Master Data Management

Online Education • Certification • Enterprise Solutions

- ➢ **MDM Fundamentals and Best Practice**
- ➢ **MDM Architecture and Implementation**
- ➢ **Data Profiling**
- ➢ **Data Parsing, Matching & De-duplication**
- ➢ **Data Virtualization**
- ➢ **Data Governance Fundamentals**
- ➢ **Fundamentals of Data Modeling & Metadata Management**
- ➢ **Data Quality Assessment**
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- ➢ **Ensuring Data Quality in Data Integration**

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Master Data Management (MDM) is a hot topic. High-quality, low-redundancy reference data is essential in business today. Customer relationship management (CRM) without customer data integration is difficult. Effective supply chain management is equally difficult without integrated product, supplier, and partner data. These are but two examples among the many reasons that MDM - a relatively young discipline - has moved so rapidly from emerging to mainstream. MDM is no longer a "nice to have." It has taken a place among the essential competencies for business success..

Our Master Data Management curriculum includes 9 online courses from world leading experts: Andy Hayler, Kathy Hunter, Theresa Kushner, William McKnight, Arkady Maydanchik, Henrik Sørensen, Maria Villar, and Dave Wells. Our robust Certified Information Management Professional (CIMP) program builds upon education to certify knowledge and understanding of data quality. Finally, eLearningCurve's Enterprise Program is a flexible, scalable, cost-effective solution for teams and enterprises.

WHAT OUR CUSTOMERS ARE SAYING

"The course instructors were very knowledgeable and provided interesting real-life examples."

Having over 20 years of experience within the data management field, I know that it's a challenge to find comprehensive resources for disciplines like DQ and MDM, but the structured approach of the CIMP certification course allows business/IT professionals to update their skills using in-depth understanding of underlying fundamental concepts. I found the courses to be very well organized in terms of content and delivery; the exams were challenging and the best thing about this online learning is that you can listen to the content at your own convenient time. The course instructors were very knowledgeable and provided interesting real life examples. I would recommend the certification for any professional interested in gaining a better understanding of Data Quality and MDM and to learn different approaches for its implementation.

Purvi Ramchandani, CIMP Ex – Data Quality, CIMP Ex – MDM, USA

Full course descriptions begin on page 8.

MDM Fundamentals and Best Practice
Instructor: Andy Hayler

This 4-hour course builds upon experiences of those who have implemented MDM. You will learn what MDM is all about - the terminology used, different styles and architectures of MDM, and the best (and worst) practices for MDM programs.

MDM Architecture and Implementation
Instructor: William McKnight

This 4-hour course provides a comprehensive view of the critical elements for MDM success including business, architectural, people, process, project, and technology considerations. Learn from the real-world experiences of the instructor what it takes to make MDM work.

Data Profiling
Instructor: Arkady Maydanchik

Data profiling is the process of analyzing actual data and understanding its true structure and meaning. It is one of the most common and important activities in information management. This 5-hour course teaches all practical skills necessary to succeed in a data profiling initiative.

Data Parsing, Matching, and De-duplication
Instructors: Kathy Hunter, William McKnight, Henrik Sørensen

To take advantage of the worldwide marketplace, businesses need to manage data globally. This reality poses very specialized and unique kinds of problems in data management. In this 4.5-hour course you will learn to identify and avoid the pitfalls of global information.

Data Virtualization
Instructor: Dave Wells

Data virtualization is a core component of next-generation data integration architectures, techniques, and technology. This 3-hour online training course will introduce you to the concepts, techniques, and capabilities of data virtualization.

Data Governance Fundamentals
Instructors: Maria C. Villar and Theresa Kushner

This 4-hour course provides an overview of the disciplines of governing data, covers the essential components of an enterprise-wide program, and outlines a roadmap to execute a successful data governance program. An extensive case study illustrates data governance concepts, principles, and practices.

Fundamentals of Data Modeling and Metadata Management
Instructors: Arkady Maydanchik and Dave Wells

This 3-hour course provides foundation knowledge about the most commonly used data modeling techniques: entity-relationship modeling and dimensional modeling. A similar foundation is built for metadata management with attention to common metadata purposes and metadata discovery methods

Data Quality Assessment
Instructor: Arkady Maydanchik

This 6-hour course gives comprehensive treatment to the process and practical challenges of data quality assessment. It starts with systematic treatment of various data quality rules and proceeds to the results analysis and building aggregated data quality scorecard.

MDM: Selecting a Vendor
Instructor: Andy Hayler

This in-depth 5.5-hour course takes the mystery, uncertainty, and guess-work out of selecting and purchasing MDM software products. Based upon a framework that describes the model of an ideal MDM product, you will learn about a structured process of product evaluation and selection.

Ensuring Data Quality in Data Integration
Instructor: Arkady Maydanchik

Without a comprehensive data quality monitoring program bad data spread like viruses through countless real-time and batch interfaces. This 5-hour course discusses various practices that can be put in place to maintain high data quality through data integration.

CIMP: Demonstrate Mastery. Achieve Success.

Certification is an important tool for job seekers and for employers seeking to hire the most qualified people. eLearningCurve offers a robust certification program, Certified Information Management Professional (CIMP) that builds upon education to certify knowledge and understanding of information management.

The CIMP Master Data Management designation makes a clear statement that you have learned from the industry leaders and have demonstrated thorough understanding of master data management by passing several challenging exams.

For the true experts and standard bearers in the industry we offer the second level of CIMP certification - **CIMP Ex**. To earn the CIMP Ex designation you must demonstrate a combination of great **Ex**pertise, **Ex**perience, and **Ex**cellence.

WHAT SETS CIMP APART?

Rigorous exam system: We go beyond the basics. Rather than testing for knowledge that any industry professional should know, CIMP exams test an in-depth knowledge, comprehensive understanding, and ability to apply various concepts to a problem. You can be proud of your achievement of the CIMP designation, and hiring managers can be sure they are getting a highly knowledgeable employee.

Education to support certification: We believe that the best way to ensure success is to combine meaningful industry experience with thorough academic study. To that end, CIMP exams are aligned with our courses, developed and taught by top industry educators and professionals.

Designed with busy, working professionals in mind: No time-consuming or costly travel is required to complete coursework or to take your CIMP examinations. All courses and exams are available online. All that's required of candidates is an internet connection and the desire to demonstrate mastery of data governance topics and achieve success.

HOW DO I ENROLL?

The most convenient and cost-efficient method to enroll in the CIMP program is with one of our Education Packages (see page 5 for details). Each package includes all courses and exams necessary to earn CIMP or CIMP Ex. Alternatively, you can enroll in courses one at a time.

 For more information about CIMP, including customer stories on the Web visit.

EDUCATION PROGRAMS

Education Program packages allow you to purchase bundles of online data quality courses at a significant discount. Whether you are looking for a comprehensive MDM education covering all relevant topics, or want to focus on a specific topic or job role, there is a program for you.

CIMP Master Data Management Program offers education in master data management capped off with the Certified Information Management Professional (CIMP) designation in the Master Data Management track. The CIMP credential makes a clear statement that you have learned from the industry leaders and have demonstrated understanding of the master data management discipline by passing several challenging exams. The program includes five courses chosen from our data quality curriculum, including MDM Fundamentals and Best Practice and at least two other "core" courses. Students, their managers, or program sponsors may pick different course combinations that are most suitable to individual student's roles and needs.

CIMP Ex Master Data Management Program ensures thorough understanding of MDM expected from a true expert. The program includes all five "core" MDM courses and three elective courses, one of which can be chosen outside of the MDM curriculum. Upon completion of the program you will meet the academic requirements of the highest level of CIMP – CIMP Ex.

Many information management disciplines, such as data quality, data governance, MDM, metadata, and data integration are strongly interconnected. A true expert in one area would desire an in-depth knowledge in the other. **CIMP Ex Data Quality and MDM Program** and the **CIMP Ex Data Integration and MDM Program** combine MDM education and one of the adjacent disciplines.

We recognize that everyone's needs are unique. If you cannot find a program for you, simply e-mail support@elearningcurve.com and tell us what you are looking for and we will tailor the program for your needs.

ENTERPRISE SOLUTIONS

Today more than ever companies are watching expenses and looking for ways to streamline processes, make training convenient, and create a consistent, scalable learning environment.

eLearningCurve Enterprise is a flexible, convenient, and cost-effective way to train your employees and ensure that all team members have access to master data management training they need when they need it. Whether your team or department work in the same office, or are on the other side of the world from each other, you can train them on time and on budget with eLearningCurve Enterprise.

Why eLearningCurve Enterprise?

- ➢ Comprehensive educational solution from a single provider
- ➢ Employees can take the courses they need when they need them
- ➢ Ensure all team members are trained to the same high standard
- ➢ Train employees no matter what their geographic location
- ➢ Employ a fully scalable education solution
- ➢ Minimize disruption to the business
- ➢ Maximize your employee training ROI
- ➢ Achieve 100% information comprehension
- ➢ Get "live" time with our instructors
- ➢ Stretch your training budget
- ➢ Get solutions for your specific needs

When you become an Enterprise customer we:

- ➢ Work with you to develop educational programs for different roles, positions, teams, departments
- ➢ Manage and track enrollment of all students in online classes and CIMP exams
- ➢ Track and report educational progress for each student
- ➢ Work with you to meet any specific educational needs, including:
  - o Organize question and answer meetings (via Webinar) with course instructors for groups of students who complete online courses
  - o Organize onsite sessions when appropriate, often for senior management.
  - o Prioritize new course development, or customize existing courses, per customer needs
  - o Create custom instances of our Learning Management System to reflect customer branding
  - o Mount our online courses on the customer's Learning Management System

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eLearningCurve Enterprise Benefits

PARTNERSHIP: *Comprehensive educational solution from a single provider.*
eLearningCurve will be your educational "partner-for-life" providing all employees with continuous information management education they need over the course of their careers. You can be sure that all employees, including new hires and transfers, come up to speed quickly and learn from a common state-of-the-art set of courses.

FLEXIBILITY: *Employees can take the courses they need when they need them.*
Educational needs vary from employee to employee and project to project. eLearningCurve's flexible program allows your employees to take the courses they need when they need them to best suit their role, projects, backgrounds or interests.

CONSISTENCY: *Ensure all team members are trained to the same high standard.* Train your existing team, and set up courses for new hires and transfers. Consider CIMP exams to verify that your employees utilize the same methodology, techniques, and terminology.

SCALABLITY: **Select an Education Partner who truly understands scalability.**
eLearningCurve Enterprise is 100% scalable. Roll out to a few employees, or your entire organization. If your team or department grows, it's no problem. Our solution can quickly and effortlessly accommodate groups of all sizes, even if they are geographically dispersed.

BREADTH: Acquire comprehensive education and certification.
We offer more than just a collection of courses, we offer information management education. Whether its data quality, data governance, MDM or another information management discipline or function we have you covered with a comprehensive set of courses, exams, and certification programs designed to impart knowledge, test understanding, and validate learning.

LOCATION: *Train employees no matter what their geographic location.*
Overcome geographical barriers to training. With eLearningCurve Enterprise you can train your entire team whether they are in the same office, or on the opposite sides of the world. Everyone can access our online courses from any place at any time.

LOGISTICS: *Minimize disruption to the business.*
It's not realistic for an entire department to take time off en masse for training. eLearningCurve's online format allows employees to study from their office or home, allocate full training days, or study an hour a day during lunch breaks.

ROI: *Maximize your employee training ROI.*
No need to worry about paying for flights, hotels and other travel expenses. 100% of what you spend goes towards learning, thus achieving top quality education at a fraction of the cost of in-person training.

RESULTS: *Achieve 100% information comprehension.*
Learn from top industry experts in data quality, data governance, master data management, data modeling, data warehousing, and business intelligence. Study at your own pace, listen to the material many times, and test your knowledge through CIMP certification exams.

SAVINGS: *Stretch your training budget.*
We offer various pricing options including volume discounts, pay-as-you-go model with increasing discounts, and other alternatives. We try to understand your needs and budget constraints, and meet them in the best way possible.

"LIVE" INTERACTION: *Spend time with our instructors.*
Arrange "live" Webinar sessions with the leading experts, practitioners, and educators, or purchase online/onsite training combination packages and get access to our education both online and "live" on-site.

CUSTOMIZATION: *Get solutions for your specific needs.*
Our Learning Management System can be customized to reflect your company's branding or we can mount our courses on your corporate LMS.

MDM Fundamentals and Best Practice

Instructor: Andy Hayler
Duration: 3 hours and 45 minutes

Master Data Management (MDM) needs arise from many different causes - mergers and acquisitions, poor data management practices of the past, legacy systems, ERP and packaged application inconsistencies, and more. MDM is complex and challenging, but it pays great dividends when done well.

The unique challenges of an MDM program are often not apparent even to seasoned data management professionals. The complexities of managing identities, managing hierarchies, and resolving conflicts among disparate data sources make MDM an ambitious undertaking. Add to these complexities the multi-faceted nature of MDM - with human, organizational, architectural, and technological implications - and it becomes clear that knowledge is an essential component of MDM success.

This online training course builds upon experiences of those who have implemented MDM. You will learn the terminology used, the different styles and architectures of MDM, and the best (and worst) practices for MDM programs.

You will learn:
- ➢ The concepts and terminology of MDM
- ➢ The architectural options for MDM implementation
- ➢ The elements and activities of building an MDM business case
- ➢ Best (and worst) practices for MDM
- ➢ The important role of related disciplines such as data governance and data quality

This course is geared towards:
- ➢ All individuals who are planning for or actively involved in an MDM program of work

Course Outline

About the Course (6 min)

Introduction (38 min)
- o What is Master Data Management?
- o What Is Master Data?
- o Sources of Master Data
- o Poor Master Data Consequences
- o Why is Master Data Management So Difficult?
- o Types of Master Data Managed

Best Practice (75 min)
- o The Business Case for MDM
- o MDM in Action
- o MDM Potholes
- o Best Practices Review

Architecture and Technology (94 min)
- o MDM Architectures
- o Data Governance
- o Data Quality

Conclusions (16 min)

> "The MDM Fundamentals & Best Practice course is an excellent introduction course to MDM. It provides a good overview of what to expect when embarking into a MDM project, including the vendor selection, data governance and data quality aspect of MDM."
>
> — Nicole Carriere, Canada

MDM Architecture and Implementation

Instructor: William McKnight
Duration: 4 hours

More complex and demanding business environments lead to more heterogeneous systems environments. This, in turn, results in requirements to synchronize master data. Master Data Management (MDM) – an essential discipline to get a single, consistent view of an enterprise's core business entities – customers, products, suppliers, and employees. MDM solutions enable enterprise-wide master data synchronization.

Given that effective master data for any subject area requires input from multiple applications and business units, enterprise master data needs a formal management system. Business approval, business process change, and capture of master data at optimal, early points in the data lifecycle are essential to achieving true enterprise master data. MDM takes knowledge, skill, and organization to be successful..

This online training course provides a comprehensive view of the critical elements for MDM success including business, architectural, people, process, project, and technology considerations. Learn from the real-world experiences of the instructor what it takes to make MDM work.

You will learn:

- *Architectures* — The variety of **architectural approaches** to MDM and guidelines to determine which is right for your organization
- *Roles and Responsibilities* — The **people dimension** of MDM including roles of sponsors, program managers, analysts, designers and developers, DBAs, and more
- *Tool Selection* — The **technology dimension** of MDM including information gathering, proof-of-concept, and scoring and selection techniques.
- *Process Improvement* — The **process dimension** of MDM including workflow optimization that leads to business process improvement, and information management process improvements such as using MDM to conform dimensions of analysis at earlier points of the data lifecycle
- *MDM Implementation* — The **project dimension** of MDM including activities of planning, requirements analysis, design, test strategy, data migration, design, development, and integration

This course is geared towards:

- Anyone involved in managing Enterprise Master Data
- MDM Program and Project Managers
- MDM Analysts, Designers, and Developers
- Data Architects
- Information Systems Project Managers
- Data Integration and Data Warehousing Program and Project Managers
- Business Data Owners and Data Stewards
- Business Users of Enterprise Master Data

Course Outline

About the Course (7 min)

Introduction (30 min)

MDM Architecture (79 min)
- Architecture Approaches
- Conforming Dimensions for the Enterprise
- Business Process Workflows
- Data Quality
- Data Quality Case Example
- Syndicated Data
- Architecting Syndicated Data

MDM Tool Selection (49 min)
- Request for Information and Request for Proposal
- Proof of Concept and Final Selection

Planning for Success (77 min)
- MDM Project Management
- MDM Project Roles and Responsibilities
- Organizing and Planning for MDM Success
- Case Study

> **"A very good high-level overview of architecture and implementation."**
> **—Van Zyl Kruger, South Africa**

Data Profiling

Instructor: Arkady Maydanchik
Duration: 5 hours

Data profiling is the process of analyzing actual data and understanding its true structure and meaning. It is one of the most common and important activities in information management. Data profiling is the first critical step in many major IT initiatives, including implementing a data warehouse, building an MDM hub, populating metadata repository, as well as operational data migration and integration. It is also the key ingredient to successful data quality management.

While proliferation of commercial tools made data profiling accessible for most information management professionals, successful profiling projects remain elusive. This is largely because the tools allow gathering large volumes of information about data, but offer limited means and guidelines for analysis of that information.

In this online training course you will learn all practical skills necessary to succeed in a data profiling initiative.

You will learn:
- The what, why, when, and how of data profiling
- Various data profiling techniques, from simple column profiling to advanced profiling methods for time-dependent and state-dependent data
- How to efficiently gather data profiles
- How to analyze the data profiling information and ask the right questions about your data
- How to organize data profiling results
- How to perform dynamic data profiling and identify changes in data structure and meaning

This course is geared towards:

- Data quality practitioners
- MDM practitioners
- Metadata management practitioners
- IT and business analysts involved in data management
- Those responsible for implementation and maintenance of various data management systems

Course Outline

About the Course (7 min)

Introduction to Data Profiling (44 min)
- What is Data Profiling?
- Myth and Reality of Data Profiling
- Profiling Techniques
- Profiling Challenges
- Role of Profiling
- People and Technology

Column Profiling (89 min)
- Introduction
- Basic Counts
- Value Frequency Charts
- Value Distribution Characteristics
- Value Distribution

Profiling Time-Dependent Data (58 min)
- Introduction
- Timeline Profiling
- Timestamp Pattern Profiling
- Multi-Dimensional Profiling
- Event Dependency Profiling

Profiling State-Transition Models (49 min)
- Introduction
- Data Structures for State-Dependent Data
- Profiling Techniques

Other Profiling Techniques (65 min)
- Subject Profiling
- Relational Integrity Profiling
- Attribute Dependency Profiling
- Dynamic Data Profiling

> "Terrific course. The content was great for both data profiling professionals and those that are new to the concepts."
> —Joseph Fagnoni, USA

Data Parsing, Matching and De-duplication

Instructors: Kathy Hunter, William McKnight, Henrik Sørensen
Duration: 4 hours, 20 minutes

Data parsing, standardization, matching, and de-duplication are the cornerstones of successful Master Data Management (MDM). They are also critical parts of successful data quality programs, and are key steps in building data warehouses as well as any data integration and consolidation initiatives. You could say that today few organizations can function effectively without implementing data parsing and matching processes often in many data domains.

This need is further magnified if your company has gone global and plans to create databases that combine name- and address-related data from all corners of the world. Managing global information effectively takes specialist knowledge and the ability to show consideration for the differences that exist throughout the world. Worldwide there are more than 10,000 languages, 130 address formats, 36 personal and hundreds of business name formats. All of these variables are further complicated by the need to respect national and regional cultures. Failure to consider formats, styles, and cultures has huge impact on quality of data and quality of business relationships.

This online training course is aimed at data quality and master data management (MDM) professionals as well as those responsible to work with global information. The field is broad and the details are many. The purpose of this course is to provide a broad and in-depth review of data parsing, standardization, matching, and de-duplication techniques, as well as extensive overview of specific problems and solutions when dealing with global data.

You will learn:

- Data parsing, standardization, matching, and de-duplication techniques
- How to find and use external reference data
- How data parsing and matching contribute to improving data quality, MDM, and data warehousing
- Which data domains, entities and data elements may benefit from data parsing and matching
- Challenges of global data and ways to overcome these challenges

This course is geared towards:

- Master data management professionals
- Data quality professionals
- Information architects
- Developers of data warehousing systems
- Business professionals who work with global data

Course Outline

About the Course (12 min)

Introduction (17 min)

Implementation Fundamentals (70 min)
- Parsing and Standardization
- Introduction to Data Matching
- Data Matching Techniques
- Data Matching Destinations
- Evaluating Data Matching Tools

External Reference Data (45 min)
- External Data Sources
- Syndicated Customer Data
- Syndicated Product Data
- Using the Web

Challenges of Global Data (58 min)
- Introduction to Global Information
- Global Data: What You Need to Know
- Variations by Country and Region
- Cultural and Legal Impacts
- Characters and Diacritics

Overcoming the Challenges of Global Data (59 min)
- Data Profiling
- Consistent Data Structures
- Preparing Global Data for Effective Use

> **"Absolutely excellent course: thought through and well delivered."**
> **—Marina Severinovskaya, USA**
>
> **"Good information on global data!"**
> **—Gregg Bostwick, USA**

Data Virtualization

Instructor: Dave Wells
Duration: 3 hours

The work of data integration has become increasingly complex in recent years. Business needs for real-time and low latency data, expanded uses of unstructured data, and accelerated interest in big data analytics are but a few of the trends that change the data integration landscape. Extract-transform-load (ETL) processing was sufficient for the once relatively simple task of combining data from multiple transactional databases was to build a data warehouse, operational data store, or master data hub. Today's data integration challenges go well beyond the capabilities of ETL technologies with needs to integrate enterprise data with external data, Web data, clickstream data, end-user data, big data, cloud data, and more. To meet these new requirements, data integrators need more tools in the integration toolbox. Data virtualization doesn't replace ETL; it complements ETL and offers new tools to meet new integration needs.

Data virtualization is a core component of next-generation data integration architectures, techniques, and technology. This online training course will introduce you to the concepts, techniques, and capabilities of data virtualization. It will prepare you to expand your data integration capabilities, deliver business-speed information, and make the most of recent advances in data integration technology.

You Will Learn:
- Data virtualization definitions, concepts, and terminology
- Business case and technical rationale for data virtualization
- Foundational principles of virtualization – abstraction, views, and services
- How to extend the data warehouse with virtualization
- How virtualization is applied for unstructured data, big data, and cloud data challenges
- How to mix and match virtualization with ETL technology to optimize data integration architectures and processes

This course is geared towards individuals who:
- BI, MDM, and data warehousing program and project managers
- Data integration architects, designers, and developers
- Data and technology architects

Course Outline

About the Course (6 min)

Data Virtualization Concepts and Principles (29 min)
- Overview
- Data Virtualization Basics
- Why Data Virtualization
- The Data Virtualization Foundation
- Review

Data Integration Architecture (19 min)
- Overview
- Integration Architecture Concepts
- Reference Architectures
- Integration Architecture Examples
- Review

Data Virtualization in Integration Architecture (49 min)
- Overview
- Virtualization in Data Integration Projects
- Data Virtualization Use Cases
- Data Warehousing Use Cases
- Data Federation Use Cases
- MDM and EIM Use Cases
- More Data Virtualization Applications
- Practical Data Virtualization
- Review

Data Virtualization Platforms (20 min)
- Overview
- Platform Requirements
- Platform Capabilities
- Platform Variations
- Some Platform Vendors
- Review

Implementing Data Virtualization (16 min)
- Overview
- Analysis
- Design and Modeling
- Development
- Deployment and Operation
- Review

Getting Started with Data Virtualization (28 min)
- Overview
- Skills, Competencies, and Human Factors
- Goal and Expectations
- Best Practices
- Case Studies
- Review

Data Governance Fundamentals

Instructors: Theresa Kushner & Maria C. Villar
Duration: 4 hours

Data governance is an emerging, cross-functional management program that treats data as an enterprise asset. It includes the collection of policies, standards, processes, people, and technology essential to managing critical data to a set of goals

Data governance also includes the oversight necessary to ensure compliance and to manage risk. A data governance program can be tailored to match an organization's culture, information maturity, priorities, and sponsorship.

This online training course provides an overview of the disciplines of governing data, covers the essential components of an enterprise-wide program, and outlines a roadmap to execute a successful data governance program. In addition to the extensive overview, the course makes data governance real and tangible by illustrating the concepts, principles, and practices using a case study of data governance in a customer intelligence initiative.

You will learn:
- What data should be governed
- Why data governance is important
- Basic concepts, principles, and practices of a data governance program
- Where and how to start a data governance program
- People and tools that enable a data governance program
- Techniques to measure success of a data governance program
- Governance of big data and cloud applications

This course is geared towards:
- Individuals who implement a data governance program
- Individuals who participate in a data governance program
- Business data stewards
- Information professionals who want to learn about this emerging area

Course Outline

About the Course (7 min)

Introduction to Data Governance (33 min)
- Data Governance 101
- Why Govern Data?
- What Data Should Be Governed?
- Business Drivers for Data Governance

Implementation Fundamentals (78 min)
- Selecting Data and Setting Goals
- Standards, Policies, Processes, People, and Technology
- Managing and Measuring Data Governance

Case Study (63 min)

Data Governance of Emerging Solutions (65 min)
- Big Data
- Cloud Applications

> "The course is great and it added an important value to my experience and expertise.
> Thank You."
> —Rachel Salamani, UAE
>
> "I loved it. The pronunciation was more than excellent."
> —Juana Janett Alvarez Corona, Mexico

Fundamentals of Data Modeling and Metadata Management

Instructors: David Wells and Arkady Maydanchik
Duration: 3 hours

Every information management professional needs to have some basic knowledge of data modeling and metadata management. You can't manage information effectively without understanding the data meaning, constraints and relationships, and these disciplines provide the essential tools to collect, record, and organize such knowledge.

This online training course is designed to provide foundation knowledge about the most commonly used data modeling techniques: entity-relationship modeling and dimensional data modeling. A similar foundation is built for metadata management with attention to common metadata purposes - classification, description, guidance, and control - as well as metadata discovery methods including applied data profiling.

You will learn:
- ➤ The core elements of describing data: meaning, constraints, and relationships
- ➤ Common metadata processes, practices, and standards
- ➤ The role and application of data profiling in metadata management
- ➤ The basics of entity-relationship data modeling
- ➤ The basics of dimensional data modeling

This course is geared towards:

- ➤ Aspiring data modelers who need to start with the basics
- ➤ Data and database analysts and designers
- ➤ Data stewards
- ➤ Data governance participants and practitioners
- ➤ Data quality professionals
- ➤ Anyone with a role in information management that includes need to understand the data

Course Outline

About the Course (8 min)

Understanding Data (15 min)
- o Views of Data
- o Projects Flow
- o Describing the Data Meaning
- o Describing the Data Constraints
- o Describing the Data Relationships
- o Describing the Data

Metadata Management (43 min)
- o Metadata Defined
- o Metadata Purposes
- o Metadata Classification
- o Metadata Management Processes
- o Metadata Organizations
- o Metadata Skills and Competencies
- o Metadata Architecture
- o Metadata Standards
- o Metadata Tools and Technologies

Data Modeling (69 min)
- o Data Modeling Defined
- o Data Modeling Purpose
- o Data Modeling and People
- o Data Modeling Processes
- o Entity-Relationship Modeling
- o Supplemental Models and Additional E-R Concepts
- o Dimensional Data Modeling

Data Profiling (42 min)
- o What is Data Profiling
- o Myth and Reality of Data Profiling
- o Profiling Techniques
- o Profiling Challenges
- o Role of Profiling
- o People and Technology

> **"I am extremely impressed with both the presentation and content. While the speaking-pace is rather quick (I'm a slow talker/listener), I can always pause and repeat the information. I'd change nothing!"**
> **— Philip Perucci, USA**

Data Quality Assessment

Instructors: Arkady Maydanchik
Duration: 6 hours

More and more companies initiate data quality programs and form data stewardship groups every year. The starting point for any such program must be data quality assessment. Yet in absence of a comprehensive methodology, measuring data quality remains an elusive concept. It proves to be easier to produce hundreds or thousands of data error reports than to make any sense of them.

This online training course gives comprehensive treatment to the process and practical challenges of data quality assessment. It starts with systematic treatment of various data quality rules and proceeds to the results analysis and building aggregated data quality scorecard. Special attention is paid to the architecture and functionality of the data quality metadata warehouse.

You will learn:
- ➢ The what, why, when, and how of data quality assessment
- ➢ How to identify and use data quality rules for assessment
- ➢ How to ensure completeness of data quality assessment
- ➢ How to construct and use a data quality scorecard
- ➢ How to collect, manage, maintain, warehouse and use data quality metadata

This course is geared towards:
- ➢ Data quality practitioners
- ➢ Data stewards
- ➢ IT and business analysts and everyone else involved in data quality management

> **"It has been a very good experience learning about DQ Assessment in a formal way!"**
> **—Vikram Khanna, USA**

Course Outline

About the Course (9 min)

Introduction (53 min)
- o Why Assess Data Quality
- o Business Value of Data Quality Assessment
- o Types of Data Errors
- o Data Quality Assessment Approaches
- o How Rule-Driven Approach Works
- o Project Planning
- o Project Steps

Data Quality Rules Overview (63 min)
- o Attribute Domain Constraints
- o Relational Integrity Constraints
- o Complex Data Relationships

Rules for Historical Data (56 min)
- o Historical Data Overview
- o Timeline Constraints
- o Value Pattern Rules
- o Rules for Event Histories
- o Rules for State-Dependent Objects

Finding Data Errors (76 min)
- o Discovering Data Quality Rules
- o Implementing Data Quality Rules
- o Building Rule Catalog
- o Building Error Catalog
- o Fine-Tuning Data Quality Rules

Aggregate Data Quality Scores (66 min)
- o School Report Card Example
- o A First Look at DQ Scorecard
- o Defining Aggregate Scores
- o Score Tabulation

Building Data Quality Scorecard (61 min)
- o Basic Scorecard Example
- o Recurrent Data Quality Assessment
- o Database and Enterprise-Wide DQ Scorecard

MDM: Selecting a Vendor

Instructor: Andy Hayler
Duration: 5 hours, 30 minutes

This in-depth online training course takes the mystery, uncertainty, and guess-work out of selecting and purchasing MDM software products. Based upon a framework that describes the model of an ideal MDM product, you will learn about a structured process of product evaluation and selection.

The evaluation process includes a balance of technical, commercial, and functional criteria to seek a good match to the needs and constraints of your MDM program. The framework and the process, when combined with a survey of the MDM market, positions you to quickly create a short-list of vendors and then to conduct a detailed evaluation of short-listed products. Purchasing tips will help you to save money at the procurement stage.

The course also offers review and product evaluation charts for 25 leading MDM vendors.

You will learn:
➢ A structured evaluation process for selection and purchasing of MDM software
➢ The current state of the MDM market
➢ strengths and weaknesses of leading vendors in the MDM marketplace
➢ How to develop a short-list of MDM vendors
➢ How to conduct a detailed evaluation of MDM products
➢ How to save money when procuring MDM products

This course is geared towards:
➢ Anyone involved in evaluation and selection of MDM vendors and products.

Course Outline

About the Course (7 min)

MDM Key Elements (26 min)
o What is Master Data?
o PIM & CDI & MDM: Alphabet Soup
o MDM Styles
o Operational vs. Analytic MDM
o MDM Vendor Landscape
o Data Quality Vendor Landscape

Vendor Evaluation Model - Part I (81 min)
o Functionality Model Overview
o Data Governance Functionality
o Business Rules Functionality
o Data Quality Functionality
o Data Provision Functionality
o Master Data Storage Functionality
o Data Movement Functionality

Vendor Evaluation Model - Part II (69 min)
o Commercial Model
o Technical Model
o Vendor Evaluation Spreadsheet

Vendor Landscape - Part 1 (50 min)

Vendor Landscape - Part 2 (47 min)
o MDM vendors overview
o 25 detailed MDM vendor reviews

Software Procurement (42 min)
o Procurement Approach
o Business Case
o Short-listing
o Request for Proposal (RFP)
o Evaluation
o Procurement

Conclusions (14 min)

> "The MDM vendor selection is a very comprehensive course, well taught and very useful for anyone embarking on an MDM initiative."
> —Martha Lemoine, Canada

Ensuring Data Quality in Data Integration

Instructor: Arkady Maydanchik
Duration: 5 hours

Corporate data universe consists of numerous databases connected by countless real-time and batch data interfaces. The data continuously move about and change. The databases are endlessly redesigned and upgraded, as are the programs responsible for the data integration. The typical result of these dynamics is that information systems get better, while data quality deteriorates. Without a comprehensive data quality monitoring program bad data spread like viruses.

This online training course discusses various practices that can be put in place to mitigate the problem and maintain high data quality through data integration.

You will learn:
- The data quality challenges that are inherent in data integration
- The critical role of data quality monitoring in data integration
- Specific techniques to monitor and manage quality for batch data integration
- Use of Statistical Process Control (SPC) methods in monitoring data quality
- The impacts of change on data quality and techniques to address those impacts
- How an enterprise integration hub can be applied to managing data quality

This course is geared towards:
- Data integration practitioners
- Data quality practitioners
- Data warehousing practitioners
- MDM practitioners
- Others in the trenches involved in design, development, and maintenance of data integration systems

Course Outline

About the Course (8 min)

Introduction (60 min)
- Data Integration Basics
- Data Quality in Data Federation
- Data Quality in Data Consolidation
- Data Quality in Real-Time Interfaces
- Data Quality in Batch Interfaces
- Beyond Monitoring

Data Consolidation and Cleansing (60 min)
- Data Quality in Data Conversion
- Data Cleansing
- Data Quality in Data Consolidation

Error Monitors in Batch Interfaces (77 min)
- Monitoring Techniques
- Batch Integrity Rules
- Master Data Integrity Rules
- Dynamic Integrity Rules
- Monitor Management
- Error Correction
- Root Cause Analysis
- Statistical Process Control

Change Monitors in Batch Interfaces (95 min)
- Examples
- Change Monitor Defined
- Which Metrics to Monitor
- Implementing the Monitors
- Heuristic Monitors
- Basic Statistical Monitor
- Handling Non-Stationary Data

Excellent! Provides a strong theoretical background for stuff I already know and presents new useful stuff. A must do! ""
—Donaldo Dagnone, Brazil

OUR INSTRUCTORS

Andy Hayler

Andy Hayler is one of the world's foremost experts on master data management. Andy founded Kalido, which under his leadership was the fastest growing business intelligence vendor in the world in 2001. Andy was the only European named in Red Herring's "Top 10 Innovators of 2002". Kalido was a pioneer in modern data warehousing and master data management. He is now founder and CEO of The Information Difference, a boutique analyst and market research firm, advising corporations, venture capital firms and software companies. He is a regular keynote speaker at international conferences on master data management, data governance and data quality.

Kathy Hunter

Kathy always says she has data in her blood. Joining Harte-Hanks in 2002, she built an information management practice and, with her highly skilled team, was responsible for instituting their highly successful Global Data Management solution set. From information quality and data governance through to providing global data solutions and guidance she attained a reputation for expert knowledge and successful delivery in global information management to her clients. Kathy is known for her pragmatic approach to topics, providing helpful hints and practical examples in order to solve tough problems.

Theresa Kushner

Theresa Kushner is presently the Vice President of Enterprise Information Management for VMware, Palo Alto. She joined in October 2012 to help the fast growing software company develop a firm data foundation on which to build their future business. Before joining VMware she was the Director of Customer Intelligence within the Strategic Marketing organization of Cisco Systems.

William McKnight

William is president of McKnight Consulting Group, which includes service lines of Master Data Management, IT assessment, Big Data, Columnar Databases, Data Warehousing, and Business Intelligence. He functions as Strategist, Lead Enterprise Information Architect, and Program Manager for sites worldwide. Many of his clients have gone public with their success stories. William is a Southwest Entrepreneur of the Year Finalist, a frequent best practices judge, has authored hundreds of articles and white papers and given hundreds of international keynotes and public seminars. His team's implementations from both IT and consultant positions have won Best Practices awards. William is a former Information Technology Vice President of a Fortune 50 company, a former engineer of DB2 at IBM and holds an MBA from Santa Clara University.

Arkady Maydanchik

For more than 20 years, Arkady Maydanchik has been a recognized leader and innovator in the fields of data quality and information integration. As a practitioner, author and educator he has been involved in some of the most challenging projects industry has seen. These projects were often the result of major corporate mergers and the need to consolidate and integrate databases of enormous variety and complexity. Arkady's client list includes such household names as Dun & Bradstreet, Hewitt Associates, Kimberly Clark, Raytheon, Sprint, Verizon, and Xerox.

Henrik Sørensen

Henrik Liliendahl Sørensen has over 30 years of experience in working with Master Data Management and Data Quality and is a charter member of the International Association of Information and Data Quality.Currently Henrik works with Master Data Management at Tata Consulting Services and as Practice Manager at Omikron Data Quality besides writing on a well trafficked blog about data quality, master data management and the art of data matching. Henrik is the founder of the Data Matching and the Multi-Domain MDM groups on LinkedIn.

Maria C. Villar

Maria C. Villar is a leader, consultant and writer in the field of enterprise information management, IT management and software development. She has held senior executive positions in both the technology and financial sector. Maria holds a bachelor in Computer Science and graduate degrees in Management Information Systems and Business Administration. Maria has guest lectured on the topic of IT and information management in leading universities, industry conferences and Fortune 500 companies across the country.

Dave Wells

Dave Wells is a consultant, teacher, and practitioner in the field of information management. He brings to every endeavor a unique and balanced perspective about the relationships of business and technology. This perspective ─refined through a career of more than thirty-five years that encompassed both business and technical roles─ helps to align business and information technology in the most effective ways. Dave is a frequent contributor to trade publications and is a co-author of the book *BI Strategy: How to Create and Document.* He also speaks at a variety of industry events

E-LearningCurve has over 2,500 students in 70+ countries around the globe. Our enterprise customers include numerous Fortune 500 and Global 1,000 companies as well as governmental institutions in various countries.

CUSTOMER STORIES

"The instructor's deep knowledge of the course material was evidenced in the value-added by the narrative."

I recently acquired a certification in Master Data Management from eLearningCurve. The coursework was well organized and well prepared. It now resides among my reference library. The instructor's deep knowledge of the course material was evidenced in the value-added by the narrative. Care was given to providing the placement of each topic in relation to topics within the subject area, in my case MDM. The training received through eLearningCurve has jump-started my movement into the area of MDM.

The evolution of course materials during the timeframe of acquiring my first certification demonstrated to me the training and "refresher" potential of a long-term relationship. I am in the planning stages of acquiring a second certification in Data Quality. In reviewing the materials available on the eLearningCurve website it was easy to discern the value of pursuing the coursework in validating and affirming practices I used many times in my 30-plus year career.

As a final point I'd like to commend the people who comprise eLearningCurve. Through several interactions concerning coursework, course selection and assistance in plotting a strategy to meet my training goals I offer these people, individually and collectively, my highest praise. Whether the discussions were in the area of education of directions within the IT industry their responsiveness and willingness to engage a student have been admirable.

David Egge, CIMP - Master Data Management, Maricom Systems, USA

"The course instructors were very insightful, and were very knowledgeable with the great hands-on experience and provided interesting real life examples."

I have completed a CIMP in the discipline of Data Governance and was pleased to have the opportunity to expand my knowledge of Data Governance. Having over 20 years of experience within the data management field, I know that it can be a challenge to find comprehensive resources but the structured approach of the CIMP certification and the support available through the course allow business professionals to update their skills using high-quality tools.

I found the courses to be very well designed; they were intellectually stimulating and challenging, but the workload was manageable. The course instructors were very insightful, and were very knowledgeable with the great hands-on experience and provided interesting real life examples. I would recommend the certification for any professional interested in gaining a better understanding of Data Governance and to learn different approaches for its implementation.

Marina Severinovskaya, CIMP Ex - Data Governance, CIMP - Data Quality, MDM, IM Foundations, USA

"The best thing about this online learning is that you can listen to the content at your own convenient time."

I have recently completed a CIMP EX in the disciplines of Data Quality and Master Data Management and was pleased to have the opportunity to expand my knowledge of Master Data Management and Data Quality. Having over 20 years of experience within the data management field, I know that it's a challenge to find comprehensive resources for disciplines like DQ and MDM, but the structured approach of the CIMP certification course allows business/IT professionals to update their skills using in-depth understanding of underlying fundamental concepts.

I found the courses to be very well organized in terms of content and delivery; the exams were challenging and the best thing about this online learning is that you can listen to the content at your own convenient time. The course instructors were very knowledgeable and provided interesting real life examples. I would recommend the certification for any professional interested in gaining a better understanding of Data Quality and MDM and to learn different approaches for its implementation.

Purvi Ramchandani, CIMP Ex – Data Quality, MDM, USA

"The course instructors were very knowledgeable & had deep hands-on experience in the subject areas."

The elearningCurve courses on MDM and Data Profiling were very informative & helpful. I recently completed the CIMP in MDM track. The content was very practical and implementable. Key concepts were presented very clearly too. The course instructors were very knowledgeable & had deep hands-on experience in the subject areas. Will recommend elearningCurve to others with no reservations.

Paul Jeyasingh, CIMP - MDM, USA

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MDM COURSE PRICING

Education Packages	Price
CIMP Master Data Management Package…………….	$1,795.00
CIMP Ex Master Data Management Package…………	$2,695.00
CIMP Ex Data Quality & MDM Package………………..	$3,295.00
CIMP Ex Data Integration & MDM Package……………	$3,395.00

Individual Courses

MDM Fundamentals and Best Practice	$380.00
MDM Architecture and Implementation	$400.00
Data Profiling	$515.00
Data Parsing, Matching & De-duplication	$435.00
Data Virtualization	$285.00
Data Governance Fundamentals	$410.00
Fundamentals of Data Modeling & Metadata Mgmnt	$295.00
Data Quality Assessment	$575.00
MDM: Selecting a Vendor	$550.00
Ensuring Data Quality in Data Integration	$525.00

Exams

CIMP Exam for each course…......................................	$80.00

Enterprise Discounts

We offer discounts to Enterprise customers who purchase in bulk. Please contact us for more information.

About eLearningCurve

eLearningCurve offers comprehensive online education programs in various disciplines of information management. With eLearningCurve, you can take the courses you need when you need them from any place at any time. Study at your own pace, listen to the material many times, and test your knowledge through online exams to ensure maximum information comprehension and retention.

eLearningCurve also offers two robust certification programs: CIMP & CDS. Certified Information Management Professional (CIMP) builds upon education to certify knowledge and understanding of information management. Certified Data Steward (CDS) is a role-based certification designed for the fast growing data stewardship profession.

Finally, eLearningCurve's Enterprise Program is a flexible, scalable, cost-effective solution for teams and enterprises.