

Skills for the future As the working world transforms, we detail the skills you'll need to know about

You may begin typing now ACA students and tutors offer insights about the new computer-based exams

Generation tech What can accountants do to prepare themselves for the impact of innovation on their roles?

It's all in the cloud Insider's guide on making sure your online training file is updated frequently



OCTOBER 2017 | ICAEW.COM/VITAL

The innovative members who are breaking the mould and using their qualification to disrupt the status quo speak about what drives them





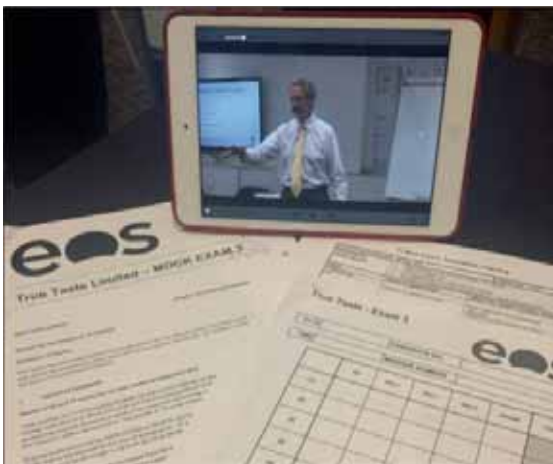
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October 2017 Issue 74

14 SKILLS FOR THE FUTURE

Discover the key skills the accountants of tomorrow will need



08 THE BOSS

Euan Cameron explains how he rose through the ranks to become PwC's artificial intelligence leader



26 THE TECH REVOLUTION

From big data to cyber security, innovation is transforming the role of accountants



30 UPGRADE YOUR GIZMOS

Enhance your life with the latest gadgets, such as necklace cameras or Bluetooth earphones



18

TECH DISRUPTORS



Driving change

Ten individuals share their insight on the challenges and delights working at the cutting edge of innovation with Danny McCance

05 Editor's picks

Our favourite must-have apps

06 In review

News, events, and the Twitter interview

09 From the council

We speak to the Student Council's Jessica Bernardez and Louise Hollington

10 Keeping it all up to date

Online training records have never been easier to manage

12 Case Study essentials

Senior examiners offer their guide to the Case Study exam

17 From pen to keyboard

Top tips for the new computer-based exams

34 The last word

Sagar Kanakiya



Chartered Accountants' Hall
Moorgate Place
London, EC2R 6EA
☎ +44 (0)1908 248 250
✉ vital@icaew.com
icaew.com/
studentcommunity
linkedin.com - ICAEW
Students
@ICAEW_Talk
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Vital is produced by
Progressive Content
71-73 Carter Lane
London EC4V 5EQ.
T: +44 (0)20 7920 8100.
progressivecontent.com.
Contact: info@
progressivecontent.com

Advertising enquiries to
advertising@
progressivecontent.com

To comment on your
magazine, please email
publishing@icaew.com

LPDPLM15452
ISSN 2398-5194

Printed in the UK by
Sterling Solutions



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Welcome

to the October issue of *Vital*, which explores how technology is disrupting all aspects of the profession



This is the first issue of *Vital* to feature a focus on technology. It was an obvious choice for a special issue given the huge change the world of business, finance and accountancy is undergoing and the extent to which this change is driven by emerging trends in technology.

Adapting to change and new technology is something that accountants have always taken in their stride, from the arrival of computers, the launch of the spreadsheet and the dawn of the internet, to the rise of big data and artificial intelligence (AI), accountancy keeps changing as the world around it does. It is no surprise to see the profession and those within it adapting so well to change and coping with the current burst of disruption.

It is even less surprising to find those recently qualified at

the heart of so many of the firms leading this disruption. For the cover story in this issue we sought out some of the most influential ICAEW Chartered Accountants. We also hear from other prominent members of the profession, such as PwC's Euan Cameron, who leads the firm's work on AI.

But it is not just individuals who have to keep ahead in a fast-moving profession. As the professional body responsible for your qualification, helping you to prepare for whatever challenges you may face in your career, ICAEW continually updates the ACA to maintain its relevance.

Perhaps the most striking recent development has been the arrival of computer-based exams. In this issue we speak to some students who have experienced the computer-based exams, as well as looking at best practice when it comes to maintaining your online training file.

We always enjoy hearing from you, so get in touch with your thoughts on vital@icaew.com

Marie

Marie Lake
Vital Editor

FROM THE FACULTIES



Audit & Beyond

New, extended auditor reports place extra demands on auditors. But does the rest of a company's report, notably the strategic report, offer a similar degree of assurance? For more details, visit icaew.com/aaf



Business & Management

As organisations fear disruption from a major incident, they are updating disaster recovery and business continuity plans to build in resilience. For more details, visit icaew.com/bam

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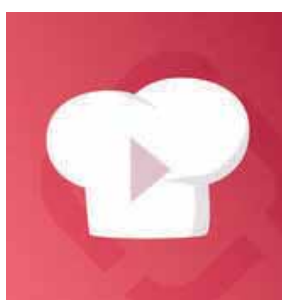
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Making international calls
cheap and easy
rebtel.com/en

LIFESTYLE

**ACAST**

The latest for all your
podcast needs
acast.com

**RUNTASTY**

Healthy recipe app with
diet-specific filters
runtastic.com/en/apps/runtasty

**CHARITY MILES**

Helping to make those
difficult runs more
worthwhile
charitymiles.org

Editor's picks

A selection of apps to make those
essential, and not-quite-so-essential,
tasks a little easier

ORGANISATION

**TANDEM**

Making banking even
more interactive
tandem.co.uk/features

**TRÖV**

On-the-go insurance for
individual personal items
trov.com

**MISSIVE**

Taking team communication
to a new level
missiveapp.com/features

In Review

BASE 2017 NATIONAL CHAMPIONS



North London Collegiate School saw off tense competition to be crowned the winners of the BASE National Final 2017 in Birmingham. The event, which saw around 250 aspiring young business leaders aged 16-19 from across the UK taking part in a day of business challenges, was judged by business professionals, who were all ICAEW members, from companies such as BBC, ITV and Rolls-Royce.

Sky Italia's Gillian Curle, pictured on the left with the winners, took on the difficult but ultimately rewarding task of being head judge of this year's panel. "I was delighted to take part in BASE and meet so many enthusiastic and talented young people - the future of business is certainly in safe hands!" she said.

With members and ACA students providing guidance as mentors for the 43 teams, she emphasised the importance of taking part, no matter what stage of your training, adding: "I would urge more schools and businesses to get involved in BASE and work together to improve skills. It can also give business leaders the opportunity to learn what motivates the next generation of talent."

2018 ACA TAX EXAMS

The syllabus, exams and learning materials for all ACA tax exams in 2018 will be based on Finance Act 2017. Once (no.2) Finance Act 2017 has been published, ICAEW will determine what impact it has on our examinable content and update you. Please visit icaew.com/examresources

UPDATE: SPECIAL CONSIDERATIONS

Students who feel their exams are adversely affected by illness or other circumstances may apply to have this taken into consideration during marking, providing they complete the application form and supply any supporting evidence within 14 days of the exam. This special consideration process has recently been updated, so make sure you carefully read the guidelines before applying at icaew.com/specialconsiderations

EXAM BOOKING DEADLINES

It's essential to plan ahead when booking exams as there is only a limited time to book your place. Exams are booked on a first come, first served basis so make sure you know the date when the exam booking opens to get in early. For all key dates go to icaew.com/acaplanner

COMPUTER-BASED EXAMS: EXAMINER FEEDBACK

As of the September exam session, four Professional Level exams are now computer-based: Tax Compliance; Audit and Assurance; Financial Management; and Financial Accounting and Reporting. Tips for students from the examiners, including some more in-depth guidance from the Financial Management team, can be found at icaew.com/cbe



KEY DATES AND DEADLINES

4 October Deadline to apply for November's Advanced Level exams and access arrangements

10 October Case Study advance information will be posted for November's exam

20 October Results for September's Professional Level exams will be released

1 November Deadline for applications for December's Professional Level exams and access arrangements

6-8 November Advanced Level exams

4-6 December Professional Level exams

15 December November's Advanced Level exam results

19 January Results for December's Professional Level exams will be released

To access your exam results and statistics on the pass rates, go to

icaew.com/examresults

Book your exams via your online training file at icaew.com/trainingfile

ACCOUNTANTS ARE IN DEMAND

SMEs and start-up firms have contributed to the increased demand for accountancy professionals, with the number of vacancies increasing by 21% in the second quarter of 2017. A report from the Consultative Committee of Accountancy Bodies discovered that the profession contributed £52bn a year to UK GDP as the scope of finance departments becomes broader.



ICAEW ACADEMIA AND EDUCATION COMMUNITY

The Academia and Education Community is a free online forum for anyone with an interest in academia and the advancement of the accountancy profession. Join the community to:

- connect with other professionals with similar interests;
- discuss the latest issues facing accountancy, education and training;
- share teaching ideas and materials;
- receive the latest ICAEW thought leadership in the field; and
- access and share research ideas.

To join free, visit ion.icaew.com/academia



WEBINARS WORTH TUNING INTO

All broadcast from Chartered Accountants' Hall, London at 10am (UK time). Register for live webinars, or catch up on-demand at icaew.com/acawebinars

18 October Transitioning from being a student to the workplace

12 December Technical update

ON-DEMAND WEBINARS

There is a wealth of webinars available to help you through your ACA training. You can access our entire library of webinars wherever you are in the world, 24/7 and discover a range of topics including exam skills, professional development and wellbeing. Simply visit icaew.com/listenagain



KIRSTIN GILLON THE TWITTER INTERVIEW

Kirstin Gillon, technical manager at ICAEW's IT Faculty, answers our quick questions.

Can you sum up your role in 140 characters?

I research, analyse and write about how technology is changing the profession, the implications for the future and how ICAEW should respond.

What's the best part of your job?

Speaking to members around the world on how technology is affecting their roles.

What do you find challenging?

Finding ways to explain new technologies simply and meaningfully, and trying to predict the future in a very fast-changing world.

What is the key to your success?

Understanding what different people need to know about technology, whether students, members or executive officers at ICAEW.

How do you relax outside of work?

I enjoy music, playing the piano and singing in a few choirs. I also enjoy walking and recently did the four-day Inca Trail trek.

What do you think is the key to healthy work/life balance?

To take control and be clear about your priorities. Sometimes work takes over, but don't let that become the norm.

Do you have any useful advice for students?

Trends like AI make our soft, 'human' skills even more important, so make sure you're developing those as much as the technical ones.

The Boss

Euan Cameron, PwC's artificial intelligence leader, highlights the key skills for future leaders

I wanted to be a newsreader. Or a stuntman. Although if I'd known about artificial intelligence (AI) when I was six, I like to think I'd have found that exciting too.

I don't have an accountancy background. I studied engineering and worked at a strategy consultancy before doing an MBA and joining PwC.

I worked up through quite a standard route in PwC initially - from a junior strategy consultant to partner, then an industry leader.

I always try to approach issues with an open mind, treat everyone with respect, and not take myself too seriously.

I would like to have spent more time abroad. I did a six-month secondment in Germany at the start of my career and my MBA in France, but I think everyone benefits from more exposure further afield.

It's important to make sure that you're able to adapt quickly to new situations, and have a good dose of creativity, curiosity and emotional intelligence. All of these are uniquely human skills and will be invaluable in the future as we increasingly work more closely with machines.

I play tennis with my kids to unwind. But I'm afraid they're improving so rapidly and I need to make the most of it. I reckon I have about six months to go before I'll never win a game again. ●

AI is likely to be the dominant technology of our age, affecting almost every industry and organisation

There's a lack of public understanding about AI and it's hard to trust what you don't understand

I'm enjoying the opportunity to shape a role from scratch, helping businesses to understand the value of AI





**JESSICA
BERNARDEZ**

Congratulations Jessica, how has your initial experience been?

Really good, I feel very supported. It's been an eye-opener going to council conferences and meetings, and being able to hear what the ICAEW council actually discusses. It's been amazing.

What have been your highlights?

The Council conference in July was definitely a highlight. I had two days in Ascot, so it was a great opportunity to meet people and hear about the ICAEW strategy.

We had our first ISC meeting in July too, when I officially chaired my first meeting, which went really well.

What did you discuss?

We tend to get sessions and updates from other people. We had an update on the computer-based exams and their impact upon students. We also had CABA do a session with us on nutrition, which was interesting.

Then we spent time hearing about the other societies, what they're up to, issues they're facing, what things are going well, and then we pulled together what we think we're doing well at across the student societies, and I left them with some things to go away and talk to their societies about.

Have you had any issues or challenges so far?

Getting people involved is the main challenge. Some student societies are quite geographically spread out, so they find it quite hard to get people to go to events.

The challenge here is how best to get events for everyone.

What's the most important thing on your agenda right now?

I'm really pushing being a voice for the students. I get to go to council meetings and then student council - it means I get to share feedback.

So now in every meeting I'm doing a feedback session of what's being discussed at council and what others want me to bring up.

I'm also trying to push diversity, so I've signed up as a diversity champion with ICAEW. This is something my vice-chairman Louise is really passionate about, so will explain some more.

And what's next?

I get to stay on council for three years, even after I'm chair of the ISC. I really want to champion the younger members aspect. I want to keep people engaged once they are not students any more.

Find out more on ISC and student groups near you at [icaew.com/studentgroups](https://www.icaew.com/studentgroups)

Leading the charge

Vital spoke to the the ICAEW Student Council (ISC) chairman Jessica Bernardez and the vice-chairman Louise Hollington about how things have been so far, and what they aim to achieve in the future



**LOUISE
HOLLINGTON**

Congratulations Louise, what have your first few months been like?

I think the main challenge has been balancing everything, like work and all the things outside ICAEW.

And what about the highlights?

The council conference was brilliant. Being able to get involved, and the more experienced members listening to us and our views and thoughts on what's happening, and seeing them take them on was really good.

Tell me about being a diversity champion...

We're getting involved as diversity champions for ICAEW. It's a new programme being set up. There will be about 10 champions in total, and Jessica and myself are two of them. It's something I'm really passionate about and have been for a long time.

It's about getting people from disadvantaged backgrounds into the profession or into university and letting them know that the option is there and that they shouldn't feel hampered by their background or where they've come from. I was from a single parent family and went to a normal school and now I'm here and doing pretty well.

I think it's just people having the belief and having someone that believes in them saying yes you can do it. Hopefully we're going to make good strides with this.

What does the ISC mean to you?

To me it's a place where I've been able to come out of my shell and meet people across the country that are in different roles across the profession.

Networking is key and I have really been able to expand my networking capabilities. Going from being involved in the Leeds society to being on the ISC nationally has given me a chance to broaden my network. ●

Getting online

Keeping your online training file up to date throughout your ACA training is essential and easier than you may think. Nicola White, training and CPD manager at ICAEW, shares her top tips on how to keep your training file current and how to prepare for a six-monthly review

From the day you register as an ACA student, you will be able to log in and access your training file until it is signed off at the end of your training agreement. It is your responsibility to keep your file up to date. Meeting your qualified person responsible for training (QPRT), counsellor or principal every six months is also a mandatory requirement of the ACA.

KEEP YOUR ACA PROGRESS ON TRACK

Your training file is easy to navigate. Ensure you don't miss a step by watching the guidance video, it provides everything you need to know. Watch it on demand at icaew.com/how-to

Once you have watched the video, here are some tips on how to maintain your ACA progress and stay organised.

Start recording your progress as soon as your training starts and continue throughout your training agreement period.

✚ Please note that if your employer's internal professional development and/or ethical programmes have been accredited by ICAEW, you will only see the sections of the training file relevant to you.

PROFESSIONAL DEVELOPMENT

Provide an example from your day-to-day work experience to show how you meet each professional development skill. You'll need to evidence all 52 skills before the end of your training agreement. Record how you demonstrate each skill within your training file and include feedback from your QPRT, counsellor or principal.

Access webinars and past *Vital* articles on each professional development skill to ensure you continue to gain those all-important skills at icaew.com/listenagain

Ensure you have acquired all the skills before you attempt the ACA Advanced Level Case Study exam.

ETHICS AND PROFESSIONAL SCEPTICISM

You'll develop your ethics know-how throughout your ACA training and it's vital that ethics is discussed at every six-monthly review. Failure to complete this section will jeopardise your journey into membership.

Steadily progress through the ethics learning programme during your training and after completing each module watch the corresponding Practising Ethics webinar. Make notes on the ethical scenarios during the webinar as you will discuss these at your next review.

When you have completed all six modules you will need to achieve 70% or more within the devolved assessment. Remember to speak to your employer before you take the assessment.

Keep a note of ethical examples that you read in the news or see in the workplace as they will help you to talk about a real-life situation in your next review.

PRACTICAL WORK EXPERIENCE

Keep a record of the number of hours you complete per day using a timesheet or noting the hours in a diary.

One working day is seven hours so if you work longer than this, you may be able to record more time.

Add your number of days in six-month blocks in your training file and make sure that the days you enter are for the full period of your training agreement - don't leave any gaps.

You can't count study leave, courses, sickness days, holidays or office administration towards your work experience.



For additional help and guidance on your online training file or six-monthly reviews, speak to your QPRT, counsellor, principal or contact ICAEW. Call +44 (0)1908 248 250 or email studentsupport@icaew.com

AUDIT QUALIFICATION

Audit experience gained during your ACA training may help you to gain the Audit Qualification (AQ) if you're working for a firm of registered auditors in the UK who is an ICAEW authorised training employer. You will need the AQ to become a Responsible Individual to sign audit reports in the future.

Ensure you record your audit experience throughout your training agreement, not just after an audit. If you don't record your audit experience, you will lose it. You may not know yet if you'll ever become a Responsible Individual, but don't limit your future career by ignoring it now. You will not be able to claim the experience you are gaining now in years to come. At the end of your training agreement, you will have six months to finalise your audit experience and submit to ICAEW.

EXAMS

Keep a tab on the exams you have taken and your marks by logging in to your training file. Book a Professional or Advanced Level exam via your training file and log in on results day to view your marks. You can download and email your exam results to anyone when you're logged into your file.

MORE TIPS

You can update your training file at any time. Access it online 24/7 by using a tablet, laptop or desktop computer. ICAEW run random checks every month to ensure that students are keeping their training files up to date. If we check your file and six-monthly reviews are not taking place, we'll be in contact with you. An incomplete training file is not compliant with ICAEW regulations.

Ensure you receive information from ICAEW by keeping your contact details up to date - you can view your details and update them in your file. By keeping your file current it will be much easier when your file is ready to be signed off and it will also help ICAEW to verify your records before you're invited to become a member. Remember, you won't be able to qualify if your training file is incomplete. Before the end of your training agreement, download a copy of your file to keep a record of it. ●



SIX-MONTHLY REVIEW: WHAT YOU NEED TO DO

Get your six-monthly review meetings in the diary early. Schedule them to occur at each six-month point of your training agreement period and remember to invite your QPRT, counsellor or principal. This will help you to work towards each review date and ensure that you continue to monitor and record your ACA progress. You'll discuss the progress and development of each ACA component at every six-monthly review. Here is a summary of what you need to do to prepare.

Professional development Review your progress through each of the seven ladders over the last six months and record how you have demonstrated the skills. You'll gain feedback on this at the review.

Ethics and professional scepticism

Be ready to discuss at least one ethical scenario from the Practising Ethics webinars and prepare a real ethical situation to discuss at the review. You will need to confirm within your file that this discussion took place. You'll also be asked about your progress in the ethics learning programme.

Practical work experience Ensure you have the number of days worked within the last six months ready to discuss and agree at the review.

Exams Be prepared to talk through your exam progress, results and any resit plans.

Audit qualification If you're aiming to apply for the audit qualification, ensure you have the number of audit days you have worked within the last six months ready for the review. You'll need to have recorded the nature of the audit work you have carried out and the full legal names of all businesses audited.

You may also want to discuss other areas for development, such as on-the-job guidance, coaching and mentoring. Update your file by taking a tablet or laptop in to the review. Log on at icaew.com/trainingfile and remember to add any feedback given to you by your QPRT, counsellor or principal.



How the Case Study is assessed

A guide for students by the Case Study senior examiners

The Case Study exam is a competency-based assessment which uses a substantial case study to assess the professional skills of ACA students and is the final exam many students will sit before completing their ACA training. It comprises the Advance Information (AI) of around 15,000 words, which provides the case scenario; and the exam paper (EP) which is around 3,500 words. On the day of the exam, students will receive updates to the case scenario and will need to answer the exam requirements. The Case Study exam is based on a real-life business situation and essentially tests practical rather than pure academic or technical skills.

THE FOUR PROFESSIONAL SKILLS AND HOW THEY ARE ASSESSED

In the Case Study, the examiners are assessing students' ability to demonstrate their competence in four professional skills, as shown below (together with a brief explanation of what the examiners assess):

- **Assimilating and using information (A&UI)** the identification and use of relevant data from the case material - integrating AI and EP and any own research.
- **Structuring problems and solutions (SP&S)** the appropriate analysis and explanatory commentary on figures and other case information, providing evidence of comprehension of the core issues.
- **Applying judgement (AJ)** the evaluation of the

analysis conducted, consideration of implications by assessing all assumptions, identification of limitations, omissions and links between issues, applying appropriate professional scepticism.

- **Conclusions and recommendations (C&R)** highlighting key points, providing clear conclusions derived from analysis and judgement and offering a range of relevant action points.

All students are advised to read the examiners' detailed report on any recent Case Study exam to obtain further understanding of each of these skills in a specific exam context.

The ICAEW learning materials also provide detailed examples of different qualities of answer for each of the cases included.

Students' exam scripts are assessed using a marking key in five sections:

- executive summary;
- the three main exam requirements; and
- appendices and overall exam.

The marking key has 40 equal 'skills assessment boxes' in total: six for the executive summary, 10 for each main requirement and four for appendices and overall exam. Thus, the three main requirements are given equal weighting and so should be given equal attention by students. The professional skills are closely integrated and there is synergy between them.

Competency is assessed by reference to four levels in each skills assessment box:

1. clearly competent (CC);
2. sufficiently competent (SC);
3. insufficiently competent (IC); and
4. insufficiently demonstrated (ID).

Clearly competent and sufficiently competent collectively are referred to as 'passing grades'. If there is no evidence of the competency, the box will be marked 'not attempted' (NA).

The result is expressed as a final mark out of 100; the pass mark is 50.

MARKING AND RESULTS DETERMINATION: THE PROCESS

The marking key for each exam session is developed by a process of intensive discussion over a period of several days by the senior examiners in conjunction with a group of highly experienced markers, with reference to a sample of actual exam scripts.

Marking is carried out by a 50-strong group of independent, professionally qualified, trained markers, arranged into teams headed by team leaders. Markers are required to be fully versed in the content of the confirmed marking key before they can begin 'live' marking. Their work is monitored throughout by the team leaders reviewing marked scripts and completed marking keys, and by overall statistics that monitor standards and variations.

Marking keys must show a clear, objective audit trail indicating how each mark was awarded (or not awarded).

This process provides a ranking of all scripts according to total grades achieved. The senior examiners and senior moderator then review a

range of scripts around a predicted pass mark to determine those to be selected for second marking.

Around 12% of all scripts receive a second marking, chosen mainly from just below and just above the predicted pass mark. This is undertaken 'blind' (that is, by a different marker with no reference to the first mark but using exactly the same marking key template). Differences between first and second marking are arbitrated independently by a third marker.

After second marking, a final ranking is produced. The senior examiners and senior moderator then read marginal scripts to decide a final pass/fail position. This is a reflective process which relies on the audit trail recorded by markers on the marking keys. Using that yardstick, the senior examiners and senior moderator can determine whether the scripts provide evidence of the necessary quality to pass a competency-based, professional skills assessment. The following criteria are relevant:

- position in the ranking;
- number of achievable passing grades obtained in each requirement;
- balance and completeness in coverage of the requirements;
- balance and completeness in coverage of professional skills;
- quality and integration of the answer to each requirement;
- number of not attempted boxes on the script overall.

An accumulation of not attempted boxes is seriously detrimental to success (no self-respecting professional accountant would present a report to a client with gaps in it!).

Legibility is also a critical key issue. There is no point in students writing 40 pages that markers struggle to read - they will try their best but points are bound to be missed. It is better for students to spend more time and reduce the number of pages, or to use simple techniques such as clear spacing. Until computer-based exams remove this issue, students should ensure that their report is completely legible - an unreadable report means that no credit can be given.

Students with marginal fails will have had their script marked twice, arbitrated where necessary, and been subject to a final review. The examining team are therefore confident that a fail is a fail. Unsuccessful students are advised to read the detailed examiners' report on the Case Study exam they sat to understand the general strengths and weaknesses which the whole cohort presented.

IN CONCLUSION

Success at the Case Study lies in knowing the AI scenario thoroughly; integrating the exam paper information into AI knowledge (A&UI); analysing the problems posed and performing relevant calculations (SP&S); making judgements from that analysis (AJ); and presenting conclusions and recommendations (C&R) that follow from the work conducted - all presented in a coherent and legible report for the client. ●

Explore the latest Case Study exam resources at [icaew.com/examresources](https://www.icaew.com/examresources)

Please note that the Case Study exam is fully open book. You can attempt the Case Study once you have attempted (or received credit for) all the other ACA exams, and you need to be in the final year of your training agreement.

Skills for the future professional

To face new challenges and the changing business world accountants will be working in, professional skills training must adapt to suit the times

The commercial environment in which you train is changing. There is less routine and compliance work, for example, and this is due to regulatory changes including audit exemption increases and digitisation of tax, and technological changes including data analytics and cloud accounting.

As routine and compliance work reduces, there is a greater focus on the development of skills that equip professionals to work with the outputs of automated processes, with other

specialists, and in a changing world. These skills include analysis, interpretation, professional scepticism, communication, collaboration, adaptability, resilience and commerciality.

As the pace of change continues to speed up, future professionals will need to continue to develop these professional skills throughout their career and learn how to adapt and thrive in a constantly changing commercial landscape.



SKILLS REVIEW

To ensure the ongoing relevance of the ACA qualification we have recently undertaken a review to identify which professional skills are needed for the future chartered accountant.

In this article *Vital* explores the five key skills that emerged from the review and provides some examples of how they have been incorporated into the ACA skills development ladders and within the exams that you will sit from January 2018 onwards.

RESEARCH FINDINGS

The research confirmed that our current professional skills development is robust and that the depth and breadth of skills assessed in the ACA is comprehensive and remains relevant and highly prized. The learning and development of professional skills is embedded throughout the ACA and begins from day one of your training agreement. You will develop your professional skills in the exams, through professional development in the workplace and through the ethics and professional scepticism element of the ACA.

THE FIVE SKILLS THEMES

The review identified five over-arching themes that already exist within the ACA and that will be key for the future professional. These are:

Adaptability The ability to recognise that business is in a constant state of change and evolution, to be curious about this, and to be flexible and adjust thinking, approach or methods as required.

Insight The ability to analyse and interpret data and think critically to provide commercial insight.

Collaboration The ability to partner and consider diverse perspectives to create successful outcomes while being accountable for yourself.

Perspective The ability to take a holistic view of business issues and decisions, considering external stakeholder interests and enterprise-wide implications.

Learning and reflection The ability to reflect on experience, learn and change to be more efficient and effective.

SKILLS IN THE EXAMS

The way we assess skills within the ACA exams is not changing. We currently

assess professional skills alongside technical knowledge in the Professional and Advanced Level exams, and we recommend that students review the professional skills along with the syllabus, learning outcomes and technical knowledge grid for each exam.

We have updated the current skills assessed in the exams to highlight these five key themes, and from January 2018, a revised exam skills grid will be introduced for each Professional and Advanced Level exam. Be sure to read this section in your study manual.

EXAM SKILLS GRIDS - EXAMPLES

Here are some examples from the updated exam skills grids to help you understand how examiners will be assessing these skills themes from January 2018 onwards. The updated theme that each example relates to is shown in brackets.

- When assimilating and using information, have you demonstrated understanding of the business context (perspective) and identified elements of uncertainty within a scenario or situation (adaptability)?
- When applying judgement, have you identified assumptions or faults in arguments (insight) or appraised ethical, public interest and regulatory issues (perspective)?
- Have you communicated clearly to a specialist or non-specialist audience in a way that is suitable for the recipient (collaboration)? Have you prepared any advice, notes or report in a clear and concise style (collaboration)?
- When analysing data, have you identified any information gaps (insight) and applied relevant technical knowledge and skills to analyse a specific problem (insight).

Each study manual will show the professional skills developed in the exam, so you can see the progression in skills development as you study.

WORKPLACE SKILLS - SOME EXAMPLES

In September 2017 the updated skills were incorporated into the current professional skills development ladders. This hasn't changed what you need to do at work, how you need to record the skills you have been working towards and gaining or have an effect on any of the skills evidence you have already recorded in your training file.

The following examples are taken from the updated professional development skills ladders.



ADAPTABILITY

This theme includes areas such as flexibility, resilience, determination and ambition. Employers will look for times when challenges must be overcome to achieve a goal and how you as a future professional reacted to these challenges and kept motivated in difficult situations. Start to think about:

- When/how have you demonstrated resilience and creativity when solving a problem or implementing a solution?
- How you have achieved a target or goal despite unexpected set-backs and problems? How did you adapt to those challenges?
- How have you used your initiative to evaluate and prioritise what was important, focusing on key issues and outputs?
- Do you anticipate and see opportunity in change? Have you added value as a result of change? Maybe this was a time-saving or a cost-saving or maybe you assisted more reluctant colleagues to embrace change?
- How have you adapted your behaviour, style, approach and means of communication towards another person to get their commitment or agreement?
- Do you support technological change? Can you identify an area where technological innovation could help improve performance or delivery of a project?

INSIGHT

This skill theme includes things like critical thinking, analysis, judgement and client service. Employers want to be sure you can analyse a range of financial and non-financial information and can provide considered solutions with clarity, integrity and confidence. Can you demonstrate how you have:

- Used your insight to evaluate options and rank potential solutions identifying any associated risks and uncertainty that each may have?
- Used your insight to develop a creative solution to a problem?
- Used your professional scepticism to identify when information was biased or an argument was flawed?
- Understood the key issues and then tackled them in a rational and logical manner?
- Grasped information quickly?



COLLABORATION

This is linked to team working, cultural awareness, emotional intelligence, relationship building and leadership. Your employer will want to see how you can collaborate within a team, that you are culturally sensitive and that you are able to articulate your point of view in an appropriate and professional way, both verbally and in writing. Can you:

- Show you have understood the needs of different audiences and adapted your communication style and method accordingly?
- Keep an open mind to the feedback from others and show empathy and sensitivity to the feelings of others in a team?
- Cut through jargon to provide a clear message that is relevant for your audience?
- Explain complex ideas to someone who does not have the same level of understanding as you on that subject? How did you ensure they had understood?
- Have you had to work together with people with very different working styles from yours? What did you do to make this successful?

“Your employer will want to see that you are able to articulate your view in an appropriate and professional way”

PERSPECTIVE

This theme includes skills such as identifying risks and opportunities, commercial awareness, strategic thinking and understanding the needs of stakeholders.

- Have you evaluated any potential risks and made an informed decision despite uncertainty?
- Can you think laterally and creatively about a problem you have been faced with?
- How have you respected and maintained confidentiality in your dealings with others?
- Have you built rapport with customers or stakeholders to better understand their needs?
- How have you improved the service you provide to internal or external customers or stakeholders?

LEARNING AND REFLECTION

This key theme relates to competencies such as self-evaluation, efficiency, providing added value and continuously improving. Do you:

- Actively seek feedback on your performance and learn from your experiences?
- Have a realistic view of your strengths and weaknesses? Have you reflected on your own performance and found a way in which you could improve?
- Understand when you need to ask others for their expertise and advice?
- Have an example of a complex problem you were faced with? How did you use your technical skills and knowledge to resolve it?
- Have an example of when you adapted ideas from one situation to another in order to be more effective? Or when you identified the best solution given the existing constraints?

NEXT STEPS

By updating these key skills themes throughout the ACA, we are helping you, as a future professional, develop and maintain the core skills that help keep ICAEW Chartered Accountants in high demand around the world.

If you registered as an ACA student from 1 September 2017, you will see the refreshed professional development skills within your online training file. If you are already on your way to progressing your skills either by following the ICAEW professional development ladders or your employer's professional development training, there is no change. You will continue to progress the skills within your training file. Your employer may choose to transfer over to the updated skills, if you are following the ICAEW programme, your employer will guide you on this.

Find out more at [icaew.com/futureprofessional](https://www.icaew.com/futureprofessional) ●



Computer-based exams have arrived

The transition from the traditional paper-based exam represents a more authentic experience, indicative of the working life of any accounting professional. With over 11,000 exams delivered by computers at the March, June and September exam sittings, for most, writing by hand for three hours on a day-to-day basis is as alien to them as the word processor was to the office worker when it was first introduced in the 1960s.

So while computer-based exams may not be what students are traditionally used to when in an exam situation, you are probably far more comfortable with the format than you realise. With the right preparation, using the wealth of information and support on hand from ICAEW, computer-based exams certainly shouldn't cause any sleepless nights! *Vital* asked ACA students and tutors for their top tips to make the most of your computer-based exams.

EXAM GUIDE

The exam guide provides everything you need to know for the day, including how to navigate the software, and what you can and can't take into the exam room, including some things you may not have thought about.

"It can be quite noisy with all the students typing at the same time, so maybe consider taking ear plugs with you." Alice De Vine, ACA tutor, iCount

WEBINARS

If you feel like you don't know where to start, ICAEW's on-demand webinars are the perfect way to introduce you to computer-based exams. There are six to watch, available 24/7 from icaew.com/cbe

"The webinars definitely helped in getting to know the features and functionality of the e-answer booklet as well as the correct way to present our answers (make sure that the cell you're typing in is expanded!)." Jolyn Lay Shian Tan, ACA student and Tax Compliance prizewinner, PwC

EXAM SOFTWARE

Getting to know the exam software in advance is crucial; use it for question practice and to test the functionality. Becoming familiar with the new format will help with any on-the-day nerves.

"When I eventually bit the bullet and used the exam format it was strange at first, but it really prepared me for what I was going to face in the exam." Daniel Webb, ACA student, KPMG

QUESTION BANKS AND SAMPLE EXAMS

Question banks will continue to be available two months prior to each exam. You can also access sample exams, illustrative answers from examiners, plus guidance on exam technique to aid your revision.

"Use the online question banks and sample exams as early as possible to ensure you are fully comfortable with the software, so in the exam you are only having to think about the question." Eimear Gunn, ACA student, Booth Ainsworth

REMEMBER TO RELAX...

Take time for yourself, especially away from the computer screen when revising. Go for a walk, spend time with friends, head to the gym, knit - whatever relaxes you! And try to avoid last-minute cramming.

"I try and remind myself that the exam is won or lost long before the night of the exam, and so I'm far better off just trying to relax and making sure I walk into the exam with a clear head." Alistair Franke, ACA student, PwC

ALICE DE VINE, ACA TUTOR AT ICOUNT, SHARES MORE TOP TIPS:

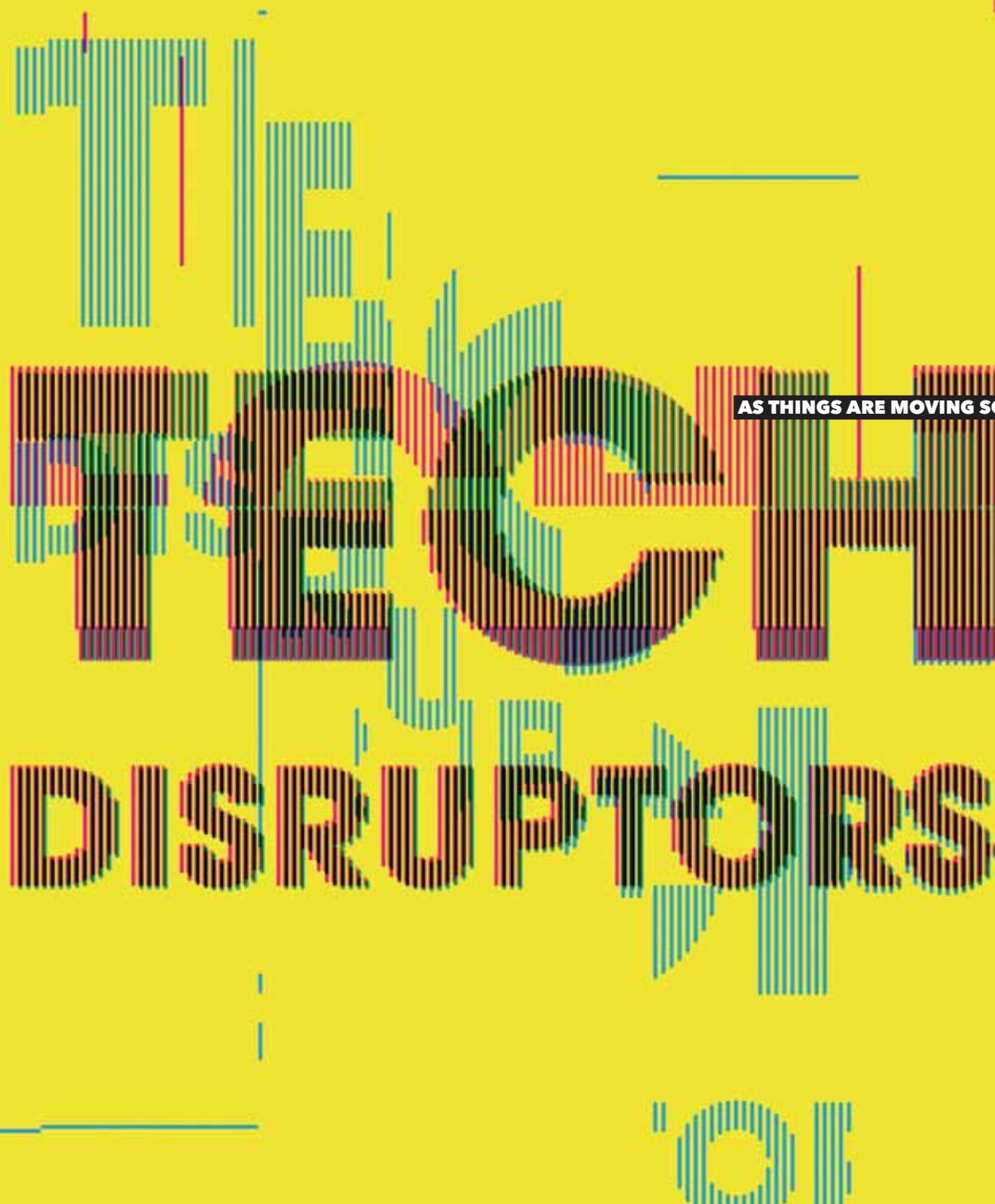
The input method for your answers might have changed but the exam is still the same. You need to learn and understand the material to pass the exam.

Use the practice software as much as possible - don't leave it until revision before you start using it.

Be positive and embrace the software.

For more about computer-based exams, including question banks, sample exams and when each exam will move to computer go to icaew.com/cbe

What is a tech disruptor and, more importantly, what drives them to try and make a change? Danny McCance speaks to 10 of these individuals about being at the forefront of innovation



TECH DISRUPTORS

AS THINGS ARE MOVING SO QUICKLY AND

ILLUSTRATIONS BY MELVIN GALAPON



When I went to the co-founder events for challenger bank Tandem, I thought that it was a company that really wanted to do something good and was relevant to me. It was a tangible proposition. So when I heard it was looking for people to join finance I found the opportunity very exciting. I was the first permanent finance employee.

The ACA qualification is incredibly valuable if you're looking to move across industries or across roles in the

future. It's valuable in ensuring you have a core set of rules, a core pillar that you can then transition off or move around using. You have core competencies that are incredibly valuable and working in different industries expands on that, as you're working across different topics.

Every business needs a solid foundation.

What is important is that you do things properly and in the right way. In disruptive industries this is maybe even more important, as things are moving so quickly and you're working in a challenging environment, it's important that you have core principles and a solid foundation. You need to be quick on your feet with everything constantly changing and even though things might be different, actually the foundations are the same.

In a heavily regulated industry

there are things you have to get right every time, but there are other areas where you can continue to push and to challenge and you need to learn. I think it's quite normal and natural to make some mistakes and that's OK, as long as you recognise them and learn from them and make your product or proposition better for the future.

For us, and with challenger banks like us, we need everybody to succeed for us to be able to succeed, in a way. We really welcome other people in the space as it grows consumer awareness. People's perception of a new bank might be: "I don't know if that's where I want to put my money, or if I trust them." The more the other challenger banks do in terms of raising awareness and disrupting traditional banks, the better it is for us. Everybody has a bank account. If you think about the market size it's huge. Even if we just took a few percent that's still a huge market.

To be truly disruptive and to truly push boundaries you have to have an incredible ability to keep going.

HAVE CORE PRINCIPLES AND A SOLID FOUNDATION. YOU NEED TO BE QUICK ON YOUR FEET

YOU'RE WORKING IN A CHALLENGING ENVIRONMENT, IT'S IMPORTANT YOU

How can the ACA help those in disruptive roles?

The understanding I got from both my time as an auditor and the rigour of the qualification has been of consistent value. I've moved from more junior roles to a senior finance role in a more complicated matrixed organisation. While the regulatory landscape changes over time, and we keep abreast of this through CPD, the principles and discipline of the ACA have proven essential to me as I've progressed through my career.



What challenges do you face?

Three trends are apparent to me. First, the growth of matrixed structures sprouting specialist niche teams (offshored, outsourced, insourced) to be partnered with and consulted and utilised to achieve goals. Second, the speed and depth of information available and learning how to filter out clutter. Turning data into value add analytics that drives the behaviour change needed to maintain or boost competitive edge and profitable revenue generation is key as a finance business partner.

Third, is security. Daily reports of hacks means there is a long way to go and constant vigilance is imperative. This will only become more relevant.

In the next two to five years, the continuing evolution of best practice surrounding cloud and big data - and of course GDPR - will affect both social and workplace uses of data.

What makes a disruptor?

Openness and acceptance of change. Embracing it and using it to spot opportunities, getting comfortable with constant change and with

rigorous adherence to the principles of value add analytics to drive profitable growth - my ACA helped establish these principles for me.

What future disruption do you foresee in your industry?

The IT and networking industry has grown to provide increasingly productive and ubiquitous communications in a more effective and cost efficient way. Constant evolution is a requirement to thrive. It's a tough environment but makes daily life busy, challenging and fun.

LAURA FOSTER
ASSOCIATE, CAPITAL MARKETS
FUNDING CIRCLE
QUALIFIED 2012 / FINTECH

I'd heard of Funding Circle a few years before joining through a mutual connection and found the business concept an interesting one, so I stayed in touch with its progress. When I found myself looking for a new role in 2016, I saw a job spec from Funding Circle and, given what I knew about the company, I was interested to explore the opportunity. I could sense a great culture from the interview stage and the role itself ticked a lot of boxes.

I knew my chartered accountancy qualification could open doors but perhaps assumed I'd end up in a more traditional finance company.

The role at Funding Circle stood out from the rest - the scope was wide and it offered some interesting opportunities.

Accounting is central to my current role. In particular, I'm responsible for the monthly reporting on the Funding Circle SME Income Fund, which is listed on the London Stock Exchange - so the ACA was a requisite skill. I use my qualification every day - either through my work on reporting for the listed fund, or on other projects that the Capital Markets team may be working on at Funding Circle. We explore a variety of potential transactions and we need to make sure we understand the full picture before proceeding - the accounting of any one of these transactions is a key factor so some interesting technical queries can often arise. It was an interesting challenge to move from a large corporate firm to an ever-evolving

business with a start-up feel. Keeping up with regular innovations and adaptations took a bit of getting used to, but is certainly exciting to be part of.

A career in accountancy doesn't have to be traditional or mundane. Chartered accountants play a central role in all financial firms - innovative and traditional. There are a lot of interesting start-ups around at the moment. It's great to see fintech firms reinventing very traditional markets, like Monzo with banking and Transferwise with FX.

At the moment, I'm focused on my current role and getting the most out of it as there is still plenty more to learn and some great internal opportunities. Working in a company so focused on change and innovation certainly always has the potential to inspire the next step though.

In my mind an innovator is someone motivated to challenge the status quo - someone eager and willing to break the norm in order to take the business a step further. I think something that will have a major impact on the future of my industry is the automation of accountancy.

THE INDUSTRY IS CONSTANTLY CHANGING SO BEING DISRUPTIVE IS KEY TO SUCCESS

FINANCIAL CONTROLLER,
CAMBRIDGE INTELLIGENCE
QUALIFIED 2006
/ DATA VISUALISATION



CHRIS HOWELL

control over process and risk. It just gives a bit more of a stable platform to allow a business to grow.

What challenges have you faced?

Growth is always a challenge. If you're growing quickly everything is changing constantly, so systems that worked a month ago may no longer be

fit for purpose, so you're constantly reinventing process. The other challenge we've faced is talent acquisition as we rely on finding the best people. We're in a very competitive market. We have to compete for talent with Cambridge and London, which makes it quite hard to find the right people.

What makes a disruptor?

It's an organisation that's looking forward and at the opportunities

How has the ACA helped you?

It is great as it provides credibility. Another advantage I found was when talking to a potential employer it allowed me to define the role.

Why is it important to have people with the ACA in disruptive roles?

When a company is fast growing and trying to do new things, people are constantly trying to push the business forward and it can help to have some

ACCOUNTANCY DOESN'T HAVE TO BE TRADITIONAL OR MUNDANE

DISRUPTION IN A NUTSHELL

It is not surprising in an age of great change that disruption is everywhere. It can feel like disruption is one of the most over-used words in the business lexicon. But there is hardly any walk of life that isn't being disrupted. The term "disruptive innovation" was first coined by Harvard Business School professor Clayton Christensen in his 1997 book *The Innovator's Dilemma* in which he highlighted how established businesses lose out to dynamic start-ups, while market-leading products get overtaken by unexpected new rivals. Classic examples include taxi firms losing out to a tech business that owns no cars (Uber) or a personal computer business revolutionising mobile phones (Apple). The tech disruptors listed here have all taken the skills learned on the ACA into companies that are shaking up an established market.



that are not necessarily around today but going to be around tomorrow. Also seeing where the next big thing is going to be, and making sure you've got something to address, or shape what that's going to be.

Are there companies you look up to or try to keep in line with?

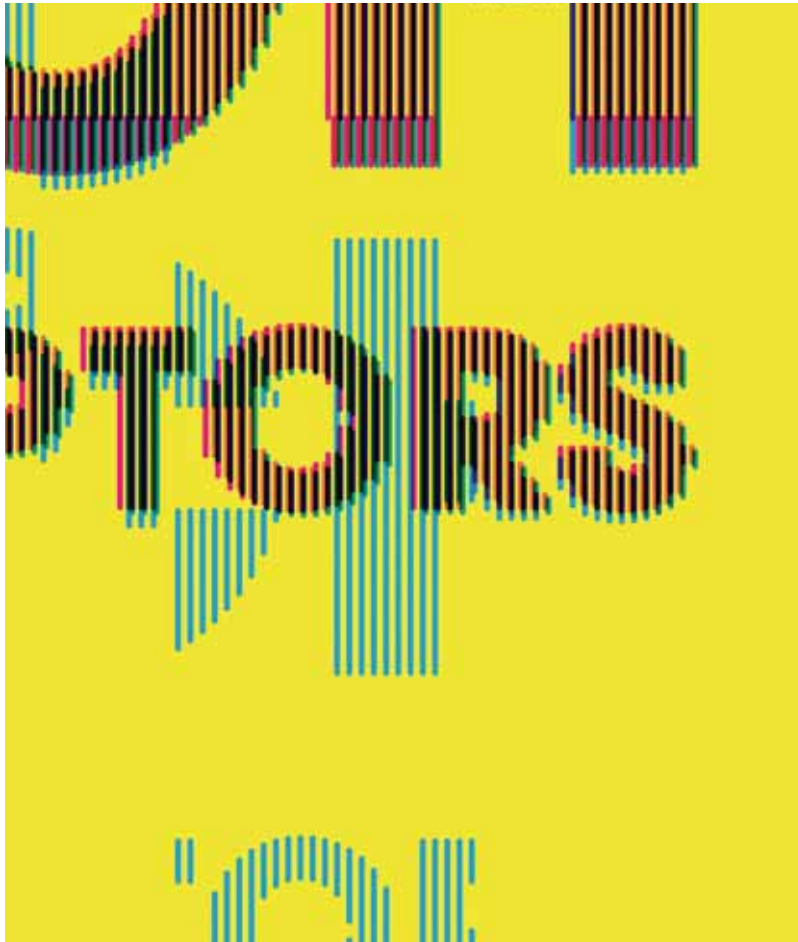
From a competitive point of view there are some competitors, but everyone comes at things from a different angle. In terms of looking to other companies it tends to be related technologies. Our software fits in with other software so we're really interested when our partner organisations, or companies we have alliances with, are doing new things and that's always of interest - it gives us ideas of where we need to change.

We've been part of a programme called Upscale, which is run by TechCity UK, that brings together quite a lot of fast-growing companies. That was really great to see what other people were doing.

Do you foresee a time when your company is going to have to watch out for new disruptors?

In terms of what we do, data visualisation is a very big topic, and it's all about giving humans an insight into their data. But there's also a lot of work on artificial intelligence and one of the goals from that might well be to eliminate humans altogether from the analysis. So, in the very long term that might be the next thing. However, that could be an opportunity as well as a threat.

“Growth is always a challenge. If you're growing quickly everything is changing constantly, so systems that worked a month ago may no longer be fit for purpose, so you're constantly reinventing process”



**HEAD OF WOMEN IN
LEADERSHIP, SKY**



SHIVANI UBEROI
QUALIFIED 2008 / MEDIA

**Has it always been your
intention to be working in a
disruptive company?**

Yes, I like being constantly challenged and Sky provides that as it is an ever-changing business and you always need to think out of the box.

**How did the ACA help you to
get your current job?**

I joined the finance department where my ACA was paramount to

THINGS LIKE VIRTUAL AND AUGMENTED REALITY, AND ARTIFICIAL INTELLIGENCE, WILL HELP WITH ADAPTIVE LEARNING,

There's a certain irony to Marios Hadjioannou: for someone who works for a tech disruptor, he's followed a well-established path. A strong mathematician at school, he opted for a university course that nourished his appetite for economics and accountancy. A role with EY followed, along with the ACA, and five fruitful years with the Big Four company before switching to Blis.

"I'd had some terrific clients with EY in the advertising industry, so the

move to Blis made sense because I knew a great deal about the industry," he says. After being approached by a former colleague, they now work alongside each other as finance managers. "He knew the business was going to grow and was recruiting more people, especially in finance," Hadjioannou says. "Finance at Blis is a core part of the business. We do a whole range of budgeting and forecasting, and help prepare deals. We're backed by venture capitalists

and we work in key decision-making and short-term planning."

From a product level, the numbers are huge. Hadjioannou reveals that Blis is currently processing 1.5 billion location data points in its system each day. "Think of all the devices multiplied by all their movements through the day - it adds up to a staggering

amount," he says. "We probably look at approximately 1.3 billion devices on a monthly basis, which generate thousands of location points per second. With this location data, we can come up with a pattern in location and we use that data to serve our clients' needs."

Everything is done anonymously, which generates one of the company's biggest challenges - data protection. "We do have some consumers that are still very sceptical, but our database is anonymous and we ensure we do all we can to not violate the Data Protection Act. It is very important to us."

Three years on from earning his ACA, he reflects on how it has helped: "The ACA has provided me with the financial knowledge and experience to be a finance manager, which allows me to support the business in making key decisions to meet objectives set by executive management and the board. I also pass on my knowledge to the junior members of the finance team to develop their career."



understanding the fundamentals of the business.

Why do you think it is important to have people with the qualification working in disruptive roles?

The ACA sets you up to work in challenging, ever-changing environments. You need to be flexible with your thinking and resilient when things don't go as planned. People who have the ACA are experienced in dealing with unexpected issues.

What challenges have you faced or do you predict facing?

In my current role I have been working across the company to improve gender diversity. It was challenging to switch from a structured finance role to one that required more creative thinking and risk taking. It has been brilliant and I have loved trying my hand at something new. This included developing a sponsorship programme for our high-potential

women, creating a positive external reputation and raising awareness of unconscious biases that may exist in the workplace. I also set up a women@sky network to provide a place for women to connect with each other and create an environment where they can thrive and be inspired through speaker and networking events.

What makes a disruptor?

I think it is someone who is willing to challenge norms and go against the majority. Resilience is key, as not all innovations will be successful and you need to keep moving forward and learn from each one.

In your industry, who do you look up to as innovators?

It has to be Apple. What Apple did with the iPhone was revolutionary. Twenty years ago who would have thought we would be able to watch content, order taxis, shop for groceries and listen to music all on our phones! These days it's hard

to imagine a world where we can't do that.

Would you like to establish your own disruptive company?

I am lucky that Sky allows me to be innovative and it still feels like a young entrepreneurial company. We are in an age where the industry is constantly changing so being disruptive is key to our success.

What disruption do you fear for the future of your industry?

I don't fear any companies. Our biggest challenge in my mind is the ever-changing customer. Technology is always evolving and there is more choice out there for viewers to consume content that we need to ensure we stay ahead, remain competitive and continue to innovate.

WHICH IS HELPING PEOPLE LEARN WHAT THEY NEED TO

DOMINIC BYRNE
HEAD OF FINANCE, EBURY
QUALIFIED 2014
FINANCIAL SERVICES

Ebury borrows currency wholesale from banks and provides foreign exchange facilities for commercial purposes to SMEs. They're not really facilitated by banks, as they're not willing to invest time for what is to them quite small returns.

I've been with the business for two years last month. When I joined there were about 120 people in the business and the finance team was made up of two or three people. For me it was an opportunity to grow a

finance team in a dynamic and exciting sector.

INCREASED EXPOSURE

In smaller firms you get far more exposure to various areas of the business, and it's higher impact. Things I do on a daily basis, and things we do as a team, are helping the business to grow on a daily and on an annual basis.

A challenge we're facing is how we want to structure our group in the most tax efficient way. The ACA has provided me with the theoretical knowledge to participate in discussions with external parties about how we can do this.

Ebury's employee base is quite varied. It's been good to show that as accountants we're not just bean counters. The ACA qualifies you as a well-rounded person who can think on your feet and is adaptable and malleable.

THE ABILITY TO REACT

Businesses such as Ebury are better

suited to deal with big changes. For instance, we develop our own technologies to facilitate our underlying business. Because we can tailor that to our needs and capabilities, we can develop quicker. That in itself makes us more flexible. We can keep a step ahead of more traditional businesses in the payments space like banks. If they did want to facilitate SMEs, they would be better off partnering with us as we can do a better job.

A disruptor is somebody who sees an opportunity that is either new and unique, or something that can be done better. For the more established, it is something that causes them to think and pushes development and change.

MARIS LIIGMANN

SENIOR FINANCE MANAGER & HEAD
OF SALES OPERATIONS, BRIDGEU

QUALIFIED 2013
TECHNOLOGY AND EDUCATION



intelligence to bridge the gap between school and the future. Our platform is a software as a service (SaaS) solution aiming to transform higher education and early career decision-making for young people around the world, while empowering learning institutions to deliver premium, modern guidance

services to students and families.

The role is ever changing as the company grows and our business needs evolve. Alongside day-to-day finance and operations and performance reporting, my focus has been on helping to develop and grow our marketing and sales development function, together with systems implementation to support the execution of new processes. I also support our leadership with strategic initiatives and partnership

negotiations. A fast growth tech start-up is very dynamic and one has to be eager to get involved with different challenges and apply a pragmatic and forward-looking approach to problem solving and process design that will help scale up.

How did you become involved?

I was introduced to BridgeU and its founder Lucy Stonehill by a mutual connection. It just so happened that they were looking for their first full-time finance hire. Having been an international student myself I immediately recognised the problem that BridgeU is solving and felt a strong connection to the mission, to Lucy as the founder and the entire team. So I decided to give it a go.

Why did you choose the ACA?

I knew it would offer me greater flexibility and choice in my career as well as a great foundation for any way in which I decide to apply my skills in the future. The ACA has equipped me with specific knowledge and skills, but also forms a solid foundation for business decision-making day to day.

Tell us about your role?

BridgeU is an education technology business using big data and artificial

A FAST GROWTH TECH START-UP IS VERY DYNAMIC A

HEAD OF FINANCE, BUSUU

STUART TAYLOR

QUALIFIED 2009
TECHNOLOGY AND EDUCATION

Originally from Winchester, Taylor sacrificed going to university in favour of going straight into a training agreement from college, which allowed him to do the ACA. "I'd met a couple of finance directors who had the ACA qualification. They said it gives you a really wide remit after that, and a good springboard

to do other things, so I had a massive head start on my peers."

He also credits ICAEW's network, for helping stay in touch with friends now in other industries with whom he can bounce ideas between.

INTEGRATED FUTURE

Taylor acknowledges that people view language learning programmes in two ways - "the people who are serious learners and those who just want to translate stuff".

He focuses on the former as he discusses a more all-encompassing vision of learning a language.

"The future of this is integrating with home assistants like Google Home and Alexa, where you can learn on the go with our app. Things like virtual and augmented reality and artificial intelligence will help with adaptive learning, which is actually helping people learn what they need to rather than giving them a generic course."

It's been almost a decade since Busuu was founded, in 2008. So, does it still consider itself to be a tech disruptor? "Yes, certainly," affirms Taylor. "Just look at how language learning was a few years ago."

"It was dominated by some of the big non-digital players or the slow digital ones, where you would have expensive courses at a cost of a few hundred pounds each. It would take a long time to learn."

"What we've done is create free courses, and anybody with the internet can access them."

Taylor is head of finance at social language-learning platform Busuu: "Our vision is to empower everyone in the world to learn a new language. We do this on web and mobile, and we have a community of native speakers who correct each other's writing and speaking exercises while developing their own skills. The idea is to build up your confidence in speaking a language, not just in reading it, and actually thinking in it properly."

“I created a simple double entry bookkeeping system to do the books for the company I set up when I was 21. This became the foundations of Clear Books. The company develops cloud accounting software so the qualification has been critical to our product roadmap”

totally foreign to them, yet these entrepreneurs are leading the disruption. So a chartered accountant who is able to bring financial acumen to creativity and innovation is an incredibly powerful combination.

It's my opinion that the challenge we all face is the need to constantly seek improvements in whatever we are doing. If we stop doing that then you can be sure someone else will be working hard to improve and they will leapfrog you or your company.

A disruptor or innovator is really just someone who has creative ideas. In my own experience a lot of my creative ideas have been bad ones. But the good creative ideas are the ones that can create a new product and disrupt existing industries. You have to respect companies that have experienced longevity because they will have had to re-invent themselves each decade and many times over.



TIM FOURACRE

**FOUNDER AND MANAGING
DIRECTOR, CLEAR BOOKS**

**QUALIFIED 2007
CLOUD ACCOUNTING SOFTWARE**

ND ONE HAS TO BE

EAGER TO GET INVOLVED WITH DIFFERENT CHALLENGES AND APPLY A PRAGMATIC APPROACH

I founded Clear Books in 2008, a provider of cloud accounting software to more than 10,000 small UK businesses. It has always been my intention to run my own business. The link to being disruptive is that the more disruptive an idea, the more chance it has of becoming a successful business venture.

When I founded Clear Books, the cloud was a very new idea. We were riding a wave of disruption as small businesses looked to move away from desktop accounting software and switch to online accounting software, which was more accessible and saved the user an immense amount of time.

Being a web developer and an accountant provided useful skills to create an online accounting app. I created a simple double entry bookkeeping system to do the books for the company I set up when I was 21, which was still operational. This became the foundations of Clear Books. The company develops cloud accounting software so the qualification has been critical to our product roadmap. The qualification helps in many other ways though.

There are the day-to-day benefits of having organised management accounts and being able to interpret the data to make decisions. What I learned in books about business strategy you actually end up putting into practice. The ability to take an analytical overview or dive in and pay attention to the detail is also a skill used every day.

There are 5.5 million businesses in the UK. Many of these entrepreneurs do not understand financial position or performance. Interpreting a P&L is

How is **TECH** changing the role of the accountant?

A new era of automation is under way and looks set to drastically change the traditional role of the accountant. Will innovation pose a threat or provide an opportunity to the profession? Jessica Fino finds out

Like many sectors, the accountancy profession is evolving thanks to the amount of tech changes seen in the last few years. From the rise of big data and data analytics, to the Internet of Things and blockchain, the profession is expected to embrace a new era of digitalisation that will change the way traditional accounting has been done, from record-keeping to reporting requirements.

According to the World Economic Forum (WEF), as many as 7.1 million jobs could be lost over the next five years due to the “fourth industrial revolution”, with the largest amount of skills disruption expected to occur in the financial services and investors industry.

With that said, a recent report from PwC stated that artificial intelligence (AI) will be the “biggest commercial opportunity in today’s changing economy”, with retail, financial services and healthcare expected to see the biggest gain. So what does that mean for the future of the profession?

NEW SERVICES

ICAEW’s report published in June this year, *Artificial Intelligence and the*

Future of Accountancy, warned that the accountancy profession must be “agile and flexible” enough to harness the technology’s potential.

Kirstin Gillon, technical manager at ICAEW’s IT Faculty and author of the report, says that, while accountants have used technology for decades to enhance the value they can deliver, the pace of change and the power of AI mean a “paradigm shift” is coming.

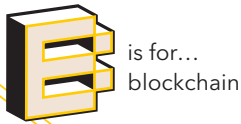
“Machines can already take over a lot of process and compliance work, for example, and they will start to offer insights, analysis and new services like fraud detection,” Gillon explains. “This is good news for finance professionals, who will be able to focus on more valuable tasks like decision-making, problem solving, strategy development, and leadership.”

However, the report says humans cannot be replaced by machines, as machine learning, while powerful, cannot yet replicate human intelligence and has significant limitations.

“Humans make decisions in two main ways - using intuition and reason - and both are important. Historically,



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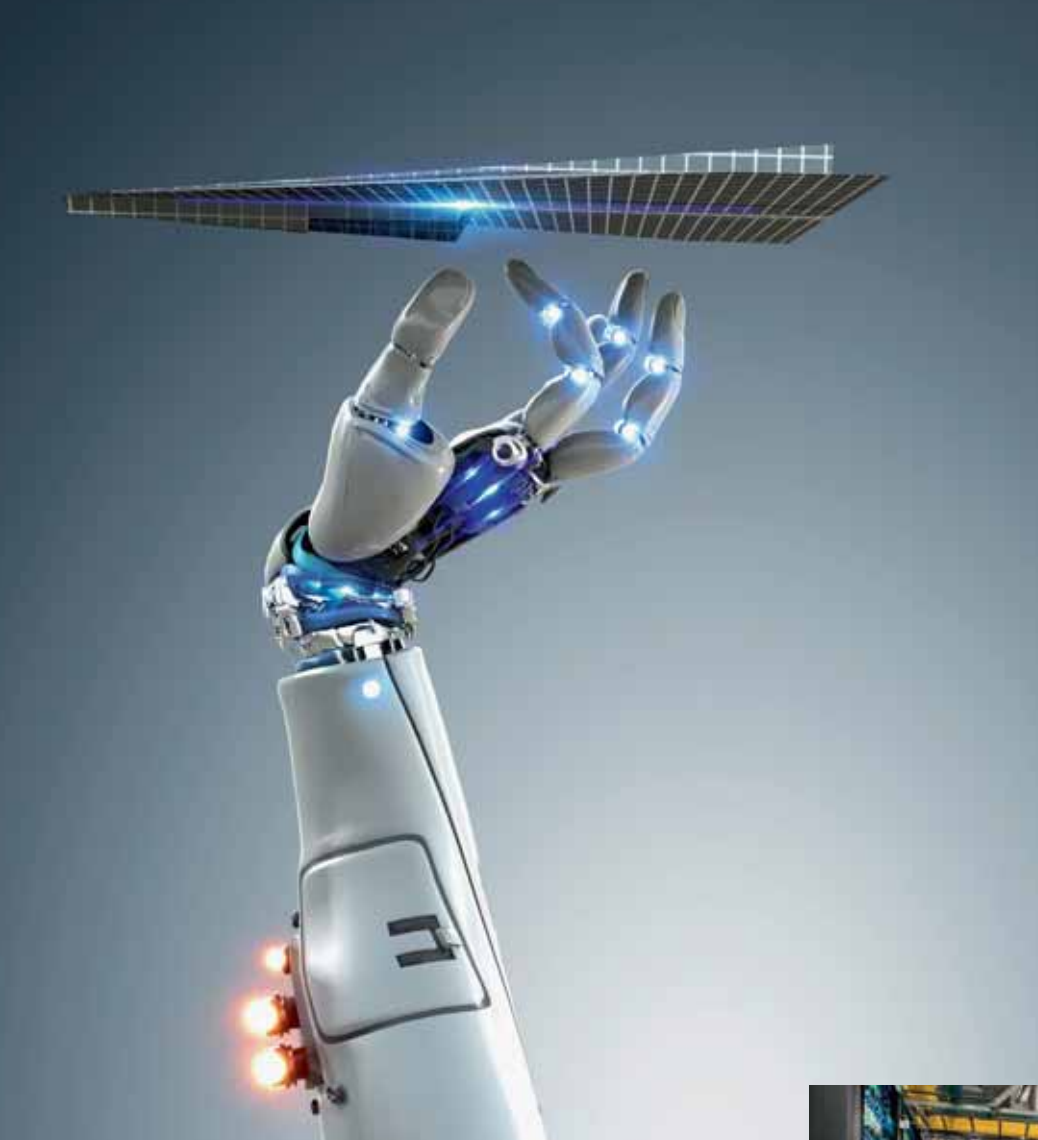


BY THE LETTER
*ICAEW insights into
the influence of tech*

IT increasingly informs all aspects of the profession and ICAEW is keen to develop helpful insights into the main developments that will have the greatest impact on the lives of its members and students in the years ahead. By working with the IT Faculty and through ongoing conversations with members and others across the profession, as well as notable IT experts, ICAEW has identified the A-E of digital developments...



Recently, the ICAEW released *Artificial intelligence and the future of the profession*, which looks at the first letter in the list, automation, and the role it might play in the future. tinyurl.com/Vital-AIFuture





"The profession needs to be open to radical change"

AI development focused on trying to replicate reason, but machine-learning based on rules, however sophisticated, will ultimately be defeated by the greater complexity of the real world," says Gillon.

David Lyford-Smith, a technical manager for ICAEW's IT Faculty, agrees: "Overall, the accounting profession will be able to provide more services, more powerful and interesting things due to the fact that they are not going to have to worry about these ground-level transactional kind of things.

"Big data and data analytics will undoubtedly change the way young people will train to become accountants. This means that when people do their training, they will start training in a different way, and will start their careers at a higher point in the chain," he continues.

Lyford-Smith predicts the amount of accounting being done will increase, but not all of it will be done by accountants. "A lot of bookkeeping and backing up will be taken care of by automation, data analytics, blockchain and all kinds of tech looking to change how the process is done," he says.

"The role of the accountant will shift and will become more highly-valued, in a higher chain and moving into new areas and possibilities."

Gillon argued that the real value of accountants is interpreting and telling a story around data, and freeing the profession from tasks such as reconciliations to focus on these questions is therefore a positive step.

The tech innovation will also bring new roles to the profession in the future. *The Future of Jobs* report, published last year by the WEF, predicted that many of the major drivers of transformation currently affecting global industries are expected to have a significant impact on jobs.

In many industries and countries the most in-demand occupations or specialities did not exist 10 or even five years ago, and the pace of change is set to accelerate. For example, 65% of children entering primary school today will ultimately end up working in completely new job types that don't yet exist.

TECHNICAL CONTENT

The Big Four have started to hire more data scientists, however, as Lyford-Smith points out there are some teething problems: "Their accounting staff do not know how to communicate what they need and the computer science people don't understand the business information they are looking at."

So, important skills for accountants will be working across functions, communication and working with others. The ACA skills focus on being able to work collaboratively with and across other departments.

"I suspect we will see some technical content within the accounting training and a possibility for people to specialise in accounting technology in that area. And we will see more demand for the essential part of the accounting skills for non-accounting people. The profession as a whole will move to a more technical field," Lyford-Smith suggests.

According to the recruiter Hays, there has been a high demand for jobs within audit, risk and compliance as organisations automate processes and





attempt to mitigate the risk of possible cyber security breaches.

As a result, salaries in this area reflect the high demand, with junior auditors earning up to £36,000.

“Demand is also high for candidates with a demonstrable knowledge of data, information security and general controls,” says Karen Young, director of Hays Accountancy & Finance.

PwC, for example, announced last year it will add 1,000 technology specialists to its UK risk assurance practice by 2020 as well as 1,000 data scientists to its deals business.

The firm said the major recruitment drive was a response to increasing client demand for digital, regulatory and cyber security services.

“Business models that have served clients well for decades are being disrupted or destroyed due to the speed of digital disruption, the increase of regulatory scrutiny on technology risks, and the escalation of cyber threat, requiring us to respond and build a strong team of specialists,” says Hemione Hudson, PwC’s UK head of assurance.

The firm also announced this year that it would be creating 80 places per year on its innovative new technology degree apprenticeship programme. The programme, a partnership with the University of Birmingham and the University of Leeds, will receive its first student intake in September 2018.

REDUCE REPETITION

Another Big Four firm, EY, has said that apps and robots could take on as much as 30% of its tasks. However, EY explained that it would not be a case of replacing employees but of streamlining the workload, reducing the number of repetitive tasks.

“A lot of graduates are in the office until midnight adding information into spreadsheets. That knowledge is now in machines, so we can free graduates

TECH AND THE INSTITUTE

ICAEW continues to recognise the increasing importance of technology in the profession and has integrated relevant aspects of it across the ACA syllabus, learning materials and professional development. Initially you will see more content on data analytics, cyber risks and security and cloud computing, although this will expand over time to include other relevant areas. To reflect the integration of technology content across the ACA modules and exams, from January 2018, two ACA modules are also changing names:

- Business and Finance will change to Business, Technology and Finance; and
- Business Strategy will change to Business Strategy and Technology.

The professional development requirement of the ACA has also been refreshed, see pages 14-16. This update also highlights skills required by students in a technological world, and you will see some of the skills referring to specific technologies.

And finally, ICAEW is introducing computer-based exams at the Professional and Advanced Level exams. Reflecting the everyday work environment of ACA students. Exams started to move to computers in March 2017.

to do more entrepreneurial projects,” Harry Gaskell, EY’s chief innovation officer, told *The Times*.

PwC has also warned that around 30% of existing UK jobs are susceptible to automation from robotics and AI, but John Hawksworth, chief economist at the firm, said that automating more manual and repetitive tasks will eliminate some existing jobs, “but could also enable some workers to focus on higher value, more rewarding and creative work, removing the monotony from our day jobs”.

Lee Reams, CEO of ClientWhys and TaxBuzz.com, has argued that the future of cloud accounting will not put accountants out of their jobs, but instead give them an opportunity to help their business clients by freeing up time to work with them in a more effective way.

Meanwhile, the early adoption of the more long-term technology tends to be driven by the largest practices. For smaller practices, there will possibly be a time lag due to the time it takes technology to become more affordable.

At the end of the day, Lyford-Smith says, tech innovation is an “external force that is pushing the profession into a certain direction, and we are not unaware of this and we are not complacent on this.

“All these topics are part of the ACA qualification and we are seeing an increase in its prominence.

“The profession as a whole and ICAEW in particular are aware and are not complacently standing by. We couldn’t keep doing what accountants were doing when spreadsheets were introduced.”

Gillon is cautiously optimistic: “In the longer term, we do recognise the risk to jobs across the economy from these powerful technologies, including the accountancy profession. This will lead to very different ways of working with machines to exploit the best of both worlds - artificial and human intelligence.

“The profession needs to be open to radical change, driven by the value it offers to economies and societies and focused on the unique skills that accountants bring.” ●



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Give your gizmos an upgrade

With technology updating faster than superfast broadband, we take a look at the latest gadgets to help you work, rest and play

● GET BETTER HOME WIFI

Amplifi HD Mesh (£360)

As our home lives get more connected, the demands we place on our wifi grow. But even as we spend more on the gadgets that rely on wifi, too often we just accept the kit provided for free, complete with deadspots. Amplifi is on a mission to improve wifi, replacing ugly routers with something that looks great, is easy to use and that can be simply expanded using range extenders plugged into standard wall sockets. Well designed and simple to use, this is what wifi routers should be.

● CHOOSE THE SPEAKER FOR YOU

Fender Monterey (£300)

There are so many Bluetooth speakers flooding the market it can be baffling which one to choose. Performance doesn't vary that much, so it's a matter of picking key features (wireless or plugged; price point) and finding one with the looks you like. The Fender Monterey is perfect for would-be rockers. It is a chunky, plug-in Bluetooth speaker with looks rooted firmly in the company's legendary guitar amps. Rather than appropriating trivial visual clues, Fender has gone to town with using the same knobs and switches you'd find on an amp. It offers the deep, but balanced sound that its size suggests it will. The only mild disappointment is that the volume doesn't go up to 11.

● TRY WIRELESS NOISE CANCELLING

Libratone Q Adapt On-Ear (£186)

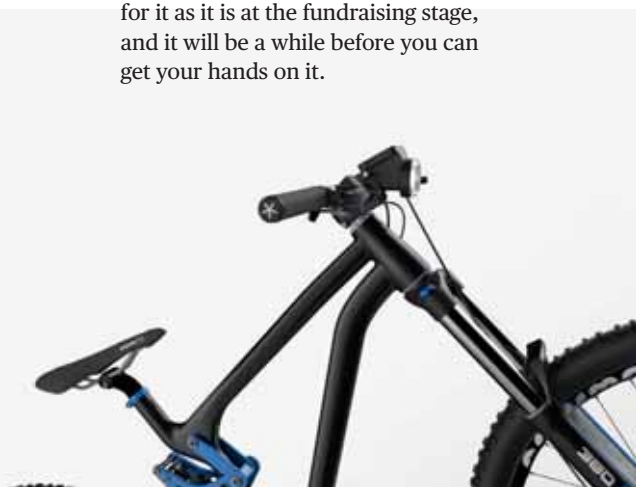
These noise-cancelling Bluetooth headphones are from a company better known for its speakers, but don't be deterred. A feature called CityMix allows you to dictate the balance of ambient sound with whatever you're listening to, making them ideal for commuting. A gesture-controlled feature called "Hush" sadly doesn't shut up annoying people within earshot, but it reduces the volume of what you're listening to, so you can communicate with baristas or ticket collectors without shouting. Controls for other functions are also on the ear-cup. These are snug on-ear headphones that offer stylish design, great sound and clever functionality. For a new entrant to the market, it's a pretty decent start.



◉ SMARTEN UP YOUR BIKE

Bitmotion (ETBC)

Bitmotion will make your bike smarter, equipping it with all sorts of features from the essential (it's a light) through the useful (GPS-controlled satnav presented on a handlebar-mounted screen) to some why-not-as-we've-come-this-far functionality (automatically notifying someone in your contacts if you have an accident). It syncs with your phone, opens texts and also acts as a fitness tracker. This may be the future of cycling, but you will have to wait for it as it is at the fundraising stage, and it will be a while before you can get your hands on it.



◉ MAKE YOUR LIFE MORE STREAMLINED WITH A TABLET

Apple iPad Pro 10.5 (£619)

Whether you go for the 10.5-inch or 12.9-inch version, its Retina screen is impressively sharp, while an A10X Fusion chip brings 64-bit architecture and six cores. If that means nothing, what you need to know is that it's very fast. Combined with additional iOS 11 functionality, excellent cameras (one with 4K video recording) and accessories, such as an improved digital pencil, this is a near-perfect gadget. If the price puts you off, think of it not as an expensive tablet but more like a value-for-money laptop.



◉ GET AN ACTIVE PHONE

Samsung Galaxy S8 Active (ETBC)

Do you put style over substance? Or do you need the most rugged tech available? If you do lots of outdoors activities, or are very clumsy, the latest Active Galaxy phone may be for you. It follows similar versions for the S5 and S6 and although it loses some of the standard S8's gorgeous curves, this dust-, shock- and water-proof phone is ready to take a beating without suffering.

◉ KEEP AN EYE ON YOUR HOME

Nest Cam £159

As a recent glitch in a smart door lock system proved, connecting more parts of the home to the Internet of Things can backfire. But it also brings advantages, many of which Nest exemplifies. Famed for its smart thermostat, the camera works best as part of a Nest home-wide system, which has the thermostat at its heart. It acts as an effective child or pet monitor, as well as an intruder alarm. It connects to an app for phone or desktop use and comes with a subscription system that allows you to record and back-up any recordings.





9 MESS AROUND WITH THE MUSIC RULES

Naim Uniti Atom (£1,750)

In a world of constantly changing technology, there aren't many hard and fast gadget rules. But there are a few. One is that with music you have to choose between looks and sound, lifestyle products or serious hi-fi. This cute streamer from Naim blows that rule apart. It ticks all the boxes for looks and convenience that suggest a lifestyle gadget. It has its own app, can be set up as part of a multi-room system and streams from all major sources. But it is made by a serious hi-fi company and doesn't compromise quality sound. Whether you want to listen to Spotify or vinyl, this box can handle it and play it across five rooms. It looks so good that *What Hi-Fi?* described it as "a little like that annoyingly good-looking friend who commands all the attention". It's certainly got ours.

10 MAKE MEETINGS AND TRAVEL EASIER

PicoPix 4010 (£209)

Pico makes pocket-sized projectors that get brighter, lighter and better with every release. They are great for anyone who doesn't trust meeting room AV equipment - and let's face it, when does it ever work? The PicoPix 4010 weighs less than your phone and is not much smaller, but projects a big, bright picture up to 3m across. It might not be cinema standard, but it connects to most laptops through USB or HDMI, and wouldn't ruin a film if you wanted to turn your hotel room into a private cinema later on.



10 STREAM YOUR LIFE AS IT HAPPENS

FrontRow (£399)

There's nothing quite like sharing every second of your waking life, and FrontRow is a device intended to put sharing at the heart of everything you do. A front-facing necklace camera, FrontRow is all about showing the rest of the world what it's like to be the best and most interesting person - you. It allows you to capture every single special moment of your life, as you experienced it, hands-free and without stopping to reach for the camera. And then, thanks to easy video and picture sharing, you can let the rest of the world enjoy your amazing life as well.



CABA

THE ART OF A DIGITAL DETOX

By Kelly Feehan, services director, CABA

When was the last time you checked your phone? The answer for most will probably be not very long ago. Research has shown on average we touch our phones 2,617 times a day, using them for over two hours daily.

Like it or not, technology is now engrained in every aspect of our lives. We rely on it to plan, stay in touch and navigate - our brains are even losing the ability to utilise this skill. This may make you question what other effects the over-use of technology is having on us, and how to reverse some of the worrying symptoms. Many people are resorting to digital detoxes to help reconnect with real life and take back control.

Below are some of the best ways to enjoy a smartphone sabbatical.

Don't take your phone to work

The thought of being parted from your phone for a large chunk of the day may fill you with dread. However, not having your phone may help you concentrate more on your work, boosting productivity. Plus, it will make you savour screen time when you get home.

Designate no-screen time

Adding an element of strictness will help lessen your reliance on your phone. Therefore, for certain activities - be it walking the dog or watching television at night, don't allow yourself to look at your phone. Concentrate on the present, not on what others are doing.

Implement a face-to-face policy

If you rely on digital devices to keep in touch with friends and family, why not try for one week a month a catch up instead of messaging them. Go for coffee, a walk or a pint - and talk to them in person. Making the effort will strengthen your relationship, so take the time and let your lips do the talking, not your fingers.

For more information and tips on wellbeing visit caba.org.uk
CABA provides free independent support for ACA students and chartered accountants.



and perseverance, I was able to join a firm in January 2013 and my ACA training period began in April 2013.

What was early working life like?

I was a fast learner and my manager was really happy with my work, and after six months I was going solo. I was the youngest employee in the firm and some of the clients could not believe that I was only 16 and doing an audit on my own with minimum supervision. To my embarrassment, I was also referred to as 'Baby Sagar' by a few colleagues.

I was enjoying my work. I was passing Professional Level exams one by one, and also scored 95% in the Audit and Assurance exam.

What are your tips for ACA students?

Make sure you have a study space that is free of distractions, and plan your study time. Once you get the study material consider the number of hours you can give to that particular exam. Make a timetable for weekdays, weekend and study leave and stick to your plan.

Set daily or weekly goals. For example, if the chapter is long you may give yourself a target to finish in three hours' time or when doing a mock exam tell yourself that if you score 75% or more, you can then treat yourself to something nice. Setting small goals will motivate you to achieve them. Remember to keep your goals realistic, and practice using the question banks and past exams.

Take frequent breaks to ensure that you remain focused. And finally, make sure you get enough sleep, especially the night before your exam.

What are your future plans?

Now, at the age of 20, I am a proud member of ICAEW and am looking forward to what my career has in store for me as a member of this prestigious institute. ●

Be the best

What does it take to become an accountant by the age of 20? Perseverance and lots of hard work, says Sagar Kanakiya, from KPMG

What led you into accountancy?

I always looked up to my dad, who worked his way to be a chartered accountant of both Canada and India. I noticed the pride in his eyes when he talked about being a chartered accountant and the respect he earned as individuals trusted his judgement. This is when I knew I wanted my future career to be along those lines.

He would mention that every chartered accountant knew of the Big Four and believed it would be a privilege to work for any of them. At the age of 10, little did I know how much hard work would be involved.

What was the first step you took?

I enrolled for the ICAEW Certificate in Finance, Accounting and Business (ICAEW CFAB) exams at 14. One of

the advantages is there is no pre-entry requirement. I started the exams one at a time, passing the first three with no issues. This built my confidence and I felt proud of my accomplishments, even though there was a long way to go.

I got set back when I took my fourth exam and failed. But with the support from my dad, I passed the ICAEW CFAB qualification by December 2012.

Was it easy finding an internship?

My dad was thinking of how to approach chartered accountancy firms and convince them to hire a 16-year-old for an internship having no experience or accounting background, except for the ICAEW CFAB exams. With great persistence



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HELPING YOU SUCCEED SUPPORTING YOUR WELLBEING GIVING YOU BACK CONTROL

You're expected to shine at work, pass your exams and still find the time to lead a normal life. So, from the moment you begin your ACA training, you can access all our services – for free and in the strictest confidence.

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