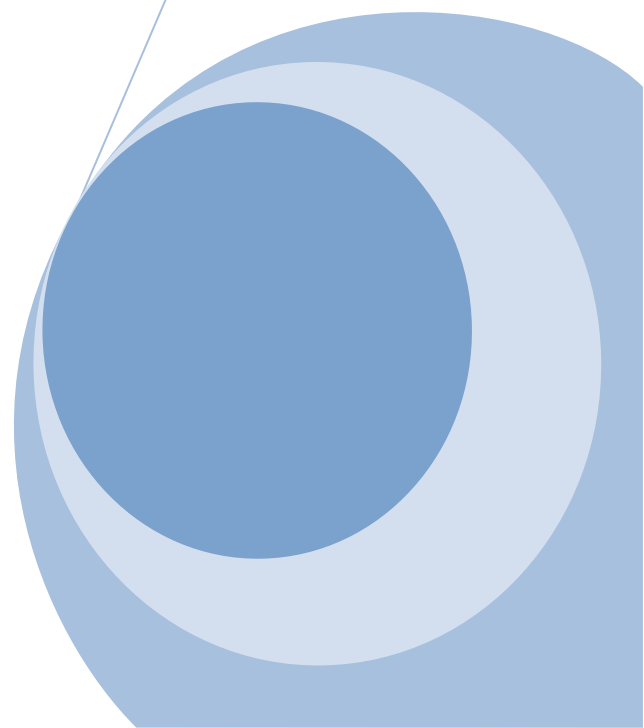


EW Solutions University Degree Programs in Enterprise Data Management Case Study

*Enabling Universities to Provide Enterprise Data
Management Degree Programs to Support Professional
Development*

Data management education approach and curriculum development for a variety of universities, support for data management subject matter expertise enables online and traditional universities to provide education in all areas of enterprise data management.

EW Solutions, Inc.
9/14/2020



Providing a Variety of Degree Programs in Data Management: A Case Study in How EWSolutions Delivered Education in Data Management to a Variety of Universities

Many universities, online and traditional brick-and-mortar, have found their students need education in the knowledge areas of enterprise data management (e.g., data literacy, data governance, metadata management, data quality, data privacy and security, data architecture, etc.) However, most universities have never taught these disciplines and do not have the subject matter expertise to develop effective learning programs in data management.

Most universities have not encountered any enterprise data management framework so they are unable meet goals for the appropriate learning expectations, nor can they incorporate these disciplines in related areas in their current curricula (e.g., data literacy with accounting and finance, data governance with management, data quality with statistics, etc.). The needs of each university's learners differ due to population, curriculum expectations, targeted degree program (bachelor, master, doctorate, certificate) and faculty interest and expertise.



Focus on Enterprise Data Management necessitates a change

The need to adopt a full enterprise data management program and to educate its students in all the EDM domains (data governance, metadata management, data integration, data quality, data security, etc.) and a commitment to integrating the data management disciplines into the general curriculum, forced several universities to realize the need for a variety of new degree programs and relevant courses.

Each university chose a separate approach to program design and curriculum development for data management. Some were focused on undergraduate programs for business and / or IT students. Other schools identified a need to have graduate programs with a more professional development approach. Still other universities chose a full-spectrum curricula suite (bachelor, master, doctorate) and a few wanted a post-baccalaureate certificate program to teach the concepts and skills needed for a career in a data management discipline.

Every program needed a focus on the underlying enterprise data/information management challenges of data architecture, full metadata management, data quality management, enterprise data governance, or master and reference data management. Additionally, all programs wanted to incorporate the concepts of data literacy so

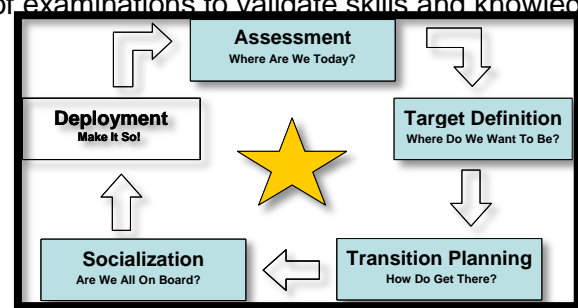
students in other majors could learn about this important skill, essential to use data with proven practices and industry standards in operations and analytics.

The colleges and universities noted in this case study retained industry leader [Enterprise Warehouse Solutions](#) (EWSolutions) and used its expert consultants to develop programs for comprehensive education / training in all aspects of enterprise data management. EWSolutions' training / education consultants were able to provide each college / university with valuable recommendations for data management-focused curriculum development, course delivery, and assessment, with concepts drawn from established data management frameworks and other best practices sources.

During each engagement, EWSolutions used its revolutionary educational assessment framework to evaluate, design, and implement a training roadmap that would lead to appropriate curricula for the desired program, and to support faculty education to enable effective teaching in these concepts and practices.

The results of the education roadmaps included:

- Analysis of current education content against the framework activities and practices
- Assessment of gaps in each curriculum against data management practices and industry proven techniques found in valid sources
- Assessment of the current delivery method for training and recommendations for improvements that incorporated current technologies, best training and learning practices, and appropriate education concepts
- Identification of skills and knowledge gaps for each area of the framework to create appropriate courses and course materials, and creation of examinations to validate skills and knowledge acquisition



EWSolutions consultants brought outstanding credentials and dedication to each partnership while also offering:

- Exceptional experience in all facets of enterprise data / information management education assessment and roadmap implementation
- Exceptional experience in all areas of educational activities, including program and course development, course material development, and delivery
- Exceptional experience in all areas of enterprise data management training development and delivery
- Sophisticated interpersonal communication skill for delivering knowledge transfer
- The invaluable ability to view data management education from faculty and student perspectives

Major Online University

This university is one of the largest online learning operations in the United States, with a focus on degree completion (associate and bachelor degrees), and professional development (master degrees). This university wanted to develop and launch a series of degree programs in data management and data analytics but did not have subject matter knowledge or experience in developing data management and analytics programs.

EWSolutions consultants worked with the university's program team (dean, department chair, various faculty) to develop academically appropriate goals for each program at each degree level and to design program and

course outlines to be used in admissions and marketing efforts. EWSolutions consultants worked with university instructional designers to create a variety of courses and assessment methods in each program for data management, data literacy (used across the university), data analytics, and related courses. EWSolutions consultants served as mentors to selected faculty to provide subject matter expertise so the faculty could deliver the courses confidently. Periodic review of the programs and courses enabled this university to continue to deliver superior instruction in all areas of data management, data literacy, data analytics and enable many students to earn degrees in these important disciplines.

International Online University

This university is an online learning operation, with operations in Canada, the United States, South America, Asia, and Europe. It offers associate and bachelor degrees, professional development (certificate programs), and graduate degrees at the master and doctorate levels. This university wanted to develop and launch a series of degree programs in data management and data analytics but did not have subject matter knowledge or experience in developing data management and analytics programs. As a relatively new operation, this university also needed curriculum development support and course content expertise and required mentoring for new and existing faculty in teaching data management and data analytics.

EWSolutions consultants worked with the university's program team (dean, department chair, operations team) to develop academically appropriate goals for each program at each degree level and to design program and course outlines and related content to be used in admissions and marketing efforts. EWSolutions consultants served as instructional designers to create a variety of courses and assessment methods in each program for data management and data analytics. EWSolutions consultants served as members of the university's leadership team during the development and initial phases, to ensure that faculty developed confidence in delivering these programs.

Small Regional Traditional University

This university is a small, traditional school, offering bachelor and master degrees in arts and sciences, and in business. This university wanted to start degree programs in data management and in data / business analytics, both at the undergraduate and graduate levels, but did not have expertise in any of the areas of data management or analytics.

EWSolutions consultants worked with the university's dean and department chair to develop academically appropriate goals for each program at each degree level and to design program and course outlines to be used in admissions and marketing efforts. EWSolutions consultants worked with a university instructional designer to create a variety of courses and assessment methods in each program for data management and data analytics. Additionally, EWSolutions consultants designed and developed two certificate programs for post-baccalaureate students in data management and data analytics. The university continues to strive to meet the need for data management and data analytics knowledge from its students.

International Organization with Online Certificate Programs

This international professional organization, with over 5000 members, offers training sessions and certificate programs in its specialty. The organization wanted to expand its educational capabilities into data management, data analytics, data privacy and security, and data literacy, while increasing the robustness of its certificate program content. However, the organization lacked the expertise in these areas to develop appropriate courses and deliver content that would support lasting professional development.

Additionally, this organization has launched an online university with a focus on data, information, and analytics. With the lack of internal subject matter knowledge and limited academic program / course

development experience, the organization found it difficult to define clearly program goals, course objectives, and appropriate assessment methods.

EWSolutions consultants worked with the university's founder and organization president to develop academically appropriate goals for each program at each degree level and to design program and course outlines to be used in admissions and marketing efforts. EWSolutions consultants served as instructional designers to create a variety of courses and assessment methods in each program for data management, data privacy and security, and data analytics. Additionally, EWSolutions consultants designed and developed several certificate programs for post-baccalaureate students in data management, data privacy and security, and data analytics. Continuing review of programs and courses, and development of new courses and enhancements to existing programs and courses allow this organization and new university to meet the needs of its members and students.

Community / Junior College

This county-based two-year college offers certificate and associate degree programs for arts and sciences, technology, and business students. Many of its students are continuing education learners and come from a wide variety of educational and employment backgrounds. This junior college wanted to start a certificate program in data management but did not have expertise in any of the areas of data management.

EWSolutions consultants worked with the college's dean (Business and IT) and department chair to develop academically appropriate goals for the certificate program and to design program and course outlines to be used in admissions and marketing efforts. EWSolutions consultants served as instructional designers to create a variety of courses and assessment methods for each course in the data management certificate program. Additionally, EWSolutions consultants served as guest lecturers in many of the courses, supporting the college's faculty with subject matter expertise and assessment support. The college embraced the certificate program concept to assist its students with professional skills.

With the superior guidance of EWSolutions in program and course development for enterprise data management, data literacy, data and business analytics, and with capabilities in educational assessment, each college / university was able to create and improve its programs. The goals achieved can be summarized as:

1. Establish the foundations of enterprise data management, data analytics, data literacy education in the institution
2. Provide program development, curriculum development, course delivery, and assessment capabilities within the college / university framework, based on the institution's goals and current program state
3. Develop a robust, skills and knowledge-based curriculum for data management / data analytics / data literacy to be available to the organization
4. Mentor selected faculty and leadership in the concepts of data management, data analytics, data literacy for continued ability to deliver the course material properly

Using senior resources from EWSolutions and the collection of new programs and courses, each college / university was able to meet all the defined goals.

Major Research University

This university is one of the largest research universities in the US, with connection across the world. It offers associate and bachelors degrees, professional development (certificate programs), and graduate degrees at the master and doctorate levels in all areas. This university wanted to develop and launch a series of degree programs in data management and data analytics but did not have subject matter knowledge or experience in developing data management and analytics programs.

EWSolutions consultants worked with the university's program team (deans, department chairs, operations team leader) to develop academically appropriate goals for each program at each degree level and to design program and course outlines and related content to be used in admissions and marketing efforts. EWSolutions consultants supported the instructional designers to create a variety of courses and assessment methods in each program for data management and data analytics.

EWSolutions Overview

[Enterprise Warehouse Solutions](#) (EWSolutions) is a consultancy with superior strategic and tactical planning analysts who offer government and commercial clients innovative and authoritative solutions. EWSolutions delivers assessments / strategies in all areas of enterprise data / information management, technology implementation in metadata management, data warehousing (ETL, BI, data and text mining, etc.), business intelligence implementation, data governance program development and implementation, enterprise data management framework development and implementation, data migration planning, disaster and contingency planning, and strategic solutions for business/technology issues. Additionally, EWSolutions offers a complete education and training program in all areas of enterprise data / information management; services include program assessment, program development, training platform selection and implementation, and related activities. The company's extensive client base spans the government and the health, life sciences, insurance, financial services, consumer products, retail, manufacturing, and high-tech industries. For more information on our strategic consulting services, high-value implementation services, methodologies, or world-class training call (630) 920-0005 or email us at Info@EWSolutions.com