Faysal Aziz

Applied Analytical Thinking

Evidence, structured reasoning and responsible AI support for business decisions

FA-0582 · 1 day

Data & Analytics · AI for Leaders & Business

Practise structured problem definition, evidence review and clear recommendations using illustrative business data and carefully reviewed AI support.

Introduction

This one-day course develops practical analytical thinking for professionals in finance, procurement, HR, shared services and other business-support roles. It focuses on defining a decision, questioning assumptions, interpreting evidence and communicating an appropriately qualified recommendation.

Generative AI is introduced as an optional support tool for summarisation, questioning and hypothesis generation. Its outputs are checked against the underlying information. Guided exercises use a selected illustrative business or operational scenario; the course does not attempt a full investigation of every listed sector example.

Learning outcomes

The course teaches participants to:

- Define a workplace problem and distinguish symptoms, assumptions and evidence.
- Interpret simple trends, comparisons and anomalies while checking data quality.
- Develop alternative explanations and use structured root-cause questions without assuming they prove causality.
- Recognise common decision biases and evaluate options against explicit criteria.
- Review AI-generated analysis for unsupported conclusions, false precision and sensitive-data risks.
- Communicate a recommendation with evidence, uncertainty and proposed next steps.

Prerequisites

- General business-support or corporate experience.
- Basic familiarity with reports, spreadsheets or dashboards and simple charts and percentages.
- No advanced statistics, programming or data-science experience is required.
- Basic awareness of generative AI is helpful but not essential.

Training outline

1. Module 1 — Framing the Decision

- Curiosity, professional scepticism, analytical responsibility and the speed–accuracy trade-off.
- Separate the problem from symptoms; define current and desired states, scope and stakeholders.
- Use decision-focused questions, 5W1H and a simple issue tree.
- Distinguish facts, assumptions, opinions, knowns and information still needed.

2. Module 2 — Interpreting Evidence

- Compare trends, targets, benchmarks, patterns and anomalies.
- Check data quality, relevance and misleading charts or summaries.
- Distinguish correlation from causation and state limitations before recommending action.

3. Module 3 — Causes, Hypotheses and Uncertainty

- Use Five Whys and cause-and-effect analysis to explore possible contributors.
- Investigate bottlenecks, handoffs and rework; validate rather than simply label a root cause.
- Develop alternative hypotheses and look for supporting and conflicting evidence.
- Test assumptions, update conclusions and communicate uncertainty.

4. Module 4 — Decision Biases

- Recognise confirmation, anchoring, availability, recency, authority and groupthink effects.
- Examine overconfidence and use a short pre-mortem to challenge a preferred option.
- Apply bias checks to the selected scenario.

5. Module 5 — AI-Assisted Analytical Work

- Use a clear analytical prompt for decomposition, hypotheses, summarisation, categorisation or scenario exploration.
- Treat generated patterns and themes as suggestions to verify against the records.
- Check hallucinations, unsupported conclusions, hidden assumptions and false precision.
- Protect personal, financial and confidential information using approved tools and data minimisation.
- Review bias, explainability, escalation and human accountability.

6. Module 6 — Options and Recommendations

- Compare benefits, costs, risks, effort, constraints and dependencies.
- Use a small decision matrix without disguising subjective assumptions as precise measurements.
- Write headline-first findings, implications, evidence, limitations and action statements.
- Explain risk-adjusted recommendations and what information could change the decision.

7. Module 7 — Guided Case and Personal Framework

- Apply the framework to a selected illustrative case, such as invoice delays, service backlogs, supplier performance or a budget variance.
- Discuss optional operational examples such as maintenance backlogs, downtime, material delays or predictive-maintenance alerts; no client-specific facts are assumed.
- Review an AI-generated report against the provided evidence.
- Practise the sequence: define the question, check evidence, challenge assumptions, compare alternatives, verify AI output, consider consequences, recommend and review.

© 2026 Faysal Aziz · Kuala Lumpur