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LAS VEGAS



Conference Program Guide

January 31–February 5, 2016

tdwi.org/LV2016

CO-LOCATED: TDWI EXECUTIVE SUMMIT LAS VEGAS 2016

 **EXEC | 16**

Make Analytics More Pervasive in Your Organization

CAESARS PALACE // FEBRUARY 1–2

The TDWI Executive Summit in Las Vegas brings together expert speakers, case studies, and panel discussions of best practices to help you think through what it means to make analytics pervasive.

More information visit tdwi.org/LVEXEC16

Unrivaled Breadth and Depth of BI & Analytics Education

At TDWI, we are in the business of accelerating the transformation of data into intelligence, insight, and impact through in-depth, practical education. Our events feature end-to-end learning *experiences* designed to bring you from foundational concepts and best practices to hands-on skills and ideation, and ultimately put your knowledge to work back in the office.

From Experience to Action

From data architecture and governance to analytics and getting value from data through innovation, TDWI Las Vegas features a learning experience on each core pillar of business intelligence.



Leadership & Innovation Experience

Develop the key leadership skills needed to build a data-driven organization and create business value by connecting people with their data.



Analytics Experience

Analytics is the bridge between data and business. Learn how to build a successful analytics program to transform data into insight and impact.



Big Data Experience

Big data is here to stay. Learn strategies to effectively integrate big data into your world. Understand its opportunities and challenges.



Data Management Experience

Rethink data management strategically, tactically, and operationally to meet current and future challenges of accessibility, scalability, security, quality, and utility.

What Makes It an Experience



FULL- AND HALF-DAY SESSIONS

Over 60 full- and half-day courses, from business intelligence basics to predictive analytics, innovation techniques, data visualization, and much more.



SHORT SESSIONS

Gain in-depth, actionable insights on how leading organizations are transforming data into business value with short sessions.



HANDS-ON LEARNING

Get hands-on experience with the latest tools and technologies from hadoop to data mining and data visualization.



PEER NETWORKING

Each TDWI event offers a plethora of structured and unstructured peer networking opportunities so you can learn from others.



WORKSHOPS

Guided by an expert facilitator, learn to put concepts into actionable plans in a collaborative group environment.



NIGHT SCHOOL

Just in case a full day of training is not enough, maximize your training dollars at informative night school sessions.

Keynote Presentations

Monday, February 1, 8:00 – 8:45 a.m.

How Analytics Drives Innovation—and Vice Versa!



Jill Dyché, CBIP

Vice President of SAS Best Practices, SAS

We've all been reading about companies that were "born digital." You know the ones—those West Coast, formerly dot-com bastions of online commerce and social media. These companies have as many developers as they do business people—and more data scientists than workaday users. When it comes to technology funding, their cup runneth over.

Come hear what going digital is like for mainstream companies who need to run their operations as they innovate, creating a digital playbook that encompasses—indeed, transcends!—existing development pipelines and incumbent technologies. Noted author, speaker, and consultant Jill Dyché will explore the collision between leadership, information, and digital. She'll discuss the roles analytics and data play in innovation, as well as present the do's and don'ts of forming an innovation lab. Use this dynamic and fun session as a playbook and a set of lessons learned on what it takes to become a truly innovation-driven enterprise in the real world.

Wednesday, February 3, 8:00 – 8:45 a.m.

The Relevance Imperative



Russell M. Glass

Head of Products

LinkedIn Marketing Solutions

Marketing has undergone a massive transformation in the last decade. And it will only continue to evolve at an accelerated pace over the next five years as more innovative technologies emerge.

Equipped with ever more sophisticated tools, marketers are uniquely poised to use data to impact business and drive revenue like never before. In his keynote address, Russell Glass, former CEO of Bizo and now Head of Products for LinkedIn Marketing Solutions, will talk about the challenges and opportunities posed by an increasingly complex buyer's journey and share valuable insights on how to not only keep pace, but forge confidently ahead.

Thursday, February 4, 8:00 – 8:45 a.m.

Doing Data Science Right: You Can't Find the Treasure without the Map



Deanne Larson

President, Larson & Associates

Data science is evolving from magic that other organizations perform to something we're developing as a core competency within. Solutions have no value if they do not address the problem; data science is no different. Data science starts with the skill of determining the problem or question that drives the analytics that follow. Much of the focus of data science has been on the treasure at the end of the hunt rather than ensuring you have the right map. This session addresses the importance of clear problem definition to ensure value from the data science process.

Attend this keynote presentation to discover the starting principles of data science:

- Begin with the end in mind
- It is a problem, decision, or discovery initiative
- Frame the problem
- Profile the data
- Create your treasure map



EXEC | 16

Make Analytics Pervasive in Your Organization

A focused, interactive event to help you expand the impact of analytics across your enterprise and fuel data-driven innovation.

February 1-2, 2016 tdwi.org/EXEC3

REGISTER EARLY & SAVE

SAVE \$340
when you register
by December 11

SAVE \$130
when you register
by January 8

Use priority code EXEC2

Learn

how to develop and apply analytics to improve business outcomes, enrich customer relationships, and drive smarter operations.

Discover

best practices for increasing the power of self-service visual analytics, data preparation, and data discovery for more users.

Apply

experience-based insights for making analytics actionable and more integrated with critical operations and processes.

Agenda at a Glance

SUNDAY

Breakfast
8:00–9:00 am

Sessions
9:00 am–12:15 pm

Lunch Break
12:15–1:45 pm

Sessions
1:45–5:00 pm

MONDAY

Breakfast
7:30–8:00 am

Keynote Presentation
8:00–8:45 am

TDWI Executive Summit
9:00 am–5:00 pm

Sessions
9:00 am–12:15 pm

Lunch Break
12:15–1:45 pm

Sessions
1:45–5:00 pm

CBIP Exam Lab
5:30–7:00 pm

Welcome Reception
6:30–8:00 pm

TUESDAY

Breakfast
7:30–8:00 am

Sessions
8:00–11:15 am

TDWI Executive Summit
8:00 am–5:00 pm

Exhibit Hall Open & Lunch
11:15 am–2:15 pm

Sessions
2:15–5:30 pm

Exhibit Hall Open & Reception
5:00–7:00 pm

WEDNESDAY

Breakfast
7:30–8:00 am

Keynote Presentation
8:00–8:45 am

Sessions
9:00 am - 12:15 pm

Exhibit Hall Open & Lunch
12:15–2:15 pm

Sessions
2:15–5:30 pm

Night School
6:00 - 7:30 pm

CBIP Exam Lab
6:00 - 7:30 pm

THURSDAY

Breakfast
7:30–8:00 am

Keynote Presentation
8:00–8:45 am

Sessions
9:00 am–12:15 pm

Lunch Break
12:15–1:45 pm

Sessions
1:45–5:00 pm

Night School
5:30–7:00 pm

CBIP Exam Lab
5:30–7:00 pm

FRIDAY

Breakfast
7:30–8:00 am

Sessions
8:00–11:15 am

Lunch Break
11:15 am–12:15 pm

Sessions
12:15–3:30 pm

CBIP Exam Labs
8:00 am–2:00 pm

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Agenda





SUNDAY


January 31


COURSE OFFERINGS


- S1**   p. 7
TDWI Big Data Fundamentals: Creating Value from Non-Traditional Data Sets
 Mark Peco



- S2**  p. 7
Best Practices in Enterprise Information Management
 Stephen Brobst



- S3A**      p. 7
TDWI Business Intelligence Principles and Practices: Charting the Course to BI Success
 Richard Hines


- S3P**   p. 7
TDWI Business Intelligence Architecture: Principles of BI Design
 Richard Hines

- S4A NEW!**  p. 8
TDWI Analytics Fundamentals
 Chris Adamson

- S4P**   p. 8
TDWI Predictive Analytics Fundamentals
 Chris Adamson

- S5A**   p. 8
TDWI Data Governance Fundamentals: Managing Data as an Asset
 Nancy Williams

- S5P**   p. 9
TDWI Data Governance Innovations: Adapting for Agile, Big Data, and Cloud
 Nancy Williams

- S6P NEW!**  p. 9
Innovation and Analytics: Getting from Insight to Impact
 Dave Wells

MONDAY

February 1

- M1**   p. 9
Serious Play for Predictive Analytics: What Works, What Doesn't, and Why
 Patrick Rooney

- M2**  p. 10
Understanding Hadoop
 Krish Krishnan

- M3 UPDATED!**  p. 10
Hands-on Data Visualization with R
 Eileen McDaniel, Stephen McDaniel

- M4A**    p. 10
TDWI Performance Management: Dashboards, Scorecards, and Metrics for Real Business Impact
 Chris Adamson

- M4P**  p. 10
TDWI Data Visualization Fundamentals
 Chris Adamson

- M5A**   p. 11
TDWI Dimensional Data Modeling Primer: From Requirements to Business Analysis
 Deanne Larson

- M5P**   p. 11
TDWI Data Modeling: Data Analysis and Design for BI and Data Warehousing Systems
 Deanne Larson

- M6A NEW!**  p. 11
Your Secret Sauce: Developing Innovation Culture
 Ginger Grant

- M6P NEW!**  p. 12
Creating Competitive Advantage with Innovation Teams
 Ginger Grant

- M7A NEW!**  p. 12
Data Preparation: Techniques and Tools for Analytics-Ready Data
 Dave Wells

- M7P NEW!**  p. 12
Practical Experience with Data Preparation: A Case-Based Workshop
 Dave Wells

- M8A**      p. 12
CBIP Preparation for the Information Systems Core Exam
 Mark Peco

- M8P**      p. 13
CBIP Preparation for the Data Warehousing Exam
 Mark Peco

TUESDAY

February 2


- T1**   p. 13
Dimensional Modeling from a Business Perspective: A Model the Business Can Understand
 Laura Reeves

- T2**  p. 13
Hands-on: Data Mining with R
 Deanne Larson

- T3**   p. 14
Solving Common Analytic Problems
 Jonathan Geiger

- T4A**   p. 14
Mobile Business Intelligence: Innovation and Advantage with a Mobile Workforce
 Shawn Rogers

- T4P**   p. 14
Social Analytics in the Enterprise
 Shawn Rogers

- T5A NEW!**  p. 14
Everyday Innovation & Creativity: How to Incorporate "Road-Tested" Techniques into Your Daily Work
 Sharon McIntyre

- T6A**  p. 15
Choosing the Right Analytic and Data Science Techniques
 John SantaFerraro

- T7A**  p. 15
Data Modeling in the Age of Big Data
 Chris Adamson

- TS NEW!**  p. 15
Innovation Short Session // Open Innovation with LEGO® Ideas: Methodology and Technology Successfully Bring Chesbrough's Model to Life
 Sharon McIntyre

- TS NEW!**  p. 16
Analytics Short Session // The Accidental Data Scientist – How to Survive in an Analytical World
 John Myers

- TS NEW!**  p. 16
Big Data Short Session // Real-World Big Data Applications: Building a 360-Degree View of the Customer
 Gustavo De León

- TS NEW!**  p. 17
Innovation Short Session // Disruptive Innovation: Past, Present, and Future
 Mark Madsen


- TS NEW!**  p. 16
Analytics Short Session // A Business Capability Framework for Classifying and Positioning Analytic Techniques and Approaches
 Mark Peco

- TS NEW!**  p. 16
Big Data Short Session // Ignore This at Your Peril: Can Your Data Lake Really Support the Red-Hot Demands of IoT and Customer Data Monetization?
 Jeff Stacey

EXPERIENCE KEY

Some classes cover more than one topic. Primary focus is listed first.

-  Analytics Experience
-  Big Data Experience
-  Data Management Experience
-  Leadership & Innovation Experience

 Recommended courses to help with CBIP certification exam prep.

WEDNESDAY

February 3

- W1** BD p. 17
Demystifying Big Data: Designing an Architecture for Data and Analytics
Mark Madsen

- W2** BD p. 17
Hands-on Hadoop
Krish Krishnan

- W3 NEW!** AE p. 18
Practical Experience with Analytics: A Models and Methods Workshop
Deanne Larson

- W4A** cbip OM p. 18
TDWI Data Virtualization: Solving Complex Data Integration Challenges
John Myers

- W4P** OM p. 18
TDWI Data Warehouse Automation: Better, Faster, Cheaper ... You Can Have It All
John Myers

- W5A NEW!** OM p. 18
Data Integration Approaches, Technologies, and Alternatives
Evan Levy

- W5P NEW!** OM p. 19
Event Stream Processing: Adding Real Time to the BI/DW Toolbox
Evan Levy

- W6A** LE AE p. 19
The New Analytical Ecosystem: Bridging the Worlds of BI and Big Data
Wayne Eckerson

- W6P** LE AE p. 19
Secrets of Analytical Leaders: Insights from Information Insiders
Wayne Eckerson

- WS NEW!** LE p. 20
Innovation Short Session // Supercharge Analytics with Innovation and Design Thinking
John Santaferraro

- WS NEW!** LE p. 20
Innovation Short Session // Innovating with Data: Tales from the Frontlines of Big Data
Aaron Werman

- WS NEW!** LE p. 20
Innovation Short Session // Innovation in the Revolution of the IoT
Asim Razvi

- NS NEW!** p. 20
Night School // Managing and Packaging Data as a Product
Evan Levy

THURSDAY

February 4

- TH1** cbip OM p. 21
TDWI Data Integration Principles and Practices: Creating Information Unity from Data Disparity
Jonathan Geiger

- TH2 NEW!** LE BD p. 21
TDWI Big Data Workshop: A Preparation and Planning Experience
Chris Adamson, Dave Wells

- TH3 NEW!** LE p. 21
Experience Innovation: A Workshop of Innovator Techniques and Tips
Kellee Franklin

- TH4A NEW!** LE OM p. 21
Data Strategy I: A Corporate Plan for Data
Evan Levy

- TH4P NEW!** BD OM p. 22
Data Strategy II: Developing the Road Map
Evan Levy

- TH5A** LE AE p. 22
Emerging Technology for Advanced Analytics
Mike Lampa

- TH5P** LE AE p. 23
Innovative Techniques for Advanced Analytics
Mike Lampa

- TH6A NEW!** LE AE p. 23
Agile Performance Management
Brett Knowles

- TH6P NEW!** LE AE p. 23
The Disruptive Analytics Organization: Strategies in the Disruptive World of Falcons and Mice
Paul Flach

- TH7A** AE p.23
Innovation Awareness: Getting Ready for Technology Shifts
David Loshin

- TH7P** AE p. 24
Workshop: Developing the Business Intelligence and Analytics Road Map
David Loshin

FRIDAY

February 5

- F1** cbip OM p. 23
TDWI Data Quality Management: Techniques for Data Profiling, Assessment, and Improvement
Jonathan Geiger

- F2 NEW!** OM p. 23
Data Preparation for Predictive Analytics
Keith McCormick

- F3** LE AE p. 23
Data Storytelling: The New Horizon in Business Analytics
Ted Cuzzillo, Dave Wells

- F4A NEW!** LE AE p. 24
Analytics-Based Enterprise Performance Management
Gary Cokins

- F5A NEW!** LE OM p. 24
Thinking Like a Data Scientist: Essential Skills for All Managers
Thomas Redman

EXPERIENCE KEY

Some classes cover more than one topic. Primary focus is listed first.

- AE** Analytics Experience
- BD** Big Data Experience
- OM** Data Management Experience
- LE** Leadership & Innovation Experience

cbip Recommended courses to help with CBIP certification exam prep.

Course Descriptions

S1 

Sunday, January 31, 9:00 am - 5:00 pm
Big Data Experience

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

Mark Peco

Big data is a hot topic in BI and analytics. Yet it is a complex topic that is still in the early stages of evolution. 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 that focuses on 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.

YOU WILL LEARN

- Common definitions of big data and the implications of each
- Key characteristics of big data and why size is not among the top five
- The structures that can be found in “unstructured” data
- Types of big data sources—data, social data, sensor data, etc.
- Value opportunities and common applications for big data
- Considerations when adapting architectures, organizations, and cultures to incorporate big data
- The scope of big data processes, tools, and technologies

GEARED TO

Business and data analysts; BI and analytics program and project managers; BI and data warehouse architects, designers, and developers; data governance and data quality professionals getting started with big data; anyone seeking to cut through the hype to understand the opportunities, challenges, and realities of the big data phenomenon

S2

Sunday, January 31, 9:00 am - 5:00 pm
Data Management Experience

Best Practices in Enterprise Information Management

Stephen Brobst

The effective management of enterprise information requires best practices in the areas of people, processes, and technology. In this talk we will share both successful and unsuccessful practices in these areas. A framework for enterprise information management (EIM) will be presented along with recommended steps for successful realization of the vision. A phased approach is suggested and the role of good governance, as well as appropriate technology choices and architecture, will be discussed. A reference architecture for deployment will be recommended with a detailed description of required services and the interoperability requirements for realization of the architecture.

YOU WILL LEARN

- The role of data modeling and the important distinctions between logical, physical, and semantic data models
- The role of metadata management and the categorization of different kinds of metadata
- The role of master data management along with the distinction between master data of record and master data of reference
- The role of governance along with the responsibilities from both a business and an IT perspective
- The role of data quality management and best practices in using total quality management techniques
- The role of data integration and the implications on deployment of newly emerging architectures for implementation

- The role of data security and privacy along with a description of best practices

GEARED TO

Data warehouse architects; data warehouse designers; data warehouse developers; data warehouse administrators; data warehouse managers

S3A 

Sunday, January 31, 9:00 am - 12:15 pm
Leadership & Innovation Experience, Analytics Experience, Big Data Experience, Data Management Experience

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

Richard Hines

The BI life cycle spans a continuum that begins with large amounts of disparate data and stretches to encompass people, technology, information, analysis, and decision making. The benefits of BI are substantial: new business capabilities for insight, forecasting, planning, agility, and strategy execution.

Realizing benefits is challenging. With many moving parts—infrastructure, technology, data, integration, analytics, applications, metrics, reports, dashboards, scorecards—putting the pieces together in the most effective way is difficult. 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.

YOU WILL LEARN

- Meaningful and actionable definitions of BI
- Effective ways to deliver BI: Web, mobile, desktop, etc.
- Common kinds of BI reporting: ad hoc, published, enterprise, operational
- Performance management principles: dashboards, scorecards, KPIs
- Business analyst principles: OLAP, analytic modeling, data visualization
- Advanced analytics concepts for data mining, predictive analytics, and text analytics
- Data management practices: profiling, cleansing, quality management
- Data integration practices: consolidation, virtualization, data warehousing

GEARED TO

Anyone with a role in BI/DW programs who needs to understand the concepts and the full life cycle of BI; BI/DW managers and leaders seeking to increase the value and business impact of a BI program; business and technical people who need to work together to implement BI; teams that need to develop a common base of concepts and terminology for BI

S3P 

Sunday, January 31, 1:45 - 5:00 pm
Data Management Experience

TDWI Business Intelligence Architecture: Principles of BI Design

Richard Hines

Business intelligence architecture is a set of frameworks to organize the data, management, and technical components used to build BI systems. 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 that involves data architects, integration architects, technology architects, and more. With the right knowledge and skills, your BI architects become an effective team able to handle the many complexities of BI systems.

YOU WILL LEARN

- The full scope of architectural objectives—structural integrity, standardization, reusability, environmental fit, aesthetics, and sustainability
- A framework to ensure architectural completeness—business, organization, data, integration, and process views
- A framework to organize BI components—access, analysis, presentation, storage, integration, and data source tiers
- A framework to organize the information management stack—data, integration, rules, tools, teams, reports, analysis, and application
- A framework to organize architectural requirements—functional, data, operations, environment, and structural requirements
- A framework to organize technology requirements—data access, data manipulation, data analysis, reporting, visualization, security, portability, and accessibility
- Technology trends and BI architecture—cloud, SaaS, open source, appliances, advanced visualization
- Organizational options for best fit of BI into your culture—conglomerate, cooperative, and centralized
- Data integration options in BI architecture—bus, hub and spoke, hybrid, federation, and virtualization

GEARED TO

Anyone who has a role in defining, documenting, or applying architecture in BI and data warehousing programs, including business architects, data architects, integration architects, and technology architects

S4A NEW 

Sunday, January 31, 9:00 am - 12:15 pm
Analytics Experience

TDWI Analytics Fundamentals**Chris Adamson**

Analytics is not only a hot topic but also a complex one. This continuously growing field now includes descriptive, diagnostic, predictive, and prescriptive analytics. Applied analytics, including optimization, simulation, and automation, expand the scope. Data growth also fuels the complexity—unstructured data, big data, social data, data streams, and more. Advanced analytics continues to expand with complex event processing, machine learning, cognitive computing, etc.

In the growing and evolving world of analytics, we're also experiencing a shift of roles and responsibilities. The "data things" that were once seen as IT responsibilities have become critical business skills. Analytics spans a continuum that encompasses IT departments, data scientists, data analysts, business analysts, business managers, and business leadership. It seems that everyone has a stake in analytics. Coordination, cross-functional analysis, data sharing, and governance have all become important skills.

YOU WILL LEARN

- The concepts and practices of analytic modeling
- An analytics topology to make sense of the variety of analytic types and techniques
- The data side of analytics including data sourcing, data discovery, data cleansing, and data preparation
- Analytic techniques for exploration, experimentation, and discovery
- The human side of analytics: communication, conversation, and collaboration
- The organizational side of analytics: self-service, central services, governance, etc.
- A bit about emerging techniques and technologies shaping the future of analytics

GEARED TO

Business leaders and managers seeking to understand business dynamics through analytics; IT leaders and managers responsible for delivering and supporting analytics initiatives; BI and analytics architects guiding the design, development, and deployment of analytics; BI and analytics designers and developers; business analysts, data analysts, data scientists, and those who aspire to these roles

S4P 

Sunday, January 31, 1:45 - 5:00 pm
Analytics Experience

TDWI Predictive Analytics Fundamentals**Chris Adamson**

Predictive analytics is a set of techniques used to gain new knowledge from large amounts of raw data by combining data mining, statistics, and modeling. Predictive analytics goes beyond insight (knowing why things happen) to foresight (knowing what is likely to happen in the future). Predictive models use patterns in historical data to identify and quantify probabilities of future opportunities and risks. Virtually every industry—insurance, telecommunications, financial services, retail, healthcare, pharmaceuticals, and many more—uses predictive analytics for applications such as marketing, customer relationship management, fraud detection, collections, cross-sell and up-sell, and risk management.

This course introduces predictive analytics skills, which encompass a variety of statistical modeling techniques, including linear and logistic regression, time-series analysis, classification and decision trees, and machine-learning techniques. Beyond statistics skills, predictive analytics requires knowledge of problem framing, data profiling, data preparation, and model evaluation.

YOU WILL LEARN

- Definitions, concepts, and terminology of predictive analytics
- Common applications of predictive analytics
- How and where predictive analytics fits into a BI program and the relationships with business metrics, performance management, and data mining
- To distinguish among various predictive model types and understand the purpose and statistical foundations of each
- Organizational considerations for predictive analytics, including roles, responsibilities, and the need for business, technical, and management skills

GEARED TO

BI program managers, architects, and project managers; business analysts who want to extend from gaining insight to providing foresight; business managers who need new tools to help them shape the future of the business; anyone interested in the basics of predictive analytics

S5A 

Sunday, January 31, 9:00 am - 12:15 pm
Data Management Experience

**TDWI Data Governance Fundamentals:
Managing Data as an Asset****Nancy Williams**

Data is a critical resource for every organization. We depend on data every day to keep records, produce reports, deliver information, monitor performance, make decisions, and much more. The data resource is on par with financial and human resources as a core component of doing business, yet data management practices are often quite casual. Data governance brings the same level of discipline to data management as is typical when managing financial and human resources

Building a data governance program is a complex process that focuses people, processes, policies, rules, and regulations to achieve specific goals for a managed data resource. Successful and effective data governance depends on clear goals and well-executed activities that match governance practices to your organization's needs, capabilities, and culture. A continuously evolving program is necessary to keep pace with trends such as cloud services, big data, and agile development. This course provides fundamental understanding of data governance concepts and techniques that is essential to start a new governance program or evolve an existing program.

YOU WILL LEARN

- Definitions and dimensions of data governance
- Key considerations and challenges in building a data governance program
- The practices, roles, skills, and disciplines essential to data governance
- The qualities that make good data stewards and stewardship organizations
- The processes of developing, executing, and sustaining data governance
- Activities, issues, and options when building a data governance program
- How maturity models are applied for data governance
- The importance of adapting data governance for trends such as big data, cloud services, and agile development methods

GEARED TO

Data quality and data governance professionals; BI/DW managers, architects, designers, and developers; data stewards, data architects, and data administrators; anyone with a role in data governance or data quality management

S5P 

Sunday, January 31, 1:45 - 5:00 pm
Data Management Experience

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

Nancy Williams

Rapid increases in data variety and data management practices challenge the old model of policy- and enforcement-based data governance. Cloud services bring new issues that go well beyond the obvious concerns of security and privacy. Big data implementation brings substantial changes to the scope and complexity of governance. Many ask if governance and agile can coexist. The answer must be “yes,” but making them work together is especially challenging.

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 the new opportunities that arise from current trends in data management.

YOU WILL LEARN

- The data governance challenges and opportunities that arise from cloud services
- Risks, challenges, and opportunities of big data governance
- How to overcome apparent conflicts between data governance and agile
- Roles, relationships, and complexities of metadata management for data governance
- Data governance challenges that arise from mobile devices and social media
- The importance of ethics as a data governance imperative
- New models, practices, and processes for modern data governance

GEARED TO

Data quality and data governance professionals; CIOs, business leaders, and IT executives facing the realities of agile, big data, or cloud services; managers, architects, designers, and developers of BI, MDM, and data warehousing systems; data stewards, data architects, and data administrators; anyone with a role in data governance or data quality management; anyone needing to modernize a data governance program for agile BI, big data, or cloud services

S6P NEW

Sunday, January 31, 1:45 - 5:00 pm
Leadership & Innovation Experience

Innovation and Analytics: Getting from Insight to Impact

Dave Wells

Analytics is a hot topic today, and much of the buzz surrounds the insight that can be achieved with analytics. We often act as if insight is an inherently wonderful thing. The reality, however, is that insight not acted upon has no purpose and little value. To achieve real value, we must understand and be able to navigate the path from insight to innovation, and from innovation to business impact.

YOU WILL LEARN

- Concepts and principles for the what, why, and how of innovation
- Cohesion and connections among the six i's—insight, ideation, imagination, inspiration, innovation, and impact
- Myths, truths, and types of innovation
- Creativity and the art of innovation
- Techniques, tools, and the science of innovation
- Investing, leading, and organizing, and the disciplines of innovation

GEARED TO

Business managers, business analysts, data analysts, and data scientists who need to move beyond creating insight and create real business value; leaders and champions of business innovation; anyone who is or aspires to be a member of an innovation team

M1

Monday, February 1, 9:00 am - 5:00 pm
Analytics Experience

Serious Play for Predictive Analytics: What Works, What Doesn't, and Why

Patrick Rooney

This one-day vendor-neutral session will prepare analytic practitioners and functional managers to make sense of predictive modeling and take control of the analytic process. We'll introduce the foundation for data-intensive 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 process than with the tactical skills of a data scientist.

If you are a business or public sector practitioner or leader seeking to propel your organization's analytic maturity and put predictive analytics to work for measurable gain, then this session is designed for you.

YOU WILL LEARN

- Develop a business-aligned strategy for applying high-value data-driven decisions
- Identify, qualify, and prioritize viable and actionable analytic opportunities
- Convey a standardized process development model to implement across your team
- Acquire both tactical and strategic skills required to stand out in the analytics practice
- Learn why most analytics projects fail and the main pitfalls to avoid
- View a standardized process methodology for predictive analytics
- Leave with resources, contacts, and plans to reduce your project preparation time, costs, and risks

GEARED TO

IT executives and big data directors; line-of-business directors and functional managers; data scientists; technology planners; consultants

M2

Monday, February 1, 9:00 am - 5:00 pm
Big Data Experience

Understanding Hadoop**Krish Krishnan**

The advent of big data has changed the world of analytics forever. 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'll all need to understand the platform, its ecosystem, and how to work with it. The enterprise adoption of Hadoop is met with mixed responses. 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.

YOU WILL LEARN

- The what and why of Hadoop
- Hadoop components
- Technical architecture
- Core components (MapReduce, HDFS, YARN)
- Hadoop tools (Hbase, Hive, Pig, Mahout, Impala)
- Hadoop setup and configuration
- Hadoop administration and management
- Using Hadoop: applications and examples

GEARED TO

Architects, developers, anyone interested in Hadoop

M3 UPDATED

Monday, February 1, 9:00 am - 5:00 pm
Analytics Experience

Hands-on Data Visualization with R**Eileen McDaniel, Stephen McDaniel**

We recommend that attendees have basic coding experience (for example, writing SQL queries or complex formulas in Excel, or using any programming language). Attendees also need to bring a laptop computer and mouse with specific free open source software installed prior to the session. When you register for the class you will receive detailed instructions for software download and installation.

The open source programming language R is not just for statisticians and academics anymore! All types of data professionals, including business analysts, data scientists, and information technologists in a variety of business, government, and non-profit organizations, are utilizing the power of R to analyze and visualize their data.

In this workshop, learn how to optimize new R packages to create high-quality data visualizations for your own use or to communicate key insights to colleagues and clients.

YOU WILL LEARN

- Cutting-edge R packages that enable creation of customizable data visualizations for yourself or to share
- How to build essential chart types, based on a case study approach
- How to create compelling data visualizations and exploring possibilities to make them dynamic and interactive

GEARED TO

Data professionals with basic coding experience who are interested in the flexibility of open source technologies to create data-based visualizations for their own use or to communicate key results to others.

Enrollment is limited to 50 attendees.

M4A 

Monday, February 1, 9:00 am - 12:15 pm
Leadership & Innovation Experience, Analytics Experience

TDWI Performance Management: Dashboards, Scorecards, and Metrics for Real Business Impact**Chris Adamson**

Performance management (PM) is a core practice in business management today, and it ranks high among the value opportunities of business intelligence. Using data to set goals and measure performance is a proven key to business success. Performance management strengthens the connection of tactics with strategy, and of operations with tactics—enabling feedback, monitoring, and accountability across all levels of business activity.

Dashboards and scorecards are the most effective ways to deliver business intelligence that drives performance management. A top-quality dashboard or scorecard looks deceptively simple, but creating simple and effective interfaces is surprisingly difficult. A powerful dashboard or scorecard involves the right indicators and metrics, the right visual elements, attention to relationships among visual elements, and the right kinds of click-through and user interaction. Further complexity arises when you work with groups of related scorecards and dashboards that must fit together to form an integrated performance management system.

YOU WILL LEARN

- Techniques to identify high-impact performance indicators and business metrics
- How measurement and feedback are applied to increase business effectiveness and improve business efficiency
- How to define and design performance management architecture
- How to foster a performance management culture
- When to use scorecards and when to use dashboards
- Design techniques for dashboards and scorecards
- How to integrate dashboards and scorecards including cascading and drill-in
- How to choose the right indicators, metrics, and visual elements for dashboards and scorecards
- Data management techniques for scorecards and dashboards

GEARED TO

BI program and project managers; BI and performance management architects, designers, and developers; business executives and managers seeking performance improvements; dashboard and scorecard designers and developers; anyone with a role in defining, creating, or applying business metrics

M4P

Monday, February 1, 1:45 - 5:00 pm
Analytics Experience

TDWI Data Visualization Fundamentals**Chris Adamson**

Data visualization has rapidly become a critical part of business analytics and business communications. Without visualization, the numbers and statistics of analytics are difficult to interpret and incomprehensible to many who need to turn data into knowledge. The advent of big data, with increasing volume and velocity of data, emphasizes visualization as a technique to compress large volumes of data into digestible presentations and observe streaming data in motion.

Elegant and well-designed data visuals often appear to be easy because skilled visual developers are able to hide the complexities and hard work behind the scenes. Business intelligence and business analytics professionals need to communicate as effectively in visual forms as they do with their verbal and written communications skills. Get started by learning the fundamentals of data visualization.

YOU WILL LEARN

- Visualization as a communication medium
- Preparing data for visualization
- Components of visualization
- Choosing and using charts and graphs
- Visual exploration and analysis
- Visual design techniques
- Extending visualization with infographics
- Visual storytelling
- Data visualization tools

GEARED TO

Business analysts and data analysts; data scientists and analytics modelers; business analytics leaders and managers; BI leaders and managers; anyone who develops charts and graphs to communicate about data

M5A

Monday, February 1, 9:00 am - 12:15 pm
Data Management Experience

TDWI Dimensional Data Modeling Primer: From Requirements to Business Analysis

Deanne Larson

Dimensional data is a core component of modern business intelligence and data warehouse 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 business intelligence and data warehousing projects needs to have fundamental knowledge of the pathway from business questions to business analytics. This course traces that pathway.

The course begins with a comparison of relational and dimensional data organization and provides an example of business questions not readily answered using the more traditional data structures of relational modeling. It then illustrates the steps to design analytic solutions, starting from business questions and concluding by demonstrating an OLAP solution. These steps encompass techniques to capture business questions, represent them as a business solution, translate them into a technology solution, and deliver them to those who need information.

YOU WILL LEARN

- Concepts of dimensional data modeling
- The relationship between business metrics and dimensional data
- Similarities and differences between relational and dimensional data models
- Requirements-gathering techniques for business metrics and dimensional data
- How to build a logical dimensional model
- How to translate a logical dimensional model to a star schema design
- How dimensional data is used to deliver business analytics and OLAP capabilities

GEARED TO

Data architects; data mart developers; business analysts; business intelligence and data warehouse program and project managers

M5P

Monday, February 1, 1:45 - 5:00 pm
Data Management Experience

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

Deanne Larson

This course assumes knowledge of data warehousing concepts and business intelligence fundamentals.

Business intelligence and data warehousing systems challenge the proven data modeling techniques of the past. From requirements to implementation, new roles, uses, and kinds of data demand updated modeling skills. The data modeler's toolbox must address relational data, dimensional data, unstructured data, and master data. For those with data modeling experience, this course extends their skills to meet today's modeling challenges. Those new to data modeling are introduced to the broad range of modeling skills needed for BI/DW systems. Those who need to understand data models, but not necessarily develop them, will learn about the various forms of models and what they are intended to communicate.

YOU WILL LEARN

- Differences in modeling techniques for business transactions, business events, and business metrics
- Different types of data and their implications
- Application of business context to modeling activities
- The role of business requirements in BI data modeling
- The role of source data analysis in data modeling
- Use of normalized modeling techniques for data warehouse analysis and design
- Use of dimensional modeling techniques for data warehouse analysis and design
- The roles of generalization and abstraction in data warehouse design
- The roles of identity and hierarchy management in data warehouse design
- How time-variant data is represented in data models
- Implementation and optimization considerations for warehousing data stores

GEARED TO

Data architects; data modelers; BI program and project managers; BI/DW system developers

M6A **NEW**

Monday, February 1, 9:00 am - 12:15 pm
Leadership & Innovation Experience

Your Secret Sauce: Developing Innovation Culture

Ginger Grant

It's a conundrum: most organizations claim to be innovation driven, but very few practice what they preach. How can any of us safeguard our innovation capacity in this kind of environment? Most organizations expect managers to focus on what is feasible rather than on what is possible. In this session, you will learn how to protect individual creative capacity in order to drive organizational performance. In building your analytics capacity, your culture will drive performance.

YOU WILL LEARN

- How to conduct a corporate culture audit (what is really going on?)
- Understand the elements of a high-performance environment
- How to align your values, policies, and procedures to support innovation practice
- How to work with self-managing teams that reinforce corporate strategy
- How to develop a climate of trust where innovation can flourish
- How to track innovation outcomes against strategic vision

GEARED TO

Managers, team leads, analysts, or leaders who are charged with creating competitive advantage or a culture of innovation

M6P NEWMonday, February 1, 1:45 - 5:00 pm
Leadership & Innovation Experience**Creating Competitive Advantage with Innovation Teams****Ginger Grant***Participants should have managerial experience with teams.*

Teamwork. Innovation. Sustainable competitive advantage. How do you develop teams that drive organizational performance? How do you attract and, more importantly, keep key players? Combining both research and case studies, this experiential session will provide you with some tools and techniques in order to build high-performance teams.

YOU WILL LEARN

- How to effectively manage corporate culture
- How to develop and enhance skills in planning and implementing organizational change
- How to promote group diversity and power sharing
- Organizational rites and rituals to support team innovation practice
- How to apply leadership complexity theory to manage data scientists effectively
- Peer coaching methods to enhance team building
- Ways to develop self-managing teams to drive insights into action
- How to design reward and recognition programs that build innovative capacity

GEARED TO

Senior managers and executives of all functional areas

M7A NEWMonday, February 1, 9:00 am - 12:15 pm
Data Management Experience**Data Preparation: Techniques and Tools for Analytics-Ready Data****Dave Wells**

The once simple world of data preparation—ETL for operational data integration—has become increasingly complex. Terms such as *data wrangling* and *data blending* indicate some of the challenges. The exciting work of analytics doesn't work well until the data is ready for meaningful analysis. The scope of big data, the variety of data uses, and the emergence of business-friendly data visualization and analysis tools all contribute to the complexity.

A recently emerged category of technologies helps to meet the challenges with business-friendly tools for data integration and preparation. When your analytics projects spend more time finding and fixing data than analyzing the data, you really need to make a change. Learn about the tools and techniques that can help individuals and teams—both business and technical—to cleanse, combine, format, and sample data for analytics.

YOU WILL LEARN

- The common challenges of data preparation in the age of big data
- Techniques for data preparation that improve both speed and quality of analytics activities
- The business case and the technical case for data preparation tools
- The data management and governance benefits of data preparation technologies
- The landscape of tools and technologies for modern data preparation

GEARED TO

Business managers, business analysts, data analysts, and data scientists who need to accelerate and simplify data preparation activities; BI and analytics developers who face the daily challenges of complex data preparation; technical managers and architects who need to integrate data preparation technologies into the BI and analytics toolkit; everyone who struggles with getting the right data in the right forms for effective analytics

M7P NEWMonday, February 1, 1:45 - 5:00 pm
Data Management Experience**Practical Experience with Data Preparation: A Case-Based Workshop****Dave Wells**

Data is inherently challenging, and preparing data for analytics is especially difficult. The CEO of a healthcare company once told me, "I don't get any real analytics. The analysts spend 50 percent of their time finding data and 40 percent fixing it. That doesn't leave much time for data analysis." This scenario is typical of most companies and is very real whether business or technical people are doing the work. Join us for a use-case-based journey through a data preparation experience where you'll collaborate in small groups to learn the tips and tricks of fast and focused data preparation.

YOU WILL LEARN

- To identify the data that is best suited to your analytic needs
- To understand the data and the challenges inherent in that data
- To define and specify data cleansing needs
- To define and specify data formatting needs
- To define and specify data blending needs
- To understand and apply principles of iterative and adaptive data preparation

GEARED TO

Business managers, business analysts, data analysts, and data scientists who need to accelerate and simplify data preparation activities; BI and analytics developers who face the daily challenges of complex data preparation; technical managers and architects who need to integrate data preparation technologies into the BI and analytics toolkit; everyone who struggles with getting the right data in the right forms for effective analytics

M8A CBIPMonday, February 1, 9:00 am - 12:15 pm
Leadership & Innovation Experience, Analytics Experience, Big Data Experience, Data Management Experience**CBIP Preparation for the Information Systems Core Exam****Mark Peco***This course assumes a working knowledge of information systems.*

This course is designed for those who already have knowledge and experience in the field of information systems but would benefit from an interactive and informative review prior to testing. You'll get ready to test through discussion, review of concepts and terminology, and sample exam questions. A CBIP-certified instructor who has experienced the examination process and can share tips and techniques to improve your performance on the exam will lead this class.

YOU WILL LEARN

- Concepts and terms used in the exam: technology and business, application system, data management, and systems development
- What constitutes the complete body of knowledge for the exam
- How to assess your knowledge and skill related to the body of knowledge

- What to expect during the examination process
- Techniques to improve your performance when taking the exam

GEARED TO

Everyone seeking CBIP certification (the information systems core exam is required for all CBIP specialties)

Enrollment is limited to 60 attendees.

M8P 

Monday, February 1, 1:45 - 5:00 pm

Leadership & Innovation Experience, Analytics Experience, Big Data Experience, Data Management Experience

CBIP Preparation for the Data Warehousing Exam**Mark Peco**

This course assumes a working knowledge of data warehousing.

This course is designed for those who already have data warehousing knowledge and experience but would benefit from an interactive and informative review prior to testing. You'll get ready to test through discussion, review of concepts and terminology, and sample exam questions. A CBIP-certified instructor who has experienced the examination process and can share tips and techniques to improve your performance on the exam will lead this class.

YOU WILL LEARN

- Concepts and terms used in the exam: organization and methodology, architecture and technology, data modeling concepts, data integration, and implementation and operation
- What constitutes the complete body of knowledge for the exam
- How to assess your knowledge and skill related to the body of knowledge
- What to expect during the examination process
- Techniques to improve your performance when taking the exam

GEARED TO

Everyone seeking CBIP certification (the data warehousing exam is required for all CBIP specialties)

Enrollment is limited to 60 attendees.

T1 

Tuesday, February 2, 8:00 am - 5:30 pm

Data Management Experience

Dimensional Modeling from a Business Perspective: A Model the Business Can Understand**Laura Reeves**

Exposure to some IT projects is helpful.

Today's businesses are under increasing pressure to deliver more with less. Meeting this challenge requires leveraging all resources—especially data. The time-proven method is through dimensional data structures. Organizations often struggle to develop dimensional models that consistently meet business needs. Using business dimensional modeling techniques, the business and systems communities can effectively partner to create a model that will support the business today and in the future.

This course is designed to teach attendees the fundamentals of business dimensional modeling. The basic principles are shared using real-world scenarios. This course is not intended to provide the complete skills necessary to develop dimensional models from scratch, but does provide a solid foundation of what dimensional models are and how they work. This practical background can be used by members of the

business community to improve communication of their requirements and increase their understanding and participation throughout the project.

The course ends by putting the modeling effort into the proper context. Techniques for successfully gathering business requirements are shared. A quick overview of what is needed to build the database and deliver the data to the business is also provided. Several design exercises are included to reinforce the concepts presented in class. These team exercises prepare the students to apply these concepts to their own projects.

YOU WILL LEARN

- How to identify facts and dimensions
- How to design comprehensive and flexible dimensions
- About different types of facts and how to model them
- Techniques to facilitate involvement of the business community in the modeling process

GEARED TO

Anyone who is involved with the data warehouse; members of the business community who are interested in understanding basic dimensional modeling concepts; all other project team members, including business intelligence application developers, project managers, database administrators, data modelers, and data staging developers

T2

Tuesday, February 2, 8:00 am - 5:30 pm

Analytics Experience

Hands-on: Data Mining with R**Deanne Larson**

Attendees should have some coding experience, basic statistics, and will need to bring a laptop computer with RStudio installed prior to the session. When you register for the class, you will receive detailed instructions for download and installation of RStudio.

With the advent of big data, there is an increased focus on data mining and the value that can be derived from large data sets. Data mining is the process of selecting, exploring, and modeling large amounts of data to uncover previously unknown information for business benefit.

R is an open source software environment for statistical computing and graphics and is very popular with data scientists. R is being used for data analysis, extracting and transforming data, fitting models, drawing inferences, making predictions, plotting, and reporting results. Learn how to use R basics, working with data frames, data reshaping, basic statistics, graphing, linear models, non-linear models, clustering, and model diagnostics.

YOU WILL LEARN

- How to configure the RStudio environment and load R packages
- How to use R basics such as basic math, data types, vectors, and calling functions
- How to use advanced data structures such as data frames, lists, and matrices
- How to use R base graphics
- How to use R basic statistics, correlation, and covariance
- How to use linear models such as simple linear regression, logistic regression
- How to use non-linear models such as decision trees and Random Forests
- How to apply clustering using K-means
- How to complete model diagnostics

GEARED TO

Anyone interested in learning to use data mining techniques to find insights in data and who has at least some statistical and programming experience.

Enrollment is limited to 30 attendees.

T3Tuesday, February 2, 8:00 am - 5:30 pm
Analytics Experience

Solving Common Analytics Problems

Jonathan Geiger

It seems like everyone in the business world is talking about analytics, but what does that really mean? More important, how do you use analytics to create business value? This course provides several common examples of how companies in multiple industries are using analytics to understand business drivers, establish meaningful goals, and execute successfully against those goals.

Following a brief introduction of business analytics concepts, the session describes use cases with practical applications of business analytics. The use case descriptions include the business scenario, anticipated business value, type of analytics involved, information needs, technology needs, skill needs, and results. Frequently encountered challenges are also explored, along with ways to overcome them. Looking across all use cases, we'll summarize common characteristics of successful analytic organizations, identify key roles, and describe areas that should be assessed to develop a road map to introduce or expand the use of analytics.

Use cases that are addressed:

- Customer relationship management (personalization, churn analysis, and reduction)
- Financial risk reduction (fraud detection, expense analysis, regulatory compliance)
- Sales and marketing (leveraging loyalty programs, converting browser to buyer, cross-selling)
- Operational analysis (productivity analysis and improvement, quality improvement)
- Supply chain optimization (inventory optimization, logistics)

YOU WILL LEARN

- Real-world examples of business analytics at work
- Common characteristics of successful business analytics applications
- Common challenges in deploying business analytics and how to address them
- Steps to help an organization prepare for effective business analytics use

GEARED TO

Business managers seeking analytics opportunities; technical managers and developers who need deeper understanding of the business value of analytics; everyone who needs to understand the importance of analytics in a competitive business environment

T4ATuesday, February 2, 8:00 - 11:15 am
Analytics Experience, Big Data Experience

Mobile Business Intelligence: Innovation and Advantage with a Mobile Workforce

Shawn Rogers

Driving innovation with data is the mantra for today's smart enterprise. In the age of big data, IoT, and the cloud, IT is already working hard to enable innovation and stay current with new technologies. As our data environments become more complex and data more distributed and diverse, we are facing increasing needs to stay flexible and agile to accommodate change and innovation. Delivering data to a mobile workforce is a critical strategy for most companies, but it goes beyond simple reporting and dashboards. Sophisticated strategies and coordinated best practices will take your company to the next level of BI and power your team with mobile data and insights.

YOU WILL LEARN

- How your peers are deploying mobile BI and analytics
- About innovative use cases and applications to drive value from mobile
- Tactics to ensure your mobile BI and analytics program succeeds

- About industry research on mobile and best practices

GEARED TO

IT and business professionals who need an overview and understanding of mobile BI opportunities and strategies

T4PTuesday, February 2, 2:15 - 5:30 pm
Analytics Experience, Big Data Experience

Social Analytics in the Enterprise

Shawn Rogers

Big data comes in all shapes and sizes. Social data is at the forefront of big data innovation for companies who need to power deeper and richer analytics. Social data analytics enables better understanding of customer sentiment, brand awareness, purchasing habits, and more. Integrating, sharing, and leveraging this data across your analytic environment opens the door to a new world of business insight. This class explores the various social data sources, data structures, integration strategies, and benefits of social analytics in your enterprise.

YOU WILL LEARN

- Why you can't afford to ignore this growing trend and innovative data source
- How leading companies achieve a competitive edge using social analytics
- To understand the five social media data types and how to leverage them
- Mistakes to avoid in your social analytics strategy
- Essential tools for social analytics
- How to integrate and utilize social data within your enterprise

GEARED TO

Those with experience on prior BI projects; those who are tasked with adding value to existing BI implementations with new data sources; anyone getting started with big data and/or social media strategy; anyone who is curious about social analytics opportunities and value

T5A NEWTuesday, February 2, 8:00 - 11:15 am
Analytics Experience

Everyday Innovation & Creativity: How to Incorporate "Road-Tested" Techniques into Your Daily Work

Sharon McIntyre

Do creativity and innovation processes only seem to get dusted off for special occasions in your organization? Perhaps you've been part of a Friday morning design thinking workshop run by a consultant. Maybe you participated in a one-time LEGO Serious Play session to drive more disruptive innovation through the new product development (NPD) funnel. Innovation simulation game anyone?

Once the fun workshop is over, however, your working life returns to normal. Sadly it seems brainstorming, sticky notes, and focus groups return to their regular place in your organization's NPD creativity and innovation toolkit—and your innovation success rate flattens.

This dynamic learning session will present practical examples of powerful creativity and innovation processes and techniques that you can incorporate into your daily work. Examples will be based on real-world case studies with leading organizations in Denmark, Cameroon, the U.S., and the UK. Discussions and interactive activities will provide participants with the opportunity to apply techniques to industry scenarios.

YOU WILL LEARN

- How to effectively constrain an innovation project for better results
- Useful techniques to replace brainstorming
- Options for effectively delimiting qualitative data generation
- Why digital suggestion boxes don't work

- Practical methods to encourage divergent thinking
- Creating a high-energy problem-solving work culture around innovation
- How to kick-start your R&D teams through internal innovation challenges

GEARED TO

Product developers; product managers; business innovators; innovation team members and managers; innovation incubator participants; insights researchers; others contributing to their organization's new product development innovation funnel

T6A

Tuesday, February 2, 8:00 - 11:15 am
Analytics Experience

Choosing the Right Analytic and Data Science Techniques

John Santaferraro

New data and modern data platforms create new opportunities for businesses every day. The challenge is figuring out how to unlock the value hidden in massive data stores. Companies that gain expertise in data science and analytics will outpace their competitors with new insight. Individuals who acquire that same knowledge will find themselves in high demand.

This introductory course in analytics and data science will give you the framework you need to understand and immediately begin using your analytics skill set. You will understand the fundamental principles of data science and analytics and lay a foundation to take the right steps toward value. Determine when to use predictive, preventive, prescriptive, and descriptive analytics. Understand the business value and applications for clustering, classification, association, sequencing, graph, simulation, forecasting, optimization, and other algorithms.

YOU WILL LEARN

- The fundamental principles of data science and analytics
- How to apply the different classes of analytics
- An overview of types of algorithms and how they apply to business processes
- Examples of how different kinds of algorithms apply to customer analytics

GEARED TO

BI, DW, and IT directors; BI, DW, and IT executives; business analysts; business executives

T7A

Tuesday, February 2, 8:00 - 11:15 am
Big Data Experience

Data Modeling in the Age of Big Data

Chris Adamson

The big data phenomenon expands the purpose and changes the role of data modeling. The level of uncertainty about data modeling in today's data ecosystems is high. Most practitioners have more questions than answers. 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 before. But data modeling purpose and processes must change to keep pace with the rapidly evolving world of data. This course examines the principles, practices, and techniques that are needed for effective modeling in the age of big data.

YOU WILL LEARN

- To distinguish between data store modeling (schema-on-write) and data access modeling (schema-on-read) and when each is useful
- The elemental characteristics of data that provide a common denominator for data modeling for all types of data

- How the common denominator is used to map various kinds of databases including relational, dimensional, NoSQL, NewSQL, graph, and document
- When traditional logical-to-physical modeling works and when it makes sense to reverse the process as physical-to-logical
- Trade-offs between methodological rigor and discovery-driven exploration in data modeling

GEARED TO

Data architects; data modelers; database developers; data integrators; data analysts; report developers; anyone else challenged with the need to make structured enterprise data and non-traditional data sources work together

TS NEW

Tuesday, February 2, 2:15 - 3:45 pm
Leadership & Innovation Experience

Innovation Short Session // Open Innovation with LEGO® Ideas: Methodology and Technology Successfully Bring Chesbrough's Model to Life

Sharon McIntyre

The LEGO Ideas open innovation community has hundreds of thousands of online fans around the world contributing new product ideas and designs, encouraging peer designers, and voting on which crowdsourced innovations they want to see produced. LEGO user-generated products have included LEGO Minecraft, LEGO Research Institute, and LEGO Doctor Who. This case study examines the evolution of successful open innovation methodology and related practices from the perspective of the community's Canadian software platform design and development firm, Chaordix.

As Berkeley professor Henry Chesbrough explains, open innovation is “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. Open innovation can be understood as the antithesis of the traditional vertical integration approach where internal R&D activities lead to internally developed products that are then distributed by the firm.” When considering this open, collaborative innovation model, questions can arise concerning intellectual property, community management, speed to market, and so forth.

Drawing on two years of collaboration with the global LEGO Ideas team, our lessons learned in open innovation will be shared and an interactive Q&A session will complete the session.

YOU WILL LEARN

- The difference between crowdsourcing, co-creation, and open innovation
- The essential elements of Henry Chesbrough's open innovation business model
- The LEGO Ideas open innovation methodology and related practices
- What roles incentives and rewards can play in open innovation
- The importance of UX and activity design in building community
- Discovering new consumer segments through open innovation
- Choosing a good open innovation spectrum “fit” for your organization

GEARED TO

Business innovators; innovation team members and managers; innovation consultants; social innovation managers; insights researchers; crowdsourcing community designers and managers; others interested in developing open innovation initiatives for their organizations

TS NEWTuesday, February 2, 2:15 - 3:45 pm
Analytics Experience**Analytics Short Session // The Accidental Data Scientist – How to Survive in an Analytical World****John Myers**

Presto, you're a data scientist! Or that's what your boss/job description says. Now you need to figure out what to do. What tools do you need? What analytical models are available? Where do you go to get started? Organizations must start the education process to empower employees to use analytical platforms and make decisions based on data initiatives. However, truly data-driven organizations—assuming their employees have these core skills—will instead focus on how to incent employees to use their analytical skills and mentor them on data-driven decision making. If you are lagging behind in those key, early-stage skills that many companies assume you have, come learn how to make the most of your available resources.

YOU WILL LEARN

- What a data scientist is
- What models are available to solve your analytical problems
- How you can use those models with the tools available
- A case study on using analytical models to develop a data science practice

GEARED TO

BI, MDM, and data warehousing program and project managers; data integration architects, designers, and developers; data and technology architects

TS NEWTuesday, February 2, 2:15 - 3:45 pm
Big Data Experience**Big Data Short Session // Real-World Big Data Applications: Building a 360-Degree View of the Customer****Gustavo De León**

The emergence of new data sources and digital data channels has brought new data opportunities. Those who succeed in the digital landscape will turn data into insight that can be used to deliver high levels of service and sales.

Part 1 will focus on how the industry can utilize new data opportunities, along with how best to connect data from across channels and lines of business to build a 360-degree view of the customer.

Part 2 describes the path data warehousing and business intelligence professionals should take to transition their deep knowledge and skill sets into a big data world.

TS NEWTuesday, February 2, 4:00 - 5:30 pm
Analytics Experience**Analytics Short Session // A Business Capability Framework for Classifying and Positioning Analytic Techniques and Approaches****Mark Peco**

Analytics as a concept has gained significant mindshare and attention in business and technology circles, everyday activities, and popular culture, with headlines and discussions related to data-driven organizations and personal lifestyle managers. However, there is a significant level of confusion and inconsistency in how people describe their understanding and perspectives of the exact nature of analytics. Many frameworks have been developed that describe and categorize analytics according

to mathematical techniques and algorithms, but this type of information is only interesting to a narrow technical audience.

This presentation provides a framework that classifies analytic techniques according to the types of business or personal capabilities that are enabled. The framework will help a wider and more diverse audience understand the broad set of opportunities that are emerging, as well as describe how true value can actually be generated from different types of analytics methods.

Business capabilities are identified and classified that can be enabled by various analytic techniques. This approach helps organizations identify new opportunities for analytics—leading to incremental business capabilities that generate additional competitive advantage in the marketplace.

YOU WILL LEARN

- How business capabilities can be categorized and classified
- How analytics techniques can be mapped to value generating business capabilities
- How to identify new opportunities for additional analytics techniques
- How to identify existing and potential business capabilities that are underserved by analytics

GEARED TO

Analytics and business intelligence leaders; functional business managers; process improvement professionals; strategic planners and managers; information technology professionals; data integration and management professionals; data science, analytics, and BI professionals; business planning and operations professionals

TS NEWTuesday, February 2, 4:00 - 5:30 pm
Big Data Experience**Big Data Short Session // Ignore This at Your Peril: Can Your Data Lake Really Support the Red-Hot Demands of IoT and Customer Data Monetization?****Jeff Stacey**

Big data analysts overwhelmingly agree: customer data and product monetization initiatives dominate more than half of today's big data analytics budgets. Monetizing customer data, if only internally, is arguably the most important initiative for incrementally improving your company's top line (and your career outlook).

Yet we have several fundamental roadblocks with today's open source big data road map:

- Analysts are predicting that data overload can outpace even the most massively scalable Hadoop and Spark installations. The average big data customer may, within the next five years, exceed all parameters of the cliché; three v's of volume, velocity, and variety.
- The actionable window for acting on relevant customer and monetization event data is shrinking to minutes—even seconds—and is becoming increasingly location-specific.
- Most contemporary real-time technologies are missing key components and context to make monetization time-relevant, and they miss the value of text and multi-structured analysis.
- As we enter the Golden Age of big data apps, the relevant data for “right person, right place, right context” is noticeably absent.
- Google and a flood of dot-com-type app companies are winning a substantial advantage over the market by creating just-in-time big data apps and architectures. How can mere mortals participate and even thrive?

YOU WILL LEARN

- How companies like yours are preprocessing and even analyzing data in motion, then optimizing their downstream data lakes for deep web/text analysis and data science.

- Why Kafka, Spark Streaming, and other real-time technologies are not likely enough for you to complete relevant, actionable analytics apps for today's enterprise.
- Proven, bake-off cases of pure open source vs. best of breed vs. hybrid approaches.
- See real-world architectures and success stories that took place in weeks, not months, using the world's most demanding telco and financial data streams.
- Business-relevant use cases and solution road maps for financial data monitoring, communications, the Internet of Things (IoT), and more.
- How much of your budget to earmark for data in motion and win the business case.
- How to make finance, legal, line of business, and especially marketing your friend with innovative micro-applications that have immediate impact.

GEARED TO

Data lake? Think again! Here's how we all must catch up to data-in-motion analytics.

TS NEW

Tuesday, February 2, 4:00 - 5:30 pm
Leadership and Innovation Experience

Innovation Short Session // Disruptive Innovation: Past, Present, and Future

Mark Madsen

The term *disruptive innovation* was coined by Harvard professor Clayton Christensen and popularized with his 1997 book *The Innovator's Dilemma*. Nearly 20 years later "Disrupt!" is a popular leadership mantra that is perhaps more frequently uttered than experienced. Disruptive innovation changes an existing market at its core, and that is not an easy thing to do. Enhance your ability to become a disruptive innovator by learning from disruptors of the past, examining today's disruptive companies and technologies, and imagining what is possible for the future.

YOU WILL LEARN

- The signs that a market is ripe for disruption – cost and complexity
- The ingredients of disruption—simplicity, convenience, access, and value
- Historical examples of disruptive innovation
- The top disruptors of the present and the markets that they are transforming
- How disruptive innovation may influence the future of society, technology, and the economy

GEARED TO

Business and technical managers, business analysts, data analysts, data scientists and others who have a role in driving innovation; everyone who wants to broaden their understanding of the nature of innovation

W1

Wednesday, February 3, 9:00 am - 5:30 pm
Big Data Experience

Demystifying Big Data: Designing an Architecture for Data and Analytics

Mark Madsen

Attendees should have a basic understanding of data warehousing.

The problem we designers need to solve isn't "big data" or "small data"—it's all data. The data warehouse is sufficient for a portion of the data we manage but not for all of it.

The requirements we have today are to accept any data, not just rigidly structured data in rows and columns; to accept that data at any speed, not just what the database can keep up with; to deliver via any means, not just SQL-based BI tools; and to support any process—not just queries but also algorithms and transformations.

The technology that we use is problematic because it constrains and sometimes prevents necessary activities. We don't need more technology and bigger machines. We need different technology that does different things. More product features from the same vendors won't solve the problem.

The big data market has set itself up as an alternative to the data warehouse, not realizing the new technologies solve different problems and aren't appropriate for some of the original problems. This is really a confusion of technology with architecture.

Architecture is more than just software. Architecture starts from use and includes the data, methods of building and maintaining, organization of people, as well as the software. We are also in an emerging technology space when it comes to data. This requires exploratory design practices, something we've largely discarded over the last 10 years as data warehousing and BI matured.

YOU WILL LEARN

- Data architecture alternatives to those of the past that are able to adapt to today's data realities
- New technologies that can be applied to address new problems inherent to the scope and scale of data today
- Methods and techniques to migrate from old data architecture of the past to new data architectures that resolve today's problems and prepare for the future

GEARED TO

BI and analytics leaders and managers; data architects, modelers, and designers; big data architects, designers, and implementers; anyone with data management responsibilities who is challenged by recent and upcoming changes in the data landscape

W2

Wednesday, February 3, 9:00 am - 5:30 pm
Big Data Experience

Hands-on Hadoop

Krish Krishnan

Understanding Hadoop course or equivalent knowledge. You will need a laptop computer with specific software installed prior to the session. When you register for the class, you will receive detailed instructions for software download and installation.

Hadoop has created a lot of buzz. 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.

This class offers a 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.

YOU WILL LEARN

- Hadoop components and architecture
- Configuration of Hadoop
- Configuration of core components (MapReduce, HDFS, Yarn)
- Usage of Hadoop tools (HBase, Hive, Pig, Mahout, Impala)
- ZooKeeper setup and configuration
- Hadoop administration and management

GEARED TO

Anyone with an interest in Hadoop, ranging from "Hadoop curious" to those who are actively involved in implementation

Enrollment is limited to 40 attendees.

W3 NEWWednesday, February 3, 9:00 am – 5:30 pm
Analytics Experience**Practical Experience with Analytics: A Models and Methods Workshop**

Deanne Larson

Analytics is a field that encompasses many skills and disciplines. Most practitioners understand statistics, and they are capable when preparing data and comfortable with data visualization. The heart of analytics, however, is data analysis—choosing the right algorithms and models and using them in the right ways. An understanding of statistics isn't enough; you need to connect statistical methods and analytic models with the problems to be solved. Join us for a problem-focused experience where you'll work with a team to plan and organize analytic problem-solving efforts.

YOU WILL LEARN

- To understand and classify different types of data science problems
- To discern the characteristics of common data science scenarios
- To outline which analytical problems are suited to which analytic models
- To match data science problems to the best-fit models to solve them

GEARED TO

Business analysts, data analysts, and data scientists who need to frame analytic problems and choose the most effective ways to solve those problems; business and technical managers who need to understand the nature of analytics and data science work; BI and analytics developers who work with data scientists; anyone who aspires to become a data analyst, business analyst, or data scientist

W4A Wednesday, February 3, 9:00 am – 12:15 pm
Data Management Experience**TDWI Data Virtualization: Solving Complex Data Integration Challenges**

John Myers

The data integration landscape has changed radically the past few years. What was once a relatively manageable problem of blending and unifying data from enterprise transaction systems has grown to encompass external data, Web data, clickstream data, end-user data, big data, cloud data, and more. New expectations for information-driven business agility further compound the complexities of modern data integration. The ETL-based data warehouse is no longer enough. Data virtualization is a core component of next-generation data integration architectures, techniques, and technology.

Get ready to expand your data integration capabilities, deliver business-speed information, and make the most of recent advances in data integration technology. Through a combination of lecture, exercises, and case study review, you will learn how data virtualization works and how to position it in your data integration architecture and processes.

YOU WILL LEARN

- Data virtualization definitions and terminology
- Business case and technical rationale for data virtualization
- Key concepts and foundational principles of virtualization—views, services, etc.
- Data virtualization life cycle, capabilities, and processes
- How to extend the data warehouse with virtualization
- How virtualization enables federation and enterprise data integration
- How virtualization is applied to big data and cloud data challenges
- How companies use virtualization to solve business problems and drive business agility

GEARED TO

BI, MDM, and data warehousing program and project managers; data integration architects, designers, and developers; data and technology architects

W4PWednesday, February 3, 2:15 – 5:30 pm
Data Management Experience**TDWI Data Warehouse Automation: Better, Faster, Cheaper ... You Can Have It All**

John Myers

Building a data warehouse is among the most labor-intensive and time-consuming activities of BI development. There are many moving parts—requirements, source data analysis, source-target mapping, data acquisition, data transformation logic, ETL design, database loading, scheduling, error handling—and getting it right the first time isn't easy. When you finally do get it right, something changes. One of the most pervasive problems in BI today is the fact that 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.

YOU WILL LEARN

- Concepts, principles, and practices of data warehouse automation (DWA)
- The current state of DWA technology
- Automation opportunities and benefits when building or managing a data warehouse
- How to get started with DWA
- Best practices and mistakes to avoid with DWA

GEARED TO

BI and data warehousing program and project managers; data integration architects, designers, and developers; data warehouse operations, maintenance, and support personnel; data and technology architects

W5A NEWWednesday, February 3, 9:00 am – 12:15 pm
Data Management Experience**Data Integration Approaches, Technologies, and Alternatives**

Evan Levy

Knowledge of data warehouse fundamentals, plus an understanding of data warehouse architecture fundamentals is required.

Data integration has traditionally been positioned within IT organizations as the dominion of data warehousing. In today's world, data sharing has become a production need and each data source is typically shared with 16 other consuming systems. Data integration isn't a just a technical process within the data warehousing space, it has become a common activity across a company from transactional systems data scientists to specialized analytical data marts, to end users merging sources into their spreadsheets.

In the era of big data, the growth of data breadth and new data sources have made the challenge of creating a “single version of truth” even more visible. Emerging technologies, cloud services, and new approaches have challenged the traditional extract, transform, and load (ETL) paradigm.

In this half-day session, Evan Levy will discuss the challenges and issues companies are facing, along with the various technologies and architectural approaches

being used to deliver data to users. He'll cover the major integration technologies (ETL, master data management [MDM], data virtualization) and provide a detailed framework to allow the student to compare and contrast product capabilities to their company's needs.

YOU WILL LEARN

- The functional capabilities required to support enterprise-class data movement and integration
- Different approaches to support bulk and transactional data integration
- Supportive processing and technologies required by data integration (matching, identification, standardization, cleansing)
- ETL, data virtualization, and MDM—how they support data integration and how they're different

GEARED TO

Integration and database architects; IT managers and directors; project managers, database administrators, and database designers; technical advisers and consultants

W5P NEW

Wednesday, February 3, 2:15 - 5:30 pm
Data Management Experience

Event Stream Processing: Adding Real Time to the BI/DW Toolbox

Evan Levy

Knowledge of data warehouse fundamentals, plus an understanding of data warehouse architecture fundamentals, is required.

One of the biggest criticisms of analytics environments is their inability to collect, process, and deliver data to support real-time decision making. As business people have become more comfortable making business decisions with data, they've demanded faster data delivery. The popularity of big data and the visibility of "velocity" have only heightened the importance of faster source data access, processing, and decision making. Real-time decision making isn't a fringe need or a cutting-edge requirement; it's becoming a business necessity. Event stream processing (ESP) has emerged as a technology to address this need.

In this half-day session, Evan Levy will discuss the functions, strengths, and capabilities that ESP can bring to your data warehousing environment. He'll cover the technical fundamentals, provide an overview of the technology's functions and capabilities, offer a framework for comparing and differentiating vendor offerings, and review a series of real-world use cases illustrating the various business and technical capabilities of ESP.

YOU WILL LEARN

- The main concepts of ESP
- The functions and capabilities enabled by ESP
- ESP, complex event processing, and how you'll use them
- Real-world use cases for ESP (along with the deployment details)

GEARED TO

Integration and database architects; IT managers and directors; project managers, database administrators, and database designers; technical advisors and consultants

W6A

Wednesday, February 3, 9:00 am - 12:15 pm
Leadership & Innovation Experience, Analytics Experience

The New Analytical Ecosystem: Bridging the Worlds of BI and Big Data

Wayne Eckerson

For too long, organizations have tried to shoehorn all analytical users and activities into a single, monolithic architecture. Forward-thinking organizations are now augmenting their classic report-centric data warehouses with real-time, analytical, and content-based engines to support multiple types of users, data, and applications. This presentation describes the fundamental business forces at work that make it difficult to deliver successful BI programs. It then describes a new organizational architecture, data architecture, and analytical architecture that enable organizations to optimize business dynamics and reap value from their data analytics assessments. In short, the presentation shows how to create a new analytical ecosystem for the 21st century.

YOU WILL LEARN

- The business dynamics that rip most BI programs apart
- The elements of a federated organizational architecture
- How to evolve your current architecture into an analytical ecosystem leveraging big data
- How to create an analytical architecture that supports the complete range of users and information requirements

GEARED TO

CxOs who want to create data-driven organizations with a strong analytical culture; business unit heads and data analysts who want better data and tools to drive insights and more business-savvy IT people; CIOs and VPs of IT who want to design business-centric data and analytical architectures and form robust BI or analytical centers of excellence; directors of BI, advanced analytics, and data warehousing who want to align more closely with business unit leaders, managers, and analysts; data architects, requirements analysts, and BI/ETL tools developers who want to maximize their effectiveness and improve their career opportunities

W6P

Wednesday, February 3, 2:15 - 5:30 pm
Leadership & Innovation Experience, Analytics Experience

Secrets of Analytical Leaders: Insights from Information Insiders

Wayne Eckerson

How do you bridge the worlds of business and technology? How do you harness big data for business gain? How do you deliver value from analytical initiatives? Based on Wayne's book, *Secrets of Analytical Leaders: Insights from Information Insiders*, this session will unveil the success secrets of top information leaders from companies such as Zynga, Netflix, US Xpress, Nokia, Capital One, Kelley Blue Book, and Blue KC, among others. The session will cover both the "soft stuff" of people, processes, and projects and the "hard stuff" of architecture, tools, and data required to create and sustain a successful analytics program.

YOU WILL LEARN

- How to organize a BI and analytics team for optimal performance
- How to deliver value quickly and earn credibility among business sponsors
- Translating insights into business impact
- Creating and deploying analytical models
- Creating an agile data warehouse

GEARED TO

CxOs who want to create data-driven organizations with a strong analytical culture; business unit heads and data analysts who want better data and tools to drive insights and more business-savvy IT people; CIOs and VPs of IT who want to design

business-centric data and analytical architectures and form robust BI or analytical centers of excellence; directors of BI, advanced analytics, and data warehousing who want to align more closely with business unit leaders, managers, and analysts; data architects, requirements analysts, and BI/ETL tools developers who want to maximize their effectiveness and improve their career opportunities

WS NEW

Wednesday, February 3, 9:00 - 10:30 am
Leadership & Innovation Experience

Innovation Short Session // Supercharge Analytics with Innovation and Design Thinking

John Santaferro

Imagine analytics taking flight to reveal correlations and predictions that you didn't even know existed. Consider what it would be like to discover new insight regarding questions you didn't even know you should ask. Ultimately, think about what it would mean to your business and your career to continually increase the accuracy of your predictions or to fine tune your learning algorithms to boost profits. It's not just all about the data. It starts with creative innovation and design thinking.

The biggest mistake you can make with your analytics program is to treat it like business intelligence. It is a different animal. It requires thinking outside the box. Recognizing the 10 faces of innovation will unlock all of the potential of prediction to move your organization beyond ordinary data-driven decision making. Design thinking will free you from the constraints of old agile and waterfall methodologies and guide you toward breakthrough. Together, these two revolutionary concepts give your analytics program the right context and the right approach to ensure success.

WS NEW

Wednesday, February 3, 10:45 am - 12:15 pm
Leadership & Innovation Experience

Innovation Short Session // Innovating with Data: Tales from the Frontlines of Big Data

Aaron Werman

Innovation in business is difficult and risky work, and big data is often a catalyst for innovation projects. It turns out that data is often tougher to wrangle than change. We will drill into the process of big data innovation, analyze some successes and failures and lessons learned from both, and brainstorm how to apply these in your world.

YOU WILL LEARN

- How to choose where data will support business change
- Approaches to technical advances in data, along with the (rare) places where technology should drive
- Strategies to balance between technical innovation and business capabilities
- Approaches to innovation with data

GEARED TO

Business strategists and sponsors; technical strategists and leaders; business and technical architects; technical data leadership; especially valuable for established businesses, start-up leads, and consultants with new initiatives around data

WS NEW

Wednesday, February 3, 2:15 - 3:45 pm
Leadership & Innovation Experience

Innovation Short Session // Data Analytics and Innovation: Insight or Death by Analysis Paralysis?

Jack Anderson

Innovation cannot thrive without insight. Insight cannot exist without analytic processes. There is, however, justifiable fear in the world of innovation practitioners that processes will kill creativity. Even the term analytics seems to induce analysis paralysis among these worrywarts.

Through success and failure stories and the sharing of best industry practices, this presentation will investigate innovation practices and the need for innovators to better understand the power of analytics. It will underscore the crucial role analytics plays in enabling insights and the selection of innovative ideas that get promoted to production. It also explores a major area of improvement in the world of innovation—the loss of tons of great ideas due to the poor application of effective analytics.

WS NEW

Wednesday,
February 3, 4:00 - 5:30 p.m.
Leadership & Innovation Experience

Innovation Short Session // Innovation in the Revolution of the IoT

Asim Razvi

The Internet of Things (IoT) revolution is becoming a powerful force of change within all industries. The previous revolution that saw HP, RIM, Myspace, and Yahoo lose market share to Apple, Amazon, Facebook, and Google will happen again with the ability to drive fast data capture, create applications, and quickly package them for maximum revenue. As companies gear up for the new marketplace, the real questions are: What is the marketplace going to look like? Who are the major players in the IoT revolution? How should your architecture evolve to support additional data capture requirements and analytics, while maintaining the maturity to spin off new business models? Although the IoT space is incredibly exciting, battles will be fought around new hardware and business models. The winners in the coming revolution will need to understand the scope of change, the speed of that change, and how to architect successfully to be able to drive innovation in the IoT.

YOU WILL LEARN

- Five key focus areas for success in the IoT marketplace
- The main differentiators between companies that succeed and fail to innovate in the IoT
- The hybrid ecosystem that can support the oncoming data explosion
- An overview of the size of the marketplace, the major players, and where to look for data monetization
- A vision of the coming changes, how to evaluate where the business value of your data resides, and an overview of the major players in the IoT
- The potential business value of the coming IoT revolution and its impact on your current business—knowledge critical to survive in technical capability

GEARED TO

Business leaders; line-of-business leaders; senior IT leaders; anyone else looking to prepare their business for the potential benefit and impact of the IoT revolution

NS NEW

Wednesday, February 3, 6:00 - 7:30 pm
Data Management Experience

Night School // Managing and Packaging Data as a Product

Evan Levy

While there's no argument that data is a corporate asset, there's often disagreement on how to manage and address everyone's needs. Data sharing has long been dealt with as a one-off need instead of the formal business requirement that it has become. In the past, data movement between applications was an infrequent occurrence (coding and interfaces were custom built); today, most every piece of corporate content is copied and shared across 8 to 10 systems. Data sharing is no longer a courtesy—it's a production need.

Traditional data strategies assume that data is created, distributed, and consumed within a company's four walls. IT organizations have successfully responded to the need to deliver data to business users: they've built data warehouses and data marts, established integration centers of excellence, and even deployed self-service reporting. However, today's world has changed once again. Business users are reliant on external data, nearly a third of new applications are cloud-based, and end-user data wrangling is becoming the norm. Today's model for data sharing and delivery must change to keep up with the enormous growth in data content, data breadth, and frequency of change.

In this session, Evan Levy will discuss managing and delivering data as a "consumer packaged good" within your company. Data is perceived by many business users as the secret sauce to support business processing, simplify business analysis, and enable decision making. Evan will offer examples where leading companies have changed their approach and dramatically improved the way they deliver data to their users.

YOU WILL LEARN

- Whether your data is managed as a commodity or an asset
- Packaging and positioning data as a usable product
- The concepts and phases of the data supply chain
- Delivering an economies-of-scale data paradigm

TH1 Thursday, February 4, 9:00 am - 5:00 pm
Data Management Experience

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

Jonathan Geiger

Today's business managers depend heavily on data analysis and decision-speed information, raising the stakes for data integration. At the same time, the work of integrating data has become increasingly complex. The simple processes of extract, transform, and load (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 the old models for data integration. Meeting modern data integration challenges calls for data integration strategy and architecture.

Get ready to build reliable and adaptable data integration systems and make the most of recent advances in data integration technologies by following the path of strategy first, architecture next, and then integration systems and technology.

YOU WILL LEARN

- The role, purpose, and issues of data integration strategy
- Frameworks and patterns for data integration architecture
- How to fit unstructured data into integration strategy, architecture, and systems
- How to use integration architecture and patterns to handle large-volume data challenges
- How to apply architecture and patterns for enterprise, departmental, and local data

- How to select, mix and match, and apply several data integration methods, including ETL, federated, service oriented, and virtualized
- Techniques to collect and manage data integration requirements
- Tips and techniques for success throughout the data integration life cycle—strategy, architecture, systems development, and operations

GEARED TO

BI, MDM, and data warehousing program and project managers; data integration architects, designers, and developers; data and technology architects

TH2

Thursday, February 4, 9:00 am - 5:00 pm
Analytics Experience, Big Data Experience

TDWI Big Data Workshop: A Preparation and Planning Experience

Chris Adamson

As big data becomes mainstream, it is no longer practical to shoot from the hip. Big data integration, implementation, and application are program-level activities where projects fit within an evolutionary plan. Road maps, planning, and architecture are as essential to big data activities as they are to any other BI or analytics endeavor.

This workshop provides principles and practices you can use to incorporate big data projects into your BI and analytics programs. You will experience a practical approach to big data planning and implementation. Working in groups, you will apply the principles and practices to develop a big data program for a sample scenario that represents a typical big data initiative. You will use templates and worksheets that will also be helpful to plan, organize, and operate your own big data program.

YOU WILL LEARN

- How big data fits into a BI program and how it affects program management
- To identify and prioritize big data opportunities
- To develop a big data road map that sequences and synchronizes business capabilities, services and systems, implementation projects, and new technologies
- To establish scope and plan resources for big data projects
- To enhance your BI architecture to include big data solutions

GEARED TO

BI and analytics program and project managers; BI and data warehouse architects, designers, and developers; business managers, business analysts, data analysts, and data scientists who need to plan and execute big data projects; technical managers and architects who need to integrate big data technologies into the BI and analytics toolkit

TH3 NEW

Thursday, February 4, 9:00 am - 5:00 pm
Leadership & Innovation Experience

Experience Innovation: A Workshop of Innovator Techniques and Tips

Kellee Franklin

Innovation is an exciting topic, but something that is easier to discuss than to do. There is a common misconception that innovators are born and only a select few can truly innovate. The reality of innovation is exactly the opposite. Innovation is achieved through a set of learnable skills—not a result of DNA or inborn qualities. Furthermore, innovation is a team effort, not an individual undertaking. Join us for a practical day of innovation activities where you'll collaborate in small groups to learn how innovation teams work and experience the art and science of ideation, imagination, and innovation.

YOU WILL LEARN

- A variety of techniques to generate, explore, and pursue creative ideas
- To understand and appreciate diversity and dynamics of innovation teams

- To distinguish between incremental and breakthrough innovations and know the value of each
- To enhance your personal innovator skills through experience and introspection

GEARED TO

Business and technical leaders at all levels who want to create new value through innovation; business and data analysts who need to understand what lies beyond analytics and insight

TH4A NEW

Thursday, February 4, 9:00 am - 12:15 pm
Leadership & Innovation Experience, Data Management Experience

Data Strategy I: A Corporate Plan for Data**Evan Levy**

Companies are dealing with exploding amounts of data; and a common belief is that volumes are doubling every two years. While most people agree that data is a corporate asset, there's little discussion about how companies can ensure that data is being managed and used effectively. With the continued growth of IT budgets, it has become commonplace to challenge the value (and ongoing cost) of retaining data assets. Although most IT organizations are prepared to discuss their strategy with technology platforms, tools, and methodologies, few are equipped to discuss their goals and strategy for corporate data.

A successful data strategy isn't just about data management, naming standards, or governance methods. It must support the goals and the execution details for ensuring the effective adoption and use of data assets. In this new class, Evan Levy discusses the details and reviews the activities that go into building a comprehensive data strategy.

YOU WILL LEARN

- The key components of an enterprise data strategy
- Aligning the strategy with your company's goals and priorities
- The key tactical enablers that can elevate the visibility of a data strategy initiative
- Understanding the alternatives and determining the best fit for your company
- The analysis and construction activities involved in building your company's data strategy
- Identifying the stakeholders and determining their roles in supporting the strategy
- Suggested approaches and techniques for conducting stakeholder interviews, along with sample questions
- Building sample strategy artifacts based on real-world scenarios

GEARED TO

CIOs and chief data officers; IT program managers; business sponsors and end users; BI program management; and data management staff

TH4P NEW

Thursday, February 4, 1:45 - 5:00 pm
Big Data Experience, Data Management Experience

Data Strategy II: Developing the Road Map**Evan Levy**

The idea that data is the critical ingredient to running our companies by the numbers is nothing new. We've developed methods to move data between our application systems and data warehouses in a fast and scalable manner. We've delivered business intelligence (BI) solutions to enable users to become knowledge workers. And it's still not enough. It's not enough because the sources of data and the needs of users continue to grow.

Many corporate data ecosystems are based on a vision that is 20 years out of date. Our methods and tactics for managing and processing data must expand to support data outside the company's four walls. Business decisions require access to data

outside the traditional IT infrastructure: cloud application platforms, social media feeds, third-party data providers, and business partner systems. We need to be able to support adding and managing new data sources and content more quickly and efficiently. If data is truly a corporate asset, it needs to be accessible and usable by anyone in the company.

In this session, Evan Levy will discuss the challenges within our corporate data ecosystems and the issues associated with supporting the enormous growth of new and diverse data content and sources. He will review various approaches and methods to tackling these challenges and how leading companies are succeeding in addressing their data objectives.

YOU WILL LEARN

- The business data ecosystem and the changes in data usage and sharing inside today's companies
- The most common data challenges in the era of big data and cloud computing
- The methods and infrastructure changes required to support the enormous growth in new data sources and alternative data content
- Tactics for managing data movement within (and outside) of your company; for reviewing tooling to simplify and automate data access and usage; for positioning users as stakeholders in data improvement processes (quality, correction, monitoring, etc.); for delivering (or deferring) data self-sufficiency; and for managing data content at the enterprise, organization, and user levels
- Aligning your company's data needs with their tactical business priorities

GEARED TO

CIOs and chief data officers; IT program managers; business sponsors and end users; BI program management; data management staff

TH5A

Thursday, February 4, 9:00 am - 12:15 pm
Leadership & Innovation Experience, Analytics Experience

Emerging Technology for Advanced Analytics**Mike Lampa**

Moore's Law—the processing power of computers doubles every two years—continues to hold true. For analytics, this means increasing capabilities to crunch more data, more quickly, at reduced costs. Software capabilities are exploding with options to leverage increased processing power and capitalize on the big data buzz.

From little known start-ups to the mega-stacks, many new capabilities exist to acquire, integrate, manage, consume, analyze, and visualize data. These technologies enable increasingly complex data mining, pattern detection, machine learning, predictive modeling, and workflow collaboration. They create new opportunities to expand beyond traditional BI solutions into hyper-integrated advanced analytics that will ultimately blur the line between business operations and business analytics.

YOU WILL LEARN

- How hardware layers are evolving at all levels from chipsets to supercomputers supporting advanced analytics workloads
- How software providers are removing barriers to entry for advanced analytics
- How emerging technologies in hardware and software combine to address complex and demanding advanced analytics workloads
- Where big data finds its niche in the world of analytics-enabling technologies

GEARED TO

Chief information officers; chief analytics officers; chief technology officers; BI and analytics architects; enterprise architects; data scientists

TH5P

Thursday, February 4, 1:45 - 5:00 pm
Leadership & Innovation Experience, Analytics Experience

Innovative Techniques for Advanced Analytics**Mike Lampa**

The world of advanced analytics is about developing solutions that closely simulate the way humans think. The key is capability to assimilate massive volumes of diverse information, observe countless permutations of data points, and discover meaningful patterns and trends. Discovery is a typical goal, with specific questions to be answered frequently unknown. Original hypotheses may morph many times along the path to real business insight. Traditional BI practices struggle to realize “the art of the possible” that is the promise of advanced analytics. In this session, we’ll look at proven innovative processes to enable the fast-paced, dynamic, and sometimes chaotic nature of advanced analytics projects. We’ll explore creative ways to weave advanced analytics into the fabric of enterprise decision making, both strategic and tactical.

YOU WILL LEARN

- How project management evolves to support advanced analytics
- How to augment systems methodologies to embrace advanced analytics without compromising systems audit points
- How to leverage new technologies, reference architectures, and design patterns to bring advanced analytics to the masses
- How to develop the talent needed to become an advanced analytics enterprise
- How to drive adoption of advanced analytics throughout the enterprise

GEARED TO

Chief analytics officers, data scientists, business strategists, business analysts, functional line-of-business owners (chief marketing officers, sales executives, supply chain executives, chief operations officers, etc.)

TH6A NEW

Thursday, February 4, 9:00 am - 12:15 pm
Leadership & Innovation Experience, Analytics Experience

Agile Performance Management**Brett Knowles**

Developing your organization’s agility is the only effective strategy to deal with today’s turbulent business environment. Every aspect of your business needs to become agile—including how you measure the organization’s and individual’s performance. What is critical today was not measured yesterday, and who knows what will be critical tomorrow?

Agile performance management solutions ask open-ended questions and don’t measure specific (historic) failure points. The measures look more like indicators, and the reader is more concerned about the trends than the exact data points. In many cases, the performance is self-reported (like in golf) until more knowledge is acquired, and often it is linked to intrinsic feedback systems.

This will be run as a workshop where participants will both learn and apply the topics throughout the morning.

YOU WILL LEARN

- How to build an agile performance management framework
- How to measure strategic goals
- How to prioritize measurement nodes
- How to dynamically change indicators
- How to deal with changing targets
- Ways to motivate employees in an agile world

GEARED TO

Anyone who wants to help develop performance measurement solutions that are agile and responsive to ever-changing goals and measures of success

TH6P NEW!

Thursday, February 4, 1:45 - 5:00 p.m.
Leadership & Innovation Experience, Analytics Experience

The Disruptive Analytics Organization: Strategies in the Disruptive World of Falcons and Mice**Paul Flach**

Today’s most innovative analytical organizations are to be found in start-up companies unencumbered by traditional IT and project management paradigms. Learn why the emerging data science community, which was once looking for a level playing field, now grossly outmatches large corporate organizations and has the upper hand as disrupters in the marketplace. This course will demonstrate how large private and public corporations are radically changing their organization strategies and development methods to get back into the game as innovators and market disrupters.

YOU WILL LEARN

- The contrasting traits of the emerging data science communities and organizations born out of traditional IT paradigms
- Radically new leadership strategies based on the phenomena of “emergence and complexity behavior,” and how they are employed to enable self-organizing and innovative organizations
- Organizational strategies that deliberately implement a healthy tension between result-oriented analytics and sustainable product development to drastically increase productivity
- Portfolio management approaches for a more logical and extensible means of organizing and managing your complex assortment of analytical products and information assets
- Opportunity management approaches to move analytical needs through the approval and delivery pipeline more efficiently while maintaining a keen eye for value
- How the “Perpetual Analytics Method” integrates these strategies into a product development lifecycle with minimal bureaucracy and optimal throughput
- Use cases from public and private organizations that have implemented these strategies

GEARED TO

Leaders and champions of business innovation; all management levels who are stakeholders of analytics; project managers

TH7A

Thursday, February 4, 9:00 a.m. - 12:15 p.m.
Leadership & Innovation Experience, Analytics Experience

Innovation Awareness: Getting Ready for Technology Shifts**David Loshin**

Innovation is happening continuously, potentially improving the way applications for business intelligence (BI), analytics, and delivery of actionable insight are developed, implemented, and integrated within an enterprise. Some of these innovations are evolutionary in that they incrementally influence change within the organization, while others are disruptive and inspire fear, uncertainty, and doubt about their potential impacts. In many cases, the innovations appear from beyond the world of data warehousing and business intelligence, but are rapidly adapted to meet the needs of the BI community. Some examples include NoSQL, Hadoop, columnar and in-memory processing, and the Internet of things (IoT).

This class’s intent is twofold. First, we provide an overview of emerging technologies and tools and describe what those technologies do, how they work, their level of relative maturity in the market, how they improve or augment the typical enterprise, who in the organization will benefit and how, and what you need to know to integrate those technologies into the enterprise. Second, we present a high-level framework

for investigating new and emerging technologies is a way that sheds light on new technologies, reduces or eliminates fear and uncertainty about their capabilities and value justifications, and helps to rapidly evaluate validity for inclusion within your enterprise.

YOU WILL LEARN

- Practical details about maturing and emerging tools such as NoSQL, Hadoop, IoT, data warehouse automation, and other timely innovations
- Types of tools and techniques that are being readied for “primetime”
- How to ask the right questions to determine benefits and practicality
- How to differentiate value from hype

GEARED TO

Business managers who need new tools to shape the future of the business; BI program managers, architects, and project managers; BI and analytics leaders and managers; business analysts who want awareness of evolving BI/analytics technologies.

TH7P

Thursday, February 4, 1:45 - 5:00 p.m.
Leadership & Innovation Experience, Analytics Experience

Workshop: Developing the Business Intelligence and Analytics Road Map

David Loshin

As technology innovation in business intelligence and analytics continues to accelerate, so does the anxiety associated with thoughtfully selecting technologies and planning their integration and deployment within the enterprise. With new computing platforms, data management schemes, and analytic algorithms appearing daily, there is a need for articulating what the key value drivers are for the business and then understanding how these technologies can address existing and emerging business challenges.

In this workshop, we will provide a structured framework for articulating business objectives for reporting, business intelligence, and analytics, evaluate whether the existing system remains suitable for the future, and work together to identify which technologies are ripe for evaluation. We will establish a medium- and long-term road map for adoption and integration. In addition, we will explore the change management challenges and opportunities for system renovation and new technology adoption.

Attendees will draft a high-level, 5- to 10-year road map for business intelligence/analytics technology.

YOU WILL LEARN

- By working through exercises to precisely articulate business value objectives
- By reflecting on the suitability of the current state of enterprise BI/analytics architecture
- Through considering the benefits and drawbacks of maturing and emerging technologies
- To specify key technology objectives for the next 2, 5, and 10 years
- To outline a business intelligence and analytics road map.

GEARED TO

Business managers who need new tools for shaping the future of the business; BI program managers, architects, and project managers; BI and analytics leaders and managers; business analysts

F1

Friday, February 5, 8:00 am - 3:30 pm
Data Management Experience

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

Jonathan Geiger

Data quality is one of the most difficult challenges for nearly every business, IT organization, and BI program. The most common approach to data quality problems is reactive—a process of fixing problems when they are discovered and reported. But reactive data quality methods are not quality management; they are simply quality maintenance—a never-ending cycle of continuously fixing defects but rarely removing the causes. The only proven path to sustainable data quality is through a comprehensive quality management program that includes data profiling, data quality assessment, root cause analysis, data cleansing, and process improvement.

YOU WILL LEARN

- Techniques for column, table, and cross-table data profiling
- How to analyze data profiles and find the stories within them
- Subjective and objective methods to assess and measure data quality
- How to apply OLAP and performance scorecards for data quality management
- How to get beyond symptoms and understand the real causes of data quality defects
- Data cleansing techniques to effectively remediate existing data quality deficiencies
- Process improvement methods to eliminate root causes and prevent future defects

GEARED TO

BI, MDM, and data governance program and project managers and practitioners; data stewards; data warehouse designers and developers; data quality professionals

F2

Friday, February 5, 8:00 am - 3:30 pm
Data Management Experience

Data Preparation for Predictive Analytics

Keith McCormick

This one-day vendor-neutral session will expose analytic practitioners, data scientists and those looking to get started in predictive analytics to the critical importance of selecting, transforming, and properly preparing data ahead of model-building. The instructor will present the characteristics of varying data types, how to address data quality issues, and understanding data representations that are fitting to various project types.

Participants will learn that data outliers are often not errors in the data, but sometimes the data points of most interest. Live demonstrations will reinforce why problem context is required to understand how to deal with outliers and why undertreating extreme values can introduce model bias. This session will cover a wide range of data preparation exercises ranging from data sandbox construction to the creation of training, test and validation data sets for model development.

YOU WILL LEARN

- Prepare a data sandbox for predictive analytics
- Detect and treat missing data and data quality issues
- Match data representations to fitting project types
- Construct various data transformations
- Handle data outliers without biasing model performance
- Build ‘train / test / validation’ data sets for model development
- Leave with resources, skills, and plans to confidently process raw data for analytics

GEARED TO

Analytic practitioners; data scientists; IT professionals; technology planners; consultants; business analysts; analytic project leaders

F3Friday, February 5, 8:00 am - 3:30 pm
Leadership & Innovation Experience, Analytics Experience

Data Storytelling: The New Horizon in Business Analytics

Ted Cuzzillo, Dave Wells

Stories are powerful. We've used them throughout history to capture attention, convey ideas, fire the imagination, and stir the soul. Data can be persuasive, but stories are compelling. Blending data and stories—data storytelling—is a particularly powerful combination.

Storytellers are the next generation of business and data analysts. Data storytelling is a recent and important contribution to analytics, going beyond quantification and visualization to complement data with narrative. A well-told story that is interesting and convincing may appear quite easy on the surface, but crafting a good data story is challenging.

In this highly interactive session, you will gain experience blending the science of statistics, the art of data visualization, and the talent of verbal narrative to develop and deliver compelling data stories.

A laptop computer is recommended but not required for this course.

YOU WILL LEARN

- Four reasons to pursue the art of storytelling
- Several story types and when to use them
- How to compose captivating and compelling stories
- To find the story line in a collection of data
- To craft a story that combines data visuals with verbal narrative
- To choose the best visuals for your story
- To filter information and visuals that add noise to a story
- To understand and connect with the audience when telling a data story

GEARED TO

BI and analytics designers and developers; anyone interested in learning new and highly effective ways to communicate and share information

F4A NEWFriday, February 5, 8:00 - 11:15 am
Leadership & Innovation Experience, Analytics Experience

Analytics-Based Enterprise Performance Management

Gary Cokins

Many organizations are far from where they want and need to be with improving performance, and they apply intuition rather than hard data when making decisions. Enterprise performance management is now viewed as the seamless integration of managerial methods, including strategy execution with a strategy map and its companions, balanced scorecards and operational dashboards; enterprise risk management; driver-based budgets and rolling financial forecasts; product/service/channel/customer profitability analysis (using activity-based costing principles); customer lifetime value; lean and Six Sigma quality management for operational improvement; and resource capacity planning.

Each method should be embedded with business analytics of all flavors (e.g., correlation, segmentation, and regression analysis; and especially predictive analytics as a bridge to prescriptive analytics) to yield the best (ideally optimal) decisions. This presentation will describe how to complete the full vision of analytics-based enterprise performance management.

YOU WILL LEARN

- How strategy maps and balanced scorecards communicate strategic objectives with target-setting to help cross-functional employee teams align their behavior and better collaborate

- Why measures of channel, customer profitability, and customer value are superseding profit and service-line measures—and shifting from product to customer-focused organizations
- How activity-based cost management (ABC/M) not only provides accurately traced calculated costs, but more importantly also provides cost transparency back to the work processes and consumed resources
- To reform the broken annual budgeting process with performance-based budgeting that links strategy to operations
- Why business analytics, with emphasis on predictive analytics and proactive decision making, is becoming a competitive advantage differentiator and an enabler for trade-off analysis
- How all levels of management can quickly assess how they are doing—typically with only a maximum of three KPIs
- How to integrate performance measurement scorecards and ABC/M data with:
 - Strategy formulation
 - Process-based thinking and operational productivity improvement
 - Channel/customer profitability, value analysis, and CRM
 - Supply chain management
 - Quality and lean management (Six Sigma, cost of quality)

GEARED TO

Executives seeking answers to the questions driving the fear, uncertainty, and doubt that challenge many organizations, including:

- How much competency does your organization have with analytics?
- How much resistance to change does your organization have?
- Are you measuring the right metrics?
- How well do your managers and employees understand your executive team's strategy?
- How effective is your annual budgeting process?

F5AFriday, February 5, 8:00 - 11:15 am
Data Management Experience

Thinking Like a Data Scientist: Essential Skills for All Managers

Thomas Redman

All things “data” are invading every nook and cranny of every company, department, and work team. Managers need to become more facile with data, and quickly. The forward-thinking want to fully engage with data scientists, making both themselves and the scientists more effective—and the less proactive don't want to be left behind. In this highly interactive course, we'll explore some simple steps managers can take to teach themselves to think like a data scientist.

YOU WILL LEARN

- The basics of collecting data and how to understand what it reveals
- To understand the distinction between causation and correlation
- Some simple steps for making effective graphics
- How to explore more data more deeply
- How to make data-driven predictions

GEARED TO

All managers, especially those for whom statistics was their least favorite subject; those finding the need to bring more analytic discipline into their jobs; and those interacting with data scientists

How to Register

STEP 1. SELECT YOUR CLASSES

Check one full-day class or one morning (A) class and one afternoon (P) class for each day that you will attend. Classes without an A or P designation are full-day classes.

TDWI Las Vegas // January 31–February 5, 2016

REGISTRATION QUESTIONS?

Phone: 425.277.9201 (M–F, 9:00 am–5:00 pm PT)

Fax: 425.687.2842

E-mail: registration@tdwi.org

SUNDAY, JANUARY 31

- S1** TDWI Big Data Fundamentals: Creating Value from Non-Traditional Data Sets
- S2** Best Practices in Enterprise Information Management
- S3A** TDWI Business Intelligence Principles and Practices: Charting the Course to BI Success
- S3P** TDWI Business Intelligence Architecture: Principles of BI Design
- S4A** TDWI Analytics Fundamentals
- S4P** TDWI Predictive Analytics Fundamentals
- S5A** TDWI Data Governance Fundamentals: Managing Data as an Asset
- S5P** TDWI Data Governance Innovations: Adapting for Agile, Big Data, and Cloud
- S6P** Innovation and Analytics: Getting from Insight to Impact

MONDAY, FEBRUARY 1

- M1** Serious Play for Predictive Analytics: What Works, What Doesn't, and Why
- M2** Understanding Hadoop
- M3** Hands-on Data Visualization with R
- M4A** TDWI Performance Management: Dashboards, Scorecards, and Metrics for Real Business Impact
- M4P** TDWI Data Visualization Fundamentals
- M5A** TDWI Dimensional Data Modeling Primer: From Requirements to Business Analysis
- M5P** TDWI Data Modeling: Data Analysis and Design for BI and Data Warehousing Systems
- M6A** Your Secret Sauce: Developing Innovation Culture
- M6P** Creating Competitive Advantage with Innovation Teams
- M7A** Data Preparation: Techniques and Tools for Analytics-Ready Data
- M7P** Practical Experience with Data Preparation: A Case-Based Workshop
- M8A** CBIP Preparation for the Information Systems Core Exam
- M8P** CBIP Preparation for the Data Warehousing Exam

TUESDAY, FEBRUARY 2

- T1** Dimensional Modeling from a Business Perspective: A Model the Business Can Understand
- T2** Hands-on: Data Mining with R
- T3** Solving Common Analytic Problems
- T4A** Mobile Business Intelligence: Innovation and Advantage with a Mobile Workforce
- T4P** Social Analytics in the Enterprise
- T5A** Everyday Innovation & Creativity: How to Incorporate "Road-Tested" Techniques into Your Daily Work
- T6A** Choosing the Right Analytic and Data Science Techniques
- T7A** Data Modeling in the Age of Big Data
- TS** Innovation Short Session // Open Innovation with LEGO® Ideas: Methodology and Technology Successfully Bring Chesbrough's Model to Life
- TS** Analytics Short Session // The Accidental Data Scientist – How to Survive in an Analytical World
- TS** Analytics Short Session // A Business Capability Framework for Classifying and Positioning Analytic Techniques and Approaches
- TS** Big Data Short Session // Real-World Big Data Applications: Building a 360-Degree View of the Customer
- TS** Big Data Short Session // Ignore This at Your Peril: Can Your Data Lake Really Support the Red-Hot Demands of IoT and Customer Data Monetization?
- TS** Innovative Short Session // Disruptive Innovation: Past, Present, and Future

WEDNESDAY, FEBRUARY 3

- W1** Demystifying Big Data: Designing an Architecture for Data and Analytics
- W2** Hands-on Hadoop
- W3** Practical Experience with Analytics: A Models and Methods Workshop
- W4A** TDWI Data Virtualization: Solving Complex Data Integration Challenges
- W4P** TDWI Data Warehouse Automation: Better, Faster, Cheaper ... You Can Have It All
- W5A** Data Integration Approaches, Technologies, and Alternatives
- W5P** Event Stream Processing: Adding Real Time to the BI/DW Toolbox
- W6A** The New Analytical Ecosystem: Bridging the Worlds of BI and Big Data
- W6P** Secrets of Analytical Leaders: Insights from Information Insiders
- WS** Innovation Short Session // Supercharge Analytics with Innovation and Design Thinking
- WS** Innovation Short Session // Innovating with Data: Tales from the Frontlines of Big Data
- WS** Innovation Short Session // Innovation in the Revolution of the IoT
- NS** Night School // Managing and Packaging Data as a Product

THURSDAY, FEBRUARY 4

- TH1** TDWI Data Integration Principles and Practices: Creating Information Unity from Data Disparity
- TH2** TDWI Big Data Workshop: A Preparation and Planning Experience
- TH3** Experience Innovation: A Workshop of Innovator Techniques and Tips
- TH4A** Data Strategy I: A Corporate Plan for Data
- TH4P** Data Strategy II: Developing the Road Map
- TH5A** Emerging Technology for Advanced Analytics
- TH5P** Innovative Techniques for Advanced Analytics
- TH6A** Agile Performance Management
- TH6P** The Disruptive Analytics Organization: Strategies in the Disruptive World of Falcons and Mice
- TH7A** Innovation Awareness: Getting Ready for Technology Shifts
- TH7P** Workshop: Developing the Business Intelligence and Analytics Road Map

FRIDAY, FEBRUARY 5

- F1** TDWI Data Quality Management: Techniques for Data Profiling, Assessment, and Improvement
- F2** Data Preparation for Predictive Analytics
- F3** Data Storytelling: The New Horizon in Business Analytics
- F4A** Analytics-Based Enterprise Performance Management
- F5A** Thinking like a Data Scientist: Essential Skills for All Managers

STEP 2. CALCULATE YOUR PAYMENT

Conference price includes complimentary TDWI Premium Membership. Current TDWI Premium Members get a \$275 discount off the conference price (in lieu of complimentary Premium Membership). Multiple-day packages do not require consecutive days.

FEES—SUPER EARLY REGISTRATION (through December 11, 2015)

USE PRIORITY CODE LV3

<input type="radio"/> Standard Package (3 days)	\$2,040
<input type="radio"/> Mega Package (4 days)	\$2,560
<input type="radio"/> Giga Package (5 days)	\$3,015
<input type="radio"/> Tera Package (6 days)	\$3,400

FEES—EARLY REGISTRATION (December 12–January 8, 2016)

USE PRIORITY CODE LV3

<input type="radio"/> Standard Package (3 days)	\$2,350
<input type="radio"/> Mega Package (4 days)	\$2,945
<input type="radio"/> Giga Package (5 days)	\$3,470
<input type="radio"/> Tera Package (6 days)	\$3,910

FEES—REGULAR REGISTRATION (January 9–29, 2016)

<input type="radio"/> Standard Package (3 days)	\$2,550
<input type="radio"/> Mega Package (4 days)	\$3,205
<input type="radio"/> Giga Package (5 days)	\$3,770
<input type="radio"/> Tera Package (6 days)	\$4,255

FEE FROM TABLE ABOVE	\$ _____
- CURRENT MEMBER DISCOUNT (Deduct \$275 from above) <small>Premium Membership status will be validated when your registration is processed</small>	\$ _____
- TEAM DISCOUNT (Deduct 10% from above) <small>For 3 or more people from the same company registering at the same time</small>	\$ _____
+ LATE FEE (After January 29, 2016—add \$50)	\$ _____
= TOTAL FEE	\$ _____

STEP 3. REGISTER

Online: tdwi.org/LV2016/register

Phone: 425.277.9201 (M–F, 9:00 am–5:00 pm PT)

Rest easy—online registrations are secure. Our secured server environment keeps your information private.

TDWI's Federal Tax ID Number is 20-4583700.

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REGISTRATION DEADLINES (PRIORITY CODE LV3)

Super Early Registration Deadline December 11, 2015

Early Registration Deadline January 8, 2016

Regular Registration Deadline January 29, 2016

After January 29, please register on site. Registration will be limited to space available. You will incur a \$50 late registration fee after January 29.

TEAM DISCOUNT

When three or more people from a single company or government agency register at the same time, the entire team receives a 10% discount.

All registration forms must be submitted together in order to qualify for the team discount.

TDWI PREMIUM MEMBERSHIP INCLUDED

All registrations for three or more days include a one-year TDWI Premium Membership. If you are already a current TDWI Premium Member, you will instead be eligible for a \$275 discount off the conference price (in lieu of complimentary Premium Membership).

Visit tdwi.org/premium-membership for more information on TDWI Premium Member benefits. Premium Membership is activated on your conference registration date, so you can begin to enjoy benefits right away.

REFUND AND CANCELLATION POLICY

You may substitute another person in your place by calling 425.277.9201 (M–F, 8:00 am–5:00 pm PT) before January 15, 2016.

If you must cancel, your refund request must be e-mailed to registration@tdwi.org no later than January 15. Your fee will be returned, less a 20 percent cancellation fee. No refunds or credits will be issued after January 15.



CONFERENCE QUESTIONS?

Phone: 425.277.9181

E-mail: education@tdwi.org