The Official Data Vault Standards Document Version 1 O Data Warehouse Architecture

Building upon his earlier book that detailed agile data warehousing programming techniques for the Scrum master, Ralph's latest work illustrates the agile interpretations of the remaining software engineering disciplines: Requirements management benefits from streamlined templates that not only define projects quickly, but ensure nothing essential is overlooked. Data engineering receives two new "hyper modeling" techniques, yielding data warehouses that can be easily adapted when requirements change without having to invest in ruinously expensive data-conversion programs. Quality assurance advances with not only a stereoscopic top-down and bottom-up planning method, but also the incorporation of the latest in automated test engines. Use this step-by-step guide to deepen your own application development skills through self-study, show your teammates the world's fastest and most reliable techniques for creating business intelligence systems, or ensure that the IT department working for you is building your next decision support system the right way. Learn how to quickly define scope and architecture before programming starts Includes techniques of process and data engineering that enable iterative and incremental delivery Demonstrates how to plan and execute quality assurance plans and includes a guide to continuous integration and automated regression testing Presents program management strategies for coordinating multiple agile data mart projects so that over time an enterprise data warehouse emerges Use the provided 120-day road map to establish a robust, agile data warehousing program

Get expert guidance on architecting end-to-end data management solutions with Apache Hadoop. While many sources explain how to use various components in the Hadoop ecosystem, this practical book takes you through architectural considerations necessary to tie those components together into a complete tailored application, based on your particular use case. To reinforce those lessons, the book's second section provides detailed examples of architectures used in some of the most commonly found Hadoop applications. Whether you're designing a new Hadoop application, or planning to integrate Hadoop into your existing data infrastructure, Hadoop Application Architectures will skillfully guide you through the process. This book covers: Factors to consider when using Hadoop to store and model data Best practices for moving data in and out of the system Data processing frameworks, including MapReduce, Spark, and Hive Common Hadoop processing patterns, such as removing duplicate records and using windowing analytics Giraph, GraphX, and other tools for large graph processing on Hadoop Using workflow orchestration and scheduling tools such as Apache Oozie Near-real-time stream processing with Apache Storm, Apache Spark Streaming, and Apache Flume Architecture examples for clickstream analysis, fraud detection, and data warehousing

"Get it done well and get it done fast" are twin, apparently opposing, demands. Data architects are increasingly expected to deliver quality data models in challenging timeframes, and agile developers are increasingly expected to ensure that their solutions can be easily integrated with the data assets of the overall organization. If you need to deliver quality solutions despite exacting schedules, "The Nimble Elephant" will help by describing proven techniques that leverage the libraries of published data model patterns to rapidly assemble extensible and

robust designs. The three sections in the book provide guidelines for applying the lessons to your own situation, so that you can apply the techniques and patterns immediately to your current assignments. The first section, Foundations for Data Agility, addresses some perceived aspects of friction between "data" and "agile" practitioners. As a starting point for resolving the differences, pattern levels of granularity are classified, and their interdependencies exposed. A context of various types of models is established (e.g. conceptual / logical / physical, and industry / enterprise / project), and you will learn how to customize patterns within specific model types. The second section, Steps Towards Data Agility, shares guidelines on generalizing and specializing, with cautions on the dangers of going too far. Creativity in using patterns beyond their intended purpose is encouraged. The short-term "You Ain't Gonna Need It" (YAGNI) philosophy of agile practitioners, and the longer-term strategic perspectives of architects, are compared and evaluated. Consideration is given to the potential of enterprise views contributing to project-specific models. Other topics include industry models, iterative modeling, creation of patterns when none exist, and patterns for rules-in-data. The section ends with a perspective on the modeler's possible role in agile projects, followed by a case study. The final section, A Bridge to the Land of Object Orientation, provides a pathway for re-skilling traditional data modelers who want to expand their options by actively engaging with the ranks of object-oriented developers. I'm delighted to see that John has put his extensive experience and broad knowledge of data modeling into print! John's ability to simplify the complex, and to share his knowledge and enthusiasm – and humor – with colleagues, comes through in this very useful and readable book. I recommend it to anyone working with data. — Monika Remenyi, Senior Data Architect, Telstra John Giles has written a

compelling and engaging book about the importance of data modeling patterns in the world of agile computing. His book is clearly and simply written, and it is full of excellent examples drawn from his extensive experience as a practitioner. You will see the enthusiasm and passion that John clearly has for his work in data modeling. And you will see in his book that any interchange with John will always have its fair share of good humor and wisdom! — Professor Ron Weber, Dean, Faculty of IT, Monash University

"There's only one right way to begin an Oracle Designer project: with a detailed standards document from which your whole team can work." "Oracle Designer: A Template for Developing an Enterprise Standards Document brings you: expert techniques for analyzing, developing, and "blueprinting" any enterprise application; a standards template for system development that can be tailored to meet your organization's needs; proven processes for building and improving your own standards documents; system development standards and naming conventions for all major Designer repository objects with detailed explanations of suggested standards diagramming conventions; and white papers on BPM and FHD interactions and Reverse Engineering."--BOOK JACKET.Title Summary field provided by Blackwell North America, Inc. All Rights Reserved

A Guide to Building the Technology Stack for Turning Data Lakes into Business Assets

Agile Delivery of Data Models using a Pattern-based Approach
A Library of Universal Data Models for All Enterprises
Data Vault Modeling A Complete Guide - 2020 Edition
Invaluable Data Modeling Rules to Implement Your Data Vault

Corporate Information Factory

Understand data in a simple way using a data lake. KEY FEATURES ● In-depth practical demonstration of Hadoop/Yarn concepts with numerous examples. ● Includes graphical illustrations and visual explanations for Hadoop commands and parameters. ● Includes details of dimensional modeling and Data Vault modeling. ● Includes details of how to create and define a structure to a data lake. DESCRIPTION The book 'Data Processing and Modeling with Hadoop' explains how a distributed system works and its benefits in the big data era in a straightforward and clear manner. After reading the book, you will be able to plan and organize projects involving a massive amount of data. The book describes the standards and technologies that aid in data management and compares them to other technology business standards. The reader receives practical guidance on how to segregate and separate data into zones, as well as how to develop a model that can aid in data evolution. It discusses security and the measures that are utilized to reduce the impact of security. Self-service analytics, Data Lake, Data Vault 2.0, and Data Mesh are discussed in the book. After reading this book, the reader will have a thorough understanding of how to structure a data lake, as well as the ability to plan, organize, and carry out the implementation of a data-driven business with full governance and security. WHAT YOU WILL LEARN ● Learn the basics of

components to the Hadoop Ecosystem. ⬛ Understand the structure, files, and zones of a Data Lake. ⬛ Learn to implement the security part of the Hadoop Ecosystem. ⬛ Learn to work with the Data Vault 2.0 modeling. ⬛ Learn to develop a strategy to define good governance. ⬛ Learn new tools to work with Data and Big Data WHO THIS BOOK IS FOR This book caters to big data developers, technical specialists, consultants, and students who want to build good proficiency in big data. Knowing basic SQL concepts, modeling, and development would be good, although not mandatory. TABLE OF CONTENTS 1. Understanding the Current Moment 2. Defining the Zones 3. The Importance of Modeling 4. Massive Parallel Processing 5. Doing ETL/ELT 6. A Little Governance 7. Talking About Security 8. What Are the Next Steps?

Understand critical cybersecurity and risk perspectives, insights, and tools for the leaders of complex financial systems and markets. This book offers guidance for decision makers and helps establish a framework for communication between cyber leaders and front-line professionals. Information is provided to help in the analysis of cyber challenges and choosing between risk treatment options. Financial cybersecurity is a complex, systemic risk challenge that includes technological and operational elements. The interconnectedness of financial systems and markets creates dynamic, high-risk environments where organizational security is greatly

impacted by the level of security effectiveness of partners, counterparties, and other external organizations. The result is a high-risk environment with a growing need for cooperation between enterprises that are otherwise direct competitors. There is a new normal of continuous attack pressures that produce unprecedented enterprise threats that must be met with an array of countermeasures. Financial Cybersecurity Risk Management explores a range of cybersecurity topics impacting financial enterprises. This includes the threat and vulnerability landscape confronting the financial sector, risk assessment practices and methodologies, and cybersecurity data analytics. Governance perspectives, including executive and board considerations, are analyzed as are the appropriate control measures and executive risk reporting. What You'll Learn Analyze the threat and vulnerability landscape confronting the financial sector Implement effective technology risk assessment practices and methodologies Craft strategies to treat observed risks in financial systemsImprove the effectiveness of enterprise cybersecurity capabilities Evaluate critical aspects of cybersecurity governance, including executive and board oversight Identify significant cybersecurity operational challenges Consider the impact of the cybersecurity mission across the enterpriseLeverage cybersecurity regulatory and industry standards to help manage financial services risksUse cybersecurity scenarios to

measure systemic risks in financial systems environmentsApply key experiences from actual cybersecurity events to develop more robust cybersecurity architectures Who This Book Is For Decision makers, cyber leaders, and front-line professionals, including: chief risk officers, operational risk officers, chief information security officers, chief security officers, chief information officers, enterprise risk managers, cybersecurity operations directors, technology and cybersecurity risk analysts, cybersecurity architects and engineers, and compliance officers

Medical Data Sharing, Harmonization and Analytics serves as the basis for understanding the rapidly evolving field of medical data harmonization combined with the latest cloud infrastructures for storing the harmonized (shared) data. Chapters cover the latest research and applications on data sharing and protection in the medical domain, cohort integration through the recent advancements in data harmonization, cloud computing for storing and securing the patient data, and data analytics for effectively processing the harmonized data. Examines the unmet needs in chronic diseases as a part of medical data sharing Discusses ethical, legal and privacy issues as part of data protection Combines data harmonization and big data analytics strategies in shared medical data, along with relevant case studies in chronic diseases

Where do ideas that reach policy makers and planners as proposals for Data vault strengthening and reform actually originate? To what extent does management recognize Data vault as a tool to increase the results? How can you negotiate Data vault successfully with a stubborn boss, an irate client, or a deceitful coworker? Who will be responsible for deciding whether Data vault goes ahead or not after the initial investigations? Does Data vault systematically track and analyze outcomes for accountability and quality improvement? Defining, designing, creating, and implementing a process to solve a challenge or meet an objective is the most valuable role... In EVERY group, company, organization and department. Unless you are talking a one-time, single-use project, there should be a process. Whether that process is managed and implemented by humans, AI, or a combination of the two, it needs to be designed by someone with a complex enough perspective to ask the right questions. Someone capable of asking the right questions and step back and say, 'What are we really trying to accomplish here? And is there a different way to look at it?' This Self-Assessment empowers people to do just that - whether their title is entrepreneur, manager, consultant, (Vice-)President, CxO etc... - they are the people who rule the future. They are the person who asks the right questions to make Data vault investments work better. This Data vault All-Inclusive Self-Assessment enables You to be that

person. All the tools you need to an in-depth Data vault Self-Assessment. Featuring new and updated case-based questions, organized into seven core areas of process design, this Self-Assessment will help you identify areas in which Data vault improvements can be made. In using the questions you will be better able to: - diagnose Data vault projects, initiatives, organizations, businesses and processes using accepted diagnostic standards and practices - implement evidence-based best practice strategies aligned with overall goals - integrate recent advances in Data vault and process design strategies into practice according to best practice guidelines Using a Self-Assessment tool known as the Data vault Scorecard, you will develop a clear picture of which Data vault areas need attention. Your purchase includes access details to the Data vault self-assessment dashboard download which gives you your dynamically prioritized projects-ready tool and shows your organization exactly what to do next. Your exclusive instant access details can be found in your book.
A Pragmatic Guide on Building a Data Vault
Engineering the Transformation of the Enterprise
20th East European Conference, ADBIS 2016, Prague, Czech Republic, August 28-31, 2016, Proceedings
Agile Data Warehousing
Building a Scalable Data Warehouse with Data Vault 2.0

Applying the Industry Standard on Data Model Quality
The Unified Star Schema: An Agile and Resilient Approach to Data Warehouse and Analytics Design

The Data Vault was invented by Dan Linstedt at the U.S. Department of Defense, and the standard has been successfully applied to data warehousing projects at organizations of different sizes, from small to large-size corporations. Due to its simplified design, which is adapted from nature, the Data Vault 2.0 standard helps prevent typical data warehousing failures. "Building a Scalable Data Warehouse" covers everything one needs to know to create a scalable data warehouse end to end, including a presentation of the Data Vault modeling technique, which provides the foundations to create a technical data warehouse layer. The book discusses how to build the data warehouse incrementally using the agile Data Vault 2.0 methodology. In addition, readers will learn how to create the input layer (the stage layer) and the presentation layer (data mart) of the Data Vault 2.0 architecture including implementation best practices. Drawing upon years of practical experience and using numerous examples and an easy to understand framework, Dan Linstedt and Michael Olschimke discuss: How to load each layer using SQL Server Integration Services (SSIS), including automation of the Data Vault loading processes. Important data warehouse technologies and practices. Data Quality Services (DQS) and Master Data Services (MDS) in the context of the Data Vault architecture. Provides a complete

introduction to data warehousing, applications, and the business context so readers can get-up and running fast Explains theoretical concepts and provides hands-on instruction on how to build and implement a data warehouse Demystifies data vault modeling with beginning, intermediate, and advanced techniques Discusses the advantages of the data vault approach over other techniques, also including the latest updates to Data Vault 2.0 and multiple improvements to Data Vault 1.0

The Data Model Resource Book arms you with a set of proven data models and data warehouse designs for the core functions shared by most businesses. You get a comprehensive set of detailed models for marketing and sales, human resources, inventory, professional services, order processing, billing, product delivery, work order management, budgeting, accounting, and more. The authors also show you how to quickly convert the logical data models into enterprise-wide data warehouses as well as data marts. You want the rigor of good data architecture at the speed of agile? Then this is the missing link - your step-by-step guide to Data Vault success. Success with a Data Vault starts with the business and ends with the business. Sure, there's some technical stuff in the middle, and it is absolutely essential - but it's not sufficient on its own. This book will help you shape the business perspective, and weave it into the more technical aspects of Data Vault modeling. You can read the foundational books and go on courses, but one massive risk still remains. Dan Linstedt, the founder of the Data Vault, very clearly directs those

building a Data Vault to base its design on an "enterprise ontology". And Hans Hultgren similarly stresses the importance of the business concepts model. So it's important. We get that. But: What on earth is an enterprise ontology/business concept model, 'cause I won't know if I've got one if I don't know what I'm looking for? If I can't find one, how do I get my hands on such a thing? Even if I have one of these wonderful things, how do I apply it to get the sort of Data Vault that's recommended? It's actually not as hard as some would fear to answer all of these questions, and it's certainly worth the effort. This book just might save you a world of pain. It's a supplement to other material on Data Vault modeling, but it's the vital missing link to finding simplicity for Data Vault success. How will the Data vault modeling team and the organization measure complete success of Data vault modeling? Why should we adopt a Data vault modeling framework? Whats the best design framework for Data vault modeling organization now that, in a post industrial-age if the top-down, command and control model is no longer relevant? Has the Data vault modeling work been fairly and/or equitably divided and delegated among team members who are qualified and capable to perform the work? Has everyone contributed? How to deal with Data vault modeling Changes? Defining, designing, creating, and implementing a process to solve a challenge or meet an objective is the most valuable role... In EVERY group, company, organization and department. Unless you are talking a one-time, single-use project, there should be a process. Whether that process is managed and implemented

by humans, AI, or a combination of the two, it needs to be designed by someone with a complex enough perspective to ask the right questions. Someone capable of asking the right questions and step back and say, 'What are we really trying to accomplish here? And is there a different way to look at it?' This Self-Assessment empowers people to do just that - whether their title is entrepreneur, manager, consultant, (Vice-)President, CxO etc... - they are the people who rule the future. They are the person who asks the right questions to make Data vault modeling investments work better. This Data vault modeling All-Inclusive Self-Assessment enables You to be that person. All the tools you need to an in-depth Data vault modeling Self-Assessment. Featuring 701 new and updated case-based questions, organized into seven core areas of process design, this Self-Assessment will help you identify areas in which Data vault modeling improvements can be made. In using the questions you will be better able to: - diagnose Data vault modeling projects, initiatives, organizations, businesses and processes using accepted diagnostic standards and practices - implement evidence-based best practice strategies aligned with overall goals - integrate recent advances in Data vault modeling and process design strategies into practice according to best practice guidelines Using a Self-Assessment tool known as the Data vault modeling Scorecard, you will develop a clear picture of which Data vault modeling areas need attention. Your purchase includes access details to the Data vault modeling self-assessment dashboard download which gives you your dynamically

prioritized projects-ready tool and shows your organization exactly what to do next. Your exclusive instant access details can be found in your book.

Treasury, Postal Service, and General Government Appropriations for Fiscal Year 1996

Non-Invasive Data Governance

Data Architecture: A Primer for the Data Scientist

Agile Data Warehousing for the Enterprise

Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, One Hundred Fourth Congress, First Session

Better Data Modeling

Practical Data Science

Building a Scalable Data Warehouse with Data Vault 2.0Morgan Kaufmann Master the most agile and resilient design for building analytics applications: the Unified Star Schema (USS) approach. The USS has many benefits over traditional dimensional modeling. Witness the power of the USS as a single star schema that serves as a foundation for all present and future business requirements of your organization. Data warehouse legend Bill Inmon and business intelligence innovator, Francesco Puppini, explain step-by-step why the Unified Star Schema is the recommended approach for business intelligence designs today, and show through many examples how to build and use this new solution. This book contains two parts.

Part I, Architecture, explains the benefits of data marts and data warehouses, covering how organizations progressed to their current state of analytics, and to the challenges that result from current business intelligence architectures. Chapter 1 covers the drivers behind and the characteristics of the data warehouse and data mart. Chapter 2 introduces dimensional modeling concepts, including fact tables, dimensions, star joins, and snowflakes. Chapter 3 recalls the evolution of the data mart. Chapter 4 explains Extract, Transform, and Load (ETL), and the value ETL brings to reporting. Chapter 5 explores the Integrated Data Mart Approach, and Chapter 6 explains how to monitor this environment. Chapter 7 describes the different types of metadata within the data warehouse environment. Chapter 8 progresses through the evolution to our current modern data warehouse environment. Part II, the Unified Star Schema, covers the Unified Star Schema (USS) approach and how it solves the challenges introduced in Part I. There are eight chapters within Part II: · Chapter 9, Introduction to the Unified Star Schema: Learn about its architecture and use cases, as well as how the USS approach differs from the traditional approach. · Chapter 10, Loss of Data: Learn about the loss of data and the USS Bridge. Understand that the USS approach does not create any join, and for this reason, it has no loss of data. · Chapter 11, The Fan Trap: Get introduced to the Oriented Data Model convention, and learn the dangers of a fan trap through an example. Differentiate join and association, and realize that an "in-memory

association" is the preferred solution to the fan trap. · Chapter 12, The Chasm Trap: Become familiar with the Cartesian product, and then follow along with an example based on LinkedIn, which illustrates that a chasm trap produces unwanted duplicates. See that the USS Bridge is based on a union, which does not create any duplicates. · Chapter 13, Multi-Fact Queries: Distinguish between multiple facts "with direct connection" versus multiple facts "with no direct connection". Explore how BI tools are capable of building aggregated virtual rows. · Chapter 14, Loops: Learn more about loops and five traditional techniques to solve them. Follow along with an implementation, which will illustrate the solution based on the USS approach. · Chapter 15, Non-Conformed Granularities: Learn about non-conformed granularities, and learn that the Unified Star Schema introduces a solution called "re-normalization". · Chapter 16, Northwind Case Study. Witness how easy it is to detect the pitfalls of Northwind using the ODM convention. Follow along with an implementation of the USS approach on the Northwind database with various BI tools.

Contains a six-stage plan for starting new warehouse projects and guiding programmers step-by-step until they become a world-class, Agile development team. It describes also how to avoid or contain the fierce opposition that radically new methods can encounter from the traditionally-minded IS departments found in many large companies.

With the aim of simplifying relational database modeling, Database Modeling Step-by-Step presents the standard approach to database normalization and then adds its own approach, which is a more simplistic, intuitive way to building relational database models. Going from basics to contemporary topics, the book opens with relational data modeling and ends with BigData database modeling following a road map of the evolution in relational modeling and including brief introductions to data warehousing and BigData modeling. A break-down of the elements of a model explains what makes up a relational data model. This is followed by a comparison between standard normalization and a more simplistic intuitive approach to data modeling that a beginner can follow and understand. A brief chapter explains how to use the database programming language SQL (Structured Query Language), which reads from and writes to a relational database. SQL is fundamental to data modeling because it helps in understanding how the model is used. In addition to the relational model, the last three chapters cover important modern world topics including denormalization that leads into data warehouses and BigData database modeling. The book explains how there is not much to logical data modeling in BigData databases because as they are often schema-less, which means that BigData databases do not have schemas embedded into the database itself, they have no metadata and thus not much of a logical data model. Online bonus chapters include a case study that covers relational data modeling and are available at the author's

The world of data warehousing is changing. Big Data & Agile are hot topics. But companies still need to collect, report, and analyze their data. Usually this requires some form of data warehousing or business intelligence system. So how do we do that in the modern IT landscape in a way that allows us to be agile and either deal directly or indirectly with unstructured and semi structured data?The Data Vault System of Business Intelligence provides a method and approach to modeling your enterprise data warehouse (EDW) that is agile, flexible, and scalable. This book will give you a short introduction to Agile Data Engineering for Data Warehousing and Data Vault 2.0. I will explain why you should be trying to become Agile, some of the

history and rationale for Data Vault 2.0, and then show you the basics for how to build a data warehouse model using the Data Vault 2.0 standards.In addition, I will cover some details about the Business Data Vault (what it is) and then how to build a virtual Information Mart off your Data Vault and Business Vault using the Data Vault 2.0 architecture.So if you want to start learning about Agile Data Engineering with Data Vault 2.0, this book is for you.

Learn how to build a data science technology stack and perform good data science with repeatable methods. You will learn how to turn data lakes into business assets. The data science technology stack demonstrated in Practical Data Science is built from components in general use in the industry. Data scientist Andreas Vermeulen demonstrates in detail how to build and provision a technology stack to yield repeatable results. He shows you how to apply practical methods to extract actionable business knowledge from data lakes consisting of data from a polyglot of data types and dimensions. What You'll Learn Become fluent in the essential concepts and terminology of data science and data engineering Build and use a technology stack that meets

industry criteria Master the methods for retrieving actionable business knowledge Coordinate the handling of polyglot data types in a data lake for repeatable results Who This Book Is For Data scientists and data engineers who are required to convert data from a data lake into actionable knowledge for their business, and students who aspire to be data scientists and data engineers

The topics in this book cover a broad range of research interests: from business engineering and its application in corporate and business networking contexts to design science research as well as applied topics, where those research methods have been employed for modeling, data warehousing, information systems management, enterprise architecture management, management of large and complex projects, and enterprise transformation. The book is a Festschrift for Robert Winter in order to appreciate his work and to honor him as a personality with a high reputation in the information systems community. To this end, many professional colleagues or long-time companions both from the Institute of Information Management at the University of St. Gallen as well as from the international

research community dedicated articles on topics related to Robert's research. They reflect his ambition to uncompromisingly conduct high-class research that fuels the research community and at the same time contributes to improved industrial practice. The book is organized in three major parts: Part I "Business Engineering and Beyond" focuses on the methodology strongly shaped by Robert in St. Gallen with a focus on research being applied in corporate contexts. Part II "Design Science Research" spans from reflections on the practice of design science research to perspectives on design science research methodologies and eventually up to considerations to teach design science research methodology. Part III "Applied Fields" combines various applications of design science and related research methodologies with practical problems and future research topics.

Data models are the main medium used to communicate data requirements from business to IT, and within IT from analysts, modelers, and architects, to database designers and developers. Therefore it's essential to get the data model right. But how do you determine right? That's where the Data Model Scorecard®

comes in. The Data Model Scorecard is a data model quality scoring tool containing ten categories aimed at improving the quality of your organization's data models. Many of my consulting assignments are dedicated to applying the Data Model Scorecard to my client's data models – I will show you how to apply the Scorecard in this book. This book, written for people who build, use, or review data models, contains the Data Model Scorecard template and an explanation along with many examples of each of the ten Scorecard categories. There are three sections: In Section I, Data Modeling and the Need for Validation, receive a short data modeling primer in Chapter 1, understand why it is important to get the data model right in Chapter 2, and learn about the Data Model Scorecard in Chapter 3. In Section II, Data Model Scorecard Categories, we will explain each of the ten categories of the Data Model Scorecard. There are ten chapters in this section, each chapter dedicated to a specific Scorecard category: · Chapter 4: Correctness · Chapter 5: Completeness · Chapter 6: Scheme · Chapter 7: Structure · Chapter 8: Abstraction · Chapter 9: Standards · Chapter 10: Readability · Chapter 11: Definitions · Chapter 12:

Consistency · Chapter 13: Data In Section III, Validating Data Models, we will prepare for the model review (Chapter 14), cover tips to help during the model review (Chapter 15), and then review a data model based upon an actual project (Chapter 16).

The Data Model Resource Book, Volume 1

The Vault Unleashed

An Efficient Data Vault-based Data Warehouse Model Implementation for a Corrections Environment

Medical Data Sharing, Harmonization and Analytics

Modeling the Agile Data Warehouse with Data Vault

Data Model Scorecard

Data Vault: Standard Requirements

What strategies can users deploy to develop a successful data warehouse architecture ? What are the other data sources that need to be integrated from a reporting perspective (either into the warehouse or directly as a source for reporting)? Who is the audience? What types of data ingestion pipelines do you have, at what frequency? Who is the audience? Defining, designing, creating, and implementing a process to solve a challenge or meet an objective is the most valuable role... In EVERY group, company, organization and department. Unless you are talking a one-time, single-use project, there should be a process. Whether that process is managed and implemented by humans, AI, or a combination of the two, it needs to be designed by someone with a complex enough perspective to ask the right questions. Someone capable of asking the right questions and step back and say, 'What are

we really trying to accomplish here? And is there a different way to look at it?' This Self-Assessment empowers people to do just that - whether their title is entrepreneur, manager, consultant, (Vice-)President, CxO etc... - they are the people who rule the future. They are the person who asks the right questions to make Data Vault Modeling investments work better. This Data Vault Modeling All-Inclusive Self-Assessment enables You to be that person. All the tools you need to an in-depth Data Vault Modeling Self-Assessment. Featuring 1121 new and updated case-based questions, organized into seven core areas of process design, this Self-Assessment will help you identify areas in which Data Vault Modeling improvements can be made. In using the questions you will be better able to: - diagnose Data Vault Modeling projects, initiatives, organizations, businesses and processes using accepted diagnostic standards and practices - implement evidence-based best practice strategies aligned with overall goals - integrate recent advances in Data Vault Modeling and process design strategies into practice according to best practice guidelines Using a Self-Assessment tool known as the Data Vault Modeling Scorecard, you will develop a clear picture of which Data Vault Modeling areas need attention. Your purchase includes access details to the Data Vault Modeling self-assessment dashboard download which gives you your dynamically prioritized projects-ready tool and shows your organization exactly what to do next. You will receive the following contents with New and Updated specific criteria: - The latest quick edition of the book in PDF - The latest complete edition of the book in PDF, which criteria correspond to the criteria in... - The Self-Assessment Excel Dashboard - Example pre-filled Self-Assessment Excel Dashboard to get familiar with results generation - In-depth and specific Data Vault Modeling Checklists - Project management checklists and templates to assist with implementation INCLUDES LIFETIME SELF ASSESSMENT UPDATES Every self assessment comes with Lifetime Updates and Lifetime Free Updated Books.

Lifetime Updates is an industry-first feature which allows you to receive verified self assessment updates, ensuring you always have the most accurate information at your fingertips. An encyclopedia designed especially to meet the needs of elementary, junior high, and senior high school students.

A quick and reliable way to build proven databases for core business functions Industry experts raved about The Data Model Resource Book when it was first published in March 1997 because it provided a simple, cost-effective way to design databases for core business functions. Len Silverston has now revised and updated the hugely successful 1st Edition, while adding a companion volume to take care of more specific requirements of different businesses. This updated volume provides a common set of data models for specific core functions shared by most businesses like human resources management, accounting, and project management. These models are standardized and are easily replicated by developers looking for ways to make corporate database development more efficient and cost effective. This guide is the perfect complement to The Data Model Resource CD-ROM, which is sold separately and provides the powerful design templates discussed in the book in a ready-to-use electronic format. A free demonstration CD-ROM is available with each copy of the print book to allow you to try before you buy the full CD-ROM.

Data Modeling for Agile Data Warehouse using Data Vault Modeling Approach. Includes Enterprise Data Warehouse Architecture. This is a complete guide to the data vault data modeling approach. The book also includes business and program considerations for the agile data warehousing and business intelligence program. There are over 200 diagrams and figures concerning modeling, core business concepts, architecture, business alignment, semantics, and modeling comparisons with 3NF and Dimensional modeling.

The Nimble Elephant

Laws, Regulations, Rulings, Topically Arranged, Full Explanations, Currently Supplemented, Completely Indexed

An Introduction to Agile Data Engineering Using Data Vault 2. 0

The Data Warehouse Toolkit

Big Data, Data Warehouse and Data Vault

A Primer for the Data Scientist

Leadership Perspectives and Guidance for Systems and Institutions

Today, the world is trying to create and educate data scientists because of the phenomenon of Big Data. And everyone is looking deeply into this technology. But no one is looking at the larger architectural picture of how Big Data needs to fit within the existing systems (data warehousing systems). Taking a look at the larger picture into which Big Data fits gives the data scientist the necessary context for how pieces of the puzzle should fit together. Most references on Big Data look at only one tiny part of a much larger whole. Until data gathered can be put into an existing framework or architecture it can't be used to its full potential. Data Architecture a Primer for the Data Scientist addresses the larger architectural picture of how Big Data fits with the existing information infrastructure, an essential topic for the data scientist. Drawing upon years of practical experience and using numerous examples and an easy to understand framework. W.H. Inmon, and Daniel Linstedt define the importance of data architecture and how it can be used effectively to harness big data within existing systems. You'll be able to: Turn textual information into a

form that can be analyzed by standard tools. Make the connection between analytics and Big Data Understand how Big Data fits within an existing systems environment Conduct analytics on repetitive and non-repetitive data Discusses the value in Big Data that is often overlooked, non-repetitive data, and why there is significant business value in using it Shows how to turn textual information into a form that can be analyzed by standard tools Explains how Big Data fits within an existing systems environment Presents new opportunities that are afforded by the advent of Big Data Demystifies the murky waters of repetitive and non-repetitive data in Big Data The "father of data warehousing" incorporates the latesttechnologies into his blueprint for integrated decision supportsystems Today's corporate IT and data warehouse managers are required tomake a small army of technologies work together to ensure fast andaccurate information for business managers. Bill Inmon created theCorporate Information Factory to solve the needs ofthese managers. Since the First Edition, the design of the factoryhas grown and changed dramatically. This Second Edition, revisedand expanded by 40% with five new chapters, incorporates thesechanges. This step-by-step guide will enable readers to connecttheir legacy systems with the data warehouse and deal with a hostof new and changing technologies, including Web access mechanisms,e-commerce systems, ERP (Enterprise Resource Planning) systems. Thebook also looks closely at exploration and data mining servers foranalyzing customer behavior and departmental data marts forfinance, sales, and marketing.

The Vault Unleashed leads managers and those new to the Business Intelligence field on a journey through the landscape. Successful Business Intelligence, or BI, is more than just technology. BI is the melding of people of multiple skills, using a variety of methods and empowering technology to solve business needs. This is best illustrated thru examples.This BI novel uses a fictitious island nation in the South Atlantic faced with threats to its very existence. The story takes the reader thru a connection of the dots from perception of a potential problem thru management execution of solutions. Augmenters must be brought on board. The core team must transfer knowledge to the new augmenters in the background and methodologies necessary to develop insights and make decisions. Most enterprises today are faced with similar challenges in our global economy. Your competition may not be state supported or as aggressive as in this tale. But for today's managers their counterparts are just as real.

Over the past 5 years, the concept of big data has matured, data science has grown exponentially, and data architecture has become a standard part of organizational decision-making. Throughout all this change, the basic principles that shape the architecture of data have remained the same. There remains a need for people to take a look at the "bigger picture" and to understand where their data fit into the grand scheme of things. Data Architecture: A Primer for the Data Scientist, Second Edition addresses the larger architectural picture of how big data fits within the existing information infrastructure or data warehousing systems. This is an essential topic not only for data scientists, analysts,

and managers but also for researchers and engineers who increasingly need to deal with large and complex sets of data. Until data are gathered and can be placed into an existing framework or architecture, they cannot be used to their full potential. Drawing upon years of practical experience and using numerous examples and case studies from across various industries, the authors seek to explain this larger picture into which big data fits, giving data scientists the necessary context for how pieces of the puzzle should fit together. New case studies include expanded coverage of textual management and analytics New chapters on visualization and big data Discussion of new visualizations of the end-state architecture The Data Model Resource CD Financial Cybersecurity Risk Management The Business of Data Vault Modeling Super Charge Your Data Warehouse Data Processing and Modeling with Hadoop Hadoop Application Architectures Guided Steps to Data Vault Success Through Building Business-Centered Models

Do You Know If Your Data Warehouse Flexible, Scalable, Secure and Will It Stand The Test Of Time And Avoid Being Part Of The Dreaded "Life Cycle"? The Data Vault took the Data Warehouse world by storm when it was released in 2001. Some of the world's largest and most complex data warehouse situations understood the value it gave

especially with the capabilities of unlimited scaling, flexibility and security. Here is what industry leaders say about the Data Vault "The Data Vault is the optimal choice for modeling the EDW in the DW 2.0 framework" - Bill Inmon, The Father of Data Warehousing "The Data Vault is foundationally strong and an exceptionally scalable architecture" - Stephen Brobst, CTO, Teradata "The Data Vault should be considered as a potential standard for RDBMS-based analytic data management by organizations looking to achieve a high degree of flexibility, performance and openness" - Doug Laney, Deloitte Analytics Institute "I applaud Dan's contribution to the body of Business Intelligence and Data Warehousing knowledge and recommend this book be read by both data professionals and end users" - Howard Dresner, From the Foreword - Speaker, Author, Leading Research Analyst and Advisor You have in your hands the work, experience and testing of 2 decades of building data warehouses. The Data Vault model and methodology has proven itself in hundreds (perhaps thousands) of solutions in Insurance, Crime-Fighting, Defense, Retail, Finance, Banking, Power, Energy, Education, High-Tech and many more. Learn the techniques and implement them and learn how to

build your Data Warehouse faster than you have ever done before while designing it to grow and scale no matter what you throw at it. Ready to "Super Charge Your Data Warehouse"?
This book constitutes the thoroughly refereed proceedings of the 20th East European Conference on Advances in Databases and Information Systems, ADBIS 2016, held in Prague, Czech Republic, in August 2016. The 21 full papers presented together with two keynote papers and one keynote abstract were carefully selected and reviewed from 85 submissions. The papers are organized in topical sections such as data quality, mining, analysis and clustering; model-driven engineering, conceptual modeling; data warehouse and multidimensional modeling, recommender systems; spatial and temporal data processing; distributed and parallel data processing; internet of things and sensor networks.
Author's abstract: The purpose of this Developmental Model is to create an efficient and effective generalized DW model (based on Data Vault 2.0 technology standards) and validate prototype implementation for a Corrections Environment that will provide efficient functional Business Intelligence to the End User. In Database Systems

understanding the problem at hand and being able to use the right tool is an essential practice. State Departments of Corrections are often the last agencies to receive funding for technology based on the attitude of a society forced to provide technology based services for prisons. A Correctional System in itself is an ever changing Eco-system and will benefit from the use of a Data Vault System that is able to provide efficient Business Intelligence that is able to change with the environment.

What amount of memory is required? Who gets access to the data infrastructure, and by what means? How are integrated data products disseminated? Does the solution support monitoring of data collection, cleaning, and integration activities? What are your industry data models and where do you find them? Defining, designing, creating, and implementing a process to solve a challenge or meet an objective is the most valuable role... In EVERY group, company, organization and department. Unless you are talking a one-time, single-use project, there should be a process. Whether that process is managed and implemented by humans, AI, or a combination of the two, it needs to be designed by someone with a complex enough perspective to ask the

right questions. Someone capable of asking the right questions and step back and say, 'What are we really trying to accomplish here? And is there a different way to look at it?' This Self-Assessment empowers people to do just that - whether their title is entrepreneur, manager, consultant, (Vice-)President, CxO etc... - they are the people who rule the future. They are the person who asks the right questions to make Data Vault Modeling investments work better. This Data Vault Modeling All-Inclusive Self-Assessment enables You to be that person. All the tools you need to an in-depth Data Vault Modeling Self-Assessment. Featuring 905 new and updated case-based questions, organized into seven core areas of process design, this Self-Assessment will help you identify areas in which Data Vault Modeling improvements can be made. In using the questions you will be better able to: - diagnose Data Vault Modeling projects, initiatives, organizations, businesses and processes using accepted diagnostic standards and practices - implement evidence-based best practice strategies aligned with overall goals - integrate recent advances in Data Vault Modeling and process design strategies into practice according to best practice guidelines Using a Self-Assessment tool known as the Data Vault Modeling

Scorecard, you will develop a clear picture of which Data Vault Modeling areas need attention. Your purchase includes access details to the Data Vault Modeling self-assessment dashboard download which gives you your dynamically prioritized projects-ready tool and shows your organization exactly what to do next. You will receive the following contents with New and Updated specific criteria: - The latest quick edition of the book in PDF - The latest complete edition of the book in PDF, which criteria correspond to the criteria in... - The Self-Assessment Excel Dashboard - Example pre-filled Self-Assessment Excel Dashboard to get familiar with results generation - In-depth and specific Data Vault Modeling Checklists - Project management checklists and templates to assist with implementation INCLUDES LIFETIME SELF ASSESSMENT UPDATES Every self assessment comes with Lifetime Updates and Lifetime Free Updated Books. Lifetime Updates is an industry-first feature which allows you to receive verified self assessment updates, ensuring you always have the most accurate information at your fingertips.

Oracle Designer

Enterprise Information Management

The Complete Guide to Dimensional Modeling
A Guide for Solution Architects and Project Leaders
The Path of Least Resistance and Greatest Success
Scientific and Statistical Database Management
Mastering Hadoop Ecosystem Including ETL, Data Vault, DMBok, GDPR, and Various Data-Centric Tools (English Edition)

This book constitutes the refereed proceedings of the 24th International Conference on Scientific and Statistical Database Management, SSDBM 2012, held in Chania, Grete, Greece, in June 2012. The 25 long and 10 short papers presented together with 2 keynotes, 1 panel, and 13 demonstration and poster papers were carefully reviewed and selected from numerous submissions. The topics covered are uncertain and probabilistic data, parallel and distributed data management, graph processing, mining multidimensional data, provenance and workflows, processing scientific queries, and support for demanding applications.
The data vault methodology presents a unique opportunity to model the enterprise data warehouse using the same automation principles applicable in today's software delivery, continuous integration, continuous delivery and continuous deployment while still maintaining the standards expected for governing a corporation's most valuable asset: data. This book provides at first the landscape of a modern architecture and then as a thorough guide on how to deliver a data model that flexes as the enterprise flexes, the data vault. Whether

the data is structured, semi-structured or even unstructured one thing is clear, there is always a model either applied early (schema-on-write) or applied late (schema-on-read). Today's focus on data governance requires that we know what we retain about our customers, the data vault provides that focus by delivering a methodology focused on all aspects about the customer and provides some of the best practices for modern day data compliance.The book will delve into every data vault modelling artefact, its automation with sample code, raw vault, business vault, testing framework, a build framework, sample data vault models, how to build automation patterns on top of a data vault and even offer an extension of data vault that provides automated timeline correction, not to mention variation of data vault designed to provide audit trails, metadata control and integration with agile delivery tools.

Data-governance programs focus on authority and accountability for the management of data as a valued organizational asset. Data Governance should not be about command-and-control, yet at times could become invasive or threatening to the work, people and culture of an organization. Non-Invasive Data Governance™ focuses on formalizing existing accountability for the management of data and improving formal communications, protection, and quality efforts through effective stewarding of data resources. Non-Invasive Data Governance will provide you with a complete set of tools to help you deliver a successful data governance program. Learn how: • Steward responsibilities can be identified and recognized, formalized, and engaged according to their existing responsibility

rather than being assigned or handed to people as more work. • Governance of information can be applied to existing policies, standard operating procedures, practices, and methodologies, rather than being introduced or emphasized as new processes or methods. • Governance of information can support all data integration, risk management, business intelligence and master data management activities rather than imposing inconsistent rigor to these initiatives. • A practical and non-threatening approach can be applied to governing information and promoting stewardship of data as a cross-organization asset. • Best practices and key concepts of this non-threatening approach can be communicated effectively to leverage strengths and address opportunities to improve.

How an organization manages its information is arguably the most important skill in today's dynamic and hyper-competitive environment. In Enterprise Information Management, editor Paul Baan and a team of expert contributors present a holistic approach to EIM, with an emphasis on action-oriented decision making. The authors demonstrate that EIM must be promoted from the top down, in order to ensure that the entire organization is committed to establishing and supporting the systems and processes designed to capture, store, analyze, and disseminate information. They identify three key "pillars" of applications: (1) business intelligence (the information and knowledge management process itself); (2) enterprise content management (company-wide management of unstructured information, including document management, digital asset

management, records management, and web content management); and (3) enterprise search (using electronic tools to retrieve information from databases, file systems, and legacy systems). The authors explore EIM from economic and socio-psychological perspectives, considering the "ROI" (return on information) of IT and related technological investments, and the cultural and behavioral aspects through which people and machines interact. Illustrating concepts through case examples, the authors provide a variety of tools for managers to assess and improve the effectiveness of their EIM infrastructure, considering its implications for customer and client relations, process and system improvements, product and service innovations, and financial performance.
Advances in Databases and Information Systems
Treasury, Postal Service, and General Government Appropriations for Fiscal Year 1996: United States Postal Service, Executive Office of the President
24th International Conference, SSDBM 2012, Chania, Crete, Greece, June 25-27, 2012, Proceedings
Delivering World-class Business Intelligence Systems Using Scrum and XP
When Information Becomes Inspiration
Data Vault Modeling Complete Self-Assessment Guide
A Design Science Research Perspective