

#### Link 7.2 Consequences of Poor Decisions Based on Poor Quality Data

There is a correlation between data quality and the decisions taken based on the data (O'Donghue *et al.*, 2011). The consequences of poor decisions based on poor quality data can include:

- Customers being overcharged, undercharged, misinformed.
- Poor customer service.
- Patients given the wrong treatment.
- Loss of customer trust.
- Employees made redundant due to poor quality sales reports.
- Confidential data released to unauthorized parties.
- Unprofitable product lines.
- Unmanageable stock levels and cash flow.
- Lack of tracking and accountability of manufactured products.
- Health scares due to breach of product safety levels.
- Loss of industry respect when problems arise.
- Mechanical and production errors.
- Financial loss.
- Missed opportunities.

The importance of data quality is signified by Fisher & Kingma (2001) who discuss the role and impact of data quality problems in a space shuttle disaster. In 1986 the space shuttle Challenger exploded killing seven people. The explosion was caused by O-ring seal joints that did not seal properly, allowing gasses to leak and catch fire. NASA was aware of the potential problems with the O-rings but incomplete and conflicting data contributed to the decision being taken to launch the shuttle, with devastating consequences.

#### References

Fisher, C.W. & Kingma, B.R., (2001), 'Criticality of Data Quality as Exemplified in Two Disasters', *Information and Management*, **39**(2), pp. 109-116.

O'Donoghue, J., O'Kane, T., Gallagher, J., Courtney, G., Aftab, A., Casey, A., Torres, J. & Angove, P., (2011), 'Modified Early Warning Scorecard: The Role of Data/Information Quality within the Decision Making Process', *The Electronic Journal Information Systems Evaluation*, **13**(3), pp. 100-109.