INSTITUTE OF ACTUARIAL & QUANTITATIVE STUDIES

Class: FY BSc

Subject : Generative AI

Chapter: Unit 4 Part 3

Chapter Name: Reshaping Insurance with Generative AI and ChatGPT: Use Cases and Considerations

Today's Agenda

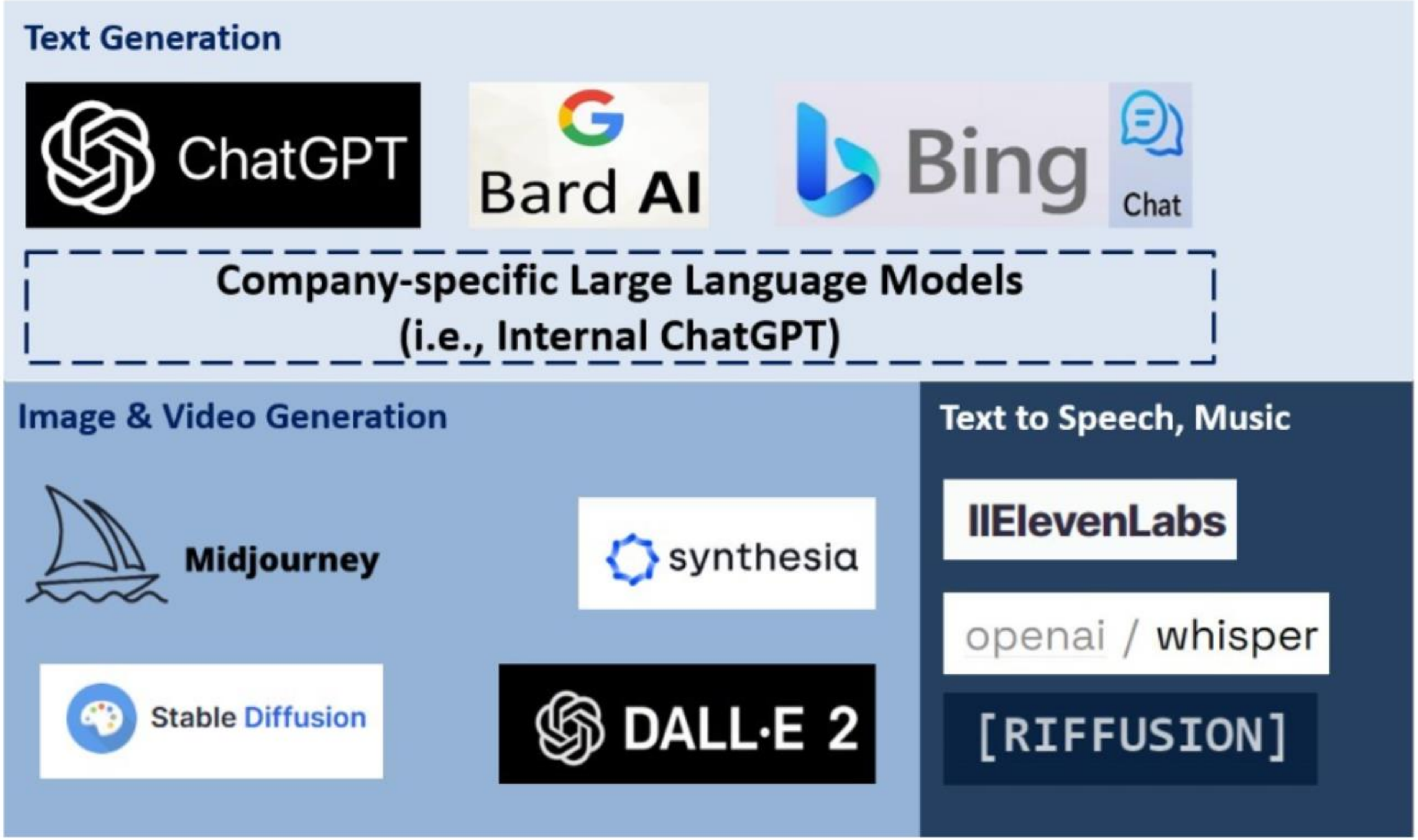
1. Introduction
2. Generative AI: A primer
3. Generative AI in underwriting
4. Insurance Claims Management Process
5. Generative AI Claims Management
6. Potential Pitfalls
7. Takeaways for Insurance leaders
8. Embracing an AI powered future

1 Introduction

- Insurance firms have a wealth of data, but analyzing it all can be a challenge.
- Most insurers only analyze a small percentage of their internal data, including underwriters, claims personnel, and salespeople.
- In this post, we'll explore how generative AI, like ChatGPT, can revolutionize underwriting and claims in the insurance industry.

2 Generative AI: A Primer

Generative AI models, such as ChatGPT, are amazing because they learn from vast amounts of data to generate new content like text, images, and audio. Some popular models include GPT-3.5, GPT-4 from OpenAI, and PaLM 2 from Google. These models can be trained on company-specific data, making them incredibly accurate and actionable. Companies can choose to use existing models or build their own LLMs.


Text Generation
ChatGPT
Bard AI
Bing
Chat
Company-specific Large Language Models
(i.e., Internal ChatGPT)
Image & Video Generation
Midjourney
synthesia
Stable Diffusion
DALL·E 2
Text to Speech, Music
IIElevenLabs
openai / whisper
[RIFFUSION]

3 Generative AI in Underwriting

- Underwriters face a deluge of data when assessing risks and setting prices.
- They rely on various sources such as past insurance policies, claims records, risk factors, and guidelines.
- Internal ChatGPTs act as search engines, enabling quick information extraction from multiple data repositories.
- This boosts decision speed, frees up time for complex decision-making, and potentially increases sales.

4 Insurance Claims Management Process

Review

- Review insurance policy
- Understand what the policy covers, limits, and deductibles

Investigate

- Verify claim legitimacy
- Gather info from policyholder
- Work with witnesses & insurance adjusters

Evaluate

- Determine if the claim should be paid
- Assess the damage amount
- Determine how much to pay out

5 Generative AI in Claims Management

Claims management involves various tasks such as claims review, investigation, and evaluation. Generative AI, particularly company-specific LLMs, can assist claims staff in retrieving and summarizing information from insurance policies, customer data, emails, and phone transcripts. For example, in auto insurance, an internal search engine can help claims staff retrieve past information about the customer, previous claims, and policy clauses, saving time and money.

6 Potential Pitfalls:Can We Trust Generative AI Output?

While generative AI tools like ChatGPT are fast, accuracy can be a concern. LLMs sometimes output incorrect information or even make things up. However, training models on company-specific data reduces the chances of such issues. Nevertheless, it's essential to view these tools as complements to the work of insurance professionals rather than replacements. Each company should have its own mitigation strategies and use these tools comfortably.

7 Takeaways for Insurance Leaders

- Educate all staff about the potential of generative AI across insurance operations.
- Identify processes where AI tools can have the greatest impact.
- Maximize returns on AI investments by focusing on high-impact areas.
- Choose between adapting existing LLMs or building custom solutions based on requirements and resources.
- Start with limited generative AI rollouts to learn, refine strategies, and manage risks effectively.

8 Embracing an AI-Powered Future

Gradually implementing generative AI in insurance provides a smooth transition to an AI-powered future. This transformative technology has the potential to revolutionize underwriting, claims management, and other areas of insurance. By leveraging the capabilities of generative AI models like ChatGPT, insurance firms can become truly data-driven, optimize decision-making, and enhance customer experiences. It's an exciting time to be in the insurance industry!