

# uCertify

## Course Outline

**The Big Book of Dashboards: Visualizing Your Data Using  
Real-World Business Scenarios**



18 May 2024

1. Course Objective
2. Exercises, Quizzes, Flashcards & Glossary  
Number of Questions
3. Expert Instructor-Led Training
4. ADA Compliant & JAWS Compatible Platform
5. State of the Art Educator Tools
6. Award Winning Learning Platform (LMS)
7. Chapter & Lessons

Syllabus

Chapter 1: Introduction

Chapter 2: Data Visualization: A Primer

Chapter 3: Course Metrics Dashboard

Chapter 4: Comparing Individual Performance with Peers

Chapter 5: What-If Analysis: Wage Increase Ramifications

Chapter 6: Executive Sales Dashboard

Chapter 7: Ranking by Now, Comparing with Then

Chapter 8: Are We on Pace to Reach Our Goals?

Chapter 9: Multiple Key Performance Metrics

Chapter 10: Power Plant Operations Monitoring

Chapter 11: Showing Year-to-Date and Year-over-Year at the Same Time

Chapter 12: Premier League Player Performance Metrics

Chapter 13: RBS 6 Nations Championship Match Performance Analysis

Chapter 14: Web Analytics

Chapter 15: Patient History Analysis of Recent Hospital Admissions

Chapter 16: Hospitality Dashboard for Hotel Management

Chapter 17: Sentiment Analysis: Showing Overall Distribution

Chapter 18: Showing Sentiment with Net Promoter Score

Chapter 19: Server Process Monitoring

Chapter 20: Big Mac Index

Chapter 21: Complaints Dashboard

Chapter 22: Hospital Operating Room Utilization

Chapter 23: Showing Rank and Magnitude

Chapter 24: Measuring Claims across Multiple Measures and Dimensions

Chapter 25: Showing Churn or Turnover

Chapter 26: Showing Actual versus Potential Utilization

Chapter 27: Health Care Provider Productivity Monitoring

Chapter 28: Telecom Operator Executive Dashboard

Chapter 29: Economy at a Glance

Chapter 30: Call Center

Chapter 31: Want to Engage People? Make Your Dashboards Personal

Chapter 32: Visualizing Time

Chapter 33: Beware the Dead-End Dashboard

Chapter 34: The Allure of Red and Green

Chapter 35: The Allure of Pies and Donuts

Chapter 36: Clouds and Bubbles

Chapter 37: A Journey into the Unknown

Videos and How To

## 8. Live labs

Lab Tasks

Here's what you get

## 1. Course Objective

The Big Book of Dashboards: Visualizing Your Data Using Real-World Business Scenarios course covers a detailed understanding of Big Book data visualization by providing objective-based interactive lessons and hands-on experience with live labs. It covers the fundamentals of data visualization, the application of dashboards in business scenarios, and then the challenges faced in the real world. The live labs provide the live experience of working with dashboards.

## 2. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

**74**  
EXERCISES

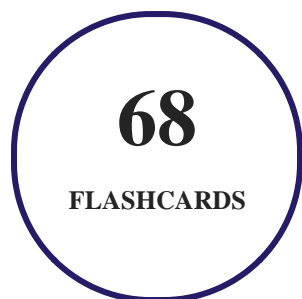
## 3. Quiz

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

**145**  
QUIZ

## 4. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.



## 5. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



## 6. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 7. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 8. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 9. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
  1. Best Postsecondary Learning Solution
- **2015**
  1. Best Education Solution

2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

## 10. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

### Syllabus

#### Chapter 1: Introduction

- How This Course Is Different?
- How This Course Is Organized?
- How to Use This Course?
- Succeeding in the Real World
- What to Do and What Not to Do
- What Is a Dashboard?
- Final Thought: There Are No Perfect Dashboards



## Chapter 2: Data Visualization: A Primer

- Why Do We Visualize Data?
- How Do We Visualize Data?
- Color
- Common Chart Types
- When Our Visual Processing System Betrays Us
- Every Decision Is a Compromise
- Summary

## Chapter 3: Course Metrics Dashboard

- Scenario
- How People Use the Dashboard
- Why This Works
- The Traditional Approach and Why You Should Avoid It
- Author Commentary

## Chapter 4: Comparing Individual Performance with Peers

- Scenario

- How People Use the Dashboard
- Why This Works
- Other Considerations
- Alternative Approach
- Author Commentary

## Chapter 5: What-If Analysis: Wage Increase Ramifications

- Scenario
- Why This Works
- Dashboard Designer Commentary
- Author Commentary

## Chapter 6: Executive Sales Dashboard

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 7: Ranking by Now, Comparing with Then

- Scenario
- How People Use the Dashboard
- Why This Works
- The Traditional Approach, and Why You Should Avoid It
- Other Approaches
- Author Commentary

## Chapter 8: Are We on Pace to Reach Our Goals?

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 9: Multiple Key Performance Metrics

- Scenario
- How People Use the Dashboard
- Why This Works
- Alternative Approaches
- Author Commentary

## Chapter 10: Power Plant Operations Monitoring

- Scenario
- How People Use the Dashboard
- Why This Works
- Ben Shneiderman's Mantra
- Author Commentary

## Chapter 11: Showing Year-to-Date and Year-over-Year at the Same Time

- Scenario
- How People Use the Dashboard
- Why This Works
- The Traditional Approach, and Why You Should Avoid It
- Dashboard Designer Commentary
- Author Commentary

## Chapter 12: Premier League Player Performance Metrics

- Scenario
- How People Use the Dashboard

- Why This Works
- Author Commentary

## Chapter 13: RBS 6 Nations Championship Match Performance Analysis

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 14: Web Analytics

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 15: Patient History Analysis of Recent Hospital Admissions

- Scenario
- How People Use the Dashboard
- Why This Works

- Dashboard Designer Commentary
- Author Commentary

## Chapter 16: Hospitality Dashboard for Hotel Management

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 17: Sentiment Analysis: Showing Overall Distribution

- Scenario
- How People Use the Dashboard
- Why This Works
- Other Approaches
- Author Commentary

## Chapter 18: Showing Sentiment with Net Promoter Score

- Scenario
- How People Use the Dashboard

- Why This Works
- Avoiding the Traditional Approach to NPS
- More Thoughts on Visualizing Sentiment
- Author Commentary

## Chapter 19: Server Process Monitoring

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 20: Big Mac Index

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 21: Complaints Dashboard

- Scenario

- How People Use the Dashboard
- Why This Works
- Other Approaches
- Author Commentary

## Chapter 22: Hospital Operating Room Utilization

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 23: Showing Rank and Magnitude

- Scenario
- How People Use the Dashboard
- Why This Works
- Another Approach: A Bump Chart
- Author Commentary

## Chapter 24: Measuring Claims across Multiple Measures and Dimensions



- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 25: Showing Churn or Turnover

- Scenario
- How People Use the Dashboard
- Why This Works
- Other Use Cases and Approaches
- Author Commentary

## Chapter 26: Showing Actual versus Potential Utilization

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 27: Health Care Provider Productivity Monitoring

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 28: Telecom Operator Executive Dashboard

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 29: Economy at a Glance

- Scenario
- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 30: Call Center

- Scenario

- How People Use the Dashboard
- Why This Works
- Author Commentary

## Chapter 31: Want to Engage People? Make Your Dashboards Personal

- Overview
- Personalized Dashboards
- Make the Demographics Dashboard Personal
- But What If You Still Want to Make Something Beautiful?
- Conclusion

## Chapter 32: Visualizing Time

- Introduction
- How Much Time Do You Want to See?
- How Does Today Compare with the Start of a Time Period?
- Are There Cyclical Patterns in My Data?
- How Can I Look Up Trends Across Two Time Dimensions?
- How Can I Look at Rank, Not Value, Over Time?

- How Can I Compare Growth Rates of Things That Happen at Different Times?
- How Can I Show the Duration of Events?
- How Can I Focus on Bottlenecks in a Process?
- Which Time Chart Should I Use on My Dashboard?

## Chapter 33: Beware the Dead-End Dashboard

- Review Your KPIs
- Track Usage with Data
- Speak to Your Users
- Build Starter Dashboards
- Summary

## Chapter 34: The Allure of Red and Green

- Designing Color-Blind-Friendly Visualizations
- Conclusion

## Chapter 35: The Allure of Pies and Donuts

- Background
- Conclusion

## Chapter 36: Clouds and Bubbles

- The Allure of Word Clouds and Bubble Charts
- Marist Poll and Views of the 2016 Presidential Election
- Conclusion

## Chapter 37: A Journey into the Unknown

- Keep Asking Questions
- The Squiggle of Visual Exploration

## 11. Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

## Lab Tasks

### **Data Visualization: A Primer**

- Creating and Analyzing Chart Types
- Visualizing Data

### **Course Metrics Dashboard**

- Using the Show Me Toolbar
- Creating a Connection in a New Workbook
- Creating a Dashboard and Implementing Actions

### **Ranking by Now, Comparing with Then**

- Creating a Regional Scoreboard

### **Power Plant Operations Monitoring**

- Building a Bullet Graph

### **Showing Year-to-Date and Year-over-Year at the Same Time**

- Performing Quick Table Calculations

### **Patient History Analysis of Recent Hospital Admissions**

- Viewing the Aggregate Data

### **Showing Sentiment with Net Promoter Score**

- Creating a Stacked Bar Chart

### **Server Process Monitoring**

- Enhancing the User Experience, Analysis, and Visualizations

### **Complaints Dashboard**

- Creating Filled, Symbol, and Density Maps

## Hospital Operating Room Utilization

- Creating a Gantt Chart

## Want to Engage People? Make Your Dashboards Personal

- Creating a Dashboard in Excel
- Creating a Story
- Building a Dashboard

## Visualizing Time

- Creating a Line Chart

## Clouds and Bubbles

- Creating a Bar Chart

## A Journey into the Unknown

- Highlighting Categories of Interest

## Here's what you get

**19**

LIVE LABS

**19**

VIDEO TUTORIALS

**01**

HOURS

**GET IN TOUCH:**



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