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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Data quality - Part 8: Information and data quality: Concepts
and measuring**

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules for Standardization Documents" drafting.

This document is part 8 of GB/T 42381 "Data Quality". GB/T 42381 "Data Quality" has published the following parts.

--- Part 8. Information and data quality. concepts and measurements;

--- Part 61. Data Quality Management. Process Reference Model.

This document is equivalent to ISO 8000-8:2015 "Data Quality - Part 8. Information Data Quality. Concepts and Measurements".

The following minimal editorial changes have been made to this document.

--- Added a normative reference to Appendix A in Chapter 4.

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

Creating, collecting, storing, maintaining, transmitting, processing, and presenting information and data to support business processes in a timely and cost-effective manner requires addressing

To define relevant characteristics of information and data quality, it is also necessary to measure, manage and report information and data quality.

GB/T 42381 defines the relevant characteristics that determine the quality of information and data, and provides management, measurement, and improvement of information and data quality

Methods. These given methods can be used to assess the quality of information and data. Oriented to the expectations and needs of the current business case, for a given method

It's also important to do some tailoring.

GB/T 42381 includes sections applicable to all data types, as well as sections applicable to specific data types. GB/T 42381 can be independent

It can be used stand-alone or in conjunction with a quality management system.

GB/T 42381 "Data Quality" consists of the following series.

--- Parts 1 to 99. Overview of data quality. This series gives the structure of the data quality series standard, data quality standard involves

The basic concept of data quality management, data quality assessment and other comprehensive content, ISO 8000-1 gives the data quality part review.

--- Parts 100 to 199. Master Data Quality. Master data describe persons, organizations, places, objects, services, processes, rules and

allow. This family of standards describes the characteristics that define the quality of master data. These properties include. semantics, syntactic encoding, consistency of requirements,

Data provenance, accuracy, integrity and data governance. This series specifies some master data information, which should be identified in general

Ensure the reliability of data communication between the information sender and the receiver. ISO 8000-100 gives an overview of the quality part of master data.

--- Parts 200 to 299. Transactional data quality. Transactional data describe temporal events, including individuals, organizations, places, objects,

Services, Processes, Rules and Standards. This family of standards describes characteristics that define the quality of transactional data. These properties include. semantics, language

Method coding, consistency of requirements, data provenance, accuracy, completeness, and data governance. This series specifies the number of business transactions

This information should generally ensure the reliability of the data communication between

the sender and receiver of the information. ISO 8000-200 gives

An overview of the transactional data quality section is given.

--- Parts 300 to 399. Product data quality. Product data quality is a measure of the correctness and applicability of product data, the number of products

The data can ensure that the data can be provided to users who need the data in a timely manner. Product data is the data required by the product from concept to manufacturing.

according to. Therefore, products include not only computer-aided design (CAD) data, but also computer-aided manufacturing (CAM) data,

Computational data engineering (CAE) data, product data management (PDM) data, and other types of data. The main idea of the series

The graph is to improve the efficiency of coordinated product development and reduce duplication of work at the data receiving end. ISO 8000-300 gives product data

A review of the quality section.

GB/T 42381 "Data Quality" is proposed to consist of the following parts.

- Part 1. Overview;
- Part 2. Terminology;
- Part 8. Information and data quality. concepts and measurements;
- Part 51. Data governance. policy statement for data exchange;
- Part 61. Data quality management. Process reference model;
- Part 62. Data quality management. Organizational process maturity assessment. Application of relevant standards for process assessment;
- Part 63. Data quality management. process measurement;
- Part 65. Data quality management. process measurement scale;
- Part 66. Data quality management. evaluation indicators for production operation management data processing;
- Part 81. Data quality assessment. data collection;
- Part 82. Data quality assessment. Create data rules;
- Part 100. Master data. Feature data exchange. Overview;
- Part 110. Master data. characteristic data exchange. syntax, semantic coding and compliance with data specifications;
- Part 115. Master data. quality identifier exchange. syntax, semantics and parsing

requirements;

--- Part 116.Master Data. Quality Identifier Exchange. Application of ISO 8000-115 Authorized Entity Identifier;

--- Part 120.Master data. characteristic data exchange. traceability;

--- Part 130.Master data. characteristic data exchange. accuracy;

--- Part 140.Master data. Characteristic data exchange. Integrity;

--- Part 150.Master data. quality management framework;

--- Part 210.Sensor data. data quality characteristics;

--- Part 311.Shape Product Data Quality (PDQ-S) Application Guidelines.

This document is Part 8 of GB/T 42381 "Data Quality", which can be used alone or in combination with other parts.

This document is intended for use by information or data quality stakeholders with a focus on one or more information systems, including inter-organizational and organizational

Internal views, and information systems throughout all lifecycle phases. When assessing the quality of information and data, it is necessary to

Establish business-related thresholds for each object to be measured, which are not set by this document. The scale used to specify the measurements is also

Importantly, this document does not define scales for measuring information and data quality, but requires a description of these scales. when conveying information and

When quantifying results based on quality, it is useful for recipients to be able to understand the confidence level of the results, and it is especially important to know whether there are any

The rule was not applied, or if any information or data was not checked.

Data Quality Part 8.

Information and Data Quality. Concepts and Measurements

1 Scope

This document describes the fundamental concepts of information and data quality and the application of these concepts to quality management processes and quality management systems

Way.

This document also specifies the prerequisites for the measurement of information and data