

# [Shadow AI **Exposed:** Zero Trust & Shadow AI Threats]

Combating Shadow AI with Microsoft Security  
Solutions and Zero Trust Methodologies

MARCH 5<sup>TH</sup>, 2025

# TOPICS TO BE COVERED

Understanding Shadow AI Threats

Introduction to Zero Trust Methodologies

Leveraging Microsoft Purview for Threat Detection

Utilizing Intune for Endpoint Protection

Integrating Microsoft Purview & Intune for  
Comprehensive Security



# Understanding Shadow AI Threats



# Definition and Examples of Shadow AI

## Understanding Shadow AI

- ▶ Shadow AI refers to AI tools used without organizational approval, posing risks to data security and compliance.

## Unauthorized Machine Learning Platforms

- ▶ Unregulated machine learning platforms are often used by employees without oversight, leading to potential security vulnerabilities.

## Risks of Unauthorized Chatbots

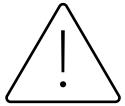
- ▶ Unauthorized chatbots may handle sensitive data without proper security measures, increasing the risk of data breaches.

# Risks Associated with Shadow AI



## Data Breaches

Shadow AI can lead to significant data breaches, exposing sensitive information and compromising organizational security.



## Compliance Violations

Organizations using shadow AI risk violating compliance regulations, which can result in hefty fines and legal challenges.



## Malicious AI Usage

The potential for malicious AI usage can pose threats to organizations, leading to misuse of AI technologies for harmful purposes.



## Reputational Damage

Reputational damage can occur if organizations fail to manage shadow AI risks, impacting public trust and stakeholder confidence.



# Impact on Organizational Security

## **Vulnerabilities of Shadow AI**

Shadow AI introduces hidden vulnerabilities within an organization, making it hard to monitor and manage properly.

## **Unauthorized Access Risks**

The presence of Shadow AI can lead to unauthorized access to sensitive information, posing significant security risks.

## **Exploitation of Sensitive Data**

Sensitive data may be exploited due to the lack of oversight in Shadow AI operations, leading to data breaches.



# A Perfect Storm



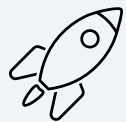
## Significant Investment Drives Quick Feature Development

Companies, both large and small, are racing to release and enhance their products with AI functionalities.



## Regulatory Agencies are Starting to Respond

Government bodies are beginning to update compliance and legal frameworks to address the rapid increase in AI usage.



## Rapid Growth of New AI Applications

Every day, new AI-driven applications are launched in the market, each carrying its own set of risks.



## Users and Threat Actors are Eager and Ambitious

Individuals at various levels are investigating new AI-enabled opportunities, creating a conducive environment for Threat Actors to breach systems.



INTRODUCTION TO

# Zero Trust Methodologies



# Principles of Zero Trust Security



## **Never Trust, Always Verify**

The Zero Trust model emphasizes verifying all users and devices before granting access to resources, reducing potential threats.

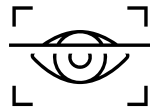
## **Least Privilege Access**

Implementing least privilege access ensures users have only the permissions necessary for their roles, minimizing risk exposure.

## **Continuous Monitoring**

Continuous monitoring is crucial in the Zero Trust model to detect and respond to threats in real-time.

# Key Components of Zero Trust Architecture



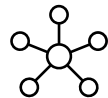
## Identity Verification

Identity verification ensures that only authorized users can access sensitive information and systems, enhancing overall security.



## Device Health Checks

Regular device health checks ensure that only compliant and secure devices can connect to the network, minimizing vulnerabilities.



## Network Segmentation

Network segmentation divides the network into smaller segments to limit the spread of potential breaches and enhance security.



## Data Encryption

Data encryption protects sensitive information during transmission and storage, ensuring privacy and integrity against unauthorized access.



## Data Classification

Data classification enables intelligent decision making based on its classification level.

# Benefits of Implementing Zero Trust



## Enhanced Security

Zero Trust enhances security by minimizing attack surfaces and protecting sensitive data from potential breaches.



## Regulatory Compliance

Implementing Zero Trust helps organizations meet compliance requirements, safeguarding sensitive data and enhancing overall trust with stakeholders.



## Improved Data Protection

With Zero Trust, organizations can implement stricter access controls, ensuring that only authorized users have access to sensitive information.



## Culture of Security

Individuals at various levels are investigating new AI-enabled opportunities, creating a conducive environment for Threat Actors to breach systems.

# Calculate Risk

$$\text{ALE} = \text{ARO} * \text{SLE}$$
$$\text{SLE} = \text{AV} * \text{EF}$$

**ALE:** Annualized Loss Expectancy  
**ARO:** Annualized Rate of Occurrence  
**SLE:** Single Loss Expectancy  
**AV:** Asset Value  
**EF:** Exposure Factor

# Leveraging M365 Purview

FOR THREAT DETECTION



# Overview of M365 Purview Capabilities

## Data Classification

M365 Purview offers robust data classification tools that help organizations categorize and manage sensitive information efficiently.

## Labeling Mechanism

The labeling feature allows users to apply security and compliance labels to data, enhancing data protection and ensuring regulatory compliance.

## Activity Monitoring

M365 Purview enables organizations to monitor data activity and access, ensuring that data governance policies are followed effectively.



# Monitoring and Analyzing Data Activities

## **Real-Time Monitoring**

M365 Purview enables organizations to monitor data activities in real-time, enhancing their security posture.

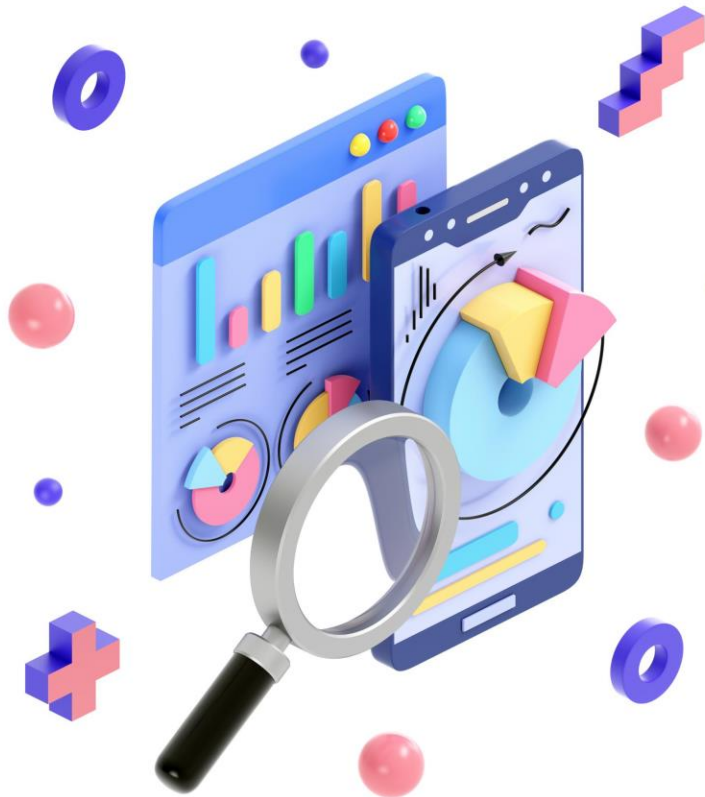
## **Identifying Anomalous Behavior**

The system identifies anomalous behavior that may indicate potential shadow AI threats, allowing for quick responses.

## **Timely Interventions**

By recognizing threats early, organizations can implement timely interventions to mitigate risks effectively.

# Identifying and Mitigating Shadow AI Threats



## Advanced Analytics Tools

Microsoft Purview utilizes advanced analytics tools to detect and identify potential shadow AI threats within organizations.

## Risk Mitigation Strategies

Organizations can implement effective risk mitigation strategies with Microsoft Purview to manage shadow AI threats proactively.

## Security Measures Implementation

Microsoft Purview facilitates the implementation of appropriate security measures to protect against shadow AI risks and vulnerabilities.

## Data Classification

Microsoft Purview facilitates the data classification and discovery process, enabling improved decision making over time.



# Reduce Risk with Microsoft Intune

Intune, a powerful ally

# Introduction to Intune Features



## Mobile Device Management

Intune enables organizations to manage mobile devices securely, ensuring compliance with corporate policies.



## Application Management

With Intune, IT administrators can manage applications on devices, controlling access and deployment effectively.



## Policy Enforcement

Intune's policy enforcement features help maintain security across all endpoints, ensuring devices meet compliance standards.

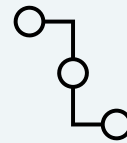


# Deploying Zero Trust Policies via Intune



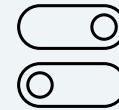
## Zero Trust Security Framework

Zero Trust is a security model that requires strict identity verification for every person and device trying to access resources.



## Endpoint Management with Intune

Intune allows organizations to manage devices and apps, ensuring compliance with security policies across all endpoints.



## Access Control Policies

Implementing access control policies ensures that only authorized users and devices can access sensitive data and applications.

# Ensuring Compliance and Enforcement

## **Compliance with Security Policies**

Intune aids organizations in adhering to security policies, ensuring that all devices meet required standards.

## **Automated Compliance Checks**

Automated checks provided by Intune help streamline the compliance process, reducing manual effort and errors.

## **Minimizing Security Breaches**

By enforcing compliance, Intune minimizes the risk of security breaches, protecting organizational data and resources.

# Integrating M365 Purview and Intune

FOR COMPREHENSIVE SECURITY

# Combining Data Governance and Endpoint Management

## Synergistic Security Approach

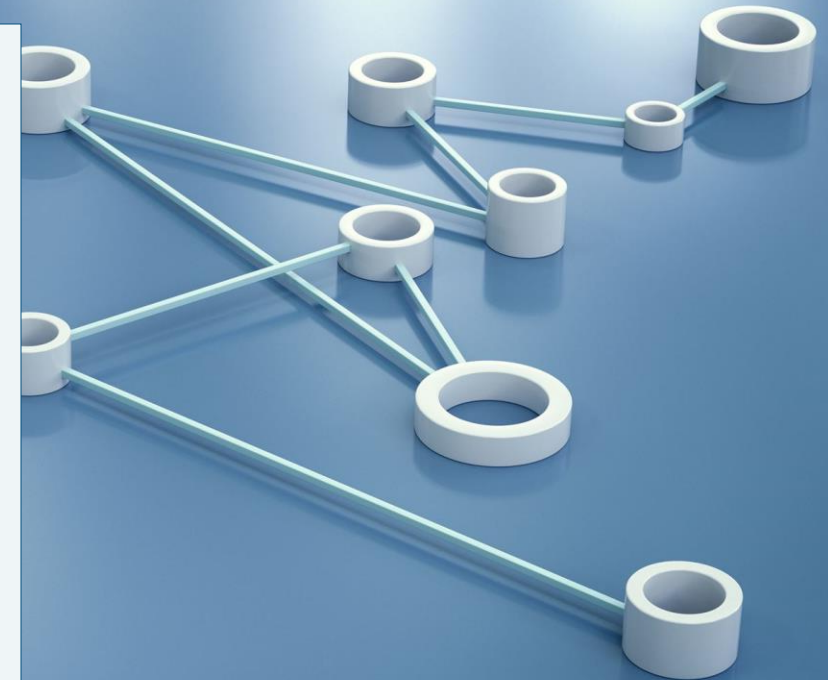
Integrating Microsoft Purview and Intune creates a unified security strategy for organizations.

## Effective Data Management

Organizations can manage data efficiently while ensuring compliance and security across their endpoints.

## Endpoint Security

Securing endpoints is crucial for protecting sensitive data and maintaining organizational integrity.



# Case Studies of Integrated Security Approaches



## Integration of Microsoft Purview

M365 Purview provides powerful tools for data protection and compliance, enhancing security within organizations.



## Role of Intune

Intune plays a critical role in managing mobile devices securely, ensuring that organizational data remains protected.



## Mitigating Shadow AI Threats

Integrating these solutions helps organizations effectively mitigate potential threats posed by shadow AI technologies.

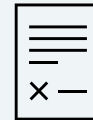


# Best Practices for Seamless Integration



## Regular Audits

Conducting regular audits ensures compliance and identifies areas for improvement in the integration process.



## Alignment of Security Policies

Aligning security policies across platforms ensures a cohesive security posture and minimizes risks during integration.



## Continuous Training

Providing continuous training for staff helps maintain up-to-date knowledge on Microsoft Purview and Intune functionalities and best practices.



## Alignment of Compliance Policies

Aligning compliance policies empowers security teams to be proactive in defense of critical assets within the datasphere.

# What's Next?

## Apply for a **Low-Cost** Data Security Assessment

As a valued attendee of our Microsoft Purview webinar, you have the exclusive opportunity to apply for a comprehensive data security assessment. This assessment will help you:

- ▶ **Identify Vulnerabilities:** Uncover potential weaknesses in your data security infrastructure.
- ▶ **Enhance Protection:** Receive tailored recommendations to strengthen your data protection measures.
- ▶ **Ensure Compliance:** Align your data security practices with industry standards and regulations.
- ▶ **Optimize Resources:** Make informed decisions to efficiently allocate your security resources.



# CONCLUSION

## **Zero Trust Methodologies**

Implementing Zero Trust methodologies is crucial for security, ensuring that all access requests are verified.

## **Microsoft Purview Integration**

Leveraging M365 Purview helps organizations manage data security and compliance, enhancing overall protection.

## **Intune for Device Management**

Intune plays a vital role in managing devices securely and ensuring organizational data remains protected.