

AI AND INFORMATION MANAGEMENT: EVERYTHING YOU NEED TO KNOW ABOUT GPT AND MORE

Recently, the chatter around ChatGPT, and the growth of artificial intelligence (AI) applications more broadly, has intensified.

Since OpenAI, the company behind ChatGPT – a bot or large language model (LLM) powered by large amounts of data and computing techniques to make predictions to string words together in a meaningful way – the realms of AI, once reserved for plotlines of the most far-fetched science fiction, have become a tangible reality.

The emergence of this technology is stoking significant interest among investors, turbocharging its development. At the end of April, OpenAI closed a funding round that raised nearly \$11bn.

Kids are writing school assignments using ChatGPT, content has popped up all over the internet explaining how the chat bot and its emerging rivals can be applied and used in a whole raft of professions, and – who knows – maybe this article was written by Chat GPT, such is its ability to mimic words written by humans... (it isn't!)

Resigning from his role at Google, Dr Geoffrey Hinton – widely regarded as the “godfather” of AI – warned of its dangers, adding that he regretted his work.

An open letter signed by dozens of AI leaders called for a pause on all developments more advanced than the latest ChatGPT release. In the UK, the Competitions & Market Authority announced that it would be reviewing the AI market over consumer protection fears. In Italy, the country’s data-protection authority banned ChatGPT over data privacy concerns.

And most recently, Sam Altman the CEO of OpenAI, told a US Senate committee that even he believes lawmakers need to move to regulate AI.

But no matter what, it seems that AI is here to stay – and as businesses we need to be ready to mitigate against the risks and capitalize on the opportunities. Here we explore the potential ways that AI – and LLMs, like Chat GPT, in particular – might further disrupt the way organizations store and manage their information.



AI, LLMS AND RECORDS MANAGEMENT

Digitalization has already had a huge impact on the way organizations store and manage information. This transformation has seen records that were once only accessible in paper format readily available at the click of a mouse. Think about the remote work revolution; that has only been made possible through the digitalization of information.

The very premise of platforms like Chat GPT is to use data and computer science to scour for and analyze information and data, before presenting it back to you in a coherent way, as if written by a person.

And for that reason, LLMs and AI look set to take information retrieval to the next level – bringing with it a raft of benefits that the most recent phases of digitalization have only really scratched the surface of.

According to themselves, ChatGPT and Bard have the potential to “revolutionize the way we store and manage records and information” – especially if these LLMs are connected to an organization’s own information management system. But how?



POTENTIAL APPLICATIONS FOR LLMS WITHIN INFORMATION MANAGEMENT

While the potential uses for AI and LLMs in information management is expanding all the time, here we have identified three key areas where this technology is already having significant impact to the way information is classified, stored, managed, and retrieved.

1. Automated document analysis:

Large language models can be used to scan and understand a variety of documents. In healthcare, for example, the model can scan electronic health records to identify and extract key pieces of information, such as patient diagnoses, medication lists, or upcoming appointments. It can also categorize and summarize medical literature, aiding in research and decision-making.

In law, LLMs can scan legal documents, identify important clauses or terms, and provide a summary of the document's content. This can be a powerful tool in legal research and case preparation (source: "Natural Language Processing in Legal Practice").

2. Information retrieval and search engine enhancement:

The accuracy and usefulness of search engines and tools, for example within a document management system, can be improved with LLMs. By understanding the context of a user's query, an LLM can provide more relevant search results.

Furthermore, LLMs can power question-answering systems, providing direct answers to users' queries based on an extensive database of information. This could have potential applications when professionals are sifting through vast archives, organic questions could be asked of the LLM like

"Do you have any legislative documents relating to such and such historical event?" Instead of simple keyword or filtration searches.

The power of LLMs as data retrieval tools is doubly important given the industries mentioned in the first point (Law and Healthcare), where accurate retrieval can, in many cases, be an issue of life, death or significant sums of money.

3. Data cleansing:

Within our industry (information management), the quality of the data directly impacts the accuracy of the insights drawn from it.

Large language models can help in identifying and correcting errors in text data, such as misspellings, grammatical errors, or inconsistencies in date formats. They can also detect and remove duplicate entries, contributing to the overall cleanliness of the data.

Moreover, they can parse records and information in a human-like way, assessing the relevance of particular records for an organization at that present time. By doing so, LLMs can help ensure that subsequent data analysis is accurate and reliable.

In addition to the above, there are many other examples of how LLMs can assist in information management. For example, we haven't touched on how regulatory compliance within big organizations can be assisted by a powerful LLM.



WHAT ABOUT THE PITFALLS AND RISKS?

There are several. And while – on the face of it – the above offers a huge amount of potential upside for organizations and information management, the risks need to be carefully considered and mitigated against.

1. Concerns over privacy

This is a particular area of concern. Italy moved to temporarily ban ChatGPT earlier this year over data privacy concerns, which have since been addressed by OpenAI with the Italian data protection authority subsequently lifting the ban. LLMs are combing through vast datasets, including those which hold personal information. Any LLM plug-ins to an organization's own software will need to be managed carefully.

2. LLMs work on data input by humans, which can be biased

While less applicable in the context of an organization's own information management, LLM's are trained on data that can be biased, which can impact upon the results they return.

3. Returning or spreading misinformation

One of the largest concerns with the likes of ChatGPT and Bard are their potential to spread misinformation. Dr Hinton cited this upon leaving Google, giving an example of how LLMs might be used by autocrats. This is another pitfall to be mindful of.

4. Regulation is likely to be imposed

It is looking increasingly likely that lawmakers around the world will impose legislation on the use of LLMs, especially given the concerns cited about the power of this technology by those who created it. It's not yet clear what shape that might take, but that could restrict the way LLMs can be used when it comes to managing sensitive information.



WHAT NEXT?

Evidently, LLMs only work on digital information. Therefore some of the potential benefits listed here are only achievable if you have already digitalized your information or records – and so much information is still stored on paper. We can support with [digitalizing your information and records](#).

It certainly feels as though this technology has come from nowhere. But it is already demonstrating levels of sophistication that are making people all over the world sit up and take note. There are, of course, risks and pitfalls. But it certainly seems as though AI – and in the first instance, LLMs – could transform the way organizations manage their information. It is critical now that we all consider and understand exactly how we harness this technology for the benefit of fast, effective, accurate and secure management of records, as its influence continues to grow exponentially.

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