# Case 2: Training Effectiveness in Skills and Competencies Development Program — Case Overview

## Case Summary:

Nexus Logistics Solutions is continuing its Strategic Analytics Initiative with a project focused on analyzing the effectiveness of its Skills and Competencies Development Program. This project will leverage employee assessment data from training courses to gain insights into skill levels and improvements. Your task is to analyze employee skill level and performance patterns and trends, evaluate the impact of course sequence on employee performance, and compare the effectiveness of in-person versus virtual training formats.

## Materials:

- **Case 2 Memo from NLS**
- **Asynch materials for Week 2**
    - Recorded video introduction presentation from client
    - Slide deck from client
    - Data files and data dictionary

## Deliverables:  due Tuesday, October 8 @ 11:59 PM ET

**"Leave-behind" slide deck uploaded on Blackboard**

- Please follow the instructions on Blackboard for uploading your work

You will be submitting your slide deck to the client for their review.  As is sometimes the case with analytics projects, you will not be presenting the slides to the client in person.  In these circumstances, your slide deck will have more written explanations and, at times, more words on the slide than we typically put in a slide deck which we will be delivering as a presentation. Consider how to use the space in your main slides to highlight your key points and communicate them with clarity, and how to use the appendix to your advantage for more detailed analytics results.

Your slide deck should include:

- **Title slide**: team members, title of presentation, date, etc.
- **Main presentation**:  Main presentation slides should contain your analysis, visualizations, and key findings in response to the client's objectives. 5 to 8 slides is a guideline (not a fixed requirement) for your main presentation.
- **Appendix Slides (Optional)**: If included, use Appendix slides to present technical details or supplementary information about the analysis shown in the main slides. These can be referenced by the client for further clarification or deeper understanding of your methodology.

## Learning Objectives and Assessment

**Case 2 Learning Objectives:**
- Analytics Concepts and Skills:
  - Analytics design concepts
    - Identify project objective and analytics orientation for given business scenario
    - Use ==FACt== to frame and communicate analytics proposals, methods and results
  - Perform data wrangling and data transformation to derive metrics for given project objectives
  - Perform exploratory data analysis
  - Use descriptive statistics and relevant statistical testing techniques for given business scenario
- Experiential Concepts and Skills:
  - Translate the client's business need into a data and analytics plan
  - Work with data from a client's organization
  - Communicate with business stakeholders
    - Interpret and refine the project objective/business need
    - Understand and communicate the potential value that analytics can provide the client

**Gen AI Policy**
- You may use ChatGPT or other AI tools to help you draft your slide deck or cover letter.
- On one slide in the Appendix of your slide deck, please briefly describe if you used Gen AI for any of your work (drafting language, brainstorming ideas, writing Python code, etc.).  A few (1 to 4) bullet points is sufficient.

**Grading**
- Your work will be graded according to the rubric below (also posted within the assignment)

| | Needs Improvement | Partially Meets Expecations | Meets Expecations | Exceeds Expectations |
|---|---|---|---|---|
| **Framing (40 points)** | 16 | 24 | 32 | 40 |
| Analysis tied to business objectives | 4<br>Missing multiple business needs | 6<br>Missing one key business need | 8<br>Completed All business needs | 10<br>Exceeded business needs |
| Content related to business needs | 4<br>Incorrect understanding of nature of business and business needs | 6<br>Overgeneralized or inappropriate assumptions | 8<br>A few minor irrelevant points or assumptions | 10<br>All content accurate and relevant to business objetctive |
| Focus on managerial insight | 4<br>Information content good, but insight is lacking | 6<br>One or two nice insights, but could be developed further | 8<br>Solid managerial insights | 10<br>Well-developed managerial insights main focus |
| Insight links across analyses | 4<br>Provide no meaningful linkage across analyses | 6<br>Presenation does some but not enough linking across slides | 8<br>Presentation effectively links across analyses | 10<br>Presentation tells clear, comprehensive story start to finish |
| **Analysis (40 points)** | 16 | 24 | 32 | 40 |
| Appropriate use & correct calculation of statistics | 8<br>Statistics missing from analysis. | 12<br>Missing key statistics to support analysis. Many incorrect calculations or applications of techniques. | 16<br>Good use of statistics. A few minor errors or omissions. | 20<br>Statistical tools used appropriately and correctly throughout analysis |
| Data Transformation | 8<br>Minimal transformation of data. Did analysis based on rows/columns given | 12<br>Some transformation of data beyond data set provided, but not enough to address all business questions. | 16<br>Good transformation of data. Metrics created to address all business questions. | 20<br>Excellent, creative transformation of data |
| **Communication (20 points)** | 8 | 12 | 16 | 20 |
| Communication - Presentation Skills: Clarity in slide deck; content and style appropriate for business communication | 2 | 3 | 4 | 5 |
| Communication - Audience Focus: Audience preparation, Appropriate complexity and technical detail for audience; Concise wording | 2 | 3 | 4 | 5 |
| Communication - Visuals: Design of visualizations; Use of slide titles, chart and graph labels and captions; Use of space/clutter | 2 | 3 | 4 | 5 |
| Communication - Organization: Highlight and conclusion slides; One idea per slide; Slides flow in logical sequence; Effective transitions | 2 | 3 | 4 | 5 |
| **TOTAL** | 40 | 60 | 80 | 100 |