Why do you want so much data and all of it in the middle?

Matthew Rapier
Vice President - CTO

FINMECCANICA
SECURITY & INFORMATION SYSTEMS DIVISION

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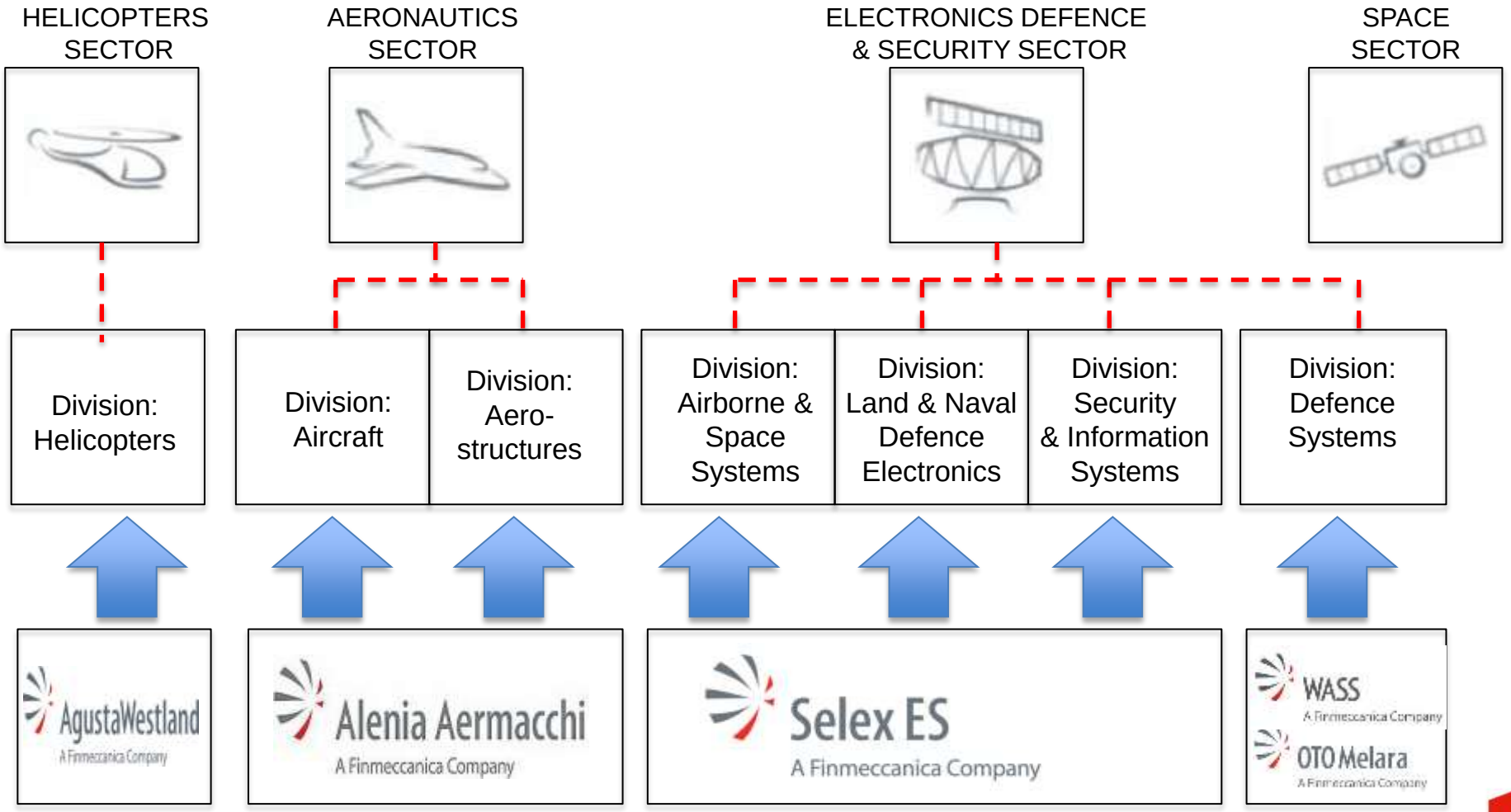
One Company

Finmeccanica's new organisational structure based on the divisional model "One Company". Is effective from 1 January 2016 and is organised into four Sectors and seven Divisions, with a new Governance aimed at centralizing the Group's guidelines and control systems whilst decentralizing the management of the business to the Divisions.



Introduction

- Cyber – at an interesting point in its Hype Cycle
- Time to learn from experience

- Raising a question

- Perspective
  - A Mathematician a very long time ago
  - Over 30 years in ICT

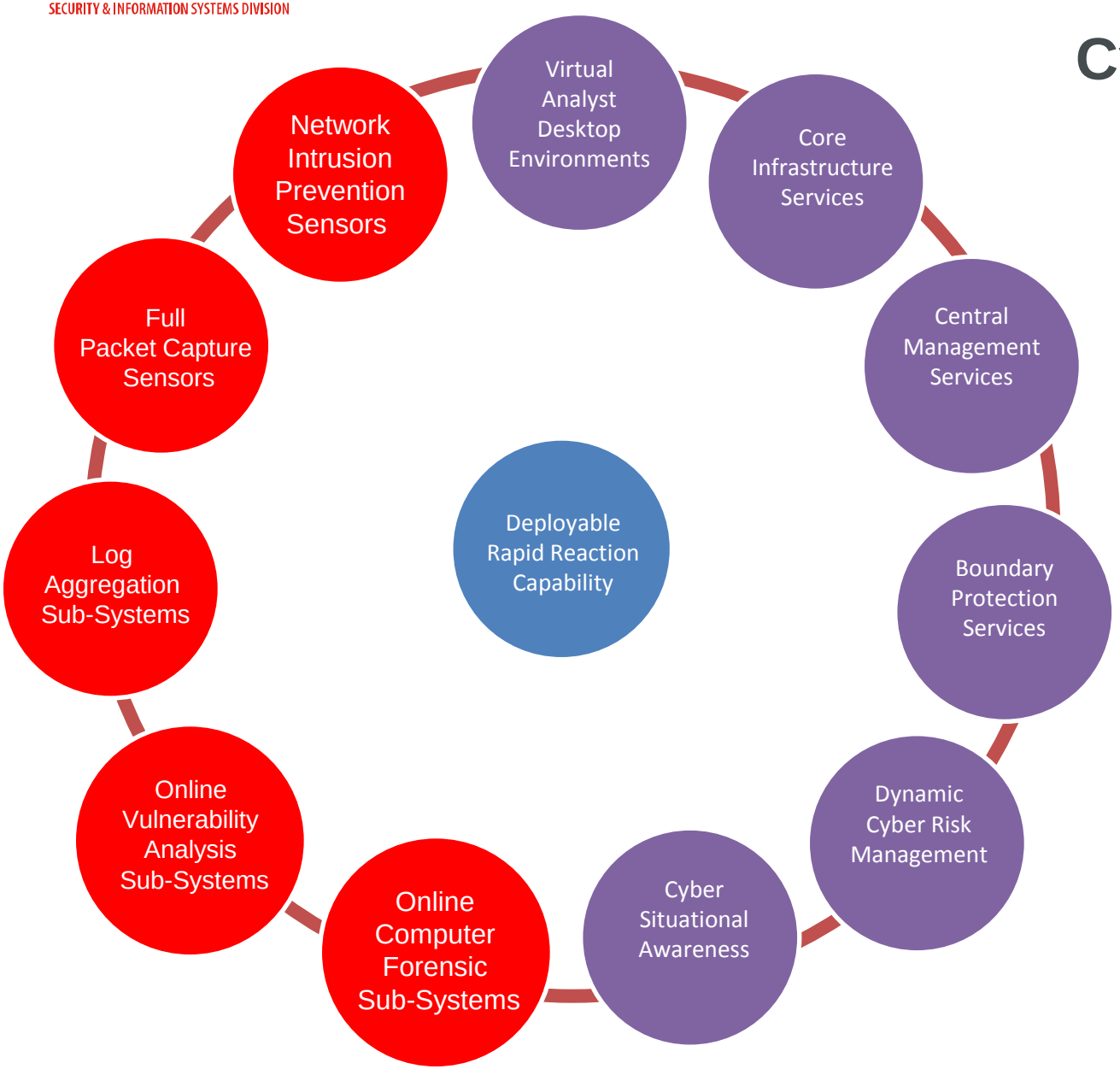
IT in my lifetime

Acorn Atom
1MHz 8 bit
1KB RAM
Cassette

Cray Y/MP 8/432
4 * 200 MHz 64bit
256MB RAM
20GB Disk

Cisco UCS
Flexpod
As much as
you like

Cyber for a major customer

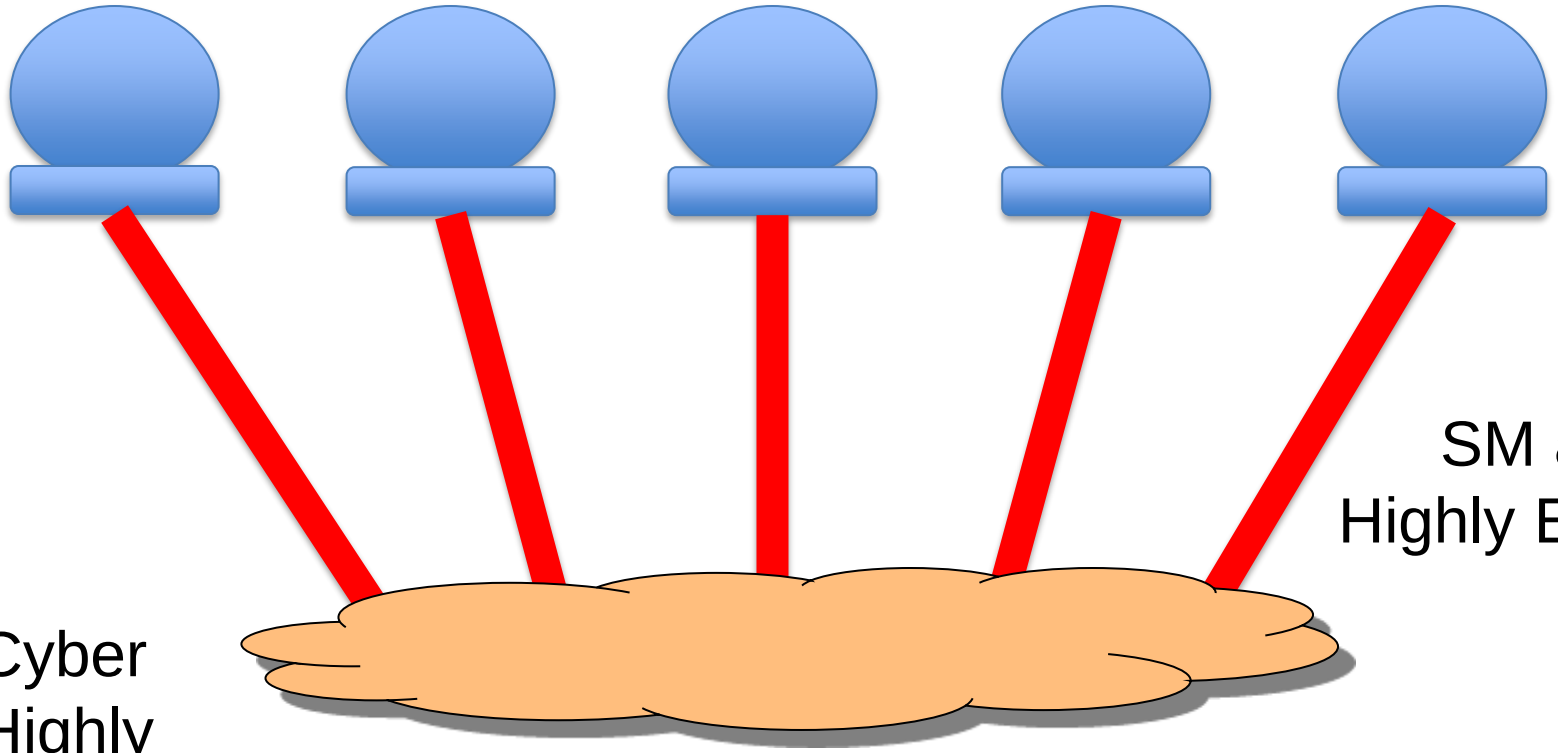


Capability Deployed Across Federated Network

Capability Deployed at Central Sites

The Analytical Model

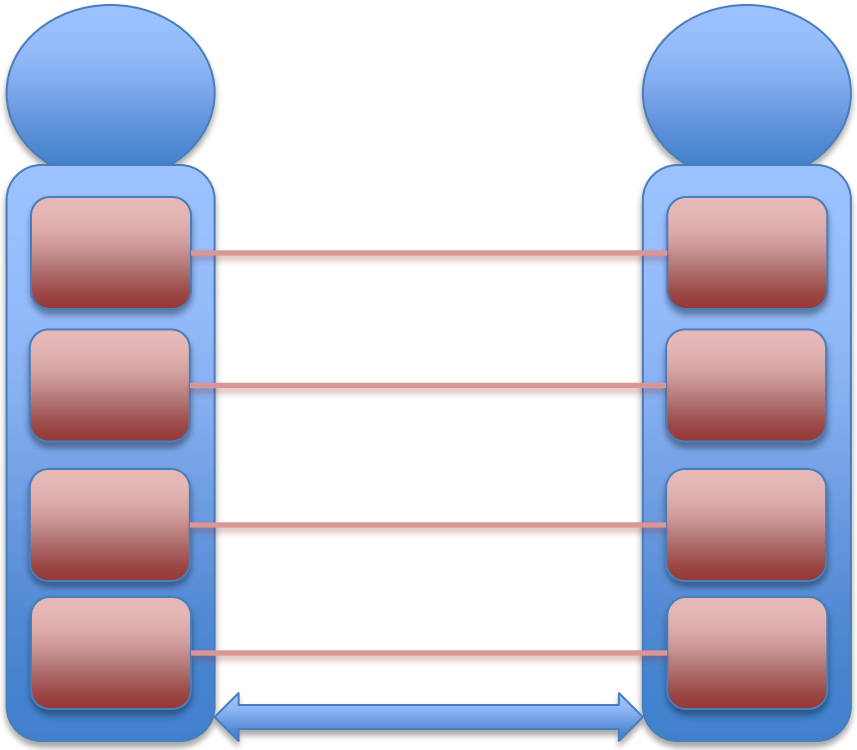
Distributed Architecture



SM and C2
Highly Efficient

Cyber
Highly
Inefficient

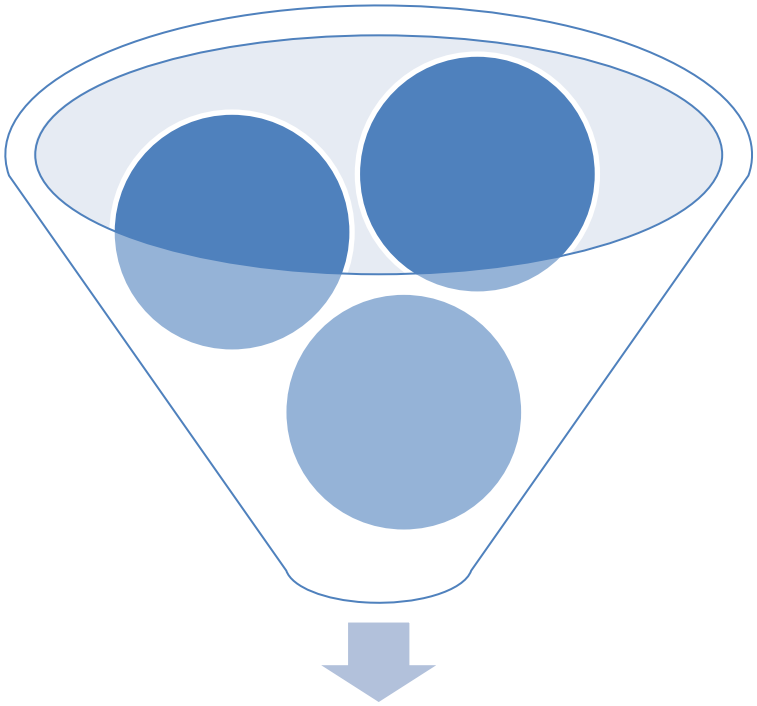
Effective Distributed Architecture



Layers communicate using efficiently coded Key Knowledge over Physical Bearer

Finding and encoding Key Knowledge is hard

Service Management Experience

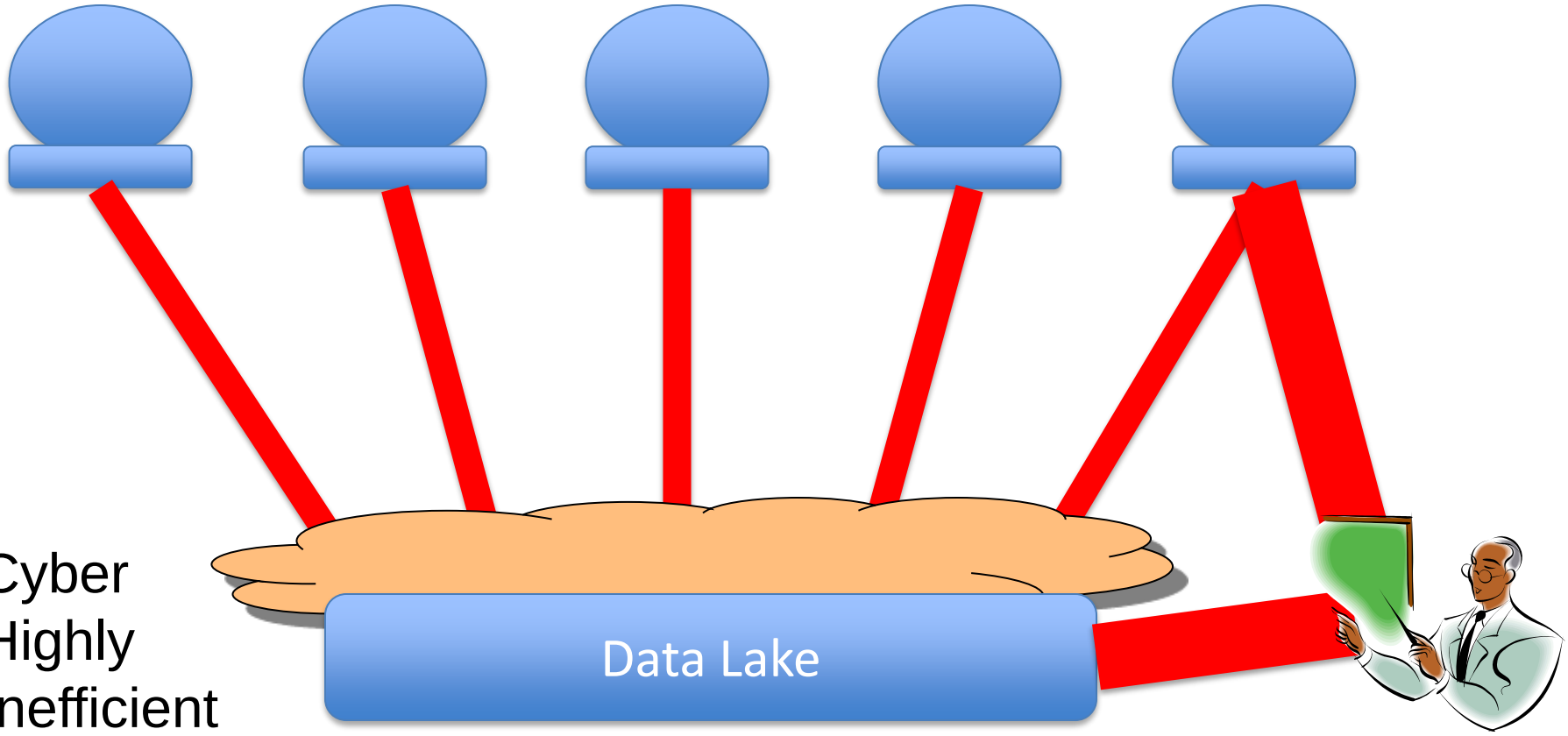


Correlated Events

Correlation, Rollup, Summarisation

Service Affecting Information Only

But in Cyber why is this normal?



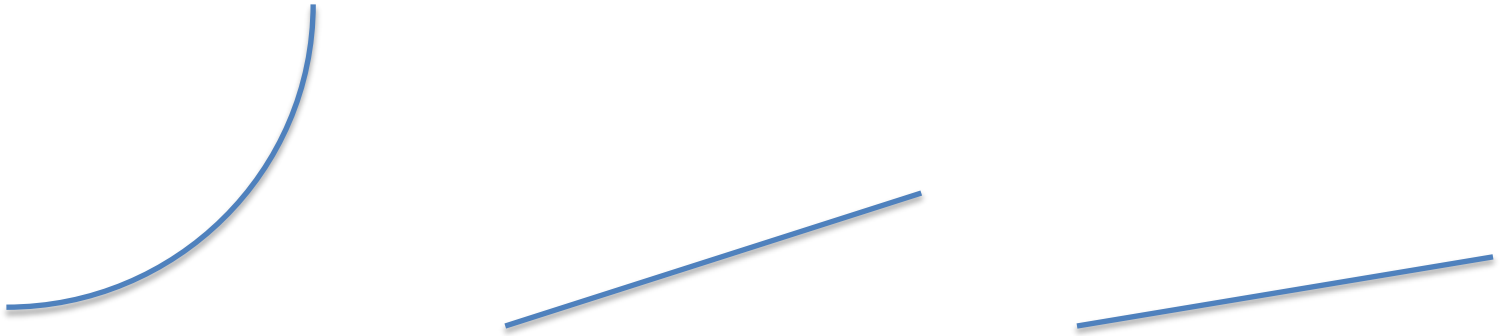
Cyber
Highly
Inefficient

The future

Explosion of Cyber Data

Practicality of Centralised Data

Availability of Skilled Analysts



The Challenge

- Can we use statistical analysis to improve how we find the trigger anomalies which cause an analyst to investigate?
- Can we use statistical analysis to leave more data at the edge?
- Can we use statistical techniques to delete the morass of historical data which we collected, but actually tells us nothing?
- Can we use statistical techniques to provide a model of behaviour inherent in the data, without having to keep the large volumes at all?

THANK **YOU** FOR YOUR ATTENTION

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