KPMG LLM Compliance Kit

Ensuring regulatory compliance while harnessing Large Language Model opportunities

Finanstilsynet

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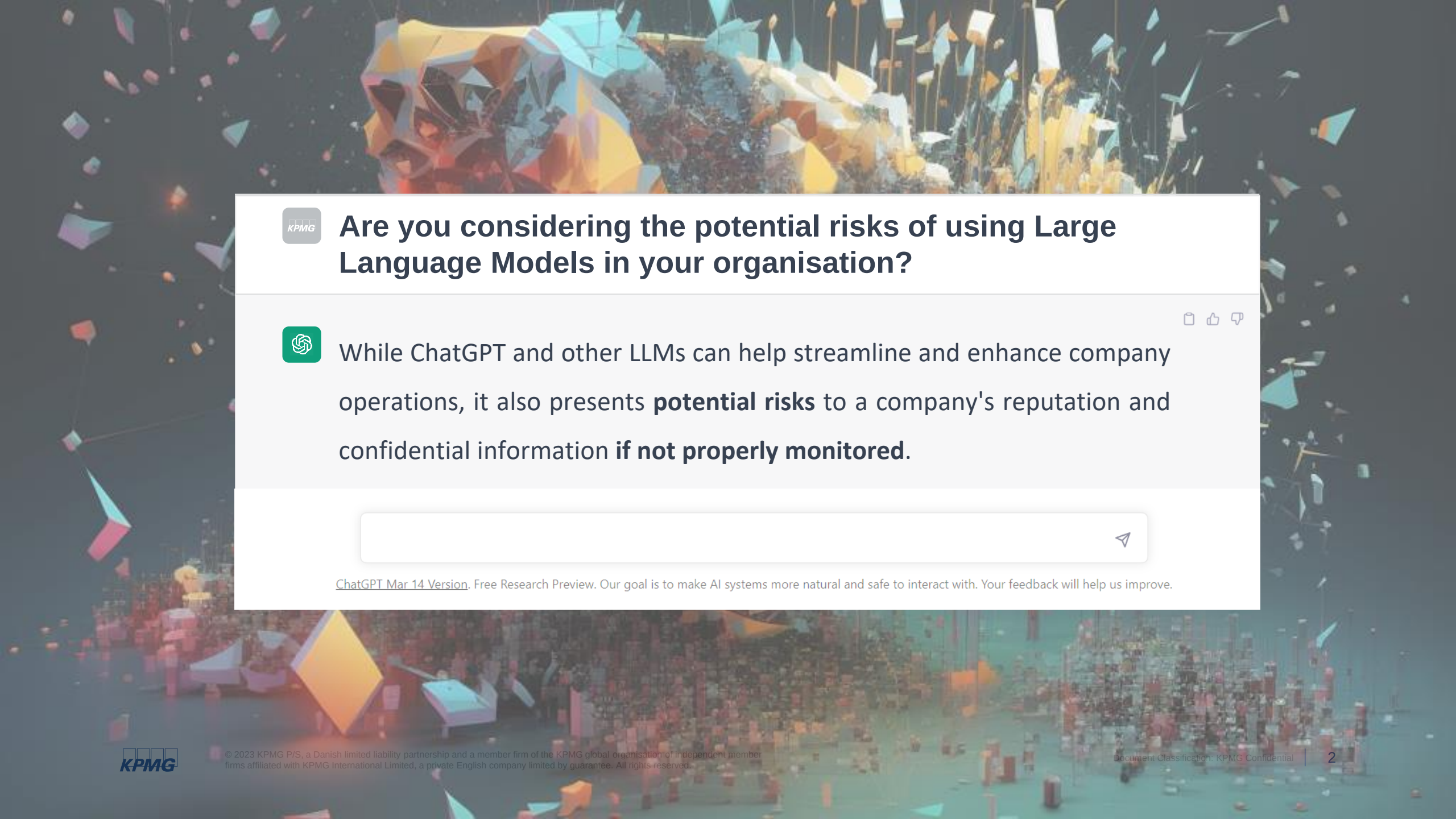


KPMG's LLM compliance kit helps assess and monitor models, enabling organisations to ensure compliance and enhance productivity

Assessment & quick stabilization

Get in control of LLM

Identification of issues & start monitoring and logging

1

Define and implement LLM compliance

Specific guidelines & principles

Implementation of guidelines

2

Communicate and train LLM capabilities

Ethical guidelines & education

Enhancing productivity and continuous compliance

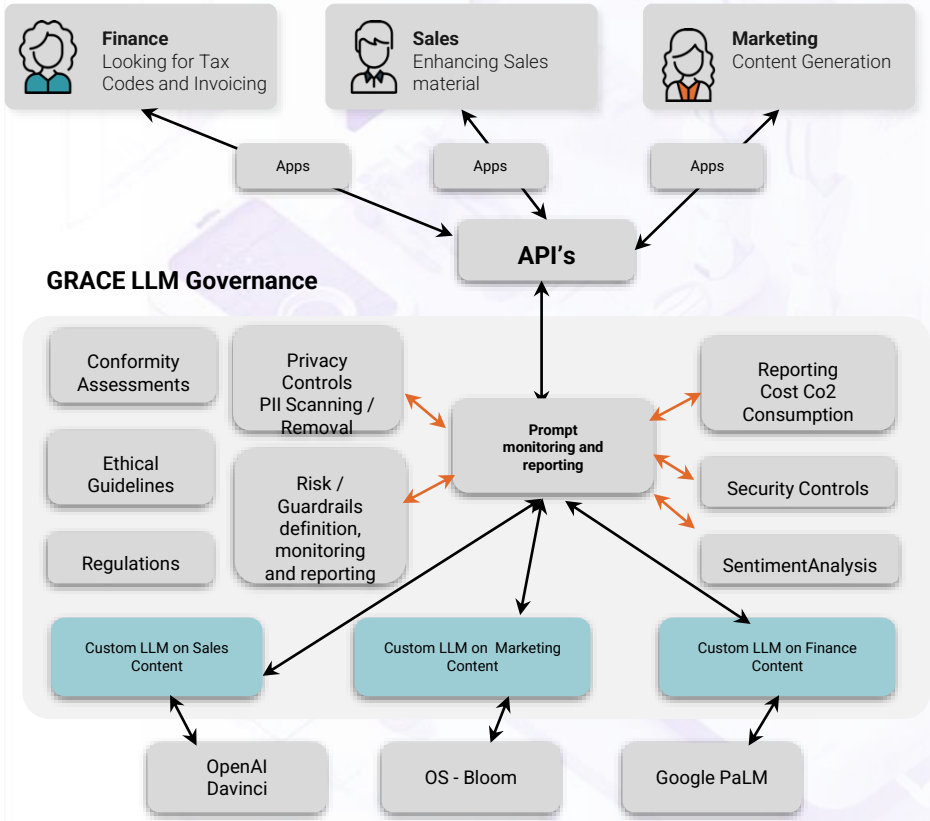
3

The LLM compliance filter enables overview and better compliance

The Grace platform enables:

- Logging
- Prompt Engineering
- Privacy controls
- Implementation of company code of conduct
- Implementation of AI ethical guidelines
- Implementation of AI and GDPR regulation

Step 1: Quick implementation of the LLM filter using a standard compliance set-up



Define and implement Governance and compliance frameworks for LLM

An AI Governance framework entails a systematic approach to compliance of AI models and systems to ensure that they align with ethical and legal standards general as well as company defined

- AI ACT (EU)
- AI and DP Risk (UK)
- Data Ethics Framework (UK)
- GDPR (EU)
- CAPAI (EU)
- EIOPA (EU)

The Danish AI Pledge

AI-based solutions must be created with the best interest of society in mind
AI-based solutions must not be developed to create addictions, generate conflict, suppression or manipulation of behavior or opinion. AI solutions must be designed and integrated to optimise long-term sustainability. Furthermore, the notions of sustainability should include both economic, social and environmental aspects.

Knowledge about AI should be made available to everyone
Developers, decision makers, authorities, investors, designers and others that work with AI must take responsibility for spreading knowledge about artificial intelligence so that everyone will understand the opportunities and challenges that the technology creates.

AI solutions must be transparent in both function and design
It must be possible for a third party to audit the recommendations and decisions that AI models generate and make. The models must be transparent and it should be documented how the solutions work and generate results.

AI solutions must be tried and tested to withstand systematic and well-informed attacks
As AI solutions spread across all parts of our society managing and optimising a multitude of processes, they will become an increasing target for hackers and other bad actors. Therefore, security around AI solutions must be high and must be considered at the time when the solutions are designed, developed, tested and maintained.

Bias in AI solutions must be documented
The bias contained in AI solutions and the data that models learn from must be documented. This includes biases based on race, gender or socioeconomic status. The use of AI should work to eliminate all known forms of biases.

When AI is used to make decisions in life-and-death situations, the guidelines for these decisions must be discussed and documented in advance
AI solutions should focus on strengthening human judgement and not act on their own behalf when considering questions related to human life and death. This is for example relevant in situation where AI is used in weapons systems or medical services. In instances where the AI-based solutions will have to make a life-or-death decision on its own, for example when being implemented in a self-driving car, the lines along which it makes its decision should be discussed and documented.

When designing and developing AI-based solutions, information asymmetry between the parties involved must be addressed
Companies and public authorities should be extra aware when leveraging AI in situations that are characterised by asymmetric information, meaning situations where one party holds more data and thereby has more knowledge than his or her opponent, as these situations hold an inherently increased risk of misuse of power.

Examples of ethical/reg. considerations when using LLMs

Confidential data sharing with BigTech and other entities

Samsung Case

Risk of perpetuating biases and discrimination

Discriminating analysis/language

Breach of EU bank regulation

EU bank directives

Misleading models in production due to insufficient governance

Absence of control & competence

Issue with discerning facts from fakes

Model hallucinations and drifting

Unethical and illegal utilization of AI

Cambridge Analytica Case

Breach of GDPR regulation

Entry of personal information

Breach of company code of conduct

Language, behaviour et al

And many more

…

Step 2: Define and implement company LLM Compliance

Training in compliance and effective LLM use

Training in effective use of LLMs (using ChatGPT as an outset) :

- ✓ Communication and training in company specific standards and ethical guidelines for LMM usage
- ✓ Training in how to maximize productivity through use of LLM (ChatGPT)

Examples on the following slides

Communication and Training topics (examples)

Company AI ethical guidelines

Regulation and compliance

Ie. AIA, GDPR etc for LLM use

Company specific code of conduct

Language, values,..

Prompt engineering

How to maximize output

Writing and learning using LLMs

Revolutionizing learning and working

Coding, testing etc with LLM's

Special module

LLM interacting with other tools

AI can accomplish complex tasks with minimal human expertise

LLM for Legal, HR,…

Special modules

And more

…

Step 3: Communication and training in LLM compliance and effective LLM use

The implementation time varies based on ambition level

From a quick minimum approach with only one module to a comprehensive custom approach with all modules.

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***Excl. any internal approval process **Very dependent on communication and training approach and org. size**

Podcast: Tech Talk KPMG

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