# MANAGEMENT TRAINEE GUIDE

# NEW GRADS TO FACTOR IN AI

With artificial intelligence (AI) already delivering some of the most significant and disruptive innovations of recent times, for current and future graduate students — including students not focused on technology — AI will inevitably impact their careers.

According a recent Microsoft *Future Ready Business: Assessing Asia Pacific's Growth Potential Through AI* study, conducted with IDC Asia-Pacific, nearly 80 per cent of jobs in Hong Kong will be transformed by AI over the next three years. The same study indicated that employees are more willing to reskill than business leaders believe they are. While 27 per cent of management felt that employees have no interest in developing new skills, only 17 per cent of employees surveyed indicated they are not interested in learning AI-related skills.

As AI tools become more prevalent in the workplace, Cally Chan, general manager at Microsoft Hong Kong and Macau says, the study highlights the top future skills Hong Kong management teams are looking for include adaptability, a continuous learning mindset and digital and analytical skills. "The demand for these skills is higher than the existing supply," notes Chan, who adds that students, including fresh graduates, are fundamental in building a pipeline of future AI talent. "With technology and the world continuing to evolve rapidly, graduate students need to embrace a 'growth mindset', and thrive on challenges while constantly stretching their existing abilities," advises Chan. With this in mind, Microsoft has established partnerships with various Hong Kong education institutions to ensure the next generation of future-ready talent will be equipped with AI knowledge and skills. For example, the Microsoft Partners in Learning (PiL) programme offered in collaboration with the Education Bureau (EDB), which includes complementary usage of Office 365 and over 20,000 hours of training, is designed to equip teachers and students in Hong Kong with the skills and knowledge for the jobs of tomorrow. Meanwhile, to provide real-life insights from executives across industries and business functions, Microsoft has partnered with INSEAD to build an AI Business School strategy module, which includes case studies, guides, and videos of lectures, perspectives and talks. In addition, Microsoft provides a wide range of online self-learning programmes, which are available to the public. "These programmes enable individuals to upskill themselves and obtain Microsoft professional certificates at their own pace, tailored to their own needs," says Chan.

Unlike many traditional career choices that have recognised learning and development pathways, careers that centre on AI are still in their relative infancy, which means that individuals need to be pioneers and take the initiative in directing their own learning and career path. Fortunately, with the ever-growing popularity of AI, there is no shortage of either online courses or face-to-face courses in Hong Kong, says Andy Chun, adjunct professor at the City University of Hong Kong and Prudential Corporation Asia, regional director - Technology Innovation.

For students and graduates with a non-technical background, Chun says learning about the capabilities of AI, machine learning, and data analytics and the impact the implementation these technologies are having different business sectors, is an important first step. Attending AI and AI-related conferences being held in Hong Kong, as well as watching TED Talks and YouTube videos about AI can also be valuable channels to gain insights. For example, the "AI for Everyone" course by Andrew Ng, who has popularised deep-learning with his programme that recognises cats from watching YouTube cat videos, is another source of learning. "It is important to understand what AI is, what AI can and cannot do, and some of the common AI concepts, such as deep-learning," says Chun who explains that, regardless of which industry sector graduates join, it is inevitable they will be exposed to AI and data analytics. "AI will increasingly impact all industries and all functions, both technical and non-technical," says Chun, who is a council member of the Hong Kong Computer Society.

However, while AI continues to open up a world of possibilities, Chun stresses it is important that hype doesn't get ahead of reality in terms of roll-out, user experience and capabilities. For instance, while data produced from AI tools is the key to understanding more about customers, potential hires, employee behaviour as well as business insights, the information is statistical and therefore unable to explain and justify decision making. "Organisations and individuals need to know what the capabilities and limitations of AI are, so that humans can take over when AI reaches its limitations," Chun says. "AI tools maybe faster and more accurate than human beings at many tasks, but a big myth is that AI is super smart." For example, Chun explains while chatbots and RPA (robot process automation) have become popular AI applications, they currently lack common sense, which is essential for learning, understanding and delivering a wide range of human-centric services.

Peter Man, general manager at operating system platform and consultancy provider, Red Hat Hong Kong, Taiwan and Macau notes that, major developments in big data, automation, machine learning, and AI are the result of smart, globally distributed teams sharing resources, making unconventional connections, and challenging one another to advance technologies. "We believe there are numerous opportunities for graduates in the open source industry in Hong Kong and across the region," says Man. To further excel in their career journey, Man suggests that graduates participate and contribute to the open source community and become part of the technology-growth ecosystem.

From natural language processing tools that use colloquial Cantonese for the retail and commercial banking sector to predicting maintenance programmes for linked IoT (Internet of Things) devices to providing a "smart" platform for delivering building management efficiency, IBM's AI tools are being widely applied to drive workflows and next-level human-machine interactions notes David Chow, IBM Global Business Services (GBS) leader. To equip themselves with the necessary skillsets to succeed in rapidly expanding AI-related job roles, Chow says it is important for job-seeking graduates to look beyond pure technology capabilities and strengthen their human talents. "We can teach the technology skills, so what we look for is people with the right emotional attitude," Chow says. Traits that IBM look for include a willingness to learn, free thinking and open mindedness. "Graduate's sometime get the importance of the academic and human qualities upside down," notes Chow.

For graduates who are interested about building a career in consulting, IBM's two-year associate programme enables participants to rotate across different business practices where they gain hands-on experience of technical business process and automation, application development and the necessary skills to become a consultant. "Often, when graduates join us, they don't have a clear idea of which area they want to work in, and actually discover new interests as a result of the programme," Chow says. For instance, the scope of IBM's GBS services include: strategy consulting, enterprise design thinking, design and implementation of solutions for digital reinvention and business process.

Meanwhile, Kevin Fitzgerald, managing director, Asia at cloud-based accounting platform Xero, believes that, with technology penetrating all facets of life, it is important not just for graduates, but also industry veterans to understand and learn how AI will increasingly change the dynamics of how work is done. "Future-ready employees will be those who understand how to breakdown and analyse complex data sets churned out by AI tools, which can be turned into actionable steps for the business," says Fitzgerald who explains the concept applies to the financial sector, customer service, human resources, government advisory, advertising, and more. "Students who graduate from university and enter the workforce armed with essential technological skills and capabilities are ahead of the curve," notes Fitzgerald. To boost their skills competencies and understanding of AI, Fitzgerald recommends that students should take AI-related courses offered at their university or professional industry bodies. "This will give them a better understanding of how AI and technology tool are likely be applied when they enter their respective field of work," he says, while pointing out while AI tools help to streamline routine work, allowing professionals to save time, the human element still needs to come through when with engaging clients and delivering tailored advice.



**Cally Chan, general manager at Microsoft Hong Kong and Macau**



**Kevin Fitzgerald, managing director, Asia at accounting platform Xero**



**Peter Man, General Manager, Red Hat Hong Kong, Taiwan and Macau**



**David Chow, IBM Global Business Services (GBS) leader**



**Andy Chun, adjunct professor at the City University of Hong Kong**