

Deloitte.



The connected employee

The utility's most important asset

Contents

Executive summary	01
Introduction	02
Traditional utility model challenged...	03
...workplace technology developments and...	04
...shifting workforce dynamics...	05
...disrupt how, where and by whom work is being done	06
1. Rethinking talent acquisition	10
2. Careers and learning: Real time, all the time	13
3. Transforming the employee experience	15
Conclusion	18
Contacts	19
Endnotes	20

Executive summary

In the utilities sector, as in the wider economy, the work we all do is changing.

Attracting the right talent with the right skills is going to get much harder. Thirty-five per cent of vacancies are already hard to fill and the sector will need to recruit 221,000 people by 2027. But with 154,000 existing jobs in the UK utilities sector likely to be automated, the skills required, the work utilities do, and the way they do it, is going to shift.

This comes at a time when the expectations of talent are changing. Millennials want meaningful work, autonomy and agile, flexible ways of working. Utilities are competing in a new talent pool to attract highly skilled people with the strong cognitive and creative skills that are in high demand across the UK economy.

Technology – a key driver of much of the change in the way we work – is creating opportunities to dramatically improve the productivity and performance of utilities. To take advantage of digital disruption, utilities need flexible organisational structures and to fundamentally change the way they attract, develop and engage their workforce. The leaders will be businesses that build innovative, flexible and creative environments that highly skilled millennials crave.

So, what should we do?

Develop an integrated talent strategy by reimagining how work will be delivered and what skills will be needed. This will involve:

1. Rethinking talent acquisition

- develop your digital employment brand
- explore innovative tools to make finding and acquiring the right talent more efficient
- build an ecosystem of flexible workforce

2. Enabling dynamic career development

- offer real time, all the time learning
- rethink the role of learning and development in your organisation to help create flexible career paths

3. Transforming the employee experience

- make employee experience a central issue and lead from the top
- take a holistic approach to deliver an integrated employee experience
- empower the future workforce to develop flexible career paths.

“The pursuit of a resilient, skilled and sustainable utilities workforce requires the whole UK sector to work together – policy makers, regulators, asset owners, retailers, delivery partners, the supply chain, unions, training providers and other key groups. As this report concludes, the human asset will remain a business critical element, even when future gazing and predicted ‘digital disruption’ becomes reality.”

Nick Ellins, Chief Executive, Energy & Utility Skills and the National Skills Academy for Power

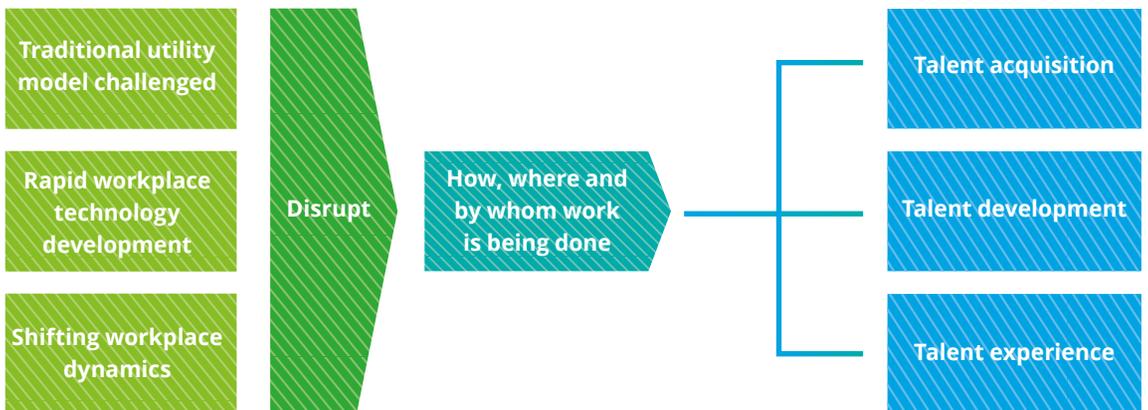
Introduction

Our *Connected* series looks at the impact of digital disruption on the traditional utilities model. The first two reports in the series explain that utilities need to reinvent their roles in customers' homes and transform the way they manage their physical assets to be able to respond to the fast changing requirements of an increasingly uncertain market.¹

But what about utilities' most important asset, their workforce? Profound industry-wide challenges, rapid workplace technology developments and shifting workforce dynamics are transforming the relationship between the utility and its workforce. These factors are driving utilities to rethink how, where and by whom work is being done.

This report, the third in the *Connected* series, looks at the opportunities that digital technologies offer utilities to acquire, manage and develop talent. It also looks at the need to establish an all-encompassing strategy for an improved employee experience that raises employee engagement, increases productivity and supports a new breed of innovators.

Figure 1. Forces disrupting established talent management methods in utilities



Source: Deloitte analysis

Traditional utility model challenged...

The UK utilities sector is undergoing dramatic change. Changing customer behaviours, distributed generation, micro grids, smart meters, developments in energy storage solutions and a higher penetration of renewable generation are but a few factors that are transforming the way energy has been traditionally generated and distributed. The water sector faces similar changes, including the introduction of competition.

While utilities develop long-term responses to these factors, they also need to meet multiple short-term objectives on a company level, such as demonstrating a laser-like focus on the customer, improving operational efficiency and meeting regulatory compliance.

When energy and water demand were predictable and competitors were known, utilities focused on assets, systems and processes to reach their operational objectives.

As the speed of digital disruption increases and both demand and supply of energy and water are becoming less predictable, the decades old organisational structures and workforce practices hinder utilities in adapting to an uncertain future.²

While lean start-ups are moving with speed and agility to disrupt markets, utilities can no longer afford layers of bureaucracy, complex webs of reporting lines and operational siloes to slow down decision-making and their ability to react quickly.



... workplace technology developments and...

The use of technology in our personal lives is growing rapidly. Nearly all of us have smartphones, tablets and home computers, and use a multitude of apps and social media to stay connected and support our daily living.

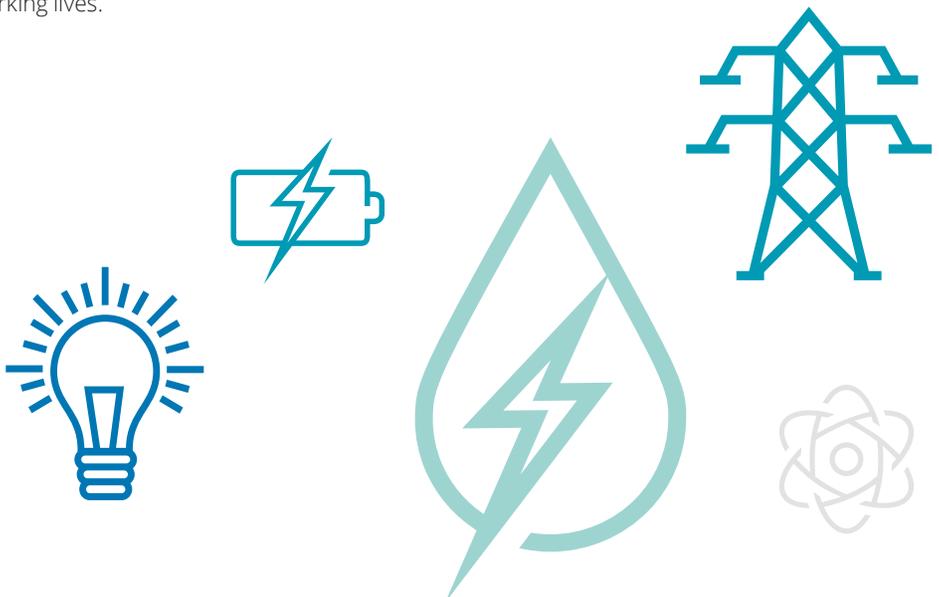
Connected home devices and smart watches are spreading, regardless of whether we do manual or office-based jobs. For example, *The connected worker report* on the services sector shows that there is little real difference between the personal use of technology by blue and white collar workers.³

As customers, we are used to getting quick, convenient services we can access via multiple platforms and predictive technologies that place things we need at our fingertips.

As technology makes our lives easier at home, we also expect our employers to provide us with technology that makes our working life easier and safer. With mobile and workplace technologies ever more sophisticated, the line between the workplace and home is blurring, giving us more flexibility and mobility in our working lives.

Digital technologies, such as artificial intelligence, cognitive computing and robots are set to revolutionise the workplace and the impact on utility companies will be just as disruptive. The Deloitte *Talent for survival* report anticipates that 30 per cent of electricity, gas, steam and air conditioning supply and 42 per cent of water supply, sewerage and waste management jobs will be at high risk of automation – a total of 154,000 jobs in the UK.⁴

While routine and predictable tasks will be at highest risk, automation is forcing utilities to consider how each task is delivered and how delivery can be made more efficient. Understanding how automation is changing the skillset and talent profile that utilities need now – as well as in the future – is the key.

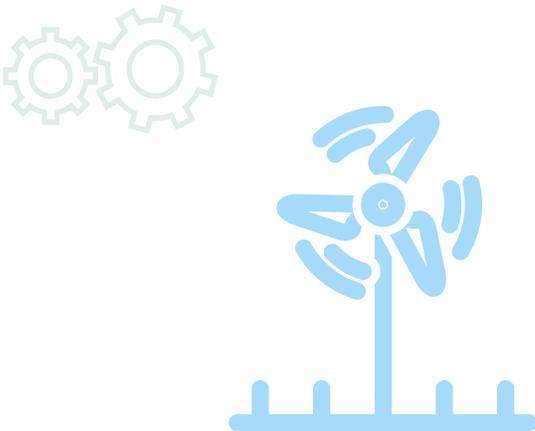


... shifting workforce dynamics...

In addition to industry disruption and workplace technology developments, a generational shift is also taking place. While it is simplistic to stereotype entire generations, research has shown broad differences in motivation among millennials – people born after 1982 – that set them apart from previous generations:

- they are better educated: 40 per cent of the UK workforce are graduates (compared to 20 per cent in 2000)
- they are environmentally and socially conscious – the purpose and impact of the industry and an individual company can greatly influence their choice of an employer and their commitment to an organisation⁵
- they are more tech-savvy and expect their workplace to provide cutting edge technology or at least similar levels that they enjoy in their personal lives. In fact 80 per cent of millennials believe that as technology develops further, their working lives will become more fulfilling⁶
- they are looking for flexibility and to feel empowered in their roles – flexible careers and working conditions, less hierarchy, the ability to manage work/life balance and the freedom to solve business issues in innovative ways
- they believe that automation will drive productivity, growth, allow people to spend more time on creative/value-added activities and enable organisations to use their workforce more flexibly. They also believe that in the energy and resources sector opportunities to develop outweigh the decrease in the number of jobs.⁷

Digital technologies, such as artificial intelligence, cognitive computing and robots are set to revolutionise the workplace and the impact on utility companies will be just as disruptive.



...disrupt how, where and by whom work is being done

Utilities' ability to adapt to an uncertain and rapidly changing environment is being challenged by their mature organisational structures, legacy strategy and infrastructure.

Utilities need to become more flexible while at the same time maintain their focus on operational standards and safety. Utilities will also need to consider how to adopt forms of more dynamic, flexible organisational structures based on networks of small teams of self-managed experts, who are empowered to make their own decisions and are focused on solving specific problems (rather than deliver work set according to their functional siloes).

Flexible organisational structures need the right support and conditions: technology that helps cross-functional, autonomous teams collaborate easily and a less risk-averse environment that allows projects to start small, learn through experimentation and failure so that errors can be adjusted quickly. One of the challenges for utilities is to work out how to innovate in a controlled way that does not introduce unacceptable risks.

Technology makes working life more flexible in utilities in a number of ways: an increasing amount of work is being done remotely by sensors, drones and robots as well as by a workforce from off-site locations.

Technical, organisational and generational change are creating a shift in the skillset utilities need now and in the future. Today, the majority of skills and knowledge that utilities require are related to science, technology, engineering and mathematics (STEM) subjects.

Utilities need engineers to design, build, operate and maintain assets; in addition to the regular field force, they also need approximately 10,000 engineers to continue to roll-out smart meters while back-office functions, such as finance or IT, are mostly staffed with employees with backgrounds in science, technology or mathematics.

This need will only grow. The amount of data utilities generate is growing exponentially because of higher levels of automation, connected assets, sensors and other types of new and emerging technologies. Utilities need more data scientists who can manipulate this large volume of data and turn it into actionable insight.

In addition, the need for cross-functional skills, not traditionally associated with utilities, is already rising. These include customer service, regulatory, cybersecurity, research and development, commercial strategy and negotiation skills.

Increased diversity within an organisation brings a better ability to innovate and solve problems. However, only 51 per cent of female STEM graduates went on to work in STEM roles, making up 13 per cent of the STEM workforce overall between 2012 and 2015.⁸ In engineering professions, this number drops to 5.5 per cent.

Employees also need more advanced critical thinking and additional social, creative, communication and collaboration skills to better adapt to the changing technology landscape in a networked organisation and to work with automation, artificial intelligence (AI) and robots. As a result, utilities find themselves competing for talent with brands such as Apple and Google globally or John Lewis and Virgin Media in the UK which, according to LinkedIn's Top Attractors lists, candidates consider the most attractive brands.⁹

Utilities need to develop a talent strategy that sets out the mix of 'on-balance sheet' and 'off-balance sheet' talent. 'On-balance sheet' talent refers to the traditionally employed workforce, enhanced with flexible working practices such as part time/job share. 'Off-balance sheet' talent means temporary individuals on short-term arrangements, crowdsourcing to get specific tasks completed via expert talent finder platforms, strategic partnerships with embedded delivery partners and access to a range of other companies to provide support in specific capability areas. In addition, the talent strategy needs to consider how to increase/decrease the provision of resources at short notice and how to manage quality and cost of talent while protecting intellectual property and critical knowledge. The combination of on- and off-balance sheet talent would bring positive, collaborative disruption.

Digital disruption is already changing the lives of various utility company stakeholder groups.

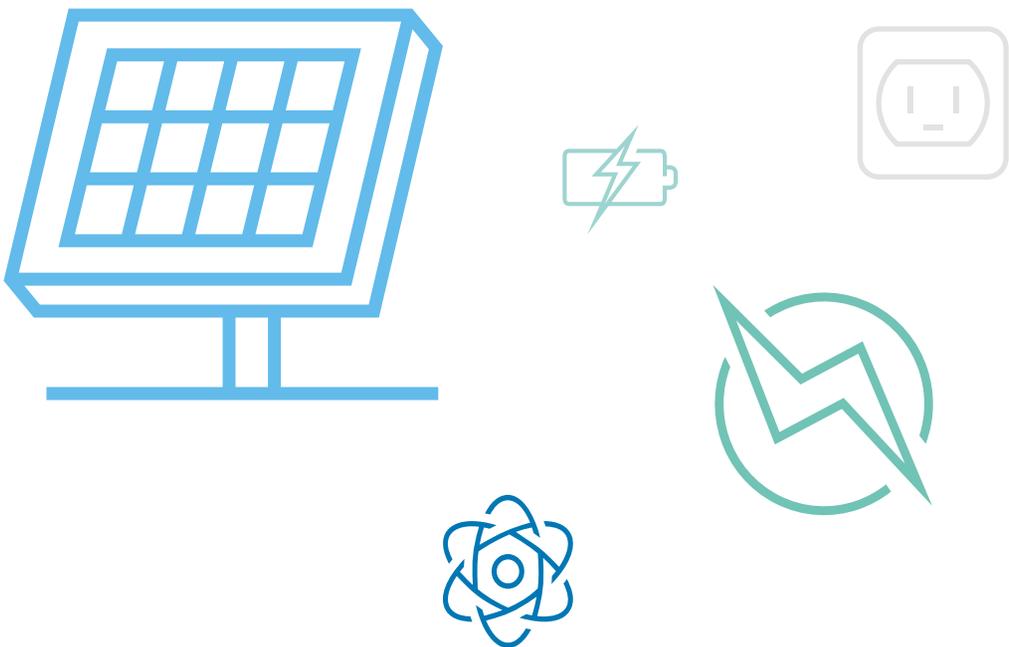


Table 1. How do stakeholder groups need to work differently in a rapidly changing environment?

Stakeholder groups	Impact of digital disruption on workforce	Skills and behaviours necessary to perform in the rapidly changing environment
 <p>Field force</p>	<ul style="list-style-type: none"> • Tablets, smart phones, wearables, collaboration tools, smart glasses, sensors and drones improve the field force's quality of work by improving the quality of data they collect and information available to them. These technologies also increase mobility for field workers, since they are no longer dependent on being able to 'dock in' at a designated location to perform tasks. Dynamic workforce scheduling through connected assets ensures that the right skillset is being utilised at the right place at the right time. • Safety and predictive risk analytics make work safer. • Artificial intelligence helps interpret and model asset performance and identify preventive action before issues arise. • Automating manual processes free up time for field force to focus on less routine work: for example monitoring and automatically administering chemical levels can reduce waste and make operations more efficient. 	<ul style="list-style-type: none"> • With more data collected through digital technologies and enhanced through predictive analytics and the use of artificial intelligence tools, field force should be better informed and equipped to make better decisions fast. They should be able to turn data into insight to solve problems and decide on the course of action. • Field force then should also be able to understand what impact a piece of insight has not only on other team members, perhaps at other locations, but also on other parts of the business – for example what assets would be affected or whether there is a need to inform customers. • Knowledge should also be coupled with communication skills to alert and explain the impact of the insight. • With less time spent on routine work, field force should be making more strategic decisions. This will require increased internal and external connectedness and awareness of the wider activities of the company.
 <p>Back office</p>	<ul style="list-style-type: none"> • Digitalisation is set to revolutionise the way work gets done in functions traditionally called 'back office' in utilities, such as finance, procurement, supply chain and IT, freeing functional leads and workforce from repeatable tasks. • For example, in finance, blockchain is expected to provide more transparency in all transactions via a distributed ledger, increasing the speed of exchange, and accelerating data consolidation and reporting; robotics can reduce effort on all routine financial transactions, while cognitive technologies reduce costs, improve accuracy and help identification, recovery and reduction of overpayments; in-memory technologies promise enhanced visibility into information and faster execution of processes, while cloud helps reduce reconciliations/data entry through a single platform access. A fully automated finance function would effectively be a control centre with process visualisation tools. It would monitor and control the flow of information between the utility's core, extended and outsourced parts; processes would be completely web-, workflow- and self-serve enabled, with most operational finance managed in shared service centres. 	<ul style="list-style-type: none"> • With cognitive technologies and robotic process automation taking over routine tasks, back-office employees will need to become problem solvers and focus on issues that need special attention. • As the number of repeatable tasks diminishes, the back office will be able to focus on making strategic decisions. In addition, they will need to be able to understand the impact of their decisions on other parts of the business and communicate effectively what this impact will be. • In finance, the use of blockchain will require understanding new ways of tracking financial transactions, rather than an advanced knowledge of excel. • To be able to design, help build or modify automated processes and work alongside new and emerging cognitive technologies, advanced critical and creative thinking will be necessary. • The IT function in particular needs to evolve its skillset to be able to advise the business on the best technologies to harness and work in more agile ways to develop and deploy these solutions.

Stakeholder groups	Impact of digital disruption on workforce	Skills and behaviours necessary to perform in the rapidly changing environment
 <p>Customer contact centres</p>	<ul style="list-style-type: none"> • Digital technology transformed call centres into contact centres, with some companies considering further changing the name to 'customer engagement centres'. • With technology enabling consistent customer information to be available across a number of channels within the utility, and with the ability to combine and analyse data from diverse sources, the customer contact centre owns the key to the customer. It is able to understand customer behaviour better than ever before and drive the customer journey to help build more meaningful customer relationships. • As transactional enquiries increasingly move to self-service channels, contact centre advisers are being freed up to provide more valuable service to the customer. • Often, contact centres 'pick up the pieces' when the digital experience does not deliver what the customer needs. • With customers increasingly moving and interacting across multiple contact channels, contact centres play a crucial role in helping understand customer behaviour and decide when, where and how to intervene in the customer journey. • Digital technology allows a contact centre workforce to learn about the impact of assets on customers before it affects them and can inform customers before the decrease in quality of services occurs. 	<ul style="list-style-type: none"> • With more data in one place about the customer, customer contact centre employees should not only be able to build in-depth knowledge of customer behaviour but also use their ability to translate data into insight rather than information for the customer and add value to the customer experience. • As contact centre workers help address issues where technology fails, they need to be good listeners. They need to couple this empathy with real-time solutions and become problem solvers. • As customer contact centre workers move away from transactional support, they need to use their communication and interpersonal skills to guide/advise customers how to re-engage with the digital experience, i.e. guiding a customer through how to do it themselves online or via apps, as opposed to just doing the transaction for them. • With more ability to intervene in the customer journey, creative thinking will be needed to help find new ways to use technology to maintain client relationships, help improve the customer journey and deliver a consistently high quality customer experience.
 <p>Leadership</p>	<ul style="list-style-type: none"> • Digital disruption brings endless opportunities to lead change in improving customer service, increasing efficiency and meeting regulatory requirements in a rapidly shifting operating environment, where demand and supply for products has become less predictable and competitors are less apparent. 	<ul style="list-style-type: none"> • Think differently: ability to visualise the opportunities that digital disruption brings to the utility; agility and decisiveness to make decisions without all the information; experimenting and supporting others in experimentation. • Act differently: adaptability to constantly shifting power structures; social flexibility to collaborate with ease across many different teams; valuing contributions of others, new work partners and interest groups. • Feel differently: ability to challenge organisational structures and the way work is being done; tolerate an environment of risk and ambiguity; show resilience and an open and positive attitude in the face of constant change.

Utilities themselves know that they are facing challenging and exciting times and they need to explain that more effectively to new candidates. Many utilities in the UK are already making an effort to attract younger generations to the sector. Numerous companies participate in work experience schemes, career fairs and apprenticeship schemes.

They also work with schools and universities to influence the national curriculum, but there is much more that needs to be done. This report focuses on what utilities can do and how technology changes the way they need to attract talent, how to help talent further develop and improve the talent experience.

1. Rethinking talent acquisition

Attracting talent with the right skills and expertise is a challenge for utilities. Thirty-five per cent of vacancies are hard to fill in the UK electricity, gas and water sectors, compared to the national average of 23 per cent.¹⁰

While anecdotal evidence suggest that companies receive a sufficient number of applications, often from other sectors, such as the military or retail, the majority of these candidates do not have the right skills, qualifications or experience.

Indeed, the skills gap is expected to continue growing with the sector needing to recruit 221,000 people by 2027.¹¹ Brexit may make this problem worse, considering that 47 per cent of highly-skilled EU workers are considering moving within five years.¹²

Utilities will continue to need in-depth engineering expertise and STEM skills, but the digital disruption and shifting generational dynamics will require new skills and behaviours. Utilities therefore need to rethink their talent acquisition strategies and consider how digital technology can help them acquire the best talent.

With a high degree of recruitment outsourced in utilities, technology can help take some control back, while making the process faster, more effective and efficient.

Where to start?

- **Building a digital employment brand** – In today's digital world, candidates often find the company before the company 'finds' them. Before applying, candidates are likely to do their own research, search the company website, read Twitter and compare employee experiences and salaries on websites such as Glassdoor or Compare My Salary.

The utility's digital 'employment brand' therefore needs to be managed carefully. Company webpages need to be available on multiple platforms to engage candidates and inform them about the organisation and the role. To extend the reach of the brand, some companies have produced a series of creative videos and interviews to describe the experience of working for the organisation and posted these on sites, such as YouTube or LinkedIn.

Utilities should also emphasise their role in protecting the environment and creating prosperity and social progress as part of their effort to inform candidates about the role. These could capture the attention of the millennial audience in particular.

- **Exploring new technologies to find the right candidates** – Utilities have needed talent with the right engineering knowledge and experience, but that will not be sufficient for the utility of the future. The workforce will also need social, communication, critical thinking and problem-solving skills in addition to being adaptable and flexible to be successful.

The 'half-life' of many learned skills currently stands at around five years.¹³ A five-year half-life means that most of the skills learned ten years ago are irrelevant and half of what we learned five years ago is obsolete. Considering that the half-life of skills is reduced by the pace of disruption, employers should think carefully about which skills are required versus those that can be developed. By narrowing the must-have skills, the pool of potential candidates should increase.

However, finding the right candidate is a complex task. Indeed, research suggests that the ability of traditional interviewing techniques to predict a candidate's long-term success at an organisation is being questioned.¹⁴ Technology can not only help make recruitment more objective, it can also increase success rates.

A number of companies are combining videos and gaming to create an all-digital recruitment process. For example, Unilever asks candidates to complete a short online form – tied to their LinkedIn profile, so no CVs are needed – before spending 20 minutes on a series of games. These games are available on a number of platforms (computers, phones and tablets)

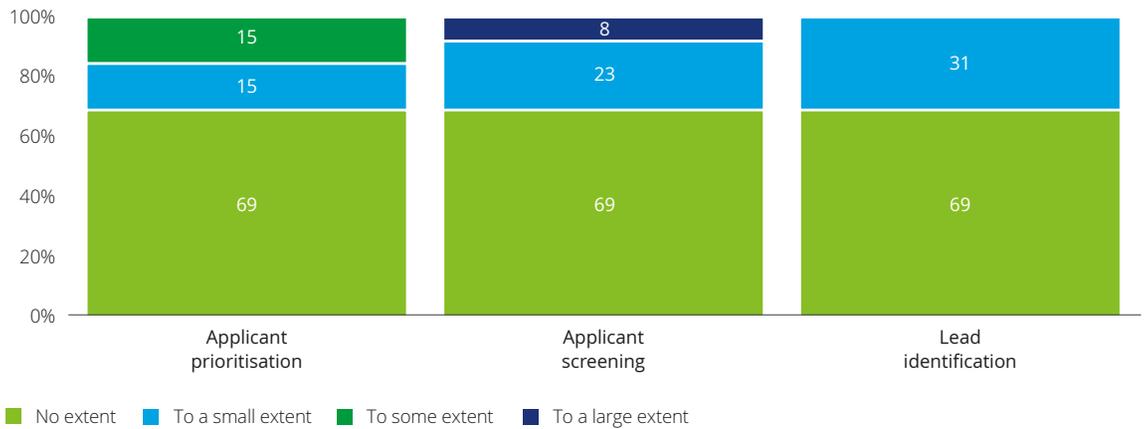
and give Unilever an insight into the candidate's skills in a number of areas such as problem-solving or communications. Some technologies can also 'filter' out skills that utilities need but for which candidates lack evidence of possessing. This can be helpful for utilities that plan to hire talent from other sectors.

Some organisations are also turning to job simulation software to give candidates tasks they would need to do on the job. This can help utilities hire candidates with the right skillset while also providing candidates with the opportunity to find out what the job would look like in real life.

Talent acquisition technology – usually from third party providers – also makes the recruitment process easier and more efficient for both the candidates and HR teams. Many use cognitive technologies such as AI, machine-to-machine learning, robotic process automation, predictive algorithms and self-learning. For example, IBM's Watson Talent Recruitment uses cognitive technologies and existing social media information to help Human Resources departments efficiently find those candidates who are most likely to succeed in the organisation. This reduces employee turnover and therefore the cost of recruitment and disruption to the business.

Chatbots have also appeared on the recruitment market. Olivia, by Recruiting.Ai, the AI recruitment assistant, can guide candidates through the application process 24/7 and help recruiters schedule interviews.

Figure 2. The extent to which the organisation uses robotics, cognitive computing or AI for the following recruiting activities



Source: 2017 Deloitte Global Human Capital Trends, will be referred to as HTC 2017 throughout the article. Energy and resources data covers power and utilities and water companies in Western Europe and the Nordic countries. Deloitte analysis

These new technologies have the potential to make recruitment more efficient and more successful given their low penetration rates among utilities in Western Europe and the Nordic countries, as shown in Figure 2.

Building the talent ecosystem – Utility companies, similarly to companies in other industries, use a number of different strategies to attract talent. These typically include using employee referrals, professional networking sites, recruitment agents or finding candidates internally.

However, considering the current and future pressures on utilities to address the growing skills gap, utilities need to consider a more efficient and effective use of ‘off-balance’ sheet workforce. Utilities need to better understand the skills and capabilities of talent groups, such as delivery partners, freelance and contract workers who are typically hired to fill specific roles and positions, deliver and build a more proactive and collaborative relationship with them.

In addition, talent accessible through web-based, crowdsourcing recruitment systems and e-staffing agencies can also help narrow the skills gap. These include CloserIQ, the e-staffing agency, OnForce and JobBliss, the freelance management systems, or Amazon’s Mechanical Turk or JobBoy, the crowdsourced recruitment system. These are already popular in the US and are becoming better known in a number of industries in the UK as well.

While most companies are using crowdsourcing sites to recruit for roles that do not require a high level of specialist engineering or industry knowledge, leading organisations in other sectors have started to use them in more innovative ways. For example, a growing number of tech companies are using crowdsourcing sites to answer technical questions that were previously handled by in-house teams. Why hire technical or customer support staff when you can encourage blogs and discussion board sites for the same support for free or significantly less? Other companies use open source sites, such as InnoCentive, to invite insights and inputs to critical business issues.

2. Careers and learning: Real time, all the time

Average life expectancy is rising and the younger generations may now look forward to careers that can span across 60 or 70 years.

But in a technology-driven world the average length of job tenure is rapidly decreasing and so is the 'half-life of learned skills', as was noted previously.

Millennials know that they will need to learn new skills faster than previous generations, and are motivated to move jobs more frequently or simply 'reinvent' their roles on a regular basis. Therefore, it is not surprising that 42 per cent say that they would need to change jobs if they are not learning fast enough.¹⁴ From their perspectives, opportunities for career development and learning can become a key driver of a company's employability brand. Millennials also want to feel that their leadership capability is being developed and they are given leadership responsibility much sooner – this needs to be factored into the type of learning provided both on and off the job.

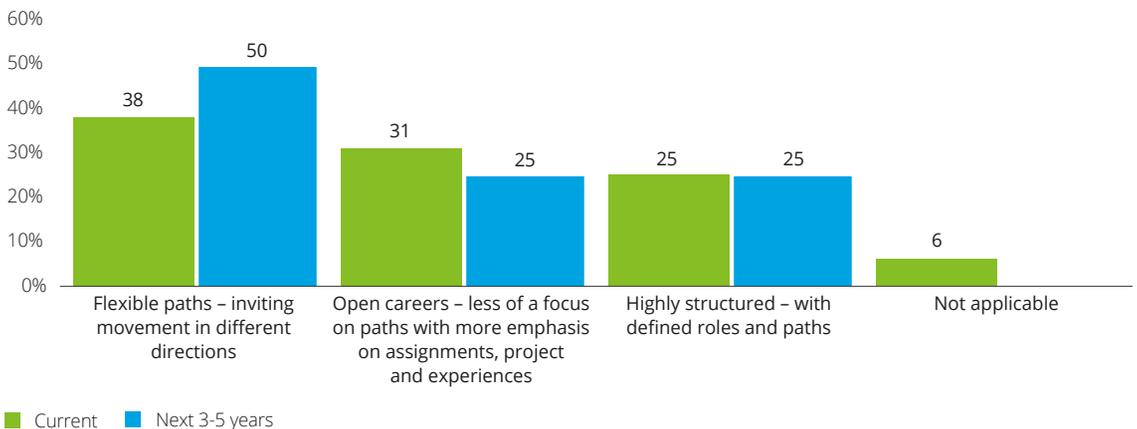
This trend is probably more acute in technology-based industries, but it is likely to accelerate – albeit at a slower pace – in the utilities sector, too. While the sector is trying to shake off the image that it 'provides jobs for life', according to HCT 2017 the average length of careers

at Western European or Nordic country utilities is still around 16 years or more. But, 44 per cent now believe that careers will shorten in the next three to five years.

Utilities will, of course, continue to need the highly specialist engineering skills that require advanced degrees. They will also need skills that may not even exist today, but will be crucial to understand, design or adapt to new technologies in the future. Therefore utilities need an adaptable workforce who would be able and willing to develop those skills.

In addition, Figure 3 shows that 38 per cent of utilities in Western Europe and the Nordic countries offer flexible career paths, while 31 per cent offer open careers, that is already more than two-thirds currently allow sideways career moves across their organisation. Indeed, an increasing number of people are looking to develop 'portfolio careers', where they can perform a number of roles within the organisation. As a result, in addition to being specialists in their subject matter, learning and development (L&D) departments will need to consider how they can help employees become more mobile and agile.

Figure 3. Organisations' current and future career models



Source: HCT 2017, Energy & Resources: Power & Utilities and Water companies in Western Europe and the Nordic countries. Deloitte analysis

More utilities are also needing to balance generational preferences for learning and have to consider ways how to support the more mature workforce's preference for classroom-based learning, while meeting the younger generation's expectations for more digital and creative ways of acquiring new skills.

Utilities face increasing challenges with knowledge transfer. For example, millennials are used to documenting and following workflow and being self-sufficient in finding information they need in data bases and online (such as chat rooms, social media platforms), while those approaching retirement age tend to rely on their organisational and industry knowledge to do their jobs. Utilities will need to ensure that this organisational and industry knowledge is recorded in an easily accessible way for the future.

Organisations also face questions such as whether and/or how they encourage more creative ways of learning (such as sourcing through chat groups) and how it impacts their employment brand.

Most of the utilities surveyed in the *HCT 2017* have started to take action: 31 per cent told us they were planning to, while 44 per cent have already started to restructure their career development model. Clearly, utilities know that learning needs to be fast, continuous, 'always on', more competency-based and more personalised than in the past.

Where to start?

- **Exploring new learning technologies** – In recent years the amount of high quality and low cost online content and tools has dramatically increased on the market. The likes of YouTube or FUSE give organisations and employees easy access to continuous, on-demand learning. These can make learning flexible and not restricted to the classroom. Content is available anytime and on a range of mobile platforms, with many providing a personalised learning experience.

Most UK universities also have a wide range of online business courses or collaborate with companies to produce online content on request.

Today a high portion of technical training in utilities is outsourced to small, specialist organisations. These typically provide theoretical training combined with practical demonstration in a classroom environment. With increased use of technology, part of this off-site training could increasingly rely on online content, making training more flexible while potentially reducing costs.

- **Rethinking the role of learning and development**

– Abundant and commoditised content is offering utilities and their Learning & Development (L&D) departments a choice: whether to upgrade their outdated and rigid Learning Management Systems or invest in new tools that help integrate and curate a growing library of content in a wide variety of formats. New learning technologies such as CrossKnowledge are offering content-curation options.

These new technologies also allow interdisciplinary thinking by letting utilities bring cross-functional teams and disciplines, such as IT, sales, finance and research and development (R&D) together to build solutions quicker.

L&D departments can play a leading role in enhancing employee flexibility and internal mobility by creating an environment necessary for employees to learn new skills, deepen their knowledge, reinvent themselves and their roles, and inspire others. This will be particularly important in supporting employees in learning how to work side-by-side with AI and robots.

There is also a shift away from Learning & Development (L&D) defining a learning curriculum, linked to specific career paths and roles that employees need to follow step-by-step over time, to a less pre-determined approach. In this latter approach employees can decide for themselves the next steps in their careers and 'pull' whatever learning they think they need for their role.

3. Transforming the employee experience

In today's increasingly connected and transparent world, employees expect a productive, engaging and enjoyable working experience. This calls for utilities to look beyond workforce engagement and culture and take a more integrated view: to consider the employee experience from end-to-end – from recruitment-to-retirement.

Utilities are aware of this and 79 per cent of respondents of the *HCT 2017* in the Power & Utilities and Water sectors say that employee experience is a concern for them, yet 60 per cent admit that they are not ready or only somewhat ready to tackle it. This suggests that, although the issue is rapidly moving to centre stage, it is still a relatively new idea.

To attract and retain the best talent, a holistic understanding of the employee experience is becoming crucial not only for HR, but for the whole organisation.

Where to start?

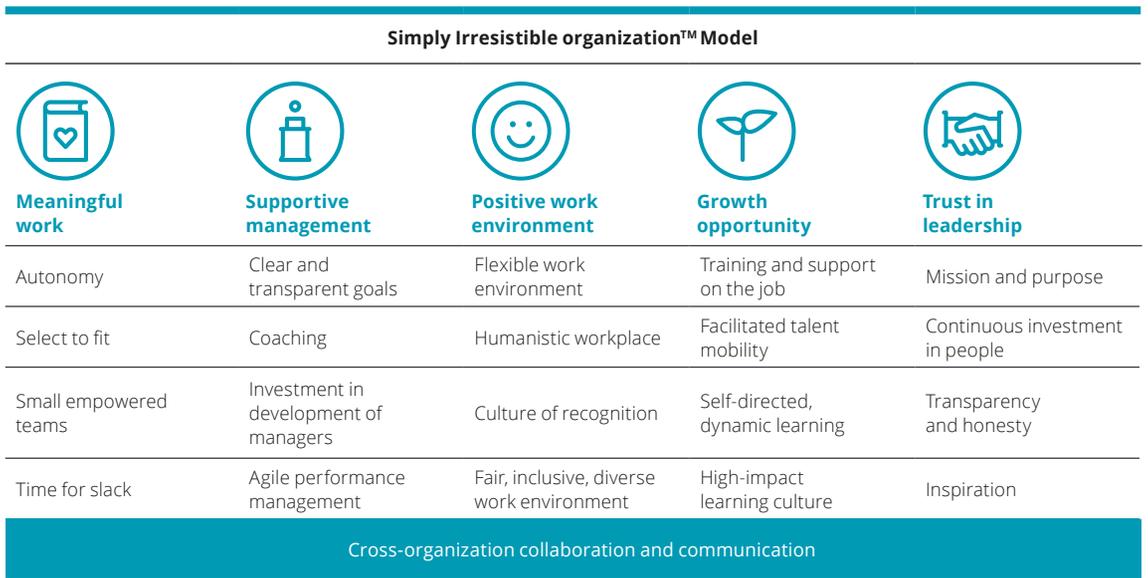
- **Making the employee experience a central issue and leading from the top** – As one forward-thinking retail executive noted, “We used to prioritize our stakeholders as shareholders first, customers second and employees third. We now realize we had it backwards. If we put employees first, they in turn take care of our customers and they in turn take care of our shareholders.” Recognising the need for an integrated employee experience is the first step. A senior leader with a good understanding of digital disruption needs to ensure that a strategy exists on a company level and that all aspects of the work, workplace and workforce are coordinated. For skills and behaviours on digital leadership, please see the Leadership section of Table 1.

- **Taking a holistic approach** – In the past, organisations dealt with issues such as learning, career development and rewards separately. Each issue had a dedicated HR person assigned to it, who used a set of tools and solutions to address it.

An employee's daily life, however, does not evolve in siloes. It is a sequence of interactions that roll into an integrated experience that has physical, emotional, professional and financial aspects to it. This gives business leaders not only the opportunity, but also the obligation to rethink the roles, structure, tools and strategy to design and deliver an integrated employee experience. The framework illustrated in Figure 4 can be used as a starting point to assess and address a range of issues from meaningful work to trust in leadership.

Organisations need to segment their talent to identify the critical talent segments (where there is a shortage/ high flight risk, or they are critical to delivery of the strategy). The needs and desires of each talent segment should be analysed and understood and talent and operational solutions defined with more focus on the critical segments – this is in place of a 'one-size-fits-all' approach.

Figure 4. Factors that contribute to the positive employee experience



Source: HCT 2017

With utilities looking to move to a more team-based, networked structure, the employee experience is becoming more complex.¹⁶ For example, some employees would prefer more flexibility in their roles than others. For example, the results of a Deloitte survey on the services sector show that 56 per cent of professionals (such as higher managerial/professional administrative) would be willing to trade in job security for more flexibility in their roles. In contrast, manual workers are keener on job security.¹⁷

Leading organisations in other industries are now overhauling their performance management systems to support the more complex employee experience. The new approach is intended to simplify the process and focus on performance development rather than assessment.

To this end, cascaded annual goal setting exercises at the beginning of the performance year are eliminated in favour of regular performance check-in conversations and more dynamic objective setting on meaningful timeframes to boost performance throughout the year. Annual feedback sessions and evaluations are being replaced with frequent 'pulse' surveys, performance 'snapshots' and quarterly talent reviews. Some organisations are using technology to allow employees to give instant feedback to each other, the same way that service providers ask customers to rate them. Annual performance ratings and distribution curve targets are being abandoned and the link between competencies and performance weakened. With more data collected through pulse surveys and ongoing recognition of performance, managers are better equipped to adjust a reward at year-end.

- **Empowering the future workforce** - Millennials in particular would like to have a more transparent and dynamic talent strategy, which gives them the opportunity to develop more flexible career paths.

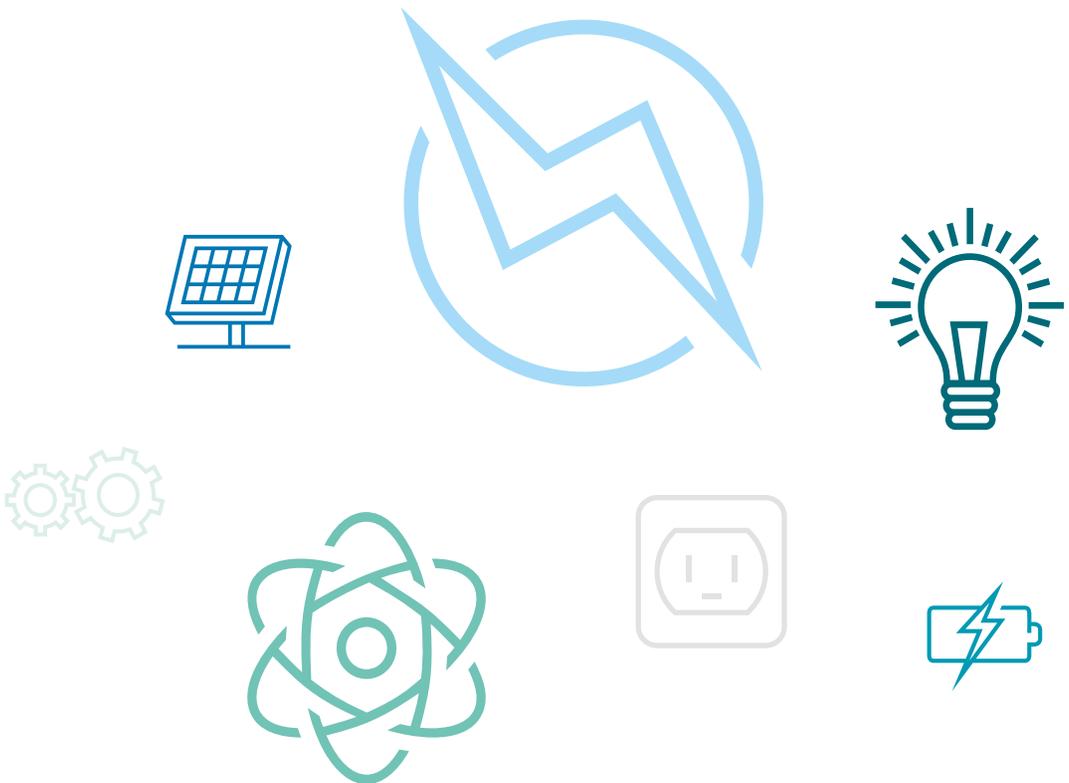
- **Getting the design and delivery right** – Listening to employee feedback is one thing, but acting on it is another. In this rapidly changing world, where we can organise our lives on our phones, employees also expect simple, well designed and easily accessible tools and services at work. Designing an integrated experience also applies to using technologies to provide a streamlined experience in executing work tasks. Investment in advanced tools can also increase competitive advantage: old or lacking workplace technology does nothing to attract or retain the young and the technologically-minded. Therefore, it will be critically important that utilities explore and make the right tools available.
- Deloitte's Human Capital consulting practice established the 'Connected Employee' physical space in London, which showcases the impact of digital age on the world of work. The space uses the latest innovative technology to demonstrate how leading organisations are using augmented reality and virtual agents to improve productivity.

Leading organisations in other industries are now overhauling their performance management systems to support the more complex employee experience.

Conclusion

Utilities are coming under pressure to adapt and take advantage of digital disruption. A plethora of new technologies promises a step-change in productivity and performance: automation, drones and sensors, the internet of things, augmented reality and wearables could each have transformational potential for the industry. But technology does not replace company strategy or create an effective working culture. Critically, harnessing new technologies effectively will require a fundamental change in the way utility companies develop, manage and engage their most important asset – their workforce.

The successful digital utility will be characterised firstly by more flexible organisational structures that enable rapid responses to disruption across the industry; secondly, a year-after-year commitment to supporting employees as they develop new skills to match the pace of technology; and thirdly, a compelling digital employer brand and recruitment approach that can successfully compete for talent across industries. Most importantly, the utility of the future will need to anchor innovations to a holistic talent strategy and employee experience.



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Endnotes

1. <https://www2.deloitte.com/global/en/pages/energy-and-resources/articles/gx-digital-disruption-in-the-utilities-sector.htm>
2. <https://www2.deloitte.com/nz/en/pages/human-capital/articles/gx-unlocking-the-flexible-organization.html>
3. <https://www2.deloitte.com/uk/en/pages/consumer-industrial-products/articles/the-connected-worker.html>
4. <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Growth/deloitte-uk-talent-for-survival-report.pdf>
5. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/about-deloitte/us-millennial-majority-will-transform-your-culture.pdf>
6. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/about-deloitte/us-millennial-majority-will-transform-your-culture.pdf>
7. <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-deloitte-millennial-survey-2017-executive-summary.pdf>
8. <https://communities.theiet.org/files/8042>
9. <https://lists.linkedin.com/2016/top-attractors/en/uk>
10. UKCES Employer Skills Survey 2015
11. The industry currently employs 500,000 people and will need to recruit 221,000 new positions by 2027: 20 per cent of its workforce is likely to retire, another 90,000 employees are anticipated to find jobs in other industries and 31,000 new positions are expected to be created. <http://www.euskills.co.uk/sites/default/files/Workforce%20Renewal%20and%20Skills%20Strategy%20FINAL.pdf>
12. <https://www2.deloitte.com/uk/en/pages/global-markets/articles/power-up.html>
13. <https://www2.deloitte.com/uk/en/pages/human-capital/articles/introduction-human-capital-trends.html>
14. Curt Rice, "How blind auditions help orchestras to eliminate gender bias," The Guardian, October 14, 2013
See also: www.theguardian.com/women-in-leadership/2013/oct/14/blind-auditions-orchestras-gender-bias
15. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/about-deloitte/us-millennial-majority-will-transform-your-culture.pdf>
16. <https://www2.deloitte.com/nz/en/pages/human-capital/articles/gx-unlocking-the-flexible-organization.html>
17. <https://www2.deloitte.com/uk/en/pages/consumer-industrial-products/articles/the-connected-worker.html>



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