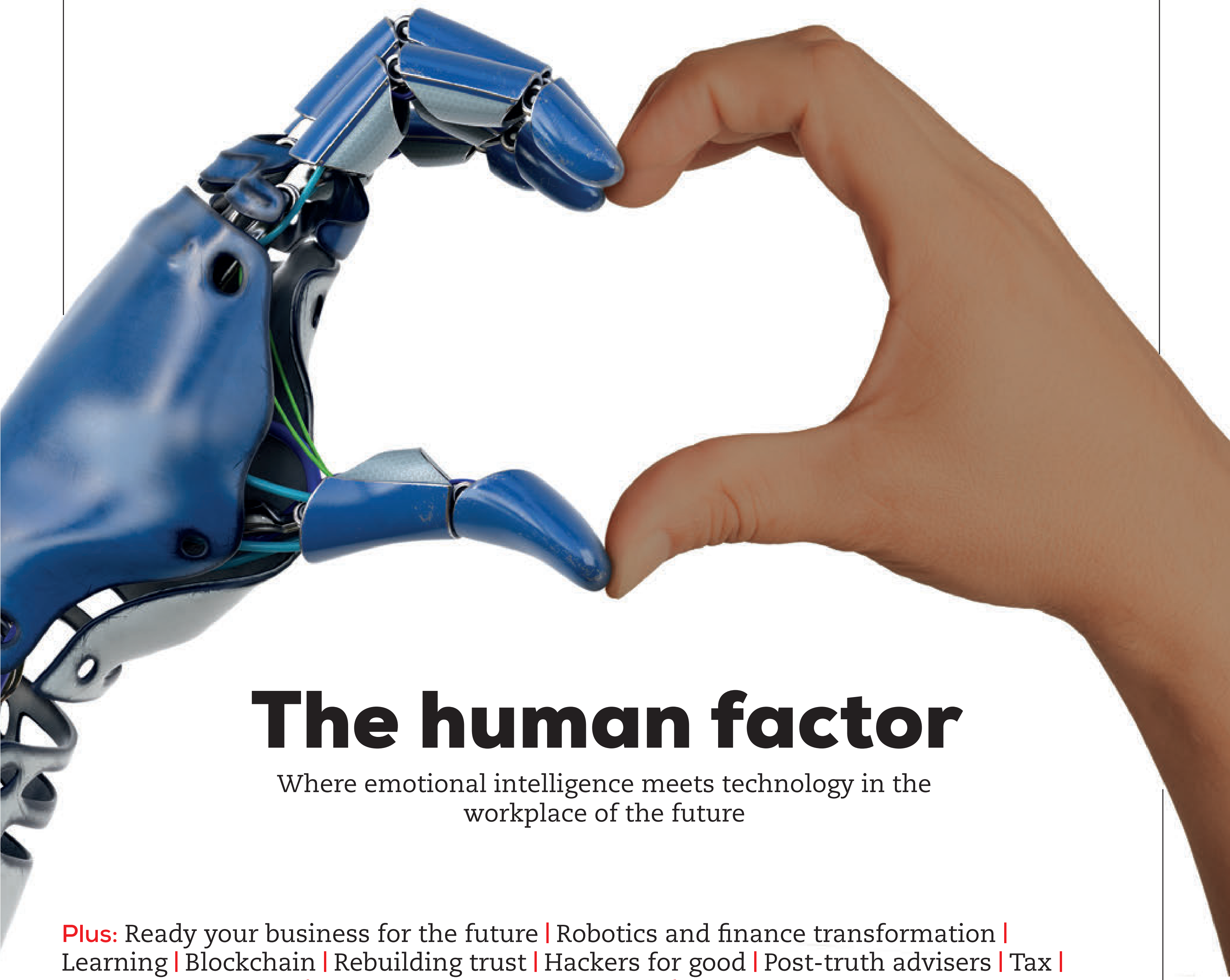
Accountancy Futures

Critical issues for tomorrow's profession

Edition 17 | 2018

Take a virtual journey into the future workplace here



The human factor

Where emotional intelligence meets technology in the workplace of the future

Plus: Ready your business for the future | Robotics and finance transformation | Learning | Blockchain | Rebuilding trust | Hackers for good | Post-truth advisers | Tax | Corporate reporting | Capacity building milestones | IFAC CEO Fayez Choudhury

ACCA Think Ahead

CHARTERED ACCOUNTANTS™
AUSTRALIA + NEW ZEALAND

About ACCA

ACCA (the Association of Chartered Certified Accountants) is the global body for professional accountants, offering business-relevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management.

ACCA supports its 208,000 members and 503,000 students in 179 countries, helping them to develop successful careers in accounting and business, with the skills required by employers. ACCA works through a network of 104 offices and centres and more than 7,300 Approved Employers worldwide, who provide high standards of employee learning and development.

ACCA

ACCA Connect

+44 (0)141 582 2000
members@accaglobal.com
students@accaglobal.com
info@accaglobal.com

HQ

The Adelphi
1-11 John Adam Street
London WC2N 6AU
United Kingdom
+44 (0)20 7059 5000

About CA ANZ

CA ANZ (Chartered Accountants Australia and New Zealand) is a professional body comprised of over 120,000 diverse, talented and financially astute members who utilise their skills every day to make a difference for businesses the world over. Members are known for their professional integrity, principled judgment, financial discipline and a forward-looking approach to business which contributes to the prosperity of our nations. We focus on the education and lifelong learning of our members, and engage in advocacy and thought leadership in areas of public interest that influence the economy and domestic and international markets.

CA ANZ

Contact us

+61 2 9290 5660
service@charteredaccountantsanz.com
Twitter @Chartered_Accts
Facebook facebook.com/charteredaccountants
LinkedIn Chartered Accountants Australia and New Zealand

HQ

33 Erskine Street
Sydney NSW 2000
Australia

Editor Lesley Bolton

Contributing editors Chiew Chun Wee, Annabella Gabb, Jo Malvern, Maggie McGhee, Rosie McKeown, Arif Mirza, Helen Ozolins, Colette Steckel, Pat Sweet

Sub-editors Dean Gurden, Peter Kernan, Jenny Mill, Vivienne Riddoch

Design manager Jackie Dollar

Designers Suhanna Khan, Robert Mills

Production manager Anthony Kay

Head of ACCA Media Chris Quick

Pictures Getty

Printing Wyndeham Group

Welcome

Explore the critical issues facing the accountancy profession in the latest jointly produced magazine from Chartered Accountants ANZ and ACCA

This edition of Accountancy Futures is published just ahead of the World Congress of Accountants (WCOA), a landmark event held once every four years, bringing thousands of members of the accountancy profession together with other business leaders and visionaries to look to the future. This congress is particularly exciting as it's in Sydney, and Chartered Accountants Australia and New Zealand (CA ANZ) is co-hosting the event with CPA Australia. ACCA is a gold sponsor. The strategic alliance between ACCA and CA ANZ will be very much in evidence: for example, we'll be talking to delegates about our recently released joint research with KPMG on the impact of robotics and artificial intelligence on the accountancy profession. You can read all about this on page 13. One of the main aims of WCOA is to stimulate thinking, innovation and preparation for the years ahead. Wherever you are reading this edition, we hope that the following articles will achieve the same objective.

You can find out more about CA ANZ's research and insights at charteredaccountantsanz.com/news-and-analysis/insights/research-and-insights

You can find out more about ACCA's research and insights activities at accaglobal.com/insights

Jane Stanton, CA ANZ president; Leo Lee, ACCA president.

Try our virtual experience

Use the camera on your phone and aim it at the QR code on the cover of this edition to take a trip into the future and explore how your working life might look. Move your phone around to explore the different elements of our future world.

The ACCA and CA ANZ alliance

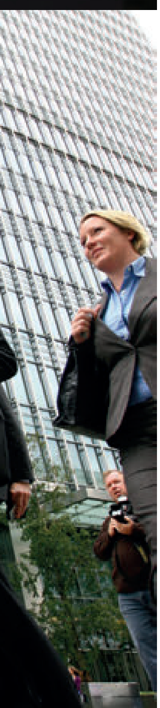
A strategic alliance was founded in June 2016 by ACCA and CA ANZ to shape and lead the future of the accountancy profession. Our combined voice represents the views of more than 830,000 current and future finance professionals in around 180 countries, offering unique range and scale. The two professional bodies work together to advance public value, to promote and represent members, to provide greater support and resources to members and other stakeholders, and on research projects and events. Together, the two bodies have more than 100 offices and centres around the world.
accaglobal.com/alliance
charteredaccountantsanz.com/alliance

Share a digital version of this magazine

This publication is also available in a range of digital formats, including as an app for Apple, Android and Kindle devices.
charteredaccountantsanz.com/alliance; accaglobal.com/alliance

04
06
08
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50

Innovation




The human factor

Accountants will need to reassess their relationship with technology as the areas where automation meets emotional intelligence increase

What does it mean to be human? What makes you who you are? Is it your body? Your emotions? Your soul? Your brain? All your experiences? Your body's biology, sensations and actions? As a human, you are all of this and more. You think and feel. You are capable of complex cognitive and intellectual feats and high levels of motivation and self-awareness. You are an astonishing thing. But in a world where artificial intelligence (AI) is taking over tasks that require memorisation and logic, how will your human intelligence retain its advantage? What's your superpower going to be?

The answer could be your emotional intelligence (see box 1). 'This is an area that ACCA has been exploring,' says Narayanan Vaidyanathan, head of business insight at ACCA. 'We know, that to thrive now and into the future, professional accountants need an optimal and evolving combination of professional competencies or quotients.' These quotients are each a collection of technical knowledge, skills and abilities,

combined with interpersonal behaviours and qualities (see box 3), and ACCA has identified seven quotients, including one for emotional intelligence (EQ).

'When we talk about EQ we do not mean something amorphous, we mean something very specific,' explains Vaidyanathan. For professional accountants, ACCA characterises EQ as: 'the ability to identify your own emotions and those of others, harness and apply them to tasks, and regulate and manage them'.

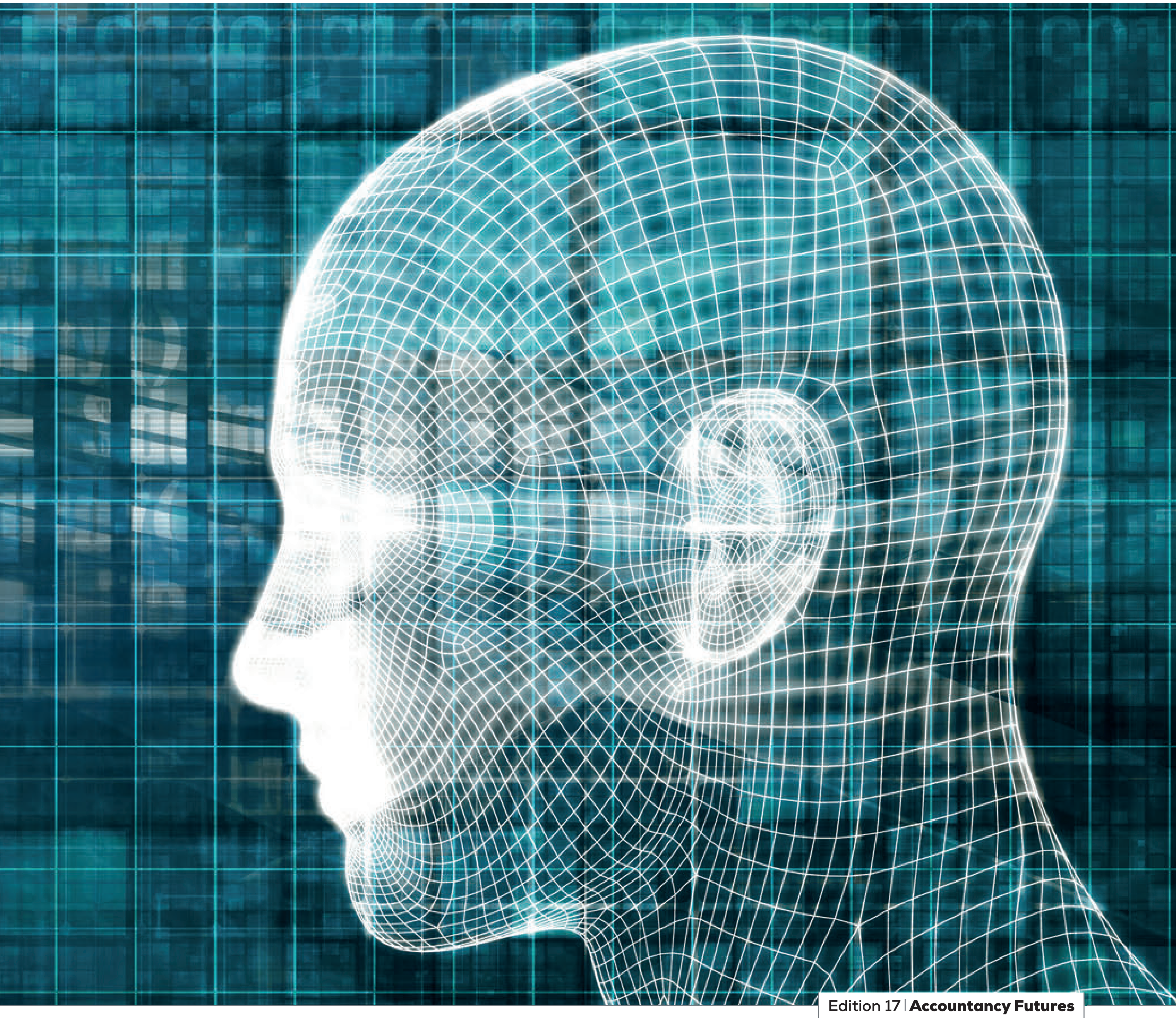
New ACCA research considers what the current state of EQ looks like around the profession and what the EQ implications of technology developments may be, looking ahead. It focuses on areas where EQ and technology overlap now and in the future.

ACCA has researched six areas of impact: change readiness, cognition and learning, ethics and beliefs, human-machine interaction, increased diversity and shifting power. The implications were then considered for five emotional competencies that are key to the EQ of professional accountants: growth mindset, self-knowledge, perspective taking, empathy and influence. 'The purpose of this work is not to dive into the psychology of EQ but to contextualise it for

A brief history of emotional intelligence

Among psychologists, historical definitions of intelligence have tended to emphasise cognitive aspects, such as memory and problem solving. However, during the 20th century psychologists such as Professor Edward Lee Thorndike and Professor Howard Gardner helped to expand accepted notions of intelligence by distinguishing between multiple types of intelligence, and in 1990, Professors Peter Salovey and John Mayer coined the term 'emotional intelligence' (EQ).

Salovey and Mayer described it as 'a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, discriminate among them and use this information to guide one's thinking and action'. In 1995, based on their work, Daniel Goleman, a psychologist and journalist, wrote his book *Emotional Intelligence*, which sold in its millions, promoting the concept that EQ is more important to success in our personal and professional lives than IQ.



the accounting profession,' says Vaidyanathan – to prepare accountants for a very different future.

'It is vital that the profession embraces technology so that we, and the next generation of accountants, are agents of change, helping to shape the technology agenda not simply following it,' says Rachel Grimes, CFO of technology with Westpac and president of the International Federation of Accountants. 'Cloud-based computing, hosted applications, big data, and the rise of machine learning are already transforming the way we work. As the quantity and sources of data increase, the need for human accountants to understand context, interpret nuance and apply professional judgment also grows.'

Managing change

Accountants are increasingly expected to have the soft skills and emotional competencies to manage the accelerating speed of change and adapt to its transformational nature. 'In the high performing organisations we work with, accountants are expected to incorporate innovation and change into their day-to-day roles and responsibilities, by working on the business not just in the business,' says Brendan Sheehan, ACCA Council member and CEO of finance transformation consultancy White Squires.

Joseph Owolabi, director, corporate advisory, Deloitte Australia, and ACCA Council member, notes how EQ is also thrown into sharp focus by the diversity that technology can facilitate: 'More remote working and collaboration means less face-to-face contact in meetings.' Ways of developing and exerting leadership, influencing, motivating, mentoring team members, and developing and demonstrating empathy are all affected. 'The world is a global village – often you need to get on a conference call. But you are expected to be able to decipher moods, predisposition and motivation by verbal clues, hesitation, rhythm and other emotional pulse indicators. Ethics and integrity – fundamental to our role as accountants – are largely driven by application of judgment, which in turn is strengthened by high levels of emotional quotient,' he says.

As the areas where technology meets EQ increase, so does their significance for professional accountants

Learning from the past

Looking back can help us to see into the future. In the 19th century the arrival of the telephone meant less reliance on face-to-face communication and because people no longer had that full package of information what was heard over the phone became much more important to decision-making. Now technology is taking this to the next level, this is affecting how we communicate and make decisions and the emotional competencies we need to do this successfully.

Rapid evolution of the mobile phone and other devices, in combination with anywhere anytime access to cloud resources and social media (and its echo chambers), can make us feel more closely connected to each other. However, it also means that many people talk less to family, friends and colleagues, and we will need to find ways to develop the new emotional competencies that will be needed if we want to sustain the sort of human interactions that glue people together.

and the need for them to reassess their relationship with technology itself. Lynn Morrison, ACCA panel member and assurance partner from EY Australia, who leads EY's Oceania China assurance practice, is expecting a paradigm shift: 'Relationships between humans and technology are changing fundamentally. We will need to challenge the way we think of work and understand the pros and cons of this changing relationship. We will have to learn how to build and manage our relationship with technology and manage the impact both personally and professionally.'

A new symbiosis

There will still be a symbiotic relationship between accountants and technology but it will not follow the pattern established in the past. Scribes used clay tablets to record commercial transactions in the ancient Near East; early printing presses enabled Luca Pacioli to promote his 16th century treatise on double-entry bookkeeping; accountants powered the microcomputer revolution in the 1980s with their enthusiastic uptake of electronic spreadsheets. The future promises a stronger and more intimate symbiosis between the profession and technology.

'Accountants have seen technology as a tool to help us work more efficiently, to perform better and to automate boring tasks in the past. With further technological advancements in areas of RPA, AI and blockchain etc, we can predict some tasks will be completely replaced by technology in the future.

'Accountants need to be more resilient in this transition process, have open growth mindset to continuously reskilling ourselves, in particular those humanity skills, and focus on more important judgmental and strategic areas. This is part of the process of building a different kind of relationship with technology,' says Morrison. She sees a future where human processing units and computer processing units will be working together, learning from each other and achieving more through their close collaboration than either could achieve alone. The skillsets of collaboration and technology are already overlapping increasingly, as highlighted in a recent CA ANZ report *The Future of Talent: Opportunities Unlimited.*

Futurist and researcher Mark Pesce suggests one approach could be to open up finance teams and accountancy firms to collaborate better among themselves and with colleagues – and with technology itself: 'Every time we have a basic question we reach into our pocket, take out a smartphone and get the answer from Google, Wikipedia or Siri. So we are already creatures who are a combination of human intelligence and machine learning.'

In the future, what accountants and software tools can learn from each other will increase and members of the profession will no longer be limited by their personal knowledge or the length of their career. The pyramid structure that has traditionally characterised accountancy firms and finance departments will no longer be necessary. However, as Matthew Campbell, technology audit director, KPMG, notes: 'Knowing how to interact with and leverage the knowledge of hundreds if not thousands of individuals through cognitive technology will drive a different skillset in finance professionals.'

The profession's use of artificial intelligence (AI) technologies and techniques is not yet widespread, but it is already informing and enhancing decision-making by professional accountants in companies and practices across numerous specialist areas. Developments around financial statement audit may exemplify the future direction of travel for the profession by showing: how existing technologies are changing established practices; how emerging technology trends may undermine business models and institutional power structures; and how factors such as these increase the importance of EQ.

The Canadian fintech MindBridge has created an advanced analytics tool powered by AI that offers a complete solution for audit planning, testing and reporting needs. The MindBridge Ai Auditor can analyse 100% of a general ledger, do completeness tests on the data and rank transactions on the basis of risk. Use of machine learning techniques enable it to acquire knowledge based on experience and education: utilising the risk weightings that its human users have applied, for example, helps it to get better at identifying the riskiest transactions and to enhance processes such as sampling.

EQ will influence accountants' attitudes on the notion of working collaboratively with technology. Vaidyanathan says: 'To interact effectively with another entity, whether it's a human or a machine, self-knowledge is crucial, because your interactions with others cannot succeed if you don't understand your own behaviours.' Auditors and other professional accountants will also need emotional competencies that allow them to adapt to technology-enabled transformations much faster than they have ever needed to in the past.

After much talk about how blockchain and distributed ledger technology might transform audit, one developer, Auditchain, is well on the way to creating a public blockchain-based 'decentralised continuous audit reporting protocol ecosystem for enterprise assurance, reporting and disclosure'. It could be a mistake to underestimate its potential, because the 'decentralised consensus-based attestation for reward' approach it uses has already been successfully exploited by one of the great disruptors, Airbnb.

There is a sizeable overlap between emotion and technology in the age of 'distributed trust', where people are comfortable opening their homes to strangers (Airbnb), lending small amounts of money to businesses in the developing world (VisionFund) and sourcing local help with household jobs (TaskRabbit), after being reassured by the online codification of their reputation. These business models have profound business and social implications and challenge the long-established power structures of governments, nations, institutions and organisations, with consequences for EQ in terms of influence.

Quotients for success

ACCA introduced its professional quotients for success in 2016, based on the extensive global research undertaken for its ground-breaking report *Professional accountants – the future: Drivers of change and future skills*. Looking ahead up to 2025, it recognised that the accountant of the future will need an optimal and changing combination of professional competencies; a blend of technical knowledge, skills and abilities combined with interpersonal behaviours and qualities.

These are grouped into seven constituent areas: technical and ethical; experience; intelligence; digital awareness; creativity; vision; and emotional intelligence (EQ). ACCA has deepened its research into these areas and their interdependencies. Its latest global research, which involved 4,500 accountants, focuses on the key area of EQ for the professional accountant, which ACCA defines as: 'the ability to identify your own emotions and those of others, harness and apply them to tasks, and regulate and manage them'.

In *Emotional quotient in a digital age*, ACCA's research looks at the growing significance for the professional accountant of EQ in the digital age. It considers various technology developments and trends that may impact on a number of areas (cognition and learning, change readiness, ethics and beliefs, human-machine interaction, increased diversity and shifting power) and their implications for a number of emotional competencies (adaptability, empathy, identity, influence and self-knowledge).

Understanding these interactions is vital for professional accountants in the fast-changing digital work environment, because the benefits of developing your EQ include:

- the ability to adapt to change
- improved leadership skills
- being more effective in your professional role.

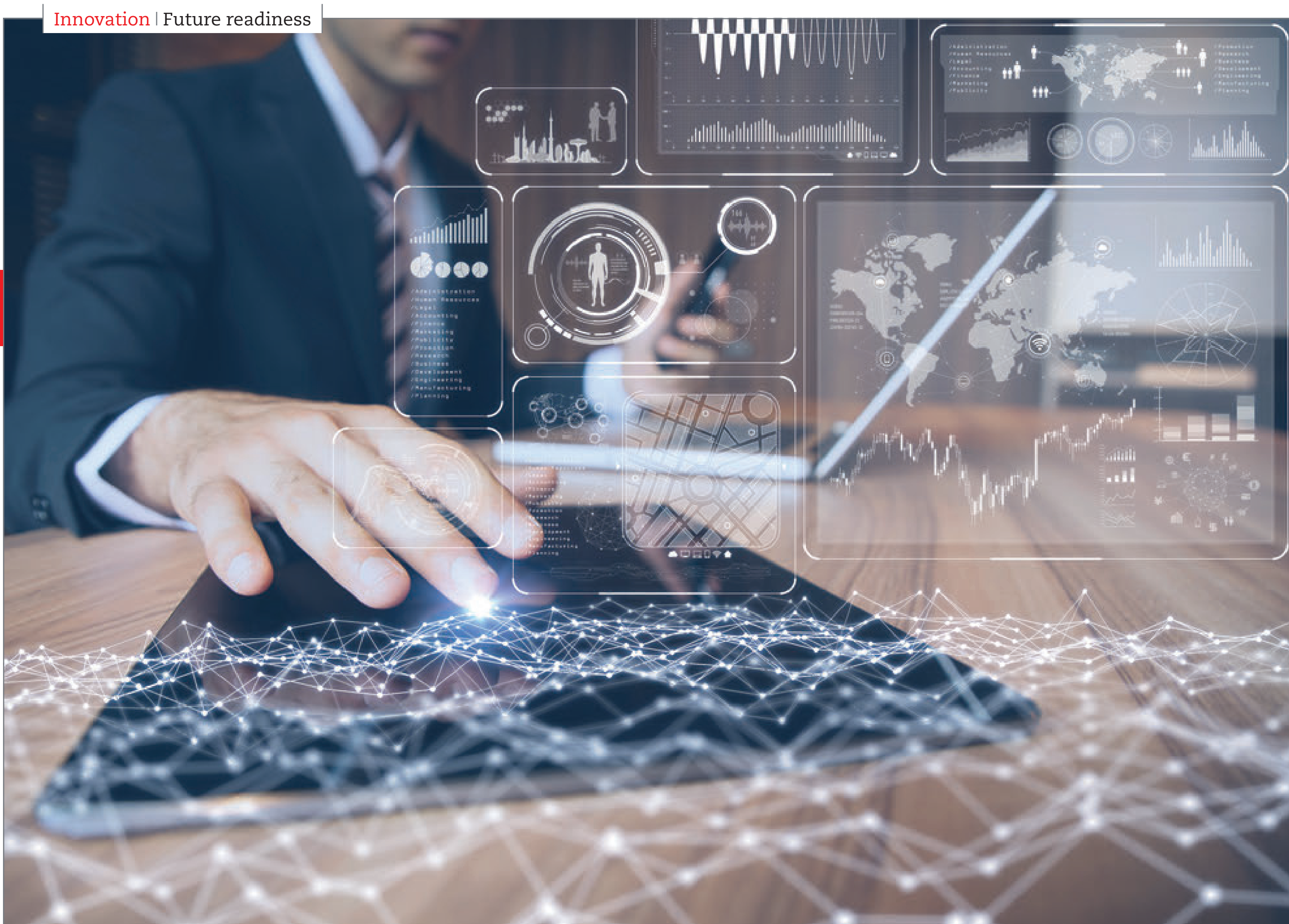
ACCA has developed a number of interactive online tests, with diagnostic tools, that help accountants to assess their own EQ and the other professional competencies and quotients the professional accountant will need. These can be found, along with ACCA's research on the future of accountancy, at future.accaglobal.com/the-future-of-accountancy

Some professional accountants may need to develop new social competencies and technology skills if they are to inspire, encourage and direct compellingly in peer-to-peer environments. The wider implications of this shift are eloquently explained by WCOA speaker Rachel Botsman, lecturer at Oxford University's Saïd Business School and expert on trust and the collaborative economy, in her books and talks.

In *Who Can You Trust? How Technology Brought Us Together – and Why It Could Drive Us Apart*, Botsman places the world on the cusp of massive social change, driven by technologies that are rewriting the rules of human relationships: 'We might have lost faith in institutions and leaders, but a new world order is emerging,' she says. If accountants are to adapt to this shift they will need to understand how trust is built, managed, lost and repaired in the age of distributed trust and increasingly smart machines, and carefully assess the implications for EQ – or develop another superpower.

Lesley Meall, journalist

Read *Emotional quotient in a digital age* at accaglobal.com/insights



Is your business ready?

ACCA's new readiness indicator and a new CA ANZ study highlight the issues businesses should be addressing in preparation for the future

Businesses are facing a bewildering array of challenges as they peer into the future. Financial professionals are aware that they are operating in an era of volatility, uncertainty, complexity and ambiguity (VUCA) and that they need to encourage their employers to think how to act across a range of issues to ensure business is ready for the future.

ACCA has set out the most pressing issues that corporates across many sectors need to be thinking about in order to face the future in a new readiness assessment indicator, designed to help them identify where they should be focusing their efforts (see box).

Whatever the issues that businesses are facing they need to be able to respond in an agile fashion. CA ANZ has looked at how businesses could be dynamic, digital and socially responsible in a survey called *The Future of Business*, published in June 2018. It took the views of 1,500 Australian and New Zealand business leaders concerning their plans for, and views on, the future. The survey had much in common with ACCA's themes, looking at the evolving response of business to themes of globalisation, digital disruption, shifting demographics and climate concerns.

Rick Ellis, CEO of CA ANZ, says: 'Agility can be broken into five elements of flexibility, speed, leanness, learning and responsiveness.' These elements – adapted from a model by academics Qumer and Henderson-Sellers – should help businesses to consider how agility can be incorporated into their plans in a tangible way. Businesses most likely to succeed are resilient and able to act and react quickly to meet the needs of their customers.

Agile businesses surveyed were more than three times more likely to report having above average revenue growth.

> 'Expectations of the finance function increasingly gear towards faster and more sophisticated data insights'

Financial professionals need to react in an agile manner to the demands of the global economy through building up their networks to ensure that individually and collectively they possess the required global finance knowledge.

Networks are integral to the development of new professional advisory services in the context of internationalisation. This is because global value chains require close and efficient coordination of activities between businesses. In knowledge networks staff can learn, collaborate and access good practice.

Perhaps the leading example of the need to establish networks across national borders and pushing through global barriers in the 21st century is China's Belt and Road Initiative (BRI). This is set to transform global connectivity. With over 60 countries identified along the route and US$800bn invested by the China Development Bank, the implications of the project are far-reaching and significant.

But the prizes offered by the BRI are not guaranteed. As in every business venture in the VUCA era, there are risks for the countries and companies involved. The way for entities to explain and communicate their risk is though better reporting.

Maggie McGhee, executive director – governance at ACCA, says: 'In an increasingly complex world, the question financial professionals need to ask is what is the role expected of leaders in managing risk? How can they maximise the opportunities as well as protect their organisation?'

One of the ways that organisations can protect themselves is by employing people with the talent required and ensuring that the skill base is kept up to date, which ensures in a fast-moving environment that there is still an ongoing commitment to training.

Essential CPD

This continuous professional development is particularly important for finance professionals as the finance function continues to develop so rapidly. For individuals it provides satisfaction and a guarantee of personal achievement and advancement. For a business it ensures that we remain relevant to addressing the needs of our clients and stakeholders by matching or exceeding their evolving expectations.

As McGhee says: 'Expectations of the finance function increasingly gear towards faster and more sophisticated data insights, as well as business advice. Organisations must ensure teams are up to the task.'

As blockchain demonstrates, behind much of this uncertain but opportunity-filled future is the relentless march of technology. One of the key issues facing the business sector in the digital age is how trust is dying. ACCA research, *Ethics and trust in a digital age*, reveals that 89% of professional accountants believe trust will become more important in this digital age. If that is the case, the question is how can businesses earn and keep that trust?

One way, according to the CA ANZ research, is that businesses are becoming mindful of their broader responsibility in order to attract and retain customers.

Look out for the articles with the icons below in this edition which address these key issues.

New indicator to assess your future readiness

ACCA has developed a new interactive readiness assessment indicator for employers to assess how ready they are across the 10 key future themes below, offering support and information depending on the answers given. Try it at accaglobal.com/readiness

1. Ethics and trust
2. Technology
3. Training
4. Blockchain
5. Skills
6. Audit
7. Talent
8. Network
9. Belt and Road
10. Risk

Today, 87% of businesses are involved in at least one action to build their social responsibility profile, and this is expected to grow to 94% in five years' time.

However, they answer that technology is set to revolutionise – once again – the finance functions. Artificial intelligence (AI) and robotics offer a golden opportunity for finance professionals to concentrate on added-value activity and insight, while increasingly pervasive machine learning will perform the more mundane tasks of accounting and reconciliation.

Ellis is clear that each different business has to find its own answer. He says: 'For one business, it may mean introducing artificial intelligence into a logistics and supply chain; for another, it might mean a greater focus on corporate social responsibility.'

The concept of global uncertainty is not going anywhere. If anything, the next few years will see it increase, with a new wave of exponential technologies being adopted. Though uncertainty is not comfortable for most businesses, waiting for it to tide over is not an option. Businesses need to be prioritising agility and adaptability – not just in products and processes, but in business models too.

For all the challenges, however, the CA ANZ research found optimism. Three-quarters of businesses were positive about their outlook over the next five years. By being proactive, seizing opportunities and looking forward, business owners are best placed to secure their own prosperity.

Peter Williams, journalist and accountant

Read CA ANZ's report *The Future of Business* at bit.ly/ACCA-FutureofBusiness

Unlocking potential

ACCA's Judith Bennett looks at the skills the next generation of professional accountants require to meet the needs of employers

Judith Bennett is ACCA's director of professional qualifications and has been leading the redesign of the ACCA Qualification.

Today's workplace is changing as it prepares for tomorrow's new working environment, and professional accountants in the years ahead will face a very different set of expectations.

Artificial intelligence, data analytics and blockchain are set to disrupt accounting practices and finance functions. Demands for flexible working, clear career progression and early leadership opportunities mean that employers need to offer employees an attractive package, including training, if they are to retain and get the best out of their talent.

This is not just our opinion; it's based on our research project, *Professional accountants – the future*, for which we spoke to thousands of employers globally. The research told us that the increasingly globalised, digitised and uncertain business environment we work in means that professional accountants have a more vital role to play than ever before.

These employers are calling for forward-thinking professionals to use tech to their advantage, combine technical excellence with high ethical standards and management skills, and thrive on a global stage.

We used what the employers said to identify the key skillsets – seven technical, ethical and interpersonal competencies – that professional accountants will need to demonstrate in the future. These seven 'quotients' (intelligence, creative, digital, emotional intelligence, vision and experience, with technical and ethical competencies at the heart) have helped us redesign the ACCA Qualification.

Over the last few years, we've therefore launched a range of innovations that enhance the breadth and depth of the qualification, with more focus on the practical application of core skills in the modern workplace. The enhancements include new computer-based assessment in our Applied Skills exams, using word processing and spreadsheet tools.

We launched a new market-leading Ethics and Professional Skills module in 2017, which increases our students' employability by exposing them to realistic business situations that develop the full spectrum of advanced ethical and professional skills.

We've also revised the final level of the ACCA Qualification, now called Strategic Professional, with the first exams held in September 2018. It now includes an enhanced corporate reporting exam, Strategic Business Reporting, so students can more confidently explain the implications of transactions and reporting to stakeholders, and an innovative case study exam, Strategic Business Leader. In the case study exam students must use a mix of technical, professional and ethical skills to evaluate and present their responses to challenges based on a real-world scenario.

The enhancements to our qualification have been designed to meet the needs of employers, ensuring that they get the pipeline of talent their organisations need to unlock their commercial potential – as well as meet the needs of student accountants.

But we will not now stand still, and nor should anyone in or around the accountancy profession. We must constantly scan the local and global horizon to understand the changing environment.

The global drivers of change are regulation and governance, digital technologies, expectations and globalisation. Employers need to plan how to adapt to these current and emerging trends that will have the largest impact on the business environment.

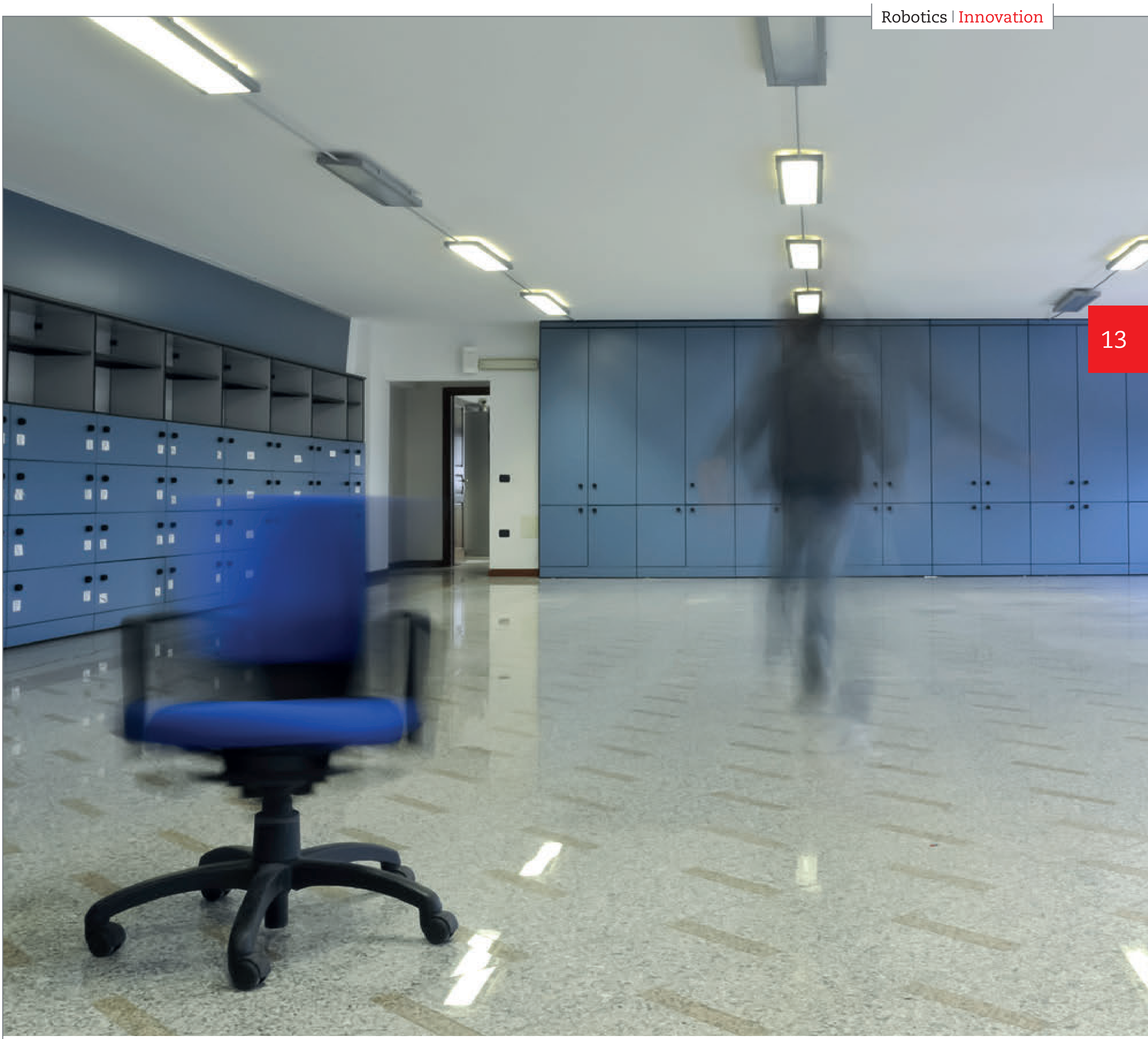
By having trainees and employees equipped to deal with this environment, employers will have the confidence that they have the best equipped teams to meet these challenges head-on. AF

Explore our Competency Framework

ACCA's Competency Framework is a tool that can be used to explore and analyse the knowledge, skills and values that the ACCA Qualification provides. Employers can use it to help train and recruit staff, and to create benchmarks to evaluate the performance of their team capabilities. Learn more at bit.ly/ACCA-competency

The redesigned ACCA Qualification

Find out more about how ACCA has been working with members, employers and partners around the world to evolve the ACCA Qualification at accaglobal.com/thefuture



Transformers

RPA adoption can be the driver of strategic transformation of the finance team, finds a new joint report from ACCA, CA ANZ and KPMG

Robotic process automation (RPA) is a major opportunity for the finance profession. For the CFO, implementing RPA goes way beyond cost reduction. It promises improved controls, faster processing speed and better data quality. And the chance to transform the finance function.

A joint report, *Embracing robotic automation during the evolution of finance*, by ACCA, CA ANZ and KPMG, shares the results of a survey of more than 2,500 ACCA and CA ANZ members, offers insights from leading organisations around the globe on robotics adoption and highlights the growing interest in RPA and identifies implications and opportunities for the finance function.

As Jamie Lyon, portfolio head, ACCA, says: 'Automation will reduce the more mundane activities, freeing up the resources of the finance function to add value and use its professional skills and competencies.'

Perhaps unsurprisingly there is confusion in the marketplace around the role and opportunities of robotics for the finance profession.

Ten lessons learned from RPA pioneers

1. Invest in change management capability. Introducing robotics technology successfully requires the capability to ensure programme delivery and manage employee engagement.
2. Engage employees through the journey. Understanding the benefits and the implications for their roles and responsibilities ensures minimal resistance.
3. Build RPA capabilities widely in the finance team. Ensure the technology understanding is with those who understand the business processes to build a strong wide platform for adoption and scale-up.
4. Start small. Learn in a safe environment where risks are minimised; don't start with complex, company-wide processes.
5. Involve IT early, ensuring buy-in and support in terms of security, programme management and robot coding capability.
6. Model governance well. Strong centralised RPA governance structures ensure supplier and licensing arrangements are efficient, bots are maintained and controlled and a proliferation of RPA 'point solutions' is avoided.
7. Choose processes. Understand processes and inherent complexities before applying software and don't be too ambitious about the processes chosen for RPA adoption.
8. Optimise processes first. Optimise, eliminate, simplify or standardise. Robots don't fix bad processes.
9. Know when to stop. RPA is rarely the solution to automating 100% of an end-to-end solution.
10. Recognise when RPA is not the right solution. Replacing legacy systems or building an API (application programming interface) using more traditional IT automation protocols may be the better solution longer term.

RPA may evoke images of sophisticated robot-like machines assembling cars, but the reality is markedly different

The report is timely as interest is growing among CFOs and investors in RPA technology.

In an article in March, the *Financial Times* noted that: 'Software robots have become one of the hottest fads in business automation, as a new wave of AI [artificial intelligence] is poised to sweep through the back office functions of large corporations.' And it added that investors were jumping on the bandwagon.

While the hype focuses on technology, CFOs need to recall that deploying RPA is as much about change management and stakeholder engagement as it is about implementing software.

Challenges

Any change as significant as implementing RPA will bring challenges. In business transformation the soft stuff – the people element – is the hard stuff.

CFOs have to engage with finance function staff to involve them in the transition process and to work with the technology. With so many media reports focusing on the threat from robotics it is not surprising that some people are scared because they think they are going to lose their jobs.

Working with robots remains mainly the preserve of big organisations. The report reveals a split between large and small organisations on RPA. According to the survey, three-quarters of the largest organisations (those with more than US$25bn annual revenue) had either trialled or implemented RPA in the finance function, compared with only one-third of entities with turnover less than US$50m. One of the challenges is to encourage smaller organisations to explore the benefits of RPA.

Nikki McAllen, partner, financial management at KPMG, says RPA could be as suitable for smaller entities as larger ones. She adds: 'The application of RPA can significantly reduce processing costs, improve the productivity and knowledge of employees and the quality of the data and data flows. So if it is not cost-prohibitive, then I would be considering RPA as a potential solution regardless of the size of the organisation.'

The biggest barrier cited by CFOs is knowing where to start. Hesitation over embracing the technology suggests a lack of knowledge over how it works. Finance teams need a strong understanding of the technology and how it functions so that they can lead its implementation in the finance function and outside. (See 'Ten lessons learned from RPA pioneers', left).

Geraldine Magarey, thought leadership and research leader, CA ANZ, cites two main reasons why RPA is not being adopted yet. She says: 'First we find that finance teams are still understanding the benefits that RPA may bring to their businesses. There is not a lot of information about how RPA can work in a finance setting and which part of the finance function would be suitable for RPA. This is part of the reason we put this report together. Secondly, finance teams have many competing priorities including for resources so for many it is not the highest priority at the present time.'

But the finance function may come to see that the birth of RPA changes the paradigm, offering a simple automation fix – often to start by sitting on people's desktops – which enables different legacy systems to interact with one another.

This misunderstanding around the basic functionality and applicability of RPA can also result in finance leaders looking to IT for technology teams to dominate automation decisions in relation to RPA whereas it should be 'business led' but working collaboratively with the IT function.

The reality

RPA may evoke images of sophisticated robot-like machines assembling computers or cars, but the reality is markedly different.

RPA is software that can be easily programmed or instructed by end-users to perform high-volume, repeatable, rules-based tasks in today's finance world where multiple enterprise resource planning systems (ERPs) and loosely integrated support systems are commonplace.

This 'swivel chair' automation product, so called because it replicates the actions of a human accessing multiple systems, cuts across the IT legacy landscape and helps connect it together.

It automates tasks and transfers data within processes much more quickly and accurately, freeing up finance resource away from mundane tasks.

McAllen says: 'Where RPA is deployed successfully, there is often a "snowball effect" – the benefits from the first implementation can be immediate and organisations see multiple opportunities to automate, eager for more.'

RPA 'user-interface' technology means bot solutions utilise the same application interfaces and login IDs as a human would. Ease of implementation is optimised because no underlying system changes are required.

As Lyon points out, the automation agenda for the finance function is not new: it can be seen in different tools and technologies designed to improve processes, reduce costs and lower the number of manual workarounds. Key among these are the advent of the ERP systems in the 1990s; the rise of spreadsheets and macros; and even screenscraping technology.

Clear benefits

AMP Capital Australia is a large global investment manager headquartered in Sydney, Australia. Its fund technical and finance services department is deploying robotics in the fees and billing team. A legacy of older IT systems and infrastructure meant multiple workarounds and use of Excel were needed to manage frequent fee changes.

A key lesson from the initial RPA implementation was that taking 'as-is' processes and applying a robotics solution was sub-optimal and prone to failure because of the number of exceptions or different human interventions still required. To deal with this issue, experts in accounting and process redesign were hired to ensure a sustainable solution.

As a result, the control environment has improved significantly with a lower error rate. The benefits of RPA have been the automation of the manual tasks of more than five full-time equivalent staff as well as an extra A$1m of revenue so far due to faster revenue collection, error reduction and identifying client recharges in the available time window.

The RPA business case

A better understanding of the technology among finance professionals will inform its application and provide context for where it should fit in the CFO technology roadmap securing the business case for scale-up.

CFOs thinking about robotics should be aware of the benefits for all sizes of businesses if RPA is correctly targeted (see case studies, right). This is not just about technology – rather it provides a significant opportunity for the finance organisation to retrain and redeploy finance staff on added-value activities that require professional judgment, decision-making and interactions with customers.

CA ANZ's Magarey says: 'The use of new technology, particularly robotics, provides new opportunities for finance teams of the future. It will free up the teams from some of the more repetitive tasks and allow them to focus more on the higher-level functions.' RPA provides the opportunity for the finance function to move decisively towards value-adding activity. AF

Peter Williams, journalist and accountant

Read the full report, *Embracing robotic automation during the evolution of finance* at accaglobal.com/insights

Centre of excellence

Implementing RPA in pharmaceutical giant GSK's finance shared services centre in China was part of a wider transformation for shared services. Targeted at high-volume and repetitive processes with significant manual intervention, two primary goals were adding business value and improving the control environment.

Scaling its RPA deployment has made GSK look at its governance model. Starting from a locally driven finance team initiative, as the implications became more widely understood a central technology team – based in the UK – was established as an RPA centre of excellence.

Establishing the command and control hub has produced many benefits including:

- better coordination of software licensing and supplier engagements
- enterprise-wide visibility of work scheduling of the robots
- centralised maintenance and control of robot performance including analytical reporting.

Taking control

An evolving workplace and emerging technologies are changing the way professional accountants learn. ACCA's Clive Webb reports

Clive Webb is senior insights manager at ACCA.

Life for professional accountants is evolving. The shifts that we face need us to develop new skills and to grow existing ones. This is at a time when the nature of employment is changing too. We need to be increasingly self-motivated in ensuring that we have the right balance of skills to meet the demands of our roles. How do we achieve this? ACCA has looked at the future of learning in the profession and concluded that taking more responsibility for our own development is an opportunity to take control of our careers.

There are four key factors that influence learning in the workplace and hence how we obtain the skills that we need to ensure we are successful.

The first of these factors is the impact of the evolution of technology on finance. We are aware of the predictions about the impact of automation in the workplace; the loss of jobs that particularly impact the entry-level roles that have provided the traditional training grounds for generations of accountants in industry or in practice. While this is indeed occurring, it presents an opportunity for the professional accountant. We need to find innovative ways of fast-tracking individuals through experiences they will no longer gain on the job, particularly at the start of their careers.

> As learners we need to be more sophisticated in selecting the learning opportunities that are right for us

The second factor is that as a society we are developing different career expectations. We have transitioned from a career path where we saw longevity as a value to one where we look to shorter-term career steps that gain us experience. We use the change in role as a developmental opportunity rather than relying on our employers to guide our progression. There are also more of us in the workplace. We live in an era of four generations as life expectancy and the need to earn an income increase. We therefore have a broader range of development needs throughout our working lives.

Thirdly, the combination of these two factors leads us to think differently about the work that we do and the desire to be more flexible in our working lives. More of us contract on shorter-term projects as the opportunities differ and circumstances change.

As individuals we need to be able to demonstrate that our skills are current and up-to-date, as this is the mechanism by which we gain our next role.

As employers we need to be aware that the traditional career pathways upon which many of our career development programmes are based are no longer relevant. We need to reappraise how we grow relevant talent to sustain our organisations in the future and, as a result, adapt our traditional views.

Finally, the implication is that we are increasingly self-motivated in how we develop our career paths and our resultant learning needs. We place greater reliance on our professional bodies and ourselves, rather than expecting our employers to deliver.

For many, the learning experience in the workplace is defined by courses that their employer has provided. This ignores the fact that the majority of what we learn comes from on-the-job experiences – learning by what we do and our mistakes. The fundamentals of how we learn are not changing. We should not forget the importance of on-the-job experiences.

Growing opportunities

There is an increasing range of learning activities that we can undertake. As learners we have access to online academies provided by leading players, often in combination with academic institutions. These give us greater access to an extended range of development opportunities. What we need to remember is that we need to reinforce what we learn from these courses back in the workplace, to internalise them and develop our own set of rules. All too often, as employers, we ignore the online resources and do not incorporate them into the personal learning journey.

As learners we need to be more sophisticated in how we select the learning opportunities that are right for us. We need to understand the performance outcome that we are seeking to attain and then determine how we will achieve this goal from the range of options available to us.

The implication for the learning and development community, and therefore for employers, is to reflect the shift from being organisers of courses and structured programmes to being curators of content that is available when we, as learners, need it.

Knowledge, both technical and skill-related, is something that we increasingly have at our fingertips. We can search for information at the touch of a button. As learners our key skill is to analyse, interpret and apply information from sources that we have evaluated as trustworthy. In our fast-moving world, knowledge that we have learnt is rapidly becoming out of date.

At the heart of this is the need for employers to create an environment where learning is part of the culture. Too often we think that it is something that distracts

from adding value in the work we do. In the knowledge society it is the value that we as individuals and as organisations add.

We need to be in an environment that supports our development, values success and rewards contribution.

We should also accept that not everybody wants to learn and grow. There are those who are comfortable with their current position and expertise. They do, however, need to remain up to date.

Learning technology

Technology plays an increasing role in the delivery of learning. From MOOCs (massive open online courses) through to the use of virtual and augmented reality as learning tools, we are seeing an evolution in capability. But we must not ignore the role that traditional face-to-face learning can play. We need to be more sophisticated as learners in choosing the appropriate programme.

Much of the effectiveness of learning is undermined, however, by poor design. This is a challenge that the learning community needs to address.

Valuing mentors

The need for guidance from those more experienced than ourselves is increasing. As a profession, the challenge to address this need through effective mentoring programmes is paramount. The technology-driven transformation will potentially reduce the number of middle-management roles, where traditionally we have had the opportunity to mentor and coach others.

The future of learning is therefore one that we as individuals need to grasp for ourselves. We need to utilise the increased opportunities available to us. After all, it is your career.

Ready for what's next?

ACCA has looked at 10 major drivers of change that businesses will face in the future, including the trends described in this article (see page 10). **Try our readiness indicator to assess your business's preparedness for these challenges at accaglobal.com/readiness**

Force for good

Not all hackers are embarrassing companies and plundering banks, says World Congress of Accountants speaker Keren Elazari

Given the frequency with which hackers empty bank accounts, steal identities and wreak general mayhem, it feels a little odd that they would have a public representative. But Keren Elazari, a US-Israeli security researcher and informal ambassador for the global hacker community, is adamant that hackers are an essential force for good. Her TED talk (with 600,000 views) posits that hackers are the immune system of the internet and play a critical role in society. She researches bug bounty programs – a monetary rewards system for hackers

> 'At a certain size, especially if you're in the financial industry, it's irresponsible not to have a security manager'

who discover security holes in software – and the value they create in the software industry.

The power of hackers in society is expanding as the world becomes more digitised. The number of devices connecting to the internet, from thermostats to servers, surpassed the number of humans on Earth four years ago. Today the ratio is 12 billion devices to 7.5 billion people – and within two years the ratio will be four to one. 'We are already the planet of the machines,' Elazari says.

Many of these devices, which collectively make up the 'internet of things', have poor defences against malicious attackers and are made by manufacturers uninterested in the consequences of a network breach. Elazari has worked with very large companies and government agencies in the US and in Israel to help them understand how to address this.

One of those large companies was PwC in Israel, 15 years ago. The business world was then adjusting to the new Sarbanes-Oxley rules (a US act passed in 2002 to protect investors following a number of major financial scandals, including Enron and WorldCom) and the Big Four found themselves knee-deep in security audits. Deloitte and EY now have some of the biggest security consulting divisions in the world, Elazari says. The issue is so important that chief security officers report directly to the CEO and board.

'At a certain size, especially if you're in the financial industry and dealing with customer data, I think it's irresponsible not to have a security manager,' Elazari says. If a company has an IT department they should consider adding a security team.

How do you hire a hacker whom you can trust? Elazari recommends prospecting at IT security conferences where experts will be willing to have conversations in the open, rather than in encrypted online chat rooms. The most desirable skills are digital forensics and incident response, which uncover attacks happening in your company. Technology can supplement these skills but can't replace them.

Companies with 20 or fewer employees that can't afford a security researcher should partner with larger organisations to protect their data, Elazari says. An easy step is to use cloud software where the software company is responsible for security.

What are the first principles this white-hat hacker recommends for defending accounting firms?

'Before buying anything I would get the operating systems to the latest and greatest versions and make sure you update them regularly,' Elazari says. This means not just PCs and laptops but phones, routers and any other device connected to your network.

Elazari suggests developing a habit to ensure all devices are up-to-date once a month. Turn on automatic updates for operating systems (on Mac and PC) as well as for Flash and Java apps, two popular entry points for hackers.

The Windows operating system attracts most of the attention from malware makers, as befits its position as the world's most popular operating system for desktop computers, with 80% market share. However, Microsoft has invested heavily in security and the latest version (Windows 10) is far more secure than its predecessors.

'I have to hand it to Microsoft; their security team do a lot of proactive research and they push out updates that will prevent a lot of the attacks,' Elazari says. 'Microsoft have visibility to more than a billion computers around the world. They can usually create a signature to stop attacks.'

Hackers are looking for the low-hanging fruit – there are plenty of companies still running 16-year-old copies of Windows XP that are no longer supported.

Elazari also recommends spending money on software to protect endpoints – security terminology that refers to any device operated by a user, such as laptops and desktops.

Another suggestion for staff who travel frequently is to use a VPN service for connecting to public networks. VPNs – virtual private networks – create an encrypted tunnel between a user's device and the online service or server they want to access. 'If you're connecting to your cloud-based accounting software, that's where you want to have the additional layer of encryption and protection,' she says. She also recommends a VPN for users with customer data on their laptop.

Elazari avoids recommending products from particular software companies to avoid accusations of bias in her work as a researcher. However, she urges businesses to consider the status and origin of the company making the software.

'It does matter who is behind your security product. It's preferable to have a company that you can trust, ideally one that has a local representative in your country.' As she carefully puts it, 'global geopolitical issues' play a role here: technology companies have been caught building secret 'back doors' into their software that can give outsiders full control of a computer.

Russian software firm Kaspersky's antivirus programs have been banned by US government agencies and described as 'malicious' in a European Union resolution on cyber defence on 13 June, an accusation the company denies. The US's National Security Agency has also been accused of planting interception tools into American-made routers.

'When we install a security product that will hopefully protect us from threats, we want to make sure that we're not introducing a fifth column to our organisation,' Elazari says.

Sholto Macpherson is a technology journalist specialising in accounting software

Keren Elazari giving a presentation on hacking at the TED2014: The Next Chapter conference in Vancouver, Canada.

The blockchain buzz

Don't know where to start? Peter McBurney explains what blockchain is, how it is evolving, and why accountants are well placed to exploit it

Peter McBurney is professor of computer science at King's College London and a member of the academic advisory council of the UK Financial Conduct Authority.

There is a great deal of buzz about blockchain and distributed ledgers at present. This is the second time I have seen such excitement about a new technology. The first was in the mid-1990s with the rise of the world wide web, and the reasons for the excitement now are similar to those back then: many people can see potential applications and benefits even if they do not yet see how they will be realised.

So how best to explain blockchain? I like to compare it with the web. The internet has made it easy to share information. Imagine it as a vast skyscraper made up of an infinite number of classrooms, each with a whiteboard at the front. Anyone can wander into any empty room and start writing on the whiteboard; it's like creating a website. We can also wander into any room and read what is written there.

The basic idea of distributed ledgers is similar, but imagine that in this case each room has a second whiteboard on the side, a 'scratchboard'. Before being allowed to write on the main board, you need to write your draft text on the scratchboard and get approval from the people sitting in the room. Approval can be obtained via any group-decision method – for example, a majority vote. Also, once you have sent something to the main board, this text cannot be deleted without prior approval from the people in the room.

Gaining approval for what is to be written on the main board has an important consequence: everyone has seen what is going on the main board before it appears there, everyone knows they have all seen it, and everyone knows that everyone knows this – and so on, ad infinitum. Game theorists call this situation 'common knowledge'. It stops any participant later claiming they did not see the information in question. In other words, the shared information cannot later be repudiated, or at least not plausibly.

As with many computer technologies, practice comes well before theory. Charles Babbage and Thomas Fowler, for instance, built their calculating machines a century before Alan Turing proposed a theory of computing. In the case of the distributed ledger, the first widely known example was the blockchain technology developed in late 2008 to run bitcoin, the first truly decentralised electronic currency.

The bitcoin blockchain has some features that are specific to the bitcoin application, such as aggregating transactions into blocks, and chaining these blocks together in sequence. As we are now realising, though, these features are not needed for other applications. However, because we still don't know the full potential of the technology, we do not have a good sense of the overall conceptual space of these distributed ledger technologies (DLTs).

If we have many computers agreeing on the values of some shared information, an obvious next step is to run computer programs over these shared values. Such programs running over a distributed ledger have come to be called 'smart contracts' (although the terminology predates blockchains).

Broader applications

Following the launch of bitcoin, the first organisations to see the potential of distributed ledgers for other applications, about four years ago, were banks and financial institutions. Their interest was initially for monetary transfers, but people soon realised the technology would also work for transfers of any assets that can be digitally represented. Everledger, for example, is a startup that places indelible information about individual diamonds onto a blockchain to record ownership and changes of ownership.

As understanding grew, people realised that the technology would work not only for asset transfers but also for recording any information where a permanent or semi-permanent record was needed. The next sector to become interested was insurance, starting around two years ago, and more recently companies in the energy and transport sectors.

Most global companies have grown by acquisition. They have usually inherited disparate IT systems, and getting these to interact with one another can be challenging. A distributed ledger can act as a shared blackboard between different IT systems, which the various systems can each write to, and a smart contract can then automatically aggregate the written data.

A recent proof-of-concept project that I undertook for a global bank executed internal foreign currency transactions between the national offices of the bank via a blockchain, as an alternative to using the Swift network. The benefits of the blockchain model were a cut in the total cost of transfers and a significant reduction in the need for data reconciliation.

Reconciliation of data held in different databases is a major cost for many multicompany workflows. Consortia are being formed in transport and energy, for instance, to look at blockchain technologies for data sharing. For example, when a contract is signed for the delivery of some commodity – say, oil – to some place on some future date, each party to the contract will enter all the relevant data separately in its own database. To fulfil the contract, they may then need to instruct downstream partners – for example, telling a shipping company to collect the oil, or inspectors to verify its quality – and these partner companies also then enter the relevant details into their databases. All these episodes of data entry provide room for error, so large companies employ people to reconcile data in intercompany workflows. DLT opens up the possibility that shared data need be entered only once, and validated at the time of entry.

A key challenge for commercial applications is that data should only be shared with others with a need and authority to see it. The bitcoin blockchain is an open system that anyone may join or leave at any time, and is therefore a 'permissionless platform', since no permission is needed to use it. This openness is a strength in a system designed as an electronic currency without a central controller, since every transaction is witnessed by the entire user community. Ethereum, another blockchain platform originally intended for smart contract applications, is also permissionless.

In contrast, most commercial applications under development are intended as 'permissioned' or closed systems, which means that only authorised users may participate in the system.

A requirement for many applications involving complex workflows, such as the management of energy trading contracts, is that access rights to different data items need to be granted to different organisations, possibly for limited periods. An oil company with a trading contract to supply a designated volume of oil to a designated place on a future date, for instance, may need to inform its nominated shipping company of the date, place and volume, but maybe not the oil quality or the purchase price. None of the major permissioned platforms currently seem able to handle this requirement easily.

Immature technology

This experience of technology not being quite adequate to the application is typical of new technologies. DLTs are immature, as are the development tools needed by programmers. We are still at an early stage of deploying these technologies and do not yet have a good understanding of which features are best for which types of application. It may be, as some sceptics argue, that a DLT is not the most appropriate option for some applications. This needs to be decided case by case.

Much of the buzz around blockchain arises from its ramifications. The creation of an online presence by 'bricks-and-mortar' companies in the mid-1990s resulted in many redesigning their internal business processes, and there followed a decade of business process engineering and re-engineering projects. The adoption of distributed ledger technologies for multicompany workflows will, I expect, lead to another wave of such projects.

Accountancy and management consulting firms are best placed to take advantage of this new wave. Now that law firms have been freed to enter other lines of business, we may also see them enter this market, especially to ensure compliance with data privacy regulations. Expect the future to be very exciting.

Ready for what's next?

ACCA has looked at 10 major drivers of change that businesses will face in the future, including the trends described in this article (see page 10). **Try our readiness indicator to assess your business's preparedness for these challenges at accaglobal.com/readiness**

Rebuilding trust

The finance professionals of today and of the future can help business to rebuild trust

A former president of ACCA recently said: 'Nothing is more important to the professional accountant than ethics.' So it was fitting that in October, ACCA, in partnership with the Carnegie Council for Ethics and the CFA Institute, celebrated the fifth Global Ethics Day.

The organisations used the day to explore how businesses are preparing for an ethical future in the face of threats and challenges posed by globalisation, technology and human psychology.

Of course, ethics is not just for one day. But as Brian McEnery, the former ACCA president, observed: 'At a time when the future of global cooperation has rarely been more uncertain, everyone in the business community needs to take time to consider the wider value of ethics.'

The world is more than a decade on from the global financial crisis of 2008, but the echoes from that time still reverberate around capital markets, the banking system, governments and the accountancy profession.

'Ethics and professionalism are the foundations of the accountancy profession, although they are not exclusive to accountancy,' said ACCA chief executive Helen Brand, launching Global Ethics Day. 'This day is to remind individuals and businesses to do the right thing and highlight why doing the right thing is important.'

Low levels of trust

The increasingly low levels of trust in business are one of the key reasons why ethics needs to be front of mind, for accountants and for other business leaders. According to the 2018 Edelman Trust Barometer, 60% of the general public believe chief executives are driven more by greed than by a desire to make a positive difference in the world, while overall levels of trust in business remain stagnant at 52%. Among the group that Edelman calls the 'informed public', the level of trust in business has fallen from 65% to 64% – not a huge drop, and certainly not as low as the general public's view, but nonetheless, it is a cause for concern that despite attempts to address the issue, the direction of travel is still downwards.

The same survey also reveals that people believe building trust is the most important job for any chief executive, above product and service quality and profit and stock price increases. As ethics and trust are intrinsically related, it is therefore important that business behaves ethically in order to restore trust.

'There is increasing realisation about the role that business plays in society,' says Joel Rosenthal, president of the Carnegie Council. 'Business is a very powerful actor, it shapes our daily lives and with that power should come some sense of responsibility to steer it in a positive direction.'

Rosenthal makes reference to BlackRock CEO Larry Fink's now famous letter to business leaders on 'A sense of purpose', in particular one line that says: 'To prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society.'

Such a conclusion is just as valid for professional accountants. The good news is that professional services ranks as the third most trusted sector in the Edelman survey. But there is still work to be done.

Staying relevant

As current ACCA president Leo Lee says: 'It's the finance professionals of today and of the future that will help business to rebuild trust. We can all work to instil the right mindset and culture to drive business forward, ethically and sustainably.'

But he warns: 'As a profession, accountants must stay relevant and must lead by example. We must endorse and adhere to the highest standards of ethics and professionalism – we have to be ready and help businesses and the public sector be ready too.'

In answer to this, ACCA has launched a new Ethics and Professional Skills module. Building on the previous Professional Ethics module, it will continue to develop the concepts of ethical behaviour and judgment. It is available to students and qualified members as part of their continuing professional development.

The module combines ethics and professionalism with other core skills such as personal effectiveness, innovation and scepticism, commercial awareness, leadership and team working, ensuring that ethics is is seen as an integral part of business life.

Tony Tan, co-head of ethics, standards and professional conduct at the CFA Institute, suggests a four-point framework to help professionals assess ethical, or indeed unethical, behaviour, built upon awareness, analysis, application and action: 'People need to be aware that certain behaviours are unethical or at least pose an ethical dilemma. A decision-making framework will help them analyse this behaviour and identify steps towards doing the right thing. They need to think about the application of standards, professional conduct and enforcement. The fourth point is action. Most people know instinctively if something is wrong, but are unaware of options available to do something. The action part provides a better range of choices, thus increasing empowerment.'

There is, however, a further dimension that needs to be considered when looking at ethics and the future of the accountancy profession: technology, in all its guises, is without doubt having an unprecedented impact. Whether the issue is how companies can assure their customers that they are handling personal data securely and with integrity, or artificial intelligence (AI) and machine learning replacing human decision-making, the profession will be key in ensuring trust in the systems, and their ethical use.

Artificial intelligence: ethical decision points for the accountancy profession

- What are the possible threats to the profession's integrity in an AI environment and how might these be mitigated?
- How will AI change the skills needed within the finance function, advisory or assurance team?
- How can the profession assist with making AI more accountable and algorithm applications more transparent for users and their clients?
- Who will be responsible for deciding if AI's output and performance fit within an ethical accountability framework?
- Can the profession create its own 'sandbox' for ethical development of AI in accounting, audit and assurance?

(Source: *Machines can learn, but what will we teach them?* CA ANZ)

A man leaving Lehman Brothers' European headquarters in Canary Wharf, London, in 2008, after a judge had put the firm's UK arm into administration.

Ethical crossroads

A recent report from CA ANZ on the impact of AI suggests society has reached an ethical crossroads. 'By setting the right ethical framework now, we have an opportunity to design a new AI-enabled world, which could create a more inclusive global society and sustainable economy than exists today,' argue CA ANZ's Simon Grant and Karen McWilliams in *Machines can learn, but what will we teach them?*

The report notes that AI has already infiltrated the accountancy sector in some ways; accounting software is becoming more intelligent, performing analyses previously carried out by humans. But while the increasing volume of data allows for more robust analytics and greater money-making potential, it creates increased ethical accountabilities around how this data is being handled, for what purposes, and by whom. The report quotes Peter Williams, chief edge officer at the Centre for the Edge at Deloitte Australia, who says: 'Accountants are in the box seat to continue to act as trusted advisers to interrogate the systems and processes that underpin the acquisition, management, analysis and disposal of this information.'

Even though a new world of AI-powered applications is being forged, the fundamental ethical standards for accountants around integrity, professionalism, duty of care, confidentiality and competency remain the same. Therefore, says the report, the accountancy profession will continue to play a key role in ensuring business information is sound and business decisions are in step with wider societal values, demanding a considered balance between what is good for business and what is good for society.

As Lee says: 'Accountancy is one of the most respected professions in the world and ethics is central to being respected and trusted. So, for ACCA members, ethics isn't just for a day; it's 365 24/7.'

Philip Smith, journalist

Ready for what's next?

ACCA has looked at 10 major drivers of change that businesses will face in the future, including the trends described in this article (see page 10). **Try our readiness indicator to assess your business's preparedness for these challenges at accaglobal.com/readiness**

Clarity required

In a follow-up to ACCA, IFAC and CA ANZ's 2017 global tax survey, Chas Roy-Chowdhury finds transparency is the top issue in the public's mind

Chas Roy-Chowdhury FCCA is head of taxation at ACCA.

What are the elements that make up trust when it comes to tax? The reason I ask this is that, at the moment and for some time previously, trust is something that has been distinctly lacking in the business world.

Levels of trust in business have plummeted among ordinary citizens around the world. Whether it is through a lack of transparency, needless complexity or a perception of dishonesty, people simply do not trust their business and political leaders to do the right thing.

But there are varying degrees of trust (or lack of it) among the different players in the business ecosystem. The good news is that ACCA has found that professional accountants remain the most trusted, more so than lawyers, the media, government agencies and politicians.

The bad news is that this support has dropped, albeit marginally, over the last 18 months.

At the beginning of last year, ACCA, the International Federation of Accountants (IFAC) and CA ANZ carried out an in-depth study of people living throughout the G20 nations, looking in particular at tax. The study – *G20 public trust in tax* – has now been repeated and we have found that for the second year running, professional accountants lead the way in terms of the levels of trust people place in them over tax matters.

In fact, well over half (55%) said they either trusted or highly trusted professional accountants. That was down just two percentage points on the results we found last year. Trust in lawyers is not far behind at 50%, increasing by one percentage point over the last 18 months.

Global focus

To understand these findings, we need to understand the context. There has been unprecedented international focus on the global tax system in

recent years. Media stories continue to highlight companies that are allegedly not paying their 'fair share' of tax around the world. Corporations bear the brunt of these allegations, but pressure is also being exerted on governments and their revenue-collecting agencies. And, of course, on tax advisers, whether they are accountants or lawyers.

The efforts of the Organisation for Economic Co-operation and Development (OECD) through its Base Erosion and Profit Shifting (BEPS) project are well documented and we are now beginning to see the fruits of the actions, at least in terms of international cooperation. But professional accountants know full well that they are in the firing line in terms of implementation and making sure that their clients are aware of the implications and take the necessary action to ensure they are compliant with whatever regimes and jurisdictions they operate within.

Professional accountants would recognise the key finding of our G20 survey, that transparency in the tax system is the top issue in the minds of the general public. These people want clarity on how and from whom their governments are collecting taxes, and how their tax revenues are being spent. But they are also concerned about complexity in the tax system – they dislike the uncertainty, opacity and increasing costs when it comes to dealing with tax themselves.

It will come as no surprise therefore, that these same people dislike an apparent inequality in the system, where they possibly believe there is one rule for the rich, and well-organised multinational companies, and another for average or low-income taxpayers. Allied to this, fears of corruption in the tax system are rife in a number of countries in our survey.

Global cooperation

This would explain why people are supportive of greater cooperation on international tax policy. They understand that such cooperation can lead to a more coherent international tax system. However, they also understand the impact of tax competition – they know that competitive corporate tax rates can help attract multinational businesses into their own countries, with the promise of increased employment opportunities and wealth creation.

But there has to be a clear purpose to this – people are less supportive of such policies if they are purely to increase national tax revenue. They know that this can be at the expense of other neighbouring countries, which can lead to these countries increasing their reliance on other areas of finance, such as international aid. 'Beggar thy neighbour' is not an attitude that finds much support.

Interestingly though, the jury is out on whether multinationals should report their taxes on a country-by-country basis – 56% say that the information should only be confidentially provided to tax authorities, or indeed not provided at all, while 44% would support public disclosure. This would appear to run counter to the public's desire for greater transparency, but perhaps here this is more to do with how clear governments, politicians and revenue-collecting agencies are in their actions, rather than focusing on individual situations, be they personal taxpayers or corporations.

Which brings us back to trust. While people may trust accountants and lawyers, there is a distinct lack of trust in politicians and their tax authorities. Politicians, whose policies guide the actions of tax authorities, remain in a trust deficit – some 58% say they either distrust, or highly distrust them, although this figure is a 10% improvement on last year's survey.

At the same time, while tax authorities may be the third most trusted 'actors' in the tax system, they only achieved a trust rating of 37% (34% distrusted them, while the remaining third remained neutral). This was the first time we had asked this question, so we do not know whether this level of trust has improved or worsened in recent times, but it could be an area for concern. The good news is that around half the G20 population are satisfied in their dealings with the authorities in terms of ease and efficiency, though less than that (42%) see the process as generally fair.

> While people may trust accountants and lawyers, there is a distinct lack of trust in politicians and tax authorities

And in this context, it is encouraging to see that most people believe the role of professional accountants contributes to better tax systems by making them more efficient (57%), more effective (56%), and fairer (51%). People who use a professional tax accountant are substantially more likely to have found their financial situation has improved over the past five years than those who do not.

So, while the tax system and authorities remain under close scrutiny, I am encouraged that our profession remains in credit with people's trust. At a time when the work of professional accountants in other areas of the profession, notably audit, are under attack, I take heart from these findings. It might not be a cause for outright celebration given the current climate within which we are working, but I do think we should be quietly satisfied that our work to promote fairness and transparency in tax is being recognised. And I am confident that this gives us a solid platform on which to build greater trust in the future. AF

Read *G20 public trust in tax – Ed 2018* at accaglobal.com/insights

Ready for what's next?
ACCA has looked at 10 major drivers of change that businesses will face in the future, including the trends described in this article (see page 10). **Try our new readiness indicator to assess your business's preparedness for these challenges at accaglobal.com/readiness**

The post-truth adviser

Most professionals aim to use evidence and reason to work out the best advice for their clients. But that ideal is under threat, says Nick Enfield

Nick Enfield is professor of linguistics at the University of Sydney, director of the Sydney Social Sciences and Humanities Advanced Research Centre and head of a Research Excellence Initiative on The Crisis of Post-Truth Discourse.

As professionals, how are we to advise others? As clients, how are we to evaluate the advice we get and which decision to make? The problem is exacerbated by the 'post-truth' trend in public discourse, which is eroding public trust in the counsel of experts and creating a dwindling respect for evidence and facts.

Numerous recent books address the post-truth problem and its impact on the status of professional expertise. Two of these – *The Death of Expertise: The Campaign Against Established Knowledge and Why it Matters* by nuclear policy specialist Tom Nichols, and *Win Bigly: Persuasion in a World Where Facts Don't Matter* by Dilbert cartoonist Scott Adams – represent polar opposites in the debate. Nichols laments the post-truth trend and its worrying potential to damage society and do us all harm, while Adams celebrates pure persuasion for its own sake, embracing the idea that 'facts don't matter' and advocating US President Donald Trump's methods, which evidently helped get him elected in late 2016.

Nichols asks: How can democratic society best work to solve problems for everybody's benefit? His message is that we need to respect expertise while also being well enough informed so that we can evaluate the advice we get from experts, and in turn make sound decisions for ourselves. For Nichols, the expert's job is to provide counsel in a context of mutual trust. Our modern societies could not be sustained without the existence of professions, from solar physics to weaving, from architecture to accounting.

> We look for reasons to believe that we are right, and we ignore reasons to believe otherwise

Nichols explains: 'The technological and economic progress that ensures the wellbeing of a population requires the division of labour, which in turn leads to the creation of professions. Professionalism encourages experts to do their best in serving their clients, to respect their own boundaries, and to demand their boundaries be respected by others, as part of an overall service to the ultimate client: society itself.'

The key concepts that Nichols invokes here include service, respect, boundaries and society. His spirited defence of experts is grounded in a commitment to the greater social good, and to a rational concern with solving the many problems people face today. He not only wants citizens to appreciate that experts have an indispensable function, he wants experts to uphold their part of the bargain and act towards their clients with integrity, balance and objectivity.

Experts can lay out facts, likelihoods and educated guesses, and can evaluate the probabilities of various scenarios. They cannot force clients to make particular decisions. Indeed, Nichols emphasises that experts must let people make up their own minds. This can only work well if people are well-informed and level-headed. But the truth is that people are anything but level-headed in their evaluation of advice. We are prone to a host of psychological biases that take considerable effort to overcome and that are readily exploited by the skilled manipulator.

For example, our thinking suffers from confirmation bias; when we ask a question, we already have a sense of what we think the answer will be or, worse, what we would like it to be. We look for reasons to believe that we are right and we ignore reasons to believe otherwise. This is bad from the client's point of view because it prevents us from considering advice that happens to go against our hopes or preconceptions. But from the point of view of the selfish advice-giver, cognitive bugs such as the confirmation bias open the client up to exploitation.

When persuasion is the goal

Adams takes this approach. His nihilistic view – that persuasion is the goal, independent from the content or soundness of any arguments or their consequences – is the disease Nichols warns us against. Adams says Trump is a 'master persuader' and that we should learn from, and adopt, the techniques he used in the election. Trump, Adams says, 'is so persuasive that policies didn't matter'. Adams wants us to treat clients the way that Trump treated voters, as devices that can be controlled just so long as you understand how the interface works. *Win Bigly* is a how-not-to guide for professionals who are in the business of serving clients for their interests and, in turn, for the interests of all.

Adams focuses on what he calls persuasion, but he is really talking about bullshitting, in the technical sense of that word. As the philosopher Harry Frankfurt defines it, bullshit is a mode of discourse in which the speaker has no interest in the truth or falsity of what they are saying. It is distinct from lying – where the speaker knows that what they are saying is false, and intends to deceive – and it is driven by a desire to make an impression. If Trump is anything, he is a master bullshitter. Nichols is a conservative and his

particular disdain for Trump targets this knowing disinterest in facts: 'Rather than be shamed by his lack of knowledge, he exulted in it', he says of Trump's 2016 campaign performance.

Adams praises Trump for using persuasion to get elected. But getting elected isn't solving a problem. You can persuade people to vote a certain way but you can't persuade cancer to abate, traffic to flow more smoothly or wages to go up. Nor can you persuade the Moon to wait until the sky clears before passing between the Earth and the Sun. To solve real problems, facts do matter. As Nichols states, 'the celebration of ignorance cannot launch communications satellites or provide for effective medications'. When Adams says that 'compared with the average citizen, trained persuaders are less impressed by experts', it is again clear that when he says persuaders, he means bullshitters. Nichols despairs that nothing 'can overcome the toxic confluence of arrogance, narcissism and cynicism that Americans now wear like a full suit of armour against the efforts of experts and professionals'. Adams' book embodies in almost crystalline fashion that very confluence of toxic traits.

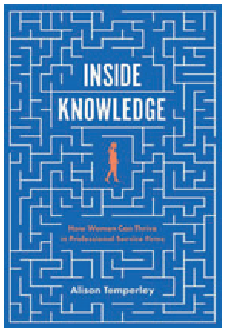
Whose advice?

There could be no starker contrast in models of professional discourse. Suppose that we want to know when, where and why a solar eclipse will occur. Nichols is the solar physicist, using evidence and reason to infer the best advice. Adams is the cartoon mythologist, making up a story – any story – so long as it appeals to people. Without knowledge of the facts of our solar system, cultures everywhere have invented interpretations that suit human sensibilities, usually imagined interactions between supernatural entities. But these naïve interpretations can neither explain nor predict the phenomenon. Whose advice would you rather take? AF

Cartoonist Scott Adams describes Donald Trump as a 'master persuader', whose techniques for winning the 2016 US presidential election can be used effectively in business.

Blueprint for success

Why do so few women reach the top in professional services? A new book reveals how to climb faster and higher



Alison Temperley's book *Inside Knowledge: How Women Can Thrive in Professional Services Firms*, draws on her experiences at PwC and offers advice on navigating successful career paths.

An anomaly in the numbers at professional services firms has long captured the attention of Alison Temperley, a former PwC tax accountant turned management coach and leadership expert. When equal numbers of men and women – the best and brightest graduates – are entering firms that purportedly operate as meritocracies, why do only about 15% to 20% of the women ever reach the pinnacle of partnership?

London-based Temperley's three-decade career has given her a unique perspective on gender issues in the leadership of professional services firms. She spent 17 years at a leading global professional services firm and almost as long again as a coach to hundreds of senior executives and their teams from international legal, consulting and accounting firms and other global corporations.

In 2017, when it rained for 12 days of a fortnight-long holiday, Temperley started decanting her wisdom into a book. The result, *Inside Knowledge: How Women Can Thrive in Professional Services Firms*, overflows with insights, observations, opinions and advice.

A former director of the Praxis centre at Cranfield University, Temperley says she zoomed in on professional services firms because 'the numbers are stark, and their business models are more opaque than corporates'. She says women are drawn to these firms 'because they are perceived as meritocracies that require the skills and intellectual power they have excelled at previously at school and university'. But she adds that the numbers show 'clearly something else is going on'.

The book aims to help women navigate successful career paths – essentially by boosting things they often don't catch on to early enough, such as talking about their achievements, cultivating networks and understanding the less obvious challenges inherent in firms. 'Women still feel uncomfortable talking about their successes because it may be seen as bragging, and they often discuss playing politics with their noses screwed up,' says Temperley. This needs to change. But at the same time she's not letting firms and society more broadly off the hook.

Most telling for Temperley are reports from women who have been through her leadership courses. Often when they recount their revelatory learnings back at the office, their male colleagues are nonplussed to hear of career-forging tactics that to them have always been obvious. So what do women in professional services need to know?

Hard work is not enough

'It was enough at school and university, and if you have a fabulous boss and a brilliant system in your firm, it may be enough now, but time and again I see hard-working, really good women working away in a corner,' laments Temperley. 'Brilliant work is a fundamental in every firm, but others need to know about it, so women need to talk about it.'

> 'Women still feel uncomfortable talking about their successes because it may be seen as bragging'

The people who are making decisions about women's careers often don't know what their successes have been or what they've been involved in – and there's a joint responsibility here, she says. 'Those partners should know what they do, but actually they're incredibly busy, too.'

Women have a responsibility to give partners news of their achievements in a format that's easy to understand and use. Temperley suggests a short factual email update each month. 'It's about providing information and telling the truth,' she insists. 'Not bragging.'

Sustainable equilibrium

Professional services firms are incredibly demanding on both intellectual ability and time, and many young women leave firms in their late 20s and early 30s. 'It's the time when female attrition rates are at their highest compared to males,' notes Temperley. 'It's assumed this is something to do with having children, but often it's about the incompatibility of the lives they want with the hours worked,' she says. 'Many ask themselves if they will be able to maintain equilibrium with the additional pressures of being a partner.'

The results of a 2012 McKinsey study, which surveyed thousands of women in professional services firms, showed 71% believed work had to be their number-one priority to achieve partnership. On a similar theme, Facebook COO and *Lean In* author Sheryl Sandberg has noted many women 'check out' before trying.

Don't make assumptions, urges Temperley. Certainly, the traditional model of a professional services firm is not built for women's biological phases, as the hard push to partnership happens in the mid-to-late 30s.

Temperley hears from women partners that the role holds more flexibility and autonomy than working in senior management for a number of partners. 'You owe it to yourself and the partnership to confirm that what you want is not possible before you leave,' she advises. Conduct due diligence by asking partners what they enjoy about their role and how they find time for life.

Is there an appetite to do partnership differently? Both genders will soon be asking this question as millennials move up through firms, Temperley predicts, flagging a key area of change.

The ambition double-bind

Women face an ambition double-bind. Many are not perceived as ambitious because they don't state their career goals as straightforwardly as men, who talk about them from the outset.

Countless studies show men will apply for a new role or project when they have 60% of the requirements, while women tend to wait until they have all. Their hesitation is perceived as lack of ambition. 'Men are assumed by default to be ambitious, which effectively puts them on a superhighway to partnership, but women tread a very fine line between being "not hungry enough" and being seen as strident,' explains Temperley. 'In one professional services firm, I heard a woman described as "too ambitious", with the inference she was pushy. When is a man described that way?'

Active career management means not waiting to be noticed. Temperley advises: 'State what you offer, then what you want. Put a date on when you'd like to be a partner or take on a particular piece of work,' she says. The annual appraisal process is your forum.

You do need to play politics

Is your firm a pure meritocracy or political bear pit? It's likely to be both, writes Temperley. In professional services firms, where every partner is an owner with an imposed management system, it's like herding a bunch of bright, entrepreneurial cats, she says. In this environment, engaging with impression management and politics is imperative but this does not mean practising 'the dark arts of manipulation'. Getting a proposal over the line may be simply a matter of ensuring people know what's in it for them before a key meeting. It's not Machiavellian, just common sense, Temperley insists.

The unique structure of firms requires you to understand where real power sits – and it's not necessarily with the holder of a particular title or role. The partner who set up that part of the business and held the role previously may actually be the person everyone listens to. Check who has the clout.

Promote commercial outcomes

The financial contribution professionals make to the firm's bottom line becomes increasingly important as they move up the ranks, but here again a perception gap opens between genders. *Cracking the code*, a 2014 report by KPMG, leadership consultancy YSG and UK-based gender balance group 30% Club, shows that in development reviews women are considered relatively poor at applying commercial acumen.

Temperley believes this is because women tend to talk about inputs – working hard and technical knowledge – rather than outputs. Women must be clear about the

Facebook COO and *Lean In* author Sheryl Sandberg has noted many women 'check out' before trying financial contribution they make at all career stages, she says, along with demonstrating awareness of what competitors are up to and what they bring to their firm's differentiated offer. The good news: women tend to naturally have the increasingly critical skills of building trusting relationships and listening to clients.

Create a composite role model

In 2001, when Temperley left PwC, she berated a male partner about a lack of female role models in the firm. 'I was looking for someone exactly like me, an expert in personal tax, but a few years ahead,' she recalls. 'I wish someone had told me that a more effective approach to finding role models is to take aspects from different people that you want to be like to create a composite role model for yourself.'

For a career-building network, role models, mentors and supporters are essential, but sponsors – who openly and strategically champion you and your achievements – are particularly vital. Unfortunately, sponsors are more challenging for women to find in firms, as male leaders focus on protégés in their own image. It's the 'mini-me' factor.

Women must ask for a sponsor, Temperley says, and, crucially, support other women. In the book she quotes former US secretary of state Madeleine Albright: 'There is a special place in hell for women who do not support other women.'

The ambiguity conundrum

Women often miss hearing about opportunities or being exposed to informal conversations in firms because they're not part of men's informal social networks, which often convene for a sporting moment. In the post-Weinstein era, Temperley is alarmed to think invitations for women to join such occasions may become even less frequent. She references ambiguity in the male-female dynamic in several instances, such as when a woman from a professional services firm invites a male client to lunch. This one is easily solved. 'Invite a colleague or partner along, too – or go for breakfast,' she suggests.

What concerns Temperley after #MeToo is that good men may cease to sponsor women because they don't want their interest misconstrued. 'How do we deal with that?' she wonders.

Deborah Tarrant, journalist

The extra hurdles women must jump

A series of interlocking hurdles clutter the path to success for women in professional services firms, Alison Temperley observes. These include:

- The social cost of success. Women 'stand out in a sea of grey suits' in professional services firms and may attract media attention and consequently tall poppy syndrome. 'They are expected to be brilliant at work, have the family totally sorted and look good all the time. The same standards are not applied to men, and that's tough.'
- Greater reliance on the firm's formal career system. Men rely on informal networks but women ask permission. One example is how women typically flex their time by asking for a formal arrangement. A man wanting time off to train for a marathon is likely to put on his running shoes and go, says Temperley.
- Getting caught with 'organisational dusting' – taking on tasks that are important but only noticed when not done, such as developing junior associates, client liaison and note-taking in meetings.
- Fear of failure. 'I see a lot more perfectionist women than I do perfectionist men, and I don't know why.'
- Attributions of success. Women tend to credit external circumstances, like a great team, luck or an easy assignment, says Temperley, but men tend to claim good leadership and focus.

US secretary of state Madeleine Albright: 'There is a special place in hell for women who do not support other women'

View from the top

Be passionate about growth, build personal relationships and challenge the status quo – key tips from global business leaders

Jennifer Whooley CA

'I think it's really important to always be able to learn and adapt. In the last 10 years, my role itself has changed a lot. You're involved in all aspects of the business. You're not only just looking after the financial stewardship of the company, you're partnering with the chief executive and you're partnering with the board to set and execute the strategies. [For young women starting out] they need to pick organisations that suit them [and have] support around them both in their personal and work life. I've had great mentors throughout my career. I've been very fortunate to work for really great CEOs and also have the support of my board.'

Full interview at bit.ly/JenniferWhooley

Stride Property Group CFO and EY's New Zealand CFO of the Year

Japheth Katto FCCA

'The threats and disruptions keep coming. There is no board meeting now where we don't talk about cyber threats and risk management. We face competition from non-banks – from fintech and mobile – and as a board chair, you have got to understand what is going on. [This includes understanding the need for new skills.] We are all fighting for high-level skills now. The banks in Uganda are all looking for highly skilled people in risk management, IT, global banking and so on.'

Full interview at bit.ly/JaphethKatto

Chairman of Stanbic Bank Uganda

Brian Ierland FCCA

'Leadership is about helping people on a journey, often when they don't feel confident of the route. It is recognising their individual needs in order to help them move on. As leaders, we set direction and then take people with us. And that can be difficult, not because of a lack of willingness but because you are dealing with ambiguity. Often, there is no right or wrong answer.'

Full interview at bit.ly/BrianIerland

FD at BAE Systems, AIR

Jenny Gu FCCA

'I've never been afraid of branching out beyond finance management into strategic planning, supply chain management, commercial and general business management, transformation management and consulting, let alone the most recent and hot trends in big data, artificial intelligence, robotics and digitisation. All experiences are mutually enriching and enhancing. And I believe these are also the challenges and opportunities facing many finance talents today. The broader your experience beyond finance, the stronger the leadership you can perform.'

Full interview at bit.ly/JennyGu

COO of Richemont China and ACCA vice president

Brett Redman FCA

Strong finance leaders 'should be leaders around strategy – and a big part of strategy is driving growth. I've always been passionate about growth and passionate about customers. You've got to constantly look at that top-line growth in any business in order to keep growing and to keep offsetting the more mature parts of the business. A lot of people talk a lot about what you should do. What I love about AGL is that we do do. I'm really happy to be judged on actions and let others fill in the words.'

Full interview at bit.ly/BrettRedman

Former CFO of AGL; interim CEO at time of going to press

Janine Manning CA

'I love being involved with grass-roots businesses where you have to roll your sleeves up and get things done. And as an angel investor, I relish the set of challenges that brings as well, dealing with everyone from employees to large hedge-fund investors. [The most important lesson is] to understand that it's the people that drive any business. First there are the employees and then the customers and other stakeholders, from the vendors and suppliers to the professional services firms and the banks. So it's critical to focus on building up strong and long-lasting relationships with them.'

Full interview at bit.ly/JanineManning

Director at Crimson Education

Jon Kenfield CA

'We are trained to be discipline-centric. Accountants approach things from a numbers perspective; lawyers apply legal thinking; psychologists take psychological angles. Each approach labels and pigeonholes us, as advisers, and confines us to specific professional boxes. This may not suit our clients' needs, at all, and it limits our ability to differentiate our practices ... Technically correct advice doesn't build personal relationships. So if CAs want to do interesting work, like business succession, wealth transfer, and legacy planning, they must learn to become "agile advisers", skilled at doing what computers cannot do. This stuff currently lives outside traditional professional practice and beyond conventional professional indemnity insurance coverage.'

Full interview at bit.ly/JonKenfield

Founder of Solutionist Group

Colin Keaney FCCA

'Know your role as an innovator. Ultimately, consider how technology will change not only your finance function, but your business as a whole, and how you can benefit from technological innovation. Encouraging innovation is important, particularly in a business such as financial services and technology, where change is the norm. Don't be afraid to push the envelope as a leader. The ability to challenge the status quo is critical in a leadership role.'

Full interview at bit.ly/ColinKeaney

Global CFO of Dell Financial

Anselm Tan FCCA

'A good understanding of finance and the application of scientific principles can help with business model innovation in the new digital age, also referred to as Industry 4.0. The future will see an increase in multidisciplinary programmes, such as engineering and accountancy or business, which will lead to the emergence of a new breed of engineers with sound business acumen. I'm excited to see what comes from it. Startups, across many sectors, are driving a lot of the innovation you see today. By combining our strengths, we can deliver better solutions.'
Full interview at bit.ly/AnselmTan

Head of corporate venturing, Philips ASEAN Pacific

Hugh Murnane FCCA

'Data digitalisation is the big thing in finance at the moment – you need to be able to give them the numbers in a user-friendly fashion, and not just static numbers, but something they can drill into, go below the headline and see what's making it up. Using this technology, every Omnicon Media Group manager would have a dashboard to get analysis of a client's revenue line, [and could] compare it to figures from last year, or the previous month, or to the budget.'
Full interview at bit.ly/HughMurnane

CFO of Omnicon Media Group, Australia

A better way

Hywel Ball describes how EY is helping drive forward an important initiative to improve the way businesses report on performance

> The shape of value has changed, with an increasing proportion of a company's value lying in its intangible assets

With public trust in business in decline, the future outlook for corporate leaders, and their advisers, is challenging. But there is, nonetheless, a great opportunity to shift the dial on how corporations are perceived, and how these organisations can demonstrate their commitment to long-term value creation.

Long-term value is not a new concept. What is different today is that a combination of factors is now coming together to add increased urgency to the need for companies to articulate their purpose and measure their performance, both now and in the future.

These factors, such as the explosion in big data, together with plummeting levels of trust, are placing businesses under the spotlight of stakeholder attention like never before. It is a spotlight that will only intensify in the coming years.

How business reports its activities, and indeed how auditors verify these results, will continue to be disrupted as alternative methods of validation and analysis become available. If businesses stand by and let others measure their performance, then they face losing control of their own narrative. They also miss an opportunity to build trusted relationships with their broader stakeholders.

This is why initiatives such as the Embankment Project for Inclusive Capital will play such an important role in the long-term future of business organisations and those that are expected to report on their performance. Under the auspices of the

Hywel Ball is EY's UK and Ireland managing partner of assurance, UK head of audit and a UK LLP board member. He is the audit partner and client service partner for a number of EY's FTSE 100 clients and the architect of EY's long-term value framework thinking.

Coalition for Inclusive Capitalism, the project brings together business leaders, investment managers and shareholders (asset creators, asset managers and asset owners respectively), all of whom are committed to creating real change in the transparency of the capital markets.

The genesis of the project came from a realisation that there had to be a better way to describe how companies create value. The shape of value has changed, with an increasing proportion of a company's value lying in its intangible assets (see right). But traditional methods of financial reporting have not kept up with this shift.

Allied to this, there was an increasingly obvious investment disconnect between companies,

The changing shape of business value

- Undisclosed intangible value rose annually by 18% from 2011 (Source: 2017 Edelman Trust Barometer).
- Intangible assets represented 17% of market value in 1975; by 2015 they had risen in some sectors to 87% (Source: ICAEW).
- On average, 52% of market value is based on intangibles (Source: 2017 Global Intangible Finance Tracker).

The widening gap in trust

- Only 43% of the UK general public trust business compared with 45% in 2017.
- 45% say businesses do not operate in an open and transparent way.
- 60% believe CEOs should lead change rather than wait for regulators to impose change.

(Source: 2018 Edelman Trust Barometer)

investment managers and investors. Quarterly reporting, and the short termism that it encourages, is just one example of this breakdown that flows all the way through the investment value chain.

EY developed a framework (see right) to demonstrate how companies could report the long-term value they are creating for all their stakeholders. The Coalition for Inclusive Capitalism and EY then brought together some 30 global organisations from across the investment value chain (asset creators, asset managers and asset owners) with combined funds under management of more than US$30 trillion, to test and validate the approach. The participants of the EY-supported project have been mobilised to help provide a clearer, more comparable and more measurable articulation of how companies deliver value.

The work is also supported by an Advisory Council which includes leading academics and thought leaders. Together those involved are aiming to publish the methodology and proposed metrics with a view to achieving widespread market adoption.

The project addresses different aspects of intangible value – culture, trust, human capital, innovation – so the methodology has been refined and fine-tuned, giving companies a standardised way to break down their strategies into areas that can be measured. This answers investors' complaints that it is often too easy for companies to cherry pick the metrics that they report on. The project will give examples of standardised metrics that companies can use to support these various areas of value.

To succeed, this will require the commitment from companies to adopt the metrics, investment managers to evaluate companies using those metrics, and institutional shareholders to mandate their managers use the metrics when they evaluate potential investments. The support given by these 30 global business leaders endorses the importance of the initiative and helps ensure that its recommendations will be workable in practice.

Looking forward, there are a number of ways the work can be further developed. There are natural synergies that can be explored between the project and the work carried out by organisations such as the International Integrated Reporting Council, which counts ACCA among its partners. The organisations that make up the Coalition for Inclusive Capitalism could continue to evaluate and develop the methodology and metrics on an open source basis.

As a market-driven solution, it should be taken forward by the market. Management need the tools to help equity investors understand the company's narrative while simultaneously helping all other stakeholders to understand the company's value. Aligned properly, one should feed the other. Looking specifically at the future of audit, initiatives such as the Embankment Project line up with other developments such as the increasing use and sophistication of technology in the audit process, and indeed what the audit process is measuring – is it counting the things that count?

Society is increasingly questioning whether a company's responsibility is to all of its stakeholders, not just the shareholders. Auditors and the audit process must reflect this demand and need to work with companies, investors, policymakers and regulators to respond accordingly to meet the demands of society and bridge the trust gap.

The long-term value framework

With a focus on outcome metrics to measure the achievement of stakeholder outcomes, the framework considers:

- the context, purpose, strategy and governance behind the outcomes the organisation needs to deliver to its stakeholders
- the stakeholders at the core of the organisation's value creation model and the outcomes the organisation is aiming to deliver to meet those stakeholders' requirements
- the types of value an organisation creates
- the types of risks and threats an organisation manages to protect value
- the strategic assets, ie, the capabilities and resources that are required to deliver stakeholder outcomes.

Who is supporting the Embankment Project?

- Asset creators: Ecolab, Aetna, BASF, DowDuPont, Johnson & Johnson, Novartis, PepsiCo, Unilever, Nestle
- Asset managers: Amundi, MassMutual & Barings, JP Morgan, Investec Asset Management, TIAA, BlackRock, Schroders, Fidelity Investments, Vanguard, State Street Global Advisors, Neuberger Berman
- Asset owners: Public Investment Fund, Allianz, CalSTRS, CalPERS, New York State Common Retirement Fund, ATP, MetLife, Canada Pension Plan Investment Board, Government Pension Investment Fund, Guardian Life, New Zealand Super Fund, Washington State Investment Board, Allstate.

Counting the milestones

After security, one of the most important requirements for a developing country is building its accountancy profession

A participant tries out a virtual reality headset at the World Economic Forum on Africa, held in Rwanda in 2016. The country is working with ACCA to build its professional accountancy organisation.

'When I am talking to businesses, the first thing they ask me about is the security in Afghanistan, the second is about the security of their investment.' So says Zarif Ludin, who heads up CPA Afghanistan, which is probably the fastest growing professional accountancy organisation (PAO) in the world. To build up a PAO in post-conflict environments or in fragile economies requires two imperatives – support from the authorities and a legislative framework, says Stephen Shields, ACCA's market director – partnerships and recognition.

'Look at those developing countries that attract foreign direct investment and you see that they have an accounting base'

He adds: 'Throughout all levels of government, there has to be interest, drive and will. And we have seen that with the Afghan authorities. The nation's president is personally invested in seeing positive outcomes from this work, as are senior leaders within the relevant ministries. Coupled with the drive and passion of the newly formed CPA Afghanistan, we are seeing rapid progress and impressive developments.'

Backing up the politics is the law. Putting in place legal requirements sets out the framework of what is and is not permissible. Without this, says Shields, building all the different facets of a PAO is difficult.

A successful PAO is about building credibility as much as about ensuring adoption of standards. Keto Kayemba is Uganda's assistant auditor general for audit. She is also a member of the International Federation of Accountants (IFAC) PAO development committee. She says: 'First you need to have a mass of committed accountants who understand that it is important to form themselves into a professional association that adds value and can be respected.'

The local accountancy body needs outside help to build capacity. Nations are trying to develop their accountancy professions in the expectation of ushering in economic development and growth. Developing accountancy bodies can turn to global organisations including the World Bank, IFAC and more mature PAOs such as ACCA, which can help build capacity in different ways by sharing their knowledge and expertise.

Mahalah Groves is head of capacity building projects at ACCA. She says: 'We try to understand the capacity within any particular profession. We look at what is achievable within the regulatory framework. We work in partnership with the national profession, tailoring our support to deliver focused, targeted initiatives.'

For instance, in Afghanistan, where ACCA and CPA Afghanistan signed a partnership agreement at the end of 2017, ACCA has supported the PAO through multiple initiatives to develop and implement the framework that a professional body needs – within the parameters of the new accountancy law.

The ultimate aim for all accountancy bodies is IFAC membership, which will confirm and confer their status as a competent professional body. Alta Prinsloo, IFAC's executive director for quality and development, has seen first hand the work that ACCA has done in another of its capacity-building projects, in the East African state of Rwanda.

Here, ACCA is providing strategic support with building a PAO (the Institute of Certified Public Accountants of Rwanda – iCPAR). Its president Mkombozi Karake, chief internal auditor at Development Bank of Rwanda, says: 'We are getting deeper engagement from stakeholders

– the Government of Rwanda, development partners, members of the profession and prospective students, businesses and other regional PAOs. This tells us what they are expecting from Rwanda's accountancy institute and has helped us develop our strategy.' ACCA is partnering with iCPAR via a twinning model focused on partnership, mentoring and skills transfer.

IFAC's Prinsloo talks about having an effective PAO rather than thinking of any particular size of organisation. She says: 'Education is absolutely the foundation. For instance, ACCA's work in Rwanda is focused on building quality education; both the technical and practical aspect of the training.' She adds: 'That practical training helps to build credibility, the foundation of a strong profession, which contributes to strong economic growth.'

IFAC suggests that an effective PAO is built on three pillars: a sustainable organisation; a relevant organisation; and a credible profession.

Uganda's Kayemba agrees with Prinsloo that education is the first step in capacity building. Kayemba says: 'In order to have any level of a PAO you have to ensure that you are going to improve on the number of accountants. When you talk about building the critical mass you go straight in to education.'

Before you produce qualified accountants, however, it is necessary to get potential students interested. She suggests that the message is two-fold: telling people that it is a good profession to enter and that the country has a need for accountants. For Kayemba the PAO has a key impact on both the government and on the economic development of the small and medium-sized (SME) sector. As she points out: 'In developing countries it is the SMEs which push the development of the economy.'

Whether it is in Afghanistan, Uganda or other areas where multiple parties are supporting the development of a PAO – Myanmar in south-east Asia is another example – such a development brings a set of benefits as standard. Kayemba says: 'When you have a strong PAO then you have information about cost, risk, control. SMEs need accountants to ensure they make the contribution they are supposed to.' This goes beyond the SME sector, she adds. 'Accountants enhance accountability and transparency. It is what I do every day; I am shouting about this. "This money was given to you: how have you used it? Are you carrying out stewardship well? Have you reported it well?"'

The sentiment is echoed by Ludin in Afghanistan. He says: 'After security I believe that the second most important thing for the country is the accountancy profession. Look at those developing countries which attract FDI [foreign direct investment] and you see that they have an accounting base.'

'With a PAO you can get growth and transparency. Also we're running a really high rate of corruption and the accountancy profession can help to limit that.' Afghanistan is ranked 177 out of 180 in Transparency International's Corruption Perceptions Index 2017.

Foreign investors want to see whether a country's systems are strong enough for them to rely on.

Mobile developers testing a chess app at the Myplay software house in Yangon, Myanmar. ACCA is helping develop the country's accountancy profession to boost its economy.

Kayemba says her country receives development aid from international organisations. She says: 'With a PAO in place it means that to a degree there is some system that you can rely on. That attracts FDI, which in turn contributes to economic development.'

Without a PAO, attracting FDI is hard work. Shields says: 'Foreign investors are very reluctant – if not refusing outright – to invest in economies without a robust accounting and auditing profession. It is like throwing money into an abyss – there is no oversight of how the money is managed and governed.'

And for Rwanda's Karake, strengthening the PAO happens in the detail. He says the work now is drilling down from the strategy to create implementation plans. He says: 'When we say "strengthen the mandate of the secretariat", what does that actually mean? What do we need to do to develop the secretariat?'

In the early stages of building a PAO in his country, Ludin says he searched the websites of different accountancy organisations in the region and elsewhere. Then he was helped by the World Bank's Reports on the Observance of Standards and Codes (ROSC), which detailed what was lacking.

Now Afghanistan is much more integrated into the international community. As well as the ACCA deal, which is central to establishing the pillars of

What does success look like?

As well as numerical benchmarks – such as growing numbers of members and students – Uganda's Keto Kayemba says one mark of success is recognition by the government that the PAO is important. When a government asks for advice, when government ministers regularly attend your functions (even those held at busy times, such as Budget breakfasts), when they engage and consult you as a matter of course – that is success. She adds: 'It shows accountants are important and respected.'

Accountants powering economies globally

IFAC's vision for professional accounting education is built on five steps, each leading onto the next:

Step 1 Accountancy education
Step 2 Competence and expertise
Step 3 Trust, ethics and credibility
Step 4 A strong profession
Step 5 Economic growth and stability.

sustainability, relevance and credibility referenced by Prinsloo, CPA Afghanistan has joined the South Asian Federation of Accountants and the Confederation of Asian and Pacific Accountants and is working with IFAC. Ludin says: 'We keep IFAC informed of our work towards compliance with the SMOs [statements of membership obligations] and are working with them on three areas: our IT development roadmap, benchmarking of our qualification and IFAC membership readiness.'

For accountants working in practice or in commerce, PAO building may at times seem esoteric. But Ludin insists that IFAC's statements of membership obligations 'are not a form to be filled in but a milestone to be achieved. They help us take practical steps which strengthen our local PAO.'

Building PAOs in fragile states and developing economies is tough. Unsurprisingly, resources are paper-thin. CPA Afghanistan now has nine members of staff (Ludin jokes that as most are ACCA members or part-qualified, his is the globe's most professional PAO) and ACCA's Groves says that in Rwanda recruiting at the senior staff level has been a major milestone on the route to meeting its strategy.

In Myanmar, Groves says the profession is driven by very committed volunteers. 'As part of an IFAC capacity-building project, the small staff and voluntary executive committee are being supported to shape a strategy that is fit for purpose and brings in other donor support,' she explains.

Defining success in PAO building is not straightforward. Groves is clear that one sign of success is sustainability: 'We've seen examples in capacity-building work where it has not worked out because the money runs out and so of course the consulting stops.'

Prinsloo says that those involved in capacity building must sometimes think outside the box. She says: 'It is easy to fall back on to what we know. To be successful you have to be relevant. Look out for the areas where the government is particularly interested.'

For instance, it may want to improve tax take, in which case it is important to work to modify the local exams so newly qualifieds understand tax well; or it may want to reach a certain target number of accounting technicians in five years' time, which means making sure the PAO and its partners produce a quality qualification for accounting technicians.

And of course we all know times change. As ACCA's Shields notes: 'Measurement of development of the profession is not just in the number of accountants that exist, it depends on the needs of the economy. With changes in areas such as reporting and technology it is a question of refining and reinventing.'

Success is as much about counting the milestones along a journey as it is about a destination – a journey which in many countries may take more than one generation to produce a quality profession.

Peter Williams, journalist and accountant

Employees at The Nest i/o technology incubation centre, in Karachi, Pakistan, launched with grants from global partners including Google and Samsung. Attracting foreign investment requires a robust accounting profession.

Money myopia

To understand modern economics, we need to explore financial history, says economic historian and WCOA keynote speaker Niall Ferguson

In 2008, economic historian Niall Ferguson wrote and presented a TV show about how finance had evolved up to the global financial crisis – 'an explanation of the crisis disguised as a financial history of the world', as he calls it.

Back then, the Glasgow-born Ferguson was already a highly credentialled young history professor with a talent for simplifying ideas and linking the past to the present. Indeed, he had three previous television documentaries on his résumé. But *The Ascent of Money*, as both series and subsequent book were titled, gained a special power by making finance the engine of history. 'Banks financed the Renaissance,' he declared, 'while the bond market decided wars.'

And this came at a time when people were wanting to know why the system seemed to be failing. *The Ascent of Money* confirmed him as the great popular historian of finance and an expert on the crisis.

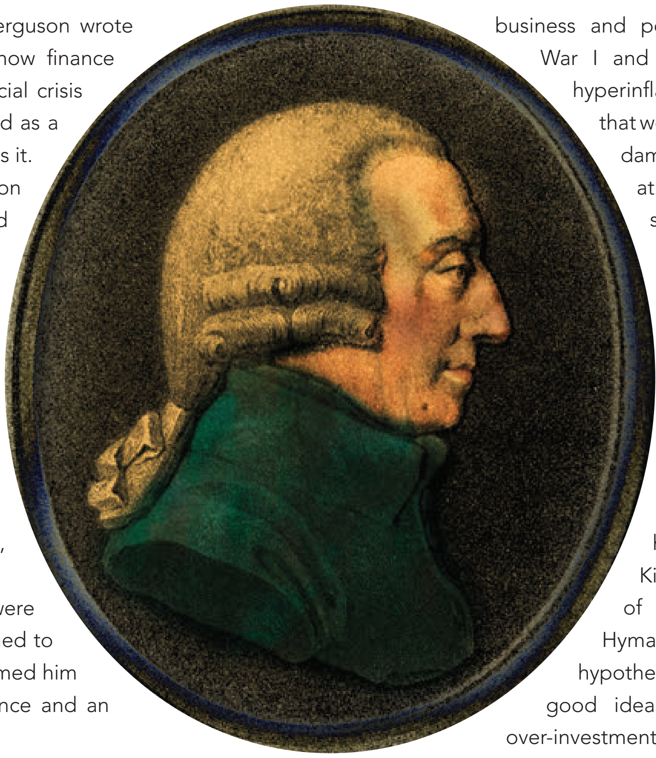
Ten years later, Ferguson is again thinking about the global financial crisis. He's about to update *The Ascent of Money* with what we have since learnt about asset price bubbles, bank collapses and financial innovation. And here's the thing: most of our best insights are coming not from new financial theory, but from economic and financial history.

Growing interest

Ferguson's interest in economic history has many roots. He grew up in a household where analysis and creativity were both taken for granted. His mother was a physics teacher and his father a doctor. Neither, he says, was much interested in money, though his father did give him a copy of that foundational Scottish text, Adam Smith's *The Wealth of Nations*. And his maternal grandfather, a journalist, fostered his love of writing. His paternal grandfather, however, ran an ironmonger's shop in the famously poverty-stricken Shettleston area of Glasgow's East End, teaching himself accounting out of a book. Ferguson still has the book.

Ferguson's upbringing, natural smarts and 'an old-fashioned Scottish education' won him a scholarship to Oxford. There he became convinced that the financing of states underpinned history everywhere. 'I was persuaded by my tutors in medieval history that you couldn't really understand what was happening to medieval England if you didn't understand the system of public finance,' he recalls.

'Once I realised that that applied to everything from ancient Rome to modern-day Australia, I was intellectually converted to a way of looking at the world that is quite rigorous – I want to know the debt-to-GDP ratio, what is the tax structure, how does it work? If you don't know that stuff, I think you're driving with a blindfold on as a historian.' He also studied in Germany. That led to his Oxford dissertation on business and politics in Hamburg during World War I and the disastrous post-war German hyperinflation – economic mismanagement that would give rise to Hitler and destroy or damage so many millions of lives. Also at Oxford, Ferguson wrote his first film script. The future economic historian and television documentary-maker was on his way.



Adam Smith's *The Wealth of Nations* was an early influence on economic historian Niall Ferguson.

Ferguson has consistently argued that financial crises such as the 2008 collapse need to be better understood. The great study of financial disasters, economic historian Charles Kindleberger's *Manias, Panics and Crashes*, had been published in 1978. Kindleberger built on the work of the then little-known economist Hyman Minsky, whose 'financial instability hypothesis' described a world in which good ideas often led to over-enthusiasm, over-investment and collapse. This was the precise course that new mortgage financing techniques had taken in giving us the 2008 crisis. It was also how internet technologies had delivered the first dot.com boom that ended in 2000.

Nevertheless, in the years after Kindleberger's work, the economics profession lost interest in financial crises. And while Kindleberger described crises and their genesis just the way a vulcanologist might describe the lead-up to volcano eruptions, economists could say no more than vulcanologists about how to fix their big problem.

So when the 2008 crisis came along, macroeconomics had few tools it could apply to fix the problem. 'The cupboard was intellectually very bare,' says Ferguson. He sees the global financial crisis as 'a crisis of economics, of macroeconomics as a discipline'.

History lessons

Having failed to see the crisis coming, Ferguson notes, global economic authorities do seem to have been effective in staving off a new global depression. And their work drew less on complex economic models than on history lessons.

Government treasuries borrowed to keep economies moving, following the recession recipe recommended by John Maynard Keynes, the Depression-era British economist who Ferguson reckons may have been 'the biggest intellectual winner' from the global financial crisis. 'Nobody added anything new to Keynes' thinking,' he says. 'They just dredged up the general theory and hit replay.'

Meanwhile, central bankers followed another recipe – set out by Milton Friedman and Anna Schwartz – and pumped money into the global economy, inventing new tools such as quantitative easing to get the job done. 'A lot of effort then went into trying to explain why the improvisation had worked,' Ferguson chuckles. He quotes former US Federal Reserve chairman Ben Bernanke's wry remark that such solutions 'work better in practice than in theory'.

Through all this, the underlying system has changed remarkably little. 'The rating agencies still do what they do,' he notes. 'The derivatives market wasn't in any profound way changed. And indeed, it's not clear that the mortgage market's all that different. Above all, debt levels have not significantly diminished – despite a great deal of talk of deleveraging.' Indeed, among the enduring legacy of the crisis is yet more debt, 'particularly public sector debt, but also household debt'.

The other intellectual winners from the crisis were a pair of economists, Carmen Reinhart and Kenneth Rogoff, who wrote an eight-century history of financial crises. From their work, they drew an important lesson: recessions initiated by financial crises tend to cut deeper and produce a long 'hangover' period of slow growth. Ferguson and others argue that their predictions essentially predicted the shape of the slow post-crisis recovery.

It is economic history rather than mathematical economics, then, that has been the most fruitful guide to understanding the 2008 crisis – and Ferguson is clearly pleased. 'Historical approaches have gained some traction,' he agrees, 'which from my vantage point is good, because I prefer people to look at history rather than to build mathematical models'.

Indeed, Ferguson argues there's a reason why mathematical models have made so little headway in describing the financial sector. It evolves too fast.

'The problem that most people have,' he says of economists, 'is that they want the world to stand still so that they can model it – whereas the financial system is always evolving'. This endless innovation means 'the system is never static and so any model that may describe it at point T, by point T plus 5 is obsolete, because the thing has changed structurally'. Economists are trained to model, he notes – 'and finance doesn't stay still enough [for] long enough'.

When you look outside the finance and IT sectors, he argues, innovation is much slower. 'There's a lot of the economy in the developed world that just doesn't innovate that much and ekes out productivity gains from doing the same things just a little bit more efficiently. If you're not in finance, if you're not in technology, you're in a much less rapidly changing world.'

Ferguson points to two finance sectors where innovation is moving particularly fast. Mobile technology, especially in China, is improving the efficiency of the payments system, though he is surprised at the slow pace of change in the West. And technology for algorithm-based trading will cement the dominance of passive investment, 'render an awful lot of the human labour in investment and asset allocation obsolete', and make the financial system more efficient again.

1870s, not 1930s

For all today's uncertainty and upheaval, Ferguson remains an optimist about the modern financial order. He has no patience for those who claim we are revisiting the 1930s. With a few exceptions (Greece among them), the global slowdown of the 2010s has been 'less traumatic' than the 1930s.

Ferguson's preferred historical analogy is the far less well-known period from the late 1870s to the early 1890s, when much of the world was burdened with a post-crisis stagnation. 'The global international order didn't break down and indeed, growth in North America didn't slow down that much,' he says. And like the 2010s, the 1870s and 1880s brought a wave of economic populism, with politicians around the world pressing for higher tariffs, lower immigration and tougher bank regulation. 'The populists of the late 19th century sounded a lot like Trump,' he notes. 'There's some evidence to show that you really wouldn't have had the [2010s] upsurge of right-wing populism without the financial crisis.'

After more than two decades as a public intellectual, Ferguson remains convinced of perhaps his central idea: that money drives the course of history. He's proud of the work he did early in his career tying wars to bond markets and he's baffled that so few others see the links. 'I'm constantly amazed at people who can write books on modern historical subjects and just leave the finance out,' he says. 'It's one of the frustrations of my life.'

David Walker has written about the accounting industry since 2012 and is a former head of communications for the Business Council of Australia. This article first appeared in *Acuity* magazine.

Time to rethink inflation?

In November 2010, Ferguson lent his signature to a letter by 23 prominent economists, fund managers, academics and journalists, most of them, like him, political conservatives. The letter said the US Federal Reserve's practice of quantitative easing risked 'currency debasement and inflation' and would distort financial markets without improving employment. Ferguson followed that up with a 2011 *Newsweek* article predicting 'The Great Inflation of the 2010s', which used questions about the calculation of the US consumer price index (CPI) to claim that 'double-digit inflation is back'.

As predictions go, it was a spectacular failure. In the period since, the US CPI has rarely exceeded 2.5%. Ferguson now admits that the letter's predictions were wrong, and that quantitative easing did not cause runaway inflation. 'It misunderstood the nature of what the Fed was doing,' he says now. 'In the end, the Fed was buying mainly Treasuries with excess reserves – and that didn't, in fact, have inflationary implications.'

Ferguson remains a political conservative and attracts controversy; he advised John McCain in the 2008 US election that brought Barack Obama to power, and loudly opposed Obama's 2012 re-election. He also remains a critic of the Fed. His current criticism, however, is that it is too focused on inflation data and too tied to the Phillips curve, the idea of a direct trade-off between inflation and unemployment. This, he says, is 'a quite myopic approach'. What might need to be added to the models? Ferguson suggests one factor: so many people now fear the automation of work. 'In the end, inflation is not going to happen if people's expectations aren't inflationary,' says Ferguson. 'I sense that even with a really tight labour market, people are looking at the future and thinking, "Well, how long before all the truck drivers are replaced by self-driving cars or self-driving trucks?" And I'm not sure that we're adequately allowing for people's expectations of technological displacement.'

Getting connected

A new report looks at the need for robust accounting infrastructure alongside digital skills in countries along the Belt and Road routes

Much has been said about the business opportunities presented by the China-led Belt and Road initiative (BRI). But where can professional accountants add value in the chain of cross-border trade proliferation – especially given the huge disparity of accounting standards along the BRI routes?

A new report, *Digital Connectivity in Accounting: A boost to the Belt and Road Initiative*, helps navigate through the complexities. Conducted jointly by ACCA, the Shanghai National Accounting Institute (SNAI) and Yonyou Group, the research serves as an important reference for the discussion on how to realise digital connectivity along the BRI routes, and promote harmonisation of accounting systems to avoid duplication.

Put simply, says Yuki Qian, *ACCA China's* head of policy, the report 'breaks through the shackles'. It explains how the various standards, regulatory systems and talents involved can align with the development of international trade and cross-border capital flow, based on digitally enhanced transparency and sharing of data.

Qian says: 'The purpose of this research is to improve the breadth, depth and quality of digital interconnection along the BRI routes.'

The report is timely, she adds. 'More and more countries along the BRI routes have committed to enhance their overall IT infrastructure and consider the digital economy as a new engine of growth.'

> More and more countries along the BRI routes have committed to enhance their overall IT infrastructure

Along with being an important information resource for ACCA members, the report will have special relevance for Chinese companies going global under the BRI, Qian believes. 'We aimed to explore what is at stake here and set it out as future-ready. The ability to reshape and regenerate is becoming more ubiquitous. Every party involved will need to keep up to date with digital trends and methods in order to achieve a purposeful value proposition.'

For the research conducted in April 2018, leading accounting talents and EMPAcc students trained by SNAI, ACCA members and partners, and corporate clients of Yonyou were asked questions on accounting informatisation, digital competencies of accounting talents, and tax reform. A total of 257 valid questionnaires were retrieved.

Within the business community surveyed, the report finds enormous space for economic cooperation along the BRI routes, Qian says. More than 60% of the company respondents are operating in countries along the routes, while another 20% intend to follow suit.

'More than 71% of these companies have set up fewer than 10 branches in the region, and they are still in the early phase of their business expedition,' she says. 'South-East Asia remains a key region for business along the BRI routes.'

'Infrastructure construction' remains the key area for respondents investing along the BRI routes, accounting for around 37%, followed by investment in plant construction, overseas market expansion, industrial manufacturing, financial services, and outbound mergers and acquisitions.

When asked about their current situation regarding accounting informatisation and application, Chinese companies going global cited the normal operation of accounting and financial modules (including financial accounting and financial reporting) as their main concern, followed by accounting internal control and risk management modules.

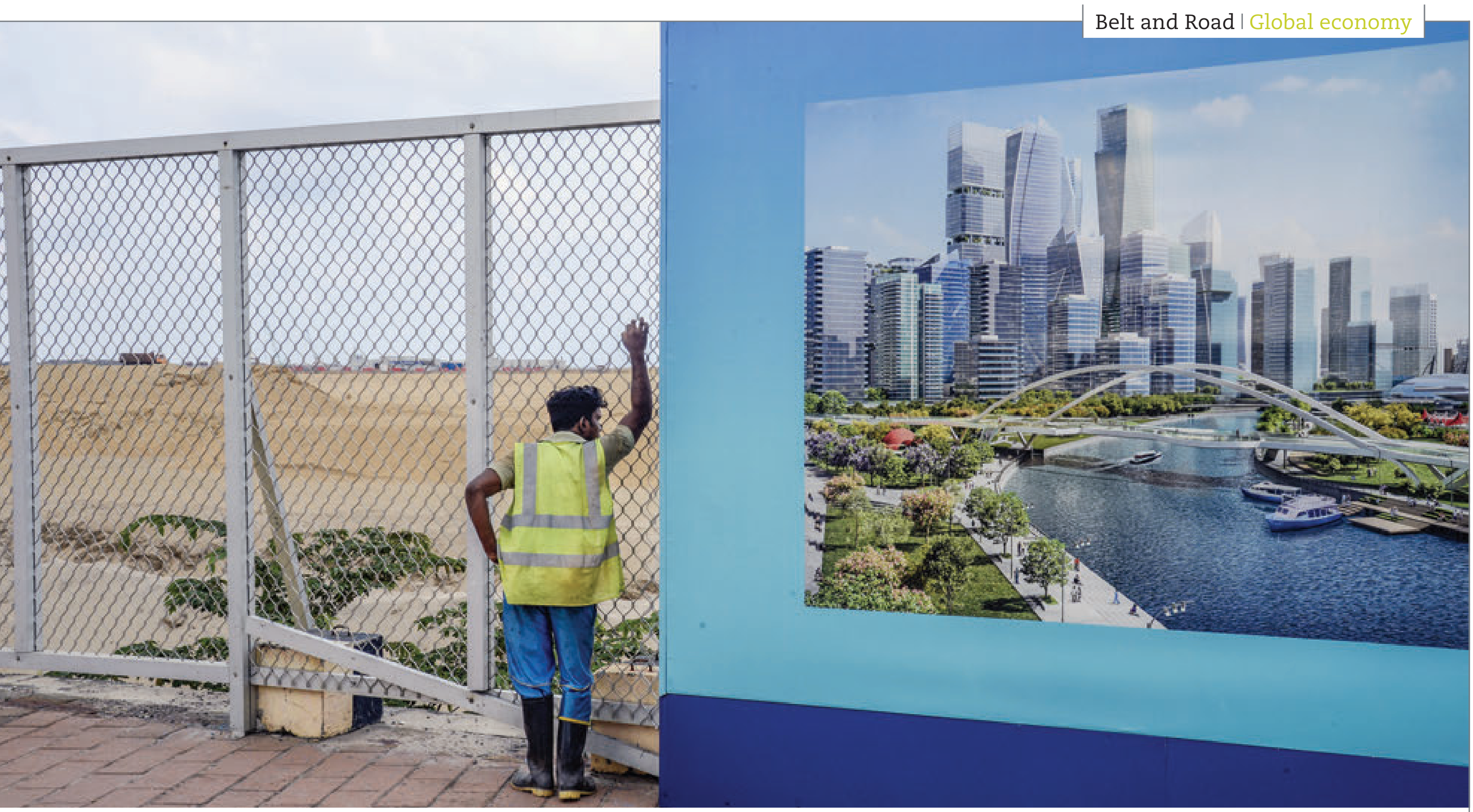
Their third and fourth concerns were decision-making support modules (such as cost management and internal reporting management), and modules to improve accounting operational efficiency.

'Companies believe that the core value of accounting informatisation and application is supporting regular business development, followed by improving productivity/efficiency,' Qian says.

Questions on digital competency revealed a general understanding of the technical domain, including popular office automation software, Chinese social media (WeChat and Weibo), and the accounting information systems. However, it also showed a limited knowledge of emerging technologies, such as big data, cloud computing, robotic process automation (RPA), Internet of Things (IoT), artificial intelligence (AI), and distributed ledger and cryptocurrency.

Among those surveyed, a professional qualification in digital competencies was the most common training method for upskilling accounting talents, followed by internal training and external forums.

US President Donald Trump's tax reform and the base erosion and profit shifting (BEPS) action plan are also addressed in the report, noting the subsequent implications for foreign investment decisions and tax burdens on businesses. 'Companies hope that the countries where they invest can reduce tax rates, offer



The site and an artist's impression of the Colombo International Financial City project in Sri Lanka, capitalising on the US$500bn projected to underpin the BRI infrastructure.

tax incentives, enhance tax transparency, stability and legalisation, simplify tax collection and management procedures, and ameliorate law enforcement in order to increase corporate enthusiasm and confidence in outbound investment,' Qian says. 'At the same time, they expect China to further improve its local tax system, strengthen international tax coordination and eliminate duplicate taxation via tax treaties so as to support going global.'

Digital imperative

The overarching takeaway, in Qian's opinion, is that efforts should be made to quicken the pace of digitalisation on the BRI to pave the way for connectivity. 'The connectivity of accounting and business languages is urgently needed in the regional economic cooperation and trade activities along the BRI routes,' she says.

The findings also affirm that international application of accounting and financial management systems relies on the digitalised application infrastructure and cloud service. 'For Chinese enterprises going global, accounting and financial management will be even more difficult in a multi-regional context with diversified economic situations,' Qian says.

The establishment of corporate internal control systems will also see huge challenges. 'The challenge lies in risk control and liquidity management,' Qian explains. 'The globalisation of financing channels, diversification of financial assets, and fluctuation of interest and exchange rates will intensify at the same time. Another challenge lies in the changing tax landscape, as tax accounting and management need to comply with local tax regulations. Given that, the tax service system should be able to support local tax data requirements and realise the connectivity of different tax systems.'

Therein lies the crux of the accounting profession's role. 'In addition to the right digital accounting ecosystem and oversight, we need professional accountants who have an in-built digital understanding and appreciation,' Qian says.

'In 2016, ACCA published its ground-breaking report *Professional accountants – the future*, where we isolated the seven professional quotients that all qualified accountants will need to develop. These professional quotients are a collection of technical knowledge, skills and abilities, combined with interpersonal behaviours and qualities.

'The digital quotient – the awareness and application of existing and emerging digital technologies, capabilities, practices and strategies – is one of these seven key areas and ACCA is committed to ensuring our current and future members can navigate all the opportunities that a digitally enabled accountancy profession presents. In this way, we hope both ACCA and our members can play a major role in developing a Digital Silk Road that enables the BRI to reach its full economic potential.' AF

Peta Tomlinson, journalist

ACCA's *Digital Connectivity in Accounting: A boost to the Belt and Road Initiative* can be viewed at bit.ly/ACCA-BR-Initiative

Ready for what's next?

ACCA has looked at 10 major drivers of change that businesses will face in the future, including the trends described in this article (see page 10). **Try our readiness indicator to assess your business's preparedness for these challenges at accaglobal.com/readiness**

Honest broker

CEO of the International Federation of Accountants Fayez Choudhury explains how the global body adapts to the winds of change

For Fayez Choudhury, the accountancy profession is a cornerstone of a properly functioning society. And he should know. During a 42-year career he worked at PwC and held senior positions at the World Bank and a number of high-level representative bodies before joining the profession's global organisation, the International Federation of Accountants (IFAC), in 2013 as its CEO – a position he is stepping down from at the end of this year.

Although IFAC represents associations across the globe with a combined total of three million members and students, it is itself a relatively small organisation. Against that background, Choudhury encouraged the IFAC team to ask themselves what IFAC can do that others can't – IFAC's comparative advantage.

Choudhury has been keen to explore how to leverage IFAC's extensive network of member bodies to facilitate dialogue. 'By not being attached to any one jurisdiction, IFAC – which is ultimately a knowledge, advocacy and stakeholder organisation – can become a trusted intermediary for stakeholders in their dialogue with the profession,' he says.

The comparative advantages identified by Choudhury underpin his view of how IFAC should be organised, exploit the opportunities that come its way, and address and confront challenges. He describes those advantages as IFAC's pole star in helping to chart its three broad roles: supporting the profession, developing the profession and championing public interest issues that are important to the profession.

Members of a foundational profession for society such as IFAC have an obligation to help emerging economies, he says, including developing a profession in those countries. 'We are not just accountants turning up to an office every day; we are important members of civil society because we are privileged to have benefited from a good education and training. We are also influencers in the organisations in which we work.'

This, he says, gives accountants an obligation to speak out on relevant issues. While admitting that there is always more to do, Choudhury says he is proud of the way IFAC has spoken out over the years.

'Projecting public interest issues on a broad stage using the weight and credibility of the profession, and partnering with other influential bodies, has led to significant successes,' he says. 'It is not just us speaking about the issues; we are catalysing influential voices to participate in these discussions.'

As the world continues to change at speed, Choudhury says he is optimistic that IFAC possesses the agility, flexibility, nimbleness and durability needed to spot and take advantage of the winds of change and adapt accordingly: 'We do have a responsive organisational mindset.'

He pays particular tribute to the 'knowledge mediation of the IFAC team'. IFAC's 175 member bodies around the world are generating information and knowledge relevant to the profession. Leveraging this, IFAC has constructed a Global Knowledge Gateway (ifac.org/global-knowledge-gateway) – an online hub organised by topic area that provides links to further resources.

But he believes that IFAC must go further still. 'Having great ideas and topics in our New York offices or at board meetings isn't enough,' he says. 'We need to deliver those messages.' As a result, IFAC has upgraded its global communication function.

> 'Technology is changing people's views of the physical workspace, job security, opportunities, entrepreneurship and horizons in a way that was unimaginable even 15 to 20 years ago'

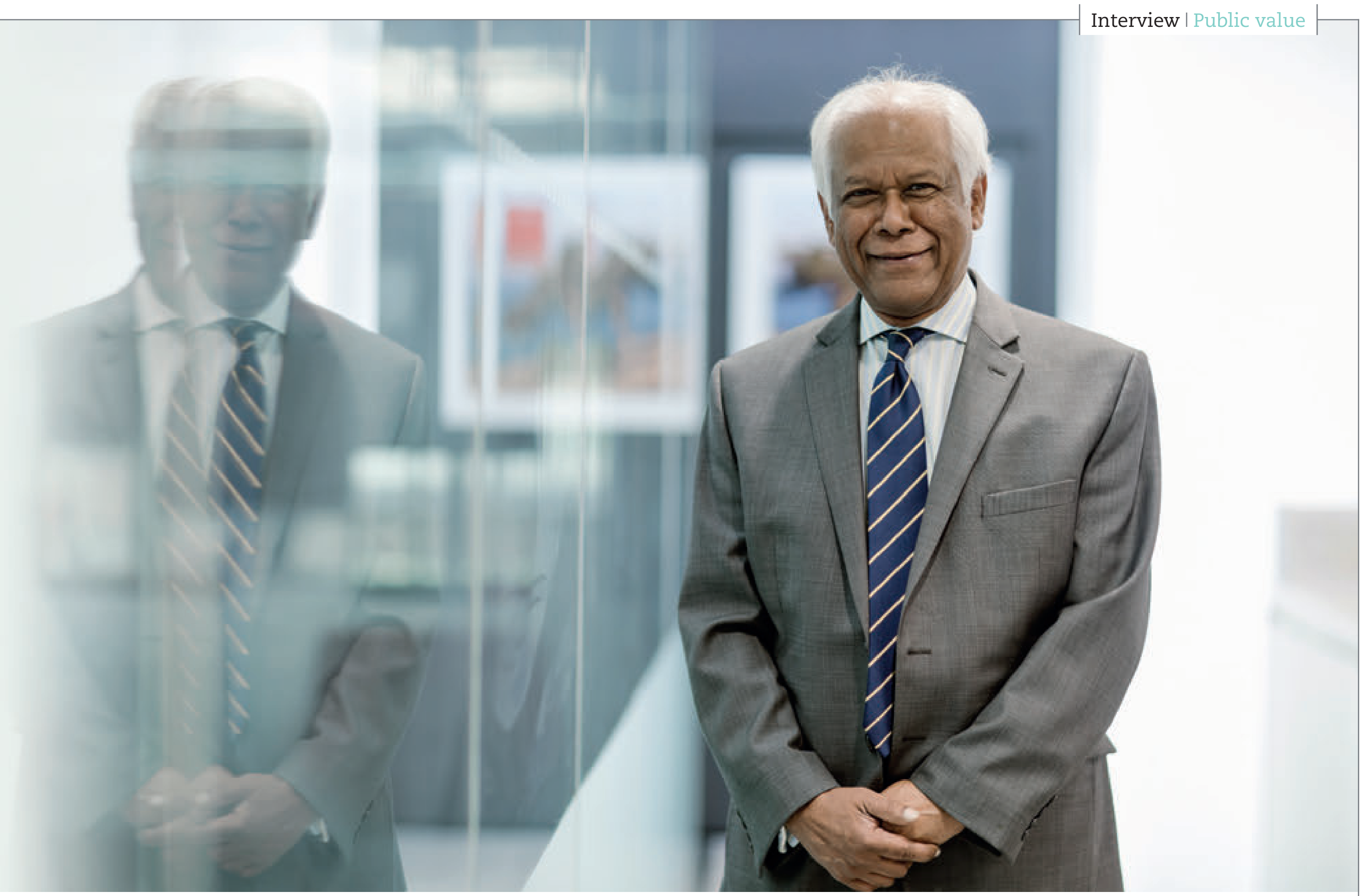
Winds of change

Choudhury sees 'difficult and fundamental challenges coming down the pipe', and believes the profession needs to track fundamental change, which is coming from many directions. While he does see opportunities, he says they are 'often fleeting chances to promote the role of professional and public interest issues, often in a small window of opportunity'.

The first challenge is an old one: 'Every profession has to constantly search for relevance. Who are we trying to serve and how do we best deliver?' He describes the relevance issue as subject to considerable flux.

Although the same is true for a great many professions and jobs, much of the work that was performed 40 years ago by accountants is now automated. He wants accountants to be at the heart of the societal discussion on the future of work. 'Professional accountants won't be doing the work we do today, but we have to scrutinise our offering and make sure it is aligned with the market's needs,' he says.

The other key challenge is the perceived changing view of careers of the generation currently entering the workforce – the millennials and Generation Z. 'Technology is changing people's views of the physical workspace, job security, opportunities, entrepreneurship and horizons in a way that was



unimaginable even 15 to 20 years ago,' he says.

The profession has to work out the impact of those changing perceptions on the need for a steady stream of the brightest to join its ranks. It also has to compete to remain attractive compared with other professions. Roles such as performance management and reporting are being opened up to those with expertise in emerging knowledge sectors such as data mining. Such changes benefit society, he says, but challenge the profession to define its value proposition.

On the future of audit, Choudhury says the profession carries out the important audit function of expressing an opinion on financial statements 'by and large very well'. A watershed moment was the redrawing of the audit report to include key audit matters (KAMs) to show where auditors spent their time and the issues organisations were facing. 'It gives insight into the financial risk and dynamics that users of accounts would not otherwise have.' But he acknowledges that increasingly the financial statements do not provide the information required by stakeholders and that broader forms of reporting on how organisations create value are needed.

Clearly the challenges faced by the profession differ across the world: the agenda for accountants in developed countries is not identical to those who are working in fragile states. 'We have to look at that transition and provide a roadmap that different countries can use,' says Choudhury.

But perhaps one challenge is common to finance professionals the world over. Choudhury calls ethics 'the defining characteristic of the accountant', adding: 'If professionals are not grounded in ethical principles, then the profession is not serving its purpose.'

Ethics drive the whole profession, but Choudhury sees auditors as facing particular pressures related to independence and objectivity. The International Ethics Standards Board for Accountants' code of ethics, supported by IFAC, dwells on that threat, but he points to 'a considerable infrastructure from regulators and government to make sure conflicts of interest are avoided and safeguards exist against threats'.

While Choudhury describes a substantial and meaningful ethical framework, he acknowledges it will not always work. 'Even the most highly skilled surgeon will have the occasional lapse,' he says. 'The one ethical breach – out of hundreds of thousands of good-quality work – is the one that makes the press. That transparency is good, and the profession is committed to that continuous learning.' And he argues that ethics are changing for the better. 'By our shining a light, people have a more nuanced and deeper view of where conflicts can occur or principles may be compromised.'

As CEO of IFAC he has been energised by the people he has met. They have helped to motivate him to make a contribution to the development of the profession: 'I am fortunate to have had this opportunity, and IFAC will remain an organisation for which I have the deepest respect and affection.'

Peter Williams, journalist and accountant

Call for ethical guidelines for AI

A CA ANZ report on the rise of artificial intelligence (AI) and its effect on people's lives, calls for businesses to have codes of ethics around what their AI programs can and can't do. 'Ideally these should be shared with customers so they can make informed choices about who they are doing business with,' says the report, *Machines can learn, but what will we teach them?* 'In our world of fake news and privacy concerns, we are currently at an ethical crossroad where we need to determine the right direction for the development of machine learning and AI,' commented Karen McWilliams, business reform leader at CA ANZ. 'By setting the right ethical framework now, we have an opportunity to design a new AI-enabled world, which could create a more inclusive global society and sustainable economy than exists today.'

Read the full report at bit.ly/CAANZ-EthicalGuide

Seven-year handicap for women

Women in finance and accounting take seven more years on average than their male counterparts to reach executive level, according to *The slow path to the top: the careers of women in finance and accounting,* commissioned by ACCA. The research found that, while the careers of men and women in the sector initially progress in near parallel, the careers of women decelerated in middle management, due primarily to limited peer sponsorship and a lack of high-profile projects or opportunities. 'This report is particularly interesting as it looks at the factors behind the seven-year lag that women are most likely to encounter when they reach middle management,' said Maggie McGhee, executive director – governance at ACCA.

Read the report at bit.ly/ACCA_SlowPath. See also article on page 28.

Business model innovation

In today's ever-changing world, organisations are using business model design to build unique approaches to creating value that have the potential to radically disrupt industries. A new report from ACCA, *Business models of the future: systems, convergence and characteristics*, identifies 12 characteristics behind business model design that are being combined by organisations in different ways to create new sources of value. These are: multi-layered; participatory; platform-ready; multi-capitalist; purposeful; data sensible; boundary testers; open; potential enhancing; fair players; convening; and restorative. 'These characteristics lie behind the models creating organisations that are ready for the future,' said the report's author, Jimmy Greer, head of sustainability research and policy at ACCA. 'The accountancy profession is well placed to support the growth of business models of the future,' he added.

Read the full report at bit.ly/ACCA-TechValues

Report highlights tax gap

More Australians than ever are claiming deductions they are not entitled to, a fact proven by the Australian Taxation Office (ATO) individuals (non-business) tax gap report, which highlights a gap not just in tax collected, but also tax policies and community behaviours. 'Many Australians probably think claiming a few extra deductions is a victimless crime, but it actually costs our society billions,' said Michael Croker, tax leader at CA ANZ. 'This is not "their" money, it's Australia's money, and each incorrect claim adds up to billions being diverted from Australian services and infrastructure. Those who do not accurately share their claims with their accountant or the tax office need to consider that the ATO has considerable powers to investigate, claim money back and penalise. If deductions continue to be over-claimed, then the next step will be for policymakers to consider new approaches, and this report certainly gives the argument credence.' AF

Tax avoidance is costing Australian society billions.