



Advancing all things data.

## **TDWI** ONSITE EDUCATION

JANUARY 2016

**Your Team,  
Your Location,  
Our Instructors**

[tdwi.org/onsite](http://tdwi.org/onsite)

# Practical Onsite Education for Your Team

## Maximize Your Training Budget

TDWI Onsite Education provides world-class instruction at your location. Train your whole team at a fraction of the cost of an offsite event when you bring our practical, high-quality, vendor-neutral education to your office or boardroom.

All TDWI Onsite instructors are current business intelligence (BI) practitioners who bring their real-world experience to every class. Schedule training when it best accommodates your workload and projects. You can easily tailor TDWI courses to meet the specific needs of your company and team.

### KEY BENEFITS OF ONSITE EDUCATION

- Advance project goals by giving your team a common understanding of core concepts
- Tailor training to your specific needs and incorporate organization-specific information
- Build training into your project schedules with just-in-time training from TDWI
- Keep your organization up to speed with the rapid changes occurring in the world of data

## CHALLENGE

You know the value of business intelligence and the competitive edge that comes with a high-performing BI team. The world of BI is changing rapidly, and the change of focus from reporting to analytics is substantial. Keeping up with the changes is critical, but the difficulties of training everyone are daunting—the time, the expense, the logistics.

## SOLUTION

TDWI Onsite Education offers world-class training conducted at your location, saving you travel expenses and keeping productivity high. From fundamental courses to advanced techniques, plus prep and exams for the Certified Business Intelligence Professional (CBIP) certification—we bring the training you need directly to your team in your own conference room.



# Flexible and Easy

## Start here to bring TDWI Onsite Education to your organization

- Step 1** Work with TDWI to assess your team’s needs and select courses.
  
- Step 2** Schedule the training when it best fits your availability and project timetable. Reserve one of your own conference rooms (no computers necessary).
  
- Step 3** Participate in a pre-course discussion with the TDWI instructor to ensure content is aligned with your training objectives.
  
- Step 4** TDWI instructor travels to your location and trains your team.

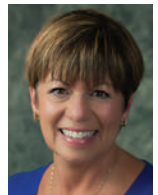
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### NETWORK WITH TDWI



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# Index of TDWI Onsite Courses

Choose from a wide variety of courses you can bring on site. Detailed course descriptions can be found at [tdwi.org/onsite](http://tdwi.org/onsite).

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- Developing Data Analytics Literacy Workshop
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- Measuring Intangibles: Breaking Down Analytic Barriers
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## TDWI Onsite Instructors

TDWI instructors are carefully selected, rigorously qualified, and routinely measured and observed to ensure that TDWI sustains the highest standards for professional education. We require our instructors to have extensive BI experience and demonstrated teaching skills. In addition, all instructors are current practitioners who bring their real-world experience to every class. See for yourself what a difference a TDWI “guru” can make for your team!



**Chris Adamson**  
CEO  
Oakton Software LLC



**Aaron Fuller, CBIP**  
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Superior Data Strategies, LLC



**Jonathan Geiger, CBIP**  
Executive Vice President  
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Senior Consultant  
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**Lynn Winterboer, CBIP, CSM, CSPO**  
Agile Analytics Educator & Consultant  
Winterboer Agile Analytics

### INSTRUCTOR INDUSTRY EXPERIENCE

- Retail/Wholesale/Distribution
- Healthcare
- Insurance
- Financial Services
- Government
- Education
- Telecommunications
- Manufacturing
- Utilities
- Advertising/Marketing/Public Relations
- Media/Entertainment/Publishing
- Software/Internet

## Worldwide Training

TDWI has brought its Onsite Education to companies in the following countries. Contact us today to bring our training to you.



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DENMARK  
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ESTONIA  
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SPAIN  
SWEDEN  
TRINIDAD & TOBAGO  
TURKEY  
UNITED ARAB EMIRATES  
UNITED KINGDOM  
UNITED STATES  
VIETNAM

*“Well done! This course definitely stimulated my thought processes. Looking forward to applying what I learned to my business.”*

J. Andre  
Sterling Jewelers, Inc.

*“The course was fantastic. It has given me the basis I needed to improve the value we are offering our end customers.”*

R. Vasconcello  
Roche Pharmaceuticals





## CHALLENGE

Keeping your BI program vibrant, dynamic, and continuously aligned with business needs is difficult. Changing business priorities, technology, and data sources causes waste, rework, and lost time.

## SOLUTION

A well-defined and actively applied BI architecture, along with an evolving BI road map, helps you adapt to continuous change and make the most of your limited time and resources.

Recommended courses:

- TDWI Business Intelligence Principles and Practices: Charting the Course to BI Success (see this page)
- TDWI Business Intelligence Architecture: Principles of BI Design (see this page)

## Core Skills

### TDWI Business Intelligence Principles and Practices: Charting the Course to BI Success

#### ONE-DAY COURSE

The benefits of BI are substantial: new business capabilities for insight, forecasting, planning, agility, and strategy execution. But realizing benefits is challenging. Learn the basics of BI from end to end, with special attention on two of the most important factors for BI success: planning and collaboration. You are most able to chart a course for BI success when teams and stakeholders share common concepts, use consistent terminology, and contribute collectively to the BI vision.

### TDWI Business Intelligence Architecture: Principles of BI Design

#### ONE-DAY COURSE

Architecture plays an important role in BI programs and projects, ensuring that the development efforts of multiple projects fit neatly together as a cohesive whole. Comprehensive architecture addresses data, technology, integration, business rules, processes, projects, and more. Multifaceted, multidimensional, and complex—BI architecture is clearly a team job. With the right knowledge and skills, your BI architects become an effective team that can handle the many complexities of BI systems.

### TDWI Project Management for Business Intelligence

#### ONE-DAY COURSE

Managing BI projects is challenging for even the most experienced project managers. BI projects are of many kinds—front-end applications, back-end systems, infrastructure, and more. Dependencies among multiple projects create additional complexity. Source system constraints, uncertain data quality, volatile business requirements, and business urgency add to the challenges. With BI projects, there is no “one size fits all” approach to management. Learn to objectively assess project characteristics and configure and apply the best-fit management method for each project.



## TDWI Requirements Gathering: Getting Correct and Complete Requirements for BI Systems

### ONE-DAY COURSE OR TWO-DAY WORKSHOP

Gathering business requirements for BI systems is more difficult than for operational systems. Without the specifics of business transactions, scheduled reports, and prescribed business rules, it is difficult to know where to start and how to proceed. The skill set for the BI requirements analyst includes techniques to identify requirements, tools to manage requirements, and checklists to ensure completeness.

## Putting the Business Back in BI: A Framework for Requirements and Value Management

### ONE-DAY COURSE OR TWO-DAY WORKSHOP

BI means *business intelligence*, yet it sometimes seems that technology interests supersede those of business. When a BI program gives more attention to dashboards, scorecards, online analytical processing, and data warehouses than to finance, research and development, marketing, or operations, it is time to put the business back into BI. Take this course to learn a business-oriented approach to gathering the right requirements, measuring the right things, and delivering information that really makes a difference.

*“Very good overall view of DW concepts and provided valuable insight for such a varied audience.”*

J. Bundt  
Nestle Purina

## CHALLENGE

Big data analytics is top of mind in BI programs today. But cutting through the noise and hype to understand both the opportunities and the risks can be confusing. Understanding the impact that big data may have on your business, your teams, and your data infrastructure is especially challenging.

## SOLUTION

An objective, balanced, and hype-free view of big data with attention to impacts on business, architecture, infrastructure, technology, and team competencies.

Recommended TDWI Onsite courses to help meet the challenge:

- TDWI Big Data Fundamentals (page 13)
- Big Data Road Map (page 13)
- Evolving Information Architecture (page 13)





## Data Asset Management

### TDWI Data Governance Fundamentals: Managing Data as an Asset

#### ONE-DAY COURSE

Data is a critical resource for every organization, yet data management practices are often quite casual and unstructured. Building a data governance program is a complex process that focuses people, processes, policies, rules, and regulations on achieving specific goals for a managed data resource. This course provides the fundamental understanding of data governance concepts and techniques that is essential to start a new governance program or evolve an existing program.

### TDWI Data Quality Fundamentals

#### ONE-DAY COURSE OR TWO-DAY WORKSHOP

Managing data quality is among the most vexing information management issues. This course provides foundational knowledge of data quality assessment and improvement, starting with definitions, as well as typical causes of data quality problems, the responsibilities in data quality management, uses and limits, and techniques for assessment and improvement.

### TDWI Master Data Management Fundamentals

#### ONE-DAY COURSE

Master data management (MDM) includes the processes of collecting, consolidating, quality-assuring, and distributing master data. Tools are abundant and diverse, but the nature of identification, matching, consolidation, conflict resolution, and hierarchy management makes MDM complex and challenging. This course discusses issues and techniques for MDM, as well as data governance and the relationships of MDM with BI/DW.

### TDWI Data Governance Innovations: Adapting for Agile, Big Data, and Cloud

#### ONE-DAY COURSE

Cloud services, big data, and agile BI are here to stay. Data governance programs must modernize and adapt to these realities. A fundamental culture change from control-oriented governance to collaboration is at the core of modern data governance—shifting from enforcement to prevention and intervention as the means to assure data security, privacy, compliance, quality, and value. Beyond cultural change, every data governance participant needs to understand the new issues and opportunities that arise from current data management trends.

## CHALLENGE

You have the infrastructure, technology, and skills, but delivering BI and analytics that make a difference to the business is proving difficult. The tools are powerful, but each time you seek requirements, the business units ask for more reports. You must find a way to get past the one-more-report mentality and find the real business requirements.

## SOLUTION

Requirements-gathering and requirements-management processes and techniques specifically geared to BI.

Recommended TDWI Onsite courses to help meet this challenge:

- TDWI Requirements Gathering: Getting Correct and Complete Requirements for BI Systems (page 7)
- Putting the Business Back in BI: A Framework for Requirements and Value Management (page 7)

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## TDWI Data Integration Techniques: ETL and Alternatives for Data Consolidation

### ONE-DAY COURSE

Design of data integration systems was straightforward when ETL was the only option. Today, the demand for right-time data increases expectations, while scorecards and dashboards increase visibility. This course teaches techniques and skills to build data integration systems, starting with the right requirements, using the right technologies, and designing for adaptability.

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## TDWI Data Integration Principles and Practices: Creating Information Unity from Data Disparity

### ONE-DAY COURSE

Today's business managers depend heavily on data analysis and decision-speed information, raising the stakes for data integration. The work of integrating data has become increasingly complex, and the simple processes of ETL integration for structured enterprise data no longer meet the need. Unstructured data, big data, departmental data, end-user data, and external data all challenge old models for data integration. Get ready to build reliable and adaptable data integration systems and make the most of recent advances in data integration technologies.

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## TDWI Data Integration Testing: Ensuring Quality for ETL and Data Consolidation

### ONE-DAY COURSE OR TWO-DAY WORKSHOP

This course uses a combination of lecture, examples, and practice to teach effective testing techniques for data integration. Complex logic for consolidating data from disparate sources and other factors combine to make data integration testing especially difficult. From data profiling to stress and regression tests, participants learn how to apply the most powerful testing techniques throughout the data integration life cycle.

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## TDWI Data Quality Management: Techniques for Data Profiling, Assessment, and Improvement

### ONE-DAY COURSE

The most common approach to data quality problems is reactive—fixing problems when they are reported. But reactive data quality management quickly becomes a never-ending cycle of continuously fixing defects and rarely removing the causes. If you spend countless hours and dollars on data quality efforts but see little change, it is time to proactively assess and systematically improve the quality of your data.

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## TDWI Data Virtualization: Solving Complex Data Integration Challenges

### ONE-DAY COURSE

What was once a relatively manageable problem of unifying data from transaction systems now encompasses external data, Web data, cloud data, and more. The ETL-based DW is not enough, and data virtualization is a core component of next-generation data integration. Through lecture, exercises, and case study review, you will learn to deliver business-speed information and make the most of recent advances in data integration technology.

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## TDWI Data Warehouse Automation: Better, Faster, Cheaper ... You Can Have It All

### ONE-DAY COURSE

Data warehouses take too long to build and they are hard to change! Data warehouse automation (DWA) is a relatively new class of technology that accelerates warehouse development and change cycles while simultaneously assuring quality and consistency. More than simply generating ETL scripts, DWA automates the entire life cycle from source system analysis to testing and documentation. Productivity gains, cost savings, and quality improvement are all possible with DWA.

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## The Art and Practices of Information Management

### ONE-DAY COURSE

Information management (IM) encompasses 14 distinct disciplines. This course describes the dependencies among these practices; the what, why, and who for each discipline; the people, process, and technology factors of each discipline; and the roles and opportunities for IM professionals. Whatever your specialty, there is value in seeing the big picture and knowing where your skills fit.

# Business Analytics

## NEW TDWI Analytics Fundamentals

### ONE-DAY COURSE

Analytics is an ever-expanding and increasingly complex field that includes descriptive, diagnostic, predictive, and prescriptive analytics. Diverse applications ranging from optimization to automation add to the complexity, as does the big data phenomenon and its analytics impacts. The field continues to expand with complex event processing, machine learning, and cognitive computing at the leading edge. Keeping up with the changes requires communication, coordination, and teamwork. All stakeholders—data scientists, data analysts, business analysts, business leaders, and technical leaders—need a strong foundation of analytics knowledge.

## TDWI Predictive Analytics Fundamentals

### ONE-DAY COURSE

Predictive analytics (PA) goes beyond insight to foresight. Predictive models identify and quantify probabilities of opportunities and risks. Virtually every industry uses PA. This course introduces PA skills such as statistical modeling techniques, including linear and logistic regression, time-series analysis, classification and decision trees, and machine-learning techniques. PA also requires knowledge of problem framing, data profiling, data preparation, and model evaluation.

## TDWI Data Visualization Fundamentals

### ONE-DAY COURSE

Data visualization has become critical to business analytics and communications. Without it, the statistics of analytics are incomprehensible to many who need to turn data into knowledge. The advent of big data, with growing data volume and velocity, emphasizes visualization as a technique to compress large volumes into digestible presentations and observe streaming data in motion. Elegant and well-designed visuals appear easy because skilled visual developers can hide the complexities and hard work. Business intelligence and analytics professionals need to communicate as effectively in visual forms as they do verbally and in writing. Get started by learning the fundamentals of data visualization.

## TDWI Performance Management: Dashboards, Scorecards, and Metrics for Real Business Impact

### ONE-DAY COURSE

Performance management (PM) is a core practice in business management, and it ranks high among the value opportunities of business intelligence. It strengthens the connection of tactics with strategy, and of operations with tactics—enabling feedback, monitoring, and

accountability across all levels. Dashboards and scorecards are the most effective ways to deliver business intelligence that drives PM. A top-quality dashboard or scorecard looks deceptively simple, but is surprisingly difficult. Further complexity arises when groups of related scorecards and dashboards must fit together to form an integrated PM system. This course helps you cope with that complexity.

## Business Analytics for Insight and Foresight

### ONE-DAY COURSE

Today's business climate demands extraordinary analytics. Business managers need to know more than *what*; they need to know *why*, *what if*, and *what next*. Learn what is at the heart of business analytics and how to apply the systems view to measure the right things and find the right answers to critical business questions.

## Data Analytics Boot Camp

### TWO-DAY COURSE

This course prepares functional managers and business practitioners to finally make sense of data analytics and take control of the analytic process. It develops core skills for business analytics and lays the foundation for data-intensive analytic projects that deliver insight, clarity, confidence, and sound decision support.

## Data Mining with R

### ONE-DAY COURSE

Big data has focused attention on data mining and the value that large data sets can yield. Data mining is the process of selecting, exploring, and modeling large amounts of data to uncover new information. R is an open source software environment for statistical computing and graphics being used for analysis, extracting and transforming data, fitting models, drawing inferences, making predictions, plotting, and reporting results. Learn about R basics, working with data frames, data reshaping, basic statistics, graphing, linear and non-linear models, clustering, and model diagnostics. *For best experience, attendees should have exposure to statistics and programming.*

## NEW Data Preparation for Predictive Analytics

### ONE-DAY COURSE OR TWO-DAY HANDS-ON LAB

Refined projects cannot be attained directly from raw data. Many software solutions claim to build actionable models upon directly connecting to data sources. And while the automation of modern analytic software certainly does hold great advantage in taming the complexity of machine-learning algorithms, software alone cannot understand the context of your data and

objectives of your project. Moreover, there are specific ways in which data needs to be prepared in order to have significance for advanced analytics. For example, start and end date fields rarely have meaning for a predictive model. But deriving a new variable for duration from the start and stop dates will often have significant predictive value. This event will convey how data should be accumulated, selected, normalized, preprocessed, derived, and transformed ahead of predictive modeling to have significant impact on overall model performance.

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### **Data Storytelling: The New Horizon in Business Analytics**

#### **ONE-DAY COURSE**

On the surface, storytelling appears to be the opposite of analytics: anecdotal instead of quantitative. But quantities aren't the only way, or even the ideal way, to convey information. Storytellers are the next generation of business and data analysts. They don't dismiss the value of quants—quantification is the foundation. Neither do they devalue visualization; in fact, they amplify it by scripting a story through visuals to communicate business circumstances and behaviors.

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### **Developing Data Analytics Literacy**

#### **TWO-DAY WORKSHOP**

Enhanced literacy helps business professionals separate useful information from background noise and enables them to take informed actions. Developing analytics literacy within the general business community is now a strategic imperative. Understanding how these skills enable competitive positions and support data-driven decision making is now a core requirement for success. This workshop enhances these skills for business professionals by integrating education with practical activities.

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### **Harness the Power of “What-If” Analytics: Shaping Your Future with Simulation**

#### **ONE-DAY COURSE**

Simulation enables us to evaluate options by playing the “what-if” game. Combining models with assumptions and decision variables leads to insights. Models help us understand key behavior patterns better than relying on simple cause-and-effect rules, and boost confidence in our ability to define and achieve key business objectives. This course provides an introduction to simulation analytics, including basic definitions, general system concepts, modeling techniques, and application areas.

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### **Measuring Intangibles: Breaking Down Analytic Barriers**

#### **ONE-DAY COURSE**

The right things to measure are those that drive goal attainment. This means changing the measurement focus from outcomes (using lagging indicators) to influences (using leading indicators). Influence employs measurement of “intangibles,” which are central to managing future performance. Learn why and how to apply intangible measures for business leverage.

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### **Predictive Analytics: Low-Risk/High-Impact Implementation**

#### **TWO-DAY COURSE OR THREE-DAY WORKSHOP**

This intensive, hands-on, methodical workshop offers a comprehensive project-level orientation to predictive analytics solutions—from project assessment and preparation to industry standard process, case demonstrations, pragmatic exercises, and model life-cycle management. You will step through the industry standard process for data mining and realize why an advanced degree in statistics, math, or computer science is not required to establish a productive internal predictive analytics practice.

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### **Putting Predictive Analytics to Work: A Practitioner’s View of Common Technical Issues and Solutions**

#### **TWO-DAY COURSE**

Do you need to better understand the methods, techniques, and processes of business analytics? This course covers technical issues that are often misapplied in predictive analytics projects. Each topic is enriched with real-world insights and made tangible by illustrating the impact of various solutions. The course is vendor neutral but tools based, using leading products to illustrate the development process. Results are drawn from actual applications and interpreted in the context of measurable business impact.

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### **NEW Serious Play for Predictive Analytics: What Works, What Doesn't & Why**

#### **ONE-DAY COURSE; TWO- OR THREE-DAY WORKSHOP**

This event introduces a formal predictive modeling framework for goal-driven analytic projects that deliver insight, clarity, confidence, and actionable decision support. Live demonstrations will illustrate how organizational practitioners can effectively maneuver the natural messiness of advanced analytics. Attendees will realize that true impact with predictive analytics has far more to do with the overall management of a project team and strategic implementation than with particular software or the tactical skills of a data scientist. This event will prepare analytic practitioners and functional managers to make

sense of predictive modeling and take control of the analytic process. If you are a business or public sector practitioner or leader seeking to propel your organization's analytic capability and put predictive analytics to work for measurable gain, then this event is intended for you.

# Data Analysis and Design

## TDWI Data Modeling: Data Analysis and Design for BI and Data Warehousing Systems

### TWO-DAY COURSE

Business intelligence demands that the “toolbox” for data modelers be expanded beyond basic entity-relationship modeling. It now includes techniques to manage time-variant data, distinguish between event and reference data, manage data redundancy, and more. From BI requirements gathering to physical data design, this course provides a solid background for people of various data modeling and analysis skill levels.

## TDWI Dimensional Data Modeling Primer: From Requirements to Business Analysis

### ONE-DAY COURSE

Dimensional data is a core component of modern BI and data warehousing implementations. Dimensionally organized data offers a more effective and adaptable solution to business analytics needs than can be achieved with relational data structures. Virtually anyone involved in BI and data warehousing projects must have fundamental knowledge of the pathway from business questions to business analytics. This course traces that pathway.

## TDWI Advanced Data Modeling Techniques

### TWO-DAY COURSE

Every data design, whether logical or technical, is challenged by complex considerations—scalability, adaptability, performance, legacy and package databases, etc. Every data model raises questions. Advanced modeling techniques provide many of the answers.

## Advanced Dimensional Modeling: Techniques for Practitioners

### TWO-DAY COURSE

This course provides comprehensive coverage of dimensional modeling principles, processes, and deliverables. Students learn the complete set of best practices—from multiple fact table designs, to bridge tables, to advanced slow change processing. Students learn to match these techniques to real-world business complexity and

explore their impacts on BI and data integration tools. Students also learn how to fit dimensional modeling into agile development frameworks and receive templates for capturing requirements and designs.

## Data Modeling in the Age of Big Data

### ONE-DAY COURSE

Big data expands the purpose and changes the role of data modeling. The uncertainty about data modeling in today's data ecosystems is high. Has data modeling become obsolete? Does unstructured data make modeling impractical? Does NoSQL imply no data modeling? What are the implications of schema-on-read vs. schema-on-write for data modelers? Do entity-relationship and star-schema data models still matter? Data modeling is still an important process—perhaps more important than ever. But data modeling purpose and processes must change as rapidly as the world of data. This course examines the principles, practices, and techniques that are needed for effective modeling in the age of big data.

## Dimensional Modeling Beyond the Basics: Intermediate and Advanced Techniques

### TWO-DAY COURSE

Your modeling problems do not fit neatly into the textbook examples. Maybe you are stumped or perhaps you think you have solved the problem but need a second opinion. This accelerated class goes beyond the fundamental questions to tackle common questions and address common mistakes. It is based on real-world experience in dealing with large data volumes and complex models. The goal is to equip you with tools and knowledge to address your complex modeling challenges and meet your demanding business needs.

## Dimensional Modeling from a Business Perspective: A Model the Business Can Understand

### ONE-DAY COURSE

Organizations often struggle to develop dimensional models that consistently meet business needs. Using time-proven dimensional modeling techniques, the business and systems communities can effectively partner to create a data model that will support the business today and in the future. This course is designed to teach the fundamentals of business dimensional modeling, which improves communication and understanding of requirements and enhances the business community's participation throughout a project.

# Big Data

## TDWI Big Data Fundamentals: Creating Value from Non-Traditional Data Sets

### ONE-DAY COURSE

Successful big data projects that deliver real business value are challenged by multiple definitions and rapidly shifting technologies. Achieving good return on your big data investment requires strategy for purpose, people, and process before exploring data and technologies. Strategy drives planning and architecture to ensure that big data complements and does not disrupt the existing BI and analytics environment. To prepare for success with big data, start by understanding all of the pieces and how they fit together.

## Big Data Road Map

### ONE-DAY COURSE

Every enterprise wants to know how to integrate big data and the associated infrastructure changes that need to be implemented. There are a slew of new technologies—Hadoop, NoSQL, BigQuery, Tableau, Qliktech, R, and Drill. Emerging technologies include Spanner and Dremmel. The big questions are: Which of these technologies does your organization need? How do you evaluate and integrate them? How will this impact your EDW strategy? This session will focus on all these topics and more.

## Business Analytics Integration: Integrating Big Data Analytics into Your Structured World

### ONE-DAY COURSE

The phenomenon of big data has changed the business world like never before. The most important part of this transformation is the strong emergence of analytics and the shift from process to data-driven transformation. How do enterprises make this shift? What is the tipping point? Why analytics? Attend this session to learn more.

## Data Modeling in the Age of Big Data

### ONE-DAY COURSE

Big data expands the purpose and changes the role of data modeling. The uncertainty about data modeling in today's data ecosystems is high. Has data modeling become obsolete? Does unstructured data make modeling impractical? Does NoSQL imply no data modeling? What are the implications of schema-on-read vs. schema-on-write for data modelers? Do entity-relationship and star-schema data models still matter? Data modeling is still an important process—perhaps more important than ever. But data modeling purpose and processes must change as rapidly as the world of data. This course examines the

principles, practices, and techniques that are needed for effective modeling in the age of big data.

## Evolving Information Architecture

### ONE-DAY COURSE

Enterprises are investing in big data programs, but executives are still asking for value and ROI. Remember that big data is not a magic bullet; it is a journey and requires maturity and leadership to start and lead an initiative. This course explores the world of information and business. We will start by examining BI, the real-world problems that we deal with every day, the new world of big data, and how all of it comes together.

## Hands-on Hadoop

### ONE-DAY COURSE

From data warehousing to advanced analytics, our enterprise data and processing infrastructure is being reshaped by Hadoop technology. The question is no longer if you'll have Hadoop, but how best to approach it for both business and technical value. Get hands-on learning experience working with the Hadoop ecosystem. Using a series of examples and exercises for each topic, you'll experience the Hadoop tools firsthand and strengthen your learning with discussion about how to implement them.

## NEW Introduction to NoSQL: Storing and Managing Operational Big Data

### ONE-DAY COURSE

NoSQL is empowering businesses to be agile and scalable and operate with much higher speed and flexibility. Using NoSQL appropriately enables new types of applications and improves customer experiences with digital strategies. The NoSQL class will help align your business goals with NoSQL capabilities. It will help you determine the right workloads to move to or put on NoSQL and the right NoSQL platform to select, whether that is a key-value, column store, document store, or graph database. This practical class will add a significant class of technologies into consideration to ensure information remains an unparalleled corporate asset.

## Understanding Hadoop

### ONE-DAY COURSE

Big data challenges scalability, and big data platforms reshape BI and analytics infrastructure. Hadoop has taken center stage in the big data revolution, and we all need to understand the platform, its ecosystem, and how to work with it. Join us to learn Hadoop basics, understand the realities, sort out the conflicts, and find out where and how Hadoop fits into your BI and analytics future. We will discuss the ecosystem and its intricacies, look at where it will help, and discuss how companies have embraced its usage.



## CHALLENGE

The pace of business and the pace of BI are accelerating, and keeping up with demand is becoming increasingly difficult. Agile BI is intriguing, but the path to agile is fraught with uncertainty.

## SOLUTION

A systematic approach to developing agile skills and teams that addresses all of the dimensions—people, process, technology, and culture.

Recommended TDWI Onsite courses to help meet the challenge:

- TDWI Enabling Technologies for Agile BI (page 14)
- Agile BI: Road Mapping, Chartering, and Release Planning (page 15)
- Agile BI: Value-Driven Data Warehousing and BI (page 15)

# Agile Data Warehousing and Business Intelligence Development

## TDWI Enabling Technologies for Agile BI

### ONE-DAY COURSE

The foundations of agile software projects—people and methodology—are important for BI projects but more is needed. BI projects, for example, can't realistically minimize documentation because knowledge transfer is essential to BI success. Requirements discovery is valuable for BI projects, but source data is filled with the unexpected, so we also need data discovery. Test-driven development is challenging for BI projects without the help of test automation tools. In addition to people and methodology, agile BI needs enabling technologies for data discovery, painless documentation, test automation, versioning and change management, rapid deployment, adaptable infrastructure, and more. The technologies are available today. We need to make them part of the agile toolkit.

## Agile BI: Just Enough Design, Data Modeling with Agility

### ONE-DAY COURSE

Agilists criticize the “big design up front” (BDUF) nature of plan-driven development. Uncertainty early in a project makes BDUF costly and risky. However, avoiding BDUF is sometimes misconstrued as “no design up front,” which leads to poor quality and high technical debt. Experienced agilists know what is truly needed is sufficient design up front (SDUF)—enough to galvanize developers around a shared understanding of the problem domain, architecture, and data models. This course introduces an agile modeling approach that strikes the sufficient-up-front and just-in-time balance.



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## Agile BI: Road Mapping, Chartering, and Release Planning

### ONE- OR TWO-DAY COURSE

Proper agile project planning and management is the foundation of agile analytics. Unlike conventional project management methods, agile requires a highly adaptive and evolutionary approach that delivers chunks of value every few weeks. This course walks you through typical collaborative BI program road-mapping, project chartering, and planning sessions to introduce a set of effective practices for facilitating collaboration between technical team members, end users, and management stakeholders.

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## Agile BI: Test Automation and Test-Driven Database Development

### ONE-DAY COURSE

You can't really be agile if your testing is entirely reactive and manual. Testing quickly becomes a bottleneck that impedes delivery of new features. Agile testing involves three key elements: tools and technology, principles and practices, and mindset and behaviors. This course introduces agile testing principles, test-first development practices, the importance of testing as a front-end development driver rather than a back-end quality assurance activity, and effective open source database testing tools. This class also introduces the mindset that testing and quality are everyone's job, and that each person on an agile analytics team has a part in testing.

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## Agile BI: Value-Driven Data Warehousing and BI

### TWO- OR THREE-DAY COURSE

This course aligns agile values and principles with BI/DW delivery; reviews both iterative (scrum) and flow-based (kanban) frameworks; and clarifies roles, responsibilities, and relationships in the agile BI/DW project community. The class also provides guidelines, examples, and practice on how to write and slice effective agile BI/DW requirements/stories.

*“An amazing instructor in every aspect. Not only does he have a mastery of the subject material, but he is able to teach it in a way that is clear and understandable. His pace was perfect and he was adept at managing the classroom while still being able to adapt to the needs of the students. Add to that his approachable and engaging personality, and you have the recipe for a very successful training session.”*

W. Godfrey  
Smoky Mountain LME/MCO

# Leadership and Management

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## **TDWI BI and Analytics Executive Briefing**

### **THREE-HOUR BRIEFING**

Business Intelligence and Analytics are at the heart of business management today. Everyone from executives to knowledge workers depends on information to maximize business effectiveness and efficiency. The role of executives and senior business managers in creating value from BI and analytics simply can't be overstated. This briefing gives executives essential insight into the purpose, scope, disciplines, and complexities of this data-centric world. It provides a business-oriented, nontechnical explanation of all facets of BI from business requirements to data management.

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## **TDWI BI Program Management: A Competency Center Approach to BI Excellence**

### **ONE-DAY COURSE OR TWO-DAY WORKSHOP**

A BI program is a large and complex undertaking with competing interests, conflicting priorities, and simultaneous projects that must be managed from a big-picture point of view. The very broad scope of BI program management encompasses business alignment, value management, quality management, change management, and risk management. Find out how a BI competency center approach to program management will substantially increase the impact of your BI program.

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## **Beyond Technology: Mandatory Success Factors for Information Projects**

### **ONE-DAY COURSE**

Most information projects do not exceed expectations. Those that outright fail usually do so because of nontechnical issues. This class is designed to put project teams and stakeholders on the same page about nontechnical project killers. It is also designed to make your project exceed expectations—make it set targets the business cares about, hit them, and manage organizational acceptance from start to finish. The instructor will address questions of project and program value and making organizational change happen. This class provides a framework to help research, measure, and present the economic value of a proposed or existing information initiative.

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## **Bringing Business and IT Together: Practical Steps to Improved Working Relationships**

### **ONE-DAY COURSE**

Business/IT working relationships have been troubled since the dawn of the information age. As the interdependencies of business and technology grow, the cost of failed relationships also increases. This course offers a systematic approach to address real problems and improve business/IT working relationships through continuous attention to organizational alignment.

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## **NEW Business Information and Modern BI: Balancing OLAP, Analytics, and Performance Management**

### **ONE-DAY COURSE**

The dimensional data marts of yesterday are insufficient to meet the demands of modern BI programs. Business expectations have expanded to include predictive analytics and performance management. Enterprise initiatives call for data governance and master data management. New methods and technologies bring the possibility of virtualization, agile development, and big data initiatives. This course will show you how to meet this expanding list of challenges, starting with information assets and building outward.

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## **Organizational Change Management: Solving the Hard Soft Issues**

### **ONE-DAY COURSE**

The growing “change gap” between expecting change and managing it has left information management (IM) shops in traction as they initiate the large and complex projects in DW, big data, MDM, and ERP necessary to stay competitive. Business leaders and IM professionals must ensure their organizations accept these efforts. To succeed with the larger enterprise goals, these initiatives must transform organizations. The complexities of engaging behavioral and enterprise transformation are too often underestimated at great peril, because the “soft stuff” is truly hard.

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## Return on Investment for Information Projects

### ONE-DAY COURSE

Information management plays a critical role in supporting strategic business initiatives. Despite the apparent value of providing the data infrastructure for these initiatives, executives often question the economic feasibility of BI. Thus, information professionals must calculate and present the value of BI in terms business executives can understand. Unfortunately, IT professionals often lack the knowledge to develop comprehensive cost-benefit analyses or measure ROI. This session provides a framework to help IT professionals research, measure, and present the economic value of a proposed or existing information initiative. The session provides practical advice on ROI, which formula to use, and how to collect necessary information.

*"The instructor did an excellent job and demonstrated an understanding of real-world applications."*

S. Dewulf  
Con-way Freight

*"This course was very useful, with information relevant to our environment."*

F. Choudhry  
TELUS Communications



Certified by TDWI



## CERTIFY YOUR TEAM FOR EXCELLENCE: CBIP ONSITE

With millions of dollars and your company's strategic initiatives at stake, you need to be confident that your team has the qualifications to create, implement, and manage your BI initiatives. The Certified Business Intelligence Professional (CBIP) credential shows that your team operates with the highest level of knowledge possible in the business intelligence industry.

TDWI Onsite Education will bring instructors, exam prep courses, any extra education, and the CBIP examinations right to your conference room with a training package tailored to your team's needs. You'll accelerate the certification process and improve overall exam performance—without incurring travel expenses or sending staff out of the office.

## Is CBIP Right for Your Team?

The CBIP program is designed for senior-level information systems and technology professionals in the business intelligence, data warehousing, and business analytics industry.

### Identify Your Specialty Area

CBIP offers four recognized industry specialty areas to validate your skills and experience.

- **Leadership and Management**  
Requires deep process knowledge, including development methodology, program and project management, as well as organizational and team-building skills. An understanding of business topics such as BPM, CRM, and SCM is also needed.
- **Business Analytics**  
Understanding of both business and technical topics: concepts of performance management, business metrics definition and delivery, data visualization, and deployment and use of technology solutions such as OLAP, dashboards, scorecards, analytic applications, and data mining.
- **Data Analysis and Design**  
Analysis concentrates on understanding business needs, and design translates needs into data structures. Skills include analysis, business metrics specification, and relational and dimensional modeling, as well as an understanding of data warehousing concepts, architectures, and processes.
- **Data Integration**  
Proficiency in acquiring, transforming, and cleansing data. Mastery of concepts and skills for source data analysis and source qualification, data profiling, source/target mapping, data cleansing and transformation, and ETL development.

# Becoming a Certified Business Intelligence Professional

## Identify Your Exams

Everyone must take two mandatory exams: information systems and data warehousing, plus one exam for a chosen specialty area.

## Prepare

Novices and veterans alike can improve their exam scores with preparation courses from TDWI. Prep courses are designed for those who already have the knowledge and experience but would benefit from an interactive and informative review just prior to testing. You'll get ready to test through discussion, review of concepts and terminology, and practice with sample exam questions. Exam preparation courses are offered through TDWI Onsite Education. See page 20 for a list of CBIP preparation courses that can be brought on site.

Prep courses include: concepts and terms used in the exam, the body of knowledge covered by the exam, a self-assessment of knowledge and skills, what to expect during the examination process, and techniques to improve your performance.

## Take the Exams

*"The course was excellent and will be very useful in my career."*

R. Medina Mosley  
Copa Airlines

Exams can be taken via TDWI Onsite Education. Each exam is 110 questions long with a time limit of 1.5 hours. Scores are available immediately.

There are two certification levels:

- Practitioner Level
- Mastery Level

## Keep Current and Connected

Don't let your CBIP certification lapse! Your initial certification is valid for four years. After this initial period, it must be renewed every three years. Certification renewal consists of continuing education through ongoing professional development and an annual fee. Keep learning and connecting with TDWI Onsite Education.

**FOR MORE INFORMATION, VISIT:**  
[tdwi.org/cbip](http://tdwi.org/cbip)

## Certification Requires Passing Three Exams

Take two mandatory exams and choose one specialty area exam.

MANDATORY EXAMS	SPECIALTY AREA EXAMS
Information Systems Core Exam	<b>Management Exam</b> (Leadership and Management specialty)
Data Warehousing Exam	<b>Business Analytics Exam</b>
	<b>Data Management Exam</b> (Data Analysis and Design specialty)
	<b>Data Integration Exam</b>

## CBIP Exam Preparation Courses

These one-day preparation courses can be brought to your location. Time is built into each course for team members to take the exam.

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### CBIP Preparation for the Information Systems Core Exam

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### CBIP Preparation for the Data Warehousing Exam

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### \*CBIP Preparation for the Management Exam

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### \*CBIP Preparation for the Business Analytics Exam

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### \*CBIP Preparation for the Data Management Exam

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### \*CBIP Preparation for the Data Integration Exam

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*\*Exclusive to the TDWI Onsite program.*

## CBIP Training Packages

TDWI offers Onsite training packages for teams, which combine recommended TDWI courses with CBIP exam preparation courses. Training packages may be customized to fit specific needs of your group.

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### Preparation for Information Systems Core Exam and Data Warehousing Exam

#### TWO- OR THREE-DAY PACKAGE INCLUDES:

- TDWI Business Intelligence Principles and Practices (page 6)
- The Art and Practices of Information Management (page 9)
- CBIP Preparation for the Information Systems Core Exam
- CBIP Preparation for the Data Warehousing Exam

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### Preparation for Leadership and Management Specialty

#### TWO-DAY PACKAGE INCLUDES:

- TDWI BI Program Management (page 16)
- CBIP Preparation for the Management Exam

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### Preparation for Business Analytics Specialty

#### THREE-DAY PACKAGE INCLUDES:

- TDWI Analytics Fundamentals (page 10)
- TDWI Performance Management (page 10)
- CBIP Preparation for the Business Analytics Exam

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### Preparation for Data Analysis and Design Specialty

#### THREE-DAY PACKAGE INCLUDES:

- TDWI Data Modeling (page 12)
- TDWI Dimensional Data Modeling Primer (page 12)
- CBIP Preparation for the Data Management Exam

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### Preparation for Data Integration Specialty

#### TWO-DAY PACKAGE INCLUDES:

- TDWI Data Integration Principles and Practices (page 9)
- CBIP Preparation for the Data Integration Exam

# TDWI Onsite Education

## Frequently Asked Questions

### What is the minimum number of attendees required to bring training on site?

There are no minimum class size requirements.

### How long are the courses?

Courses range from one to three days.

### Can we schedule more than one day of training at a time?

Yes. We are happy to provide multiple days of training depending on your needs.

### Can the course be tailored to our organization?

Yes. The delivery of Onsite training can be tailored to meet the specific needs of your organization.

### What type of training room and equipment are required for Onsite training?

We require a training or conference room with a screen and a projector. A flipchart or whiteboard is also desirable.

### Are laptops/computers required for the training?

No. Our courses are delivered via instructor-led lecture; laptops/computers are only required for attendees if they are taking CBIP exams.

### Who are your instructors?

All TDWI Onsite instructors are current BI practitioners who bring their real-world experience to every class. Onsite instructors are the same professionals who teach at TDWI Conferences.

### What is the cost to bring Onsite training to my team?

Pricing for Onsite training is based on class size and includes all course materials.

### How much time is required for scheduling Onsite training?

Once you specify your desired time frame, we will explore instructor availability and return with specific dates for your consideration.

### Do you provide Onsite training outside of the U.S.?

Yes. TDWI provides Onsite training worldwide.

### Does TDWI have training centers?

TDWI does not have training centers. TDWI Onsite Education brings our instructors and training materials directly to your location, where we train your team on site.

### Who can I contact for assistance with course selection?

Yvonne Baho, Director of TDWI Onsite Education, is available to assist you with questions and curriculum design.

### FOR MORE INFORMATION, CONTACT:

**Yvonne Baho**  
**Director, TDWI Onsite Education**

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 ybaho@tdwi.org

[tdwi.org/onsite](http://tdwi.org/onsite)



Advancing all things data.



Advancing all things data.

For more about TDWI Onsite Education, contact:

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**TDWI** ONSITE EDUCATION

Celebrating Over 20 Years of Excellence  
Delivering Programs That Reach Data  
Professionals Worldwide

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