**Discussion Question**

One the one hand, large language models (LLMs) are very powerful and versatile in understanding and processing human languages. On the other hands, they suffer from various weakness and limitations.

Which limitation of LLMs would you think to be most serious? Please provide details and examples to support your opinions.

**Answer:**

Microsoft piloted its LLM-based system from March 2023 to October 2023 before fully deploying it in November 2023. Since then, the system has had a notable impact on efficiency and productivity, measured by incident response time and speed in making decisions, and those gains are expected to increase as the system is refined even more over time.

LLMs have become increasingly popular among masses. Every individual and organization want to harness it’s benefits to increase their productivity and bring efficiency.

In the field of Supply chain management also there have been various implementations of LLMs and some have made headlines. Microsoft launched a pilot project based on LLM from March 2023 to October 2023. This system had a visible boost in productivity and efficiency. These could be measured in incident response time and faster decision making. Upon realizing these benefits, the system was deployed in November 2023 with an expectation for refined outputs.

“The LLM can be used to explain decisions made by the supply chain system and provide additional insights, such as information about trends.”

The system and hardware utilization reports which earlier used to go through multiple teams and divisions to get the data and signoff and took about a week to complete can be done in a matter of minutes with the LLM system.

There is a boost in productivity, however, there are challenges as well. We need to train the workforce to use the LLM system efficiently. For Example, the question/prompt “Can we utilize factory A better?” can be interpreted in multiple ways. We need to train the people to ask the questions in the format that is interpreted correctly by the LLM.

More and more organizations are training their LLM on their Domain specific data. If any unsupported question is asked, the LLMs responds in a generic manner like “I do not understand the question. Here are a few suggestions.” The system needs to be trained to handle these kinds of questions effectively.

Conclusion:

The LLM based systems have brought higher efficiency and productivity. However, to maximize the benefits, we need to train the workforce to adapt to the LLM. On the other hand, LLM also needs to be continuously trained to overcome the limitations and errors.

References:

<https://hbr.org/2025/01/how-generative-ai-improves-supply-chain-management>

<https://hbr.org/2024/09/embracing-gen-ai-at-work>

<https://hbr.org/2024/03/how-machine-learning-will-transform-supply-chain-management>

**Response:**

Hi Young,

Your post brings out the practical challenges with respect to LLMs in the field of Logistics. You have clearly pointed out issues like hallucinations, bias, lack of real world understanding, limited reasoning and data security. It is true that LLMs and AI can not be implemented in every aspect of Logistics to solve the problems effectively. Moreover, LLMs can just act as a centralized source of information.

In the domain of logistics, there are multiple moving parts which keep on updating quite frequently which would impact operations significantly. Like weather, road conditions, transportation etc. It is nearly impossible to keep the LLM updated with these dynamic situations and information. With these imitations, the industry cannot completely rely on the LLMs.

It is also true the several processes have been streamlined including reports and multi-department approvals which would earlier take weeks, but these systems are far from being hundred percent reliable.

The video is a good one!!

Thank you,

Sonali Sabnam

Hi Alwin,  
You have correctly pointed out that bias and misinformation are the most common challenges when using the LLMs and also the most serious limitation. Misinformation makes them non-reliable for any critical process.

Bias in the training data reflects clearly on the output of the LLMs and make them non-viable for implementation.  Though organizations are trying to train the LLMs on their  respective knowledgebase, it is true that the gaps in contextual understanding will definitely need more efforts and time to fill.

We can realize some level of process improvement and simplification with the LLMs. However, both the employees and the leadership needs to condition themselves to use the LLMs efficiently.

Thanks

Sonali Sabnam

Hi Andy,

You brought out the most important drawback of using LLMs which is "Hallucinations". The models confidently provide misinformation which is easy to believe unless fact checked. This has a direct impact on the reliability of these models. Integrating the LLMs into the organization’s processes is both time-consuming and expensive. When these models cannot be utilized efficiently, it makes them non-viable.

When these LLMS are used by a specific organization, they are trained on their knowledgebase. However, it might not interpret all the prompts in the required manner. The employees using these systems need to be trained to provide the appropriate prompts. Moreover, the LLM also needs to be trained and re-trained on more and more data to interpret the prompts accurately.

There are both pros and cons of using LLMs to streamline processes by the organizations, there is a long way for the LLMs to achieve their highest potential to deliver maximum value.

Thank you,

Sonali Sabnam