



**Banking on Security: Real Time
Threat Detection and Vulnerability
Response in Finance**





Matthew Kholos

Senior Sales Engineer, Security





Introduction

- Overview of Financial Industry Security Challenges

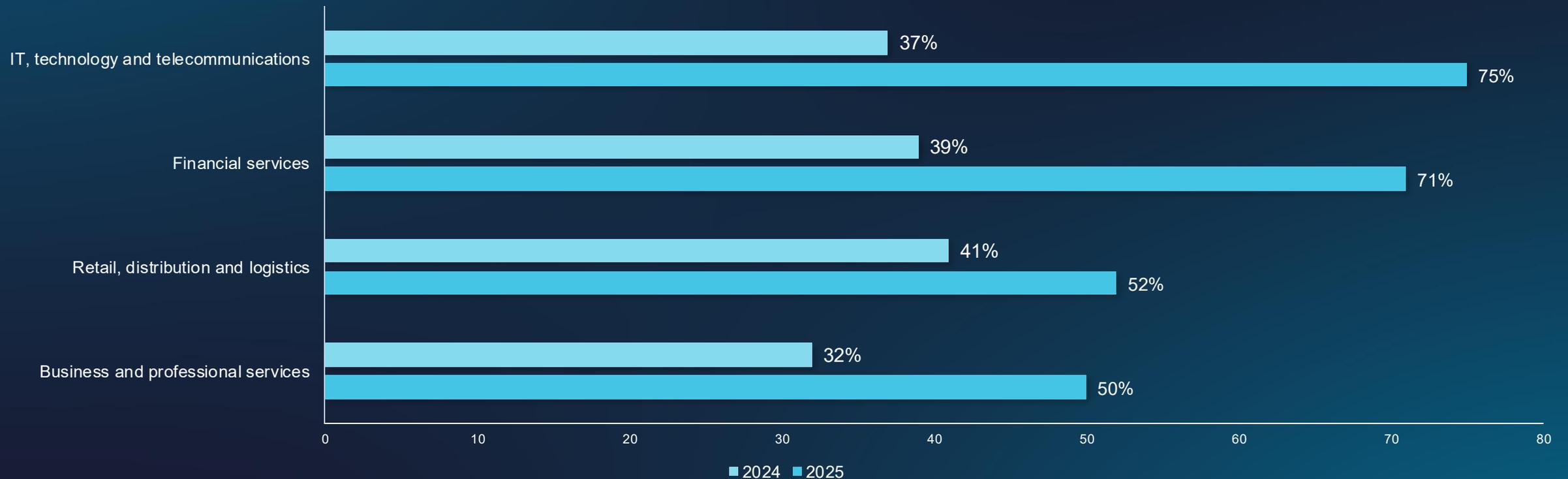
- Importance of Real-Time Threat Detection

- Increasing Cyber Threats

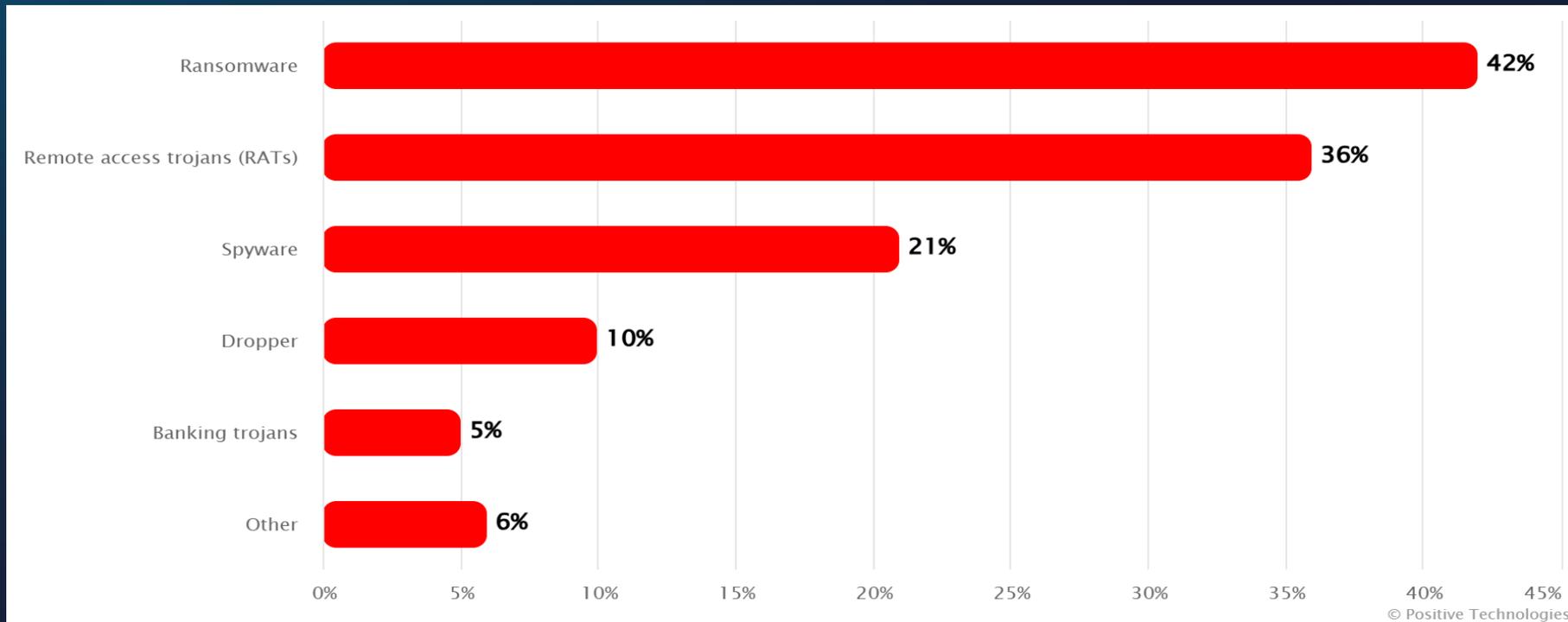


The threat level is increasing across industry sectors – resulting in a growing focus on cybersecurity

Cybersecurity is critical to our business – it's a top priority



Types of malware used in attacks on financial organizations, percentage of attacks (Q1-2025)



High Value Targets

- **High Value of Data and Assets**
- **Direct Access to Funds**
- **Service Disruption**
- **Regulatory and Reputational Pressure**



What is a SIEM?

- Full Visibility of Everything Happening Within the Network
- Decreases the Time it Takes to Identify Threats
- Detailed Forensic Analysis in the Event of Major Security Breaches

Why do I need it?

Security Information and Event Management

A SIEM works by collecting log and event data generated by an organization's systems, devices, and applications and brings them into the centralized platform for analysis and reporting.

When the SIEM identifies a threat through a set of predetermined rules, an alert is generated for human review.





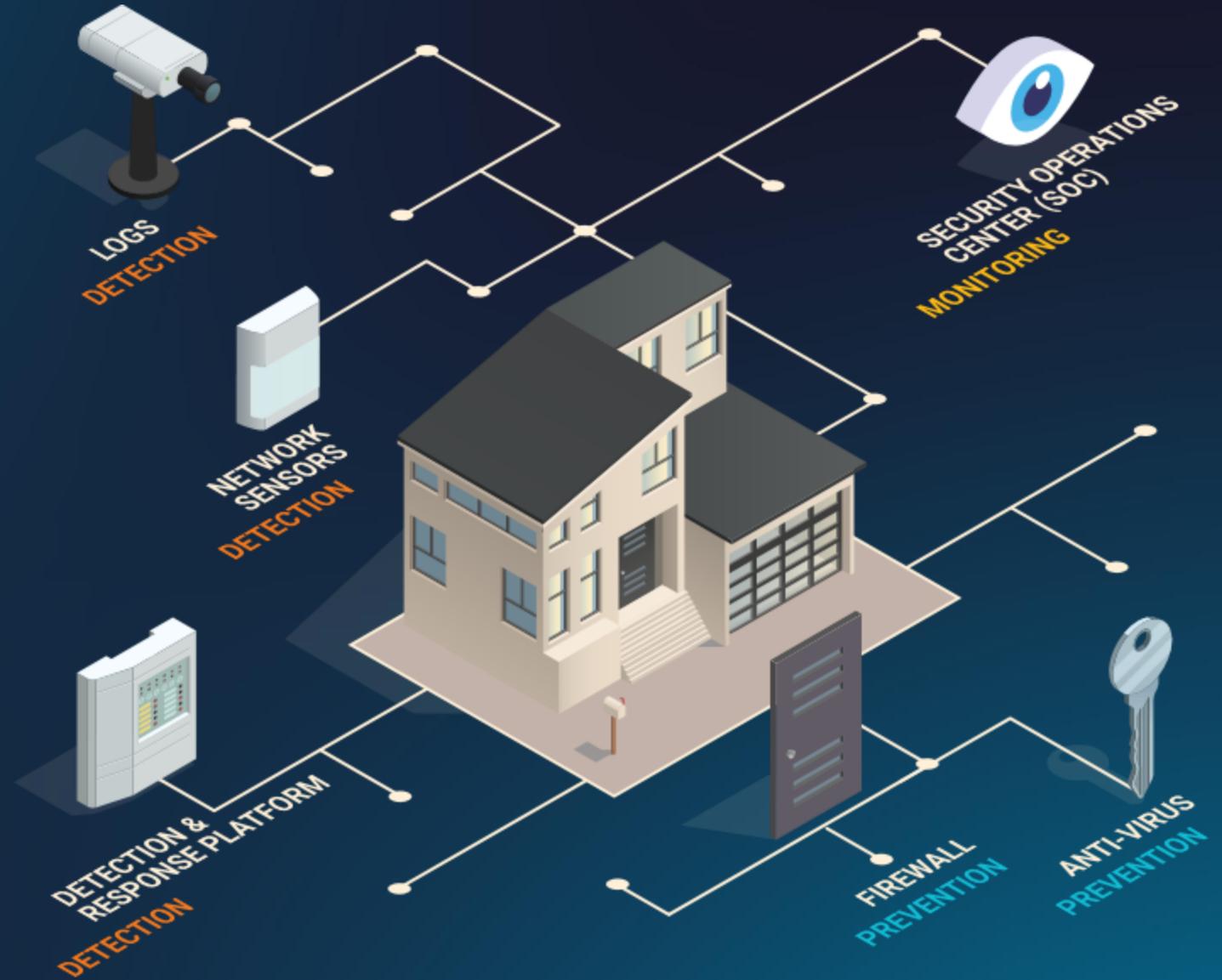
Alerting and Logging: SIEM & SOC





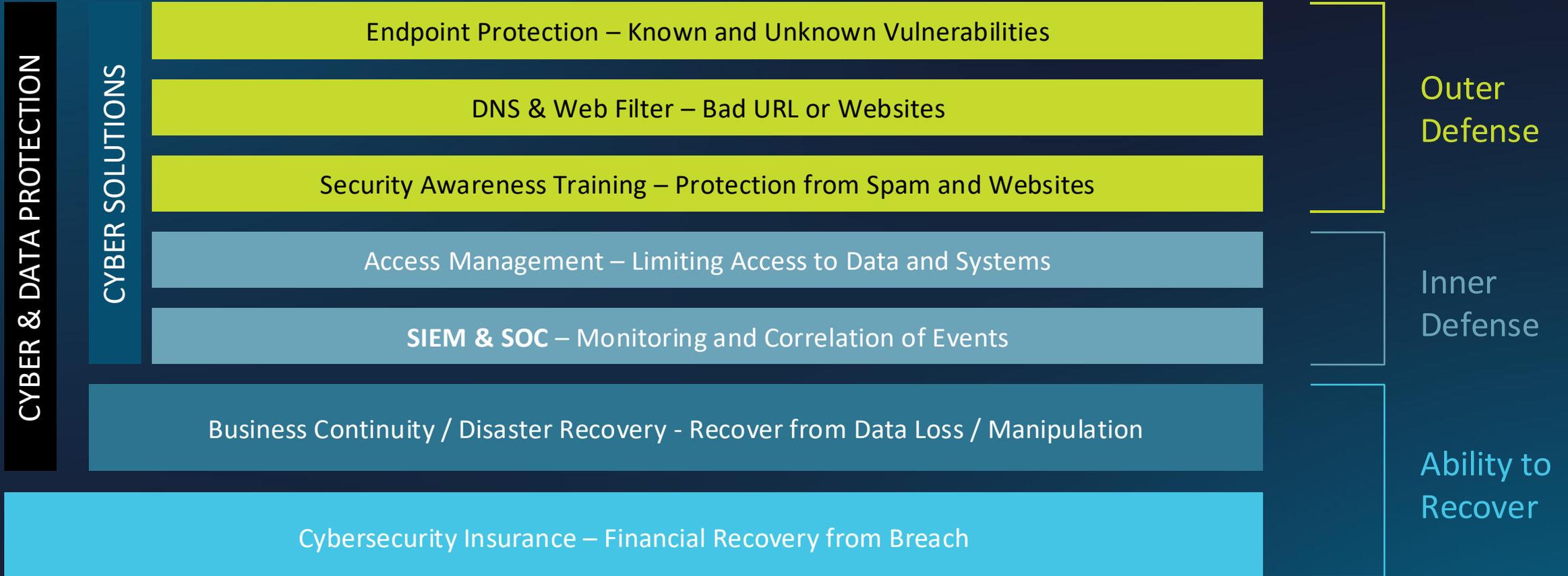
Future Security

PREVENT	Firewall Anti-Virus
DETECT	Detection & Response Platform (SIEM & EDR) Network Sensors Log aggregation (on prem/remote/cloud)
MONITOR	Security Operations Center Threat Hunting Security Research





Technology: Cybersecurity 'Stack'



Threat Intelligence

- **What is Threat Intelligence?**
- **External vs Internal**
- **Importance in Finance**



Harnessing External Threat Intelligence

- **FS-ISAC**
- **CRU**
- **Anomali ISAC**
- **Cisco Talos**



Leveraging Internal Threat Intelligence

- **Security Event and Audit Logs**
- **User Activity and Access**
- **Endpoint Telemetry**
- **Network Traffic**
- **SaaS Applications**



What is Credential Theft and How to Prevent It



Real World Example

- **Strengthening of Blank Bank's Network Perimeter with SIEM**
- **Monitoring the following data sources:**
 - Firewalls
 - VPN
 - Endpoints
 - External Facing Applications
- **Post Incident Analysis**



Conclusion

- SIEM plays a vital role in centralizing monitoring, providing real-time threat detection, and enabling proactive threat hunting
- Threat Intelligence, both external and internal, is crucial for protecting sensitive data and ensuring compliance
- Integrating threat intelligence with SIEM enhances situational awareness and helps identify both external and insider threats
- Real time monitoring and automated responses are essential for early detection

