# Data quality monitoring

### Definition

Data quality monitoring is the process of detecting and reporting data issues.

### Synonyms

Data quality measuring

### Purpose

The purpose of data quality monitoring is:

- To gain insight into data issues, both on individual level and statistically (dashboard),
- To be able to follow and track the number of data issues in time,
- To be able to correct data issues and to analyse the cause of data issues (see factsheet data issues).

### Life cycle

| Phase | Activity |
|---|---|
| Plan | * Establish the scope of data quality monitoring.<br>* Decide which tool will be used to apply Data quality monitoring.<br>* Implement the tool.<br>* Establish the data quality rules that will be applied.<br>* Assign roles and responsibilities. |
| Do | * Run data quality monitoring periodically to detect data issues.<br>* Use the results of data quality monitoring for solving the data issues. |
| Check | * Evaluate the effectiveness and costs of Data quality monitoring |
| Act | * Adapt the data quality rules.<br>* Make other changes: scope, tool, roles and responsibilities. |

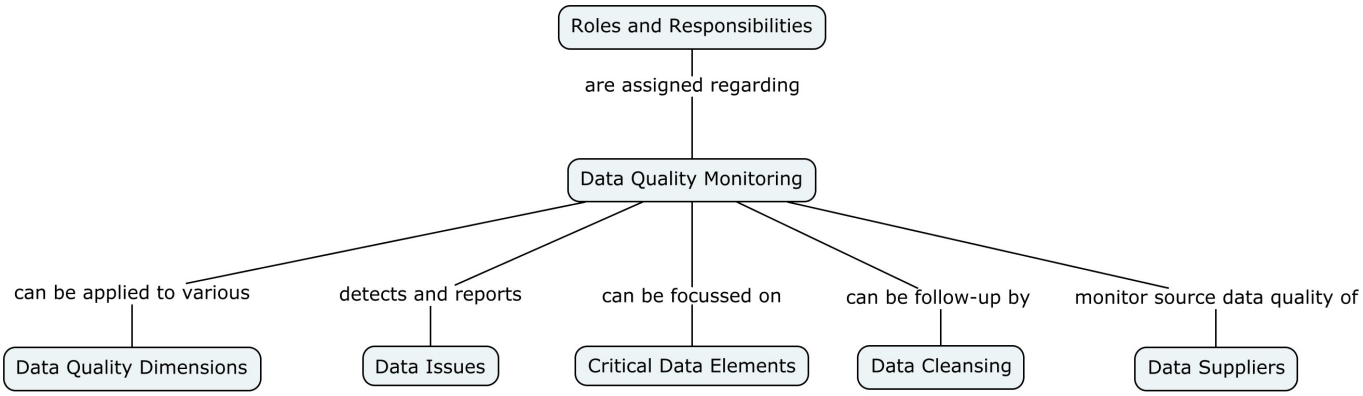
### Characteristics

| Characteristic | Requirement |
|---|---|
| Efficiency | Data quality monitoring should be done efficiently and cost-effective. |
| Effectivensss | Data quality monitoring should be effective. |

### Relations

- Data quality monitoring is part of a data quality management system.
- Data quality monitoring can be focussed on critical data elements.
- Data quality monitoring detects and reports data issues.
- Data quality monitoring can be input for or is part of data cleansing.
- Data quality monitoring can be applied to various data quality dimensions.

- Data quality monitoring is assigned to roles and responsibilities.
- Data quality monitoring will monitor the quality of the data suppliers source data.




### Story

A municipality wants to improve and guarantee the quality of its property register. First, they want to get an insight into the situation before they start improving. Therefore, they first purchase a tool with which, the quality of the data can be efficiently measured and monitored. They set the right data quality rules in the tool and produce their first report. It shows that there are two percent locations outside the municipal boundaries and that there are property categories that are not consistent with the description of the property.

Based on this report, the municipality decided to first solve the problem of inaccurate locations. This is where they suffer the most. They start a process of Data Cleansing to solve this. Partly, they do this by comparing the register with another file. For another part, the objects are visited by officials and the locations are redetermined. The monitor measures the progress of the cleaning action. Furthermore, an extra check have been built into the application with which new objects are entered, so that this problem can no longer occur.

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