



Principle
Networks

RACING INTO RISK: AI IS YOUR BIGGEST SECURITY THREAT RIGHT NOW

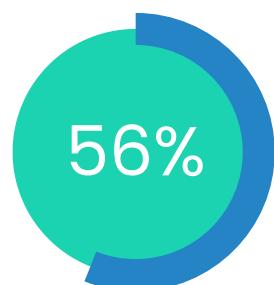


The threat isn't coming. It's already here.

While organisations have been fortifying defenses against external attackers, the biggest cybersecurity risk for decades has walked through the front door, been welcomed by employees, and is currently accessing your most sensitive data. It's AI, and the exposure is happening right now, you just don't know it yet.

The rush to embrace AI has created a serious security crisis. *The Stanford AI Index Report (2025)* documented a staggering 56% surge in AI-related privacy and security incidents in 2024 alone, with 233 reported cases of data breaches, algorithm failures, and compromised sensitive information.

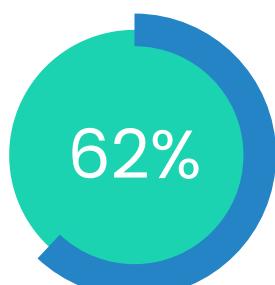
The Stanford AI Index Report (2025)



Surge in AI - related privacy and security incidents in 2024



data breaches and algorithm failures reported in 2025



of mid-sized organisations had already deployed AI agents by 2025

The uncomfortable truth: these are only the incidents that were discovered. How many breaches and exposures are lurking undetected in the datasets of AI platforms you don't even know your staff are using?

By 2025, 62% of mid-sized organisations had already deployed AI agents into production environments. **Nearly a quarter** are using them to automate workflows, engage customers, and drive growth. These aren't passive tools, they're active participants accessing internal systems, querying databases, and interacting directly with critical infrastructure.

Meanwhile, employees are routinely **feeding AI tools data** without thought of security or data loss prevention: client data, intellectual property, financial records, strategic plans, and confidential communications. Every prompt, every uploaded document, every "help me draft this" request is potentially creating a permanent record outside your control.

**This isn't a future risk.
This is your current reality.**

The Crisis Unfolding In Your Blind Spots

Without robust governance, AI creates tangible vulnerabilities that can compromise the foundations of organisational security, compliance, and operational integrity, often without triggering a single alarm.

“ Shadow AI has become an epidemic

Across your organisation, employees are using unapproved AI platforms that security teams don't know exist: personal ChatGPT accounts, free AI assistants, browser extensions, and productivity tools. Each one is a potential data exfiltration point. When sales teams paste client information into unapproved AI tools, legal departments upload contracts for analysis, and finance teams feed budget data into free assistants, that information could be stored indefinitely, used to train commercial models, or exposed through platform breaches you'll never hear about.

You have no visibility into where your data is going, who can access it, or whether it can ever truly be deleted.

AI agents granted broad system access don't need **malicious intent** to cause serious damage. Poor configuration, monitoring, or unclear boundaries are sufficient. These agents can inadvertently expose confidential information, misinterpret permissions, cache sensitive data insecurely, or create unintended pathways between systems. The breach doesn't announce itself, it happens quietly, in the background.



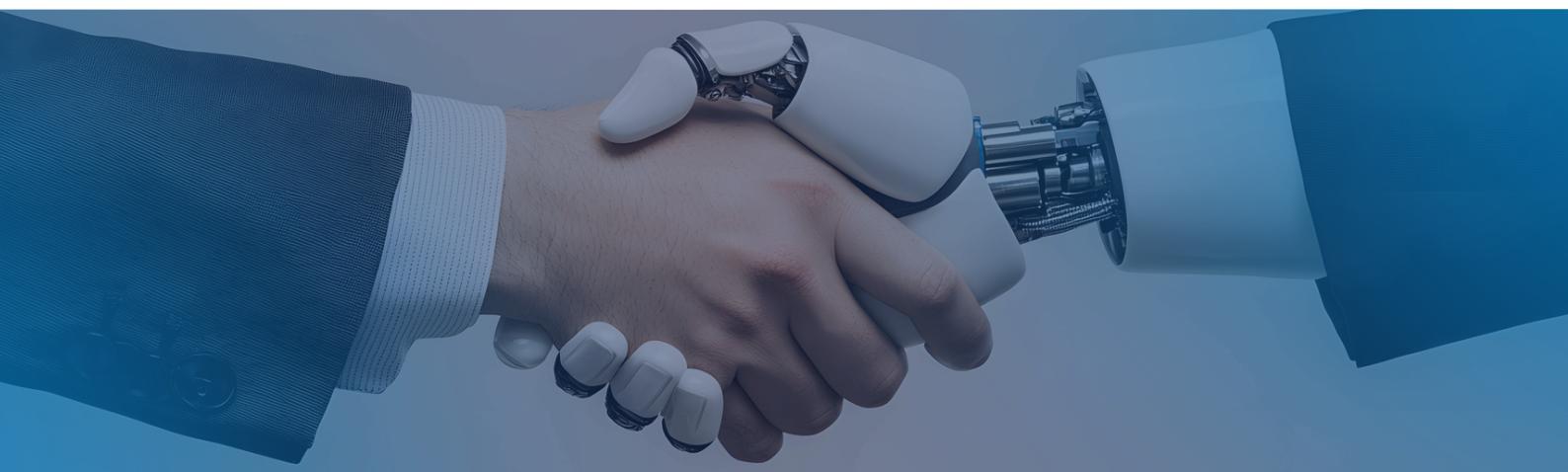
Even more concerningly, GDPR, financial regulations, and sector-specific compliance frameworks are being breached at scale by AI systems processing personal data without proper consent, transparency, or auditability. The **penalties are severe** – substantial fines, reputational destruction, and loss of trust that can cripple businesses. Yet organisations continue deploying AI systems first and asking compliance questions later, if at all.

AI agents with excessive access don't just create security risks, they create operational landmines. They may misclassify sensitive data, interfere with critical workflows, and move laterally across systems in ways that are difficult to detect.

AI: The Insider Threat You Invited In

AI is probably the single biggest cybersecurity risk to your data right now, not ransomware, not phishing, not sophisticated nation-state actors (however, we're not saying not to pay attention to these things).

Traditional insider threats require human intent, such as a disgruntled employee, a careless contractor, or a malicious actor. **AI doesn't need intent.** It needs opportunity, which you've given it in abundance. It has access to your systems, your data, your workflows, operating continuously without oversight and making thousands of decisions and data interactions that no human could manually review.



The attack surface AI creates is fundamentally different from anything your security architecture was designed to handle. Your data loss prevention tools were built to catch humans copying files or sending suspicious emails.

They weren't designed for AI agents that legitimately query databases, access repositories, and process information. They make connections, correlations, and lateral moves that appear acceptable to traditional security systems but could expose your entire data ecosystem.

Worse, AI creates what security professionals call

“ Compound vulnerabilities

where multiple seemingly minor risks combine to create serious exposure. An AI agent with slightly too much access, combined with inadequate logging, employee shadow AI use, and insufficient data classification, equals a data breach waiting to happen. And when it happens, you'll struggle to understand what was compromised, let alone how to prevent it recurring.

The Three Pillars You Can't Afford to Ignore

If AI is your biggest security threat, then your defence must be comprehensive.

Three **critical disciplines** must work in conjunction: Data Protection, Data Loss Prevention (DLP) and Data Security Posture Management (DSPM). Individually, they're insufficient. Together, they form your only viable strategy for managing AI security risks effectively.



1) Data Protection: Understand what you need to protect

You can't protect what you don't understand so before securing data against AI-related risks, you must know what data exists, where it lives, who has access, and its sensitivity level.

“ This isn't a one-time audit, it's a continuous cycle.

Data protection in the AI era means implementing comprehensive classification systems that automatically identify and label sensitive information. Every piece of data needs classification that determines how it can be accessed, processed, and shared.

But classification alone isn't sufficient, you need encryption for data at rest and in transit, access controls that enforce least privilege principles, and retention policies ensuring information doesn't persist longer than necessary. More critically, you need **data protection measures** extending to AI systems themselves, ensuring sensitive information is anonymised, tokenised, or restricted before any AI agent touches it.

The reality is if your data protection isn't robust before AI deployment, AI will expose every gap, every misconfiguration, every unclassified file that shouldn't exist. It will find your sensitive data faster than you can protect it.

2)

Data Loss Prevention: Stop the Bleeding Before It Starts

DLP systems are your **active defence** against data exfiltration they monitor, detect, and prevent sensitive information from leaving your control.

Legacy DLP focused on human behaviour such as employees copying files to USB drives, forwarding emails with attachments, and uploading documents to personal cloud storage. Modern DLP must account for AI interactions such as prompts containing sensitive data, AI-generated outputs that inadvertently include confidential information, API calls exposing more data than intended, and AI agents that cache or log sensitive inputs.



Critically, DLP must integrate with your AI governance framework. It's not enough to detect violations, you need to understand why they're happening, which AI tools are involved, and what data is at risk.

The challenge is that DLP can only prevent losses it can see. If you lack visibility into where data flows, which AI tools are in use, or what permissions AI agents have, your DLP system is operating with significant blind spots.

Your DLP strategy must enforce policies that:

- Block sensitive data from being shared with unapproved AI platforms
- Detect when employees use shadow AI tools and intervene in real-time
- Monitor AI agent activity for anomalous data access patterns
- Alert when AI systems attempt to process data beyond their permissions
- Redact or mask sensitive information automatically before it reaches AI models

3) **DSPM: The Only Way to See the Full Picture, Know what you have and where it is before your AI does**

Data Security Posture Management is the strategic capability that makes everything else possible. DSPM provides the continuous, comprehensive visibility into your data security posture that AI-enabled organisations desperately need but rarely have.

DSPM platforms discover and map all data assets across cloud environments, on-premises systems, SaaS applications, and critically, AI platforms and tools. They identify what data exists, where it's located, who has access, how it's classified (or whether it's classified at all), and what security controls are protecting it.

More importantly, DSPM **continuously assesses** your data security posture against compliance requirements and security best practices, identifying misconfigurations, excessive permissions, and vulnerabilities before exploitation. When an AI agent is granted overly broad access, DSPM flags it. When sensitive data appears in an unapproved location, DSPM detects it. When shadow AI introduces new data flows outside governance frameworks, DSPM reveals it.

In the context of AI security, DSPM is essential for:

- Discovering shadow AI by identifying unexpected data access patterns and unknown tools interacting with your systems
- Mapping AI data flows to understand what information AI agents can access and where AI-processed data is stored
- Assessing AI risk exposure by correlating sensitive data locations with AI system permissions
- Enforcing AI governance policies by continuously monitoring compliance with access controls and data handling requirements
- Detecting anomalous AI behaviour that could indicate misconfiguration, policy violations, or active compromise

The Integration Imperative

These three disciplines cannot function in isolation, Data Protection classifies and secures your data, DLP prevents unauthorised exfiltration, and DSPM provides the visibility that makes both possible.

Together, they create a **defence-in-depth** strategy that can actually withstand the unique challenges AI presents.

Without Data Protection, you're trying to secure data you don't understand and you have no active defence against exfiltration. Without DSPM, you're operating blind, unable to see where AI is creating risk until damage is done.

The organisations that will survive AI's security challenges are those implementing all three, integrating them tightly, and treating them as unified strategic capabilities rather than separate tools. Those that don't? They're learning **expensive lessons** about what happens when you race into AI without building the security foundation first.



Governance Is Not Optional, It's Survival

To manage AI effectively as both opportunity and threat, organisations must completely reimagine their approach to access, identity, and control.

AI agents must be treated as high-risk identities, not as tools or features but as digital entities with the potential to cause significant damage. Every AI agent needs clearly defined roles, strict permissions based on least-privilege principles, comprehensive audit trails, and continuous monitoring. If you can't answer "what did this AI agent access yesterday" with certainty, you don't have control.

You need explicit, **enforceable policies** defining which AI tools are approved, what data can be processed by AI systems, how employees should interact with AI platforms, under what conditions AI outputs can be trusted, and what happens when policies are violated. These policies must be technically enforced through access controls, DLP rules, and automated monitoring, not left to employee discretion.

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Consent, transparency, and auditability must be built into every AI deployment from day one, not retrofitted after regulators come knocking.

Privacy by design must be non-negotiable. Sensitive data should be encrypted, anonymised, tokenised, or restricted before any AI system touches it. AI should operate within data boundaries, not across your entire infrastructure.

Continuous monitoring is your **early warning system** – you need real-time visibility into AI behaviour: what systems AI agents access, what data they query, what outputs they generate, what anomalies occur. When something goes wrong, and it will, you need to detect it immediately, not discover it months later during an audit.

The Uncomfortable Truth

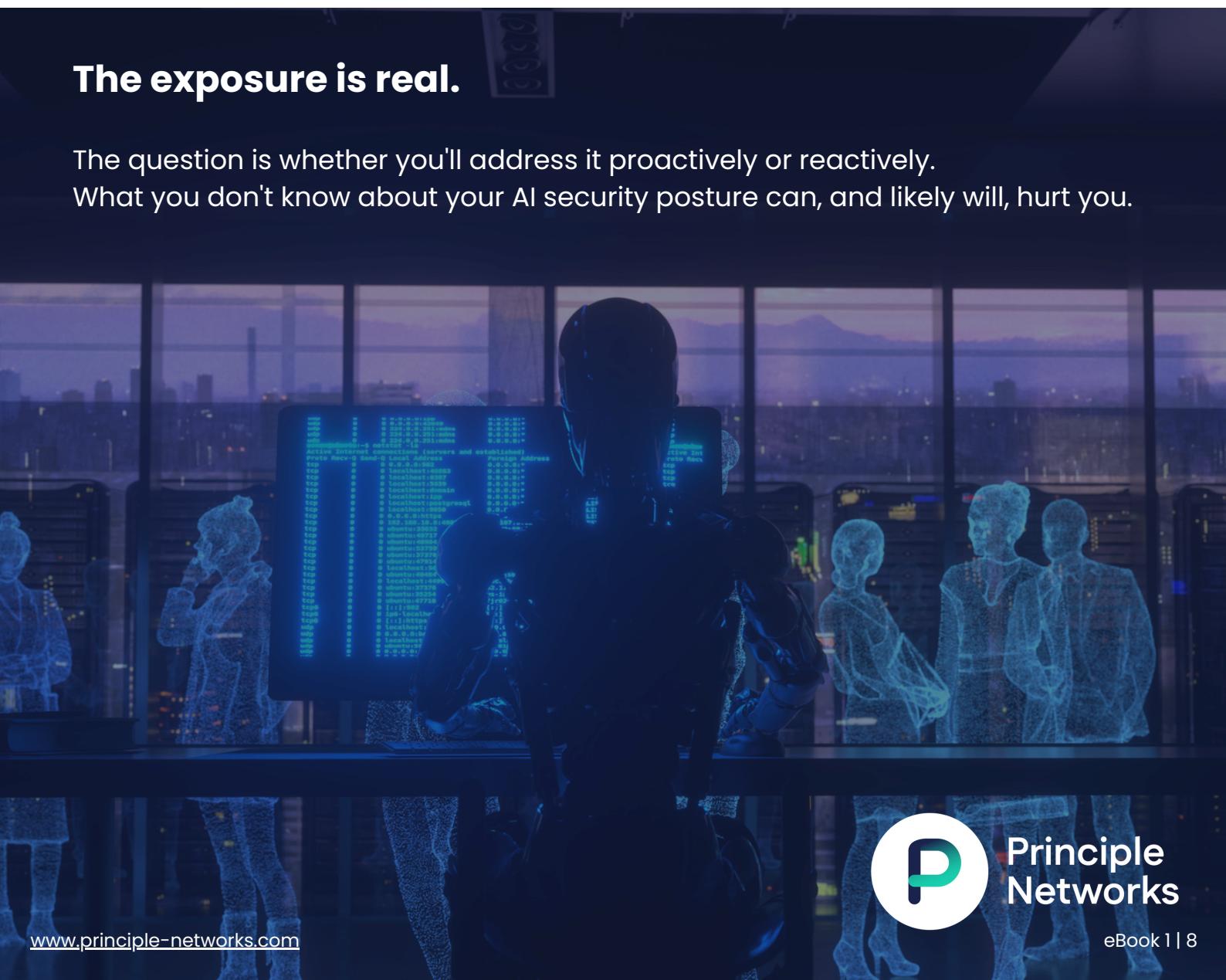
If you're using AI without robust governance, data protection, DLP, and DSPM working in concert, you have significant security exposure. You may not know it yet, but that doesn't make it less real.

The organisations that will lead aren't those that adopted AI first or deployed it fastest. They're the ones that understood AI for what it truly is - a powerful technology that requires robust security controls. They're the organisations that built proper **governance frameworks** before the breach, implemented comprehensive data security before the regulatory penalty, and treated AI security as the critical challenge it represents before learning that lesson the hard way.

You have a choice, you can continue racing toward innovation with minimal governance, hoping your luck holds, or you can acknowledge that speed without control isn't progress, it's risk accumulation.

The exposure is real.

The question is whether you'll address it proactively or reactively. What you don't know about your AI security posture can, and likely will, hurt you.





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“ Don’t Navigate AI Security Alone

Understanding your AI security exposure is the first step. Addressing it effectively requires expertise, experience, and the right approach.

Whether you're just beginning your AI journey or already have AI agents in production, we can help you understand where the risks are, what's at stake, and how to build robust governance frameworks that protect data while enabling innovation.

Ready to assess your AI security posture?



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