



LUND  
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## Module 3: Analyzing text content with natural language processing

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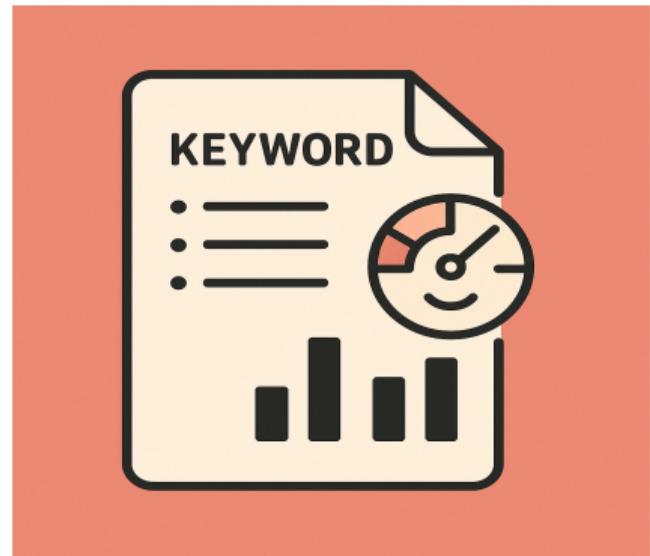
Lesson 3.3: Interpreting the results of NLP  
analysis

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# Quantitative content analysis

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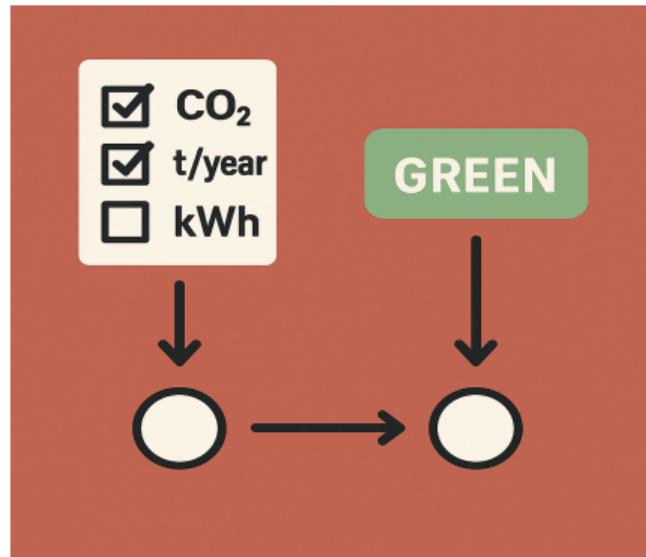
- Systematically assess text features
- Text-level differs from word-level
- Human coders lack scalability
- AI coding trades nuance
- Quant results support qualitative



# Operationalizing sustainability

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



# Comparison across organizations

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



# Summarizing results of text analysis

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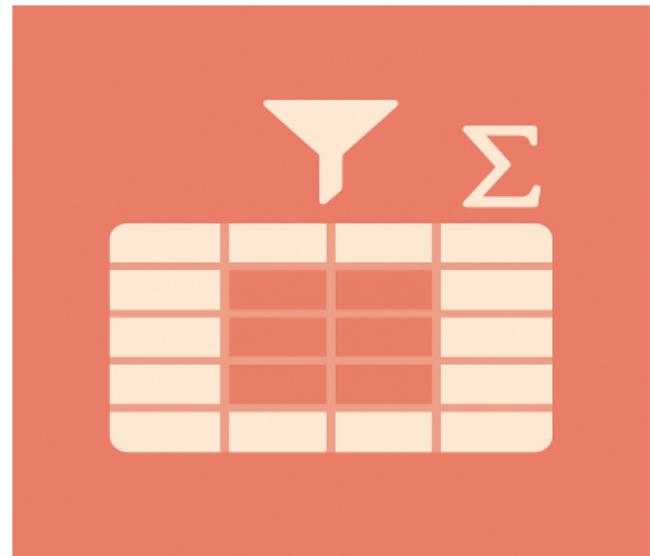
- Summaries simplify token tables
- Aggregate category and sentiment
- Compare dependent independent variables
- Highlight trends by organization
- Keep findings actionable



# Select, filter, aggregate

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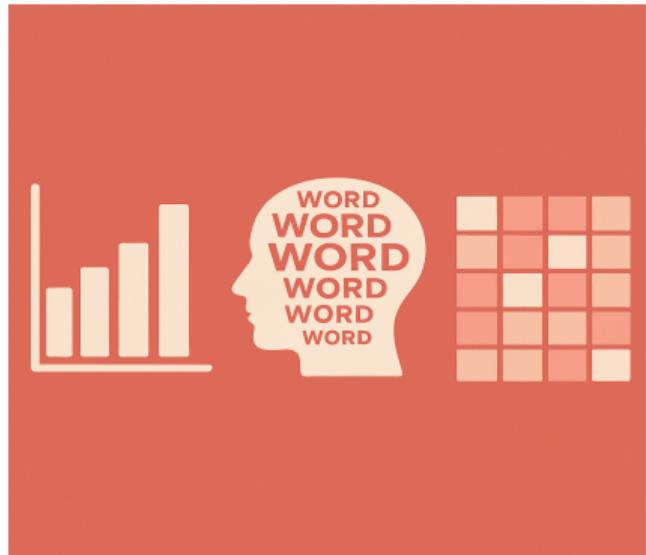
- Select key token columns
- Filter noise and rare tokens
- Aggregate counts and sentiment
- Enable precise sustainability comparisons
- Transform raw data insights



# Visualizing results of text analysis

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



# Stacked bar plots

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

