Thriving or Surviving in Engineering and Technology

Disability Inclusion in the Engineering Workforce

A White Paper by EqualEngineers.

Throughout this paper, quotes from attendees will be presented in this format. These were predominately, but not exclusively, from the group workshop, shared via written comments. Quotes have been purposely left anonymised.

Executive Summary

The engineering sector is facing a critical talent challenge yet continues to underutilise one of the largest and most capable talent pools available: disabled people.

This white paper draws on insights from a collaborative workshop between the EqualEngineers Disability Network and representatives of Rolls-Royce SMR, alongside sector data and research. While disabled professionals demonstrate high levels of resilience, adaptability, and problem-solving capability, they remain significantly underrepresented, under-supported, and often excluded from thriving in engineering environments.

The findings presented here highlight that many disabled individuals in engineering are not thriving, they are surviving.

"Not having to ask, because it's already there, that's what good looks like."

Key challenges include persistent bias and stereotyping, inaccessible recruitment processes, limited career progression, and workplace cultures that tolerate exclusionary behaviours. At the same time, evidence shows that organisations that embrace disability inclusion benefit from higher retention, improved productivity, and stronger financial performance.

To address this gap, this paper outlines a set of practical, strategic recommendations for engineering organisations to move from passive inclusion to actively enabling disabled employees to thrive.

Introduction

Engineering and technology are at the forefront of solving some of society's most complex challenges. However, the sector continues to struggle with diversity, equity, and inclusion, particularly in relation to disability and neurodiversity (hereby discussed as disability alone).

This white paper is based on an event delivered by EqualEngineers Disability Network in partnership with representatives of Rolls-Royce SMR: "Thriving or Surviving? Disability in Engineering" on the 29th of January 2026.

The session brought together professionals to explore:

- The lived experiences of disabled people in engineering
- Structural and cultural barriers within organisations
- Opportunities to create more inclusive and high-performing workplaces

This event brought together lived experience from across the engineering sector to support an open and reflective discussion on disability inclusion. The session was led by the network's Co-Chairs: Simon Houghton, who spoke about hearing loss, Sue Richards, who explored the experience of cancer and chronic illness in the workplace, and Charlotte Wessels, who spoke about the impact of her neurodiversity.

The event also featured Katy Deacon, Founder and Managing Director of Towards Belonging, Chartered Engineer and Fellow of the IET, and Royal Academy of Engineering Visiting Professor in Inclusive Engineering Design. Following her diagnosis of Multiple Sclerosis in 2012, Katy established Towards Belonging to help bridge the gap between the disabled community and the engineering industry, championing inclusive design approaches that move beyond compliance and enable

genuine accessibility and belonging. Her contribution to the event drew on extensive experience as a leader in equity, diversity and inclusion across the engineering profession, with a particular focus on the relationship between engineering, accessibility and inclusive design.

The event concluded with an interactive workshop designed to identify practical resources, actions and areas of support for disabled people and for those who manage disabled colleagues.

The aim of this paper is to translate the insights from this event into actionable recommendations for employers across the engineering sector.

The Current Landscape of Disability

When considering Accessibility and Inclusion when discussing disability, it is important to note that anyone can become disabled. Disability is often acquired during a person's lifetime, meaning that inclusion should not only focus on recruitment. There must be a focus on retention and the supports put in place for workers with a disability. It is not a niche issue; it is a mainstream workforce reality.

- Nearly 1 in 4 working-age people in the UK are disabled
- 45% of pension-age adults are disabled, rising to over 60% for those aged 80+

Despite all of this, disabled people are significantly less likely to be employed with an average salary being less than their non-disabled peers, while facing systematic barriers across education and employment pathways.

Societal Attitudes and Their Impact

Wider societal perceptions continue to shape workplace experiences for disabled employees. In wider society:

- Nearly 40% of people view disabled individuals as a burden
- 67% avoid interacting with disabled people due to uncertainty
- 180 disability hate crimes occur daily in the UK

These attitudes do not disappear as people enter their workplace. They manifest in different ways.

"Stigma is still one of the biggest barriers - it shapes everything else."

Disabled people consistently deal with social exclusion from their colleagues, and lower expectations which are not reflective of their ability. Alongside this, their colleagues exhibit discomfort and avoidance behaviours. Not necessarily due to malicious intentions, but a discomfort with their own preconceptions of what a disabled person can complete. Regardless of intent, this creates environments where disabled employees feel marginalised, underestimated, and/or unsupported.

"People don't speak up or the infrastructure is very masculine."

Disability in Engineering

Employers often cite perceived challenges when hiring disabled candidates. From the concept of employers having to invest heavy sums of money towards the workplace adjustments and the practicalities of implementing them, to concerns about the capability of the person and meeting the accessibility requirements in the recruitment process. These perceptions frequently outweigh reality and contribute to exclusionary hiring practices.

"There's still a 'replace rather than adapt' mindset."

Research from the Royal Academy of Engineering has highlighted that Engineering as a profession is not consistently inclusive. There are still reports of bullying, discrimination, and harassment persisting and microaggressions are often overlooked and unidentified.

"People don't speak up."

This compounds the lived experience of disabled employees leading to a culture where the disabled employee fears highlighting their experience of exclusion.

For those who developed their disability earlier in life find that these barriers exist long before employment in the Engineering sector. There is persistent ableism in Engineering Education which reduces entry into the profession, and the confidence levels of those within it.

"There's a lack of understanding of the reality of disabled workers."

The Missed Opportunity

"Barriers are design choices."

Despite these challenges, the evidence is very clear. Disability inclusion is a strategic advantage to employers. Disabled employees demonstrate exceptional resilience and adaptability and have very strong creative problem-solving skills. These skills are commonly developed over a lifetime of social exclusion and advocation for themselves and their own ability.

There is a perception that disabled employees will require more time off/sick leave when the reality is that disabled employees demonstrate lower sickness absence. The research also shows that disabled employees showcase comparable, or higher, productivity of their non-disabled colleagues. Alongside this, disabled employees have higher retention rates and show up to 48% lower turnover globally.

Organisations that prioritise disability inclusion report higher revenue generation and achieve up to 25% greater productivity than a comparable organisation while demonstrating stronger overall financial performance. Engineering organisations that have inclusive teams design more accessible, user-centred solutions and overall, better reflect a diverse range of user needs. This leads to these organisations capturing greater market shares, including the £448 billion "Purple Pound".

Lived Experience and Models of Disability

A central theme emerging from the workshop was the distinction between surviving and thriving. Many disabled professionals remain in roles despite of the barriers that exist rather than staying in employment because of support.

"Having things in place beforehand changes everything."

They regularly self-manage challenges without organisational backing and hesitate in seeking out support, while navigating workplaces that were not designed with disabled people in consideration.

"Accessibility should be there by default, not something people have to ask for."

Thriving, by contrast, requires accessible systems and processes within a culture of respect and belonging where they are led by inclusive leadership and experience a psychologically safe workplace.

"A place where people want to work, that's what inclusion should feel like."

The gap between the reality of surviving in the workplace, to thriving in the workplace is where organisations must focus their efforts.

Understanding disability is key to addressing it effectively.

"Stop making it sound like a failure."

The traditional models of understanding disability are the Charity Model, where disabled people are viewed as objects of pity, and the Medical Model, which frames disability as a problem to be fixed.

Both models place responsibility on the individual. A more effective approach is the Social Model of disability, which recognises that people are disabled by barriers in society, not by their condition alone. This allows for a subtle, but important shift. It shifts the focus from the individual as an object of pity, to the organisation and the environment around the disabled person. It shifts from treating people as problems to be fixed, towards removing barriers for that person.

Recommendations

Workshop participants were clear that action must move beyond intention:

"Stop performative actions."
"Start listening. Actively."
"Managers need to take responsibility for removing barriers."

To move from general awareness to impact, organisations must take deliberate action. These actions can be categorised as follows:

Category	Recommendations
Leadership and Accountability	• Embed disability inclusion into business strategy • Set measurable targets and accountability at leadership level • Champion inclusion visibly and consistently
Recruitment and Entry Pathways	• Audit and redesign recruitment processes for accessibility • Remove unnecessary barriers in application and assessment • Focus on capability, not assumptions
Workplace Culture	• Address microaggressions and everyday exclusion • Provide training on disability awareness and inclusive behaviours • Foster environments where employees feel safe to disclose and request support
Career Development and Progression	• Ensure equitable access to progression opportunities • Actively support disabled employees in career planning • Monitor progression data to identify disparities
Workplace Adjustments and Support	• Simplify and normalise access to adjustments • Shift perception from "cost" to "investment" • Provide proactive, not reactive, support
Inclusive Engineering and Design	• Embed inclusive design principles into engineering practice • Involve disabled voices in design processes • Recognise inclusion as a driver of innovation

Conclusion

The engineering sector can continue to operate within systems that unintentionally exclude and underutilise disabled talent or it can recognise disability inclusion as a critical lever for innovation, performance, and growth.

The evidence is clear. Disabled professionals are not a risk to be managed, but an asset to be unlocked. The challenge now is not whether organisations should act but how quickly and effectively they can move from enabling people to survive, to empowering them to thrive.

"Keep doing awareness and education but do it properly."

To conclude the session, attendees were asked to identify one thing that the Engineering sector should Start, Stop and Keep in relation to disability inclusion. These three things should be the priority of all in making a more disability inclusive environment.

Stop Assuming. Start Listening. Keep Learning.