



# MGT-131 - Analytical Thinking and Telecom Data Analysis

# **Description**

\*This course is also available as a live distance learning course\*

A 5-day training course to provide participants with the knowledge, tools and best practices to successfully use analytical thinking methods and data analysis tools to solve problems.

## **Learning Outcomes**

At the end of the course, participants will be able to:

- Implement a process for breaking down complex problems into their components and gain clarity around possible solutions
- Apply tools and techniques to improve overall analytical thinking and data analysis skills
- Use a structured and systematic approach to problem solving
- Analyze, report and provide management with better recommendations to solve problems

# **Topics**

The training course will cover the topics given below. The course integrates exercises and case studies, as well as a series of 7 workshops where the participants actively work on real-life problems using the analytical approach. A kit of analytical thinking tools is provided in electronic form as a take-away.

### The importance of analytical thinking and data analysis skills

- The reasoning process
  - Deductive reasoning
  - Inductive reasoning
- Sources of poor reasoning
- Advantages of using analytical thinking approach

### The analytical problem-solving process

#### Frame the problem

• The problem statement

#### Break down the problem

- Logic trees and frameworks
- MECE (Mutually Exclusive, Collectively Exhaustive)

#### Formulate hypotheses

- Methods for hypothesis formulation
- Hypothesis validation
- Developing an issue diagram

## Case study – Formulating hypotheses

#### Gather and analyze the data

- Identify the factors with most impact (80/20 rule)
- Design the analysis
  - o Sources of data
  - Key considerations
  - o Design a work plan
  - o Execute the work plan the 'so what?' approach
  - o Analysis techniques and tools

## Case study – Data gathering and analysis

## **Exercises - Data analysis**

## Interpret the findings

- Proving/disproving an hypothesis
- Challenges of interpretation

# **Design the solution**

- Making recommendations to yield the most value
  - Corrective measures
  - Action plans
  - o Forecast of expected results
  - o Key indicators of success

#### Communicate the results

- On-going communication during the process
- Formal presentations
- Structure of logical presentation
- Tips for successful presentations

### Implement and monitor the solution

- Measuring and tracking the results
- Variance analysis
- On-going monitoring and communication to key stakeholders

### **Practical Workshops**

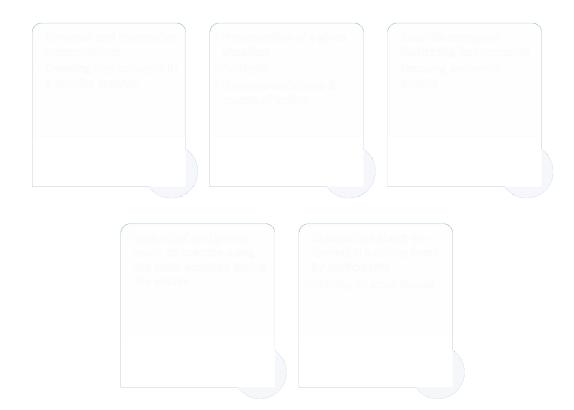
- Workshop #1 Frame the problem
- Workshop #2 Break down the problem
- Workshop #3 Hypotheses formulation and issue diagram
- Workshop #4 Analysis planning
- Workshop #5 Result interpretation
- Workshop #6 Design the solution
- Workshop #7 Communicate and monitor the results

## **Target Audience**

• Telecommunications personnel who wish to improve their ability to use analytical thinking methods and data analysis tools.

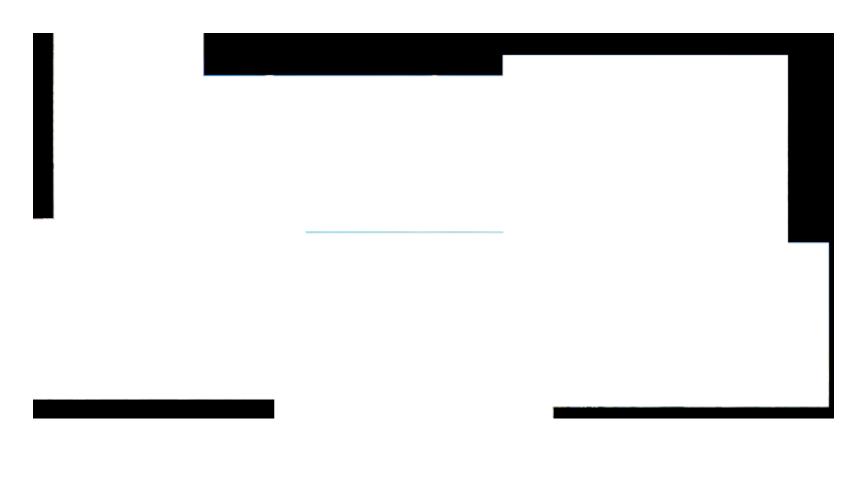
# Methodology

A combination of engaging activities and dynamic presentations to stimulate and maximize participants' learning.



# Location

A selection of Neotelis' training courses is held in various cities around the world. Please contact us at <a href="mailto:training@neotelis.com">training@neotelis.com</a> for the complete Yearly Training Calendar.



Neotelis can also deliver in-house sessions of this course specifically for your organization. Please contact us at <a href="mailto:training@neotelis.com">training@neotelis.com</a> for more information and a Proposal.

## **About Neotelis**

Neotelis provides training, consulting, conferences and publications to the telecommunications industry worldwide. Its team of senior experts has trained thousands of executives and managers working for operators, regulators, policy-makers and governments in over 120 countries around the world.



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