Theme 4 – Big Data

A Future Perspective for First Responders

Maria Eugenia (Xenia) BELTRAN

AGENDA

- Introduction – **Maria Eugenia BELTRAN (Inmark Europa)**
- Lessons Learned: Experiences in other Sectors – **Steven Davy (WIT-TSSG)**
- Experiences in Aquaculture – **Kostas Seferis (I2S) & Dudley Dolan (Q-Validus)**
- Security, Privacy and Big Data Standards – **Ray Walshe (Insight@DCU)**
- Panel Questions and Answers
- Arrangements for the next 2 days.

Organisation sponsors:

Why Big Data?

40 types of devices (RFID tags, sensors in cars or planes, supercomputers or supercolliders)

About 6,000GB Of data by person in the planet

Source: IDC. EMC Digital Universe 2014

Why Big Data?

40 types of devices (RFID tags, sensors in cars or planes, supercomputers or supercolliders)

About 6,000GB Of data by person in the planet

Source: IDC. EMC Digital Universe 2014

"Interest in big data technologies and services are at record 73% of interviewed companies are investing or planning to invest"

"Through 2015, 85% of Fortune 500 organizations will be unable to exploit big data for competitive advantage"
Source: Gartner 2015

Wikibon projects the Big Data market will top $84B in 2026, attaining a 17% CAGR
Source: Wikibon forecast 2011-2026

"Everyday we create 2.5 quintillion of data" *Source: IBM*

Data from embedded systems (IoT) will grow from 2% 2013 to 10% in 2020. *Source: IDC*

Organisation sponsors:

Why Big Data?

40 types of devices (RFID tags, sensors in cars or planes, supercomputers or supercolliders)

About 6,000GB Of data by person in the planet

Source: IDC. EMC Digital Universe 2014

2/3 created/captured by consumers, but in 85% enterprises had liability

"Interest in big data technologies and services are at record 73% of interviewed companies are investing or planning to invest"

"Through 2015, 85% of Fortune 500 organizations will be unable to exploit big data for competitive advantage"

Source: Gartner 2015

Wikibon projects the Big Data market will top $84B in 2026, attaining a 17% CAGR

Source: Wikibon forecast 2011-2026

"Everyday we create 2.5 quintillion of data" *Source: IBM*

Data from embedded systems (IoT) will grow from 2% 2013 to 10% in 2020. *Source: IDC*

Organisation sponsors:

Why Big Data?

40 types of devices (RFID tags, sensors in cars or planes, supercomputers or supercolliders)

About 6,000GB Of data by person in the planet

2/3 created/captured by consumers, but in 85% enterprises had liability

40% need to be protected

Source: IDC. EMC Digital Universe 2014

"Interest in big data technologies and services are at record 73% of interviewed companies are investing or planning to invest"

"Through 2015, 85% of Fortune 500 organizations will be unable to exploit big data for competitive advantage"
Source: Gartner 2015

Wikibon projects the Big Data market will top $84B in 2026, attaining a 17% CAGR
Source: Wikibon forecast 2011-2026

"Everyday we create 2.5 quintillion of data" *Source: IBM*

Data from embedded systems (IoT) will grow from 2% 2013 to 10% in 2020. *Source: IDC*

Organisation sponsors:

Why Big Data?

40 types of devices (RFID tags, sensors in cars or planes, supercomputers or supercolliders)

About 6,000GB Of data by person in the planet

Source: IDC. EMC Digital Universe 2014

2/3 created/captured by consumers, but in 85% enterprises had liability

40% need to be protected

22,3% is protected

"Interest in big data technologies and services are at record 73% of interviewed companies are investing or planning to invest"

"Through 2015, 85% of Fortune 500 organizations will be unable to exploit big data for competitive advantage"
Source: Gartner 2015

Wikibon projects the Big Data market will top $84B in 2026, attaining a 17% CAGR
Source: Wikibon forecast 2011-2026

"Everyday we create 2.5 quintillion of data" *Source: IBM*

Data from embedded systems (IoT) will grow from 2% 2013 to 10% in 2020. *Source: IDC*

Organisation sponsors:

Why Big Data?

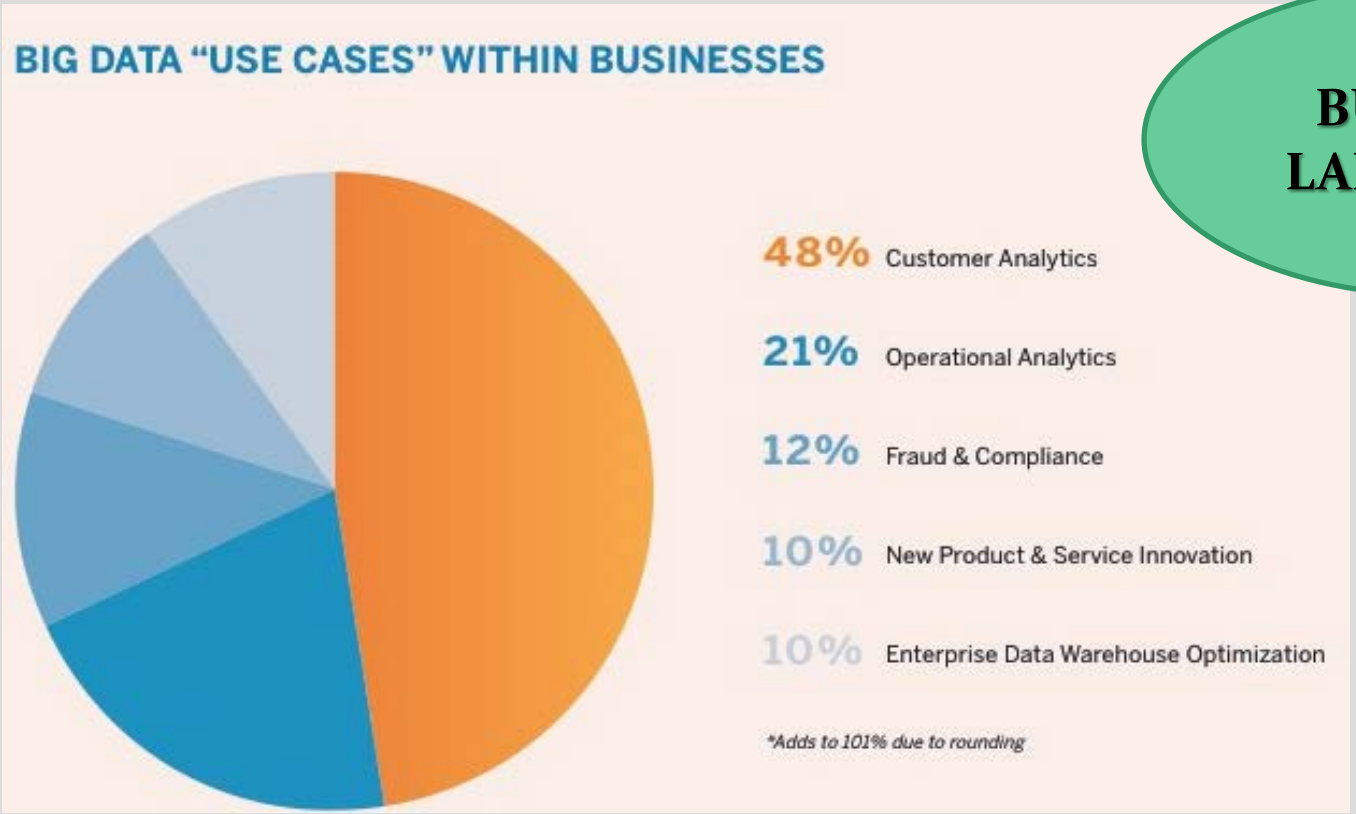
Pope Speech

-2.8 Gigabytes per second – Australian Square Kilometres Array Pathfinder (ASKAP) radio telescope.

Orga

NSAI saadian FutureAnalytics Planning + Research + Economics UNINOVA T F C q-validus NEN

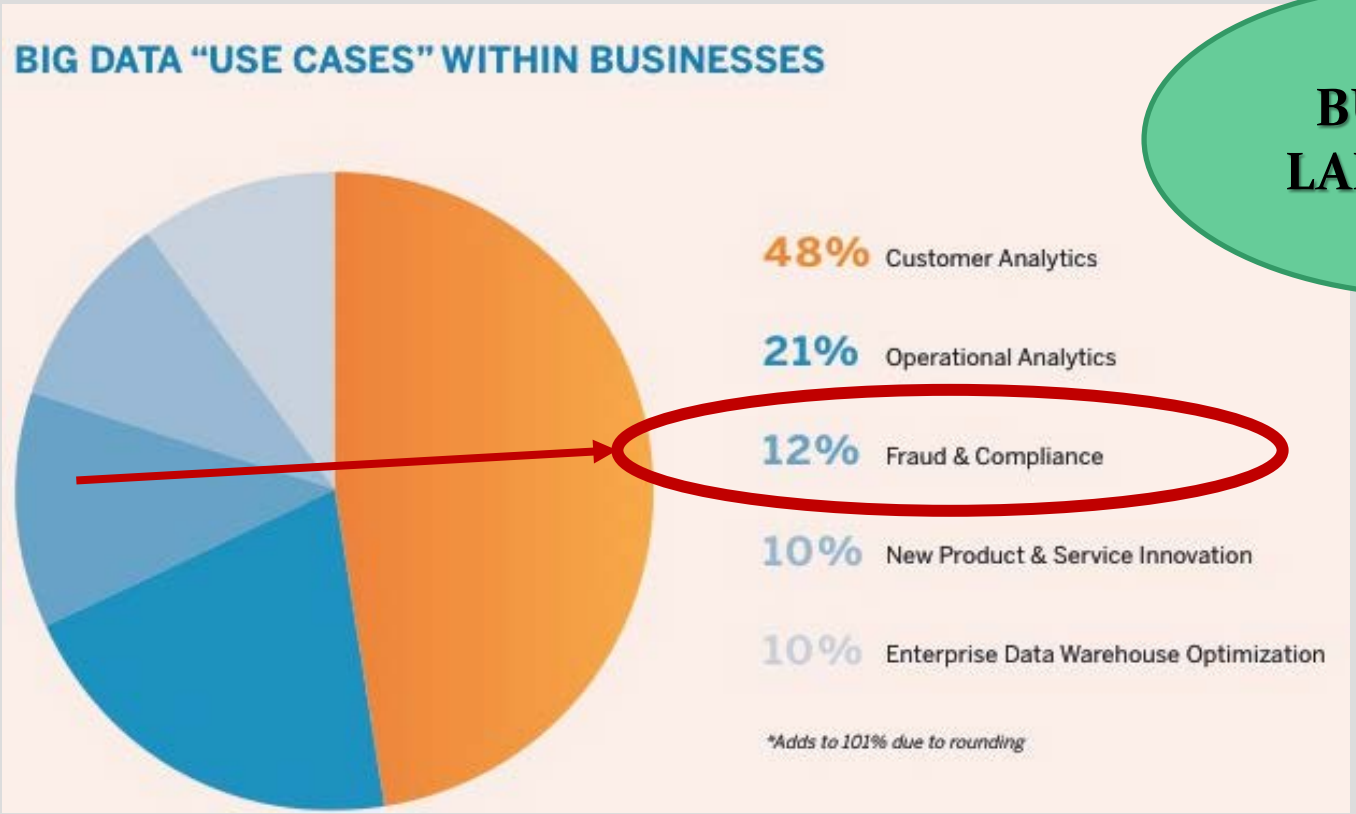
Big data as a resource for security



BUSINESS LANDSCAPE

Organisation sponsors:

Big data as a resource for security



BUSINESS LANDSCAPE

Organisation sponsors:

Big data shifts the Security Perimeter

- New perimeter defined where data consumed →focusing on data
- It is influenced by all the people, devices, and data access
- Users want constant and flexible access to data and info.
- Environment diverse and always-changing environment.
- Asset driven: data & information from systems
- **Mobility → identity affiliated devices & + remote access**
- Technological changes:
  - Centralization
  - 3rd party integrations: New tools & Apps
- No knowledge/strategies of many open source data bases and tools
- New enforced access policies (Companies + Government)

Organisation sponsors:

Big data shifts the Security Perimeter

- New perimeter defined where data consumed →focusing on data
- It is influenced by all the people, devices, and data access
- Users want constant and flexible access to data and info.
- Environment diverse and always-changing environment.
- Asset driven: data & information from systems
- **Mobility → identity affiliated devices & + remote access**
- Technological changes:
  - Centralization
  - 3rd party integrations: New tools & Apps
- No knowledge/strategies of many open source data bases and tools
- New enforced access policies (Companies + Government)

Organisation sponsors:

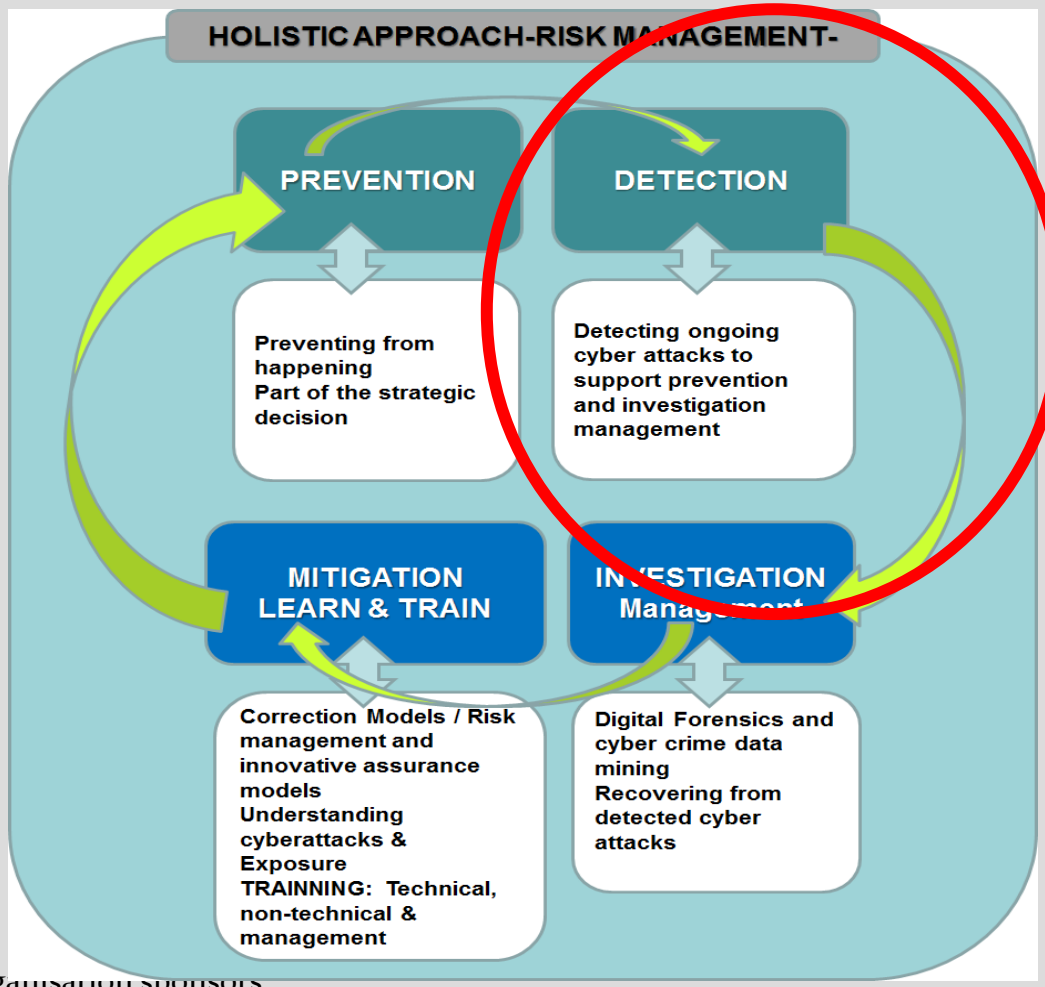
New Security Perimeter –risks shifted-

- Attack surface of the nodes is bigger → External + Internal
- *Security and risk mitigation is a growing area → extends to other areas (marketing)*
  - Fraud
  - Espionage & Political Hacktivism
  - Reputation & Social Engineering/organization
  - Disruptions (malicious + unintentional)
  - Unauthorized access (including 3rd parties e.g. cloud services)
  - Lack of compliance (Privacy, anonymity)
  - Malicious data input / steeling of information / Negligence (e.g. inad. validation)
  - Identity theft
  - Malware & Cyber-attacks (social networks, government sponsored, etc.)
  - Dumb platforms becoming smarter (IoT)

18% encrypt data, 28% encrypt some, 20% have breaches and 24% no assessments

Organisation sponsors:

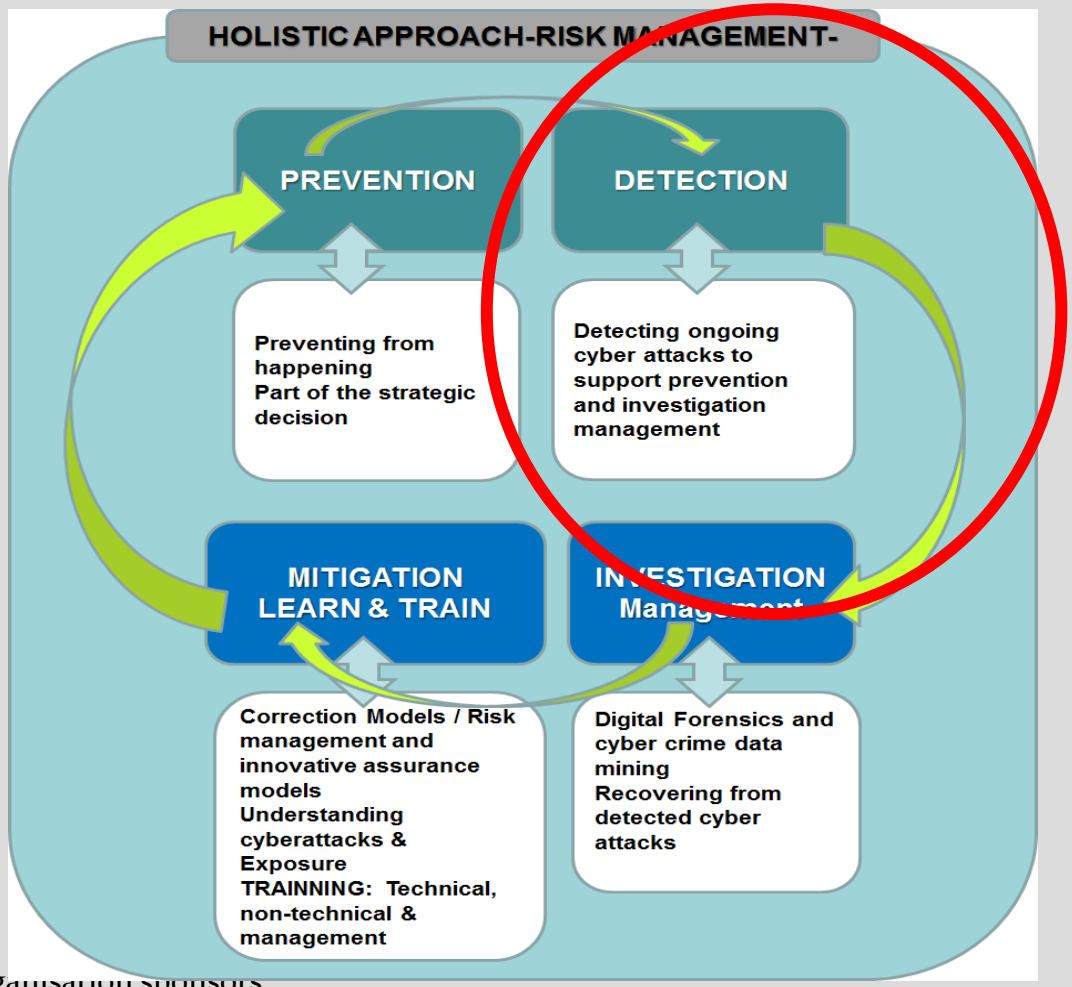
Strategic Approach – Risk Mitigation-



Source: http://www.protegrity.com/data-security-platform/#policy-key-management

Organisation sponsors:

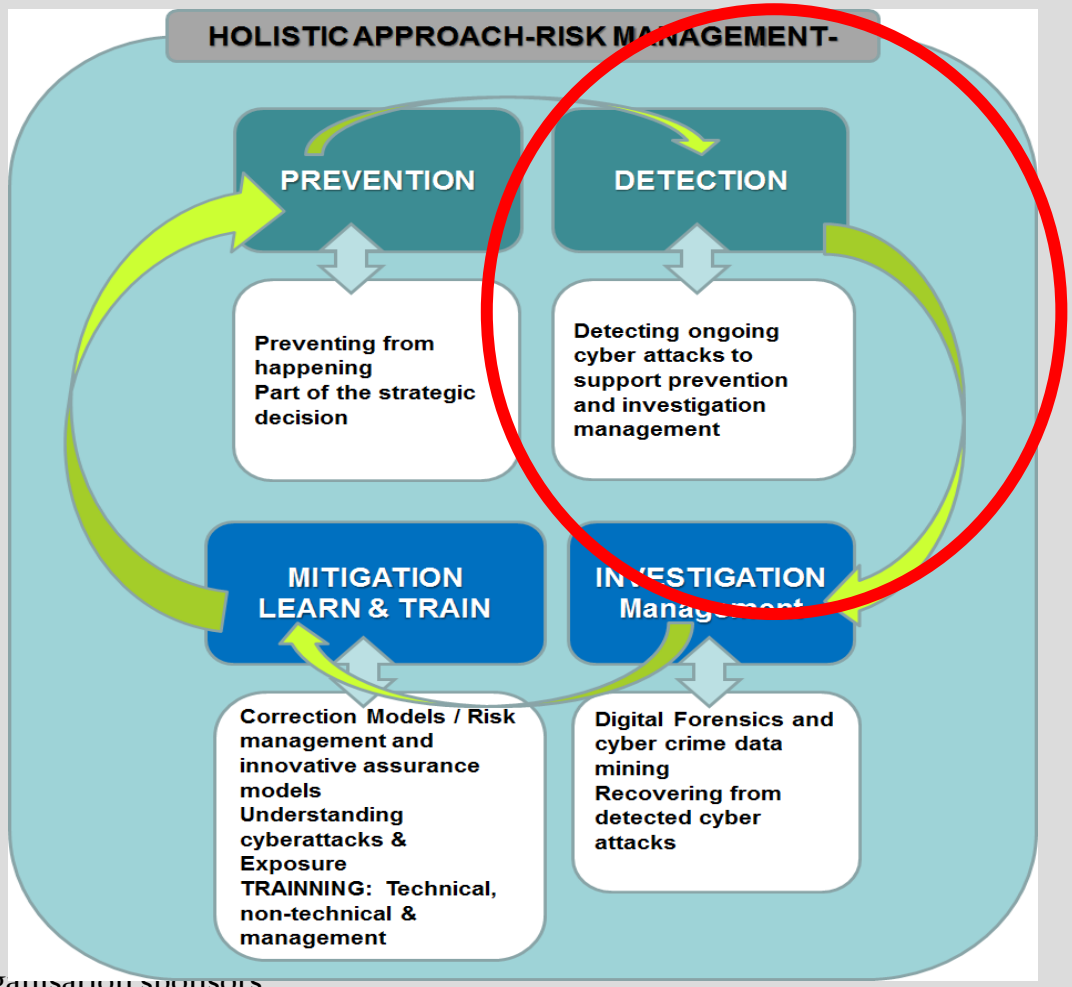
Strategic Approach – Risk Mitigation-



Source: http://www.protegrity.com/data-security-platform/#policy-key-management

Organisation sponsors:

Strategic Approach – Risk Mitigation-

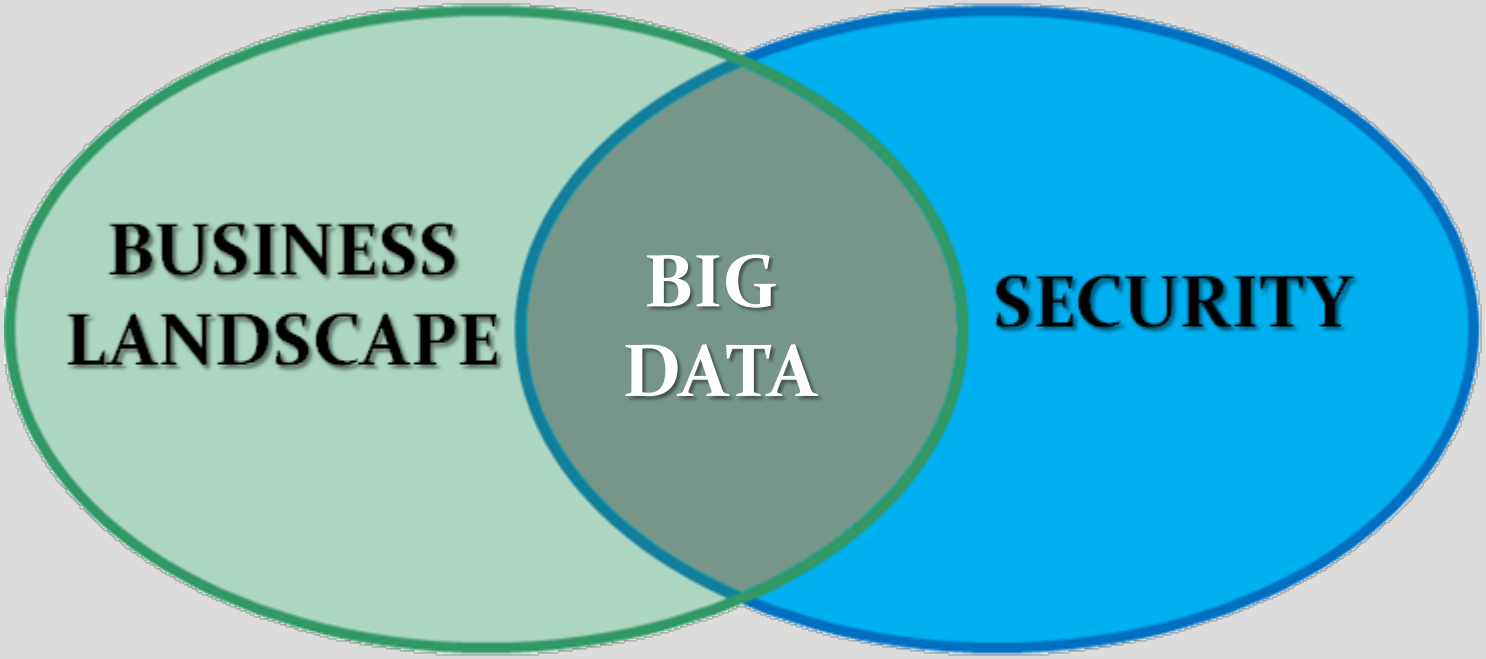


Big Data as a Tool

Source: http://www.protegrity.com/data-security-platform/#policy-key-management

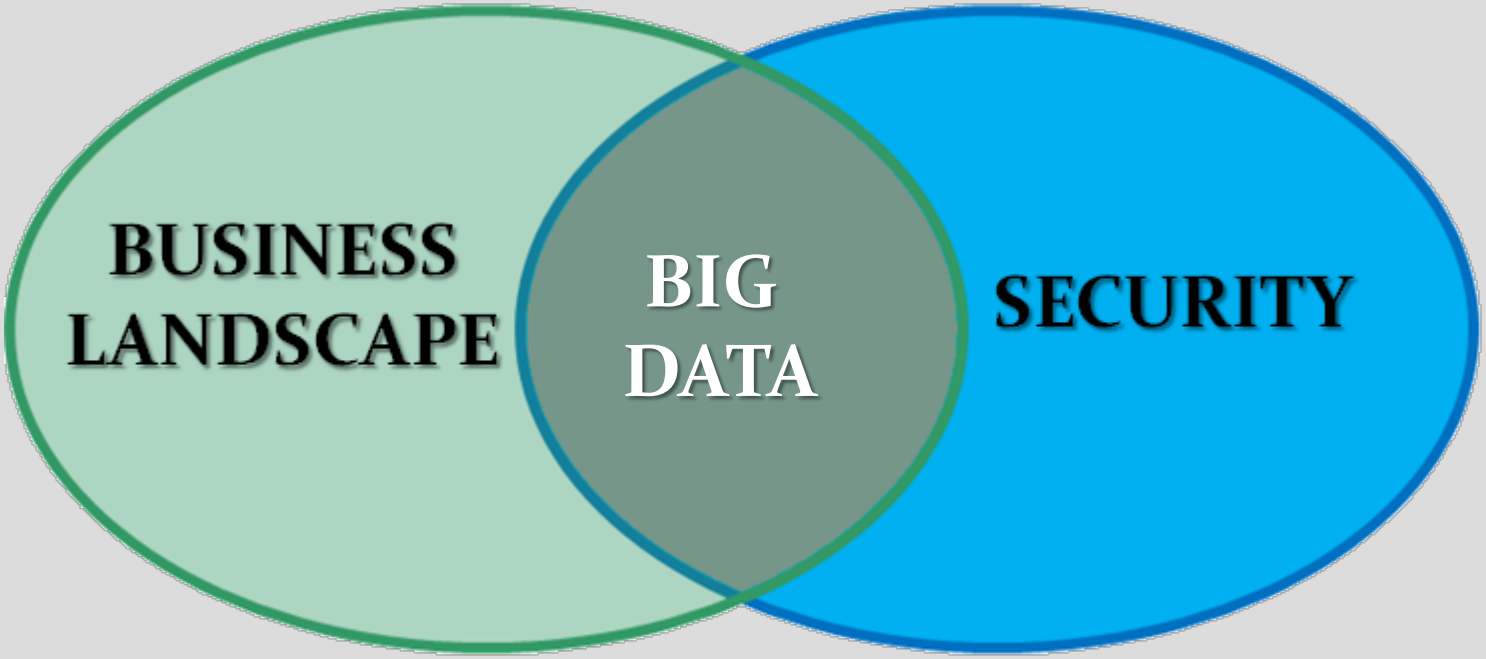
Organisation sponsors:

Big data underpins business & security



Organisation sponsors:

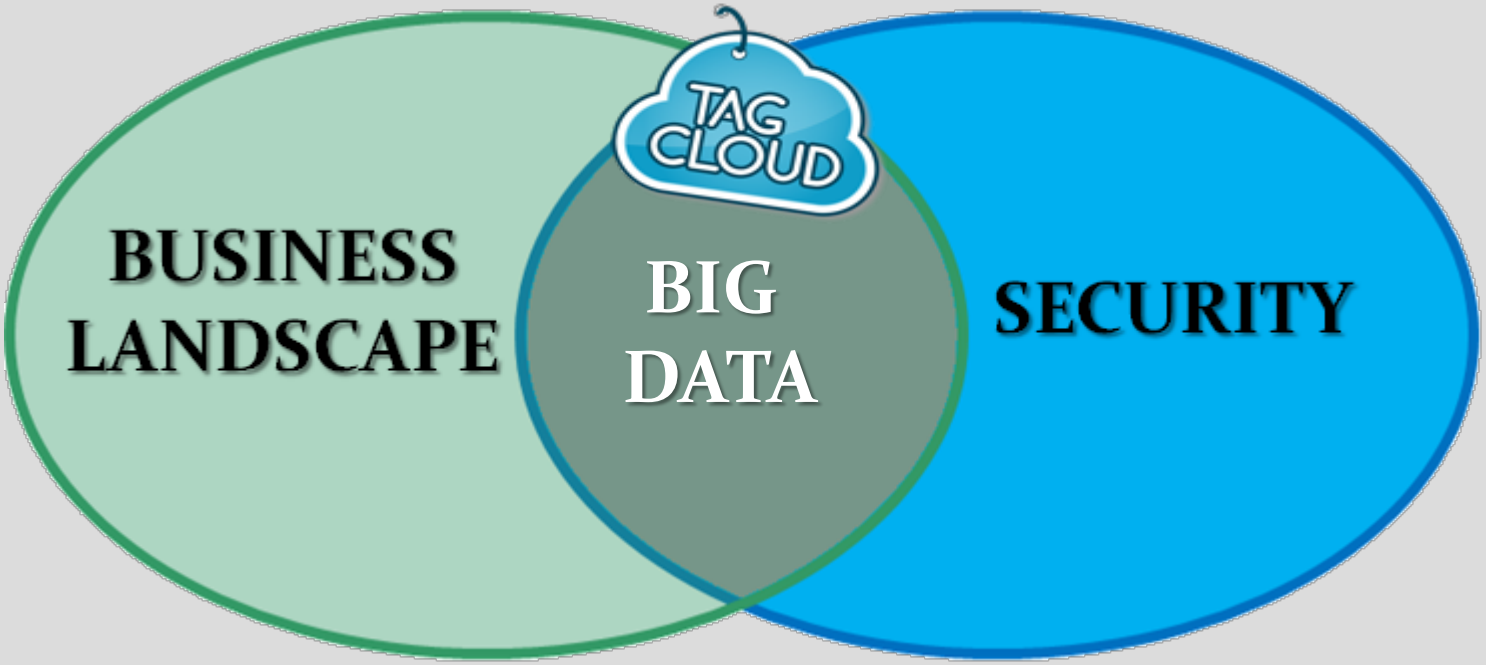
Big data underpins business & security



The business risk landscape is being shaped by economics and IT innovation → Data is the asset

Organisation sponsors:

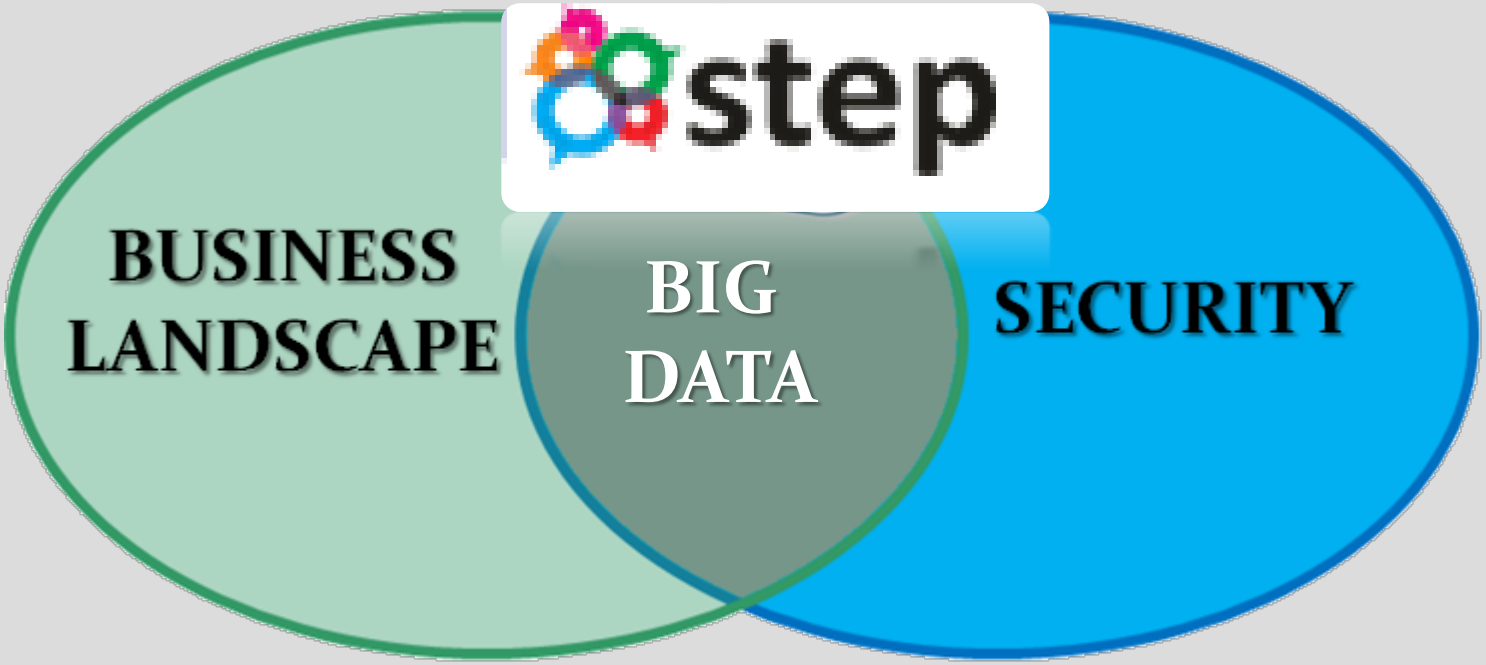
Big data underpins business & security



The business risk landscape is being shaped by economics and IT innovation → Data is the asset

Organisation sponsors:

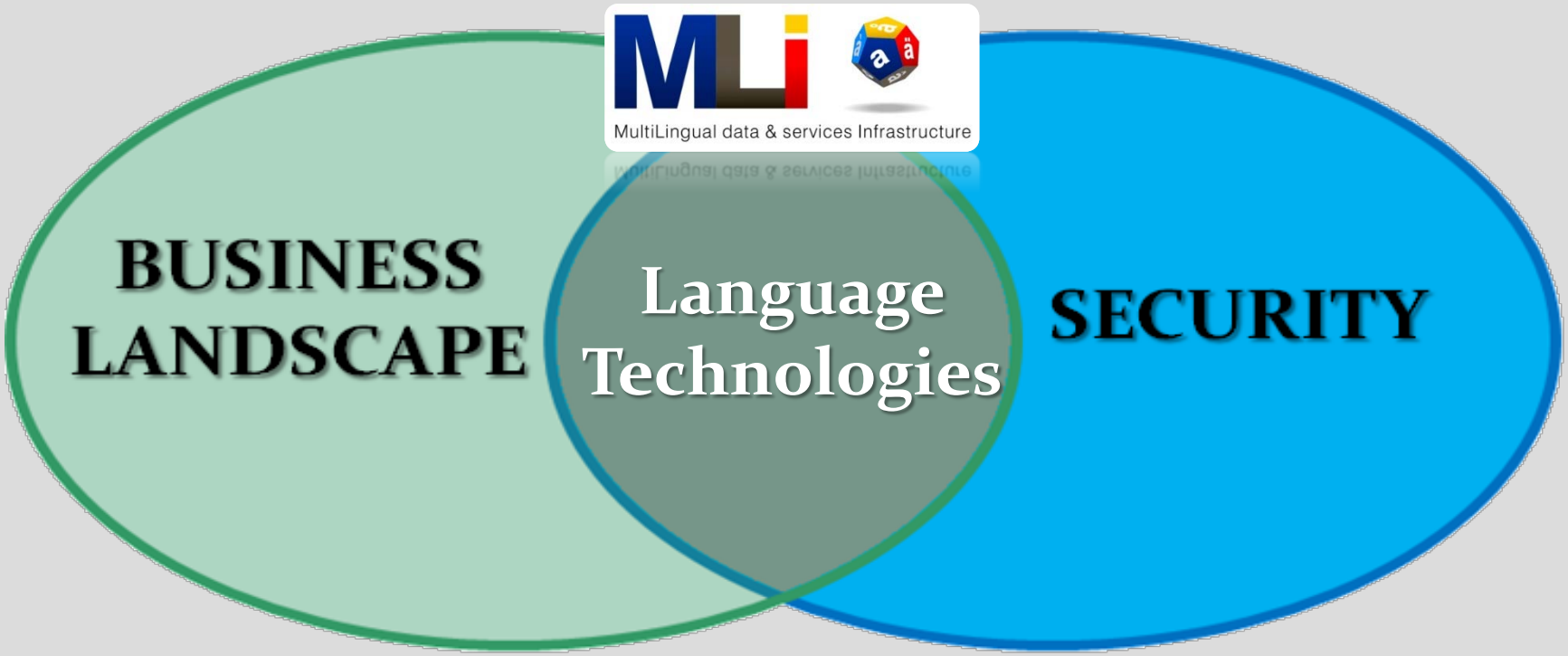
Big data underpins business & security



The business risk landscape is being shaped by economics and IT innovation → Data is the asset

Organisation sponsors:

Big data underpins business & security



The business risk landscape is being shaped by economics and IT innovation → Data is the asset

Organisation sponsors:

NSAI saadian FutureAnalytics Planning + Research + Economics UNINOVA TFC q-validus NEN

Thank you!

Name: Xenia BELTRAN
E-mail: xenia.beltran@grupoinmark.com

Organisation sponsors: