

UK PROFESSIONAL CERTIFICATION MARKET RESEARCH

BUSINESS, TECHNOLOGY AND CAREER-BASED TRENDS
DRIVING THE TRAINING CERTIFICATION MARKET



INTRODUCTION

WHICH TECHNOLOGIES AND PRIORITIES ARE DOMINATING THE IT PROFESSION TODAY, AS THE UK EMERGES FROM THE GLOBAL PANDEMIC? AND WHAT DIGITAL QUALIFICATIONS, CERTIFICATIONS AND SKILLS ARE SET TO BE THE ROUTE TO MEETING THE CHALLENGES WE NOW FACE? OUR RESEARCH DELVES INTO THE MINDS OF IT PROFESSIONALS TO UNDERSTAND JUST THAT. ORGANISATIONS ARE UNDER HUGE PRESSURES FROM THEIR CLIENTS, STAKEHOLDERS AND WIDER SOCIETY TO DRIVE A RAPID COVID RECOVERY THROUGH DEFINED DIGITAL SERVICES, EXPERIENCES AND SOLUTIONS. THE PRESSURE TO DEVELOP AND EVOLVE PROCESSES, PRODUCTS AND PEOPLE HAS NEVER BEEN HIGHER.

COVID-19 caused a level of disruption never before seen in most sectors while in the IT industry it also accelerated the development and implementation of burgeoning technologies including AI and blockchain. Digital innovation has enabled remote working, schooling, even healthcare provision across the UK keeping a socially-distanced society connected and cohesive when it mattered most.

To ensure we embrace everything we've learnt this past year and evolve to meet whatever challenges the following years bring, organisations will need people with the right competencies, attitude and experience. Training and certification are key to ensuring that people are prepared to face today's adversities and exploit new technologies in readiness for tomorrow and in the future.

BCS' professional certification market research 2021 report unveils the trends fuelling the training and certification market in these fluid times, providing top-level insight into the market and the macro-level forces affecting it.

We are ideally positioned to provide you with a valuable overview of the shape of the industry. As an organisation, we have been involved in defining the profession and what IT professionalism means since 1957. Thanks to BCS, IT professionals now have educational and career pathways that run from the classroom right through to Chartered status.

I hope you will find our 2021 report an interesting and insightful read.



A handwritten signature in black ink, appearing to read 'Paul Fletcher'.

Paul Fletcher

CEO, BCS, The Chartered Institute for IT

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1. MEETING THE IT SKILLS GAP



92%

OVERALL STATED SKILLS
QUALIFICATIONS IN THEIR
AREA ARE IMPORTANT TO
THEM PERSONALLY

BCS Professional Certifications Market Research 2021 explores how training and certification is perceived by IT professionals and the wider industry, providing BCS and its partners with valuable market insight across several key audiences. Among the many aims of our research is to demonstrate our knowledge of niche vertical markets and to provide insight for product development.

It's been a year like no other. Our latest research, carried out six months after the first lockdown measures were put in place in the UK and in the midst of the continuing global pandemic, gives us our first documented view of the impact these measures are having on the IT training market and the demand for certification.

Key findings of our research are:

- › 42% of respondents state they are *very likely* to study for certification over the next three years, with 46% quite likely.
- › 56% of participants indicated that skills qualifications are *very important* to them and a further 36% said they are quite important.
- › Among those likely to take a qualification over the next three years:
 - 69% would like a digital option for their learning – this has risen from 59% last year
 - 69% would prefer a training course with certification (i.e. with an exam at the end), 27% would prefer a training course without certification, and 4% had no preference
 - 1% would prefer to take their exam online from a remote location (e.g. home), 29% would favour a classroom online exam, and 20% would opt for a classroom paper-based exam
 - nearly three-quarters (74%) indicated that their organisation would pay for their certification.

“ ONLY 9% OF PARTICIPANTS FEEL THEIR ORGANISATION HAS ENOUGH RESOURCES TO ACHIEVE SUCCESS IN 2021.

1.1 Inside the skills gap

Understanding where and why there are skills gaps in the IT industry requires context. In addition to our Professional Certifications Market Research, every year BCS commissions survey-based research that asks people in positions of IT leadership across sectors to tell us how they view the year ahead. Which technologies will become critically important? What are the dominant forces impacting the boardroom? How do leaders see technology developing, as a tool for corporate advancement? If we understand the macro-level forces that play across the IT industry we can begin to see where demand for particular skills might begin to rise.

In our latest IT Leaders report, published in February 2021, IT leaders identified these as the trends that will likely dominate strategy and thinking as the year progresses:

- › The priorities for 2021 are operational efficiencies (59%), business transformation and organisational change (55%) and remote and distributed working (48%).
- › When asked to single out their number one priority, the top answer is business transformation and organisational change, selected by 22% of respondents. This is followed by operational efficiencies (15%) and staff engagement and well-being (10%).
- › The technologies that organisations are prioritising for 2021 are cyber security (61%), cloud (also 61%), and business process automation (47%).
- › When asked to identify their top technology priority, cyber security (18%) edges ahead of cloud (15%). Also with 15% is business process automation, closely followed by agile methods (14%).
- › Only 9% of participants feel their organisation has enough resources to achieve success in 2021.



At the very top level, the IT Leaders 2021 report can be said to show that organisations are working hard to transform and keep pace with change. To meet this need and to keep adapting, organisations are turning to cloud-based solutions and services. All of this is underpinned by a need to ensure the organisation remains secure, and adding to their challenge is a general shortfall in skills resource.

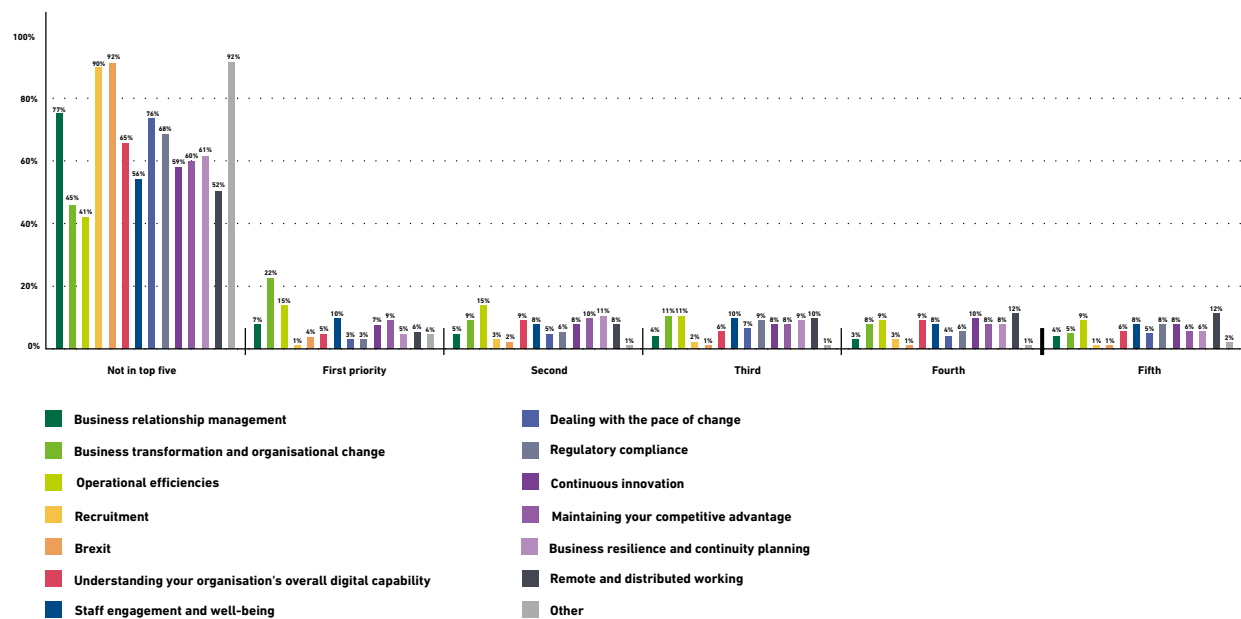


ORGANISATIONS ARE WORKING HARD TO TRANSFORM AND KEEP PACE WITH CHANGE

1.2 Technology priorities

Figure 1:

WHICH OF THE FOLLOWING ARE YOUR ORGANISATION'S PRIORITIES FOR 2021?



(Image source: IT Leaders report 2021 – figure 3.1 Organisational priorities)

2. UNDERSTANDING PERSONAL MOTIVATION

Why do IT professionals choose to take training and achieve certification? BCS explores what drives practitioners from different specialisms to invest time and money in qualifications and accreditation. What can we learn about practitioners' aspirations and how they believe certification will enable them to achieve their professional goals?

The desire to push forward in your career may be a natural driver in seeking certification but when it comes to understanding the market, intuition is never as good as the data we receive.

BCS surveyed business analysis, software testing and information security professionals and respectively of our three cohorts 90%, 88% and 92% confirmed to us that career progression was important to them.

90%

INDICATED THAT CAREER
PROGRESSION IS
IMPORTANT TO THEM



3. DRIVING YOUR CAREER FORWARD

BCS also explored how far professionals from these specialisms want to progress in their careers. 64% of information security professionals stated they would like to progress as far as directorship and C-level. Of our business analysis respondents, 51% reported that they would also like to reach their profession’s upper echelons.

Figure 2:

HOW LIKELY ARE YOU TO STUDY FOR A QUALIFICATION OVER THE NEXT THREE YEARS?

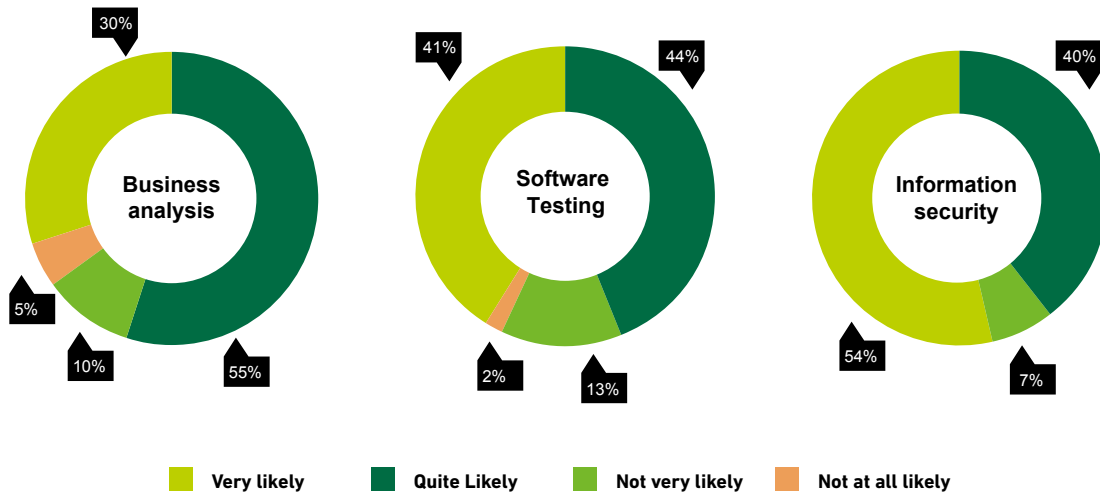


Image source: p.8 – Prof certs market research 2021)

Set against last year’s findings we saw a shift in workers’ career aspirations. In 2019, only 43% of business analysts aspired to the most senior levels (C-Level and directorship). This year then, 7% more BAs are striving for the top.

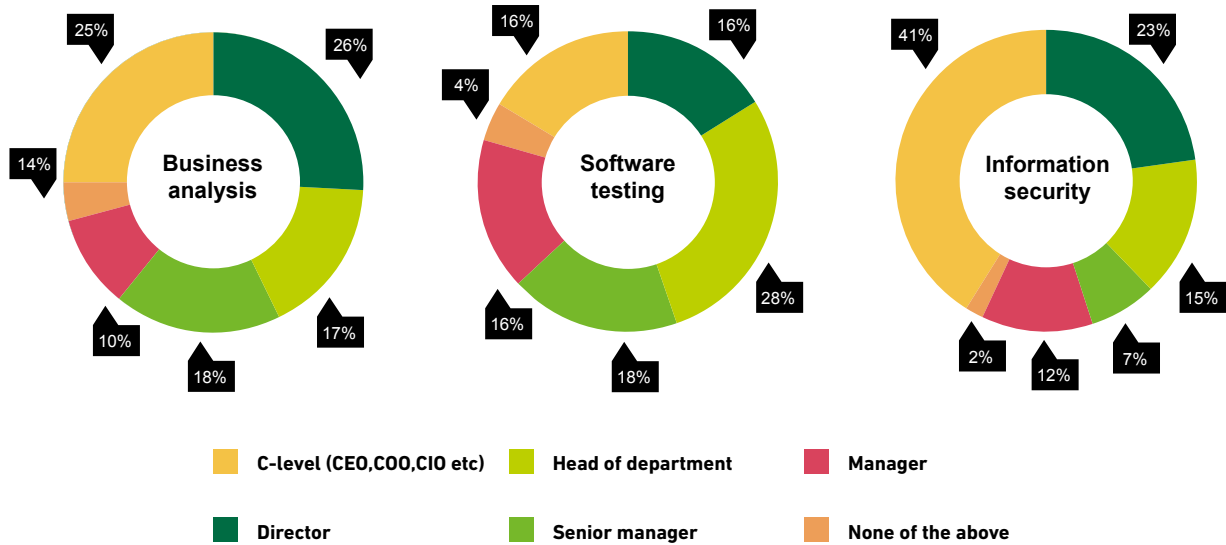
Similarly, in 2019, 52% of information security workers said they hoped to fill the top jobs. In 2020, the number of people targeting the C-Suite has jumped by 11%.

Why the increase in ambition? We saw earlier that our BCS IT Leaders 2021 report report found that the priorities for 2021 are operational efficiencies (59%), business transformation and organisational change (55%) and remote and distributed working (48%). Similarly, we saw that cyber security was the organisations’ number one technological priority.

88%

ARE LIKELY TO STUDY FOR A QUALIFICATION IN THE NEXT THREE YEARS

Figure 3:
HOW HIGH DO YOU WANT TO PROGRESS?



(Image source: p.6 – Prof certs market research 2021)

There appears to be a correlation between the specialisms that will enable organisations to meet their stated priorities and a desire to reach the top in those specialisms. Potentially BA and information security teams are growing in size and centrality within organisations. Those bigger teams will need leadership. It’s also fair to assume having a career defined by skills that are in high demand must be very motivating. Indeed, when polled, 70% of BAs, 76% of software testers and 87% of information security workers saw their specialism being more influential over the next three years.

76%
OF SOFTWARE TESTERS SAW THEIR SPECIALISM BEING MORE INFLUENTIAL OVER THE NEXT THREE YEARS

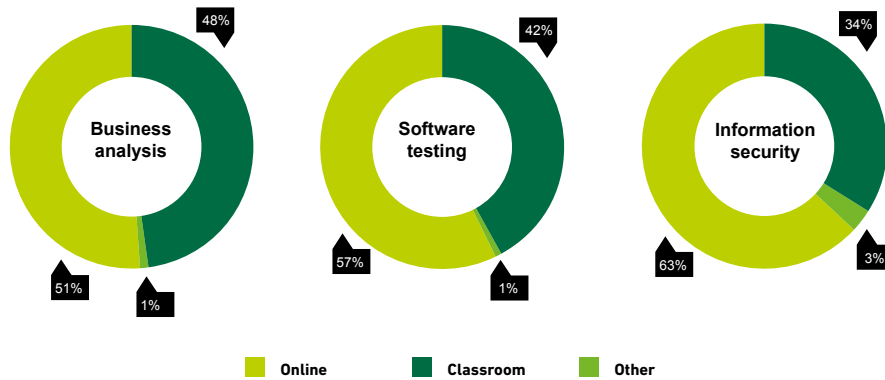
4. LEARNING STYLES AND BUYING PREFERENCES

Covid-19 has forced change and disruption in most industries. Anecdotally, some sectors have seen digital transformations take place in a matter weeks that would normally have taken decades. BCS is active in digital healthcare and during a recent webinar discussing the shift in the provision of healthcare from paper-based hospitals, a CIO reported he'd seen 'ten years of progress in two weeks.' [bcs.org/content-hub/webinar-coronavirus-9-ways-nhs-it-is-accelerating-digital-transformation](https://www.bcs.org/content-hub/webinar-coronavirus-9-ways-nhs-it-is-accelerating-digital-transformation)

So how has Covid-19 shifted attitudes towards training methods and choices?

Figure 4:

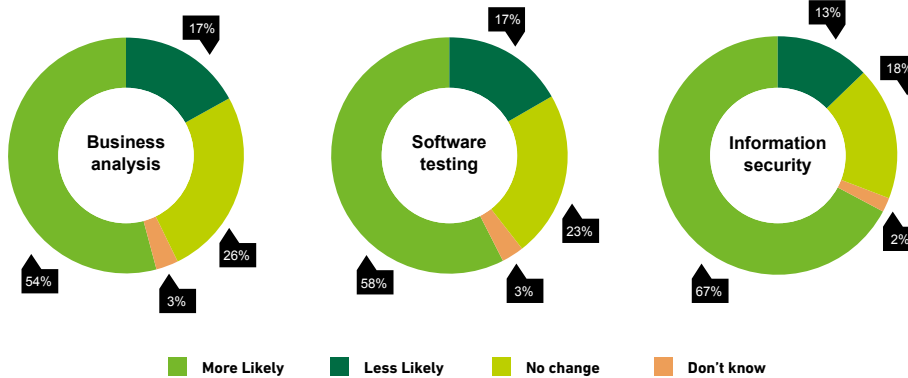
PREVIOUS TO THE COVID- 19 PANDEMIC, WHAT WOULD YOUR PREFERRED METHOD OF LEARNING HAVE BEEN?



(Image source: p.5 – Prof certs market research 2021)

Figure 5:

SINCE THE COVID-19 PANDEMIC ARE YOU MORE OR LESS LIKELY TO COMPLETE A QUALIFICATION ONLINE IN THE FUTURE?



(Image source: p.5 – Prof certs market research 2021)

Prior to the pandemic, we can see that online learning was already a clear preference across our three surveyed specialisms. Since the pandemic, the preference shift towards online qualifications is equally convincing. 59% of all respondents said they're now more likely to complete an online qualification, with 67% in the case of information security professionals.

Among participants who are likely to study for a qualification over the next three years, 69% would favour a training course option involving online learning. This has risen by 10 percentage points compared with 2019 when the figure was 59%. This shift is one that reflects our increasing reliance on online services and activity during the pandemic.

51%

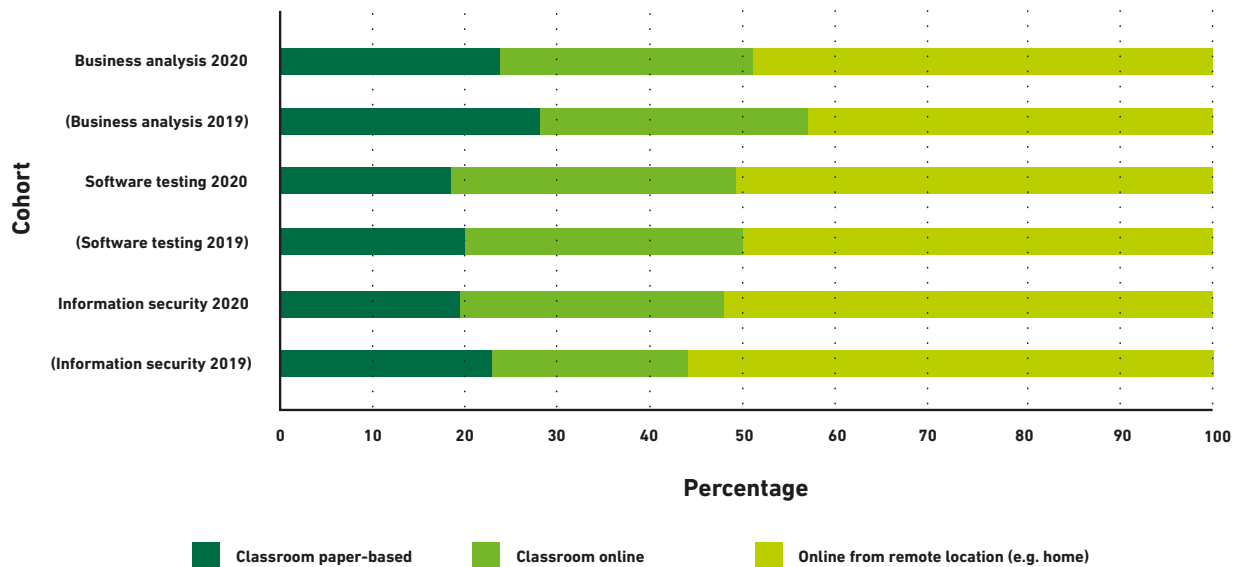
WOULD PREFER TO TAKE THEIR EXAM ONLINE FROM A REMOTE LOCATION (E.G HOME)

4.1 The decline of classroom exams

This preference for online was underlined when participants were asked which type of exam they'd prefer to take. The option to take an online examination in a remote location (for example at home) was the clear winner across all the specialisms we surveyed. And even when prospective students considered taking an examination in a classroom setting, more would still opt to take their exam digitally, as opposed to on paper.

Figure 6:

EXAM PREFERENCE



5. HOW TO FIND TRAINING

In a world so dominated by digital, it is refreshing to see one aspect of the training and qualifications market remains resolutely analogue: researching your options. When it comes to selecting a training course, *word of mouth* wins out as the most important means of judging your options, with 38%.

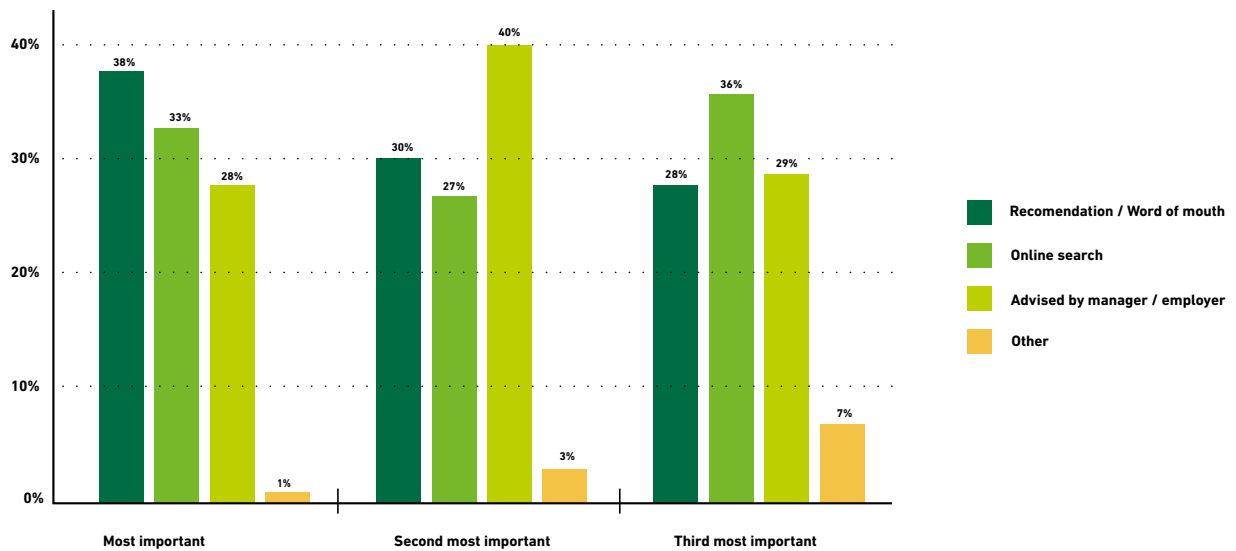
Online searching does come a relatively close second (33%), with *advised by manager* taking third place (28%).

To understand the full power of recommendation though, we must combine word of mouth with advised by manager. When we do we see that, of the people likely to study a certification in the next three years, 66% will rely on a trusted source – friend, colleague or manager – to help them navigate their training options. This convincing statistic shows the influence candidates and employers have on future prospects and the importance of ensuring their experience is a positive one.

WHEN IT COMES TO SELECTING A TRAINING COURSE WORD OF MOUTH WINS OUT

Figure 7:

WHEN LOOKING FOR TRAINING, HOW WOULD YOU GO ABOUT RESEARCHING THE OPTIONS AVAILABLE TO YOU? (PLEASE RANK TOP THREE IN ORDER OF IMPORTANCE)



Base: all very or quite likely to study for a certification over the next 3 years (n=427)

(Source: p.14 – Prof certs market research 2021)

74%

INDICATED THAT THEIR ORGANISATION WOULD PAY FOR THEIR CERTIFICATION

While recommendation remains the most common method for selecting training, we saw a distinct increase in the percentage of respondents telling us *online search* was their most important means. The rise, from 26% last year to 33%, is likely down to the remote-working status that's become the norm for so many in 2020. It's certainly been a year with fewer word-of-mouth moments: talking with colleagues deskside; catching up over coffee; or chatting at the printer! In the absence of these opportunities, the internet fills the gap as the alternative source of information.

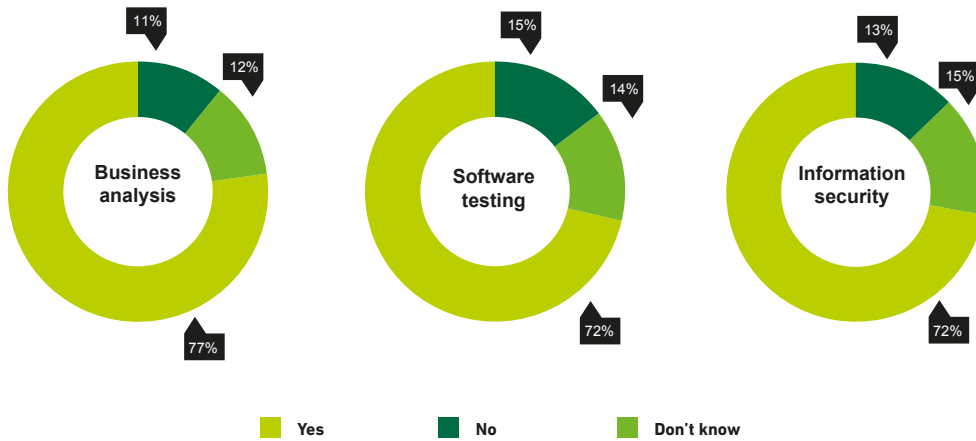
5.1 Employers see the value and are willing to pay

Year on year, our research indicates that the majority of organisations are prepared to fund their employees' training and professional certification. In fact the overall percentage figure was exactly the same this year as in the previous year, just shy of three quarters.

It's a reassuring number, and when we take into account the nearly 14% of respondents who were *unsure* when asked if their organisation would be prepared to pay for them, the true percentage of employer benefactors is likely to be even higher.

Figure 8:

WOULD YOUR ORGANISATION PAY FOR YOUR CERTIFICATION / QUALIFICATION?



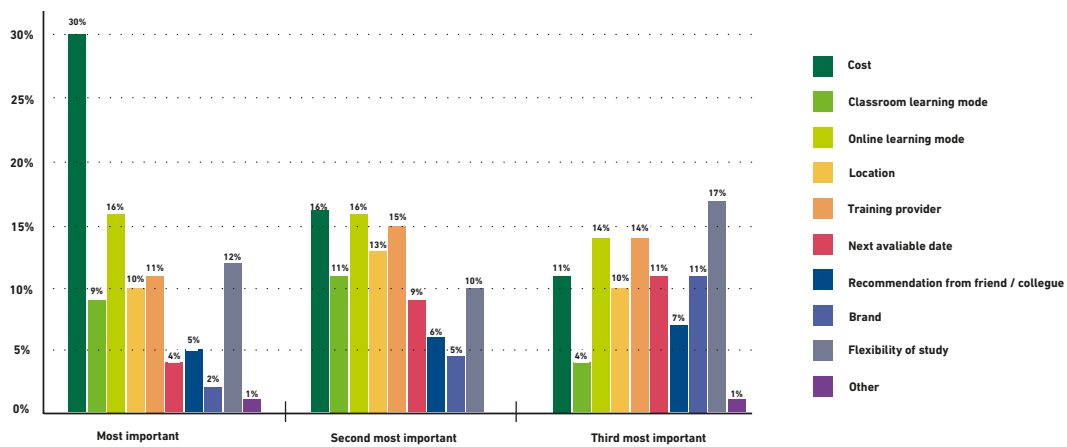
(Image source: p.14 – Prof certs market research 2021)

These consistently high scores are a clear indication of the value employers place on certifying their workforce. Looking again to the IT Leaders 2021 report, we note operational efficiencies and business transformation and organisational change were among the top three priorities highlighted by the digital exec. Organisations need to know they have all the right people in place working on the right technology. Professional training and certification of the workforce allows them the confidence of knowing there's a highly skilled and efficient team driving their digital business.

Despite the reassurance of employer funding, nearly a third of our astute candidates take cost into consideration above all other factors when it comes to choosing their training and qualification, demonstrating their mutual respect for the organisation.

Figure 9:

WHAT'S THE BIGGEST FACTOR WHEN LOOKING AT TAKING A QUALIFICATION?



Base: all very or quite likely to study for a certification over the next 3 years (n=427)

(Image source: p.14 – Prof certs market research 2021)

6. HIGH STANDARDS IN HIGH DEMAND

In these rapidly changing times, our research explores changes to the perception and reputation of professional certification within the IT industry. In a tech-savvy, on-demand, open source world, does professional certification warrant the time and commitment involved? Is formal training on the wane? Or is the need greater than ever for certified IT professionals who we can trust to keep driving up standards in the digital society? Our research appears to confirm the latter.

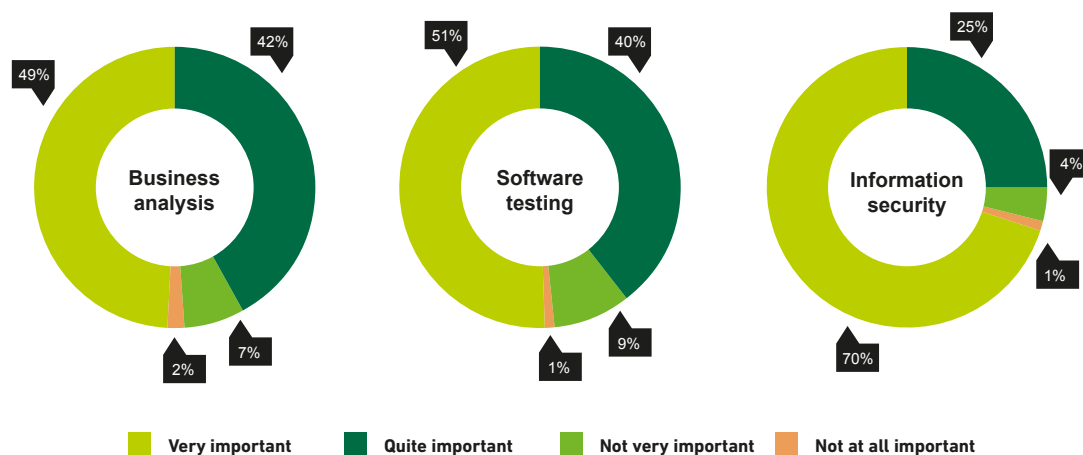
This year, across our three specialisms, we found well over two thirds of respondents already held at least one qualification. In the case of our information security cohort, the figure was an overwhelming 79%.

As expected, our cohort personally holds skills qualifications in high esteem, with over 90% overall stating that skills qualifications are *very or quite important* to them.

Interestingly for our information security cohort, there was an 11% increase in the percentage who consider skills qualifications are very important (up from 59% last year). It's a vital discipline, and organisations can pay a high price where there's poor performance or judgment. Certification in this space underlines an individual's professional standards, ethical practice and commitment to continuous improvement.

Figure 10:

HOW IMPORTANT TO YOU PERSONALLY ARE SKILLS QUALIFICATIONS IN...?



(Source: p.6 – Prof certs market research 2021)

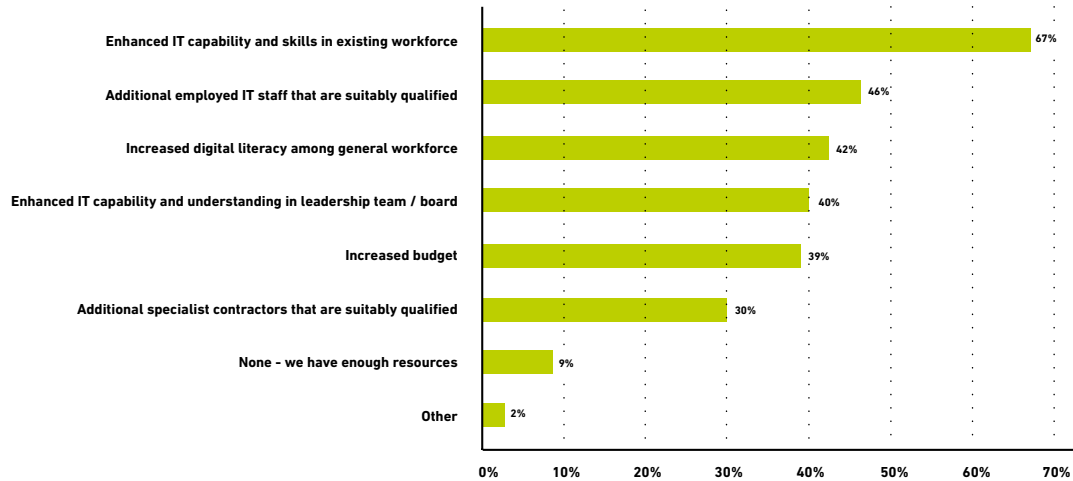
But what do the employers say? The need to upskill existing staff has been a long-running theme in our IT leaders research. From 2014 onwards, we have seen leaders report *enhanced skills among their existing workforce* their most pressing resourcing issue, with 67% of our leadership respondents calling it out in 2021.

When asked about ways to address this skills shortfall, around a third (33%) chose *professional certifications*. And of the 38% turning to *general recruitment* as a solution, it's fair to assume many will be looking for professionally certified candidates on their shortlist.

6.1 Additional resource needs

Figure 11:

TO ACHIEVE SUCCESS IN 2021, WHAT ADDITIONAL RESOURCES WILL YOUR ORGANISATION NEED?

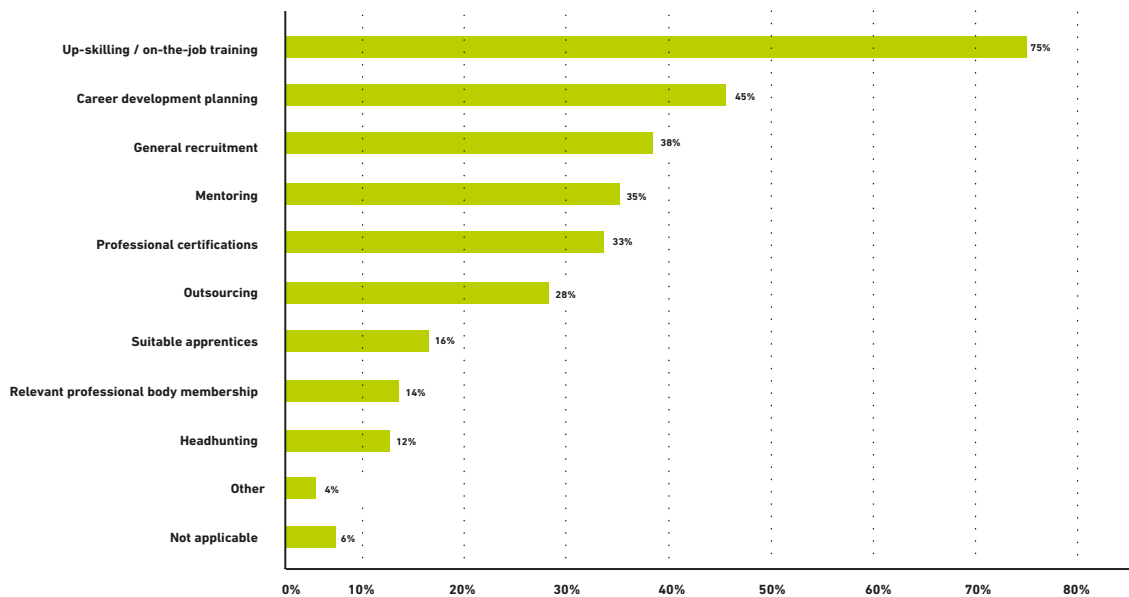


Source: 5.1 – IT Leaders report 2021)

6.2 Closing the gap

Figure 12:

HOW DO YOU PLAN TO ADDRESS THESE ISSUES?



(Image source: 5.3 – IT Leaders report 2021)

7. CHALLENGES AND NEW TECHNOLOGIES

We first reported on AI and machine learning application in last year’s report to gauge the current and planned uses of this burgeoning technology in organisations and the related gaps in skills resource.

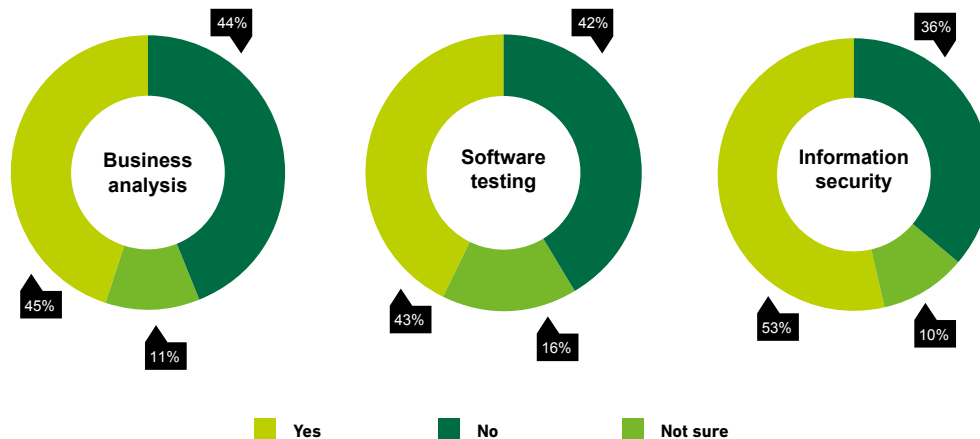
This year we report a rise in the proportion of respondents stating their organisation uses AI or machine learning applications. In 2019 the overall number across our three specialisms was 42%; this year that’s risen to 47%, nudging the halfway mark.

Significantly, this number jumps to 53% when we single out the response from our information security cohort suggesting this field may be creeping ahead in its AI implementation.

74%
RISE IN THE PROPORTION OF RESPONDENTS USING AI

Figure 13:

DOES YOUR ORGANISATION CURRENTLY USE ARTIFICIAL INTELLIGENCE (AI) OR MACHINE LEARNING APPLICATIONS?



Overall 47% of respondents claim that their organisation uses AI or machine learning applications.

(Source: p.16 – Prof certs market research 2021)

8. RESEARCH NOTES

This report explores the results of two areas of survey-based research carried out by BCS: *the Professional certifications market research 2020* and *the IT Leaders 2021 report*.

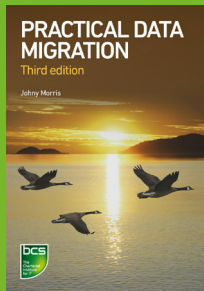
8.1 Professional certifications market research 2021 report

Our research report was compiled on 23 September 2020 from the results of our professional certification questionnaire. A total of 485 respondents completed the questionnaire during the period 4 to 21 September 2020. All respondents were based in the UK. A panel vendor, Cint, was used to source respondents.

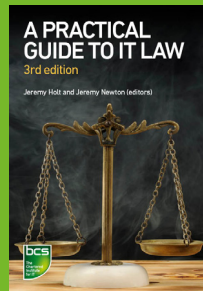
8.2 IT Leaders 2021 report

Our report was produced on 12 January 2021, giving the results for 283 respondents received during the period 9 December 2020 to 11 January 2021. The survey was conducted online and was promoted via a number of channels including direct email invitation, weekly newsletter and social media. The BCS IT leaders forum were also invited to take part in the survey. The survey was aimed at CIOs, IT managers and others who contribute to setting their organisation's strategic objectives..

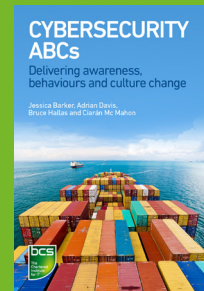
9. NEW AND UPCOMING BOOK TITLES



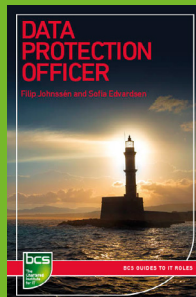
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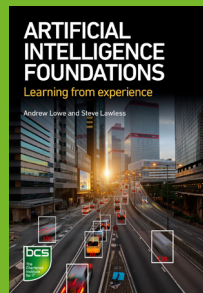
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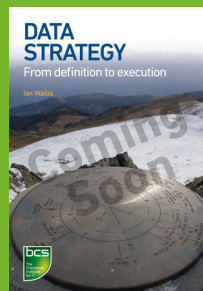
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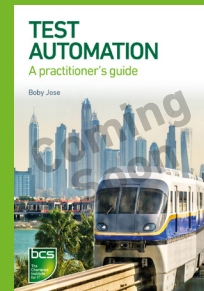
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