



Text Analytics for Business Analysts Course: Sentiment and Topic Models for Complaints and Surveys



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Introduction:

Text analytics for business analysts, with sentiment and topic models for complaints and surveys, is a 5-day course for analysts who handle complaint logs, survey comments, employee feedback and consultation responses, ending with a Text Analytics Plan and Theme-to-KPI Dashboard Specification for a case organisation. Thousands of free-text comments are collected yet only read in samples, so recurring causes of dissatisfaction stay hidden behind average scores. Nominees already build reports and pivot tables at work and learn through hands-on labs on anonymised Arabic and English comment files. CoreConcept Training Center delivers this text analytics course.

Course Objectives:

- Prepare bilingual Arabic and English comment files for analysis through normalisation, tokenisation, stop-word filtering and stemming
- Profile a corpus with keyword frequency, n-gram and keyness analysis to surface recurring complaint and comment vocabulary
- Score comments with lexicon-based and supervised sentiment methods and attribute polarity to service aspects
- Discover and label themes with LDA, NMF and embedding-based topic clustering, judging topic count with coherence scores
- Validate machine labels against a human-coded sample using Cohen's kappa, precision, recall and error review
- Specify dashboards that link text themes to operational KPIs and produce a Text Analytics Plan for sponsor approval

Target Audience:

- Customer experience and complaints analysis units responsible for reporting on complaint logs and contact notes
 - Quality and service improvement units responsible for finding root causes in open-ended feedback
 - HR and people analytics units responsible for engagement survey comments and exit interview notes
 - Policy and public consultation units responsible for summarising large volumes of written submissions
 - Business intelligence and reporting units responsible for adding text measures to existing dashboards
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Course Outline:

Day 1: Text Analytics Foundations and Comment Data Readiness

- Text Mining Versus Text Analytics Scope for Business Questions
- Unstructured Feedback Source Inventory Across Complaints and Surveys
- Corpus Sampling Frame and Analysis Unit Definition
- Arabic Orthographic Normalisation and English Case Folding Rules
- Comment File Readiness Audit for Duplicates and Personal Data

Day 2: Text Representation, Sentiment and Topic Model Methods

- Tokenisation, Stop-Word Lists and Stemming for Bilingual Comments
- Keyword Frequency, N-Gram and Keyness Profiling Tables
- Document-Term Matrix and TF-IDF Weighting for Analysts
- Lexicon-Based Sentiment Scoring with Negators and Intensifiers
- LDA and NMF Topic Model Logic and Parameters

Day 3: Applied Sentiment Scoring, Topic Discovery and Classification

- Aspect-Based Sentiment Attribution to Service Features
- Topic Count Selection Using Coherence Scores and Inspection
- Embedding-Based Clustering for Short Survey Comments
- Supervised Comment Classifier Trained on a Labelled Codebook
- Theme Labelling Exercise Turning Topic Terms into Business Names

Day 4: Validation, Bias Checks and Theme-to-KPI Linkage

- Human-Coded Gold Sample Design and Coder Instructions
- Cohen's Kappa Agreement Between Coders and Machine Labels
- Precision, Recall and Confusion Matrix Error Review
- Sarcasm, Negation and Code-Switching Failure Case Log
- Theme Volume Linked to Resolution Time and Satisfaction KPIs

Day 5: Lab Build of the Text Analytics Plan

- Lab Cleaning and Profiling a Case Complaint Corpus
 - Lab Sentiment and Topic Run on Survey Comments
 - Lab Validation Report Against a Coded Sample
 - Theme-to-KPI Dashboard Specification with Alert Thresholds
 - Text Analytics Plan Completion and Sponsor Review Panel
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Skills You Will Gain:

- Bilingual Text Preparation
- Corpus Profiling
- Sentiment Scoring
- Topic Modelling
- Comment Classification
- Label Validation
- Theme Reporting
- Text KPI Dashboard Design

Why Attend This Course:

- Deliver a Text Analytics Plan with a Theme-to-KPI Dashboard Specification to the head of customer experience, quality or HR for approval
- Decide which recurring complaint and comment themes merit process fixes, using validated volumes and sentiment rather than anecdotes
- Avoid reporting machine-generated themes that disagree with human reading, or missing complaint spikes hidden in unread comments
- Coach colleagues in the cleaning rules, codebook, validation routine and theme labels practised during the labs

Conclusion:

Back at work, the participant hands the Text Analytics Plan and Theme-to-KPI Dashboard Specification to the head of customer experience, quality, HR or policy who owns the feedback data. That owner uses it to approve which comment sources are analysed, which themes are tracked against resolution time, satisfaction or engagement KPIs, and which alerts reach process owners. After the first reporting cycle, the unit should repeat the human-coded check, compare agreement with the lab baseline and retire or merge themes that no longer explain the KPIs.

Frequently Asked Questions FAQ:

What should participants know before text analytics for business analysts training?

Participants should build reports, pivot tables or dashboards at work and be comfortable with spreadsheets. No programming background is required, because labs use analyst-friendly tools with ready workflows. Reading Arabic or English comments is needed, and an anonymised sample of their own feedback data helps.

How does text analytics for business analysts differ from NLP engineering or manual qualitative coding courses?

It equips analysts to run and validate sentiment, topic and classification models on feedback data. NLP engineering courses build and deploy language models in code, while manual qualitative coding courses analyse small interview sets by hand without automated scoring.

How accurate are sentiment and topic models in text analytics for business analysts?

Accuracy depends on the data and must be measured, not assumed. Analysts compare machine labels with a human-coded sample using Cohen's kappa, precision and recall, and log failures such as sarcasm, negation and mixed-language comments before results reach decision makers.

What do participants take back from text analytics for business analysts training?

Participants take back a Text Analytics Plan with a Theme-to-KPI Dashboard Specification for a case organisation, plus cleaning rules, a coding codebook, a validation report template and theme labels they can reuse on their own complaint and survey comment data.
