Meeting between Cabinet Members of EVP Vestager and Microsoft
April 28 at 10:00–10:45
Cabinet meeting room 12/062 Le Berlaymont, 1049 Brussels

Participants Microsoft

Participants Cabinet of EVP Vestager:

- Werner Stengg
- Michele Piergiovanni
- Liliane Karlinge
- [redacted]

The meeting took place on the initiative of Microsoft to discuss search and large language models (LLMs).

Microsoft started the meeting by explaining the lifecycle of a search task, which follows a three-step input-process-output (IPO) model. First, the user inputs either text, audio, or images to start a search request. Second, Microsoft’s search engine Bing internally translates this request by searching its index (built by crawling the web) for relevant data from the web. Third, Bing outputs a ranked display of this data as the result of the user query.

With the addition of LLMs to the lifecycle of a search task, Microsoft further explains how their users’ search experience could be improved. Instead of the typical “search language” Microsoft is experiencing from its Bing users (consisting of strategically placed keywords), they could search with their natural language as input that an LLM internally transforms into the “search language”. As an example brought forward by Microsoft, the query “I am in Brussels tonight and would like to dine out” could be transformed to “Brussels Restaurants Dinner”. To drive forward this change in search, Microsoft has acquired access to the multimodal LLM GPT-4 created by OpenAI and is currently working on integrating LLMs into search through Bing as a search engine. For demonstration, Microsoft showcased a live demo of their Bing graphical user interface with a search and chat tab. In the latter, a chatbot responds to users’ queries in natural language and further includes links to web articles underneath to provide additional information. Microsoft furthermore remarked on the probabilistic nature of LLMs, resulting in different texts from identical queries.

Moreover, Microsoft opined on competition in the search market. The launch of their chatbot, also known as Bing AI or Bing Chat, received critical acclaim from the press, especially compared to Google’s own conversational chatbot Bard, which is similarly based on LLMs. Microsoft expressed that Bing AI has a chance to increase competition in the search space, which Google has extensively dominated for many years.

Cabinet of EVP Vestager took due note of Microsoft’s comments.