# Data Quality Dimensions

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Accuracy | A measurement of the veracity of data to its authoritative source           | Accuracy is a measurement of the precision of data. It can be measured against either original documents or authoritative sources and validated against defined business rules. | • Records that are wrong at a specified time (i.e. record with incorrect maturity date)  
• Records that haven’t been refreshed or updated  
• Records at the wrong level of precision (i.e. prices that were originally quoted at three decimal places, but cut-off and stored at two decimal places) |
| Completeness | A measurement of the availability of required data attributes              | Completeness measures the existence of required data attributes in the population of data records.                                           | • A missing ticker symbol, CUSIP, or other identifier  
• A fixed income instrument record with a null coupon value  
• A benchmark or index that is missing a dividend notice or stock split  
• A record with missing attributes |
| Conformity | A measurement of the alignment of content with the required standards     | Conformity measures how well the data aligns to internal, external or industry-wide standards.                                               | • Invalid ISO currency codes  
• Violation of allowable values (i.e. state code for a country that doesn’t have states)  
• Inconsistent date formats |
| Consistency | A measurement of compliance with required formats, values or definitions | Consistency provides assurance that data values, formats and definitions in one population agree with those in another data population. | • Not logical given parameters or rules (rationalization of coding schemes)  
• Invalid data formats in some records in a feed  
• Telephone numbers with commas vs. hyphens  
• U.S. vs. European date formats |
| Coverage | A measurement of the availability of required data records                 | Coverage refers to the breadth, depth and availability of data that exists but is missing from a data provider.                           | • A group of securities (i.e.: corporate bonds) not included in a vendor feed  
• Quoted prices from an emerging market that are missing  
• Legal entity and hierarchy data missing from a country or region |
| Timeliness | A measurement of the degree to which data is both representative of current conditions and available for use | Timeliness is a measurement of how well content represents current market/business conditions as well as whether the data is functionally available when needed. | • A file delivered too late for a business process or operation  
• An issuance or corporate action not delivered when it was announced  
• A credit rating change not updated on the day if was issued  
• A new prospectus not given an official number from the national numbering agency |
| Uniqueness | A measurement of the degree that no record or attribute is recorded more than once | Uniqueness refers to the singularity of records and or attributes. The objective is a single (unique) recording of data.                  | • Two instances of the same security with different identifiers or spellings  
• A preferred share represented as both an equity and debt object in the same database |