

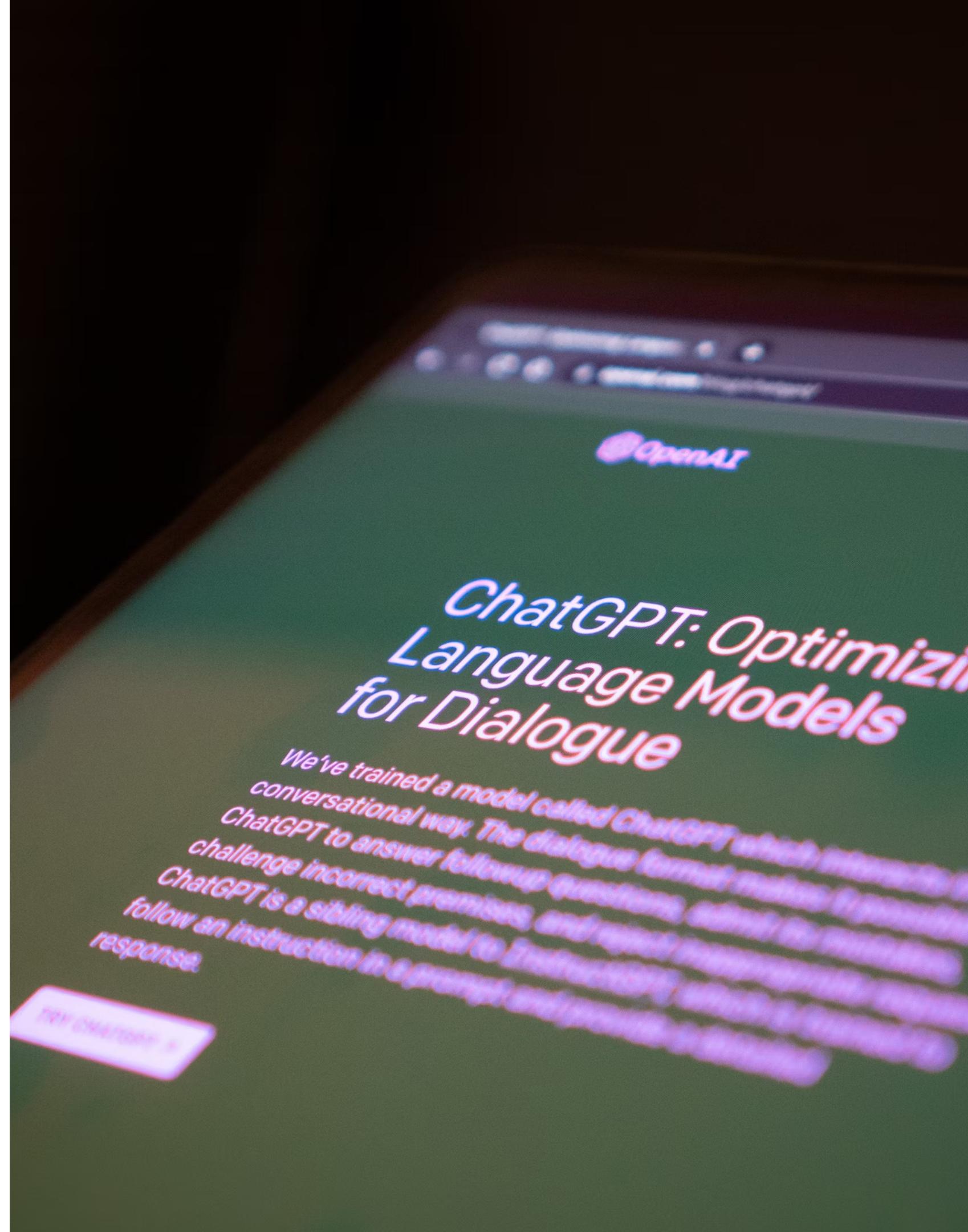
BAN432, FALL 2023 – FINAL PROJECT

How does the release of ChatGPT affect firms and the risks they face?

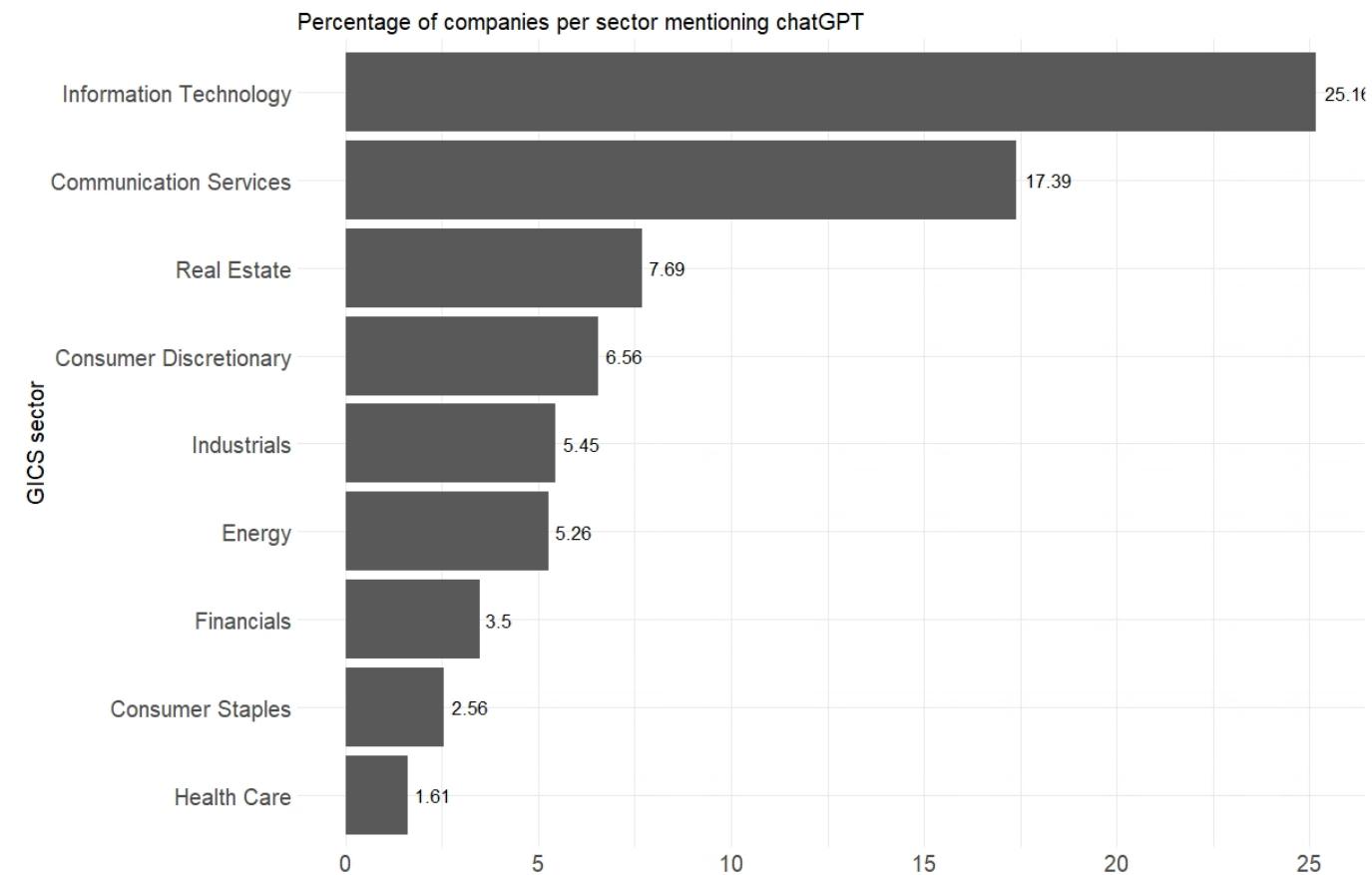
24.11.2023

Agenda

1. Which industries are affected by the release of ChatGPT?
2. What are the risks firms face regarding AI?
3. Conclusion and Limitations



Which industries are affected by the release of ChatGPT?



Step 1: Define Keyword List

Step 2: Calculate Keyword Frequencies

Step 3: Normalize Keyword Frequencies

Step 4: Analyzing surrounding Words



What are the risks firms face regarding AI?

Step 1: Definition of AI-related keywords

Step 2: Extraction of sentences containing AI- keywords

Step 3: Sentiment analysis by sentence

Step 4: Clustering by key negative LM words

Step 5: Topic modeling of the resulting corpus

Step 6: Qualitative analysis of negative sentences

Topic	Top 8 Terms (decreasing log of probability)
Data & Security Threat	concerns, cost, data, health, deliver, might, understand, today
No risk inferable	well, around, content, able, create, using, terms, things
Data & Security Threat	intelligence, time, safety, breast, sales, mission, without, designed
No risk inferable	problems, going, becomes, business, solve, within, already, problem
Strategic & Market Risks	disruptive, will, company, platform, products, just, intelligence, well
Data & Security Threat	data, threat, security, intelligence, customers, look, management, sort
No risk inferable	think, generative, across, cloud, going, system, pervasive, applications
Market Demand Risk	artificial, help, force, customer, will, customers, platform, market
No risk inferable	critical, important, capabilities, data, generative, edge, automation, design
Market Demand Risk	customers, solutions, advantage, need, thing, solution, potential, work
No risk inferable	latest, technology, also, later, learning, machine, capabilities, unique
Financial Risks	million, segment, losses, quarter, reporting, ebitda, adjusted, related

[27] "\$24.9 million of pre-tax losses related to our ai reporting segment."

[79] "ai could make your data more valuable, but it's also a threat to data privacy."

[22] "over the short-term, i think most ceos are using ai as an excuse to get leaner."

Conclusion and Limitations

CONCLUSION

- Information Technology and Communication Services sectors are the most impacted by the release of ChatGPT
- Energy and Materials sectors appear to be unaffected
- Other sectors show varying degrees of influence, with discussions about ChatGPT present but considerably less frequent
- Identified Risks related to AI: (1) Financial and Economic Risks, (2) Privacy and Security Risks, (3) AI Adoption and Market Demand Risks and (4) Strategic Risks

LIMITATIONS

- Industry affection heavily relies on extracted keywords
- KWIC/Sentiment analysis does not capture negations
- No usage of methods like TF-IDF or statistical tests or other sentiment dictionaries other than LM
- no division into executive presentation and Q&A-Session