



Report

# Physical disability

Addressing the accessibility challenges  
faced in a technical security career





Across the globe **1 in 7** are living with a form of disability



If you're disabled, you are nearly **x3** more likely to be unemployed than those with no disability

# Summary

This report is based on the findings of a workshop looking at the employment of people with a physical disability in the world of cyber security.

The challenges involved were looked at, which included physical obstacles, systemic barriers, attitudes and recruitment, among others.

The workshop was led by a senior pen tester who was born with a form of cerebral palsy. He ran through his story, outlining issues he had faced at the start and during his career. This included fear of talking or being asked about his disability, the reactions of people he has worked with and the benefits of being open, direct and honest in the workplace about these issues.

He also mentioned having a disability in the world of cyber security was actually less of an issue because the nature of the work itself lends itself to people with more 'quirks'. He also said he believed being 'different' was a positivity to bring to any business.

The report also looks at the legalities behind employing people with disabilities and suggestions for the future.

## The position now

Across the globe, more than one billion people are living with a form of disability. That is one in seven of us. Eighty per cent of these people acquire the disability between the ages of 18 and 64, meaning they are most likely to be in work or at work age when it happens. But they are also 50% more likely to be unemployed.

Whereas more companies are beginning to realise the advantages of recruiting from a more diverse talent pool, especially in professions where job opportunities outstrip supply, there are still nearly as many which are not recognising the importance – and the potential benefits of hiring people with disabilities.

The unemployment rate for people with a disability was 8.0% between January and March 2019 compared to that of 3.3% for those without any. At the same time, 3.3 million people of working age were economically inactive.

In the US alone, there is estimated to be 15.1 million people of working age living with both visible and nonvisible or 'hidden' disabilities such as visual impairment and hearing problems and very many are either un, or underemployed.

The reasons for this are multiple. Some businesses buy into the misconception that it might be costly for them to accommodate specific needs. But those who have employed people with disabilities say they have found that this isn't as challenging as often assumed.

# Challenges plus misconceptions

In a group discussion the three main issues relating to disability in work were identified as: physical disability, visual impairment and auditory issues. It was felt that visual impairment could be solved relatively easily with the use of speech recognition software for phone use.

From a safety point of view fire alarms are not always audible, and for fire drills physical impairment and no use of lifts is a critical issue that must have a viable solution.

Specialist equipment, owing to it being a fairly niche market, can be expensive, for example Braille keyboards or an adapted, high DPI mouse. One basic example is a 'spork' which is a combined knife and fork costing in the region of £30. This can be seen as a hidden disability tax on employers and their employees and it was acknowledged by workshop participants that it could impact smaller businesses.

There are also the unfounded assumptions that having a physical disability automatically means a person has a mental one as well and that all wheelchair users can't walk, as well as the threat of an inordinate amount of time being taken off work to attend doctor or hospital appointments.

The more obvious obstacles are outdated office environments which don't have lifts, or if they do, are not big enough for wheelchair access. Something else which is often overlooked are hygiene facilities such as washrooms and toilets which may have slippery surfaces as well as access issues.

Specifically, in the cyber security space, server hall set ups could also be reassessed for better access and comfort for people with mobility problems, for example, providing fold out chairs.

Then there are aspects of everyday working lives such as actually getting to work which can be problematic: being able to provide an automatic rather than a manual company car, consideration if there is a breakdown or emergency and allowing extra time for travel on public transport. Plus, if there is international travel involved in a position because some countries have skewed viewpoints towards disabilities.

When it comes to a career in cyber security there are of course many opportunities for working from home, remote working solutions, setting up security access and being flexible around location could all offer a solution in many cases.

Working from home can be isolating due to a lack of personal contact, a sense of exclusion and no 'social' side to the job. There could also be feelings of not making a measurable contribution because the workers are detached from the actual work environment and not being to be aware of the impact of their work clearly.

However, there has never been a better time to be able to work from home if need be. Technology is fully equipped for remote management of tasks and there is the argument there are less noise, light and sound distractions. More employers could be encouraged to have home working as a reasonable alternative to strictly office-based positions.

It was acknowledged that consultants who have to make visits to clients, site or field presented problems with potential unknown hazards or obstacles.

The workshop lead explained that companies and CEOs need to show the way over awareness and accessibility, offering solutions and giving priority to applying a different mindset around potential issues with homeworking, in the workplace and outside venues like conference hotels. It would also be good to have more laws to force compliance.

## Change is gaining

But the bigger picture is changing. Although there is still some way to go for employers to level the playing field. Between 2015 and 2019, those in employment increased by just under a million, meaning that almost half of the growth in employment levels over the last five years has come from people with disabilities.

In the world of cyber security, there is also a general atmosphere of increased understanding about the issues surrounding employing people with disabilities as hackers tend to be a different type of person in general with their own specific personality types and 'quirks'. These differences should be seen as increasingly positive in such a niche environment, along with the many creative and problem-solving traits which people with physical disabilities utilise as par for the course.

As one penetration tester with Cerebral Palsy stated: "A lot of cyber security people realise any kind of disability isn't important because you learn so much from sharing knowledge and experiences. It's not something to be feared as there are always opportunities wrapped up in challenges."



# The business case

Businesses are now slowly starting to realise the advantages of recruiting from a diverse and inclusive talent pool and that advancing disability inclusion is starting to mean more profitability, value creation and shareholder returns. More inclusive businesses are twice as likely to have higher total shareholder returns and higher revenue. The gains more than offset the 'cost' of accommodating people with disabilities.

But the benefits of disability-inclusive hiring practises go beyond the business bottom line. People with disabilities must be creative to adapt to the world around them, which they tend to do as a natural response to their situation.

The aforementioned penetration tester stated: "We adapt because we have to and that's a skill in itself. We bring a different mental skill set because we face different sets of challenges every day."

Strengths associated with this creativity such as problem-solving skills, agility, persistence, forethought and a willingness to experiment are all essential for innovation.

More inclusive workplaces also perform well with staff retention with studies showing that working alongside people with disabilities makes non-disabled individuals more aware of how to make the workplace more inclusive and better for everyone.

Then there is the reputational benefit, with surveys finding that more people will buy from a business which supports and includes diversity and companies are recognising this also by sponsoring events such as wheelchair basketball tournaments, for example, among many others.

If businesses are honest about where they stand when it comes to inclusion, this can be a crucial first step to improving the case for more diversity in the workplace. If they disclose – and their employees are happy to do so as well – their employment demographics then this creates an atmosphere of trust where people with disabilities feel comfortable and therefore can perform at their best. Banishing common misconceptions around the employment of people with disabilities is the first main step to take.

Social media has a big influence on how companies can be 'shamed' into complying with accessibility regs, it also helps create awareness and feedback. Examples given by workshop participants included the man who had to 'crawl' to the gate at Stansted Airport when his wheelchair was lost/damaged. Also noted were venues which advertised disabled access but required steps up/down. This can be extremely damaging to a company.

## Morality matters

Promoting and supporting diversity, including those people with a physical disability, is an important aspect of good people management and adds value to an organisation, contributing to employee well-being and engagement. All of us deserve the opportunity to develop our skills and talents to our full potential, work in a safe, supportive and inclusive environment, be fairly rewarded and recognised for our work and have a meaningful voice on the matters which affect us.

Supporting diversity also tackles under-utilisation of skills, improves decision making, boosts engagement and therefore innovation across the globe.

Making the most of everyone's skills, despite a perceived 'disability', their different working patterns and potentials is vital for success because it gives firms the widest possible pool of talent and therefore competitive advantages.

There is an extremely strong moral case for the eradication of discrimination and recognising and valuing differences is essential in overcoming ignorance. This will require a long-term strategic effort on the behalf of employers and policies of inclusion and engagement are part of this. Whether discrimination and bias are conscious or unconscious, they will impact negatively on the working lives of those who experience it and lead to negative impacts, in turn, on performance and commitment in the workplace. The arguments that overcoming biases leads to more productive as well as harmonious societies are indeed compelling.



disability



# Legal case

People with disabilities share the same general employment rights as other jobseekers and employees, but there are also special terms for them under the Disability Discrimination Act 1995.

<https://www.nidirect.gov.uk/articles/disability-discrimination-law-employment-rights>

The law covers all aspects of employment from recruitment through to the ending of the employment and beyond.

An important protection is that the law outlaws disability-related harassment and unwanted behaviour whether intended or not, that is related to a disability and causes offence, humiliation or hurt. It also ensures reasonable adjustments are made in the workplace which can refer to specialist and/or modified equipment and software, flexibility of hours, travel arrangements and access to offices and meeting rooms, for example. This is to ensure that the person with disabilities is not disadvantaged in any way which can be addressed and rectified. The aim is to allow people to get to work, stay in work or return to work. It can also include involving someone with expertise in providing work-related help such as an occupational health advisor.

The UK government's Access to Work programme provides advice and financial help to employers to achieve these adjustments.

It offers support based on an individual's needs, as long as they are in a paid job, about to start one or return to one. This may also include a grant to help cover the costs of practical support in the workplace. It can be used to pay for special equipment, adaptations or support worker services, along with help getting to and from work. The money does not have to be paid back and does not affect any other benefits.

Accessible job advert requirements include making sure that a font is easy to read, it states clearly that applications from all sections of society are welcome and that an employer has an equal opportunities policy, that only the skills and experience vital to the role are included in the person specification and that there are alternative formats for applications available.

The Equalities Act 2010 means employers may have to make 'reasonable adjustments' to the workplace and these can be changes to policies, working practises and physical layouts as well as providing extra equipment or support. The employer is responsible for paying for these, although if a person is self-employed, they may not be covered. For contract workers, the company which employs that person is responsible.

Provisions or practises includes things which are in an employment contract, or how an employee does things at work such as the hours worked, targets or rules about sick leave. Physical features include the stairs, lighting, toilets, desks or chairs employees have to use. Auxiliary aids including specialist software, support workers or visual alarms are also included in the adjustments rule.

Also under the Equality Act 2010, employers must not ask about an applicant's health until a job has been offered, except to find out if adjustments are needed during the recruitment process, if they can carry out the essential function of the role and monitor whether applicants are disabled, although this part this must be anonymous.

Employers can also sign up for free to the Disability Confident Symbol introduced in 2016 to use with job adverts. The scheme aims to help employers make the most of the opportunities provided by employing disabled people. It is voluntary and has been developed by employers and disabled people's representatives. It has three levels and employers must complete each level before moving on to the next. As of July 1st, 2019, 12,200 companies across the UK had signed up.

Of course, disclosure of a disability is important to get the reasonable adjustments needed so being open about how a disability affects a person is an advantage if it is not too obvious. This is an area of contention though because it can mean embarrassment or discomfort on behalf of both the employer and employee. Conversations with potential employers and transparency here are key to ensuring people's rights in law. This can be at application or interview stages.



# How to make a difference

Technology gives us the power to invest in untapped talent pipelines so a discussion about employment disparity for people with disabilities is imperative. Consideration of their needs in the design of digital products and services has long been in the view of businesses including Apple, IBM and Microsoft; which realise that designing elements that make websites accessible to blind or deaf users, for example, will be an emerging market place for people with disabilities who want to participate in increasingly technology-driven workplaces. For example, as one workshop participant said; companies can investigate use of conference calls; Skype; Facetime and video calls, all work well, particularly for international clients/contacts.

Improving employment participation for the disabled in today's workforce is a critical global issue, particularly in the tech sector where there is a significant need for new talent pools. Therefore, it's time for disability to be at the heart of any discussion about the economy, technology and wellbeing, as well as the role of the private sector in contributing to improved employment outcomes.

There are many opportunities throughout the employment process where employers can facilitate disability inclusion in the areas of recruitment, career development and retention, accessibility and accommodation, compensation and benefits, diversity and inclusion; as well as the metrics and analytics companies can use to measure their progress in all these areas. Given the sheer number of workers with disabilities and the low employment rate in cyber and tech, organisations not actively recruiting from this group are more likely to struggle when it comes to hiring qualified people.

Things they can do at interview and selection level include specifically asking what individual requirements and or adjustments are needed and assessing if remote working would be more productive and less stressful as a result, or if the adjustments could be easily made, to considering mental health support when a person has been made recently disabled, as well as occupational therapy.

Companies should also establish relationships with community organisations to assist with sourcing candidates with disabilities and create the right culture over time in order to help foster a diverse and inclusive workplace. In this respect it's critical to hire employees who share the same values, so making it clear during interviews that the workplace is diversity-friendly should be a priority and discussing this also with employees already within the organisation.

At the end of the day, a disability can happen to any one of us, at any time.

The workshop stressed that informal conversations can often help with solutions to disabled access, rather than formal form filling. Companies should have ability to see you on your merits, not your disability.

# Summary and time for action

One thing the workshop noted is that it is important that we get the message out that the cyber security industry is in general a good industry to work in if you have a disability because of things like its inclusivity and the opportunities for flexible and remote working.

Moving forward, the workshop participants suggested that CREST members needed to be aware of how open their organisations are and suggested having similar information on the CREST website to that on UCAS, which has guidance and good practice advice to help people be aware of how open they really are; as well as provide information and knowledge such as what kind of questions HR can ask interviewers to request from candidates.

“It’s a matter of getting better content which we can point employers towards and for us to do the research for that, give employers the facts and also that they will be getting different viewpoints and coming away from the tick box culture. This will mean we can see how things could be better for the company, what we can do as outreach to encourage people with disabilities and have people with disabilities who are in businesses becoming role models and advising and educating others,” one participant said.

It was also suggested that CREST could partner with academic bodies (such as UCAS as mentioned) plus building relationships with organisations such as the Royal British Legion, the military (for people who may have lost limbs, for example) and Remploy (<https://www.remploy.co.uk/about-us>).

It was also mentioned that CREST already partners with Pearson Vue to enable its exams to be taken remotely.

Group suggested that the structure in education around exams can be inflexible and that the same was reflected in industry: exams are too long and too structured. Physical disability is not seen as a problem. There was a question about whether the format could be changed, suggested that the criteria needs looking at for when additional time is given and also the whole structure of exams.

It was suggested that CREST should get ideas from other organisations that it can reach out to and find routes to engagement, specialist career organisations and employment agencies etc, including people like Disability Rights UK, Trade Unions, plus look at the role of government; plus information which is evidence-based and the channels to push the info out through, as well as support for parents and families. It should also look at setting up a working group of CREST members and other organisations and making sure there are no disincentives.

The group discussed whether a ‘mentor’ educational roll out across industry was needed and everyone agreed this would be very difficult but should be further investigated. The workshop lead identified that some of the existing website and online video stuff was good and one of the groups suggested a body may be needed to create some impetus – potentially with involvement of other professional bodies and ex-service people.

# Industry needs to generate more awareness

One of the ways to go this is through content such as videos, webinars, podcasts, outreach projects, even playlists, where social media could be a key approach. Support to parents crucial too, and NCSC looking at linking in. Must improve industry message.

There are things CREST can do which are exemplars, such as being open and inclusive and talking to more people with an interest in the area, rather to those who are already convinced and onboard as well as providing metrics and employability stats and looking into grants, suggested one workshop participant.

One group contributor suggested that a best practice guide would be helpful for companies. Addressing things like how to start a conversation around disability, being able to ask what a person needs. Embarrassment is a big hindrance so education is key going forward.

As is the case for most things, education is key, especially at grass roots level and so is educating the educators themselves.

## Call for action points

- CREST to consider putting together a best practice guide for CREST member companies.
- CREST to consider collaborative workshops, working with other organisations such Remploy where possible, to look at the following issues highlighted in the report. These may include:
  - Reviewing existing good work and awareness materials from other organisations and put in place strategy to ensure CREST members are aware of it – education is key!
  - Produce material where gaps in existing material is identified e.g. filming short 'day in the life' videos
  - Developing similar guidance and good practice information on its website to that on UCAS website
  - Investigating the feasibility of an industry-wide mentoring program
- A working group to be established with CREST member companies to contribute and oversee working in this area



For further information contact CREST at [www.crest-approved.org](http://www.crest-approved.org)

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