

Business and Systems Analysis

Information and Data Modelling

3 DAY course

Overview

Information is a critical and often overlooked aspect of information systems. Information Architecture is a key pillar of an effective Enterprise Architecture, and one that can deliver the most enduring business value through the entire life of a system. Modern systems that are implemented without strong, efficient data architectures are likely to be error-ridden and will seriously limit functionality and information use and may hamper the business as it grows and changes.

The design of data models is no longer a technical issue: they must be designed to take into account the requirements of many stakeholders, processes and systems that will access information over the entire lifetime of that information. A good understanding of data modelling is therefore essential for anyone involved in the analysis, specification of, or development of computer systems.



Master vital techniques for constructing data models that generate enduring business value

Target Audience

- Business and product specialists
- Domain experts and users
- Business and systems analysts
- Enterprise architects
- Data, MIS or BI specialists
- People who work with information or data and who need to ensure that product or business rules are incorporated into information systems

Prerequisites

There are no strict pre-requisites. However, to get the most value from the course, delegates should:

- Be strongly computer literate, especially in working with systems which use business information
- Have good business experience, especially in work that involves making decisions, planning, analysing or using business information.

Course Delivery

This course combines instructor-led seminars and group work built around a comprehensive case study, enabling participants to practice the tools and techniques covered. Throughout the course, delegates are encouraged to share their own personal experiences and concerns

Practical exercises, both theoretical and "real life", ensure that the knowledge gained is both transferred and instilled.

Course Assessment

This course has no formal assessment mechanism, however, students will learn by experience and assessment of others. To earn a certificate of attendance, delegates are required to:

- Attend the full three days of the course
- Actively participate in the exercises, discussion and feedback

Learning Outcomes

- Know the role and importance of data in the organisation and how to document information requirements
- Describe why data requirements are vital to any software project
- Learn how to elicit requirements in a JAD workshop
- Link business and procedural rules to information designs and implement these in data models
- Use the entity-relationship modelling technique effectively
- Validate, verify and sign off information models using walkthroughs and reviews
- Recognise and apply various information patterns that are common in business systems

Course Code: IDML





Course Content

Day 1:

The Business Context of Data

- Information in the real world
- Information lifecycle management
- Information stakeholders: their responsibilities and their needs
- The business value of data – information as an asset
- Information related risk
- The database environment

Information Modelling Fundamentals

- The purpose of modelling
- The hierarchy of information models
- Building subject area models
- Introducing the logical information/ data model
- Building business rules into information models
- Understanding entities and attributes

Day 2:

Modelling for Business rules & Requirements

- Understanding the link between models and databases
- Basic relational patterns
- Associative and Attributive Entities
- Lookup Tables
- Supertypes and Subtypes
- Understanding & implementing business rules
- Advanced Information Modelling Concepts

Day 3:

Validating Information Models

- Documenting Information Models
- The data dictionary
- Assessing model quality
- Data model normalisation
- The power of data modelling

Comments from

past delegates

"The material was good, clear and easy to follow" A.D.

"The course was excellent" K.D.

"I enjoyed the group exercises as they helped me get a practical under-standing as well as other peoples input" T.W.

"Very informational about data" C.C.

"The best was the lecturers ability to get the class to engage" N.T.

JOHANNESBURG:

Block C, Inyanga Close, Sunninghill, 2157 | Tel: 011 807 9478

CAPE TOWN:

Block C, The Estuaries, 3 Oxbow Crescent, Century Avenue, Century City, Milnerton, 7441 | Tel: 021 683 4506



info@fti.co.za | www.fti.co.za

Faculty Training Institute

@facultytraining



"FTI", various graphical images and "Growing Knowledge Professionals" are all registered trademarks of Faculty Training Institute (Pty) Ltd. All other trademarks are owned by their respective trademark owners



an EOH company



Version 14.3