Artificial Intelligence and the Prospects of Knowledge

Thanks to the direction of His Highness Sheikh Ahmed Bin Mohammed Bin Rashid Al Maktoum, Chairman of the Mohammed bin Rashid Al Maktoum Knowledge Foundation (MBRF), the Foundation has built a reputation for excellence. This has strengthened Dubai’s position as a leading regional and global destination for the transfer, dissemination, and production of knowledge in line with the UAE’s vision of building knowledge societies.

At MBRF’s annual Knowledge Summit in December, top-tier panelists discuss latest developments in the fields of science and knowledge. Through its international partnerships, MBRF launched important knowledge initiatives and programs to bolster the status of the Arabic language such as Arab Innovation, Arab Professionals Forum, Ladies Lounge, My Family is Reading, and Nobel Museum.

The Foundation’s mission is not only to spread knowledge in the UAE, but also to transfer it to all Arabs. It has established partnerships to support Arab innovators and creators wherever they are. It has launched its own Knowledge Award to honor the achievements of innovators from all over the world and has developed the Global Knowledge Index.
The MBRF’s mission is not only to spread knowledge in the UAE, but also to transfer it to all Arabs. The MBRF also plays an important role in knowledge dissemination through its books, publications, and partnerships with publishers. The Knowledge reports, produced in collaboration with the United Nations Development Program (UNDP), are among the Foundation’s most important publications. The following is from one of those reports, first published in 2018, entitled ‘The Future of Knowledge: A Foresight.’

**Future Technologies**

When we talk about the future of societies, technological change cannot be considered in isolation. Other forces—or trends—such as globalization, sustainability, demographic shifts and urbanization, will also affect the future state of the economy and the future of work. Therefore, if we want to understand how the future will be shaped, we need to acknowledge the interactions embedded in these trends as they often reinforce each other.

We believe that certain types of technologies can help overcome most of the challenges associated with these trends, such as the ageing population, increasing scarcity of resources (including food shortage in developing economies) and growing inequalities. The European Commission calls these technologies ‘key enabling technologies’ and they are also commonly referred to as ‘exponential technologies.’ In this report, we refer to them as ‘key technologies for the future.’

All key technologies for the future present two principal common features. First, they form together an ecosystem in which each technology both exploits and fosters the development of the others. In other words, the novel technologies that are being grafted onto existing and more mature technologies amplify the performance of the latter, and vice versa. Second, they enable the exponential acceleration of innovation, as each technological improvement leads to innovation, which in turn functions as a platform for further technological improvement and innovation. These technologies therefore help developing multiple novel applications in a wide range of sectors and industries.

As highlighted in the ‘Technology Profiles’, AI, cybersecurity, blockchain and biotechnology possess these two features. In addition, they are all still at an early stage of development as evidenced by their position in the latest Gartner Hype Cycle. For each of them, many avenues for future research, experimentation, and innovation remain, which could lead to unexpected results.
The objective of AI systems is to develop systems capable of tackling complex problems in ways similar to human logic and reasoning.