

L'importanza dei Big Data nella cybersecurity

come monitorare la propria infrastruttura con sistemi intelligenti

DATA BEERS ROMA #01

DATA: WPP CAMPUS

LUOGO: VENERDÌ 17 FEBBRAIO



Sponsor Ufficiali



WHO I AM



- Mario Cuomo
- cloud solution architect
- 25 years old
- waiting for Master degree in Computer Science – Roma Tre University
- enthusiast for algorithms, cryptography

AGENDA

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- BIG DATA OVERVIEW

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- MAIN TREND IN CYBERATTACK

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- MAIN TREND IN CYBERATTACK
- SENTINEL

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 - AS SIEM

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 - AS SIEM
 - AS SOAR

BIG DATA OVERVIEW

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BIG DATA OVERVIEW

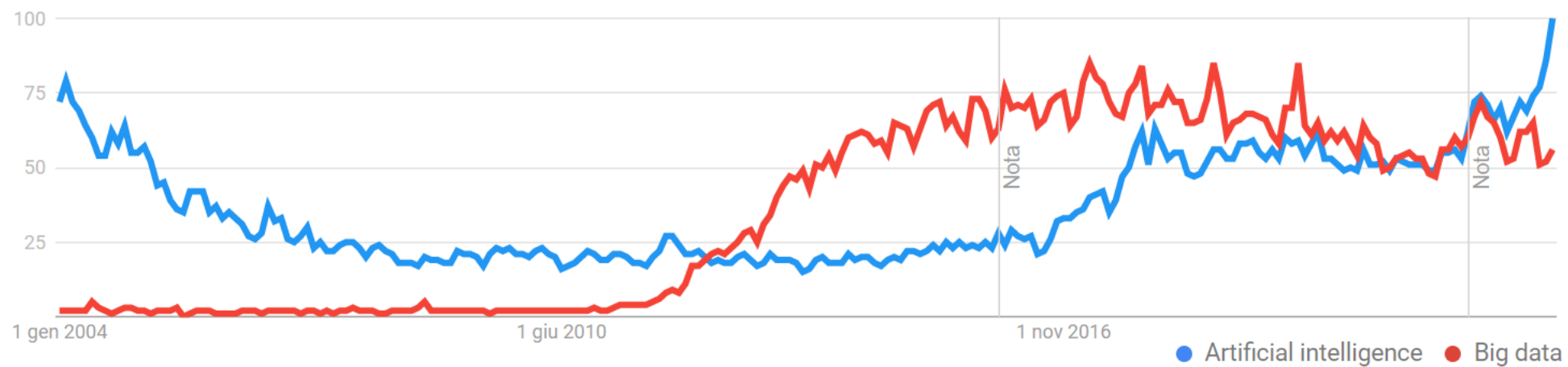
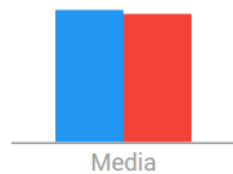
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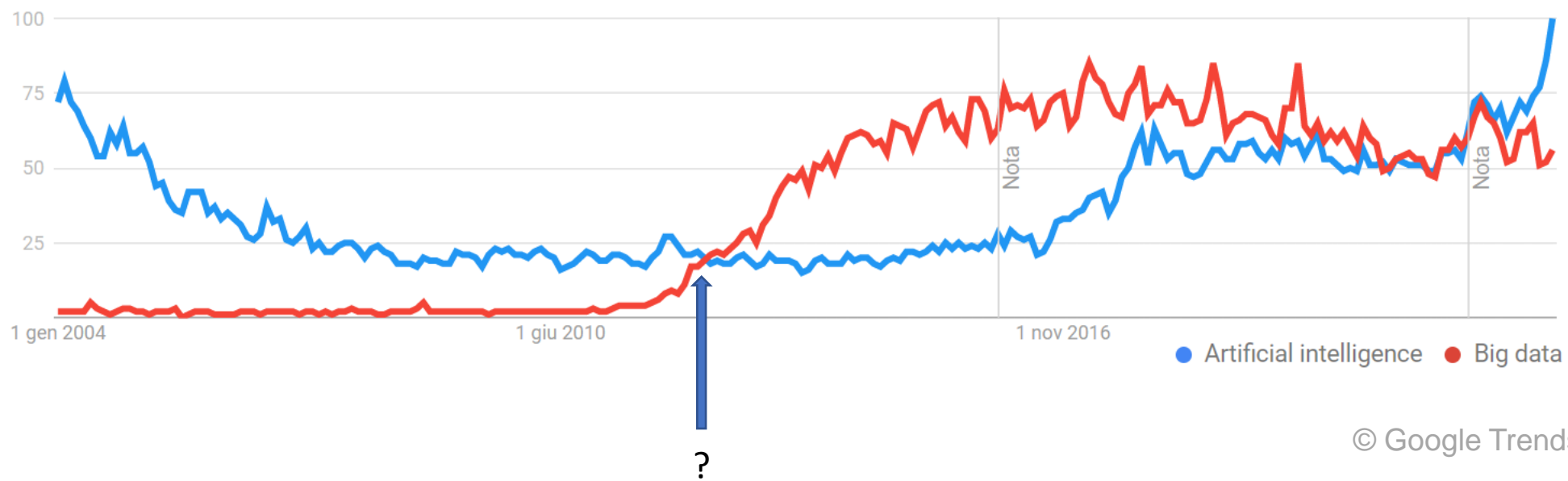
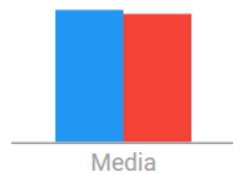
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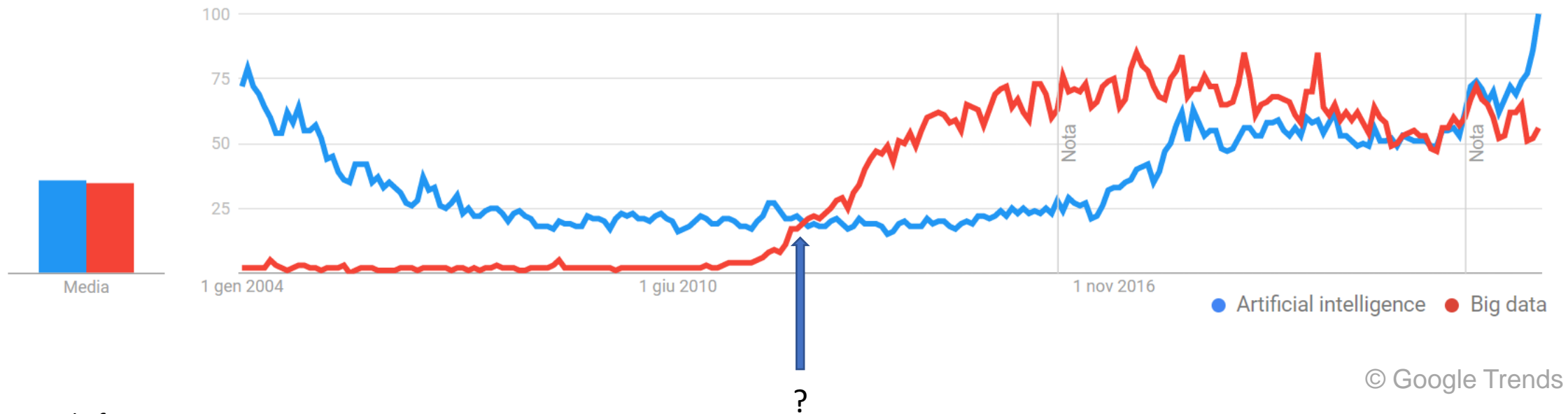
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 - insights gained



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- *Journal of Communications*
“approaching a thousand minutes of mediated content available for every minute available for consumption”. (April 2012)
- *Critical Questions for Big Data* (Danah Boyd e Kate Crawford)
“a cultural, technological, and scholarly phenomenon that rests on the interplay of: technology, analysis and mythology. (May 2012)
- *Big Data Research and Development Initiative* (March 2013)

MAIN TREND IN CYBERATTACK

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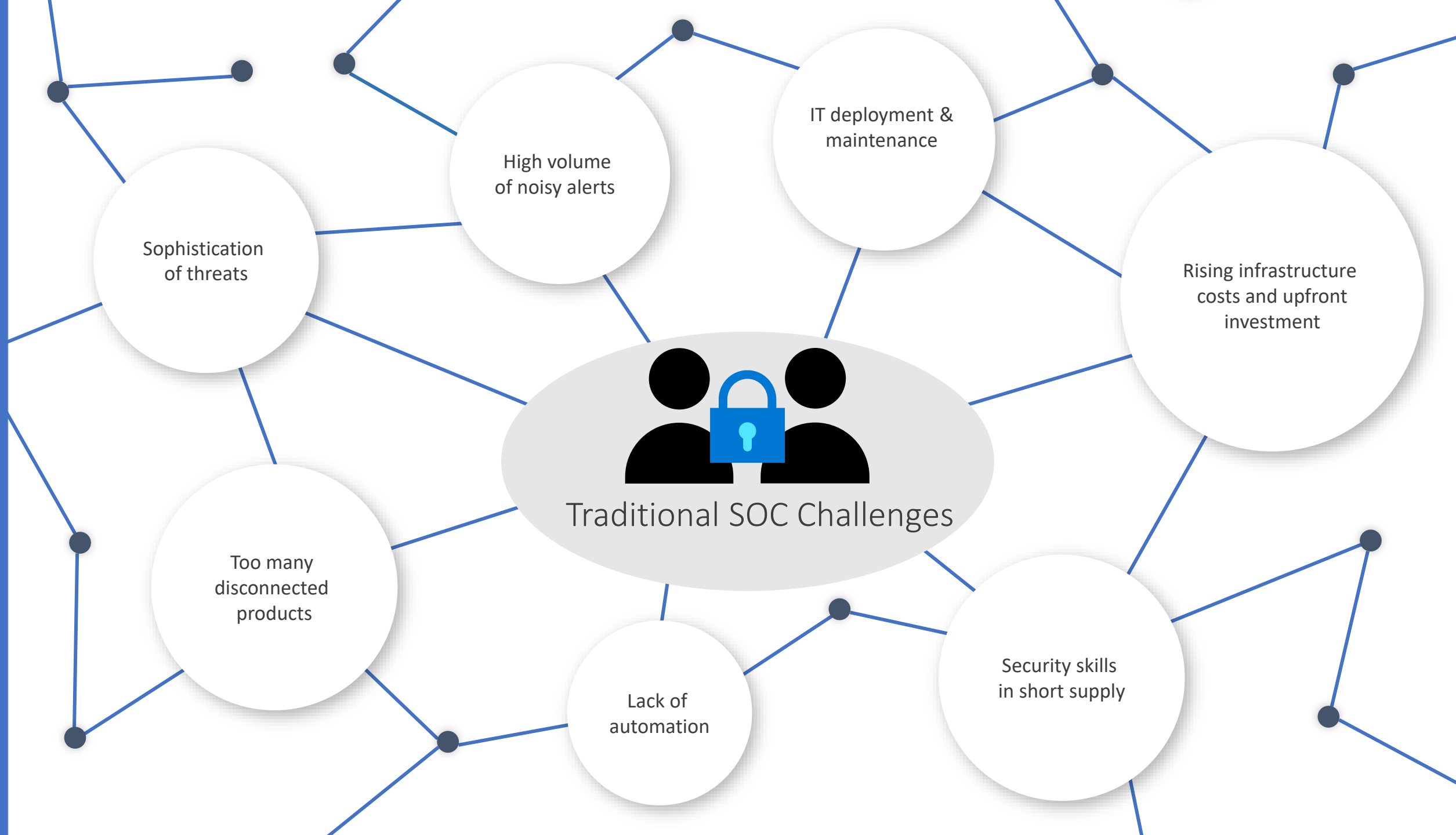
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 - \$ 2.66M



Sophistication
of threats

High volume
of noisy alerts

IT deployment &
maintenance

Rising infrastructure
costs and upfront
investment

Security skills
in short supply

Lack of
automation

Too many
disconnected
products

Traditional SOC Challenges



Security Operations
Team



Artificial Intelligence

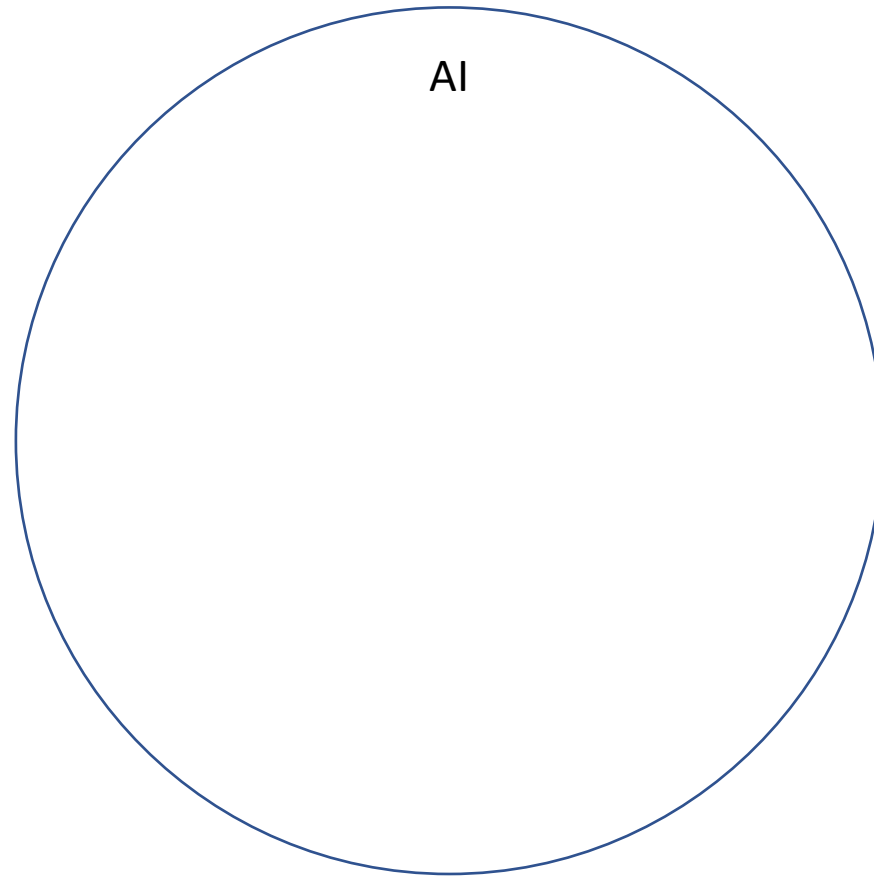
ARTIFICIAL INTELLIGENCE

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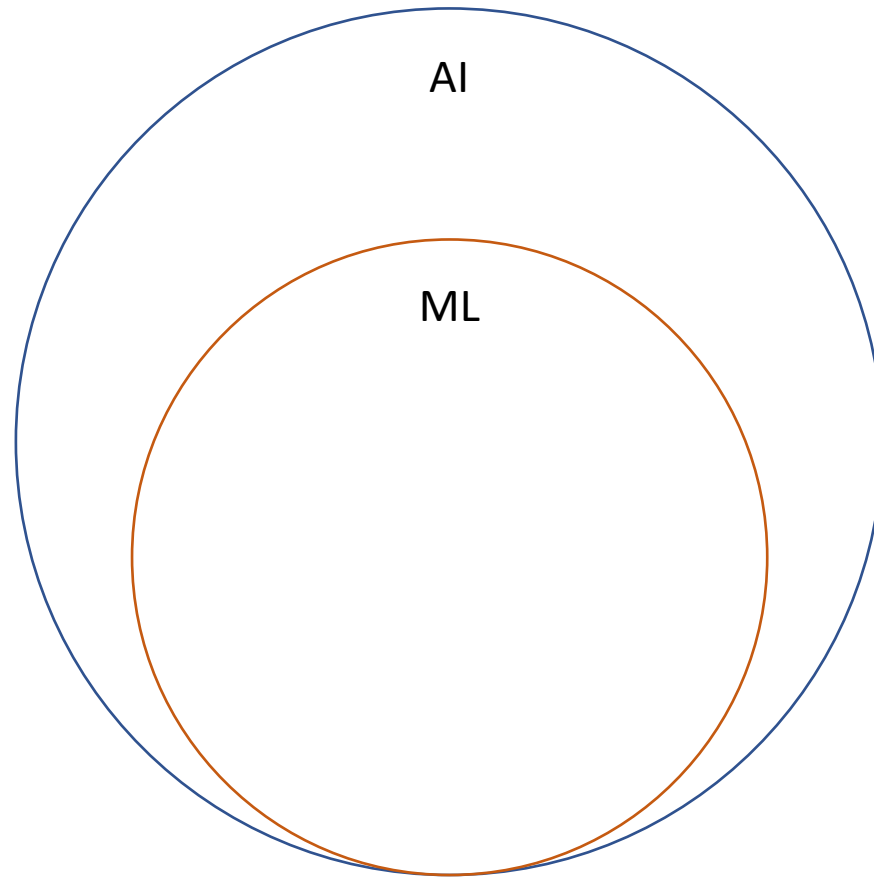
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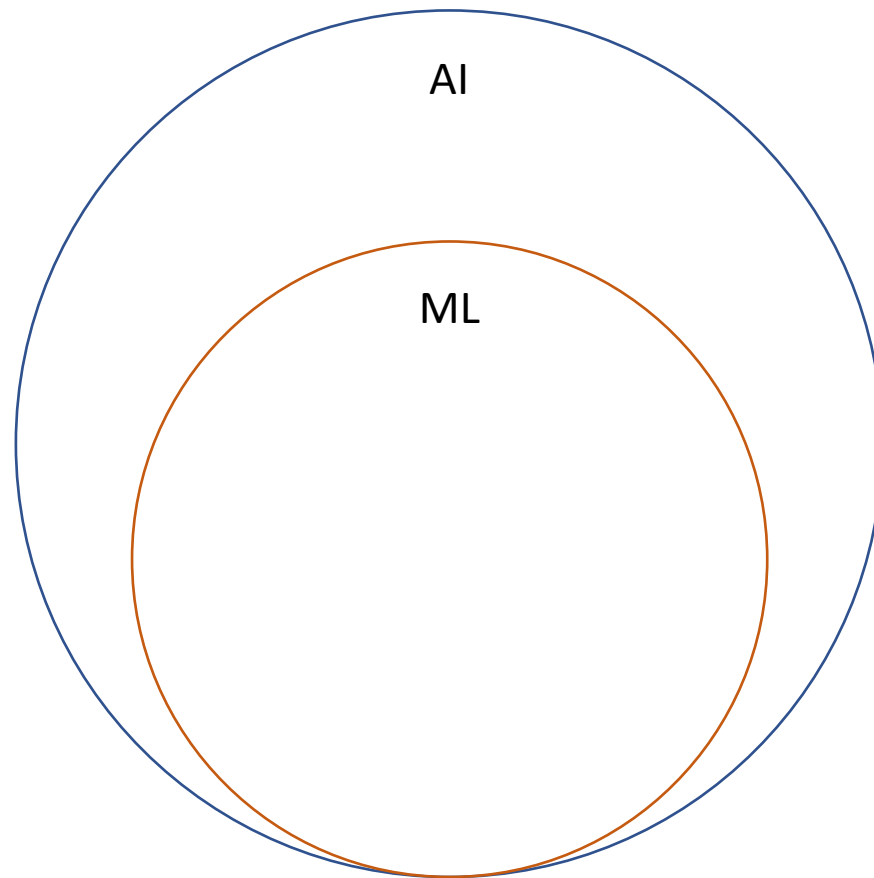


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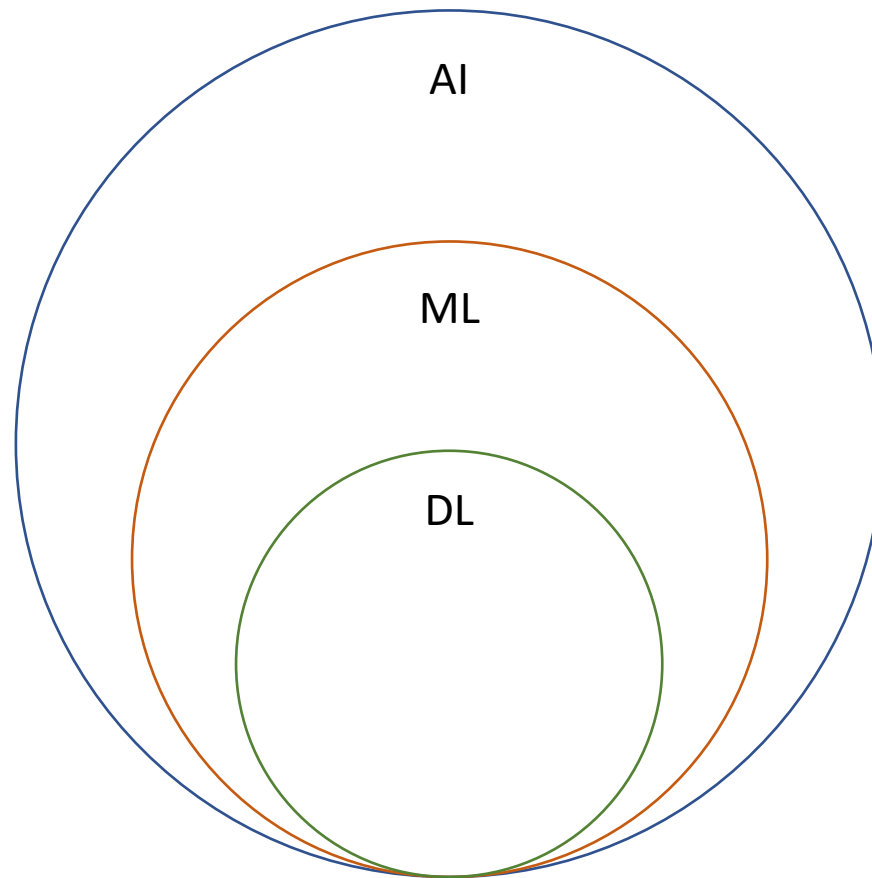
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Tom M Mitchell. Machine learning. Vol. 1. 9. McGraw-hill New York, 1997.



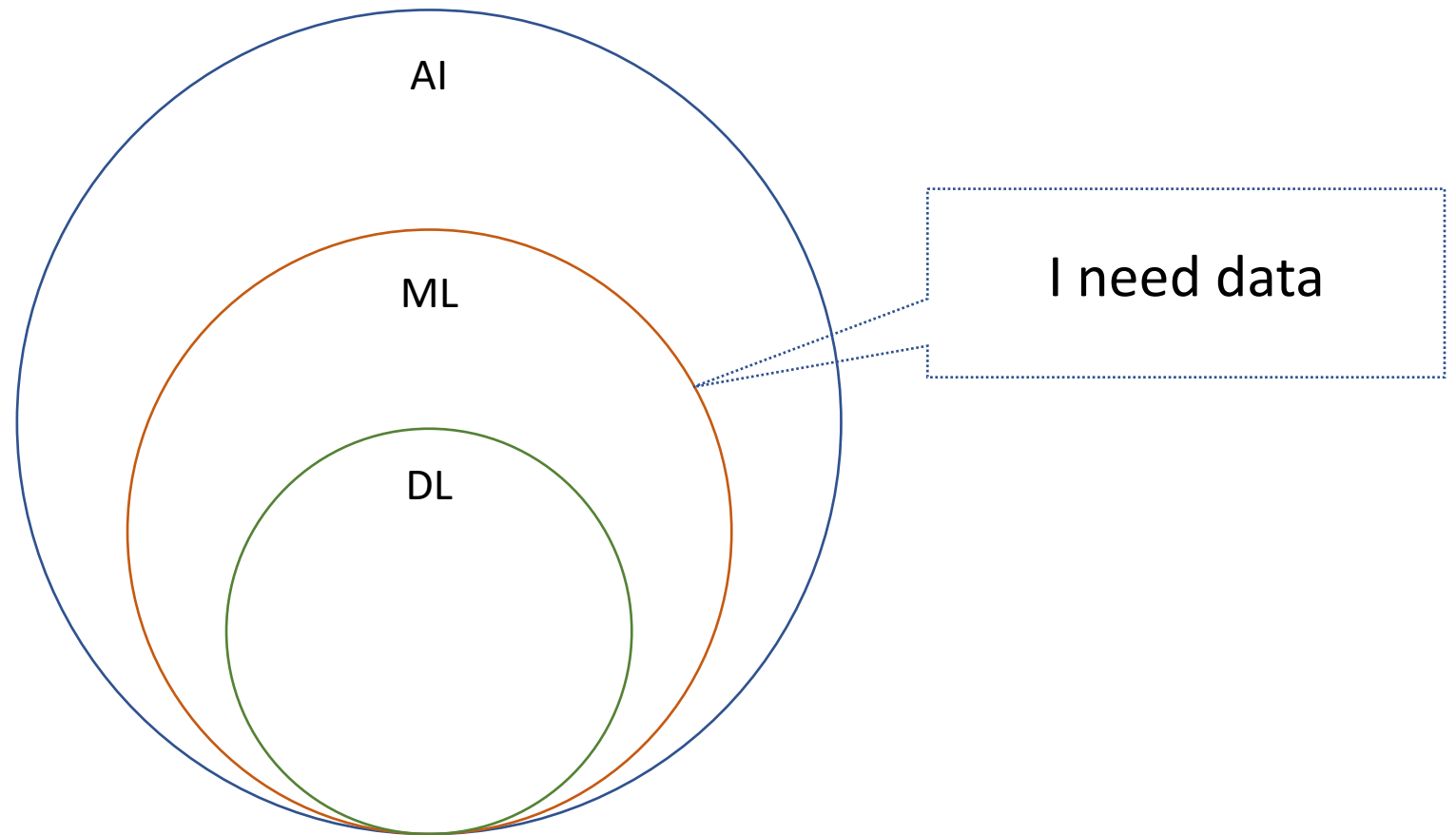
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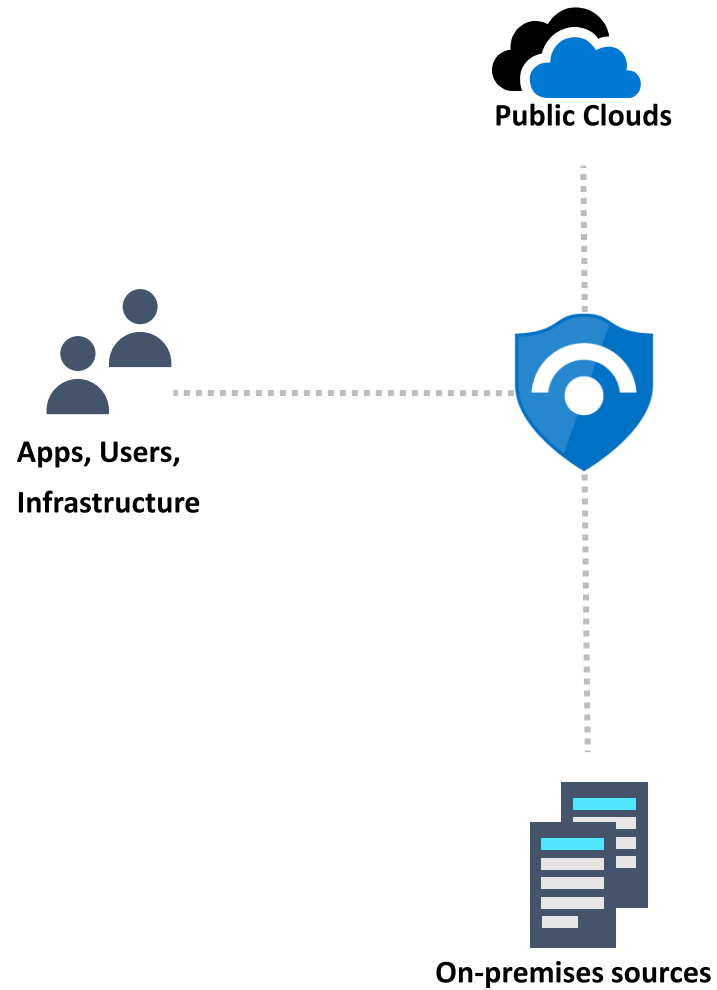


On-premises sources

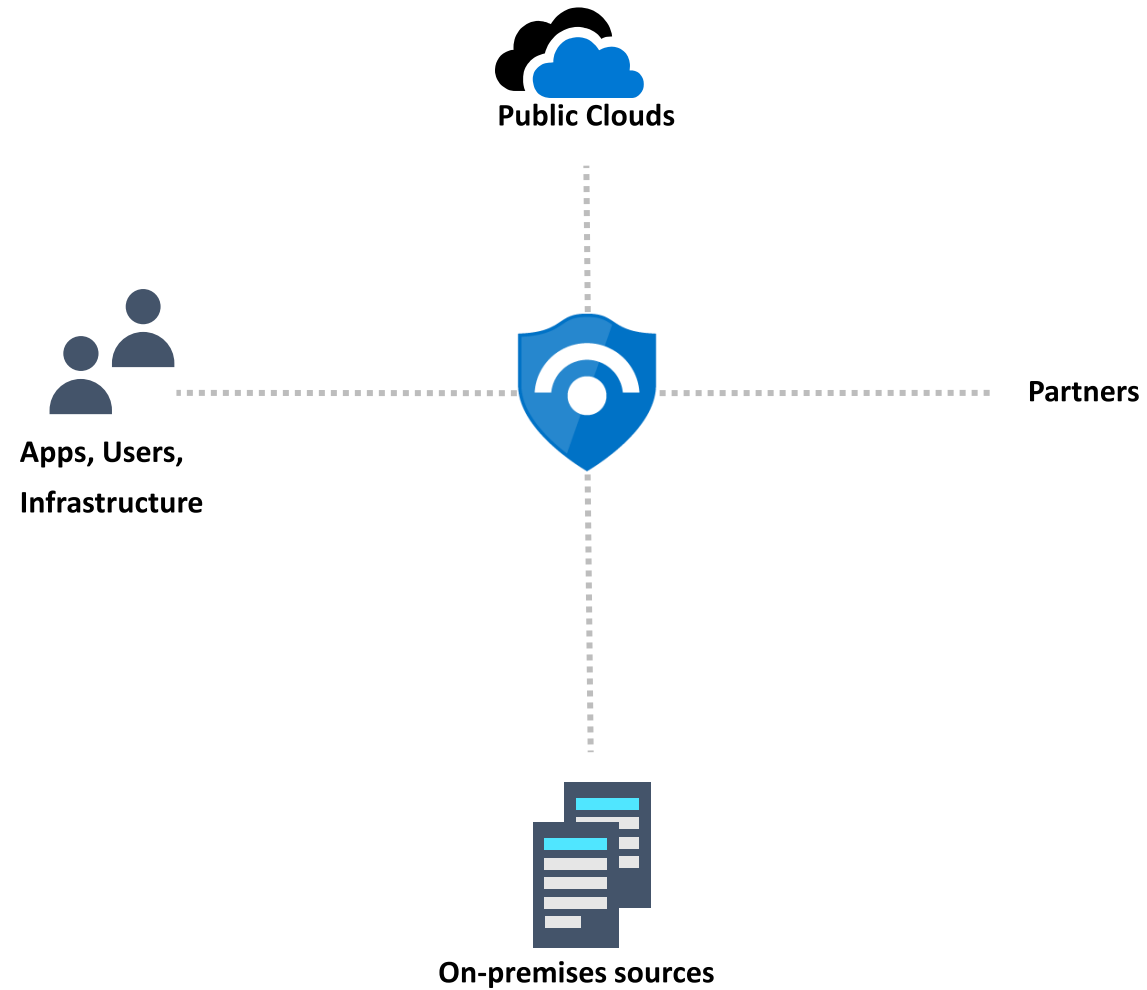
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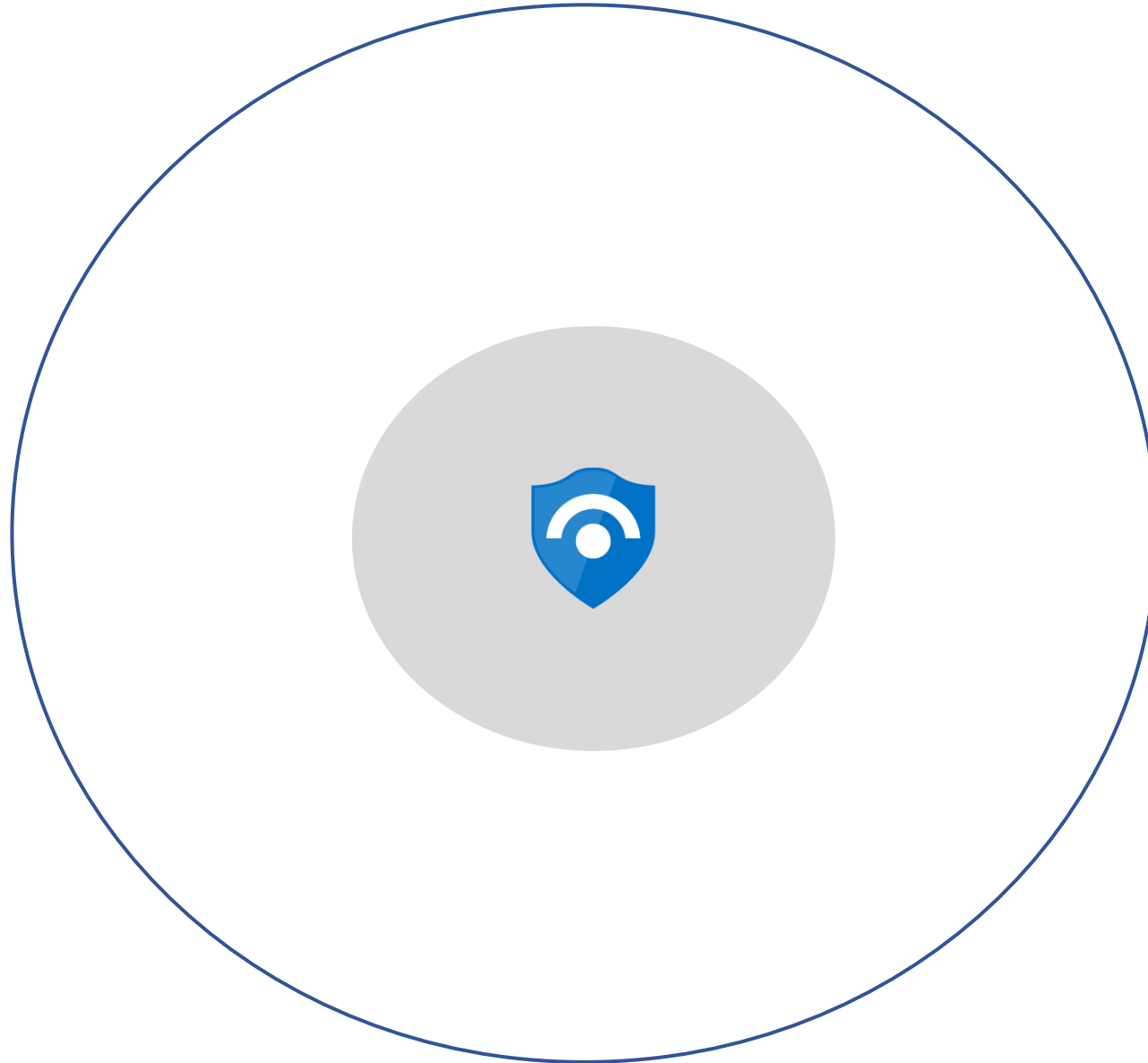
BIG DATA AND CYBERSECURITY



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SENTINEL



SENTINEL



Collect

Security data across your
enterprise



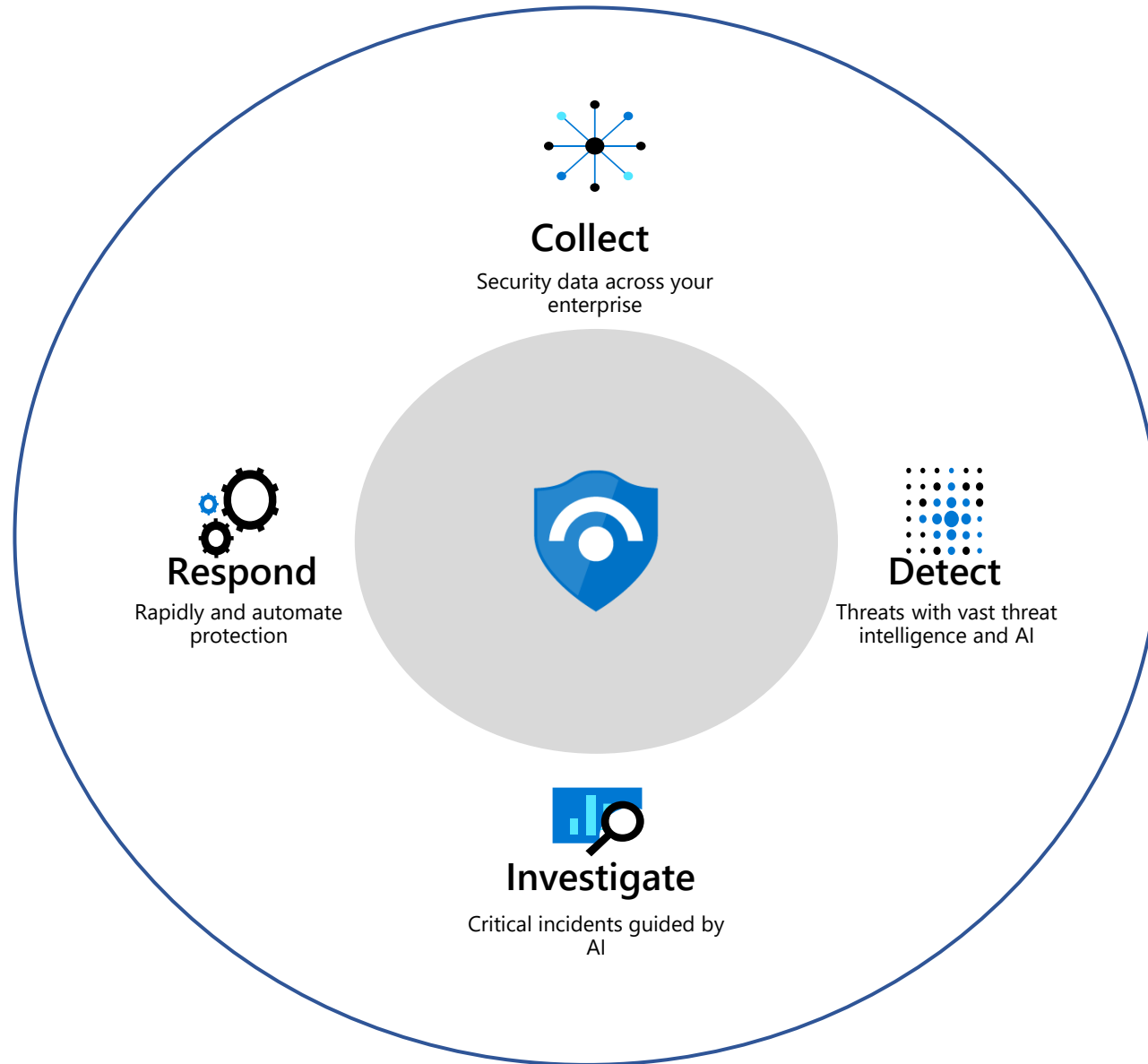
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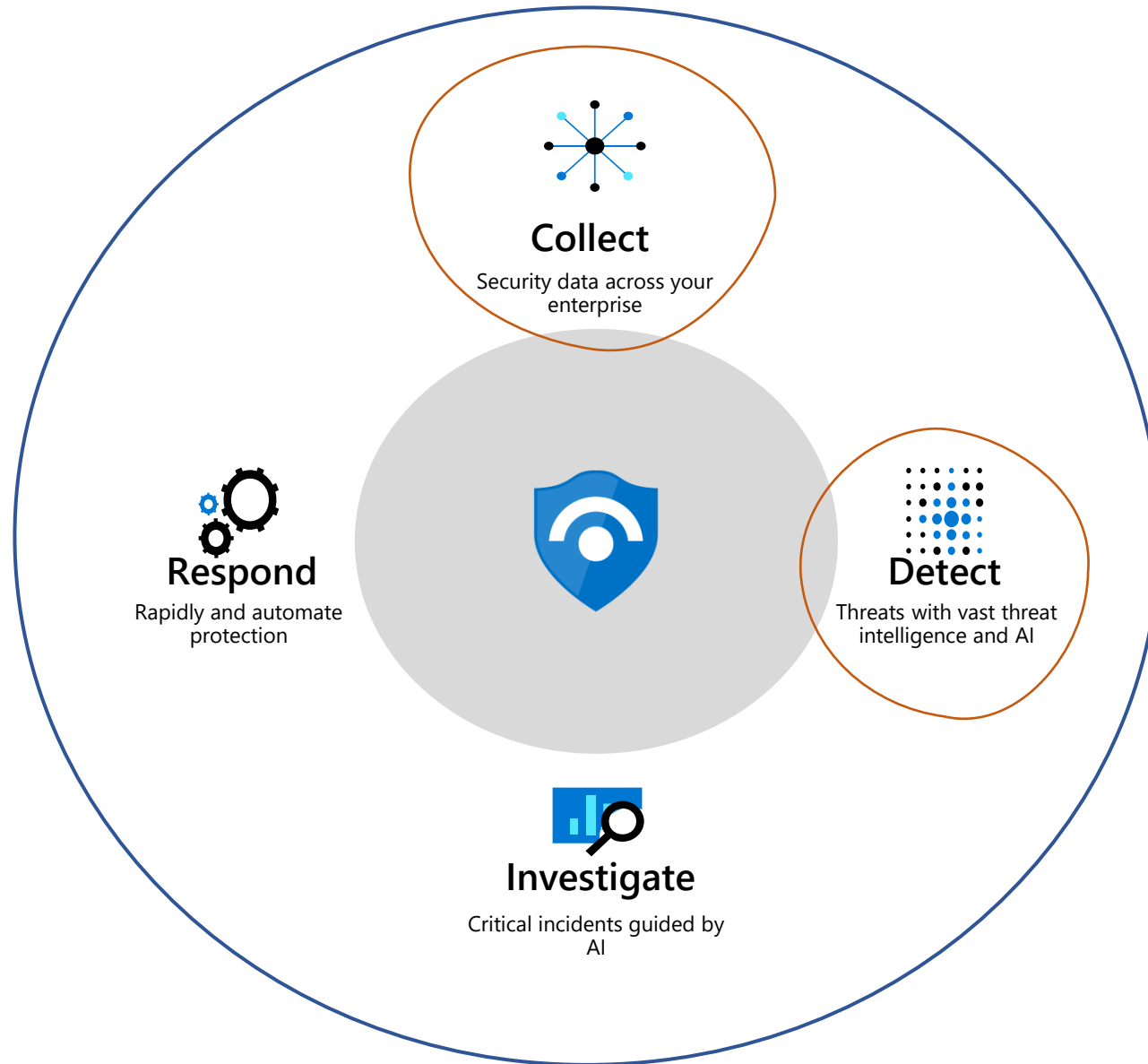
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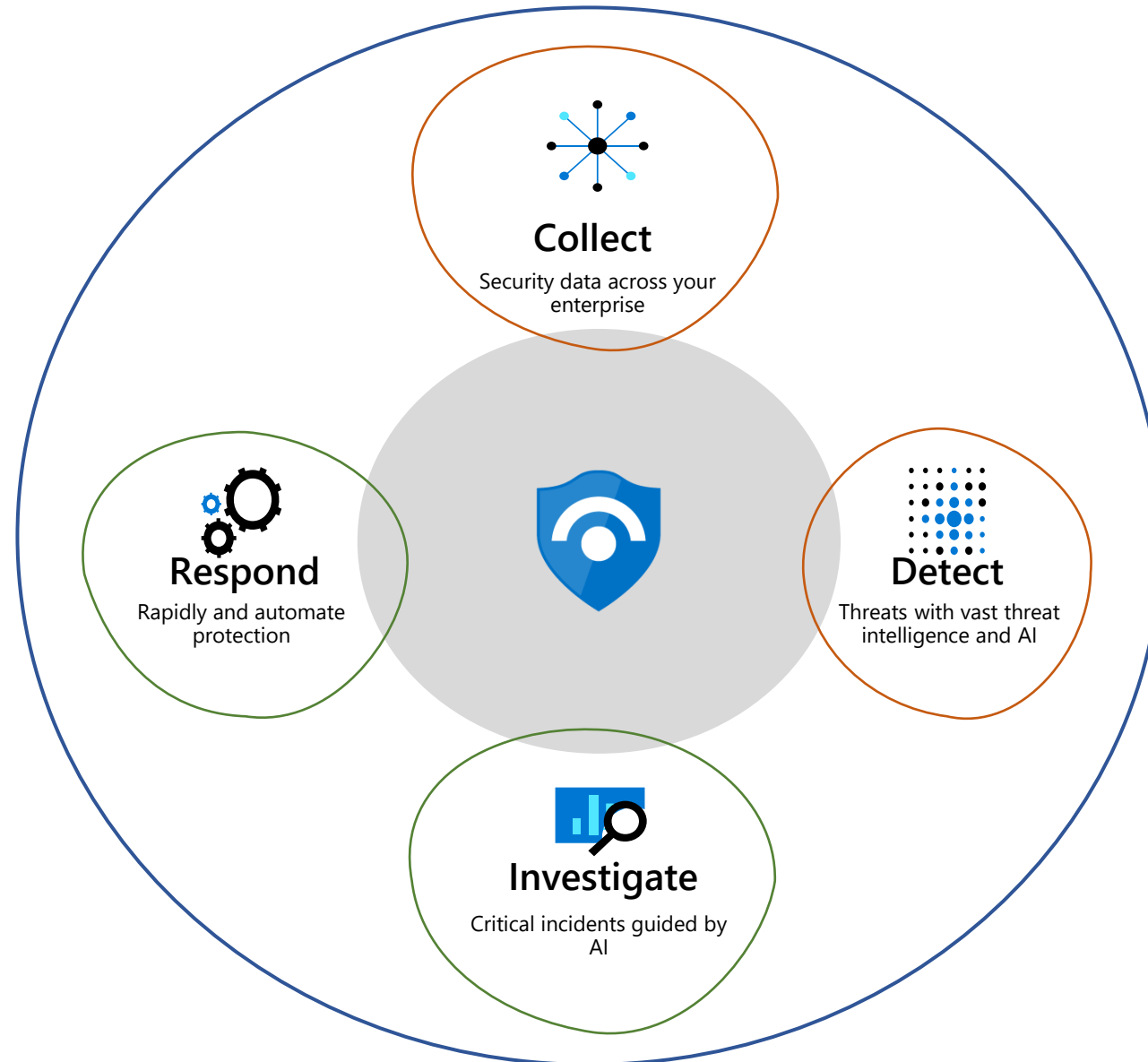


SENTINEL



○ SIEM - Security Information and Event Management

SENTINEL



SOAR - Security Orchestration, Automation, and Response   SIEM - Security information and event management

SOME EXAMPLE

- IBM Security QRadar SIEM
- McAfee Enterprise Security Manager
- Microsoft Sentinel
- SolarWinds Security Event Manager (SEM)

QUESTIONS?

THANK YOU!