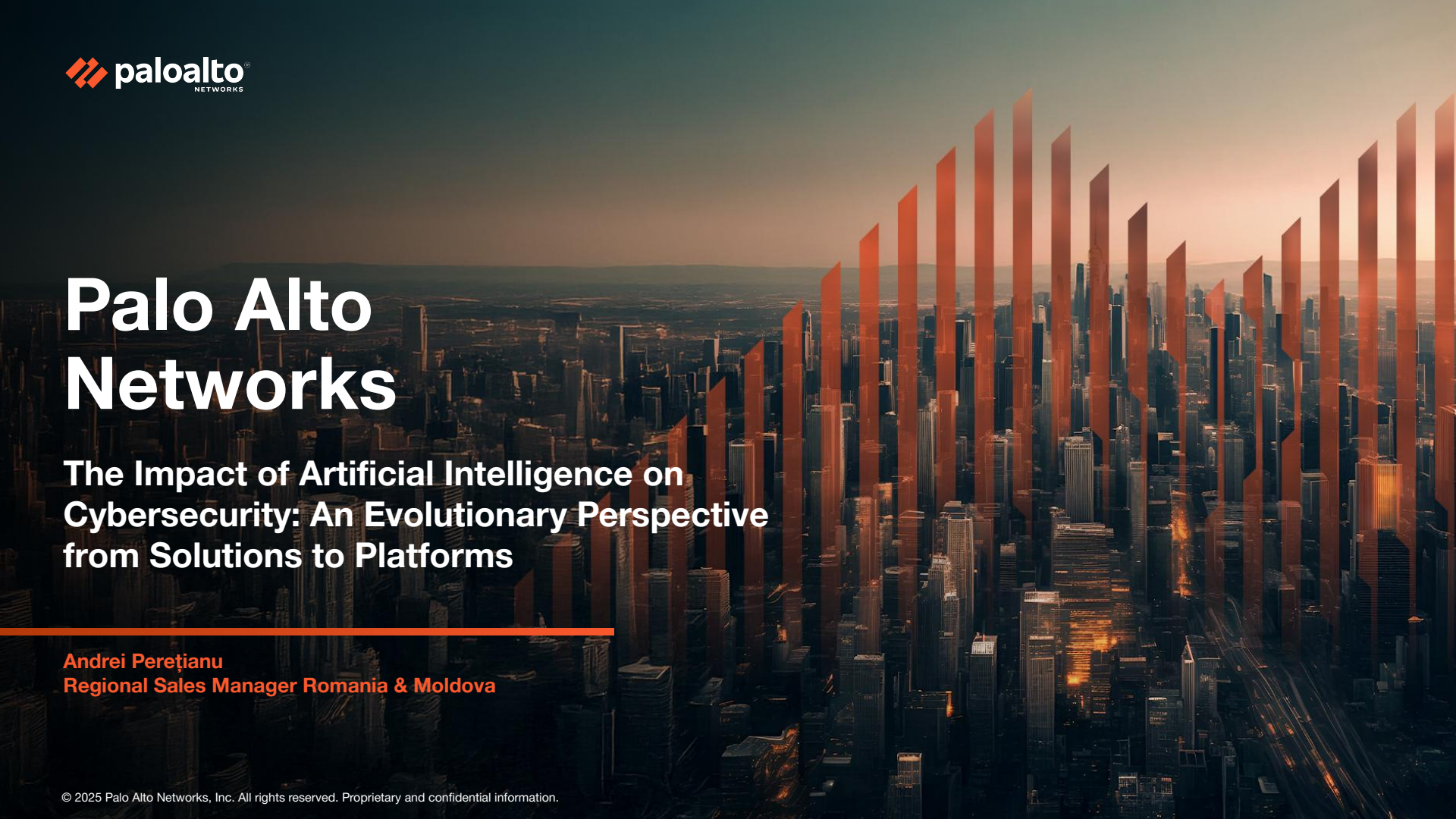


Palo Alto Networks

The Impact of Artificial Intelligence on Cybersecurity: An Evolutionary Perspective from Solutions to Platforms

Andrei Pereţianu
Regional Sales Manager Romania & Moldova

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The world is undergoing rapid digital transformation

AI, Cloud, and automation are reshaping industries.

Artificial Intelligence

94%

of businesses are investing in data readiness for AI

72%

Organizations integrated AI into at least 1 business function

80%

Enterprises are expected to have deployed AI-enabled applications



DATA GROWTH EXPLOSION:

Global data creation is expected to exceed **180 zettabytes**.

Cloud

23%

Increase in Global cloud infrastructure service spending

75%

Organizations will adopt digital transformation with Cloud as primary platform

90%

Organizations will adopt a hybrid cloud approach

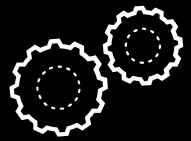
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AI is rapidly transforming your organization

Development

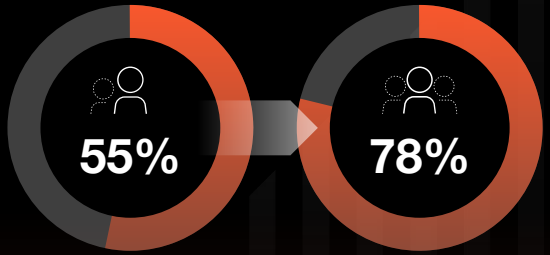
94%



Using GenAI for software development

Strong Growth in Enterprise AI Usage

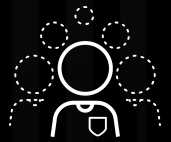
~1.5X



last 12 months

Customer engagement

42%

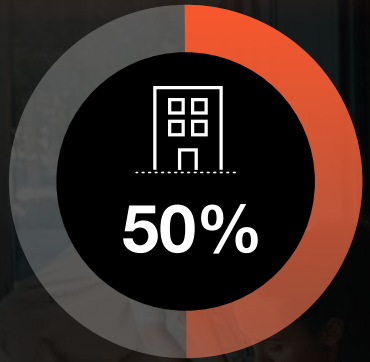


of business report using chatbots and predictive analytics for operations and customer engagement

Many more future use cases…

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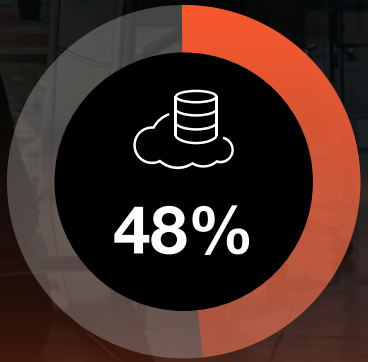
Modern cloud applications drive innovation



Of corporate workloads run in a public cloud.



Cloud computing market



of business data is now stored in the cloud.



Average number of cloud-based services workers use every day.

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Quantum computing is arriving sooner than you think



White House Signs Post-Quantum Cybersecurity Guidelines Into Law

- OMB required to “prioritize” switchover to PQC within a year of NIST’s new guidelines
- Nov 18, 2022 OMB issued memorandum for agencies to run audit of QC vulnerable systems



NATO releases first ever quantum strategy

- Strategic ambition of becoming a quantum-ready Alliance includes development of a secure, resilient, competitive quantum ecosystem

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But, it brings tomorrow’s challenges today

AI



AI-Powered Cyberattacks



AI Generated Impersonations



Permissions and Data Privacy

Cloud



Data Breaches in Multi-Tenant Environments



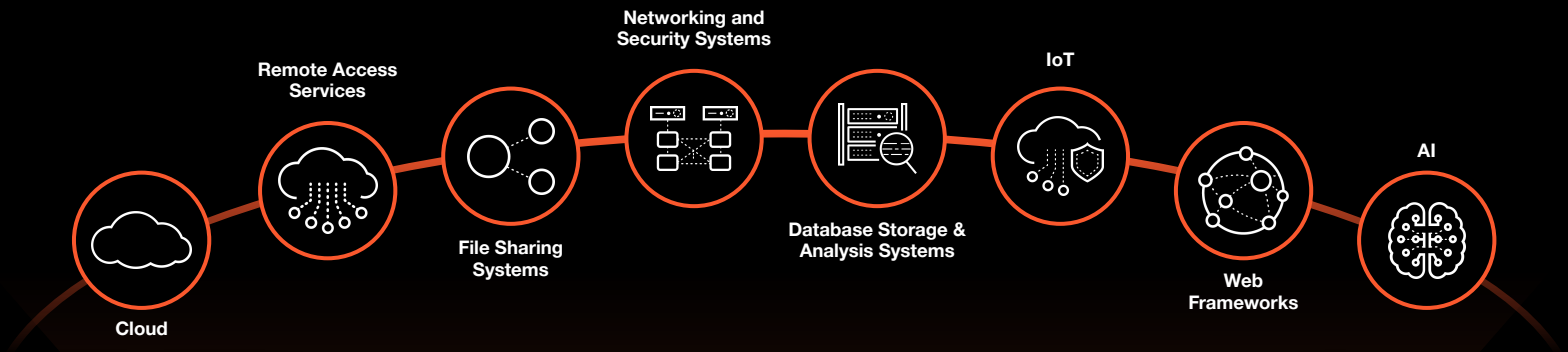
Complexity of Cloud Security



Supply Chain Vulnerabilities

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AI, cloud, and IoT expanded and fragmented your attack surface



Cloud-Related Challenges

1. Data Breaches in Multi-Tenant Environments
2. Complexity of Cloud Security
3. Supply Chain Vulnerabilities

AI-Related Challenges

1. AI-Powered Cyberattacks
2. Adversarial Attacks
3. Bias and Data Privacy



And it's secured by legions of disconnected tools

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AI is supercharging the speed and scale of attacks



Traditional Security Was Not Designed to Keep Up With AI Attacks

Sources: (1) 56% increase in exploited Zero Days in 2023 (Year-on-Year increase based on Google Cloud Blog March 26 2024), (2) 73% increase in Ransomware attacks in 2023 (SANS Blog Jan 15 2024), (3) 78% increase in data breaches and leaks in 2023 (WSJ Article March 15 2024), Most companies need >2-3 days to resolve an incident (XSIAM customer interviews and XSIAM product telemetry for customers)

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What is required to make security work?

From



Fragmented portfolio



Manual operations



Reactive

To



Integrated best in class



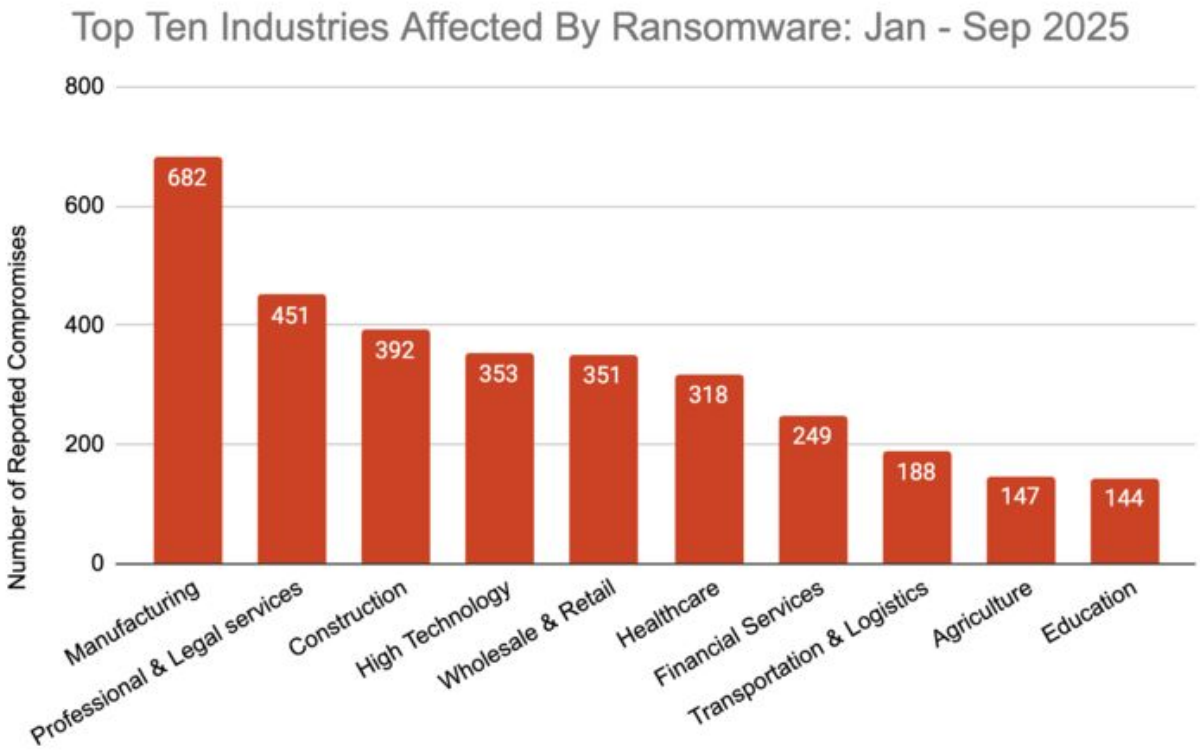
Real time AI-driven automation



Proactive

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Ransomware Victims by Industry – January through September 2025



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AI creates opportunity, but further complicates security

Employee Shadow AI Usage

55% of employees use public Gen AI at least weekly

> Shadow AI exposes the enterprise to **data leakage and malware**

Attacks on AI Apps, Models & Data

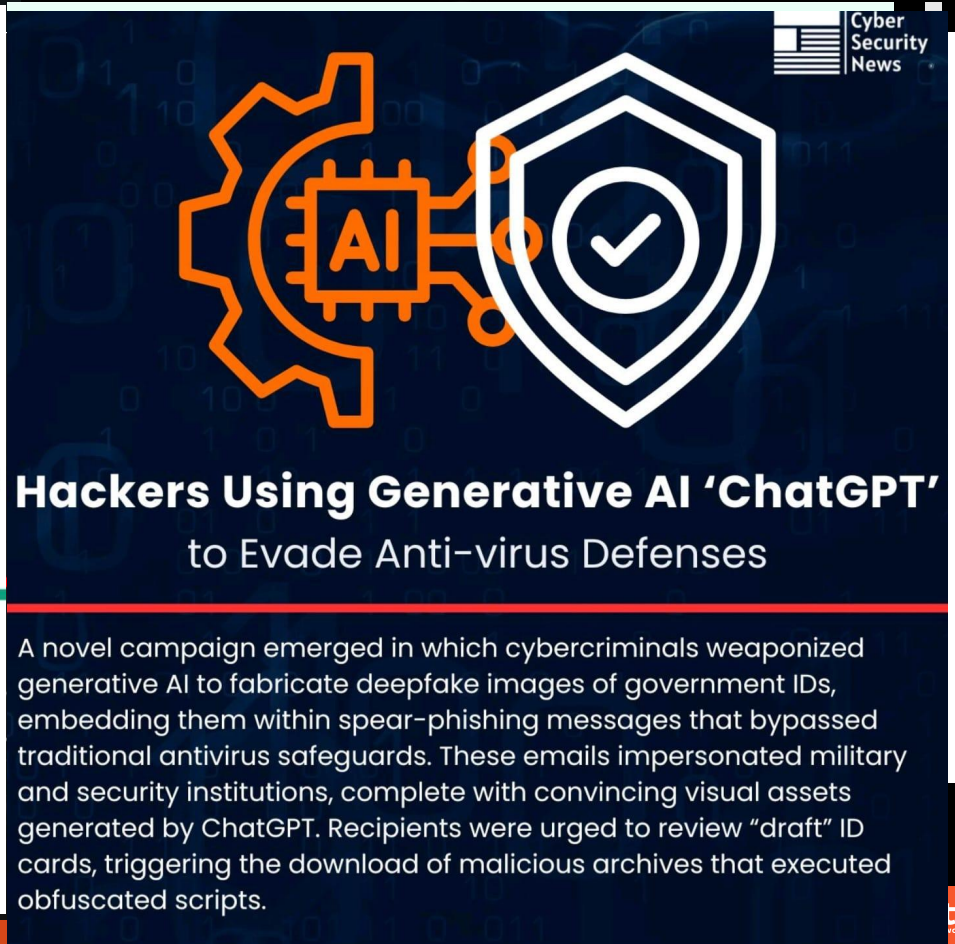
By 2025, 70% of enterprises will have operationalized AI architectures due to the rapid maturity of AI orchestration platforms"

> Risk from malicious inputs, LLM compromise, model-generated threats, and **data exposure**

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AI security news: Sept - Oct 2025







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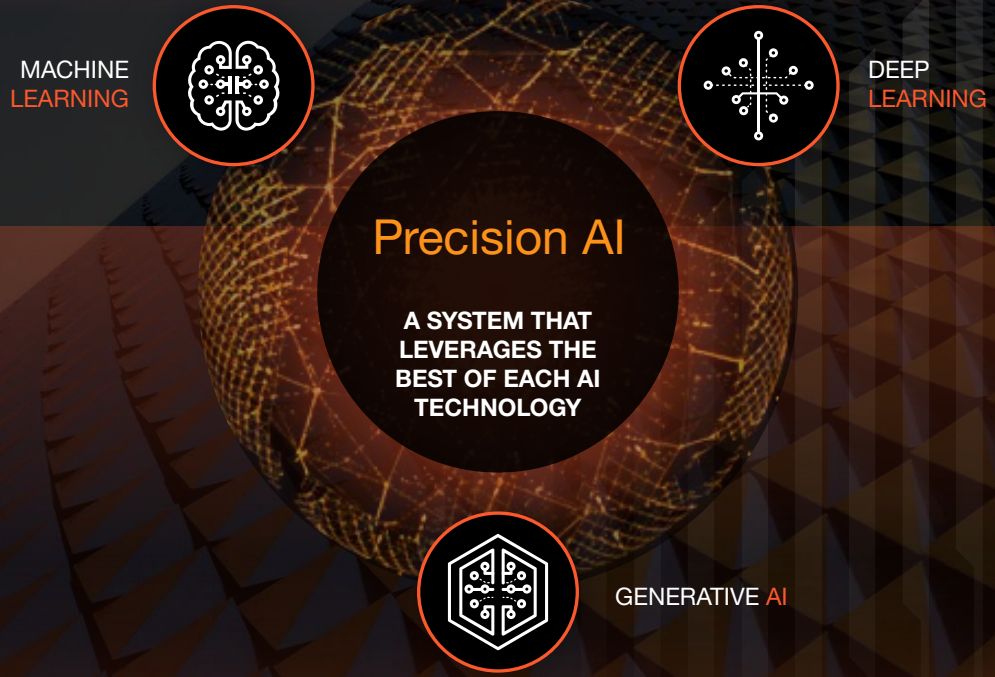
Harness the Power of AI-Ready Infrastructure Through Platformization and be Ready for Tomorrow's Threats

SUB-CATEGORY	ZERO TRUST PLATFORM
Firewall	Network Security Platform
Intrusion Detection	
URL Filtering	
Sandbox Detection	
DNS Security	
IoT / OT Security	
Data Loss Prevention	
Cloud Access Security Broker	
Posture and Health Management	
Remote Access for Users	
SWG	
SD-WAN	
Secure Web Browser	
Quantum	
GenAI Application Usage	
AI Application	
Integrated Copilot	

SUB-CATEGORY	AI-DRIVEN SECOPS PLATFORM
SIEM	AI-Driven SOC
Endpoint + EDR	
NTA / UEBA	
SOAR	
Attack Surface Management	
ASPM	Real-Time Cloud Security
Supply Chain Security	
CSPM / KSPM / DSPM / AI-SPM	
CIEM	
CWP /Vuln. mgmt.	
WaaS / API	
Cloud Detection & Response (CDR)	
Integrated Copilot	

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Powered by Precision AI® to drive real-time outcomes



Precision AI

Leveraging the best of AI while avoiding the limitations

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Why Palo Alto Networks? Innovation Built for Your Security Journey

Data

Each day we analyze

1.4B+

new and unique objects across network, endpoint and cloud

R&D Investments

Invested nearly

$1.7B+

In research per year

Growth

Acquired

19

Companies in 10 years to protect customers

Efficacy

Leader in

22

Magic Quadrants and Waves

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Thank You

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