

PI 2017 - 18

1. Company A wants to buy company B

a. Assess the health of the company you're buying.

Three main components in financial reporting

- Balance sheets
 - profit and loss accounts
 - cashflow
- } not independent of each other

b. Look at the HR of company B.

- recruitment and selection - ensures the quality and capabilities of the workforce
- renumeration - money, salary, other perks
 - ensure retention of good staff
 - ensure no turnover by competitor
- appraisal - employees feel valued by listening to them.
- workforce planning - appropriate division of labour
 - training available

c. Cyber-Security stuff. BCS code of conduct. Attributes of professionals undertaking such work.

- Public Interest
 - clear identification of public interest
 - effective training to ensure professionals are aware
 - some focus in the effects of failure to have due regard for public security.
- Professional Competence and Integrity
 - ensure appropriate qualified people are employed
 - sufficient people to cover volume of work
 - quality assurance
- Duty to Relevant Authority
 - define R.A.
 - appropriate training

2. Wikis by students, measure participation, generate marks

a. Ethical issues

- consent - to use wiki editing data
 - students need to explicitly provide consent because lecturing is repurposing the data.
 - transparency - what aspects of the wiki editing data will be used
 - translation bet. activity and grades should be transparent and fair
- b. DPA principles w.r.t. page history data
- DPA 5: data should not be retained longer than necessary for the purpose
Wiki history data is unlikely to provide facilities to manage such data effectively to comply w/ DPA.
 - DPA 7: is the data adequately secured against unauthorised access / tampering?

c. 2 changes DPA → GDPR

- requirement to document processes and policies in relation to the use of data and the possibility of greater requirements on consent for the use of data.
- data portability → depends on algorithm

d. ML to improve the algorithm

- explicability of the algorithm is difficult ⇒ based on ML
- ensuring access to human mediation in relation to the outcome of the algorithm.

3. Autonomous driving software with a black box system.

a. Privacy issues arising from the system.

- what data is recorded by the car
 - inclusion of location data and time is sensitive and has definite privacy issues because of the ability to track in real-time.
- mapping the data flows into and out of the car and the measures that might be taken to ensure security of such sensitive data.

b. Legal Issues

- legal responsibility: in the case of the death of the driver of the Tesla car w/ Autopilot, the company blamed the driver was responsible for not taking control to avoid obstruction.
- liability
 - from the actions taken by the autonomous driving software
 - standards to be set
 - software will be confronted w/ undesirable choices
 - how to permit software to make decisions?
 - based on what standards
 - some argue, based on some utilitarian metric
 - but drivers make lots of mistakes
 - acceptable if its as good as a human driver

c. Issues that arise in the acceptance of innovative technologies and how best to manage these issues.

- legal process lags the intro of technology
- takes time to gather data and experience reliably to evaluate the behavior of innovations.

d. Restructuring to mitigate risks

- localising liability, e.g. outsourcing software development / having subsidiary organisations to check design.
- risks arising - mitigate risks
 - new divisions for design and test.