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Module 3: Analyzing text content with natural language processing

Lesson 3.3: Interpreting the results of NLP
analysis

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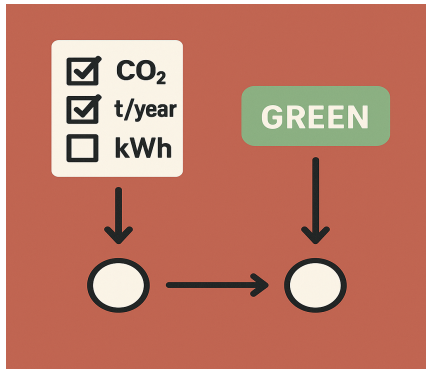
Quantitative content analysis

- Systematically assess text features
- Text-level differs from word-level
- Human coders lack scalability
- AI coding trades nuance
- Quant results support qualitative



Operationalizing sustainability

- Metrics separate authentic messaging
- Authentic messaging cites specifics
- Greenwashing uses vague claims
- NER maps entity relationships
- POS patterns reveal intent



Comparison across organizations

- Compare Preem and Vattenfall
- Fossil firms stress mitigation
- NLP detects tone shifts
- Scrutiny drives defensive messaging
- Quantifies sustainability alignment



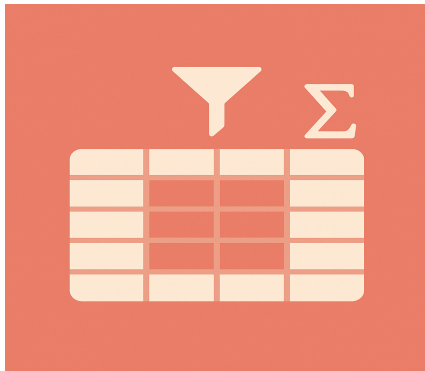
Summarizing results of text analysis

- Summaries simplify token tables
- Aggregate category and sentiment
- Compare dependent independent variables
- Highlight trends by organization
- Keep findings actionable



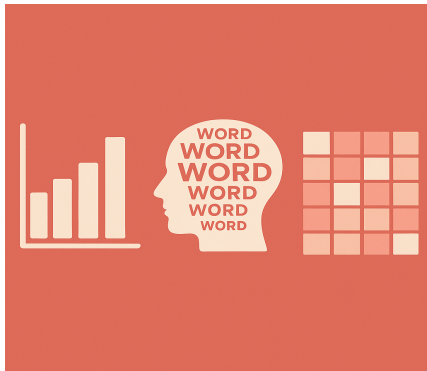
Select, filter, aggregate

- Select key token columns
- Filter noise and rare tokens
- Aggregate counts and sentiment
- Enable precise sustainability comparisons
- Transform raw data insights



Visualizing results of text analysis

- Visuals clarify NLP results
- Use bar cloud heatmaps
- Prefer simple bar visuals
- Matplotlib streamlines visualization
- Highlight interfirm term trends



Stacked bar plots

- Simple bars show single metrics
- Stacked bars compare organizations
- Segments encode variable types
- Reveal adjective differences
- Support multivariate comparisons

