# DATA MODELLING CASE STUDY WORKSHOP

(Course Code: DM3)

## Data Modeling Case Study Workshop

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#### **Introduction**

The Data Modeling Case Study Workshop is the third course in the Self-Study Certified Business Data Modeler (CBDM) Course Series. It is directed to business experts as well as computer experts. A prerequisite is completion of the <u>Data Modeling Concepts Course</u> and the <u>Business</u> <u>Normalization Concepts Course</u>.

The knowledge that you learned in these two courses will be applied to develop a solution to a real-life Case Study problem. Your solution, when it has been assessed as valid for the case study, will qualify you as a Certified Business Data Modeler. Certification is discussed further at the end of this Workshop description.

#### **Purpose of the Workshop**

The purpose of this workshop is to enable each student to apply data modeling and business normalization skills learned in the two prerequisite courses by completing a real-life case study. On completion of each group of case study problems, you will carry out a number of laboratory exercises using a supplied modeling tool, Visible Advantage, to develop an encyclopedia that contains your solution. You will then email this for assessment as your CBDM Exam solution, to qualify as a Certified Business Data Modeler (CBDM).

If this assessment demonstrates that you have gained a good understanding of Data Modeling concepts and Business Normalization concepts, you will qualify as a Certified Business Data Modeler. You will then be awarded a Certificate stating that you have attained this qualification.

However if your assessment indicates a possible lack of understanding in some areas, you may be asked to review certain concepts in the prerequisite courses. You may also be given additional

study and workshop exercises to complete for reassessment. If your solution for this additional work is assessed as satisfactory, you will then be certified as having reached the required level of understanding and you will receive your CBDM certificate.

# Prerequisites for the Workshop

This Workshop assumes that the student has completed the following courses:

- Data Modeling Concepts Course
- Business Normalization Concepts Course

## Audience for the Workshop

The audience for this workshop is the same as for the two prerequisite courses:

- Business managers and their staff who need to understand the application of data modeling and business normalization to real-life problems, so they can participate actively in partnership with IT staff in projects within their own organization that draw on their business expertise.
- IT managers, data administrators, data base administrators and systems development staff who need to understand the application of data modeling and business normalization, so they can participate with business managers and staff in projects within their own organization, drawing on their systems development expertise in a design partnership with the business experts.

## **Objectives of the Workshop**

On completion of the prerequisite courses and this workshop, both business experts and IT experts will:

- Understand how Data Modeling can be used to represent business meaning for real-life problems in an organization.
- Understand how Business Normalization can be used to identify future business needs in an organization.
- Understand how to apply these concepts to real-life problems for later use within their own organization.
- Understand how modeling tools can be used to capture data model solutions, check them for accuracy and quality and generate data bases for implementation.

# **Modeling Tool for CBDM Qualification**

A modeling tool is included for use with this case study workshop. This enables students to enter their solution and check it for data modeling correctness and quality. By using the same modeling tool and case study problem, all students can be assessed consistently - so ensuring that the high standards for qualification as a CBDM can be maintained for all.

The supplied modeling tool is a full-function, but limited-capacity student edition of <u>Visible</u> <u>Advantage</u>, one of the most powerful modeling tools on the market. Students apply the concepts of Data Modeling and Business Normalization that they have learned to the solution of a real-life case study problem. Their solution is entered using Visible Advantage. The modeling principles learned through using Visible Advantage can later be applied to any other modeling tool.

The encyclopedia produced by Visible Advantage is sent via email as your CBDM Exam solution for assessment and certification. If required, additional tasks may have to be set for a student to complete for assessment before a Business Data Modeler Certificate can be awarded.

Following completion of the workshop, the student edition of *Visible Advantage* is retained by each student and can be used for small projects, if required. The encyclopedia from each small project can be automatically merged into larger project encyclopedias, using the enterprise edition of *Visible Advantage* - if relevant. This enables students to apply the skills they have learned to specific areas of your enterprise where they have particular expertise.

To register for Certification, please <u>Register for the CBDM Course</u> online, providing also an email address. We will email to you a password and further details so that you can download and install the courses and workshop materials.

## Workshop Outline

- *Installation and Guided Tour:* Documents steps for installation of the supplied Visible Advantage software. An Introduction to the features and use of Visible Advantage is then provided through a Guided Tour, to help you enter your solution to the workshop problems using Visible Advantage in the later Laboratory Session Exercises.
- *Introduction to the Workshop:* Provides an overview of the enterprise that is the focus of the workshop problems. Planning statements for this organization are also documented for your reference. The initial laboratory sessions detail the steps to be followed in setting up an Visible Advantage encyclopedia for later entry of your problem solutions.
- *Initial Data Modeling:* Covers the first two problems and associated laboratory sessions, to develop an initial data model of entities and associations from the documented Planning Statements.
- *Tactical Data Modeling:* Provides more information at the middle management (tactical) business levels of a number of business areas. You will focus on only one of these business areas for more detailed Tactical Data Modeling, with additional problems for that area and laboratory sessions to enter your solution into Visible Advantage.

- **Operational Data Modeling:** Documents operational forms or reports that apply to each of the tactical business areas. You will use relevant documents from your selected area for business normalization to add to your data model solution. You will complete the problem for your selected area and enter your solution into Visible Advantage.
- *Quality Assurance:* Checks the correctness of your solution. A brief summary of the workshop follows. You are then told how to prepare and ship your case study solution for assessment, to qualify as a Certified Business Data Modeler (CBDM).

# **Duration of the Workshop**

The development of a workshop solution, and the entry of that solution into Visible Advantage, will take approximately 8 - 10 hours, depending on each student's progress.

## License Agreement

This workshop and the associated courses are delivered in an electronic format as a passwordprotected compressed file, downloaded using an email message which also contains the Course License Agreement. Before downloading, decompressing or expanding the courses and installing them on a machine for use, please read the terms of the Agreement carefully. If you do not agree with them, you should promptly destroy all copies of the file, whether electronic, printed or otherwise and notify Information Engineering Services Pty Ltd in writing by post, electronic mail or facsimile of its destruction. On receipt of this notification, your money will be refunded. You will otherwise be taken to have accepted and agreed to all the terms of the Agreement, and will therefore be bound by it.