

GROOMING A DIGITAL GENERATION

With the advent of Big Data, artificial intelligence and other innovations, the face of accounting is changing at a breathtaking pace. James Kelly looks at the future training needed to help prospective CPAs utilize new technology and take on an ever-evolving role

Illustrations by Annemarie Kleywegt

Early on in his career with Deloitte, Peter Koo was identified for special treatment. In the late 1990s, he was groomed in the nascent issue of cybersecurity. After intensive training in Silicon Valley, Koo, who had left Hong Kong to study in Canada and the United States, returned to lead the Deloitte cybersecurity team.

Koo, now a partner with the firm, is responsible for identifying those attributes in new recruits to meet the needs of a changing workplace and emerging technologies, with an eye on the future.

“Candidates from traditional accounting to financial management will be our first choice although we do hire from other departments like engineering as some of them can be converted to accounting professionals,” says Koo, a Hong Kong Institute of CPAs member.

“But we may change to focus more on students with majors in finance and accounting plus a minor or elective in MIS (management information systems) or information technology-related areas.”

New skills

Proficiency in IT and computer skills, interpretive and analytical

skills, together with interpersonal and communication skills seen as essential to future accountants. The Big Four have invested significant resources to identify tech-savvy qualities in their candidates.

Simon Tsang, the former chairman of the Institute’s Qualification and Examination Board, and Partner and Asia Pacific Human Capital Leader at PwC, notes a drastic change from his entry to the profession.

“I have to admit, when I started people didn’t talk about [skills] development, but about the auditing steps,” he says. “Broadly speaking the role of audit fundamentally is the same, but the expectation is different. An audit report from 20 years ago was only one paragraph, now it’s two pages and people now try to ask for more.”

Prior to sitting down with *A Plus*, Tsang had welcomed some of the 500 graduates his firm will recruit this year in its state-of-the-art learning and development facility in Kwun Tong, which includes a professional studio and editing suite to create in-house e-learning content.

“In today’s fast changing world there is a lot of new stuff, for example FinTech and cybersecurity, happening. I do not believe the uni-

versities can teach them everything, but what universities can do is teach people the basics and the way to think and to analyse,” says Tsang.

“We hire not only accounting and business students we also hire the STEM (science, technology, engineering and mathematics) students. I focus a lot on the potential of students and when I say potential I mean learning agility and aspiration in specific areas. If people don’t have these traits it will be very difficult to succeed.”

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However, it seems proficiency in Pokémon Go is no indication to a candidate’s tech savviness, observes Koo.

“We have observed of the younger generation, interestingly, they play with their smartphones all the time but they have machine phobia. That’s why we are trying to get extra screening criteria in to see if they fear acquiring new skills. ‘I love my smartphone but I hate computers’ – this is a minor disadvantage.”

New technical areas

With the new information technology, accountants will be able to apply their data analytics and data mining skills to better understand the business. They can not only distinguish whether the data is reasonable and realistic, but also identify threats and risks, says Raymond Wong, Senior Lecturer at the School of Accountancy at the Chinese University of Hong Kong.

“Accountants with knowledge and business awareness in specific sectors together with the application of different software can discover irregularities in transactions that may indicate internal control weaknesses and uncover risks or even fraud,” says Wong.

Besides different computer-assisted audit tools and techniques, Wong says accountants should demonstrate a good understanding of different accounting systems.

With IT taking on some of the more repetitive tasks, future accountants will be free to focus on advanced analytics and to exercise professional judgment, providing greater insight. One of these new areas is cloud computing audit, says CUHK’s Wong.

“Many businesses are now looking into and adapting to cloud computing and this trend will continue to grow further. Cloud computing reduces the in-house operation cost,

and at the same time, it provides easy access to information without geographical restriction that increases operational flexibility.

“However, cloud computing involves the vendor’s support and control; therefore, the audit work is relatively more sophisticated compared with the regular IT audit work. As a result, besides considering the traditional risk-based IT audit approach, auditors may consider the value-added audit approach as an alternate way of conducting cloud computing audit.”

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Koo at Deloitte says there is a need for a bridge between the accounting and IT audit communities to address the demand for these new skills.

The right course

Both professionals and academics agree that more can be done to better understand the supply and demand of the industry going forward.

University accountancy programmes should be designed to provide students with the knowledge, skills and values, which help them become future leaders in the accounting and business community, says Wong. The training should also

focus on developing students’ leadership, analytical, problem-solving, and interpersonal and communication skills.

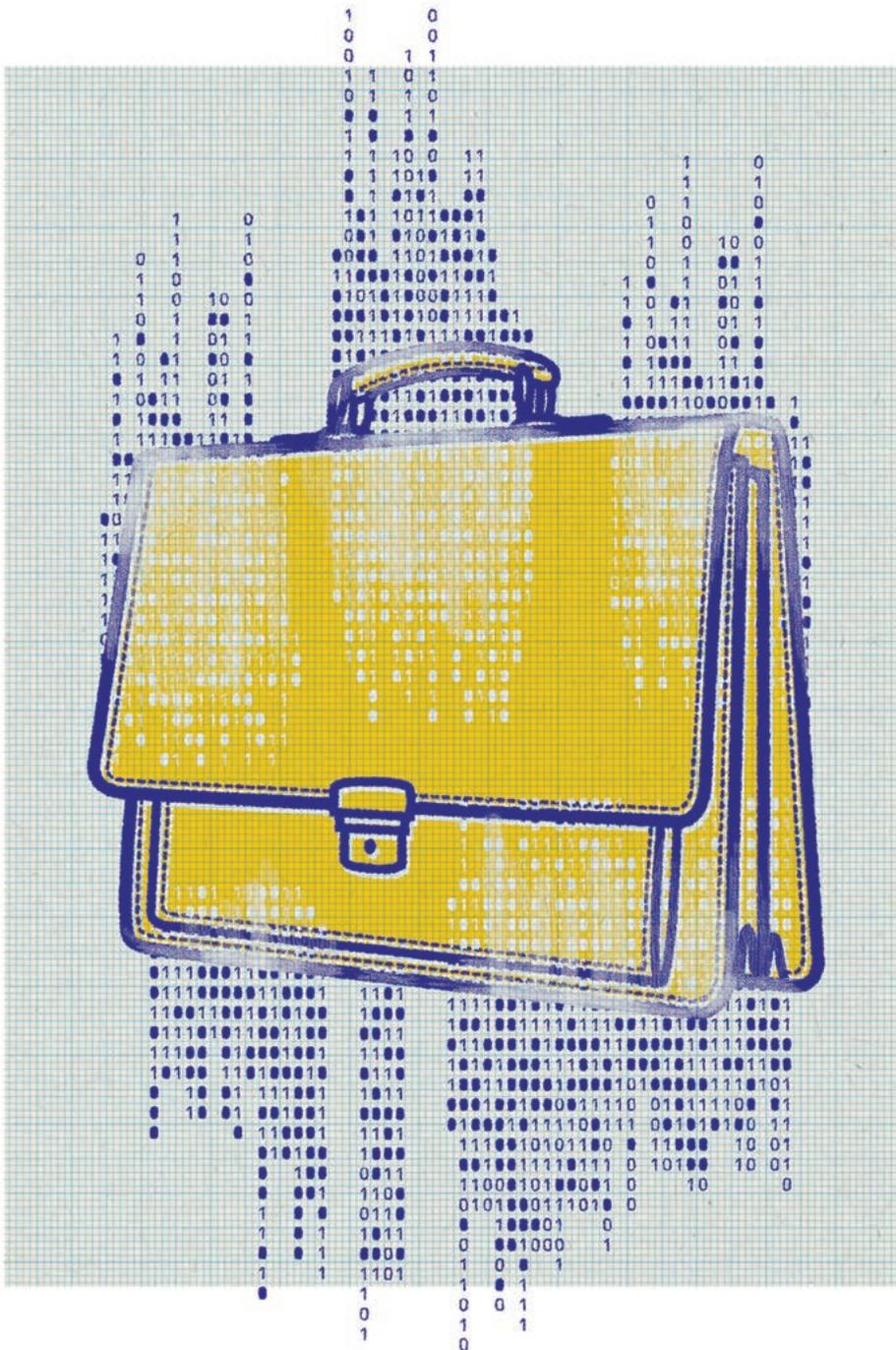
“Students at CUHK’s programme are required to take the business and accounting courses, such as marketing, management, financial management, auditing and taxation. In order to train students to become a versatile future leader, they are also required to take a language course, information technology course, general education course, and physical education course.

“Students are also encouraged to apply for internships and exchange programmes where they can acquire hands-on work experience and broaden their social networks.”

Leading American business management academic Tom Davenport, President’s Distinguished Professor of Information Technology and Management at Babson College, says the skills issue is an interesting one facing the profession.

“I think it will be a while before universities churn out large numbers of graduates with strong analytical orientations. In the short run, firms will have to provide their own training in these types of skills. Some analytic and informational skills will be concentrated in specialists who work on a variety of audit assignments. Others will be required of audit generalists at particular clients. The particular mix of skills will evolve over the next several years.”

In June, the Deloitte University Asia Pacific was launched in Singapore as its regional learning and development centre. It joins similar institutes Deloitte has opened across its global operations. According to the firm, the curriculum in the new university will be tailored to the



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region’s business needs.

Meanwhile, the International Federation of Accountants is looking at what next generation accountants will need to learn. With the advent of AI and cognitive technologies, Sylvia Tsen, IFAC’s Senior Director, Quality and Member Relations, asks whether the curriculum needs to change to prepare accounting students for this new environment.

“While the foundation skills of the profession won’t change, the curriculum will need to reflect the world around it in order to remain relevant. As AI becomes more prevalent, the

technical skills we learn as accountants and auditors will need to be supported by learning AI interfaces and understanding how AI sources and interprets information. Another key consideration for our profession is the so-called soft-skills. A professional accountant’s communication and leadership skills are of increasing importance, which help us show empathy and emotion – traits beyond machines.

“As technology changes, professionals must adjust – which is exactly what we have always done. Indeed, given AI’s utilization in a

wide range of helpful areas in other professions like health, it might also be useful in assisting personal, computer-based learning.”

This is an area being developed and implemented by the Big Four by introducing AI processes in the early stages of recruitment to identify suitable candidates and then later in ongoing personalized learning and development programmes, and even real-time performance evaluations.

“We use AI for some of the screening tests but the final round is with a partner which cannot be replaced by AI,” says Koo.

