Introduction
According to a 2019 SANS Institute survey sponsored by BlackBerry Cylance, there is now broad consensus among security professionals that artificial intelligence (AI) technologies can play an important role in reducing cyber risks. Exactly what that role is, however, and how it will evolve over time, remains unclear for many survey respondents. Opinions varied about the maturity of AI, its benefits and risks, and the baseline requirements for an AI-enabled security solution. Despite this, a majority of those surveyed see AI as an enabler for improved security and more than half report they are already using or plan to use security solutions with AI capabilities. Read on for more of the specific key takeaways from the survey results.

Survey Participant Demographics
SANS targeted professionals working or active in cybersecurity and involved with or interested in the use of AI for improving the security posture of their organization. 60% of the companies surveyed were small to medium-sized businesses.

60% of those surveyed view AI as enabling
67% believe that traditional tools will remain in force
46% regard AI-based security solutions as “maturing”

The number one leading barrier to adoption? AI technology lacking maturity.

How do respondents plan to use AI? Here are the top three applications for AI:

- Cybersecurity Defense: 75.2%
- Malware Prevention: 70.5%
- Advanced Threat Prevention: 68.6%

How does AI improve security? AI is seen as enabling, enhancing, and protecting.

- Improving the detection of unknown threats: 29.1%
- Reducing time between remediation and infection: 21.2%
- Enabling more effective overall protection: 18.5%

Is AI technology mature? It depends on who you ask, but confidence is growing.

The majority of respondents (45.8%) view AI-based security solutions as a maturing market, and the second largest group of respondents (34.7%) feel it is a still-immature market, however security staff expressed more confidence in AI-driven solutions than their management counterparts.

What technologies are part of an AI-enabled solution? Here are the top three:

- Predictive Analytics: 76.2%
- Deep Learning Platforms: 73.5%
- Machine Learning Platforms: 73.0%

AI vs. human intelligence — What cognitive abilities are expected?

Most respondents expect AI solutions to demonstrate cognitive capabilities akin to those of humans, such as: learning from experience (81.3%), predicting outcomes (78.1%), and discovering trends in the data sans human intervention (80.2%).

Download the report today for complete survey results to learn more about:
- How AI perceptions vary across industry sectors and organizational roles and responsibilities
- How AI technologies compare and contrast with human intelligence
- What respondents believe are the greatest AI risks and benefits
- How machine learning is driving advances in the field
- The most significant barriers to broader AI adoption
- Smart approaches for operationalizing an AI platform

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