

**DATAROCKET®**

**ADDED VALUE THROUGH  
DATA GOVERNANCE –  
REALITY OR WISHFUL  
THINKING?**

# 1. THE STARTING POINT: FOUR MISCONCEPTIONS AND TWO PROPOSITIONS REGARDING DATA GOVERNANCE

**Data has value. This statement should be beyond dispute, as the focus of research and controlling has long been on data as intangible assets as well as the growing importance of such assets.**

The issue of value loss due to poor data quality – redundant data, outdated data, and incomplete data – is pervasive in many organizations. The urge to improve data quality inevitably arises from the realization that data is a valuable resource. The objective therefore needs to be the improvement of data quality.

Inconsistent structures and diffuse responsibilities have been shown to negatively affect data quality. Data governance is therefore one of the fundamental requirements for improving data quality, as it defines responsibilities so that it is clear where authority lies and who can be held accountable. Data governance also creates transparency with regard to information about data, that is, it focuses on metadata.

*The information “58452” in a field only makes sense if the context in which it is to be understood is also known. You need the metadata for this data field so you know it is a postal code, for example.*

Nevertheless, many companies fail to make the mental connection that data quality can only be improved through data governance. Senior management is often of the opinion that everything is simply a matter of IT or of picking the right tool. Data governance is seen as an expensive and laborious affair.

What consultants typically find in their interactions with customers in the field:

*“We tried data governance – it doesn’t work for us! It’s much too time-consuming, so we are instead concerning ourselves with data quality.”*

*“There’s no budget for data governance at the moment – we’re rolling out SAP S/4 Hana and need to clean up our data.”*

*“We’re not making any headway in that area – we’re going to first put our focus on master data and then see where we are”*

**These statements are based on four misconceptions. The truth looks more like this:**

1. Data governance and data quality are by no means different things.
2. A quick, supposedly budget-friendly solution in the form of data cleansing is not enough. A lasting solution looks different than that.
3. Data governance can be quite straightforward and well-adapted to the specific use case.
4. It isn’t necessary for the related effort and expense to “go through the roof.”

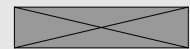
All of these ideas are interconnected and can be reduced to a common denominator: based on one's personal experience in the enterprise so far, no added value can be seen in this area. While it is quite difficult to quantify the specific return on investment (ROI), does this mean that there is no added value at all? That is surely not the case. Doubts about the cost-benefit ratio of data governance are more likely to stem from difficulties in quantifying the benefits of intangible assets and from current data quality practices and initiatives in the enterprise. So let's first take a closer look at the status quo.

"Data governance should not be perceived as a constraint or a burden. It is instead a tool for bringing about clarity as well as mutual understanding through the (mandatory) discussion, agreement, and documentation of dependencies and responsibilities."

**Vincent Oefner**

Minimax GmbH

Head of Master Data Management



## 2. THREE EXAMPLES OF HOW TO DEAL WITH DATA QUALITY PROBLEMS

### Deficiencies in data quality

There are deficiencies in data quality at a telecommunications services provider. The master data for product requirements is inconsistent, there are gaps in the network infrastructure documentation, and the customer master data is outdated, resulting in customers receiving incorrect responses when they check for online product availability. Since many customers then do not sign a contract because of the negative availability check, the company loses revenue. The problem is referred to IT.

### Economic losses due to incorrect data

At a consumer goods manufacturer, incorrect data on the dimensions and weight of shampoo bottles leads to economic losses as a result of increased costs for logistics and the disposal of damaged goods. Auxiliary staff is temporarily hired to perform data cleansing.

### High logistics costs

A controller is evaluating information from an inter-company process and tries to get an overview of transportation costs. She notices that there are considerable price differences within the Group. The controller is new to the company and finds it difficult to navigate the data structures. However, she suspects that this can be explained by a technical problem and gets in touch with IT. A relevant ticket must be opened, and an external IT service provider is commissioned with the task of analyzing the problem in the business process – a service associated with considerable costs. The analysis by IT shows that the problem can be traced back to an error in the master data. In the end, the employee invested much more time than necessary, and unnecessary external costs were incurred.

The wide-ranging data quality improvement initiatives illustrated in these examples involve quickly cleansing the data and delegating the problems to IT. Dealing with the metadata seems to be too time-consuming, and responsibilities and roles are not defined. With data governance that makes roles and responsibilities in the company transparent, the new employee referred

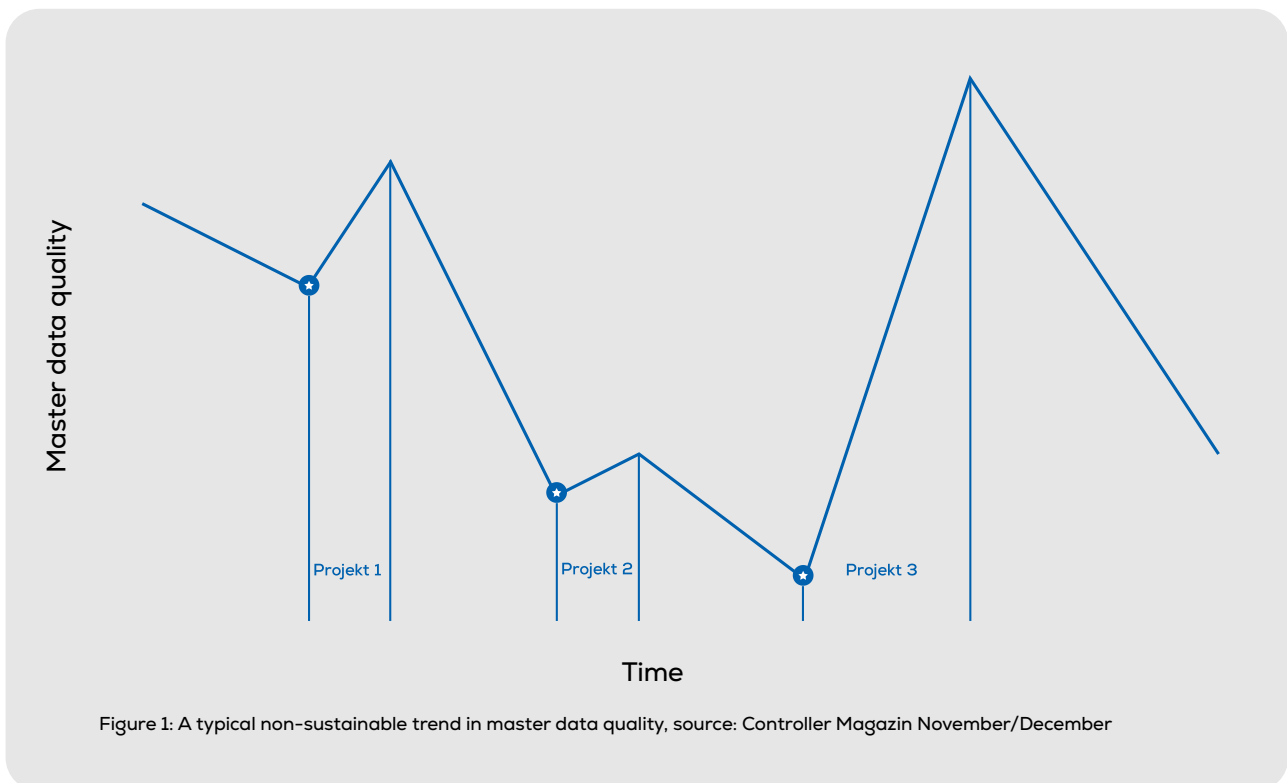
to in the third use case would at least be able to locate a contact person for the inter-company business process, for example. Due to their professional expertise, this person would know how to narrow down the problem so that it would be possible to directly attend to the task of improving the quality of the master data.

Effort/costs	Goal	Actual benefit
Inexpensive auxiliary staff	Fast manual dataset cleansing	Data is updated, but it quickly becomes outdated, is prone to errors, and has only been brought up to date superficially. No structures or responsibilities have been mapped. There is also a lack of fixed roles and processes for handling data. <b>→ Not a sustainable, long-term, or systematic solution to the problem</b>
Extensive investments are made in technical solutions – often in an isolated manner in the context of temporary projects	Enhanced and lasting data quality	The data is temporarily updated (in a manner largely focused on a single area) and the corresponding responsibilities are mapped – usually with external support. However, specific characteristics of the enterprise (such as people, policymaking, and culture) are not taken into consideration. It is often the case that a purely technological approach is taken, which can then lead to a gap between IT and the business. In most cases, such solutions require a great deal of resources (in terms of both time and money) that can neither be calculated nor planned. <b>→ An approach associated with the excessive expenditure of resources and limited benefit</b> <b>→ Not a sustainable and systematic solution to the problem</b> <b>→ The trend in data quality improvement takes on a sawtooth pattern (see Figure 1).</b>

Table 1: Comparison of costs and benefits of measures to improve data quality

The bottom line in regard to the status quo: When a critical situation arises with the operational data itself, the business process can be affected. The damage becomes obvious when a business process collapses due to incorrect data. However, in view of the associated expense, many companies don't want to spend months recording metadata – even though it could prevent costs from being incurred here in the future. In the end, related projects will focus on the content of the data itself rather than targeting the metadata,

which reveals information about the data, its origin, and how it is used. The result of this procedure is that project participants are disappointed in the medium and long term because the lasting benefit is not apparent or fails to materialize. Management is also not happy, as a great deal of cost and time expenditure resulted in an unsatisfactory solution.

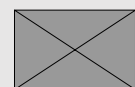


On the other hand, data governance is designed to provide lasting and sustainable solutions. It can add value – if properly understood and given a place at the center of efforts to improve data quality.

“Data governance is the enterprise-wide and system-independent foundation that helps us protect our data quality and support efficient core and business processes. It’s important to define and communicate clear responsibilities and roles, as well as to follow precise guidelines.”

**Stefanie Gries**

SMA Solar Technology  
Global Master Data Management



# 3. DEFINING DATA GOVERNANCE THAT IMPROVES THE COST-BENEFIT RATIO

*“When you hear people talking about data governance, it’s hard to decipher whether they’re really talking about data governance or if they’re actually discussing data management or some ambiguous conglomeration*

This quote is from Pete Stiglich on the Perficient Health IT blog. He provides the following definition based on the entry found in the DAMA Dictionary of Data Management:

Data governance is the “exercise of authority, control, and shared decision-making (planning, monitoring, and enforcement) in the management of data assets.”

quality management, and reference and master data management (see Figure 2).

The broad, overarching importance of data governance is also made clear in a definition by Robert S. Seiner, who states the following in his book Non-Invasive Data Governance:

Data governance is the formal execution and enforcement of authority in the management of data and data-related assets.

According to this definition, an organization needs to transform existing business roles into data governance roles. This virtual organization then defines the decision-making levels and responsibilities for the enterprise-wide data. This crucial step allows the company to gain control over data matters and take advantage of actual benefits.

Since this means that the data governance organization emerges from the enterprise itself:

- It takes into account the existing structures and corporate culture (instead of being imposed from the outside)
- It puts its focus on the needs of the business (rather than relegating the problem to IT alone and creating/reinforcing a gap between IT and the business)
- It makes use of the available resources (instead of looking for expensive external solutions)
- It can increase data quality on a lasting basis (instead of bringing about a sawtooth pattern of improvement through projects implemented in isolation).

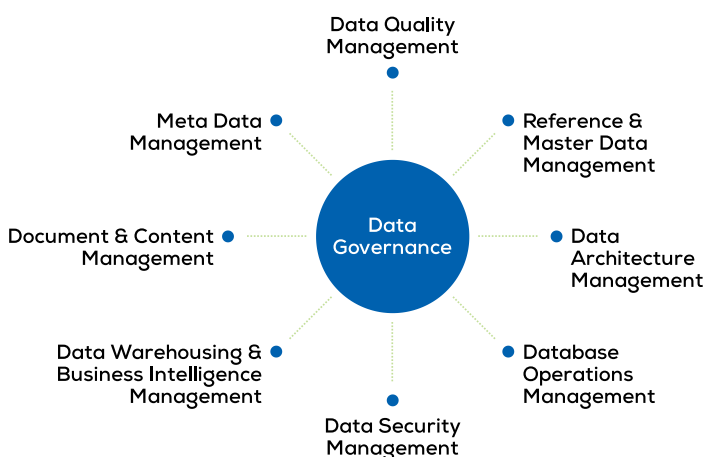


Figure 2: Data governance at the heart of data management (source: <https://www.dataversity.net/the-difference-between-data-governance-data-management/>)

The book Data Management Body of Knowledge identifies 10 primary data management functions, with data governance as the core component. Data governance is at the center and therefore connected to all other components, including data architecture management, data

# 4. DETERMINING THE (ADDED) VALUE OF DATA GOVERNANCE

**Two factors can be considered when indirectly determining the value of data governance: the benefits for employees and the impact on data quality.**

Accordingly, the value of data governance is measured first and foremost in terms of the benefits it brings to the employees in the business units. The benefits can be measured in terms of the negative added value or even lack thereof. A circumstance such as this arises when processes and projects cannot be undertaken or implemented due to a poor database, or when additional effort is required to obtain a good database.

It is now commonplace for employees to be required to consider issues related to the data they define, maintain, and use at work on a daily basis. Surveys can identify these issues in order to determine the value of data governance.

It is helpful to get answers to questions such as

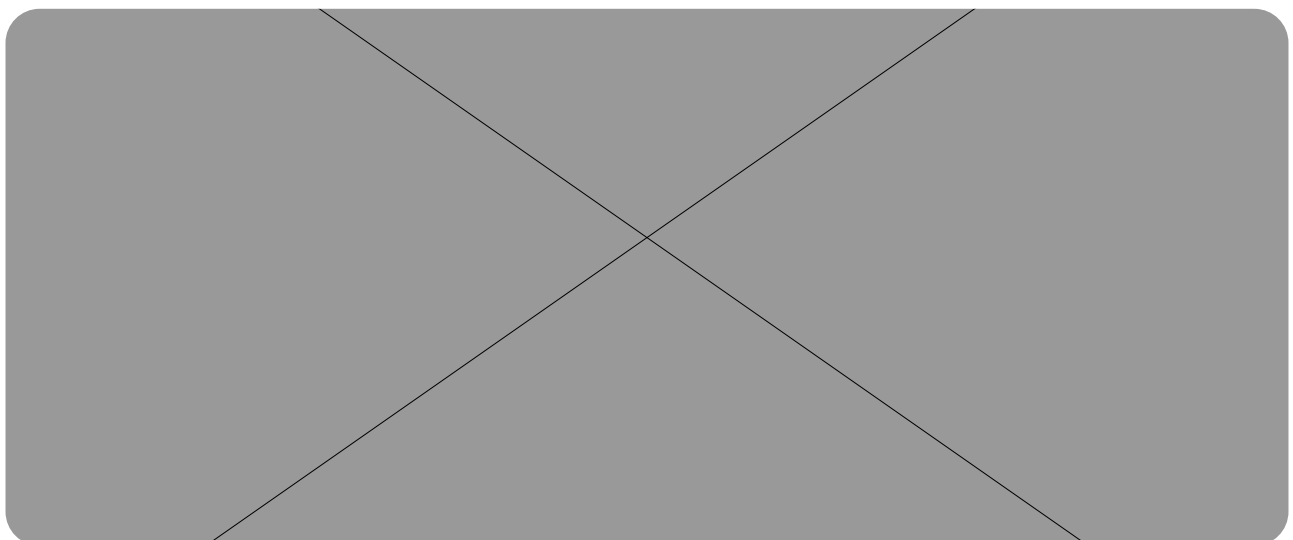
the following:

- What are employees not able to do because the data is not available, knowledge about the data is lacking, or the quality of the data is poor?
- What difficulties cause employees to invest more time than necessary?
- How much productive work time is lost because information is untraceable, contradictory, or incorrect?

The business units themselves identify the value of data governance.

Data governance as a core component of data management (see Figure 2) also affects data quality management. Data quality can only be improved if information about the data, as well as its origin and use, is both reliable and known. Data governance can be used to define rules that allow statements to be made about poor data quality.

**Added value 1 through data gov-**



## ernance: increase the ability of the enterprise to obtain information and make decisions through improvements in data quality

After data governance is rolled out, the added value for a company is primarily demonstrated by the improved ability to obtain information and save time. It is absolutely essential for the management of an enterprise to be able to quickly access the “right” information at all times and particularly in the crisis situations of the moment.

For example, it is necessary to quickly make reliable statements and to transfer data to the current IT landscape when M&A transactions are being processed. With a functional data governance organization, the enterprise knows its data structures in detail, along with the associated roles and responsibilities. The relationships between data and business processes are clearly defined, and the new business areas can be quickly and easily established.

Data governance makes for better data management, reducing the risk of making business decisions based on incorrect or incomplete

information. The specific added value therefore consists of circumstances such as an investment that was not made and that would have led to losses later on.

## Added value 2 through data governance: knowing/optimizing the reproduction costs of data

Data governance is relevant not only to the metadata of systems and structures but also to the processes in which the data is used and how the data is generated. The creation of a product includes both the collection of data in the system as well as the process of information creation. Every enterprise should know the value of its data and thus also the cost of creating it. This is only possible if each of the process steps completed in the course of this development process is known. Strategic decisions can be derived based on such information – such as whether it would pay off to automatically create similar products by means of variants and/or various configurations.

# 5. NOT HAVING DATA GOVERNANCE WILL COST YOU

The increasing focus on Big Data and analytics as a strategic asset is bringing the need for sound data governance into sharper focus for businesses. Data governance doesn't have to be overly complex, but it does need to be based on a solid foundation and get buy-in from management. While the value of data is beyond dispute and data quality has long been on the agenda of business undertakings, the realization that data governance and (master) data quality go hand in hand should become even more prevalent.

This means that the success of data governance

*The connection between the two circumstances is as simple as it is true: poor data quality results in additional costs, and data governance prevents the costs caused by*

initiatives is primarily measured by taking a detour through the value of data and the added value of high data quality. “Data is an asset!” A company can optimize its database on a lasting basis only if data governance provides the authoritative information required. A glance at the specific business use cases illus-



trates the positive effects of data governance initiatives. In turn, the added value can be indirectly derived from this. These effects include:

- **Time savings** – since employees are not bogged down in a chaotic data environment
- **Processes operate smoothly** because there are clear rules, roles, and responsibilities regarding data
- **Legal certainty** is provided since correctly maintained metadata ensures conformity with the General Data Protection Regulation and other legal rules
- **Content is communicated transparently** – IT and business staff do not talk past each other
- **Optimized reproduction costs** of data

- Faster and **better business decisions** thanks to valid data
- **Greater operational efficiency** through organized and secure collaboration.

#### The bottom line:

Employees supported by the establishment of data governance immediately notice the added value. Transparency in the company and trust in what is said about data create added value for everyone in the enterprise. There is no need for a data governance program to be established as a “big bang” solution – it is sufficient to identify an area in which a pilot initiative can be launched.

“Implementation of the DATAROCKET Guide data governance tool helps us to break down the walls between our data silos and regulate responsibilities – without taking resources from other systems in our existing system landscape.

We transform informal processes into formal processes and convert existing informal responsibilities into official responsibilities. In this way we get the buy-in of employees and managers and make it easy to transition the data and processes, ultimately resulting in a successful cultural sea change.”

#### Manfred Nielsen

ROSEN Technology and Research Center GmbH  
CDO

