Separation of Duties:**
  - Restrict access to customer payment data and personal information.
  - Ensure employees only have access to what they need for their job roles.
- 2. Secure Credit Card Transactions:**
  - Encrypt all stored and transmitted credit card data in compliance with PCI DSS.
  - Limit access to payment data to authorized users only.
- 3. Strengthen Password Security:**
  - Update the password policy to require longer passwords, special characters, and multi-factor authentication (MFA).
  - Implement a centralized password management system.

### Short-Term Solutions:

- 1. Deploy an Intrusion Detection System (IDS):**
  - Implement an IDS to monitor network activity and detect security threats in real-time.
- 2. Establish a Disaster Recovery Plan & Regular Backups:**
  - Create and document a backup strategy for critical data.
  - Develop a business continuity plan to recover from unexpected failures.
- 3. Classify & Inventory Sensitive Data (GDPR & SOC Compliance):**
  - Organize and document what data is stored, where it is located, and who has access.
  - Implement privacy controls for E.U. customers to comply with GDPR.

## **Long-Term Improvements:**

### **1. Maintain & Upgrade Legacy Systems:**

- Set up a routine maintenance schedule and define clear intervention methods.
- Develop a migration plan for replacing outdated systems.

### **2. Enhance Physical Security Measures:**

- Conduct regular security assessments of physical access controls, including CCTV monitoring and door locks.
- Implement an access control system for employees to restrict unauthorized entry.

### **3. Improve Compliance & Audit Readiness:**

- Conduct regular internal IT audits to assess compliance with NIST CSF, PCI DSS, and GDPR.
  - Provide ongoing security training for employees to enforce best cybersecurity practices.
- 

## **Executive Summary**

This audit has highlighted critical gaps in security and compliance at Botium Toys, ranging from poor data access controls to lack of disaster recovery planning. Immediate, short-term, and long-term remediation steps have been outlined to address these issues, ensuring a more secure environment and improved compliance with industry standards. By implementing these recommendations, Botium Toys can significantly reduce risks, safeguard sensitive data, and be better prepared for future regulatory audits.