The Open University
Leading in a Digital Age

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We strongly believe that organisations must embrace a learning culture and commit to making their people digital-savvy.
Introduction

Digital technologies are profoundly reshaping the world of work, making our day-to-day jobs and long-term careers exponentially more fluid and flexible. The workplace is no longer associated solely with the office or factory floor. Armed with smart technologies, today’s workforce is able to adopt diverse spaces as their mobile places of work, including their homes, community hubs, coffee shops, trains and planes.

In this vision of digital’s role in the workplace, technology has a liberating effect, offering more autonomy and freedom for an increasingly knowledge rich and creative workforce.

Other experts highlight more negative aspects of this future: the robots are coming and they are going to take our jobs. In many industrial sectors, automation has the potential to displace human labour, and indeed, the march of the robots is rapidly increasing in pace. According to a new study from Oxford Economics, there could be 14 million robots working in China alone within the next 11 years. Their role is to increase efficiency, improve quality and ultimately, save money.

In reality, the impact is likely to sit somewhere in the middle, where automation and digitisation continue to replace some repeatable tasks - but also free up swathes of employees to embark on more strategic, mission critical activities. However, to survive in this world, workforces must be equipped to harness the power of digital technologies, and understand how tech developments can positively impact their work.

At The Open University we know that digital leadership is vital to making this vision work. Workforces all over the world must learn how to use digital technology to their advantage, embracing its potential rather than being stymied by the possible threats. It is up to strong leaders in business to ensure this happens.

The Leading in a Digital Age report explores whether senior leadership teams currently have the skills and training to lead organisations and take advantage of the opportunities of digitisation. It also looks at how they can acquire these skills in order to power significant and lasting change. We strongly believe that organisations must embrace a learning culture and commit to making their people digital-savvy. And that this change begins at the top.

The report looks at how senior teams can foster a culture of digital adaptation, starting with improving their own technical digital skills, and permeating this knowledge throughout an organisation.

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The workplace is in a state of constant change and development. Disruptive technologies and innovations keep reshaping competitive environments, and as such the workforce is under continuous pressure to grow and adapt. Workers and organisations that fail to grow and adapt risk being left behind.

We firmly believe that leadership is key to digital adoption within UK business. This study found that successful leaders are prepared to embrace, implement and leverage digital innovation, in turn driving real business impact and growth.

Organisations need leaders who can show the way forward during transitions, during disruptions and uncertainty. Speaking to senior leaders, we found that those who have undertaken training to manage digital change report real benefits to the agility and productivity of their organisation.

But perhaps the most striking benefit of strong digital leadership is a financial one: an overwhelming majority (88%) of leaders who received digital training in the last year report that their organisation experienced growth compared to just half (49%) of leaders who did not receive any training.

Senior leadership teams need to have the right skillsets to navigate this rapidly evolving, tech-dominated landscape. They need the ability to communicate change, to identify what technologies are important to organisational success and what workforce skills are needed and how to acquire them.

Organisations need leaders to promote a culture of continuous digital learning and development. Employees at all levels of seniority need to be bought into this culture.

Skills must be continually refreshed throughout a person’s career and, with digital development moving at such a rapid pace, organisations must ensure that all workers at all levels are supported with their learning needs.
It is difficult for organisations to predict future technology trends and what skills will be needed to make the most of those trends. However, by fostering a culture of lifelong learning and digital innovation, leaders ensure that they and employees throughout their organisation are ready for the challenges that will surely emerge.

The Leading in a Digital Age report aims to determine whether senior leadership teams have the skills and learning to effectively lead organisations in this digital age, help their business become digital leaders in their sectors, and take advantage of technologies like AI, augmentation, and the cloud so that they are able to create a disruptive digital culture.

We strongly believe that employers should invest in the digital skills of the workforce and that this needs to be driven by leaders. Organisations need to invest in digitally-relevant leadership learning interventions for senior leaders that will foster a culture of digital adaptation, encouraging them to invest in more technical and basic digital skills throughout the workforce. Success in the digital age depends upon it.

“This study found that successful leaders are prepared to embrace, implement and leverage digital innovation, in turn driving real business impact and growth.”
Executive summary

Chief Technology Officers (CTOs) and senior leaders who have received digital training report improved business performance

- 88% of leaders who received digital training in the last year report that their organisation experienced growth compared to just 49% of leaders who did not receive any training

- The majority (82%) of companies have invested in training in how to manage digital change, with more than half (56%) investing in the past 12 months alone – offering staff six days training per year to keep up with digital tech

- Those who have experienced training report
  - Improved productivity (56%)
  - Greater employee engagement (55%)
  - Enhanced agility (42%)
  - Increased profit (42%)
  - And improved retention (33%)

- 89% of leaders who have received training in the past year see digital technology as an opportunity to make their organisation more profitable (compared to just 64% who have not received any training)

A skilled digital leader is likely to promote training and digital adoption at all levels

- 83% of leaders feel more inclined to encourage colleagues and staff to undergo similar courses when they’ve received digital training themselves
  - For example, more digital training has been on offer at all levels in organisations where leaders have received digital training, compared to organisations where leaders have not received any training

- Skilled leaders are also more likely to identify the opportunities presented by digital and embrace them effectively
  - Overall, 80% of organisations say they are embracing new technologies, with 70% investing in AI, augmentation and automation
But not all leaders have benefitted from digital training yet

- Just half (51%) of those at exec level have benefitted from digital training in the past year
  - 76% of leaders say they believe they would benefit from more training to keep up with technological change
- More than four in 10 senior leaders (43%) say that they are not expected to keep up with digital developments
  - More than one in three (37%) are unsure where to start in terms of developing their own digital skills
  - More than half (51%) believe that their employees are more competent when it comes to working with new technology
- Yet 64% of organisations admit they still recruit or buy in skills to keep up with technological change, rather than train current staff

And leaders without the right training and skills are lagging behind

- Only 39% ‘strongly agree’ that their senior leadership team has the skills and training to take advantage of technologies such as AI, augmentation and automation
- Almost one in five executives (19%) do not think they have a strong digital leader
- The research shows that many organisations are struggling to adapt to a digital workplace as leaders lack the critical digital skills they need
- More than four in 10 (44%) leaders agree that their organisation is falling behind when it comes to new technology and close to half (47%) believe that they are not doing enough to address their digital skills shortage
- More than four in 10 leaders (45%) feel that technology is moving too quickly to keep up
- When it comes to digital training, the research showed a growing gap between sectors
  - The IT and tech sector spend the most on digital training, followed by the financial services sector, with other sectors, such as education and the public sector some way behind
  - While 76% of those in the hospitality industry think that embracing new tech is essential for their survival, one in three (32%) would say that they are currently not ‘tech-first’
A view of digital: What are leaders currently doing?

To understand whether leaders have the skills and learning to take advantage of the opportunities of digitisation and deal with the challenges, The Open University analysed the capabilities and confidence of CTOs and senior managers in a mix of large, small and medium enterprises. Overall, the study found that organisations are struggling to adapt to a digital workplace where leaders lack the critical skills they need to manage digital change.

Senior leaders are aware of the opportunities that digital technologies provide for their organisation, but know that effectively adopting them is a different matter. More than four in 10 organisations (44%) report that they are falling behind when it comes to new technology. And a similar number (47%) believe that they are not doing enough to address their digital skills shortage. Just 39% ‘strongly agree’ that their senior leadership team has the skills and training to take advantage of technologies such as AI, augmentation and automation and close to one in five (19%) say that their organisation does not currently have a strong digital leader.

Digital technologies are advancing quickly. To manage the rate of change effectively and ensure that teams and whole workforces are equipped to embrace digital requires additional skills that are unlikely to be picked up on the job. Having ascended the ranks over a number of years (in most cases) it’s unlikely that leaders will be able to successfully embrace these developments with the training they received at the beginning of their careers: additional support is required. More than four in 10 leaders (45%) state that technology is moving too quickly to keep up and more than half (51%) believe that their employees are more competent than they are when it comes to working with new technology.

Despite the challenges, both management and the wider workforce realise the benefits of strong digital skills. Eight in 10 organisations (80%) say that they are embracing or investing in new technologies. A similar number (81%) agree that digital technology and automation offers opportunities for organisations to achieve growth.
To what extent do you agree or disagree with each of the following statements?

My senior leadership team have the skills and training to take advantage of technologies such as AI, augmentation, automation.

- Strongly agree: 39.2%
- Slightly agree: 39.3%
- Neither agree nor disagree: 8.2%
- Slightly disagree: 7.9%
- Strongly disagree: 4.4%
- Don’t know: 1.1%

Embracing new technology is essential for my organisation to survive.

- Strongly agree: 46.8%
- Slightly agree: 32.2%
- Neither agree nor disagree: 13.7%
- Slightly disagree: 4.6%
- Strongly disagree: 1.9%
- Don’t know: 0.7%

Leaders in my business are hesitant when it comes to adopting new technology.

- Strongly agree: 22.4%
- Slightly agree: 27.3%
- Neither agree nor disagree: 16.3%
- Slightly disagree: 15.9%
- Strongly disagree: 17.2%
- Don’t know: 0.9%
Having spoken to business leaders, The Open University found an overwhelming desire amongst UK organisations to embrace and adopt digital technology. The research looked at learning and development (L&D) and how organisations are prioritising training and preparing their workforce for future technological changes at every level of their organisation.

The tech landscape is rapidly changing – machine learning, AI and blockchain are gaining traction, which means, according to the findings, that tech skills training is now the number one priority for businesses. However, in order for leaders to identify the right skills for their business and how to acquire them, they themselves must have an understanding of the digital landscape.

Across all organisations, close to half (47%) are heavily investing in training for digital skills, compared to 40% in leadership skills and 30% in soft skills. As a result, organisations are spending more per year on digital skills (around £13K) compared to other training and are committing to six days of training in digital capabilities alone. This marks a welcome shift to prioritising the adoption of new technologies, but must still be effectively managed.

### Percentage invests heavily

<table>
<thead>
<tr>
<th>Skills</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Digital skills</td>
<td>47%</td>
</tr>
<tr>
<td>Management skills</td>
<td>46%</td>
</tr>
<tr>
<td>Leadership skills</td>
<td>40%</td>
</tr>
<tr>
<td>Soft skills</td>
<td>30%</td>
</tr>
<tr>
<td>Problem skills</td>
<td>34%</td>
</tr>
<tr>
<td>Critical thinking</td>
<td>31%</td>
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</table>
Among all organisations, the majority (82%) have invested in training to manage digital change, with more than half (56%) investing in the past 12 months. While the data indicates positive signs that many organisations are going some way to building new pools of skilled digital employees, at the same time 64% of organisations say they tend to recruit or buy in skills to keep up with technological change, rather than train current staff.

But we know that organisations are already struggling to keep pace with the rate of digital change, and simply buying in the skills they need is becoming increasingly unsustainable for business leaders looking to remain agile and competitive. Instead, they need to be building a sustainable talent pipeline through a culture of continuous digital learning.
Savvy sectors

The rate at which digital technology is being adopted varies from sector to sector. While some industries are embracing technology, others are not and risk being left behind. For those where digital development has had less of an immediate impact to their organisation or sector, it can be tempting to wait until the need to adapt becomes urgent, but this can lead to talent deficits.

The research also looked at the state of digitisation in sectors across the UK economy and found a growing gap. The IT and tech sector (including cybersecurity) comes out on top, closely followed by financial services (including fintech). Both industries have sophisticated digital capabilities and are still heavily investing in digital training in comparison to other sectors, which are lagging behind.

For example, within the hospitality industry, 76% of leaders agree that embracing new technology is essential for their organisations’ survival, yet one in three (32%) agree that they are currently not a ‘tech-first’ organisation.

Of course, digital skills are not just about the needs of tech companies. Technology now touches every industry, and nearly every job function uses it to some degree, so getting ahead and creating a continuous learning culture is essential.
Would you say your company has a strong digital leader?

Sectors that agree that they invest heavily in digital skills / training.
Setting the tone at the top: Learning culture

While many employers are investing in digital training, the main beneficiaries are middle managers, with senior leadership teams often being overlooked. But embracing digital change at the top creates a trickle-down effect throughout the whole organisation. Senior leaders who have worked with The Open University report an increased ability to identify digital talent gaps and successfully address them.

Organisations are missing an opportunity by overlooking the senior leadership team when investing in the skills needed to adopt digital. Among business leaders, 69% agree that they received more training at the beginning of their career than they do now. Similarly, six in 10 execs (60%) feel their organisation spends more time and money preparing younger and less senior staff to manage digital technology.

And the findings suggest this is true: 85% of employees at managerial level have benefitted from digital training compared to 63% of those at MD or equivalent level. Overall, organisations have invested more in training mid-level staff — spending an average of £4,600 per employee — compared to £2,500 per person at managing director level or equivalent. It would seem that organisations are hyper-focused on the skills and competencies of mid to low-level management and more concerned about their workforces’ ability to take on the digital future than their leaders’.

85% of companies say their managers have benefitted from digital training, spending £3,700 on digital training per person per year.

75% of companies say their mid-level employees have benefitted from digital training, spending £4,600 on digital training person per year.

70% of companies say their entry level workers have benefitted from digital training.

70% of organisations say their C-suite employees have benefitted from digital training, spending £5,000 on digital training per person.

63% of organisations say their MD or equivalent level have benefitted from digital training, spending £2,500 on digital training per person.
Thinking about your own experiences of training in digital technology, to what extent do you agree with the following statements?

### I received more training at the beginning of my career than I do now that I’m a senior leader.

- Strongly agree: 35.8%
- Slightly agree: 33.1%
- Neither agree nor disagree: 15.1%
- Slightly disagree: 11.4%
- Strongly disagree: 4.7%

### I believe we spend more on digital training for younger staff than older staff.

- Strongly agree: 26.3%
- Slightly agree: 33.4%
- Neither agree nor disagree: 19.9%
- Slightly disagree: 13.6%
- Strongly disagree: 6.8%

### I believe that I would benefit from more training to keep up with technological change.

- Strongly agree: 36.2%
- Slightly agree: 40.3%
- Neither agree nor disagree: 17.2%
- Slightly disagree: 4.5%
- Strongly disagree: 1.8%

And while digital skills are necessary for employees across an organisation, how many leaders have considered their own knowledge to lead digitisation?

The research found that while around half (51%) of those at exec level benefitted from digital training in the past 12 months, more than three quarters (76%) at this level say they would benefit from more training to keep up with technological change.

But while there’s a desire for greater digital training among leaders, worryingly, four in 10 senior leaders (43%) agreed that they are not expected to keep up with digital development.

For most organisations, change has to start at the top. Hence it’s critical that senior leaders have the skills needed to be exemplars of new ways of working required in a digital-first company. Our findings show that when senior leaders sponsor a digital culture, encouraging a mindset of innovation and offering the right support for all employees, organisations thrive. If that sponsorship is absent, any transformation or modernisation is more than likely to fail or bring poor results.
The impact and benefits of digital leadership

However, when leaders have received digital training, their entire organisation becomes more likely to embrace technological change.

The business landscape has been radically altered by the application of digital technologies and digital disruption means that companies can no longer afford to stand still. They can either seize the digital opportunity - like game-changers Netflix or Airbnb - or see their organisation disappear - like Kodak or Blockbuster. Success starts with strong leadership.

The majority (88%) of leaders who received digital training in the last year report that their organisation experienced growth compared to just 49% of leaders who did not receive any training.

89% of leaders who have received training in the past year see digital technology as an opportunity to make their organisation more profitable (compared to just 64% who have not received any training).

83% of leaders feel more inclined to encourage colleagues and staff to undergo similar courses when they’ve received digital training. For example when leaders receive digital training themselves, more digital training is on offer at all levels of an organisation compared with leaders who have not received any training.
Thinking about your own experiences of training in digital technology, to what extent do you agree with the following statement?

When I receive training I am more inclined to encourage my colleagues / staff to undergo similar courses.

- Strongly agree: 45.9%
- Slightly agree: 36.8%
- Neither agree nor disagree: 14.4%
- Slightly disagree: 2.0%
- Strongly disagree: 0.8%
The impact of leadership: Productivity and agility

At The Open University we know from working with businesses that a highly skilled workforce is a productive one. This starts at the top.

The UK’s productivity has long been an area of concern for businesses, as the country remains below average in the G7 rankings\(^2\). But training can make the nation’s organisations more competitive - of those who have received training, 84% believe that they have become more productive.

\(^2\) Office for National Statistics (2017) International comparisons of UK productivity
Thinking about your own experiences of training in digital technology, to what extent do you agree with the following statement?

When I receive training I feel more productive.

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>46.0%</td>
</tr>
<tr>
<td>Slightly agree</td>
<td>38.4%</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
<td>12.6%</td>
</tr>
<tr>
<td>Slightly disagree</td>
<td>2.2%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>0.7%</td>
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</tbody>
</table>

In the digital age, employers that lack the ability to adopt new technologies risk being left behind. Eighty per cent of leaders currently report that their organisation embraces digital technology, but when it comes to the requisite skills, nearly half (45%) believe that technology is moving at a pace too quick for their current workforce to keep up.

And leaders are not oblivious to the issue: 79% believe that embracing new technology is essential for the survival of their organisation. Yet nearly one in five admit that their organisation is yet to take advantage of new technologies such as AI, augmentation and automation, despite their growing prominence in the modern workplace.

As such nearly half (44%) of leaders believe their organisation is falling behind when it comes to new technology. This creates issues further down the line as more new technologies emerge, leaving ill-prepared organisations even further behind the curve. A third (35%) of those in senior positions who have not received any digital training believe that their organisation currently isn’t doing enough to prepare for future skills shortages.

We are in an age of rapid and radical change, both economically and politically, and for organisations to remain competitive, agility is key. Digital training prepares organisations for the challenges on the horizon: 42% of leaders who have received training believe their agility has improved as a result.
The impact of digital leadership: HR and retention

The business benefits of investing in training go beyond the financial. The benefits felt by trained senior leaders appear to trickle down through the ranks, as an overwhelming majority (81%) of leaders feel more inclined to encourage colleagues and staff to undergo training when they’ve received digital training. This can have a positive impact on loyalty, engagement and retention across the board.

Businesses know that these changes need to be made, and quickly. The Government’s Industrial Strategy Council report demonstrates the urgency of bolstering digital skills across the workforce. It anticipates that basic digital skills are likely to be the most lacking, with up to two-thirds of the workforce facing a skills deficit.

Within that, five million workers could become acutely under-skilled in basic digital skills.

The Open University believes that a lifelong learning culture is the solution to current skills shortages, a culture where talents are developed continuously rather than bought in. This culture also increases engagement within the organisation. Those leaders who have received training, more than half (55%) report increased employee engagement as a result.

80% I feel like my organisation is investing in me when I receive training

83% When I receive training I am more inclined to encourage my colleagues/staff to undergo similar courses
Skills investment tends to have a holistic impact on morale: 80% of leaders report that they feel that their organisation is investing in them when they receive digital training, which in turn makes them more inclined to remain loyal and productive.

Fundamentally, digital development changes the way we work. Eight hundred million jobs globally are expected to be displaced by 2030⁴ and this monumental change unsurprisingly requires communication and effective management in order to be implemented successfully. But these communication skills are often not picked up “on the job” and require further additional support for senior leaders: just 43% of leaders who have not received any training feel confident in their ability to effectively communicate change, compared to 89% of leaders who have been trained in the last year.

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³ UK Government’s Industrial Strategy Council (2019)
⁴ McKinsey Global Institute (2017) Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages
The bottom line

Perhaps most importantly, the benefits of strong digital leadership can be seen on the bottom line. This starts with seizing the opportunity that embracing technological development presents: 89% of leaders who have received training in the past year see digital technology as an opportunity to make their organisation more profitable (compared to just 64% who have not received any training).

The majority (88%) of leaders who received digital training in the last year report that their organisation experienced growth compared to just under half (49%) of leaders who did not receive training. Furthermore, of those leaders who received digital training, 42% reported increased profit.

But there’s still a way to go: three quarters (75%) of digital leaders still think that their organisation should invest more in building up digital skills. Interestingly, leaders who have already benefitted from training have greater awareness that the job is never done when it comes to promoting digital skills: 82% of leaders who have received training in the last year recognise that more needs to be done, compared to just under two thirds (61%) of those who have not received training.

Comparing organisations that have invested in training senior leaders in the last year with those who have not invested in training senior leaders, growth is more significant (24% vs 16%) for those who have, further demonstrating the benefits of a highly skilled leadership team.

What percentage of growth did your business experience last year?

<table>
<thead>
<tr>
<th>Personally received training to manage digital change</th>
<th>Yes – in the past year</th>
<th>No</th>
<th>I don’t know</th>
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<tr>
<td>%</td>
<td>%</td>
<td></td>
<td>%</td>
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<tr>
<td>0 - 10</td>
<td>40.2%</td>
<td>53.4%</td>
<td>33.3%</td>
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<tr>
<td>11 - 20</td>
<td>22.9%</td>
<td>31.5%</td>
<td>50.0%</td>
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<tr>
<td>21 - 30</td>
<td>12.9%</td>
<td>5.5%</td>
<td>16.7%</td>
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<td>31 - 40</td>
<td>5.4%</td>
<td>2.7%</td>
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<tr>
<td>41 - 50</td>
<td>6.8%</td>
<td>1.4%</td>
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<tr>
<td>51 - 60</td>
<td>4.7%</td>
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<td>61 - 70</td>
<td>1.9%</td>
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<td>71 - 80</td>
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<td>91 - 100</td>
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<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
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</table>
Developing a training solution

The solution lies in training. This creates a culture of continuous learning that allows workforces to fully embrace digital. Business leaders report that training is essential to help them and workers keep up with digital change. It improves profitability and productivity, and these benefits are likely to become more apparent as the pace of automation and digital development accelerates.

The Open University offering

Our qualifications enable employers to develop the skills that are most relevant to their organisation. They all instil knowledge, skills and behaviours that help students to become more adaptable and develop a wider understanding of how different specialisms fit together. Building a strong foundation of skills, our degrees equip organisations with highly skilled and engaged workers who are able to apply their new skills to future digital developments, as well as providing businesses with the support they need currently.

Undergraduate and postgraduate degrees

The Open University has over 400 modules available and employees can work towards a vast range of undergraduate and postgraduate qualifications. The benefit of The Open University model is that study can be delivered on a modular basis. Learners can start with a certificate or diploma of higher education and work towards a degree over a period of time.

The Open degree allows learners to build a qualification that is unique to the individual’s professional requirements – choosing modules from a wide range of subject areas to give the employee the skills and knowledge they need to make a real impact. Learners can also count previous university study towards their qualification.

Through the The Open University’s postgraduate qualifications, employees can build on their skills and knowledge. Postgraduate qualifications such as MBAs from the triple-accredited Open University Business School can help employees gain a deeper understanding of their subject and bring new expertise to the organisation.

Find out more at open.ac.uk/courses

MBA Technology Management

This MBA is applicable to technology management and technological innovation in a wide variety of contexts and sectors, including: IT/IS, telecommunications, computing, engineering, manufacturing, transport and logistics, retailing, energy production and supply, defence and security, management and administration, and any form of services, including health, welfare and leisure. It has a focus on strategic analysis and intellectual stimulation whilst gaining interdisciplinary skills, and independent judgement – exploring the processes that underpin technological innovation and the challenges of technology from a strategic perspective, with learning firmly rooted in management practice throughout.
MSc Technology Management

This MSc provides the knowledge and skills critical to making the right decisions about technology strategy, innovation and management, to make a real difference to the organisation. Students begin by focusing on the operational aspects of managing technological innovation and change. They will then explore a range of capabilities that are key to the strategic development and management of technological innovation. Studies will conclude with an in-depth investigation of a technology management topic or problem of the student’s choice.

BA Business Management

This innovative degree is firmly rooted in the employee’s own experience. Students will investigate how organisations think and work, how they are managed, and the external world in which they operate. Students can focus entirely on business management or choose to specialise within the subject areas of accounting, economics, leadership practice, innovation and enterprise or marketing.

Open degrees

The BA/BSc (Honours) Open is the OU’s most flexible degree programme because students can study any subjects they like, in any combination. This means they can build a qualification that is unique to them and unique to the needs of a job role or the organisation’s priorities.

The MA/MSc Open is an innovative postgraduate programme which enables employees to expand discipline-related knowledge at masters level, gain broader subject-specific knowledge and pursue further professional development in areas that align with the learner’s employment needs and professional aspirations.

BSc (Honours) Computing and IT

This degree helps employees to become confident users and managers of information technologies, to administer and manage network or database systems and to develop software solutions. It offers a choice of four routes, depending on the skills that are needed by the employer: broad-based, communications and networking, communications and software and software.

MSc in Computing

This qualification develops a rigorous approach to the study and application of computing and incorporates transferable skills that are highly applicable to professional development in the field. There are several options, including a flexible route (which offers a wide choice of relevant modules), a software engineering route and an information security and forensics route.
Degree Apprenticeships
Since 2016, The Open University has offered higher and degree-level apprenticeships. In England, these are available in nursing, social work, policing, digital, management and leadership and are available to employers whether or not they pay the apprenticeship levy. In Scotland and Wales, fully funded digital apprenticeships are available (see below).

These work-based programmes build upon the The Open University’s rich expertise in work-based learning and have been a hugely effective way for organisations of all sizes to address skills gaps and future-proof their workforce. The flexible delivery of the learning fits around the needs of the organisation and unlike classroom-based learning, time off out of the office is limited. Apprentices benefit from both academic and practice-based modules, allowing them to apply the knowledge and concepts they are learning into their day-to-day roles immediately – which aids engagement and retention in the workforce.

Find out more at open.ac.uk/apprenticeships

Senior Leader Master’s Degree Apprenticeship (England-only)
This apprenticeship includes the MBA, from the triple-accredited Open University Business School, and develops leaders who are responsible for developing ethical, innovative and supportive cultures, enhancing their ability to deliver results, manage complexity and instigate change. The apprenticeship is suitable for senior leaders in organisations of all sizes in the private, public or third sector. It is for anyone who leads, organises and directs organisations. It also provides employers with a useful tool to further develop and retain staff who have completed their graduate programme, providing a leadership pipeline for the future.

Chartered Manager Degree Apprenticeship (England-only)
This programme provides apprentices with higher level management skills, core competencies and desired behaviours to create leaders who can drive performance and productivity improvements in their organisation. The programme is suitable for new and existing employees who are responsible for, or are looking to progress into, managing projects, tasks or people. It is ideal for employees wanting to kick-start their career in management and achieve a degree alongside an apprenticeship, or for those who have been promoted to a managerial role and want to gain a formal management qualification.

Digital and Technology Solution Professional Degree Apprenticeship (England-only)
This apprenticeship develops the higher-level skills and behaviours required to create confident and capable digital and technology professionals.

Graduates from the programme will be competent to operate in a range of related digital roles, supporting their organisations to develop new products and services and increase productivity using digital technologies. The programme is based on a core set of outcomes that are supplemented by one of the following four specialisms:

- Cyber security analyst
- Data analyst
- Software engineer
- Network engineer
Graduate Apprentices in Scotland

The Open University’s Graduate Apprenticeships are available to new and existing employees, 16 years of age and over, who live and work in Scotland. Organisations can use these new programmes to address skills gaps and ensure that they have the talent to manage future technological changes.

As with the programmes in the other nations, Graduate Apprenticeships first develop core foundational knowledge and then enable an apprentice to specialise in a particular area of IT that is aligned to their job role.

The OU’s programmes include:

- BSc (Honours) Cyber Security
- BSc (Honours) IT Software Development
- MSc in Cyber Security

Graduate Apprenticeships are fully funded by Skills Development Scotland.

Degree Apprenticeship in Wales

The Open University’s Applied Software Engineering Degree Apprenticeship programme equips apprentices with the knowledge, skills and behavioural characteristics required to excel as a software engineering professional. The programme provides a broad foundation in the fundamental technologies and techniques of computing and the issues involved in their application, as well as providing the tools that enable apprentices to consistently keep ahead and stay agile in a rapidly changing subject area.

The Applied Software Engineering Degree Apprenticeship is a work-based higher education programme that provides apprentices with the practical experience and theoretical knowledge of designing, building and evaluating software components and systems. The apprenticeship is fully funded by The Welsh Government through The Higher Education Funding Council for Wales.

Free learning through OpenLearn

OpenLearn is the free learning platform of The Open University, which is used by around nine million learners per year. It is home to more than 950 free courses and thousands more articles, interactives, quizzes and videos. Five per cent of the content of each Open University module is released for free onto OpenLearn, providing everyone with an opportunity to sample subjects and provide a pathway to more formal higher education, while there are many other free courses developed by Open University academics that will help develop the knowledge, skills and confidence for learners to take their education further.

Management and leadership has become an increasingly popular subject area on OpenLearn, and there are many relevant courses:

- Leadership and followship
- Leadership and context
- Leadership challenges in turbulent times
- Effective communication in the workplace
- Working in diverse teams
- An introduction to public leadership
- Discovering management
- Leadership in the voluntary sector
- The digital scholar
- Digital literacy: succeeding in a digital world
Patrick has just finished his MBA in Technology Management at The Open University.

When he began his studies, Patrick was working with Southern Water in Brighton, and has risen through the ranks at his current employer, Mott Macdonald. He currently works as a Technical Principal, managing Estimators and Cost Intelligence Consultants.

“Working with The Open University’s flexible schedule, I was able to easily manage my own timetable. The Open University’s unique offering was crucial as I was able to continue working in my full time job, whilst working towards the MBA. The OU is renowned for delivering high quality skills, and I was pleased to be able to apply these skills acquired from day one of embarking on my course.”

As Patrick has witnessed, technology is constantly changing, which in turn changes how people engage and communicate with each other. One of the most exciting and challenging aspects of Patrick’s job is communicating these changes with people and the impact they have on job roles.

His challenges include ensuring that the technical excellence of around 70 estimators and cost intelligence consultants takes into account the influence of increasingly disruptive technology, and overseeing the continued evolution of their skill sets to meet the needs of the modern job role. This way, organisations such as Mott Macdonald retrain from within to tackle skills gaps before they emerge, removing the need to hire in talent from elsewhere.

Changes in digital technology require new sets of skills; having been trained in identifying and managing skills gaps, Patrick’s team are now re-training people who already have a certain set of skills to fill emerging gaps.

The experience with The Open University opened Patrick’s eyes to certain things he was not aware of at the beginning of his studies. “I’ve really enjoyed it, it is certainly something worth doing, and my skillset has notably improved. The Open University opened my eyes to many organisational issues I was previously naïve about. I would recommend it to anyone looking to further their career.”
Methodology

The Leading in a Digital Age report was developed by combining the expertise and experience of The Open University in conjunction with quantitative market research amongst a wide range of organisations across Great Britain. A detailed methodology for this report is available on The Open University’s business website.

Business survey

The Open University commissioned PCP Market Research Limited to undertake a survey of 950 CTOs and senior leaders across the United Kingdom between 18 November and 11 December 2019, amongst SMEs and large enterprises. The data includes statistically significant samples by English region, Wales, Northern Ireland and Scotland.

For further information, please contact:

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About The OU

For over 50 years, The Open University has led the way in innovative distance-learning, developing workplace education solutions for employers (across the private, public and voluntary sectors), as well as training individuals.

Specialising in developing high quality learning materials, based on rigorous research and industry insight, the OU combines academic excellence with digital and technological expertise to deliver flexible, results-driven and truly engaging workplace learning solutions.

Our offer

The OU’s flexible and adaptable approach enables consistently excellent learning to be delivered at scale, across geographically dispersed workforces, through having an online delivery model that uses advanced learning analytics to enhance the performance of business professionals, all at the pace desired by the learner.

Our well-developed blended learning approach enables us to deliver learning that is responsive to both organisational and staff needs, providing additional return on investment.

This is why more than 2,400 employers, including IBM, Travis Perkins and the NHS, regularly choose the OU’s learning solutions to develop their workforces and why 78% of FTSE 100 companies sponsor their staff on OU courses.

For more information, please visit open.ac.uk/business