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DEFENSE –
DYNAMIC SECURITY STRATEGIES FOR AN UNCERTAIN FUTURE

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4. CSF
5. AI AND WHY YOU MAY WANT TO CLEAN UP YOUR ROOM…

Tobias Gondrom

- 20 years information security experience
  (Group CISO, Global Head of Security, CISO, CTO Security)
  CISSP, CSSLP, CCISO
- 15 years management of application and software development
- Sloan Fellow M.Sc. in Leadership and Strategy,
  London Business School
- OWASP former chairman & global Board member,
  OWASP Project Leader for the CISO Survey
  (www.owasp.org)
- Author of Internet Standards on Secure Archiving, CISO training and co-author of the OWASP CISO guide
- Former Chair of the IETF Trust, Chair of IETF WGs on Web Security, DDoS Open Threat Signalling, etc.
  Member of the IETF Security Directorate
- Cloud Security Alliance, Hong Kong chapter board member

1. Attacks in an uncertain world – “sophisticated” attacks vs.“sophisticated” defenses - really…?

Wannacry at the NHS

Maersk Chairman: “NotPetya attack totally destroyed Maersk's computer network”´
- up to $300 Million

2017: 465,000 pacemakers vulnerable to hacking, need a firmware fix

ZERO TRUST SECURITY

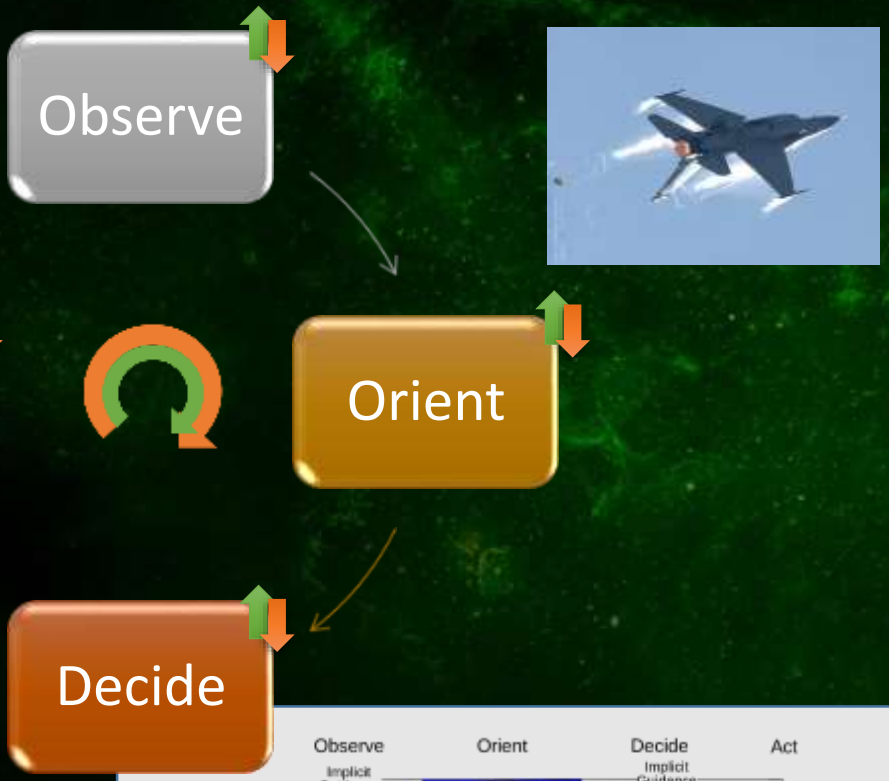
2. Do the basics well

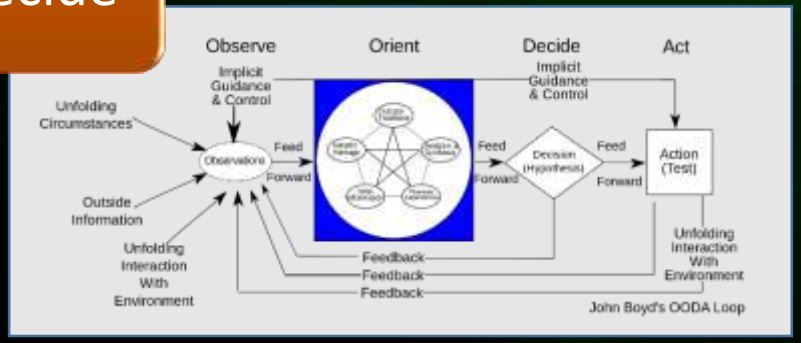
(sign in the gym above the weights…)

3. Dynamic Defense

- From static....

to dynamic...
OODA Loop





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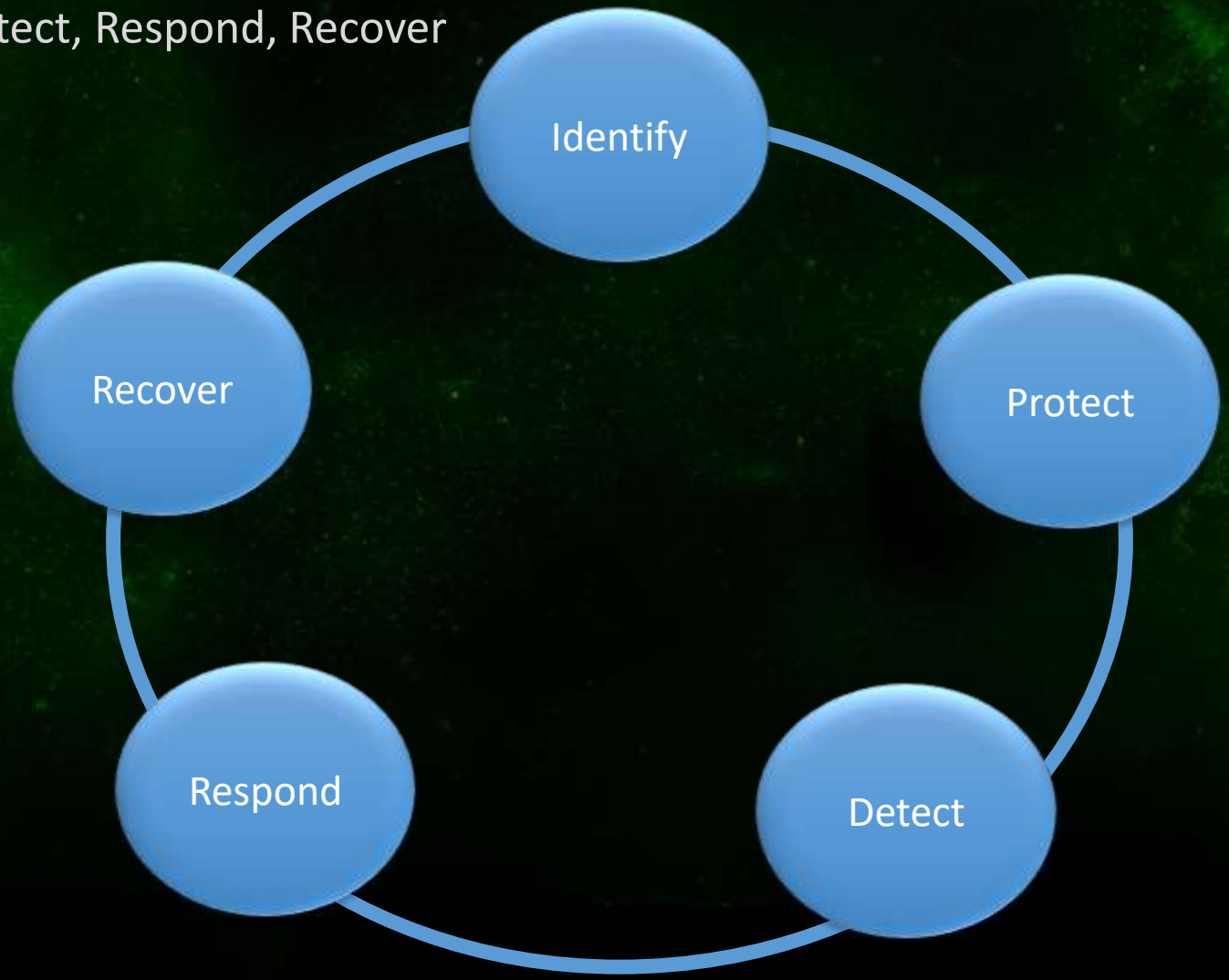
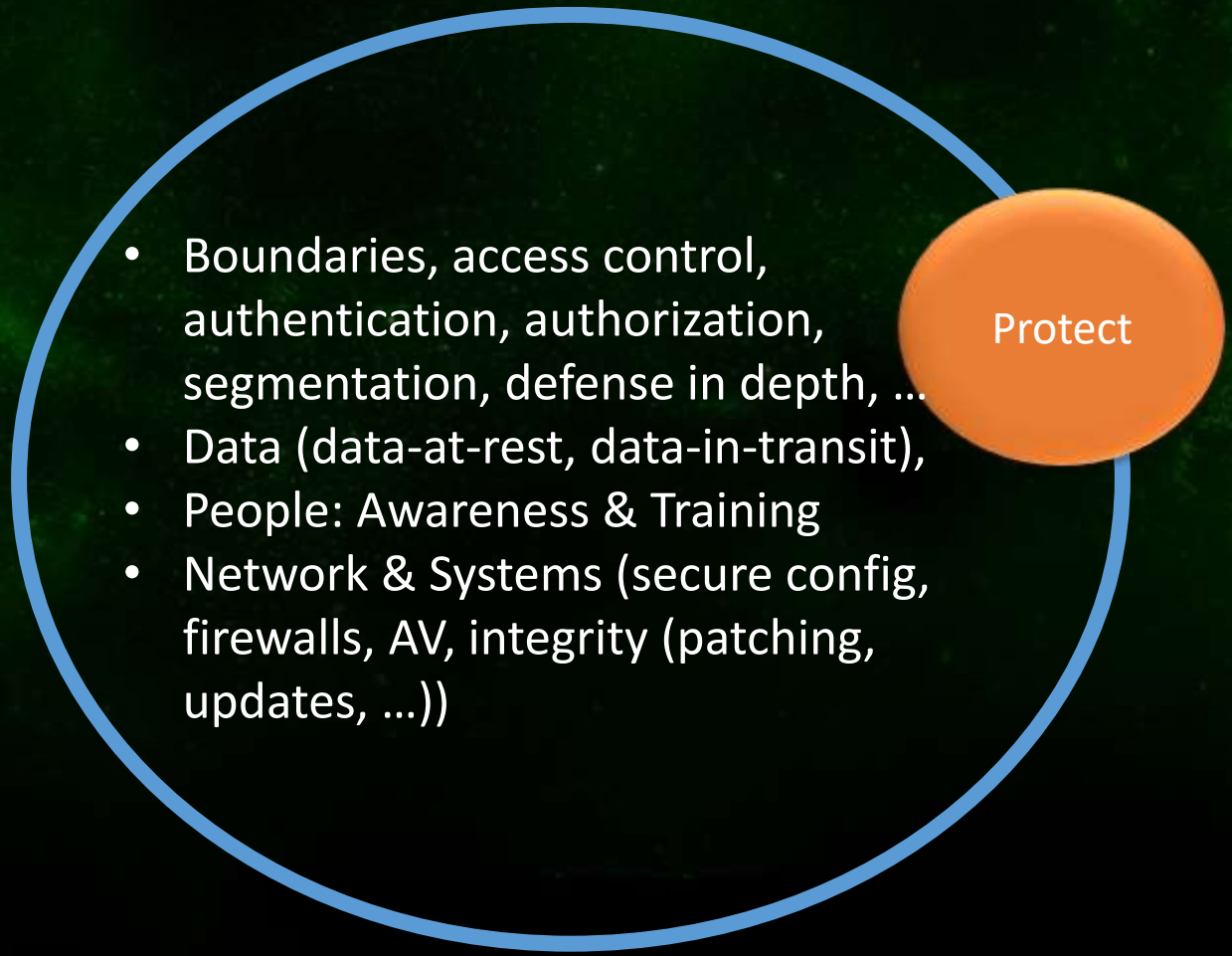
4. NIST Cyber Security Framework (1.1)

From Protect
=> Identify, Protect, Detect, Respond, Recover



4. NIST CSF (1.1): what does this mean for us?

Add capabilities & investments from Protect
=> Identify, Protect, Detect, Respond, Recover



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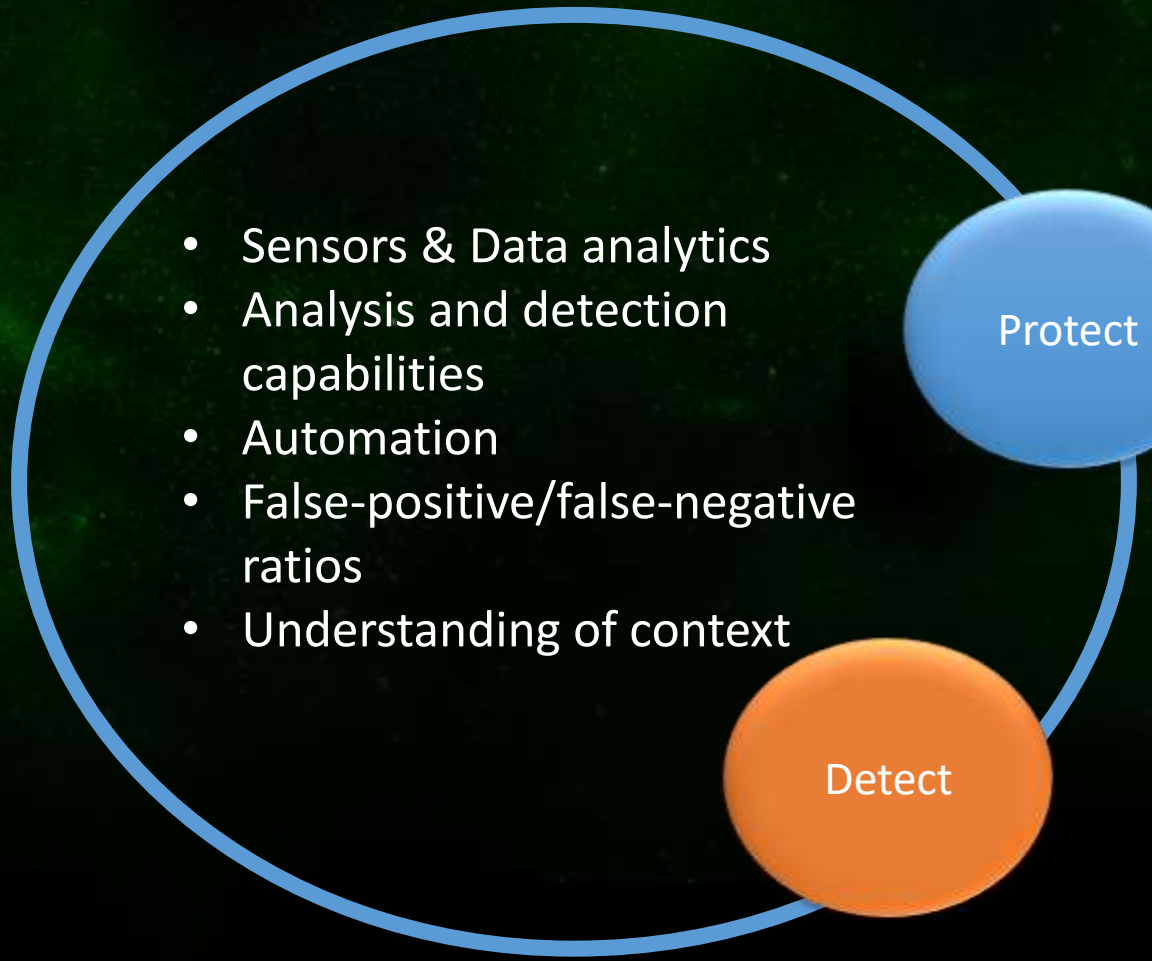

- Boundaries, access control, authentication, authorization, segmentation, defense in depth, …
- Data (data-at-rest, data-in-transit),
- People: Awareness & Training
- Network & Systems (secure config, firewalls, AV, integrity (patching, updates, …))

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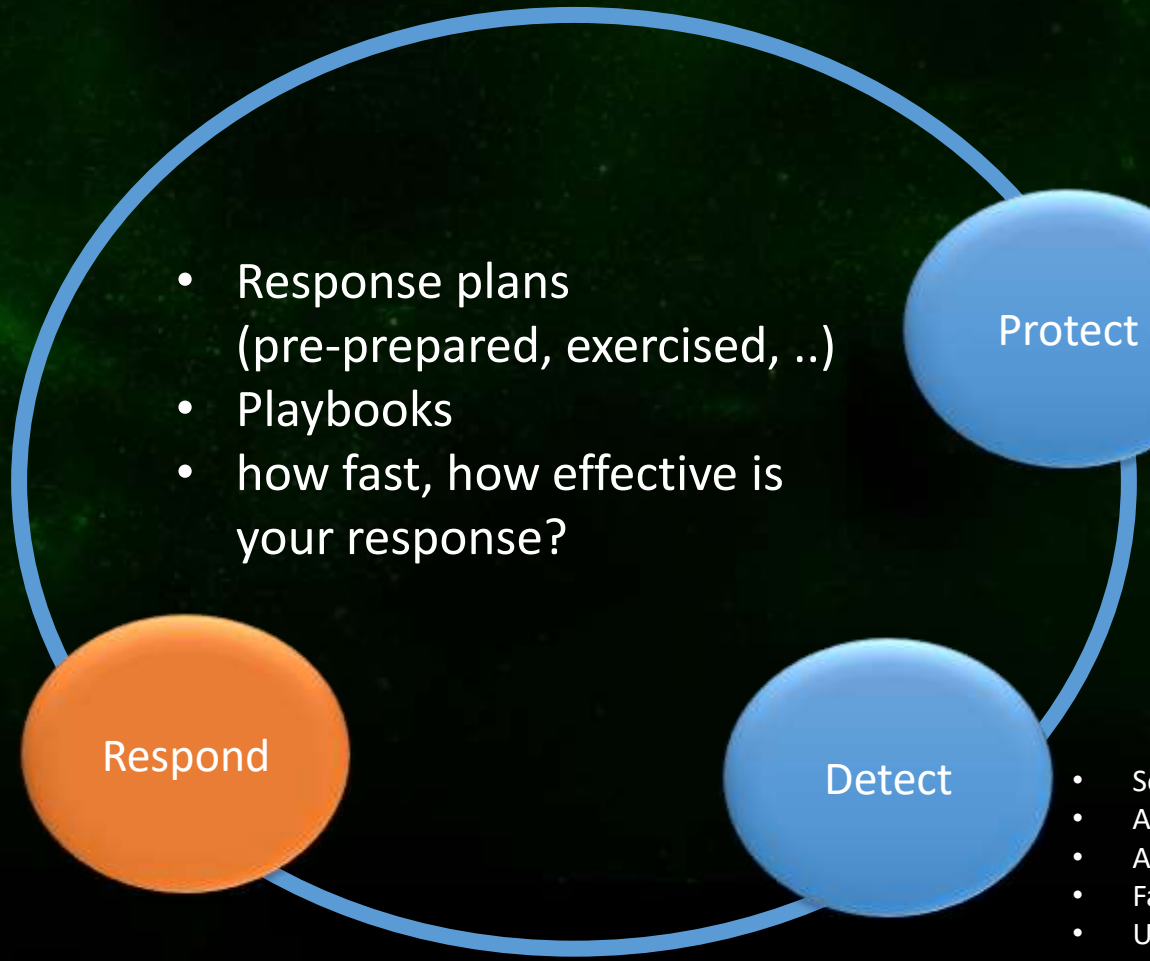

- Response plans (pre-prepared, exercised, ..)
- Playbooks
- how fast, how effective is your response?

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- Sensors & Data analytics
- Analysis and detection capabilities
- Automation
- False-positive/false-negative ratios
- Understanding of context

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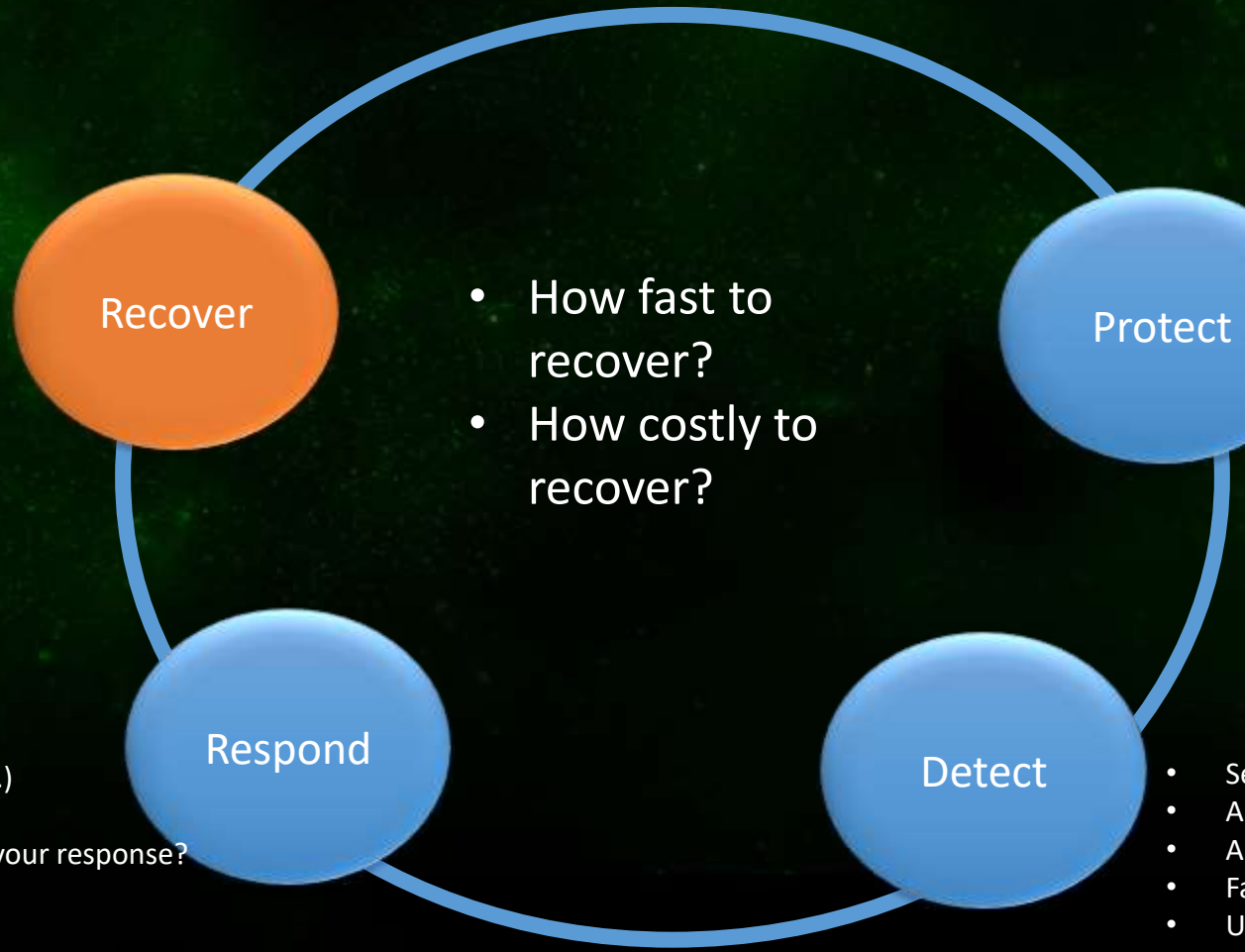

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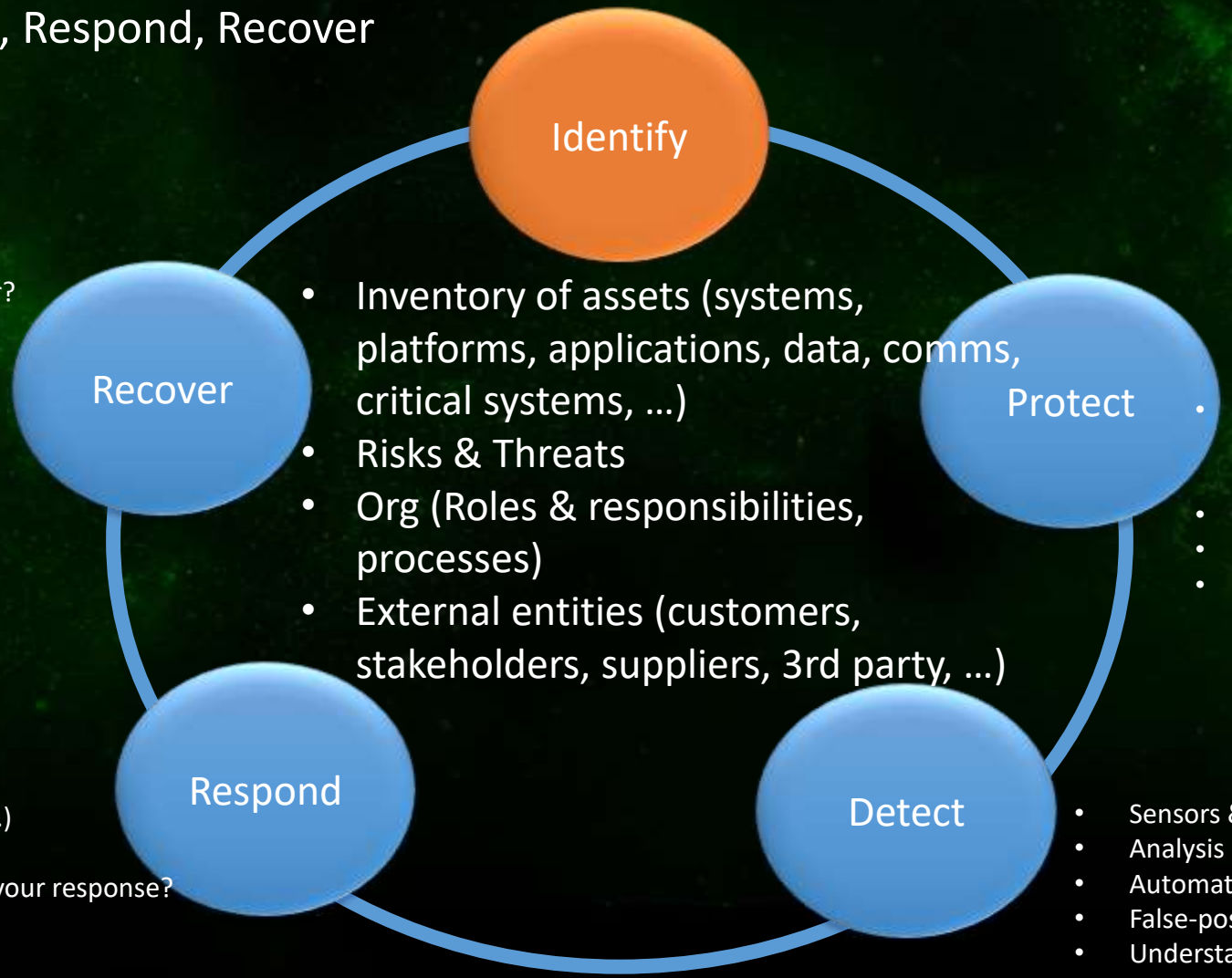

- Inventory of assets (systems, platforms, applications, data, comms, critical systems, …)
- Risks & Threats
- Org (Roles & responsibilities, processes)
- External entities (customers, stakeholders, suppliers, 3rd party, …)

- How fast to recover?
- How costly to recover?

- Boundaries, access control, authentication, authorization, segmentation, defense in depth, …
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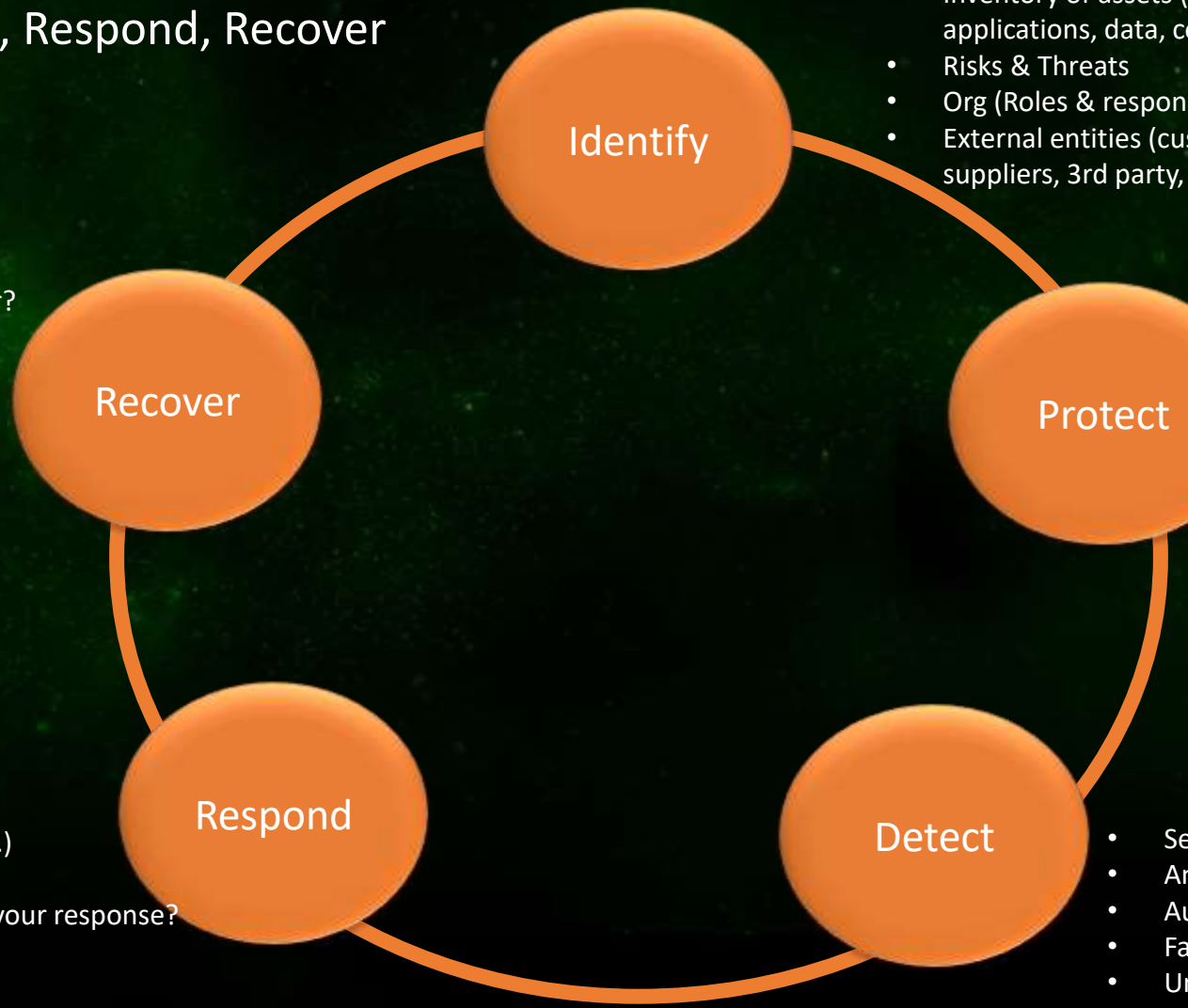

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- How fast to recover?
- How costly to recover?

5. AI and why you need to clean up your room

- A thought about AI/Machine Learning/Advanced Analytics to spot abnormal behavior/deviations from policies and configs, etc.
- A little test: Which item is out of place….?

"Do the basics well…" ☺

THANKS

ISC 互联网安全大会 中国 · 北京

Internet Security Conference 2018 Beijing · China

（原“中国互联网安全大会”）

RIGHT BY YOU 大華銀行

* P.s.: by the way: if you are a good “good guy” or “good lady”, we are hiring (Singapore, Shanghai,…) ☺