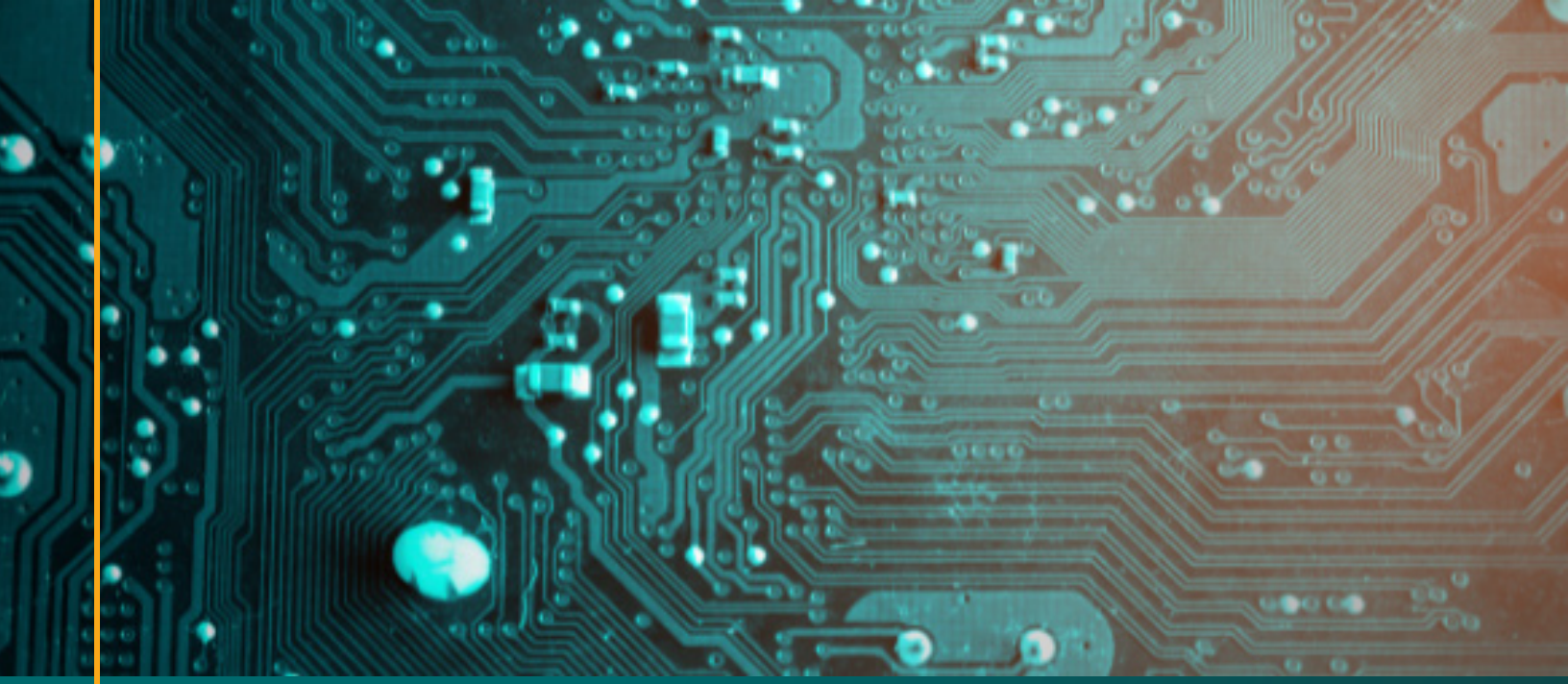

AI Cyber Threats in 2025

What SMBs Need to Know to Stay Secure

Since 1996
Prescient Solutions

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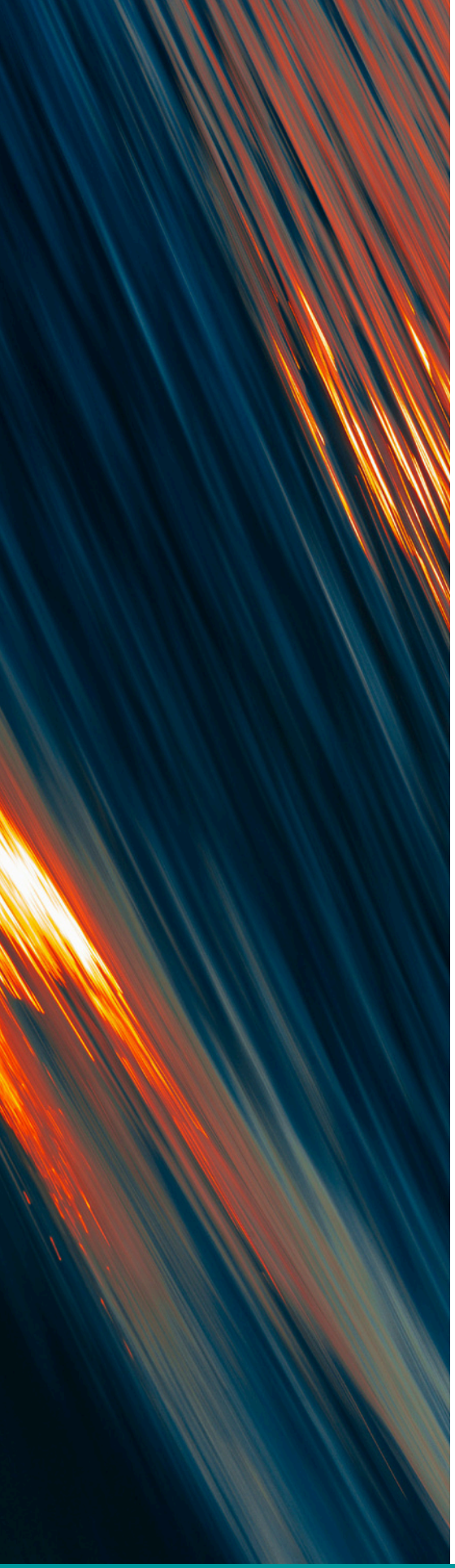
Executive Summary

As artificial intelligence (AI) becomes more accessible and widely adopted, cybercriminals are leveraging it to automate, scale, and refine attacks-making SMBs a growing target. This whitepaper explores how AI is shaping the cybersecurity threat landscape and what small to mid-sized organizations can do to stay protected in 2025 and beyond.



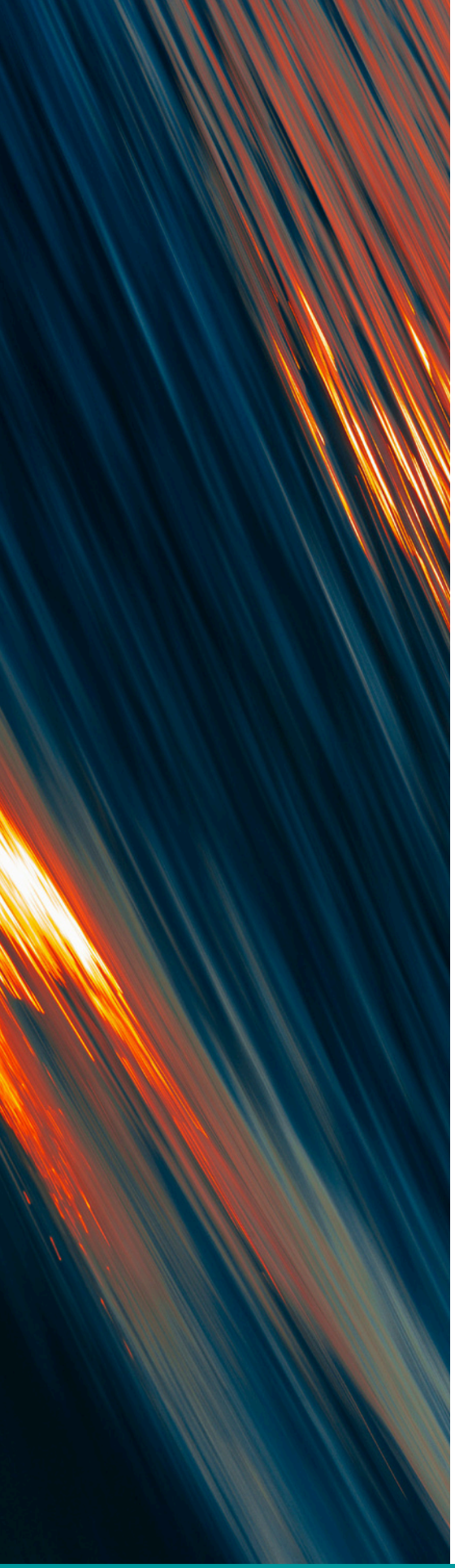
The Growing Role of AI in Cyberattacks

While AI enables incredible innovations in productivity, it also introduces new risks. Threat actors are now using AI to:

- Automate phishing emails that are more convincing and personalized
- Identify vulnerabilities in systems faster
- Generate deepfakes or synthetic identities for social engineering
- Obfuscate malicious behavior to avoid detection

Artificial Intelligence (AI), Generative AI (Gen AI), and Large Language Models (LLMs) represent increasingly powerful tools in this space:

- **Traditional AI** analyzes data to perform specific tasks, such as spam filtering or facial recognition.
- **Gen AI** creates new content (e.g., audio, images, or code) based on data patterns.
- **LLMs like ChatGPT, Bard, and LLaMA** are specialized Gen AI systems that generate and analyze text, often forming the backbone of automated phishing, malware creation, and even vulnerability exploitation.



Real-World Exploits Powered by AI

According to researchers at the University of Illinois, GPT-4 was able to exploit 87% of vulnerabilities when provided with CVE data—underscoring how quickly these tools can escalate real-world threats.

Moreover, these AI-powered tools are no longer confined to elite hacking groups. Many are now available as plug-and-play platforms on the dark web, enabling even low-skill attackers to launch sophisticated campaigns. As AI continues to evolve, the speed and scale of cyberattacks will only increase. This creates a significant challenge for SMBs that may not have the internal resources to match the pace of technological advancement. The need for intelligent, layered defenses—and trusted partners who understand both AI and cybersecurity—has never been greater.

Why SMBs Are Now Prime Targets

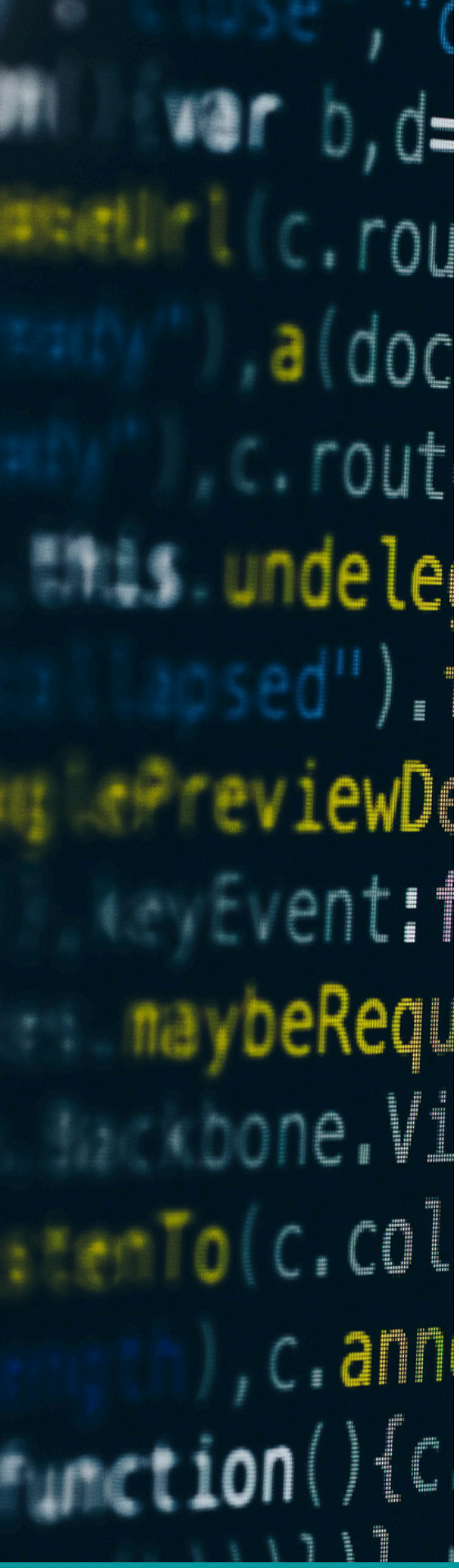
Many SMBs assume they are "too small to target," but cybercriminals often see them as low-hanging fruit. Common vulnerabilities include:

- Limited cybersecurity staffing
- Inconsistent patching and updates
- Over-reliance on legacy systems
- Minimal or no multi-factor authentication (MFA)

Recent attacks show the very real danger:

- A CEO voice deepfake was used to scam a subsidiary into wiring $243,000 to attackers (Forbes, 2025).
- In the MGM Resorts attack, hackers used AI voice cloning to bypass MFA and deploy ransomware-resulting in nearly $100 million in damages.
- Tools like Atlantis AIO enable criminals to automate credential-stuffing attacks across thousands of systems with little technical effort.

Cyberattacks on SMBs can lead to devastating consequences: data loss, business disruption, reputational damage, and legal exposure.



5 Actionable Steps for SMBs in 2025

1. **Enable Multi-Factor Authentication (MFA)** across all critical systems. Consider multi-form-factor authentication for sensitive operations.

2. **Invest in employee training** with real-world examples of AI-powered phishing, vishing, and voice-deepfake attacks.

3. **Establish endpoint protection** and consider modern solutions like CrowdStrike, SentinelOne, or Cylance for AI-enhanced security.

4. **Implement a regular patching and update cadence.** Prioritize known CVEs that are being exploited by AI-driven tools.

5. **Conduct periodic risk assessments and incident response simulations.** Align your incident response plan with NIST standards, covering detection, containment, recovery, and future prevention.

Additionally, AI-based threats require AI-based defense. SMBs should consider:

- AI-driven monitoring and intrusion detection
- Automated behavior analysis and threat isolation
- Developing baselines for user and system behavior to catch anomalies

How Prescient Solutions Can Help

At Prescient Solutions, we help SMBs close the gap between limited in-house resources and the growing complexity of modern cyber threats. Our approach includes:

- Managed security services with real-time monitoring
- AI-powered endpoint protection and threat response tools
- On-site and remote IT support
- Incident response planning using NIST best practices
- Proactive risk mitigation and recovery planning
- Deep expertise in SMB-specific IT environments

We help businesses identify and implement leading cybersecurity solutions—including tools like IBM QRadar, Zscaler, and Vectra AI—to keep pace with today's fast-moving threat landscape.

Expert Insight: Jerry Irvine

Jerry Irvine, CIO of Prescient Solutions, is a nationally recognized cybersecurity expert and the featured speaker of the webinar that inspired this whitepaper. His expertise shaped the content and insights presented throughout this document. With over 25 years of experience advising organizations across sectors and being an active member of the U.S. Secret Service Cyber Fraud Task Force (CFTF), Jerry brings deep insight into threat evolution and security strategy.

About Prescient Solutions

Prescient Solutions boasts over two decades of expertise as a leading managed IT services provider. Specializing in infrastructure, networking, cybersecurity, cloud-based solutions, and responsive help desk support, we cater to a diverse clientele, ranging from small businesses to global enterprises and government agencies. Our commitment to excellence is reflected in our tailored approach, where we leverage cloud-based models to offer scalable, cost-effective solutions that optimize daily operations. From devising robust IT strategies to providing ongoing maintenance and support, our dedicated team ensures seamless integration of technology into your business processes. We prioritize staying ahead of industry trends, enabling us to recommend and implement cutting-edge solutions that drive efficiency and productivity. With Prescient, you can focus on what matters most – growing your business with confidence.

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Prescient

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