Who's afraid of the big bad GDPR?

Elizabeth Booi & Elizabeth Archer

University of the Western Cape

SAAIR conference
15 November 2018

Agenda

- What is Personal Data ?

- The reality of Data Breaches

- POPI VS GDPR

- GDPR Key impact

- Data Management, BI & Analytics

- Conclusion

Defining Personal Data

"personal data' means **any information relating to an identified or identifiable natural person** ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person."

http://www.gdpreu.org/the -regulation/key-concepts/personal-data

LIVE

ASHLEY MADISON®

Life is short. Have an affair.®

breakyourownnews.com

Get started by telling us your relationship status:

Please Select ▼

See Your Matches »

Over 37,565,000 anonymous members!

BREAKING NEWS

175 000 USERS EXPOSED

8:11   SUICIDES LINKED TO DATA BREACH | WOMAN ASSAULTED BY HUSBAND AFTER CLIENT

100%
Like-minded
People

Sports Illustrated, Maxim, USA
Today

world's leading market
dating service for
discreet encounters

Security
Award

DISCREET
SERVICE

Secure
Site

iewfines.co.za

breakyourownnews.com

BREAKING NEWS

934 000 SOUTH AFRICANS' DATA

8:17 | HAS YOUR DATA BEEN COMPROMISED? | IDENTITY THEFT - STORY AT 18:00

In March 2017, a 27GB database backup file named "Master Deeds" was sent to H
of the project. Upon detailed analysis later that year, the file was found to contain th
tens of millions of living and deceased South African residents. The data included e
attributes such as names, addresses, ethnicities, genders, birth dates, government
identification numbers and 2.2 million email addresses. At the time of publishing, it's
was sourced from Dracore Data Sciences (Dracore is yet to publicly confirm or deny
sourced from their systems). On 18 October 2017, the file was found to have been p
publi   where it was located at the root of an IP address wit
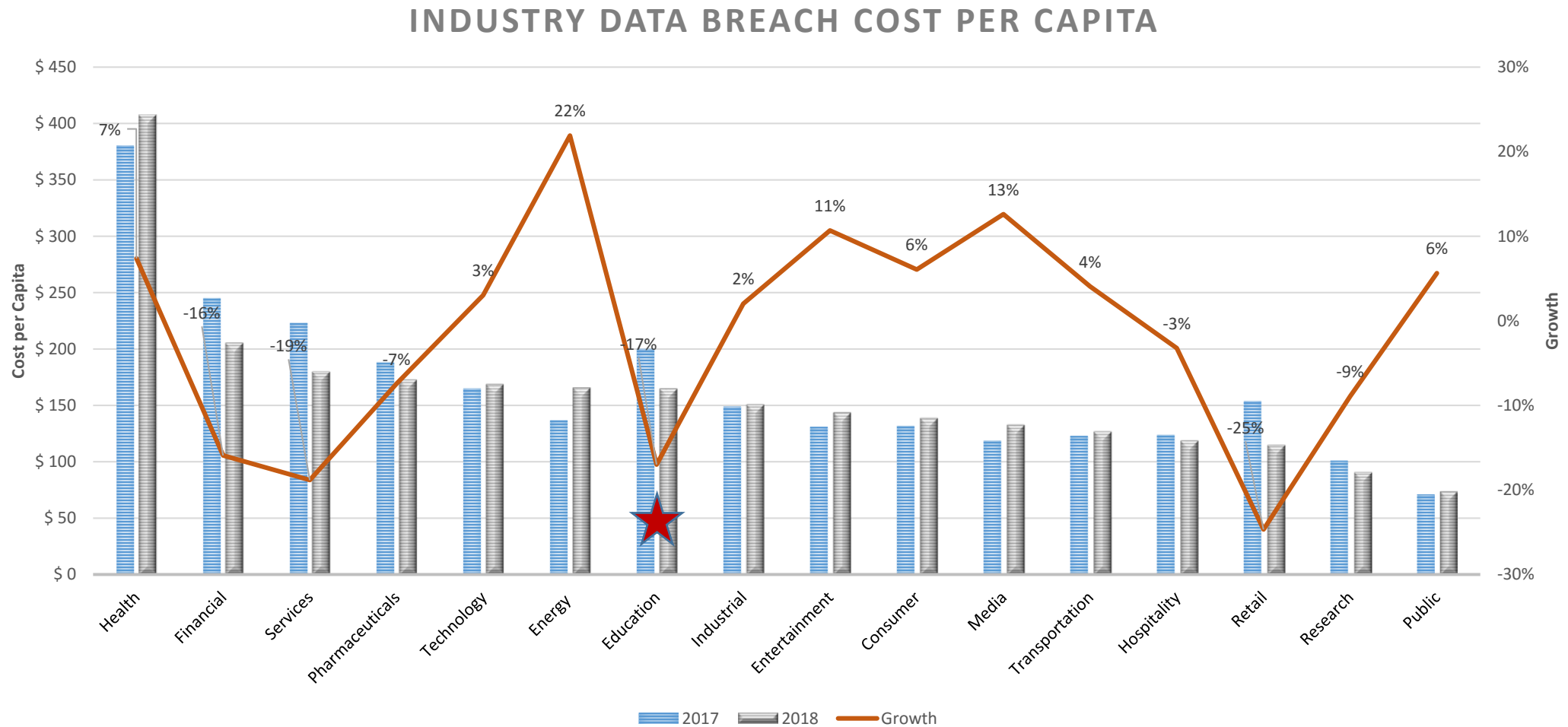enabled. The file was dated 8 April 2015.

30 MILLION USERS COMPROMISED

**8:21** COMPRIMISED DATA: EMAIL, EMPLOYER, PHONE, JOB TITLE, ADDRESS, HOME OWNER

Data breaches are resulting in major costs

INDUSTRY DATA BREACH COST PER CAPITA

Legend: ▬ 2017 ▬ 2018 ▬ Growth

Average data breach costs per compromised record hit an all-time high of $161 (in 2018)

Source: 2018 Cost of Data Breach Study: United States, Ponemon Institute

Core elements: Protection of personal information

ETHICAL

LEGAL

GOVERNANCE
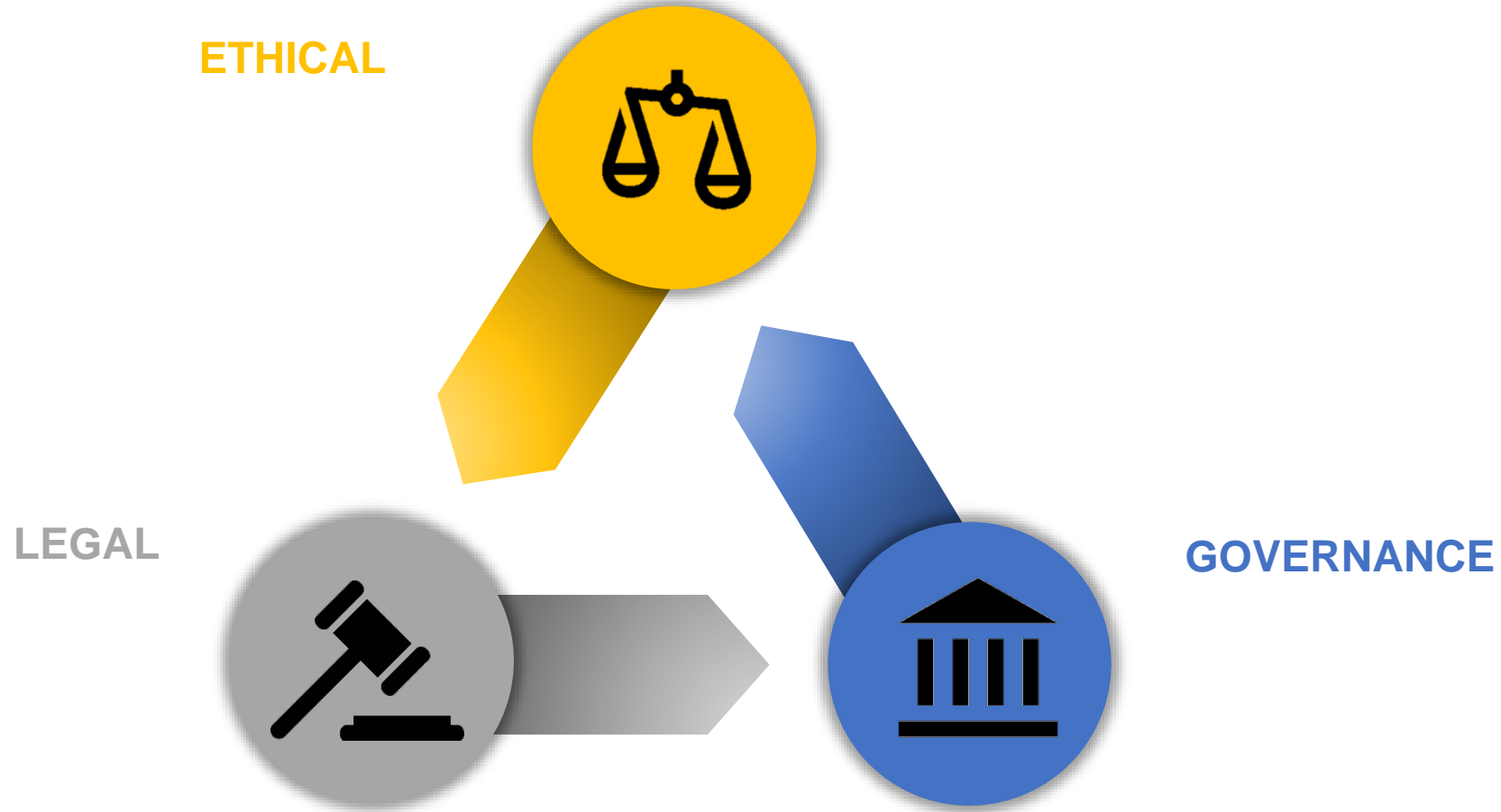
POPI VS GDPR

POPI
Protection of Personal Information Act

GDPR
General Data Protection Regulation

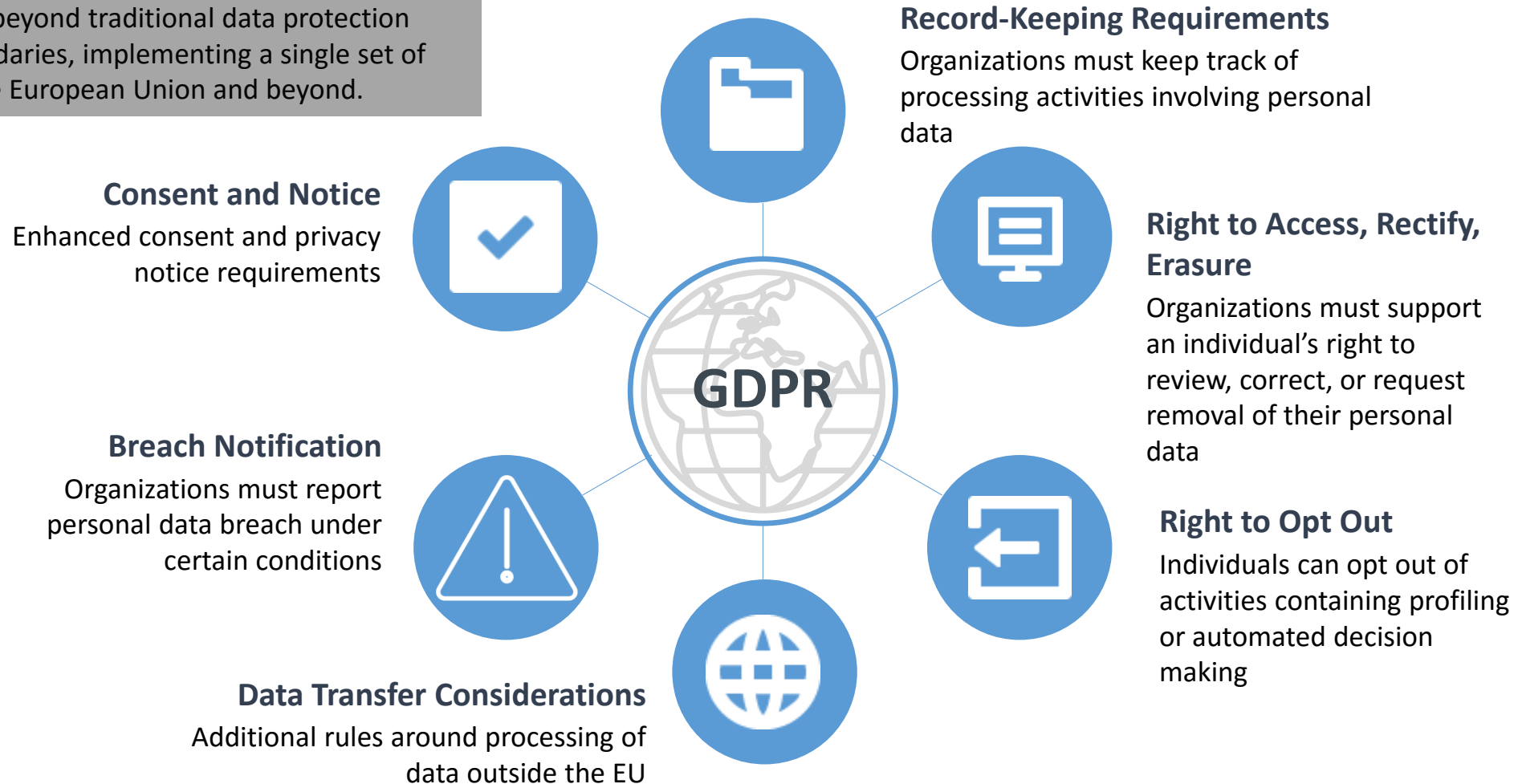|	POPI	GDPR
Territory	Home	Extra-territorial
Natural Persons	✓	✓
Collection Storage Dissemination	✓	✓
Fines	10 years imprisonment and/or up to ZAR10 million	€20 million / 4% of global turnover
Enacted	Act approved in 2013, not fully in effect (2019)	24 May 2016 Grace period ended 24 May 2018.

Why talk about the GDPR

- Overlap between GDPR and POPI

- GDPR = gold standard in Protection of Personal Information and Data Privacy

- Extra-territorial scope (any EU citizen)

- Fines - €20 million or 4% of global turnover

  - Greenwich University fine = £120 000

Key operational impacts of GDPR

GDPR extends beyond traditional data protection rules and boundaries, implementing a single set of rules across the European Union and beyond.

Record-Keeping Requirements
Organizations must keep track of processing activities involving personal data

Consent and Notice
Enhanced consent and privacy notice requirements

Right to Access, Rectify, Erasure
Organizations must support an individual's right to review, correct, or request removal of their personal data

GDPR

Breach Notification
Organizations must report personal data breach under certain conditions

Right to Opt Out
Individuals can opt out of activities containing profiling or automated decision making

Data Transfer Considerations
Additional rules around processing of data outside the EU

**This is not an exhaustive list!**

Consideration for Data Management, BI & Analytics

- What data do you have, and where is it ?

- Who owns the data? Who is responsible

  for it

- How is the data being processed, shared or
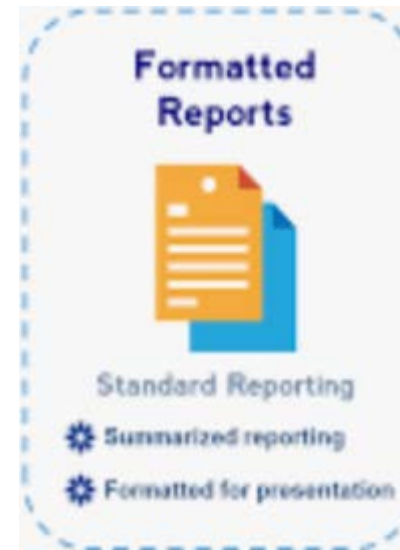
  distributed?

Data Management

- Allowed to store & process personal data only when an individual consent
    - No longer than needed for the stated purpose
- A inventory and complete view of student /customer data
    - Challenge when data is stored across multiple systems
- Keeping as little data as possible to minimise the risk?
    - Challenge for intensive data projects
- Develop and monitor GDPR or POPIA compliance process
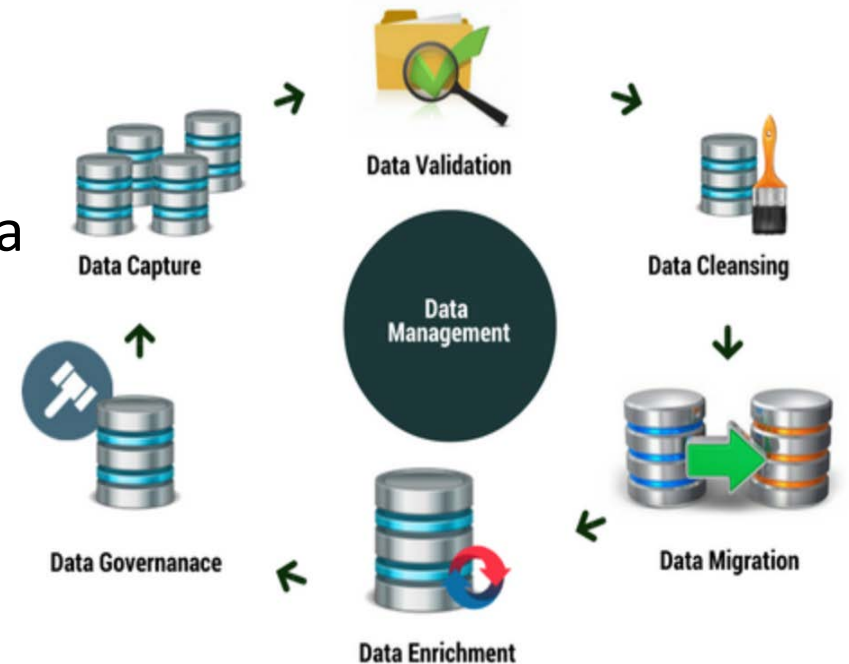
BI, Reporting & Analytics

- As BI moves into self-service visual analytics, how well documented are the systems?

  - What are users sharing?

- GDPR encourages greater use of pseudonymisation

- GDPR places control on the automated processing and profiling of personal data

- Cannot use personal data for the purpose other than original intent

- The 'right to an explanation' for output of an algorithm

Dashboards

Analytics
- Data visualization tool
- At-a-glance view

Ad-hoc Reporting

Detailed Metrics
- Multi-dimensional analysis
- Granular view of dataset

Formatted Reports

Standard Reporting
- Summarized reporting
- Formatted for presentation

Artificial Intelligence & Machine Learning

- Have to explain the inner workings of decision network & deep learning?

  - Not necessarily the inner working but the factors contributing to the decision

- GDPR requires measures to protect people's rights, freedom and interest

- Need for possibility of human intervention into the automated systems

- Accountability and transparency
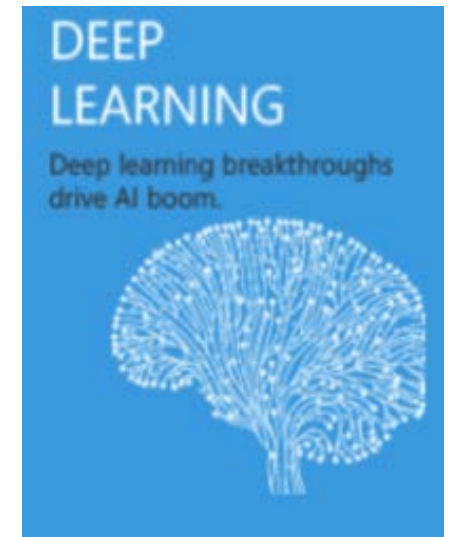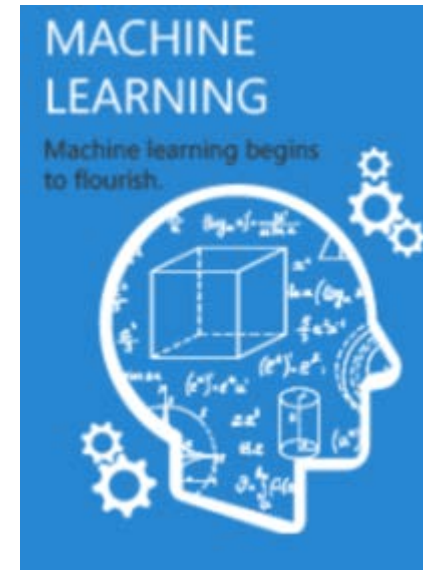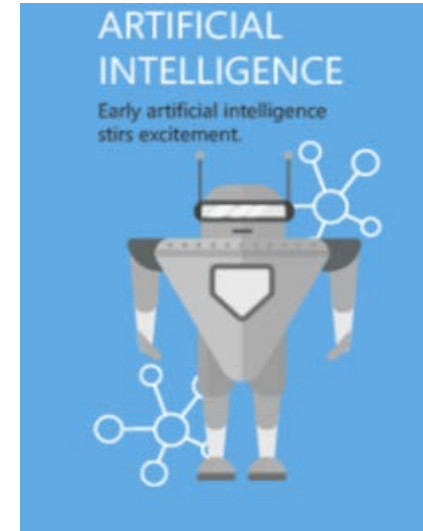
Important Caveats

- Protection of personal information only applies to identifiable natural persons

  - Not aggregated and anonymised data or when using pseudonyms

- The legitimate interest and services being offered impacts which data can be used

  - Educational institutions are allowed to use student data to support students

  - Can opt out of surveys and primary research

  - Can not opt out for modelling and analytics, may opt out of the support and notification though.

Thank You