

THE DIGITAL SKILLS CRISIS - **TIME TO ACT**



A WORD FROM OUR CEO

As businesses scramble to transform digitally, we have quickly come to realise that we have fallen into a digital skills crisis. Companies are losing billions as they struggle to find enough digital talent to meet potential demands.

Human Resource departments are suffering from this dilemma. After all, the acquisition of new staff falls on their shoulders. However, HR professionals are a big part of the solution. By changing their recruitment process, they can tackle their digital talent gap quicker.

Learning and Development departments have a role to play too. They must ensure that their current workforce is upskilled adequately for a digital future. L&D staff are entering a golden age where with the provision of sufficient training, they can become the heroes of their organisation by solidifying the future of their existing workforce.

There is no quick fix to the digital skills crisis, but there are some practical solutions that can bridge part of the gap. In this white paper, best-selling author and journalist, Daniel McConnell, looks at the state of the current digital skills gap. He examines the roles of governments, HR departments, and L&D professionals. Most importantly, he offers solutions that can help companies grow.

Code Institute is one of these solutions. We actively work with HR and L&D departments to provide the right digital talent. Whether it's developing a digital talent strategy, offering a line of sight to some of the best new developers or upskilling existing staff within your company, there are simple, cost-effective, ways to bridge the gap.

While we may be in the midst of a digital skills crisis, the future is bright. Let this white paper, "The Digital Skills Crisis - Time to Act", be your guide to solving the gap in your business.

Kind Regards,
Jim



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EXECUTIVE SUMMARY



As we head towards the quarter point of the 21st Century, digitalisation is making its way into every industry in the world. New technologies and machines are changing the way organisations and their employees do their jobs.

The rise of technology has disrupted traditional industries, revolutionised spending patterns and the pace of change is only getting faster. There is a global skills crisis at play. In Europe alone, the figure is now expected to top 500,000 unfilled ICT roles by 2020. As a result, competition for the right talent is fierce. Companies must act now and prepare their workforces for a digital future.

This White Paper examines the scale of the skills crisis in Europe, the impact that shortage is having on organisations' bottom-line, the challenges it is presenting for **Human Resources**, **IT Managers**, and **Learning and Development departments** as well as exploring workable solutions to addressing it.

The need for digital skills is growing:

In the future, 9 out of 10 jobs will require digital skills. At present, 44%, or 169 million, Europeans between 16 and 74 years old, do not even have basic digital skills.¹ It is estimated that in the western developed world the number of unfilled jobs in ICT will be between 1.2 million and 1.5 million by 2022. Hiring digital talent will become more competitive than ever before.

Organisations are losing revenue:

Right now, 40% of employers are finding it difficult to hire ICT staff, as detailed in Chapter 2. European organisations indicate that the digital talent gap is resulting in a loss in competitive advantage and a loss in potential revenue due to less production. The digital skills crisis has the potential to cost \$11.5 trillion if skill building fails to catch up, across 14 G20 countries.² Governments and organisations will continue to lose revenue until they tackle the digital skills gap. This is now at crisis point.

HR and L&D departments must adopt innovative solutions:

Human Resource departments are now having to alter traditional hiring patterns to meet the growing demands of their organisations. Learning and Development departments are increasingly in a similar position of needing to fundamentally reassess their approach to ensure the needs of their organisation are sufficiently met.



40%
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The Solution:

There is no silver bullet to address this crisis. It requires effort from governments, industry, educational systems and individuals working together to find workable solutions.

HR departments must examine how they are recruiting their staff and organisations need to fundamentally reassess the nature of upskilling on offer to their existing staff, which many find to be ineffective. For an effective workforce, businesses must focus on upskilling their staff in current and future technologies.

The solutions outlined below indicate practical ways to ease the digital skills crisis.

Attracting Digital Talent:

- Align leadership on a talent strategy that includes the unique needs of digital talent.
- Connect with specialist recruiters and build relationships to acquire digital talent.
- Identify and develop routes from where a continuous pipeline of talent can be sourced by aligning with recognised vocational and non-traditional online training providers.

Developing Digital Talent:

- A digital talent strategy that focuses strongly on upskilling existing staff in IT-related subjects and fields.
- Provide graduate programs aligned with recognised providers that ensure that graduates are job-ready once they finish training.
- Offer clear development paths that motivate staff and make them feel valued by the company.
- Nurture newly skilled digital talent and develop them to senior developers within three to five years.

Retaining Digital Talent:

- Education and upskilling should become a key attraction for your business. Organisations who promote in-job training have shown greater abilities to retain staff.
- Reward and incentivise digital talent to utilise training on offer from the organisation.
- Provide flexible working conditions and collaborative ways of working for digital staff, by allowing a degree of freedom for trial and error and ensuring the right technologies are made available to them.



CHAPTER 1

‘THE SCALE OF THE CRISIS’

Globally, the explosion in digital technology since the turn of the century has led to major growth in revenue and job creation.

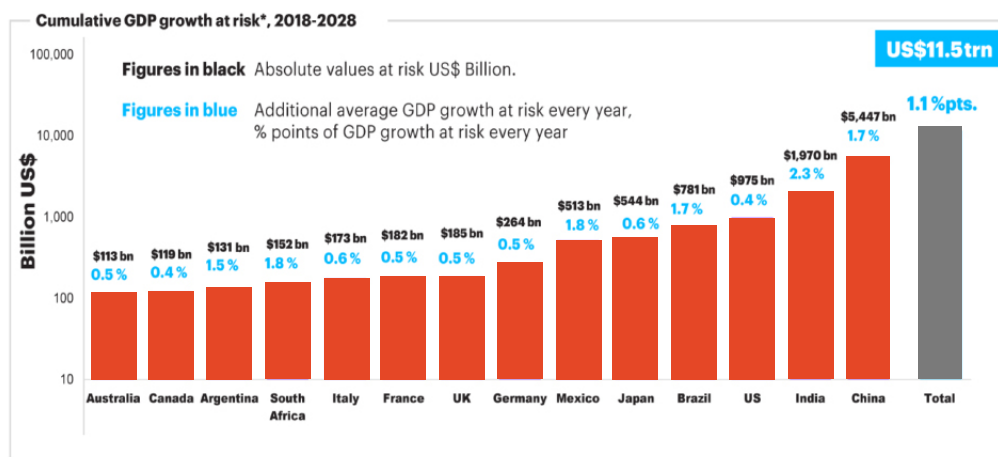
The digitalisation taking place has led to the ICT sector becoming a significant driver of employment and economic growth, tripling in size between 1995 and 2014.³

Looking ahead, it is estimated that 9 of 10 future jobs created will require digital skills, yet 44% or 169 million EU citizens between the ages of 16 and 74 years do not even have basic digital skills.⁴

Despite the positive growth in the ICT sector, a worldwide shortage of qualified skilled talent has grown into a significant crisis and threatens to impact on employment growth across the globe.

To illustrate the size of the problem, Accenture estimates that if G20 countries are unable to adapt the supply of skills to meet the needs of the new technological era, they risk forgoing up to US\$11.5 trillion in GDP growth over the next ten years.⁵

Table 1.1 – Projected GDP growth at risk because of skills shortage



Source: Accenture

It is estimated that in the western developed world, the number of unfilled jobs in ICT by 2020 will be between 1.2 million and 1.5 million.⁶ For sample purposes, the table below highlights the scale of the crisis in six countries; Ireland, UK, Germany, Holland, USA and Sweden.

Table 1.2 - Skills Gap by Country

Country	Skills Gap
 Ireland	12,000
 UK	40,000
 Germany	43,000
 Holland	12,300
 US	750,000
 Sweden	63,000

Sources: Eurostat, CSO, UK Treasury, US Commerce Dept

**G20 countries
risk forgoing
US\$11.5 trillion
in GDP growth
over 10 years⁵.**



THE SKILLS CRISIS IN EUROPE AND ITS IMPACT ON BUSINESS

The past decade has seen an explosion in the number of full-time ICT posts across the continent of Europe. Between 2011 and 2016, the number of ICT specialists in jobs across Europe grew by 1.8 million. The three biggest ICT employer countries were the UK with 1.6 million roles, Germany with 1.5 million roles and France with 1 million roles.⁷

Looking country by country, the highest number of ICT specialists in total employment were recorded in Finland (6.6 %), Sweden (6.3 %) and Estonia (5.3 %) while the lowest number was in Greece (1.4 %), Romania (2.0 %), Cyprus and Latvia (both 2.2 %).

It has been stated by the EU that a fully functional Digital Single Market could contribute €415 billion per year to its economy and create hundreds of thousands of new jobs.⁸ However, European authorities, industry bodies and educational institutions have recognised for almost a decade that as the industry grows, the supply of qualified expert talent will also have to grow.

Since 2011, it has been clear that the supply of digital talent has lagged well behind the demand. As a result, a major talent crisis has emerged. In the EU, the digital skills gap is expected to widen further, and as of yet, the employment potential of specialised digital talent remains under-exploited.

“A fully functional Digital Single Market could contribute €415 billion per year to our economy and create hundreds of thousands of new jobs”



Scale of the problem:

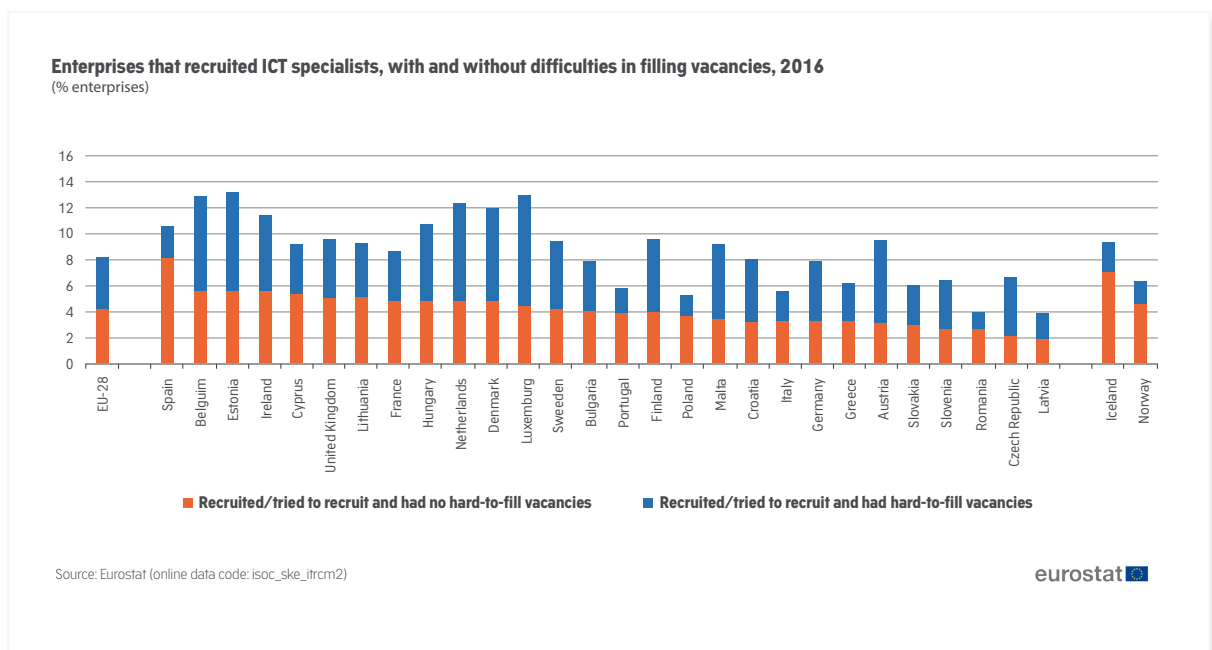
In 2016, an expert report for the EU had estimated the skills gap would hit 1 million people throughout Europe by 2020. That was later revised downward to 756,000 people.

The European Commission has said that whether the figure is 1 million or half of that, a major crisis exists and must be tackled. The lack of consistency in the reporting of these figures makes planning at a macro-level increasingly difficult.

From the industry perspective, 42% of large multinational tech organisations based in one or more European countries recruited or tried to recruit personnel for jobs requiring specialist ICT skills. This is six times the proportion reported by small and medium-sized enterprises (7%).

In total, 48% of all organisations that recruited or tried to recruit ICT specialists in 2016 reported difficulties in filling vacancies.

Table 1.3 – Percentage of firms which have struggled to fill ICT roles



A policy paper by the UK Department for Digital, Media, Culture and Sport found: “Far too often there is a correlation between where people live, their socio-economic circumstances and whether they have basic digital capability. Unemployed adults, for example, are 5% more likely to lack the basic digital skills than the national average, and 24% more likely to lack these skills than high earners. In August 2016, 22% of adults in Blackburn had not used the internet in the last three months, compared with 7% of adults in Surrey.”⁹

What governments have done in response:

The EU has launched a number of key initiatives since 2015, in light of the development of its Digital Single Market (DSM) in order to help bridge the skills gap. Among them is its upskilling Pathways Initiative, its Digital Skills and Job Coalition and the promotion of an EU-wide Code Week in 2017.

In addition to that, 16 EU member states have already adopted digital skills strategies aimed at improving digital literacy.

Countries with developed digital skills plans include the Czech Republic, Estonia, Ireland, Portugal and the United Kingdom.

The EU also provides about €6.3bn a year in ICT Research and Development funding. Some countries, like the UK, have changed their visa rules in a bid to attract foreign nationals to help bridge the gap, though industry leaders warn it will not be enough.¹⁰

IN FOCUS - THE IRISH SKILLS CRISIS:

“If there is one constant complaint from the IT sector in Ireland, it is that it has more jobs than it does skilled people to fill them and the problem is only getting worse,” a recent TechCentral.ie report stated.¹¹

In total, according to the Central Statistics Office (CSO), ICT roles account for 115,000 jobs in the Irish economy,¹² well ahead of the 91,000 jobs projected by the Irish Government in 2014.¹³

“Since 2011, a staggering 34,500 jobs have been announced by technology companies in Ireland – large and small, indigenous and multinational¹⁴,” according to Technology Ireland. In total, the ICT sector is said to contribute more than €70 billion in export revenue to the Irish economy.

Dublin, in particular, has in the past decade, developed into a major European hub for tech organisations, with many of the major multinationals choosing to locate their headquarters there.

The indigenous Irish tech industry was forecasted by Bank of Ireland to grow more than 20% in 2018, highlighting the strong growth in the sector.¹⁵ But like many other countries, it is far from a perfect picture, especially when it comes to talent development. Ireland has one of the lowest levels of basic digital skills in the EU; according to the European Commission. By 2020, the number of unfilled positions is set to hit 12,000.

Recently, the Irish Government published its report, ‘Digital Transformation: Assessing the Impact of Digitalisation on Ireland’s Workforce’. It estimates that disruption from the adoption of digital technologies over the next five years will lead to a hypothetical loss of 46,000 jobs.

While that amount of jobs could potentially be replaced by automation, the positive outcome highlighted by this report is that it is expected that employment in every occupational group will experience positive year-on-year change over the same period. Many of the new jobs expected will require workers to develop skills that can complement new technologies.



CHAPTER 2

‘WILL YOU STILL NEED ME?’

An employee’s perspective

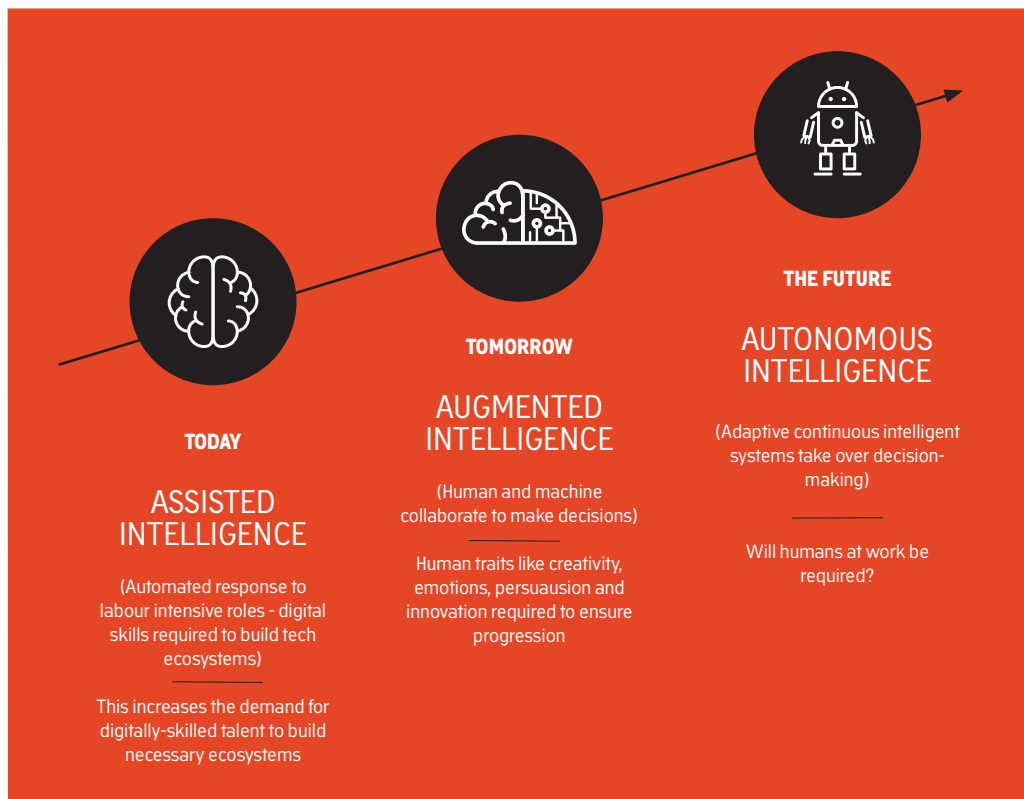
Many organisations are only now beginning to realise the impact that technology, particularly Automation and Artificial Intelligence (AI), will have on their businesses and profits. Many of the roles, skills and job titles of tomorrow are unknown to us today. These challenges pose significant questions as to how organisations can prepare for a future that few of us can comprehend. “AI will affect every level of the business and its people. It’s too important an issue to leave to IT (or HR) alone. A depth of understanding and keen insight into the changing technology landscape is a must,” a PwC report¹⁶ found.

The reality is that the challenge of the digital talent gap is no longer just a HR issue; it is an organisation-wide phenomenon that affects all areas of the business.

An OECD report indicates that the risk of automation is the highest among jobs held by young people, particularly teenagers. “The relationship between automation and age is U-shaped, but the peak in automatability among youth jobs is far more pronounced than the peak among senior workers. In this sense, automation is much more likely to result in youth unemployment, than in early retirements.”¹⁷

The chart below, which mirrors PwC’s findings in the “Workforce of the Future” paper,¹⁸ highlights how quickly intelligence systems are moving and emphasises that our workforce, as a matter of priority, must keep up. PwC claims that if we are prepared, AI should generate more jobs than it displaces over the next 20 years.

Table 2.1 – The rise of AI

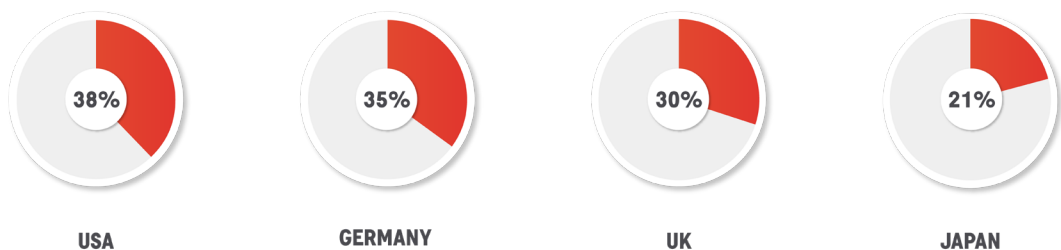


AI & THE FUTURE OF WORK

Technology is massively disrupting business landscapes, and as a result, the future of work will undoubtedly change. We now face some of the biggest questions of our age. As innovations in technology progress, what effect will automation and artificial intelligence (AI) have on the way that we work? Will it affect where we work? Or, as asked by many, will we need to work at all?

Globally, a third of the population fear that they will lose their jobs to automation. The future of the workforce depends on how businesses and governments allow it to progress. How autonomous an organisation becomes will be a decision that is made by its leaders, and how prepared it is for future technologies. However, predicting how automated a workforce becomes will be determined by future regulations, laws and governments. The chart below highlights the countries that are most at risk of losing jobs to automation.

Table 2.2 – Jobs at risk from automation by country



Automation and new technologies have historically proven themselves as job creators. For example, in the US, the proportion of adults with a job has consistently risen for the past 125 years, despite a century of creating machines to do the work for us.

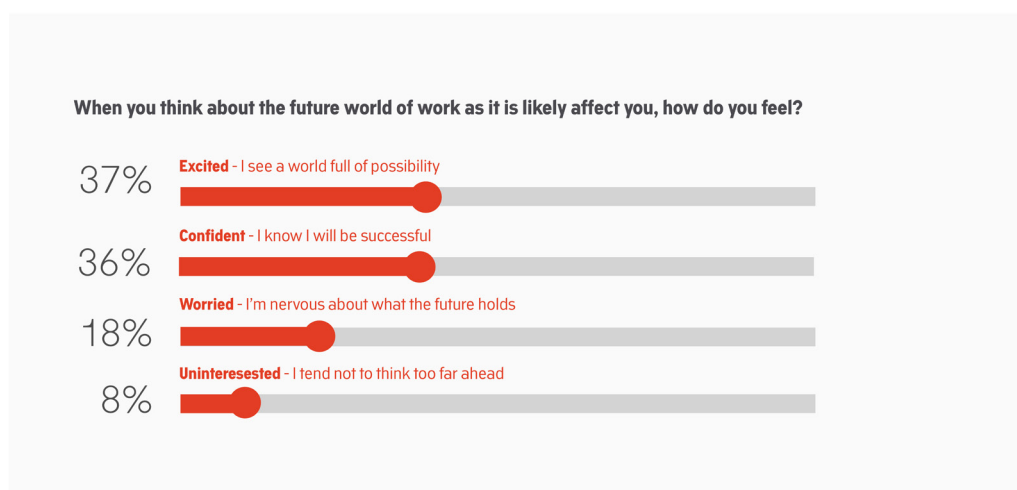
“Between the 1980s and today, 400,000 ATMs were installed in the United States. The number of bank tellers in the same period increased from 500,000 to almost 600,000. Bessen argues that ATMs increased the demand for tellers precisely because they reduced the cost of operating a bank branch. While the average number of tellers required to operate a branch office in urban areas fell by 35%, the number of bank branches in these areas increased by 43%.”¹⁹

Right now, the number of new digital roles far outweighs the number of qualified staff to fill them, which is why Learning and Development and Human Resource departments must now focus on attracting, developing and retaining digitally skilled employees.

THE FUTURE IS BRIGHT

The future is bright. According to a recent survey, the majority of respondents felt excited or confident about how the future world of work will affect them.

Table 2.3 – PwC survey



Source: PwC

73% of those surveyed think that “technology can never replace the human mind.” However, the number of people “worried about automation putting jobs at risk” has increased from 33% in 2014 to 37% in 2018.

Automation and artificial intelligence will replace millions of jobs worldwide over the next 20 years. However, it is estimated that these technologies will create more jobs than they displace. For example, AI could displace more than 7 million jobs in the UK, but they also estimate that 7.2 million jobs will be created in its place.

SKILLS FOR GROWTH

Automation will alter how we do many jobs today, but the roles that automation can not replace will become more pivotal and important for driving organisational growth. Workers with critical skills will become the ultimate prize.

While 52% of CEOs are keen to maximise the benefits of automation, and 39% are considering the impact of AI on their future skills needs, 52% of them are considering increasing their staff numbers over the next 12 months. The biggest threat to these CEOs is finding the right skills for their business, and right now they are searching for digital talent who possess the following skills; problem-solving, adaptability, collaboration, leadership, creativity and innovation.

It seems inevitable that some sectors will be hit harder by automation than others. For example, it's predicted that manufacturing roles could fall by approximately 25%. On the other side, STEM roles (Science, Technology, Engineering and Math), look set to continue to increase dramatically.

See table 2.4 for the top digital roles.



Top digital roles by 2020 as identified by employers

Table 2.4 – Top Digital roles by 2020

Top digital roles by 2020 as identified by employers

- | | |
|---|--|
| #1 Information Security/
Privacy Consultant | #2 Chief Digital Officer/Chief Digital
Information Officer |
| #3 Data Architect | #4 Digital Project Manager |
| #5 Data Engineer | #6 Chief Customer Officer |
| #7 Personal Web Manager | #8 Chief Internet Of Things Officer |
| #9 Data Scientist | #10 Chief Analytics Officer/Chief Data
Officer |

Source: Capgemini Digital Transformation Institute survey,
June–July 2017, N=501 employers.



CHAPTER 3

‘I KNOW THAT I KNOW NOTHING’

- PLATO

A Learning and Development perspective

DEVELOPING PIVOTAL TALENT

The race has begun to securing digital staff, and until supply meets up with demand, these pivotal workers with the aforementioned critical skills are highly sought after.

As competition increases, organisations need to increase their efforts in attaining, developing and retaining their staff. This has created an enormous challenge for both Human Resource and Learning and Development departments. Another factor that needs to be addressed is the risk of losing talent to burnout, or early retirement (which is facilitated by the high salaries they have commanded). This will become a critical issue for HR over the next ten years.

To tackle this, organisations need to pay attention and remain true to the employee value proposition - the reason why you attracted the best talent in the first place.

Over the next five years, training will become an essential part of the employee value proposition. It is critical to retaining, developing and attracting the best digital talent.

“74% of employees are ready to learn new skills or completely retrain in order to remain employable in the future” - PwC



EMPLOYEE WORRIES

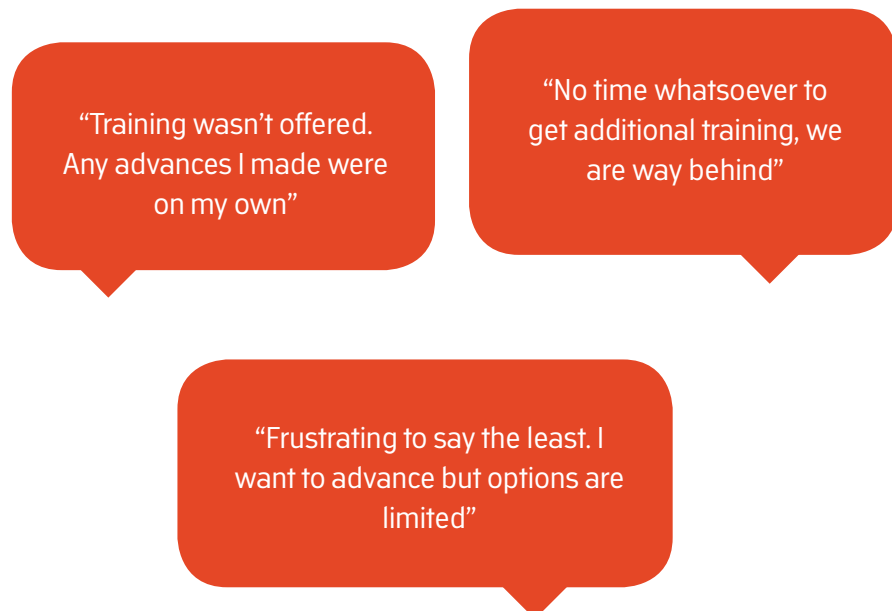
Studies show that a majority of digital employees feel organisations' training programs are not hugely effective and those who want to excel are looking beyond their organisations' Learning and Development (L&D) department.

KEY TAKEAWAYS

What is clear is that employees feel:

- 1) Shortchanged by their employers when it comes to upskilling;
- 2) Feel the need to invest in their own future by way of training;
- 3) Are willing to move jobs to feel more valued.

Table 3.1 – 'Training was a waste of time'



Source: Code Institute Digital Employee Survey 2018

CODE INSTITUTE DIGITAL EMPLOYEE SURVEY 2018

Code Institute's Digital Employee survey, conducted for this White Paper, reveals that while 66% of people have been offered training in their job, a vast majority (60%) found what was offered to be less than good.²⁰

A slight majority (53%) said they would move to another role if better training was offered while a majority (60%) have had to use their own money to advance their learning and training.

Employees, particularly those with highly specialised skills who want to excel, are looking beyond the organisations' L&D programs. According to a recent Capgemini report conducted in association with LinkedIn, the top three reasons that motivate digital talent to invest in digital skills on their own:

- 1) 'I want to be on par with my colleagues on the required digital skills';
- 2) 'Flexibility to choose programs as per my area of interest';
- 3) 'Interest in expanding digital skills that will help me in my personal, not professional life'.

From an employers' perspective, organisations need to pay attention to the widening gap or risk losing existing talent. Skill redundancy fears and lack of faith in their organisation's upskilling efforts could trigger attrition.

FOCUS ON YOUR PEOPLE

For organisations to develop for the future, a focus needs to be on existing team members. Organisations need to understand both existing and deficit skills within their workforce. To do this, they must look beyond the job titles and identify essential skills. This will allow an organisation to determine the skills gap within their business.

Companies should look to strengthen innovation and develop future skills. It is vital that opportunities are provided to staff that enables them to improve and highlight their creativity, empathy and leadership capabilities, along with learning business-critical technology skills.



EMPLOYERS' ROLE

Other focus points that need to be adopted include;

- Existing talents and capabilities must be managed once identified. This will allow organisations to capitalise on them as new technological breakthroughs arise.
- Embrace and promote adaptability within organisations. Be willing to accept that as skills are identified, career paths may radically change.
- Develop a new learning and development model that offers adequate and frequent skills training to all members of staff.

As technology becomes more immersed in the workforce, it is essential for teams to understand what the technology is and its impact.

Employers should;

- Clarify how robotics and artificial intelligence can enable the redesign of work, enhance productivity and customer experience, and enable a focus on more value-added tasks.
- Use sophisticated workforce planning and predictive analytics to plan for talent pipelines in multiple future scenarios.
- Look for ways technology can enhance your people offering for potential and existing employees.

From a policy perspective, organisations should;

- Offer an understanding of how humans and machines will work together to achieve an organisation's goals.
- Businesses should become more attractive to employees by making upskilling and education readily available.
- Graduate programs should be enhanced to include technology training that provides for essential automation and artificial intelligence languages such as Python.
- Develop clear career paths for employees and upskill those pivotal staff with quality software development training that will drive the business forward.

BE A PATHFINDER

A small number of “pathfinder” or “pacesetter” organisations have sought to meet the digital challenge head-on by taking “strategic and tactical actions to address the problem and are confident that the gap will remain flat or decrease within the next three years”.²¹ Their first step is to align leadership on a talent strategy that includes the unique needs of digital talent.

Digital teams need to be in a position where they can be afforded the freedom to trial and error their innovations and fail fast. The right technologies must be made available to them, and they must be given the space and opportunity to collaborate freely.

Investing in upskilling has allowed digital workforces in these organisations to be far more adaptive and nimble to an increasingly volatile marketplace. For example, companies such as IBM have incorporated coding boot camps into their graduate programs. In 2017, Joanna Daley, IBM’s Vice President of Talent said that they now consider graduates with “hands-on experience via a coding bootcamp or an industry-related vocational class.”

Code Institute Example

BT have employed the services of Code Institute to reskill cohorts to Python. Damien Meere, Technical Training Lead, explains the difficulties experienced by many organisations in delivering adequate training for their staff:

“It can be difficult to land staff into a course and say, we’re going to do a one-week crash course, and then expect them to run from there. We can’t expect staff to be experts after a week-long course. It’s not going to cut it”.

Meere concludes that staff on the network side of the BT business would have minimum exposure to scripting or coding, so to expect them to become experts overnight by way of a short-term course is “unrealistic”.

“Code Institute’s Software Development Diploma works really well for us. It’s a longer-term approach that delivers Python-trained engineers.”





CHAPTER 4

‘WHERE DO WE GO FROM HERE?’



The pace of change caused by technology has seen governments across the globe conclude that more needs to be done to bridge the gap between supply and demand.

Traditional educators are focusing more on theory rather than the aforementioned critical skills. They are failing to deliver enough digitally skilled employees at the pace that is required by industry. This has become a problem for HR and L&D departments and has resulted in a re-emergence of vocational training.

While we may be in the midst of a digital skills crisis, the future is bright. What we are seeing at present is a race between education and technology. As intelligent systems and machines reshape the nature of work, people will need entirely new skill sets.

The idea of lifelong learning will become a mainstay in people's lives and must become a larger part of businesses in the future.

KEY RECOMMENDATIONS

1) GOVERNMENTS MUST ESTABLISH DIGITAL FOCUS

- Governments, businesses and society must agree and legislate for the use of artificial intelligence, automation and all future technologies. An ethical approach must be discussed regarding the evolution of the relationship between humans and technology.

2) GOVERNMENTS MUST PROPERLY RESOURCE EDUCATION PROVIDERS TO PREPARE TOMORROW'S WORKFORCE

- The scale of investment to allow and maintain the digitisation of schools must be escalated or risk hampering future growth.
- Digital skills and critical, pivotal skillsets are now essential to the curriculum.
- Gender inequality in STEM must be tackled in primary education.
- Third-level institutions must align with the needs of industry.
- A vocational approach to technology-related courses is imperative.
- Countries with acute skills shortages must make it more attractive to international students to study there in a bid to bridge the gap between supply and demand.

3) INDUSTRY MUST IDENTIFY NEW AND SUSTAINABLE TALENT CHANNELS

- Plan for an automated world and understand what this means for your digital talent strategy. Skills like leadership, creativity and empathy will be in demand. Identifying these skills will allow you to build on them, and you will recognise how they can be used for future technologies.
- Human Resource departments should establish partnerships with vocational education providers that can deliver a continuous pipeline of talent.
- Education and upskilling is now a key attraction for top digital talent. Companies who promote in-job training and development have shown greater abilities to retain staff.
- Develop clear career paths for workers to help them feel like an integral part of the business and valued for the work that they do.

KEY CONCLUSIONS

Significant changes have taken place in the workforce in Europe with 9 out of 10 companies now reliant on technology to trade. As a result, a major digital skills crisis has emerged over the past decade, and as the pace of technological change escalates, that gap is set to increase unless significant action is taken.

It is estimated that the digital skills gap may reach between 1.2 million and 1.5 million unfilled jobs in the western world by 2022. This has the potential to cost \$11.5 trillion in lost GDP growth in G20 countries by 2028.²² European Governments have acknowledged they must do more to address the skills shortage. Organisations are faced with many choices when planning for an unknown future. It is imperative that companies develop an understanding of how humans and machines might collaborate to deliver corporate growth.

Developing digital talent strategies that will attract, develop and retain employees will be the key focus for all HR, L&D and IT departments. It is now time to embrace technology as a force for good.

1) Attracting Digital Talent:

- Organisations need to understand both existing and deficit skills within their workforce and think beyond simplistic concepts, like, hiring software developers with four to five years' experience.
- A new recruitment approach that focuses on industry-ready staff is needed. It is now time to build and nurture your workforce by aligning with online industry-related vocational partners. This will enable organisations to harness a flexible mix of digital talent.

2) Developing Digital Talent:

- Organisations must strengthen innovation, creativity, leadership capabilities and critical technology skills.
- Education and training programs are now a key attraction to retaining staff. This training should be rewarded and incentivised.
- A traditional linear career path no longer exists. Develop adaptability within your organisation by encouraging mobility and the development of skills.

3) Retaining Digital Talent:

- The culture of the organisation needs to support an innovative environment that supports failing fast, or risk losing the battle to harness technological breakthroughs.
- Digital talent needs must be supported through the provision of relevant technologies, collaborative opportunities, radically different career paths and compensation frameworks.
- Harness a mix of talent and support with new and flexible ways of working.

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ABOUT THE AUTHOR



Daniel McConnell is the political editor of the Irish Examiner.

A national journalist of 15 years' standing, he is a leading author, broadcaster and commentator on political matters.

He was group political correspondent with Independent News & Media (INM), which publishes the Irish Independent, the Sunday Independent, the Herald and Independent.ie. He also previously worked with The Irish Times and The Sunday Times.

He is a multi-award-winning journalist and a co-author of the 2016 best-seller 'Hell at the Gates' published by Mercier Press. He also co-authored the 2006 Sunday Times Guide to Secondary Schools in Ireland, published by Penguin Ireland.

A graduate of University College Dublin (BA in History and Politics) and Dublin City University (MA in Journalism), he is a leading contributor to radio and television programmes. He lives in Drumcondra, Dublin with his wife, Cathy, daughter, Eliza and son Sam.

WHO IS CODE INSTITUTE?

Code Institute is a digital talent accelerator. We help companies prepare their workforce for the future by creating and managing digital skills-based training programs in software development.

ACCELERATE YOUR DIGITAL TALENT



Hire Our Graduates

Our graduates are fluent in the most up-to-date languages including Python. Their hands-on experience and portfolios make them industry-ready. Thousands of companies, from start-ups to large multinationals, have hired Code Institute graduates.



Reskill Existing Employees

Code Institute's accelerator programme reskills existing employees whose roles require a comprehensive introduction to front and back end development. Code Institute provides 600 hours of instruction. Our online course offers flexibility, so employees can study when it suits them.



Train New Tech Talent

Code Institute's Tech Essential Diploma helps non-technical professionals who want to enhance their technical fluency and communicate better with technical stakeholders both inside and outside the company.

WHY CHOOSE CODE INSTITUTE?:

Code Institute works with employers to identify skill gaps and configure training solutions that meet business needs. Our online proprietary platform enables us to match student skills with employers' needs. We offer flexible online learning options including part-time and full-time courses, to help students balance personal, professional, and academic demands.



De-Risk Hiring:

Code Institute delivers a continuous stream of job-ready, digital talent derisking the recruitment process.



The Right Talent:

Our proprietary platform and learning approach match graduates skills with employer demands.



World Class Student Support:

Our accelerated learning platform and tailored student experience deliver a world class learning experience.



Code Ready in 3 Months:

Graduates are fluent in Python, HTML, Django, CSS and receive training in Data Management Presentation and Agile working.

DONT TAKE OUR WORD FOR IT. HERE IS WHAT THE TECH INDUSTRY IS SAYING



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