

Leveraging the Power of Data

LEARNING CONTENT

Each learning unit is six weeks long.

Unit I: Technology Strategy, Systems and Relationships

In this unit, you will understand how technology is an important part of an organization's strategy. You will identify the critical systems within an organization and the types of data they house. You will develop process flows to understand how the data from different systems bring value and impact decision-making. You will learn how the integration of systems, people and processes provide value to an organization and create a competitive advantage.

Unit II: Following the Trail of Data

In this unit, you will learn how to navigate the data trail within the various systems across an organization (e.g., Finance, Human Resources, Operations, Marketing, etc.). You will explore the important relationships among such data necessary for successful business practices. You will learn how data can be manipulated for data visualization. You will develop a deeper understanding on how to interact with such data to bring value to an organization.

Unit III: Data Quality — The Value of Clean Data

In this unit, you will understand the value of clean data. You will learn data warehousing and identify data inconsistencies that can exist across different systems to ensure its reliability and efficiency. You will learn about data governance and compliance and why these best practices are important in breaking down data silos in an organization. You will explore the practical approach of business process management, methodology and the governance process that surrounds data as it flows through an organization.

Unit IV: Using Data for Decision Making

In this unit, you will explore how data is used to drive decisions in organizations. You will learn how to analyze data closely to see patterns that are used in prescriptive or predictive decision-making. You will learn how data refers to the information about people, places, things, business rules, and events in relation to business planning and operations. You will learn how to identify and gather specific business data and statistical information used to make precise decisions on how to move the organization forward.

Unit V: Communicating with Data

In this unit, you will explore the power of storytelling with data. You will learn relevant tools (such as Excel, Tableau and Qlik) and how they are used to effectively display data. You will explore the differences between Business Analytics, Data Analytics and Business Intelligence. You will develop an understanding of data mining and how it's used to solve business problems. You will learn how to develop different visualization strategies to meaningfully relay your story from the data.

Unit VI: Putting the Power of Data into Practice

In this unit, you will learn how to leverage the power of data by putting what you have learned into practice, addressing a real-world business problem. Whether from your own organization or that of a real-world business case study, you will demonstrate your ability to understand and use data to successfully navigate challenges, identify opportunities, and provide data-driven solutions. You will then be challenged to develop a communication plan using the data to educate others on the value provided to the organization.

Faculty

Linda Olszewski, Associate Professor of Business, School of Professional Studies, Alverno College 414-382-6292

linda.olszewski@alverno.edu