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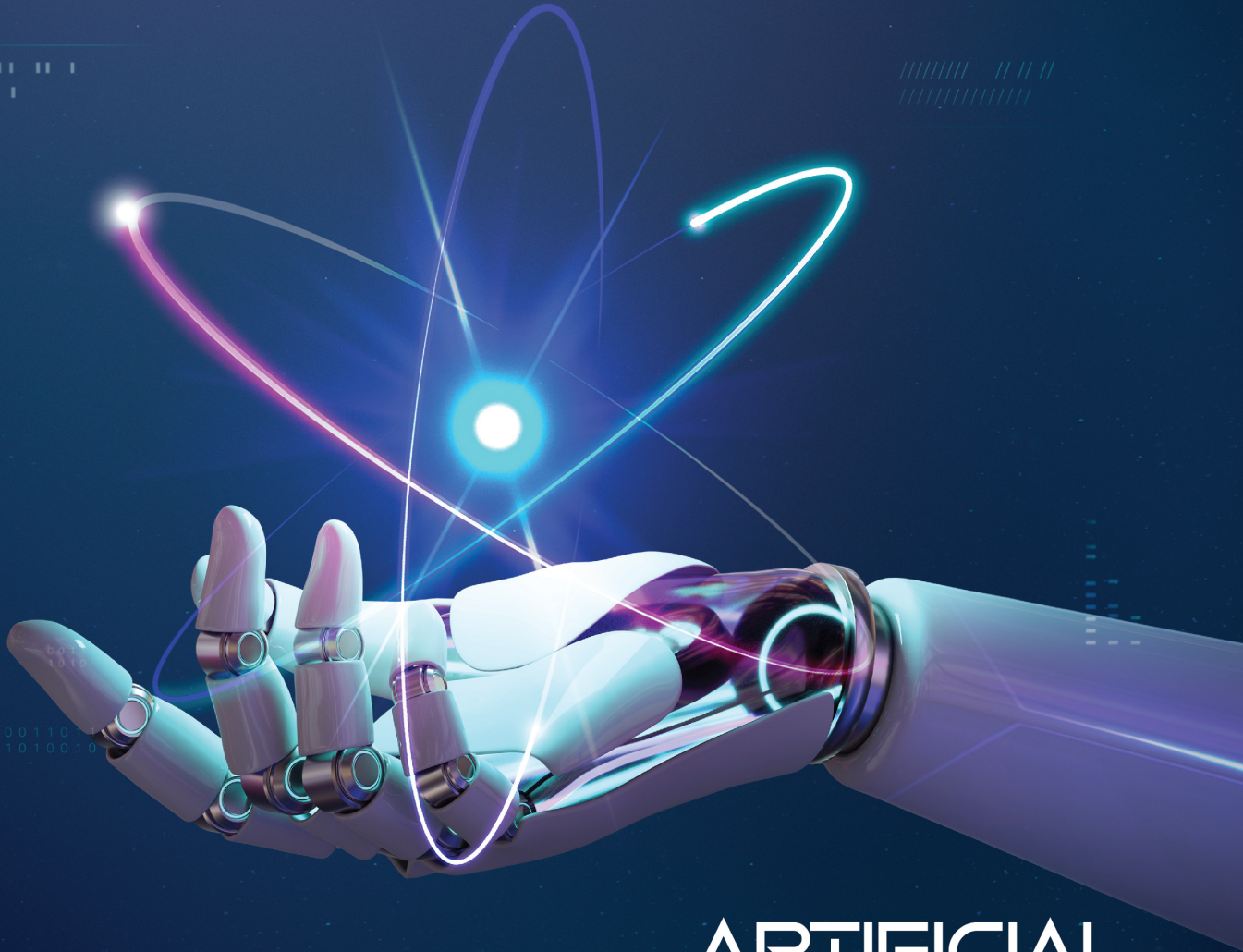
ARTIFICIAL INTELLIGENCE (AI):
Embracing the Future

RISE

UNIVERSITI TEKNOLOGI MARA

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ABOUT THE MAGAZINE

RISE Magazine is published by Office of the Deputy Vice-Chancellor (Research and Innovation) with aims to highlight a research and innovation on multidisciplinary expert of fields in UiTM. It serves as a platform for researcher to showcase their high quality and impactful findings, activities and innovative solution through publication. Contribution of these ideas come from academicians, researchers, graduates and universities professionals who will enhance the visibility of research and stride to elevate Universiti Teknologi MARA to global standards. This is an effort to promote research as a culture that is accepted by all expertise.

ABOUT UiTM

Universiti Teknologi MARA (UiTM) is a public university based primarily in Shah Alam, Malaysia. It has grown into the largest institution of higher education in Malaysia as measured by physical infrastructure, faculty and staff, and student enrollment. UiTM is the largest public university in Malaysia with numerous campuses throughout all 13 states in Malaysia. There is a mixture of research, coursework and programmes offered to the students. The Office of the Deputy Vice-Chancellor (Research and Innovation) also known as PTNCPI *(Pejabat Timbalan Naib Canselor (Penyelidikan dan Inovasi))* serves as a *Pusat Tanggungjawab* (PTJ) for navigating the research and innovation agenda of the university to achieve UiTM's goals.The PTNCPI office strives to mobilize faculty and campuses, fostering collaboration among researchers, with the aim of transforming the University into a Globally Renowned University by 2025

WHAT THE FUTURE OF AI

Will Be Like, And How It May Affect UiTM and Malaysian Society

Artificial intelligence (AI) is poised to have a significant impact on society worldwide, including in Malaysia. With the rapid development of AI technology, we can expect to see many changes in the way we live and work in the coming years. As one of the largest public universities in Malaysia, Universiti Teknologi MARA (UiTM) may benefit from incorporating AI into its academic programs. However, as with any emerging technology, there are both pros and cons to consider when it comes to AI for UiTM academics.

One of the most significant benefits of AI is its ability to streamline administrative tasks. This includes tasks such as grading assignments, managing student records, and scheduling appointments. By automating these tasks, UiTM academics can focus on more critical aspects of their job, such as research and teaching.

AI can be used to tailor educational materials and experiences to individual students' needs. For example, it can analyze student data to identify areas where students are struggling and provide personalized recommendations to help them improve. Additionally, AI can be used to create customized learning experiences, such as virtual simulations, that are more engaging and effective than traditional classroom lectures. By using AI to personalize educational materials and experiences, UiTM academics can improve learning outcomes for their students. Additionally, AI can be used to provide immediate feedback to students, enabling them to identify areas where they need to improve and make corrections in real time.

AI can also support research efforts by providing access to vast amounts of data and analyzing it quickly and accurately. This can help UiTM academics make discoveries and advance their fields more quickly than they would be able to without AI. Implementing AI technology can be expensive, particularly for large institutions like UiTM. The cost of purchasing and maintaining AI systems can be prohibitive, particularly for smaller departments or programs.

One of the biggest concerns with AI is the potential for bias. AI algorithms can be biased based on the data used to train them, which could lead to discriminatory outcomes. For example, an AI system used to screen job applicants might be biased against women or people of color if the training data used to develop the algorithm is not diverse enough. There is also a concern that AI could replace some jobs traditionally performed by UiTM academics. For example, an AI system could be used to grade assignments or provide personalized feedback to students, potentially eliminating the need for human instructors in some cases.

Finally, there are security risks associated with AI. As with any technology, AI systems are vulnerable to cyber-attacks and data breaches. This could lead to sensitive student data being compromised, potentially harming both students and the university.

One area where AI is already making a big impact in Malaysia is the field of healthcare. AI-powered medical devices and software are helping doctors and researchers analyze large amounts of data quickly and accurately, leading to better diagnosis and treatment of diseases. For example, AI-powered imaging tools can help doctors identify abnormalities in medical images that might be missed by the human eye.

Another area where AI is expected to have a big impact in Malaysia is in the field of transportation. Self-driving cars and trucks are already being tested in various parts of the world, and Malaysia is likely to be one of the countries where these vehicles will become more common in the future. This will not only make transportation more efficient but also reduce the number of accidents caused by human error.

AI is also likely to have a significant impact on the job market in Malaysia. While some jobs will be automated, others will require workers to have skills that are complementary to AI, such as creativity and problem-solving. The government and businesses in Malaysia need to invest in training and education programs that will help workers adapt to these changes and develop the skills they need to succeed in the AI-driven economy of the future.

In addition to the opportunities presented by AI, some potential risks need to be considered. It will be important for policymakers and stakeholders in Malaysia to develop a comprehensive strategy for AI that takes into account the potential benefits and risks of the technology. For example, there are concerns about the impact of AI on privacy and security, as well as the potential for AI to be used in ways that are harmful to society. It will be important for policymakers in Malaysia to involve investing in research and development, build a skilled workforce, and ensure that AI is developed and used responsibly and ethically.

One key area where AI could have a transformative impact in Malaysia is in the realm of education. AI-powered tools and platforms could be used to personalize learning for individual students, allowing them to learn at their own pace and in ways that are tailored to their individual needs and preferences. AI could also help to identify areas where students are struggling and provide targeted interventions to help them improve their performance.

Another area where AI could have a significant impact in Malaysia is in the field of agriculture. With the help of AI-powered sensors and drones, farmers could monitor their crops and soil conditions more effectively, leading to higher crop yields and more efficient use of resources. AI could also be used to develop new crop varieties that are more resistant to pests and diseases, leading to more sustainable and resilient agriculture.

In addition to these opportunities, there are also some potential challenges associated with the widespread adoption of AI in Malaysia. One concern is the potential for AI to exacerbate existing inequalities in society, particularly if certain groups are excluded from the benefits of AI. There is also a risk that AI could be used to perpetuate harmful biases or discriminatory practices.

Another potential impact of AI on society in Malaysia is in the area of environmental sustainability. AI-powered sensors and predictive models could be used to monitor and manage natural resources more effectively, leading to more sustainable and efficient use of land, water, and energy. For example, AI could be used to optimize energy consumption in buildings or to predict and prevent natural disasters such as floods or landslides.

AI could also play a role in improving public safety and security in Malaysia. AI-powered surveillance systems could be used to monitor public spaces for potential security threats or criminal activity. However, there are concerns about the potential for these systems to infringe on individuals' privacy rights, and it will be important to balance the benefits of AI-powered security with the need to protect civil liberties.

One challenge associated with the widespread adoption of AI in Malaysia is the potential for job displacement. As AI-powered automation becomes more common in various industries, some jobs may become redundant or require fewer workers. To mitigate this, it will be important to invest in retraining and reskilling programs to help workers transition to new roles that are complementary to AI.

Finally, it is worth noting that the development and adoption of AI in Malaysia will not occur in a vacuum. Malaysia is part of a global network of countries and companies that are competing to develop and use AI in various ways. As such, it will be important for Malaysia to stay abreast of global developments in AI and to develop partnerships and collaborations with other countries and stakeholders in the field.

In summary, AI has the potential to transform the way UiTM academics teach and conduct research. By automating administrative tasks, personalizing educational experiences, and improving learning outcomes, AI could help UiTM remain at the forefront of education in Malaysia. However, it is crucial to consider the potential drawbacks, such as cost, bias, job displacement, and security risks, before implementing AI technology. By carefully weighing the pros and cons, UiTM academics can make informed decisions about how to incorporate AI into their programs while mitigating any potential risks.

Hence, the future of AI in Malaysia is likely to be shaped by a range of technological advancements, social and economic factors, and policy decisions. While there are opportunities for AI to improve many aspects of Malaysian society, there are also potential risks and challenges that need to be addressed. With careful planning, a commitment to responsible innovation, and the right policies and investments, AI can harness its power to enhance healthcare, transportation, and numerous other areas of society while also mitigating potential risks. AI could play an instrumental role in shaping the future of Malaysia.

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