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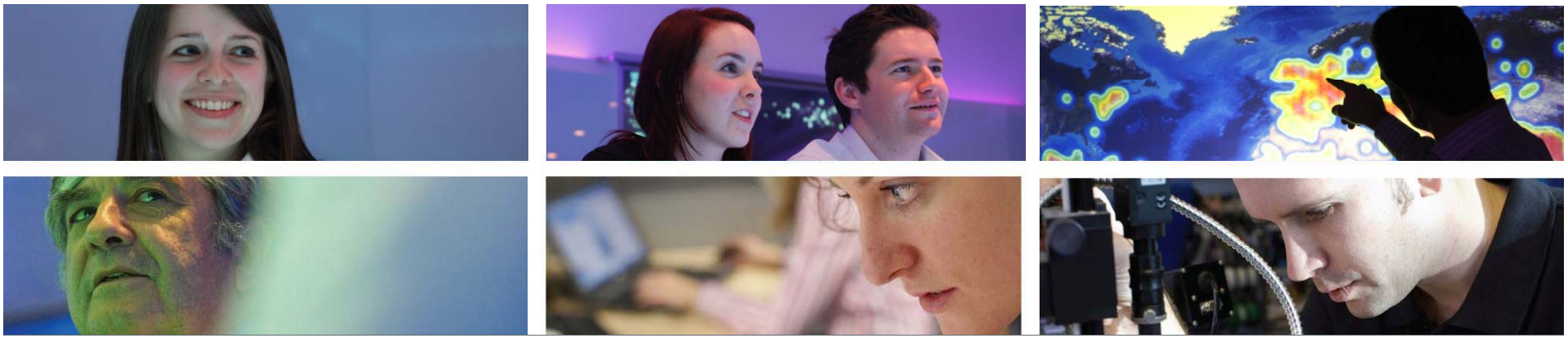
CSM ACE Panel Discussion

Rationalising Security: Bringing the Dark into the Light

6th November 2012



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The cyber security journey

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Ye olden days security (up to the early 90's)

Source: Wikipedia
http://ru.wikipedia.org/wiki/%D0%A4%D0%B0%D0%B9%D0%BB:Koropye_fortress_entrance.jpg

The fortress

- Only one way in and out
- Less worried about the inside
- Have a watchman who controls who can get in and out
- Not a lot of freedom for the inhabitants – everyone is on the inside

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The security renaissance (mid 90's – recently)

Evolution of security ideas

- Layers of protection
- Multiple controlled entry points
- Many more watchmen
- Still not a high degree of freedom for inhabitants
  - Although they're moving out of the castle and into walled towns with less internal restrictions

Information security became a "profession"

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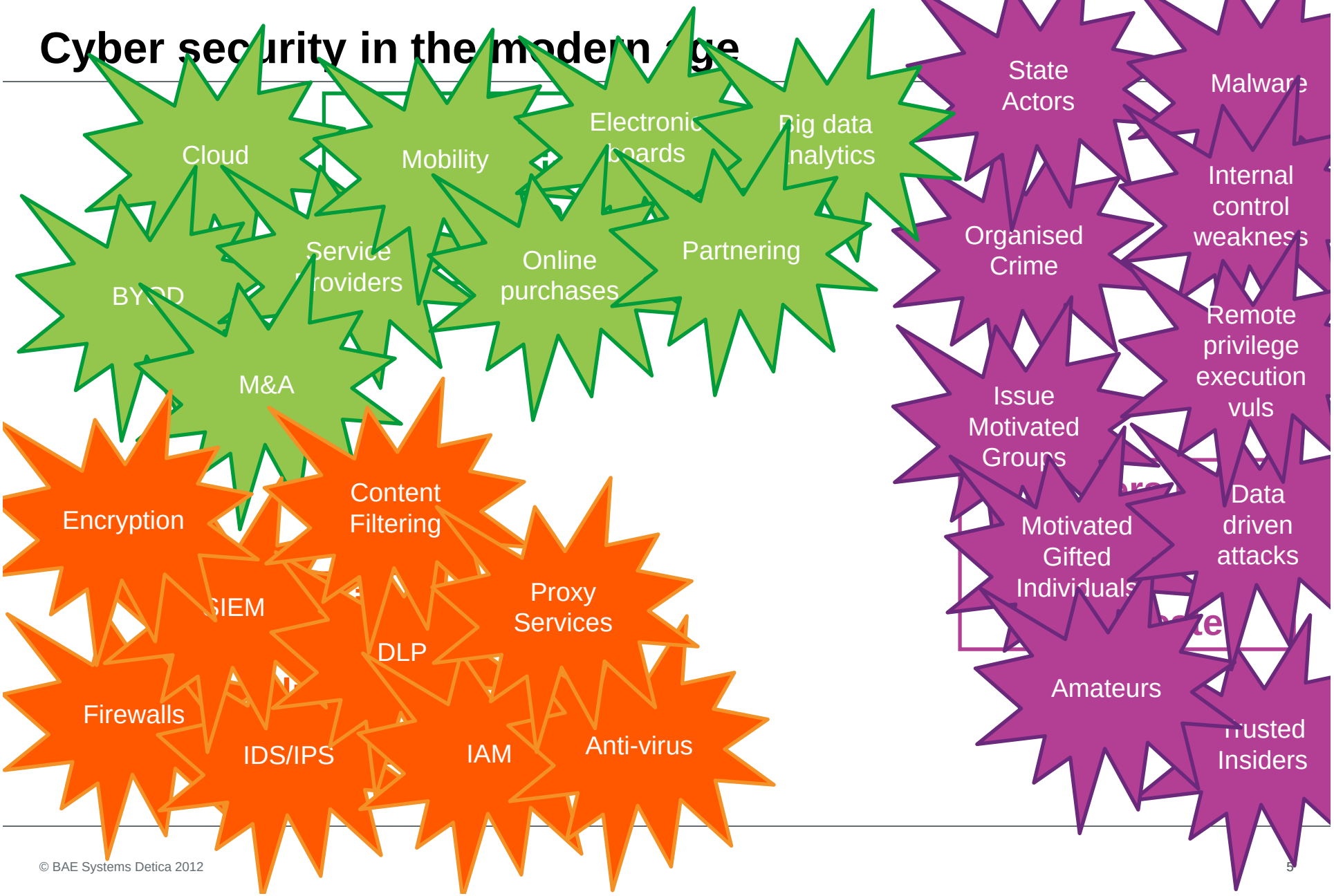
Cyber security in the modern age



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Cyber security in the modern age

Business has changed in a hyper-connected world

Attackers have become "highly innovative" and sophisticated

Cyber security has become incredibly complex

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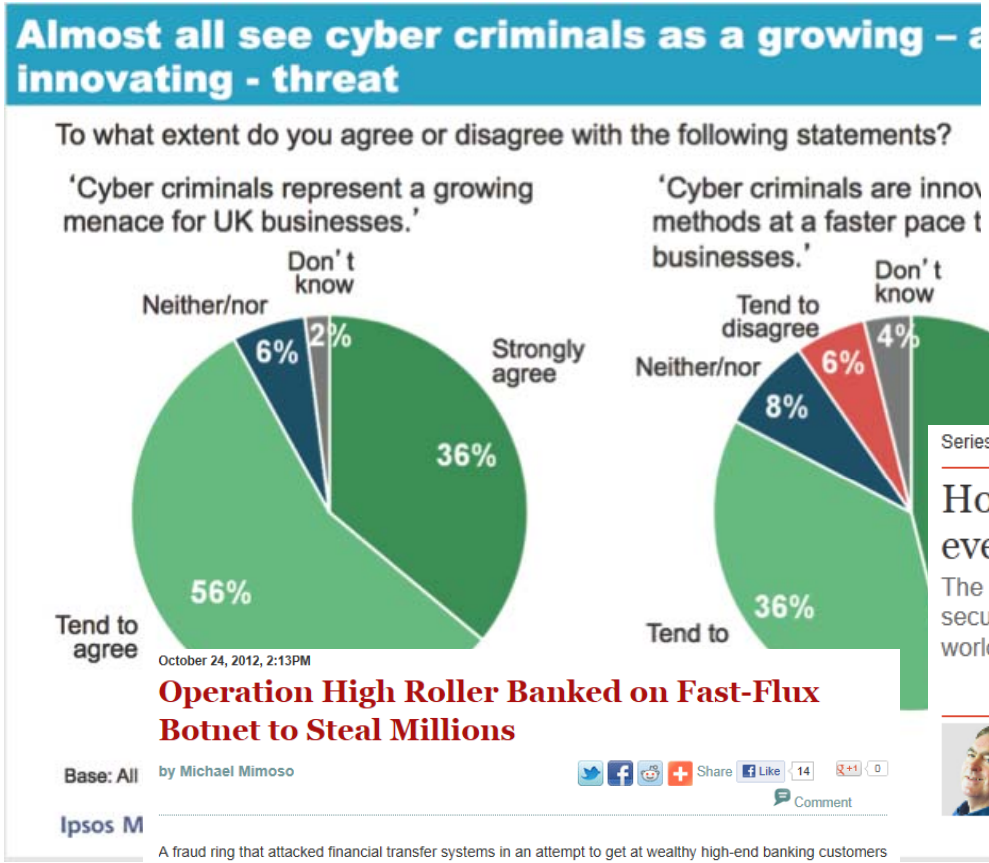
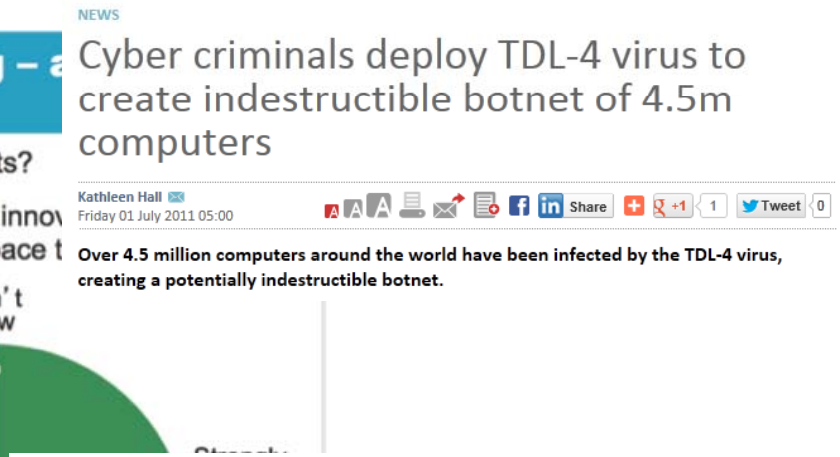
Why our thinking must change





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Rationalising security

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What do I mean by Rationalise Security?

Web dictionary (Source *www.thefreedictionary.com/**rationalise***):

Structure and run according to rational or scientific principles in order to achieve desired results

- Experience is telling us that the current approaches aren't effective and that **attackers cannot be kept on the outside** of our networks
- An innovative and sophisticated attacker requires an **adaptive and agile defence**. We must build environments that are
  - resilient to attack
  - adaptive so that we can change quickly in response to
    - New threats
    - Changing business requirements
- In line with the theme of the CSM ACE conference, **standards and best practices can guide us** on our path to rationalising security by defining sound models for holistic security management of the enterprise

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What is a holistic approach?

Prepare

- Understand your
  - trophy information
  - cyber risk
  - compliance environment
  - Internal cyber capability
- Develop strategies and plans for security capabilities to address cyber risks based on priorities
- Develop cyber aware workforce and source skills as needed
- Publish your business rules for cyber security

Protect

- Design and deploy cyber security solutions to address risks and enable business to operate
  - Confidentiality
  - Integrity
  - Availability
- Apply sound engineering processes to the selection, development and deployment of cyber capabilities

Monitor

- Continually monitor systems and networks for signs of malicious activity
- Measure the effectiveness of cyber security (technical and non-technical capabilities).
- Monitor the external environment for change
- Monitor changing business requirements/emerging trends

Respond

- Have response plans and capabilities to contain and recover from cyber incidents
- Learn from cyber incidents and feedback to PREPARE processes
- Forensic capabilities to investigate cyber incidents and understand cyber threat intent

Implement an Information Security Management System