# Real-World Impact of Word Embeddings

## Industry Adoption of Embedding Technologies

(Line chart: % of Fortune 500 Using Embeddings vs Year, 2013–2024)

Annotations: Word2Vec Released, Transformer Published, BERT Released, GPT-3 API, ChatGPT

## Efficiency Gains from Embedding-Based Systems

(Horizontal bar chart: % Improvement in Efficiency)

- Education: 12%
- Manufacturing: 15%
- Tech: 35%
- Retail: 21%
- Healthcare: 18%
- Finance: 23%

## Distribution of Embedding Applications

(Pie chart)

- Search & Retrieval: 30.0%
- Translation: 20.0%
- Chatbots: 18.0%
- Content Generation: 15.0%
- Sentiment Analysis: 12.0%
- Other: 5.0%

## Performance vs Computational Cost Trade-off

(Scatter plot: Performance (%) vs Relative Computational Cost (log scale))

- Efficiency Frontier
- Word2Vec
- GloVe
- ELMo
- BERT-base
- BERT-large
- GPT-3
- GPT-4