PART B2

Read Text 4 and answer questions 43-65 in the Question-Answer Book for Part B2.

Text 4

Ethical concerns mount as AI takes bigger decision-making role in more industries

[1] For decades, artificial intelligence, or AI, has been the engine of high-level STEM research. Most consumers became aware of the technology's power and potential through internet platforms like Google and Facebook, and retailer Amazon. Today, AI is essential across a vast array of industries, including health care, banking, retail, and manufacturing.

[2] But its game-changing promise to do things like improve efficiency, bring down costs, and accelerate research and development has been tempered of late with worries that these complex systems may do more societal harm than economic good. With virtually no government regulations, private companies use AI software to make determinations about health and medicine, employment and creditworthiness without having to answer for how they are ensuring that their programmes are not encoded with structural biases.

[3] Joseph Fuller, professor of management practice, explains that in employment, AI software sorts and processes resumes and analyses job interviewees' voice and facial expressions. The result is the growth of what's known as 'hybrid' jobs. Rather than replacing employees, AI takes on important technical tasks of their work, freeing workers to focus on other responsibilities, making them more productive and therefore more valuable to employers.

[4] While Big Business already has a huge head start, small businesses could also potentially be transformed by the implementation of AI, says Karen Mills, who ran the U.S. Small Business Administration from 2009 to 2013. This could have major implications for the national economy over the long haul as most people in the U.S. are employed by small businesses. Rather than hampering small businesses, the technology could give their owners detailed new insights into sales trends, cash flow, inventory, ordering, and other financial information in real time. This will help them understand how the business is doing and where problem areas might loom without having to hire any other experts in finance, accounting, or human resources. The owner doesn't need to become a financial expert, or spend hours labouring over the books every week, Mills said.

What are the ethical concerns of using AI in decision-making?

[5] Michael Sandel, professor of political philosophy, states that the widespread use of AI presents ethical concerns for society: privacy, discrimination, and perhaps the deepest, most difficult philosophical question of the era, the role of human judgement. "Debates about privacy safeguards and about how to overcome bias in algorithmic decision-making in employment practices are by now familiar," said Sandel, referring to intentional and unintentional prejudices of programme developers and those built into datasets used to train the software. "But we've not yet wrapped our minds around the hardest question: Can smart machines out-think us, or are certain elements of human judgement indispensable in deciding some of the most important things in life?"

[6] Panic over AI suddenly injecting bias into everyday life *en masse* is overstated, says Fuller. First, the business world and the workplace, rife with human decision-making, have always been riddled with 'all sorts' of biases that prevent people from making deals or landing contracts and jobs. "When calibrated carefully and deployed thoughtfully, resume-screening software allows a wider pool of applicants to be considered than could be done otherwise, and should minimise the potential for favouritism that comes with human gatekeepers," Fuller said. Sandel disagrees. "AI not only replicates human biases, it confers on these biases a kind of scientific credibility. It makes it seem that these predictions and judgments have an objective status," he said.

[7] "In the world of lending, algorithm-driven decisions do have a potential dark side," Mills said. As machines learn from the data sets they're fed, chances are 'pretty high' they may replicate many of the banking industry's past failings that resulted in discrimination against minority groups. "If we are not thoughtful and careful, we are going to end up with redlining again," she said. "A highly regulated industry, banks are legally on the hook if the algorithms they use to evaluate loan applications end up inappropriately discriminating against classes of consumers, so those 'at the top levels' in the field are 'very focused' right now on this issue," said Mills, who closely studies the rapid changes in financial technology, or 'fintech'. "They really don't want to discriminate. They want to give access to capital to the most creditworthy borrowers," she said. "That's good business for them, too."