Driving Value Through Data:

**Identifying the Roles of Data**:

1. Operations
2. Strategy
3. Decision-Making
4. Measuring
5. Monitoring
6. Insight Management
7. Reporting

**Other roles:**

Artificial intelligence (AI)

Problem-solving

Data Reuse

Improving Outcomes with Data

* Need skilled staff with tools to explore data insights

Approaching Data as an Asset

* **An asset** is something that is owned by a person, an organization, or a government with the expectation that it can bring some economic benefit. This includes the generation of income, the reduction of expenses, or an increase in net worth.
* An asset can be tangible or intangible.
* **Tangible assets** are physical things such as inventory, machines, and property. That’s stuff you can see and touch.
* **An intangible asset** is the opposite; it’s a non-physical thing like software, copyrights, a brand, and goodwill.
* Data is an intangible asset.

Examples of the economic value of data:

* Improves operations.
* Increases existing revenue.
* Produces new forms of revenue.
* Builds relationships with customers and other stakeholders.
* Improves the quality of products and services.
* Contributes to competitive advantage.
* Enables innovation.
* Reduces risk.

**Data is an asset and for its value to be leveraged, it must be governed. This may be one of the most important motivations for good data governance.**

Data Analytics

**Data analytics has four primary types**:

1. **Descriptive**: Existing data sets of historical data are accessed, and analysis is performed to determine what the data tells stakeholders about the performance of a key performance indicator (KPI) or other business objectives. It is insight on past performance.
2. **Diagnostic:** As the term suggests, this analysis tries to glean from the data the answer to why something happened. It takes descriptive analysis and looks at the cause.
3. **Predictive:** In this approach, the analyst uses techniques to determine what may occur in the future. It applies tools and techniques to historical data and trends to predict the likelihood of certain outcomes.
4. **Prescriptive:** This analysis focuses on what action should be taken. In combination with predictive analytics, prescriptive techniques provide estimates of the probabilities of a variety of future outcomes.

Data Management:

**Data governance** concerns itself with, for example, defining the roles, policies, controls, and processes for increasing the quality and value of organizational data.

**Data management** is the implementation of data governance. Without data management, data governance is just wishful thinking. To get value from data, there must be execution.

* good data management provides the opportunity for significantly enhanced organizational performance.

**Governing Data:**

* People
* Policies
* Metrics