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| **Item #** | **Type** | **Page #** | **Line #** | **Section** | **Comment (with rationale)** | **Suggested Change** |
| 1 | E | 1 | 37 | 1.1 | Unnecessary adjective distracting for content | There is broad agreement among commercial, academic, and government leaders about the ~~remarkable~~ potential of Big Data to spark innovation, fuel commerce, and drive progress. |
| 2 | E | 3 | 120 | 1.2 | More precise language | This volume was prepared by the NBD-PWG Definitions and Taxonomy Subgroup, ~~which focused~~ missioned with identifying Big Data concepts and defining related terms in areas such as data science, reference architecture, and patterns. |
| 3 | E | 3 | 123 | 1.2 | More precise language | The ~~aim~~ purpose of this volume is to clarify concepts and provide a common vocabulary for those engaging Big Data use, business and technologies. |
| 4 | T | 5 | 170 | 2 | More precise language | **Analytics** is the systematic analysis of data to uncover patterns, relationships between data, historical trends and attempts at predictions of future behaviors and events. |
| 5 | T | 5 | 171 | 2 | Updated to reflect current ideas. | **Big Data** a proportional increase one or more characteristics of volume, variety, velocity, and/or variability⎯that demands a change in data processing approaches and systems architecture. |
| 6 | T | 5 | 173 | 2 | Updated to reflect current ideas. | **Big Data engineering** the casual and predicable practice and application of scientific, mathematical techniques to innovate, design, construct and maintaining systems supporting Big Data processing. |
| 7 | T | 5 | 175 | 2 | Updated to reflect current ideas. | The **Big Data Paradigm** a general classification of concepts, approaches, engineering practices and techniques associate with supporting Big Data applications. |
| 8 | T | 5 | 178 | 2 | Updated to reflect current ideas. | **Data governance** refers to a system; including policies, people, practices and technologies necessary to ensure data management within an organization. |
| 9 | T | 5 | 180 | 2 | Updated to reflect current definitions from data analytic industries. | D**ata Analytics Life-Cycle** is the set of governing steps guiding all or some aspects of data analytics systems from need identification through deployment and operation management to system retirement. |
| 10 | T | 5 | 183 | 2 | Updated to reflect current ideas | **Data science** The intellectual and practical activity surrounding the systematic study of the structure of data and data’s encoded information through the application of casual, testable approaches and techniques. |
| 11 | T | 5 | 188 | 2 | Updated to reflect accuracy | ***Distributed computing*** is a computing system where one or more applications execute as physically dispersed, interconnected elements maintaining a cooperative processing environment. |
| 12 | T | 5 | 190 | 2 | Clarifying definition | ***Distributed file systems*** computer system component that stores data as files in as physically dispersed, interconnected elements maintaining a cooperative, coordinated operations of file data. |
| 13 | T | 5 | 193 | 2 | Correction | ***Fabric*** is an arrangement of physical materials used as the basis for constructing substantive objects. |
| 14 | T | 5 | new | 2 | Clarifying definition | ***Computing Fabric*** is an arrangement of, commonly repeating, physically dispersed, interconnected computing components organized as infrastructure to execute computer applications. |
| 15 | T | 5 | 195 | 2 | Correction: 1) Removed circular definition to “federated database”.  2) Correction to match Hammer/McCloud “ON DATABASE MANAGEMENT SYSTEM ARCHITECTURE” ’79.pp7,p1 See: https://apps.dtic.mil/dtic/tr/fulltext/u2/a076417.pdf  3) Added definition corresponding to current application of the term federated | A **federated database system** 1) a type of management system that maps multiple autonomous database systems using a combining scheme where one database interface for local/owner access to data and another, simpler interface for guest access to non-owner data.  2) A Database Management System (DBMS), as an element of a federated group, allowing members belonging to the same federated group to access data residing in the DBMS. |
| 16 | T | 5 | 200 | 2 | Correction | ***Horizontal scaling*** is increasing the capacity of production output through the addition of contributing resources. |
| 17 | T | 5 | 202 | 2 | Added precision to the definition | ***Interoperability*** is a type of compatibility where the actions of two or more entities acting in conjunction with each other. |
| 18 | T | 6 | 206 | 2 | Added precision to the definition | ***Metadata*** isdata employed to annotate other data with descriptive information. |
| 19 | T | 6 | 210 | 2 | Added precision to the definition. See:  1) OED Online 2014 sv for definition of negotiation.  2) Business Negotiations Francesco Gardni 2017 pg 92 Section2, Handbook of business communication. Linguistic approaches Gerlinde Mautner & Franz Rainer (eds) | ***Resource negotiation*** a process or protocol of treaty by the first party and a Resource owner to reach agreement about the first party’s used of a Resource. |
| 20 | T | 6 | 214 | 2 | Added precision to the definition. | ***Reusability*** is the ability to reapply an entity or actions for a different purpose or achieve a different goal than original intent. |
| 21 | T | 6 | 233 | 2 | Added precision to the definition. | ***Vertical scaling*** (aka optimization) is the activity to increase data processing performance through improvements to algorithms, processors, memory, storage, or connectivity. |
| 22 | T | 6 | 233 | 2 | Missing definition. Rationalization: “*Integration* is "an act or process producing a uniquely identifiable entity, object, quality or concept". In a purposeful sense, we could define integration's "act or process" as imposing relationships (associations) between two or more entities, objects, qualities or concepts (things). There are a few subtleties that should be recognized. 1) Without a relationship to at least one other thing, integration produces something *without* the property of interoperability. 2) When increasing perspective by placing the "uniquely identifiable thing" under a microscope, we expose its internal things and their relationships. However once "cracked open", it's no longer considered integrated (present tense). 3) If two or more related entities, objects, qualities or concepts is not uniquely identified, it is not considered integrated. “ GM-1/27/2019, 4:51 | ***Integration*** is the act or process combining more than one element producing a uniquely identifiable entity, object, quality or concept". |
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