

Data-Informed Decision-Making Fundamentals Syllabus

This course will guide professionals through an eight-stage framework for making data-informed decisions, balancing data insights with human judgment. Participants will develop skills to define problems effectively, acquire relevant data, analyze and verify insights, and ultimately implement, communicate, and monitor decisions. Each module introduces a stage in the decision-making process with hands-on exercises and case studies.

Target Audience

Professionals across all industries who aim to incorporate data in decision-making processes and enhance their analytical and critical thinking skills.

Course Duration

Eight weeks, with one 1.5 hour session per week, totaling 12 hours of instruction plus optional hands-on activities. Students who cannot make the live session can watch the recording of it afterwards.

Course Delivery Options

The course is administered through a learning management system. Each week there is a live session for approximately 60—90 minutes which is delivered via Zoom. It will be recorded and posted in the course on the LMS afterwards for those who cannot attend live or who want to revisit the session. The LMS will also include optional hands-on activities, discussion forums, supplemental reading and activities, as well as weekly 5-10 question knowledge checks (optional).

Tailored Delivery

This course can also be delivered in a private setting (in person or virtually) and tailored to your specific use cases, examples, and industry. For more information about availability, pricing, and anything else, please contact us at kevin@kevinhanegan.com

Course Goals

By the end of this course, participants will:

- **Develop Confidence in Data-Backed Decision-Making**
Learn how to balance data with professional judgment, resulting in more reliable, informed decisions. Participants will gain the ability to use data as a supportive tool while applying human insight, enabling more nuanced and well-rounded decision-making.
- **Efficiently Define Problems and Focus on Key Issues**
Formulate specific, targeted questions that clarify the decision-making process and highlight desired outcomes. This skill helps participants address the right issues from the start, minimizing wasted time and aligning efforts with business objectives.
- **Acquire and Prioritize High-Quality Data Sources**
Identify and gather the most relevant data for each decision, filtering out unnecessary information to stay focused. Participants will be able to work efficiently without information overload, gathering actionable insights that directly contribute to achieving business goals.

- **Transform Raw Data into Actionable Business Insights**
Analyze data to identify meaningful trends and patterns that can inform real-world decisions. By the course's end, participants will confidently interpret data to make improvements in areas such as customer satisfaction, operational efficiency, and revenue growth.
- **Verify Insights for Reliability and Relevance**
Ensure data insights are accurate, trustworthy, and applicable to the decision at hand. Participants will learn to detect and mitigate biases or misinterpretations, providing a solid foundation for responsible decision-making.
- **Generate and Compare Strategic Options for Action**
Develop multiple solutions for each decision, assessing their potential impacts, risks, and benefits. Participants will be equipped to present well-considered options to stakeholders, demonstrating a thorough understanding of each choice's potential outcomes.
- **Communicate Decisions Clearly Across Teams**
Create communication plans that effectively present decisions to team members and stakeholders, fostering alignment and support. Participants will be able to gain buy-in for their decisions and ensure a shared understanding across the organization.
- **Implement Decisions Smoothly and Track Results for Improvement**
Execute decisions confidently, monitor outcomes, and refine approaches based on real-time feedback. This skill enables participants to adapt quickly to changing needs and improve their decision-making processes over time, contributing to long-term organizational success.

Key Benefits for Professional Success

After completing this course, participants will be able to:

- **Make Strategic, Data-Informed Decisions** that reduce risk and align with company objectives.
- **Define and Clarify Goals and Success Metrics** for projects, aligning efforts with organizational priorities.
- **Efficiently Gather and Use Data** to support targeted, evidence-based actions.
- **Translate Data into Practical Insights** that enhance customer satisfaction, streamline processes, and drive performance.
- **Communicate and Advocate for Decisions** effectively, enhancing influence and collaboration.
- **Adapt Decision-Making Processes** with continuous feedback, making them more agile and effective in dynamic environments.

Weekly Breakdown

Week 1. Introduction and Overview of Data-Informed Decision-Making

Learning Objectives

- Understand the concept of data-informed decision-making and its distinction from data-driven decisions.
- Explore the importance of integrating human judgment and data.

Topics

- Overview of the eight-stage decision-making framework.
- Introduction to key principles: critical thinking, balancing data with context, and promoting ethical decision-making.

Activities: Case discussions, introductory questions on biases and heuristics

Week 2. Ask & Define

Learning Objectives

- Formulate clear, actionable questions to define decision objectives.
- Identify decision motives, success criteria, and boundary conditions.

Topics

- Problem definition techniques, converting business questions into data questions.
- Classifying decisions by complexity, risk, and uncertainty.

Activities: Case exercise on framing the right questions, defining success metrics

Week 3. Capture & Acquire

Learning Objectives

- Prioritize data quality and relevance when gathering information.
- Differentiate between signal and noise in data collection.

Topics:

- Systemic data collection, data classifications, and data sourcing.
- Techniques for filtering out irrelevant data to focus on critical insights.

Activities: Case scenario on acquiring relevant data, practice on noise filtration

Week 4. Analyze & Transform

Learning Objectives

- Conduct basic data analyses and identify patterns to transform data into insights.
- Apply strategic thinking frameworks for data interpretation.

Topics

- Data preparation, segmentation, and analysis techniques.

- Assessing data with contextual considerations (e.g., market, operational).

Activities: Hands-on exercise with root cause analysis techniques, data transformation tasks

Week 5. Verify & Validate

Learning Objectives

- Critically evaluate insights for reliability, relevance, and potential biases.
- Recognize and mitigate biases and fallacies in decision-making.

Topics

- Validation techniques: confirming insight validity, reliability, ethical considerations.
- Cognitive biases and reasoning challenges.

Activities: Case analysis of insight validation, group activity on identifying biases

Week 6. Resolve & Act

Learning Objectives

- Develop and assess decision options, weighing risks and benefits.
- Implement decision criteria and evaluate organizational readiness for action.

Topics

- Techniques for option generation and decision criteria, weighing risks.
- Introduction to systemic and scenario analysis in decision evaluation.

Activities: Brainstorming session, scenario-based decision-making exercises

Week 7. Announce & Market

Learning Objectives

- Craft effective communication strategies to present decisions to stakeholders.
- Utilize feedback loops for continuous learning.

Topics

- Stakeholder analysis, clear messaging, change management considerations.
- Techniques for stakeholder involvement and maintaining consistent messaging.

Activities: Communication plan creation, feedback analysis

Week 8. Implement & Monitor

Learning Objectives

- Execute the decision, monitor outcomes, and evaluate both process and results.
- Adjust and refine strategies based on monitoring feedback.

Topics

- Implementing decisions, tracking KPIs, and monitoring frameworks.
- Reflection on decision outcomes and process improvements.

Activities: Case study on implementation and monitoring, creating feedback-driven action plans

Certification

There is an optional final assessment which is delivered. Those who complete and pass it will receive a certification in Data-Informed Decision-Making, validating their knowledge and practical application of data in decision-making.