IT Governance

Reduce Cost and Improve Data Quality through the implementation of IT Governance

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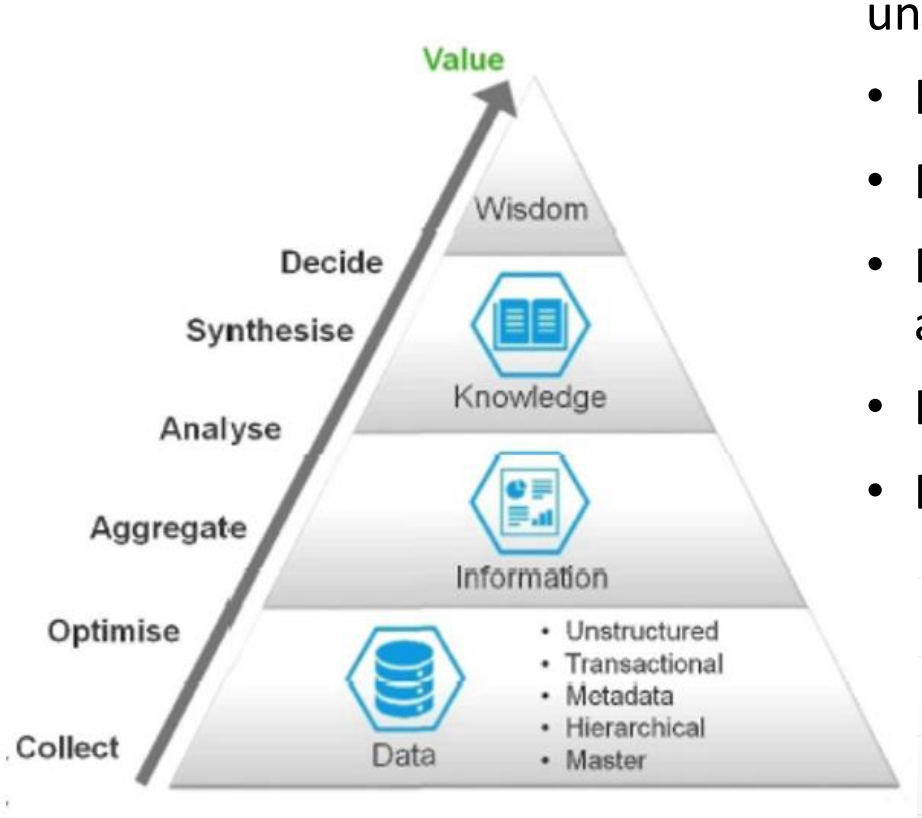
SPECIALTIES

IT AUDIT
IT CONSULTING
IT GOVERNANCE
IT SECURITY
IT DUE DILIGENCE

Data and Information as The Most Important Assets

Transformation of Data



The reason why that information is the worst governed, least understood, and most poorly utilised asset :

- Information and data are a significant expense in most organisations
- Information is hard to value or price.
- Information is easy to collect, digitise, and store and leads to an abundance of data and poor management.
- Information has increasing security and privacy exposure.
- Information has a decreasing value in a limited timeline.

Company	Market Value per User
Facebook	USD 401.95
Snap	USD 325.40
Twitter	USD 204.40
Pinterest	USD 100.26

Source : IBD, S&P Global Market Intelligence, * - monthly active users, ** - past 12 months

Poor Data Quality Impact and Cost

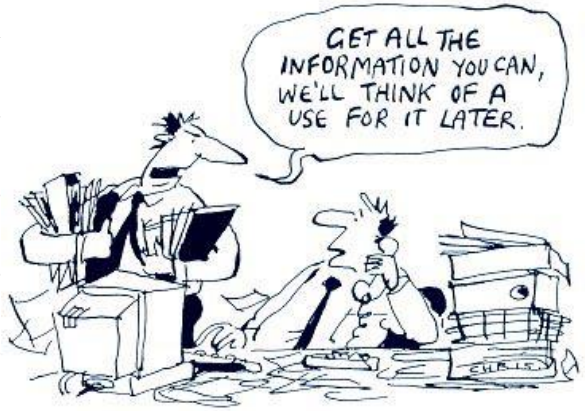
- Poor data quality is the primary reason for 40% of all business initiatives failing to achieve their targeted benefits.
- Data quality effects overall labor productivity by as much as a 20%.
- According to Gartner, “The average financial impact of poor data quality on the organization is estimated to be $9,7 million per year”.
- IBM also discovered in the US alone, businesses lose $3.1 trillion annually due to poor data quality.

Source : Gartner research ; “Measuring the Business Value of Data Quality,” Friedman and Smith (2011).

Source of Poor Data Quality

Quality of Data Entry

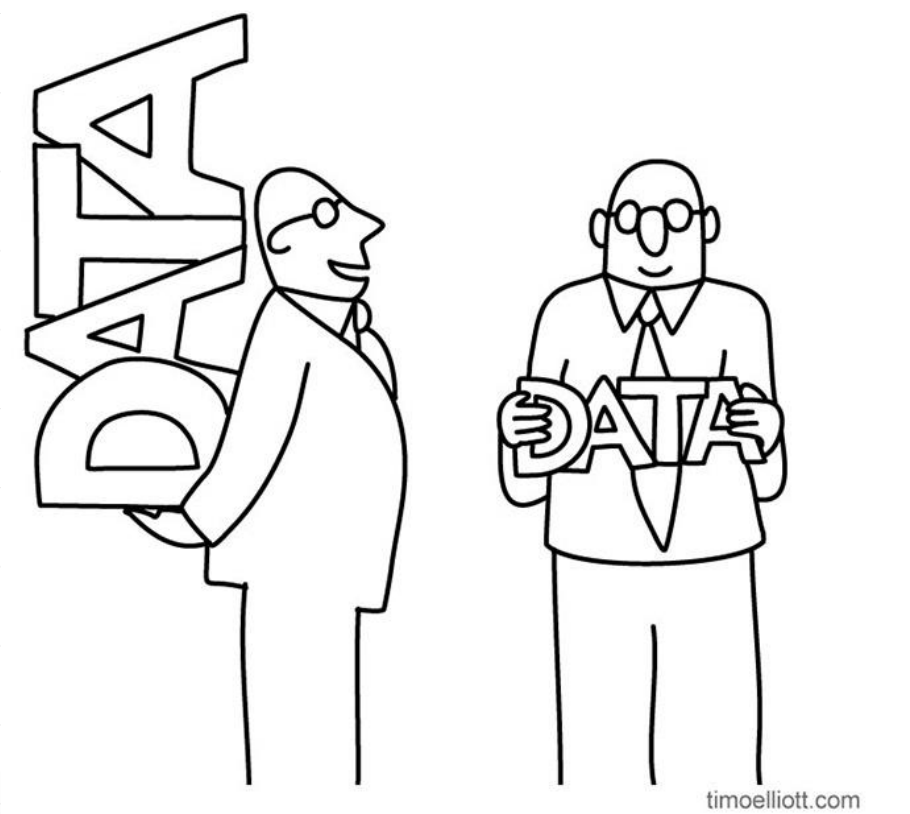
Quality of Data Process



Quality of Data Integration

Quality of Data Interpretation

Why Data Quality Initiatives seen as no productive project?



"I think you'll find that mine is bigger..."

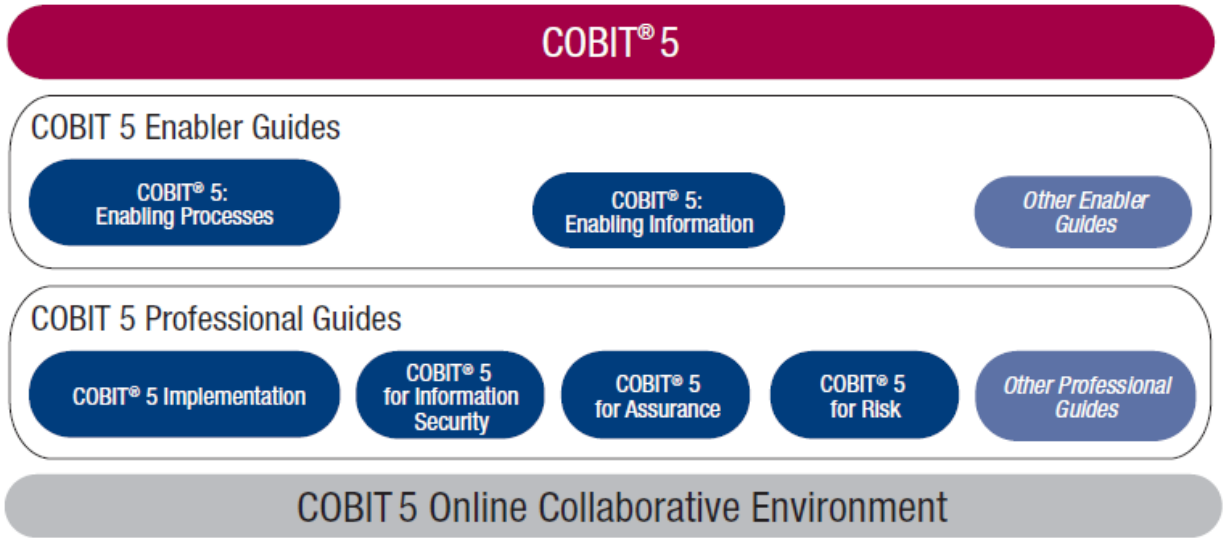
- There is no clear responsibility of roles.
- These initiatives require a cross functional and top-down approach.
- The ROI is often hard to measure.
- The organisation needs a driver for change.

Although information is seen by many organisations as an important asset that needs to be managed, controlled, and measured throughout its life cycle, companies **rarely invest in IT governance projects**.

IT Governance Framework: COBIT

COBIT 5 provides a comprehensive framework that assists enterprises in achieving their objectives for the governance and management of enterprise IT. Simply stated, it helps enterprises create optimal value from IT by maintaining a balance between realising benefits and optimising risk levels and resource use.

COBIT 5 is generic and useful for enterprises of all sizes, whether commercial, not-for-profit or in the public sector



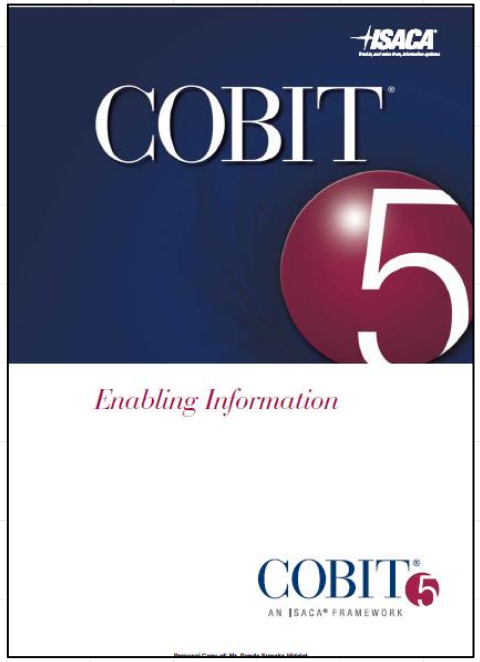
COBIT 5 is based on five key principles for governance and management of enterprise IT:

1. **Principle 1:** Meeting Stakeholder Needs
2. **Principle 2:** Covering the Enterprise End-to-end
3. **Principle 3:** Applying a Single, Integrated Framework
4. **Principle 4:** Meeting Stakeholder Needs
5. **Principle 5:** Separating Governance from management

Data Governance

Data governance ensures that:

- Stakeholder needs, conditions and options are evaluated to determine balanced, mutually agreed enterprise objectives to be achieved through the acquisition and management of data/ information resources.
- Direction is set for data/information management capabilities through prioritization and decision making.
- Performance and compliance of data/information resources are monitored and evaluated relative to mutually agreed-upon (by all stakeholders) direction and objectives.

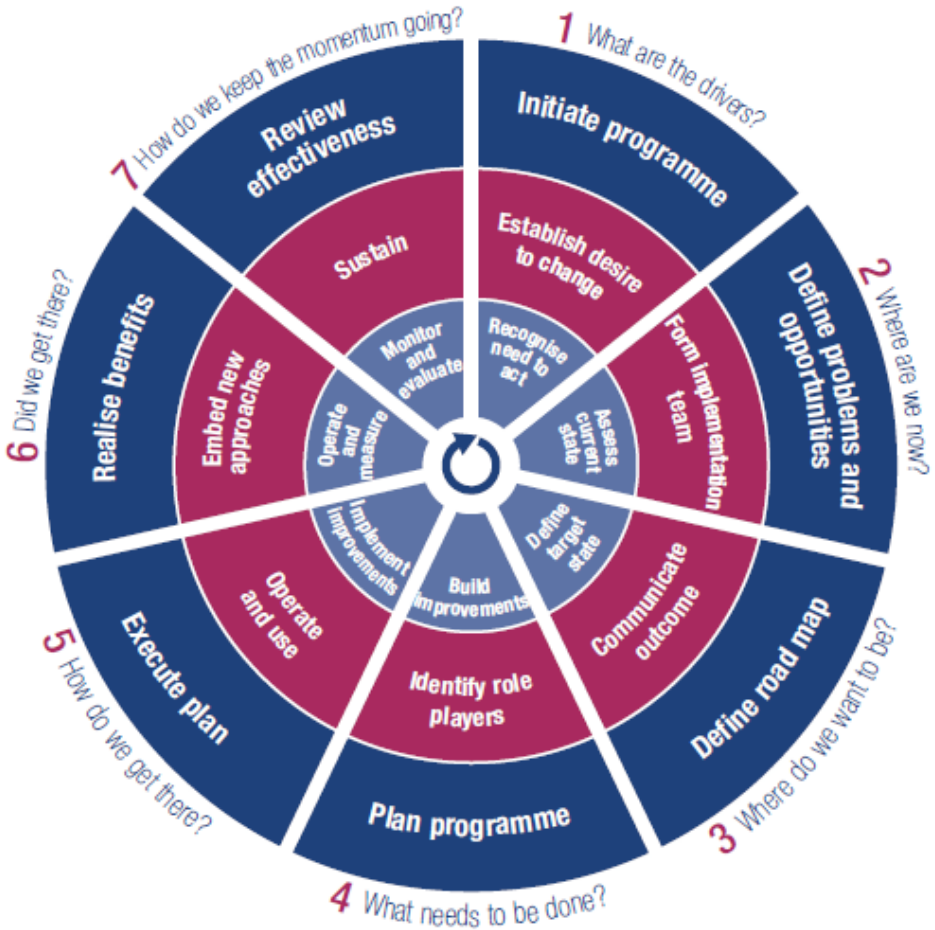


Note: *COBIT® 5: Enabling Information* provides IT and business stakeholders with:

- A comprehensive information model that is based on the generic COBIT 5 enabler model and that addresses all aspects of data and information
- Guidance for using the COBIT 5 framework, principles and concepts (especially the enablers) to address common data and information governance and management issues
- The reasons why it is critical for data and information to be managed and governed in an appropriate way

Applying Project Phase and Roles to a data-governance project

Implementation Life Cycle



- **Programme management** (outer ring)
- **Change enablement** (middle ring)
- **Continual improvement life cycle** (inner ring)

Before starting the project with the GEIT method, it is important to create the appropriate environment by doing the following:

- The executive management should specify and design the guiding principles and accountabilities for governance. They need to not only set and maintain the governance framework but also to allocate roles and responsibilities.
- The executive management and the board needs to formalise the project; the best way to do this is to establish an IT executive strategy committee.

Common Mistakes and How to avoid them

Pre-Project Stage

1. Having No data-governance strategy
2. Having buy-in but no or low commitment.
3. Creating too many committees.
4. Taking a one-size-fits-all approach
5. Failing to define data governance
6. Failing to design data governance

Initiation Stage

1. Prematurely launching a council
2. Trying to solve world hunger
3. Creating a technology-centric solution only
4. Ignoring shadow IT and data
5. Not considering data and information life cycle

Common Mistakes and How to avoid them

Subsequent Delivery Stage(s)

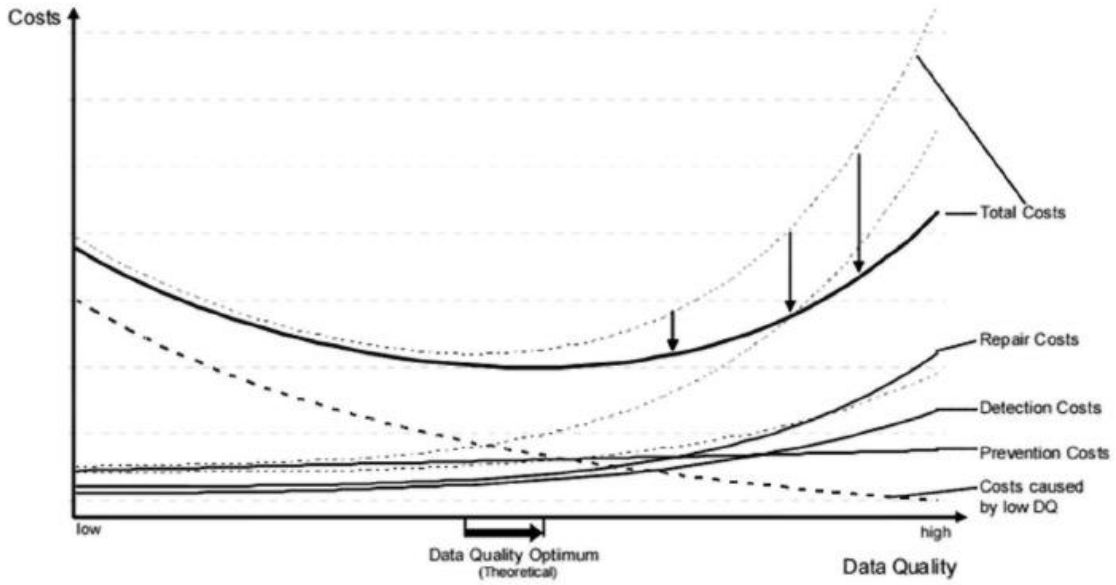
1. Focusing on the wrong level of detail
2. Relying too much on data experts
3. Relying on data models alone
4. Failing to implement
5. Creating a schemata nightmare
6. Missing change management

Final Delivery Stage

1. Not building sustainable processes
2. Assuming a governance framework means completion

Measuring Data Quality Cost

Cost Caused by Low Data Quality	**Direct Cost**	Verification cost
		Re-entry cost
		Compensation cost
	Indirect Cost	Lower Reputation cost
		Wrong decision/action cost
		Sunk Investment cost
Cost of Improving or Assuring Data Quality	**Prevention Cost**	Training cost
		Monitoring cost
		Standard Development & Deployment cost
	Detection Cost	Analysis cost
		Reposting cost
	Repair Cost	Repair Planning cost
		Repair Implementation cost



The effect of prevention on repair and detection costs
(Eppler and Helfert 2004, 320)

Cost Saving with Master Data Management

Type	Cost Caused by Low Data Quality	Cost Saving Through MDM
Verification cost	Cost estimation in terms of how long the business user needs to verify certain information.	Wasting less time searching for the right record set (the last updated customer records) will speed up the business processes and save money.
Re-entry cost	Cost estimation in terms of how long the business user needs to re-enter certain information due to poor or inconsistent information.	Saving time by not doing double work will free up resources and process time, save money, and motivate employees.
Compensation cost	Cost estimation in terms of the possible compensation costs that the enterprise has to pay to the customer or partners	Reducing compensation costs (e.g., SLA breaches) saves money.
Lower Reputation cost	Cost estimation of losing existing customer and cost for recovering company's reputation.	Reducing the risk of losing a customer helps reduce the compensating cost of acquiring a new customer.
Wrong decision/action cost	Costs resulted from incorrect decision / action such as incorrect proposing marketing scheme.	Creating more controls, becoming more risk aware, and making better informed decisions will save costs.
Sunk Investment cost	Reducing investment cost affects every project; hence, the project scope need so be revisited.	Lowering the investment cost in the master data initiative means it is important to prioritise the project tasks that are used to optimise the cost savings.

Cost Saving with Master Data Management

Type	Cost of Improving / Assuring Data Quality	Cost Saving Through MDM
Training cost	Training costs for project members and employees, internal and external costs for training, costs to spread the word in presentations and Conferences	People become aware of the importance and high value of information. There might be a shift in the cultural value—information is the most valuable asset.
Monitoring cost	Project monitoring, implementation and integration monitoring, and costs for monitoring technology and processes.	Having automation in place will reduce the ongoing costs of managing and improving data quality.
Standard Development & Deployment cost	Costs through the development of a global standard for MDM. Classifying master data, building a global standard and applying it regionally and locally, and fully assessing every location after successfully implementing the improvement cycle	During implementation, some redundant systems might be found, which can be decommissioned; hence, further application architecture work will be easier and less complex, as fewer systems need to be considered. There is also the economy of scale for migrating systems on a global level.
MDM Project Cost	Building a governance framework and environment to operate in, creating global, regional, and local project teams, understanding implications for other parallel projects, and spending on rework and new specifications.	The alignment to a global standard will not only reduce the initial implementation costs but also the ongoing deployment costs.

Cost Saving with Master Data Management

Type	Cost of Improving / Assuring Data Quality	Cost Saving Through MDM
Analysis cost	The project needs to ensure that the controls are in place to detect poor data quality; hence, in-depth analysis might be necessary.	The analysis helps to set the right focus and priorities for the project; hence, this saves costs, as only the necessary project tasks are done.
Reposting cost	Setting up reporting is a good way to monitor the data quality both during and after the project. Of course, setting up a reporting solution is expensive.	Knowing the current status is the key for MDM, as project goals will be measured in terms of better data quality (e.g., the number of duplicate records that have been reduced). As the reporting is in place, analysis costs will be lower.
Repair Planning cost	Discovering a good number of inconsistencies will not, in itself, save costs, but the consolidation and repair of them will.	Investing more time in planning will pay off in the implementation.
Repair Implementation cost	The repair will cost money, but this should be seen as a one-off cost, as MDM should ensure that only quality data will be added in the future.	Once the repair is done, less poor data is in the system, which will speed up application, employees, and processes, all of which will help save costs.

Summary

- Data is the most important asset and needs to be managed and protected like every other valuable asset. The problem is that the value of information might differ according to people's points of view; hence, organisational policies and guidelines are necessary
- Data Governance dan MDM and are recognised management disciplines because of the following business drivers: regulatory compliance, privacy and data protection, safety and security, and growing business complexity.
- Data cost or value as an asset is hard to measure.
- Costs are incurred because of poor data quality or when improving data quality.
- Funding an MDM and data-governance project is very costly; however, costs arise when working with low-quality data as well. Hence, knowing the cost of bad data quality helps you get funding for the improvement project.

Open Discussion

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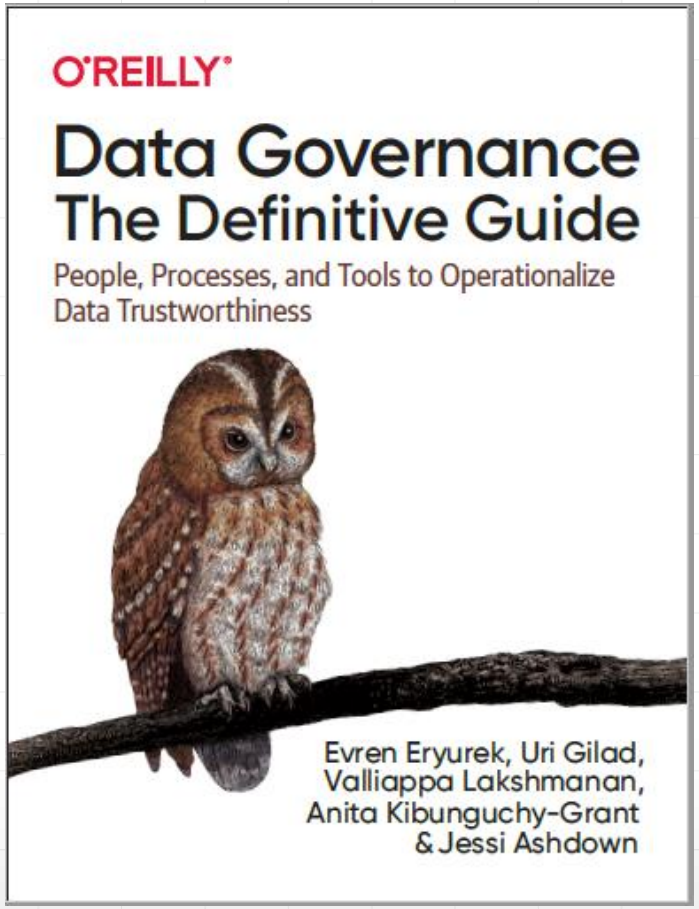
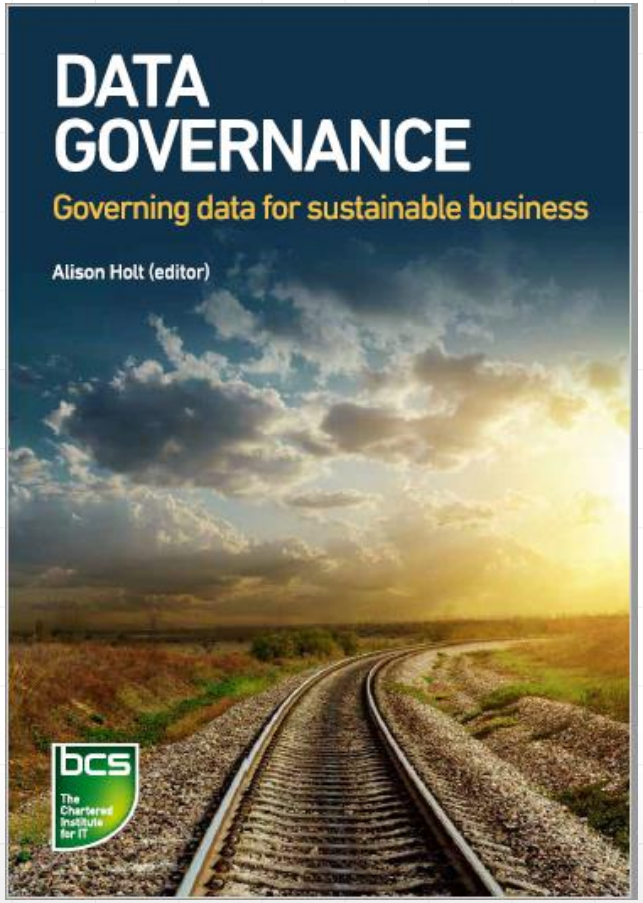
Suggested further reading





THANK YOU

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