**Data** is the "life blood" of an organisation. As it flows between people, systems, databases, processes and departments; it carries with it the ability to make the organisation smarter and more effective. High-performing organisations pay close attention to the data asset, not as an afterthought but as a core part of their business needs. Data is essential to making well-informed decisions that guide and measure realisation of organisational management.

However, there is currently a lack of confidence and accuracy in this data meaning that business cases can become uneconomically viable limiting its effectiveness.

**Value of data**

How can we assign a meaningful value to data and data quality that enables us to determine a business case to drive improvements and enhancements? How do we link changes in data quality to company risk measures/liabilities? How would we financially value the data as an item on the balance sheet? What is the realised and potential value of our data? How could we insure it against loss?

**Data as an asset**

We aim to treat data as an asset in its own right. How do we understand the value of our data so we can invest in it appropriately? How do we calculate the whole life cost of data so we can continue to operate at lowest whole life cost? How do we prevent errors before they occur? How do we move from a "find and fix" to a "predict and prevent" approach to data quality? How do we create decision support capability that helps us describe the failure, diagnose its cause, prognoses when risks will materialise, prescribe appropriate action and ultimate automate the response? How do we link data quality to the softer more qualitative aspects of an organisation? E.g. How does a culture affect data quality and decision making? How do we assure ourselves our data is accurate without resorting to expensive and slow manual validation exercises?

**Data leadership & information engineers**

We need to professionalise our data management discipline to offer people a career in data or a platform to move across the organisational disciplines. What do our Information Engineers of the future look like? What skills/behaviours should our people have so they can use/manage the data? How do we attract the best data management talent? What do we teach at school today to prepare the youth to be data leaders of tomorrow? How do we instil the importance of data in today's workforce?

**Linking data requirements to business process**

Data offers no value unless it's linked to a purpose. How do we link data into business processes? How do we link data to the risk, objectives and outputs of Network Rail? How do we link data to the social value of the organisation that is "beyond the balance sheet".

**How to deal with data uncertainty**

The goal is not perfect data, it is understanding how imperfect the data is so that risk can be factored into decision-making. Waiting for our feet data before making a decision will lead to stagnation. The challenge is how do we make the best use of imperfect data sets, whilst still being confident in the outcome? Can we build in learning/experience to improve predictions and reduce risk?

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**Related goals**

- Create Logical Architecture Framework.
- Requirement for tooling to predict and prevent data quality issues, to improve the accuracy and cost of data that aims to reduce the level of risk in decision making.
- Broadening the scope of linear asset support tooling to integrate a wide range of linear data, to enable decisions that balance the trade-off between performance, cost and risk (TQM).