



The City Quantum Summit

A briefing on Diversity and Inclusion in the Quantum Sector



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I am often asked what is the silver bullet, the one thing that an organisation should do to drive progress. Regrettably, there is no such magic. Improving diversity means a multi-year, multi-layered approach it requires systematic change and taking on a system that has worked very well for some, but excludes others. ”



Each and every one of us have a role to play in promoting equal opportunity for all in the workplace, and the contribution of men at work and in the home is crucial to gender equality. We all have a voice, and the power to effect change and we all walk taller for using it. ”

Denise Wilson



Quantum computing is opening up new opportunities for innovation, and more importantly for diversity and inclusion. This technology will change computing more in the next 10 years than it has changed in the last century. Providing equal access, and equal opportunities will make the difference between humanity's future being diverse or dystopian. ”



The most important factors in hiring and retaining diverse talent are a company's commitment and culture. Commitment because hiring for DEI isn't without its challenges and you can't give up if you face a few along the way. Culture because that's the #1 key to DEI in a company. Without a culture that embraces and celebrates differences you simply won't succeed. DEI has to be built into your company's DNA. ”

whurley

The City Quantum Summit Briefing

Workplaces are changing rapidly, with an increasingly diverse workforce and a lack of talent to fill all the roles, which is why companies across all industries are tackling Diversity & Inclusion within their organisations.

Over a dedicated lunch session, The City Quantum Summit addressed D&I in the quantum sector, not least by seeking to learn lessons from the experience of the financial sector, which has been wrestling with the challenge for many more years.

In the panel discussion, moderated by whurley of Strangeworks, the status quo of diversity in quantum companies was analysed, alongside top tips on how to create and maintain D&I.

The key takeaway from the panel is that implementing D&I takes effort but this effort is intrinsically valuable and pays off in innovation and in financial terms.

Fostering diversity and inclusion ultimately entails collecting data and statistics on diversity figures, hiring fairly, auditing work processes to ensure equal opportunity, voice and visibility of everyone, creating awareness for and informing on diversity and inclusion, amongst other factors.

The Quantum sector is at the forefront of technology, dealing with some of the world's most pressing issues such as energy provision and supply chain logistics. It relies on its workforce to be innovative and creative.

Inclusion and inclusive behaviour, such as providing individuals with a voice during a meeting can, together with a diverse workforce that represents individuals from different backgrounds, increase innovation and firm performance more generally ([Lordan and Josten 2021](#)).

Like many other sectors, the quantum computing sector, however, struggles to achieve equal representation with only 1 in 54 of all applicants for quantum roles being female and 79 per cent of quantum companies not having a female senior figure, according to the recruitment company Quantum Futures. While the reason for such low numbers are manifold, the panel offered the following potential solutions and tips to improve D&I in the sector.

I 1. The crucial role of recruiting

Connor Teague from Quantum Futures, an internationally operating recruitment company specialised in Quantum roles, highlighted the crucial role of recruiters in paving the way for a more diverse workforce. **Collecting data on diversity, benchmarking and fair hiring processes are crucial to ensure equal representation early in the hiring pipeline.**

The role of the recruiter is also to encourage, particularly, female employees with work experience to negotiate higher salaries and speak for themselves. Recruiters have the responsibility to educate and increase awareness and information of benchmarks in the industry.

One issue is that individuals often self-select out of roles before they even apply because of the language of the job description. **Companies and organisations hence need to focus on unbiased job descriptions and interview processes.**

Further, by relying less on an applicant's background and more on, for example, task-based assessments, recruiters can broaden their talent spectrum and hire more diversely.

It is also key for companies to bear in mind that that diversity and inclusion is both a selling point for their company and can be helpful to retain talent. **To note, 62 per cent of current employees in quantum want their workforce to do more to increase diversity, according to Quantum Futures.**



If we begin educating mid to senior leaders in other industries of the cross pollination of roles in quantum which they could be suitable for, we would be in a good position for them to filter down a more diverse and inclusive culture from which they have had experience with. It starts from the top. ”



Hiring non-traditional quantum leaders to the business – When the co-founders step to the side and bring in a leader from a different industry, the business tends to stop hiring versions of themselves! I've seen great success with quantum business who have done this.

Every quarter, host 'feedback days' for employees. Find out what they are enjoying, have their career goals changed, have their motivations changed, would they like to learn something new. Businesses have a relaxed mindset after they have hired someone, however, we are dealing with people and people's situations change. It's good to realign expectations from both sides. ”

Connor Teague



In order to ensure change in the workplaces of the future, it would be essential to increase the number of inclusive leaders who do not hire their friends or hire based on their own affinity, but hire for diversity and for perspectives that they do not yet have and that really requires a change in ego in our leaders and a change of perspective towards a diversity mindset. ”



We wouldn't need HR policies, government mandates and quotas if every single manager and leader was giving equal opportunities, visibility and voice and hiring from a wide talent pool based on merit. ”

Grace Lordan

2. Treat diversity and inclusion like any other business critical issue

Denise Wilson argued that D&I should be treated like other key business issue. She is chief executive of the FTSE Women Leaders Review that increased the number of women on FTSE 350 boards and is now also focused on senior leadership positions. She argued that organisations that make most progress are robust and purposeful in their intent, they treat diversity and inclusion like any other business critical issue which crucially entails the following factors:

- A data-led approach, identifying gaps, setting targets and incentivising success. Collecting data is necessary to progress on gender issues such as the gender pay gap. **The power of publication should not be underestimated and transparency drives change in the industry.**
- Like any other business goal, executives need to work hard to foster diversity and inclusion. The need to lift the lid on every people process, pay, bonus allocations, retention, performance evaluations and the like. The status quo needs to be challenged and norms surrounding hiring removed. **It takes a multi-layered, multi-year and systematic approach to change the make up and culture of an organisation.**
- **D&I must be owned and held accountable at the Board level.** It needs to be talked about like 'big business' in charts, graphs, budgets and while D&I budgets are still comparatively small they should move closer to those of other departments such as marketing.
- **There is no silver bullet but the role and ambition of the leader is key.** Information and communication, just like data, is also crucial to creating a diverse and inclusive workforce. The modern leader needs to be trained and well-informed on this topic if they are to attract, retain and develop a diverse workforce. Only when leaders are well informed on the facts, will they be confident to use their voices as a force for good, and will their voices be heard.

| 3. Opportunity, visibility, voice

Dr Grace Lordan, Founder and Director of The Inclusion Initiative at The London School of Economics and Political Science, emphasised the role of opportunity, visibility and voice.

First, to achieve inclusion at work we need to ensure equal opportunities for all talent of both growth and networking opportunities.

Inclusive leaders in firms should ensure that all people in their team are offered equal opportunities. **Auditing this type of behaviour is crucial to make salient the choices leaders are making, often unconsciously.**

Second, we need to ensure the equal visibility of all talent.

Inclusive leaders should ensure equal visibility for their colleagues i.e. give accolades or speak about them positively when they are not in the room.

Third, we need to ensure the equal voice of all talent.

Inclusive leaders should make sure that everyone is heard and has voice when they are having meetings. Companies can implement an advocacy system where advocates act as promoter of opportunities, visibility and voice for the employee and as enabler of their career.

By ensuring equal opportunities, visibility and voice we can create an inclusive culture where every person has equal chance of progression and of getting a pay rise.

In summary, it was highlighted that while promoting diversity and inclusion takes effort, we should not talk of it as 'effort' as it pays off in increased retention, promotion and productivity. **Instead, companies should stay adventurous and embrace the challenge.**

Hiring diverse candidates will become easier with increasingly larger networks of diverse individuals and more information on diverse and inclusive hiring and retaining practices in the sector.

Ultimately, the Quantum industry is missing out on talent, innovation and productivity without hiring diversely and turning its firms into inclusive employers.



The future of inclusion comes down to transparency – over pay, over promotions – and without which we look likely to repeat the mistakes of the past. ”



Illustration plays a critical role in the recruitment and retention of a more diverse workforce. A company's website is its window shop to the world – don't hide your diverse staff, highlight them and their contribution. Just as important is collaboration – measure success, measure failure, and share that with others outside the company to learn from each other. ”

Karina Robinson

Notes

Denise Ruffner, President at DiviQ.org, is concretely promoting women in the quantum sector by funding scholarships for women. The scholarship programme 'Quantum Women' funds projects, trips to conferences, and training, amongst other measures. It is one important and concrete example of how to advance women's careers.

Dr Grace Lordan offers a virtual, eight-week [course](#) on inclusive leadership at The London School of Economics and Political Science to improve inclusion, collaboration, and resilience within your organisation.

[The City Quantum Summit](#) was hosted by Robinson Hambro and Vincent Keaveny, The Rt Hon the Lord Mayor of the City of London, on Tuesday 11th October 2022 at the Mansion House. The lunch to brainstorm D&I in quantum computing, held in aid of DiviQ.org, was hosted by Robinson Hambro at The Walbrook Club.

Speakers at the lunch included:

Karina Robinson, Founder of The City Quantum Summit and Co-founder of The Inclusion Initiative at The London School of Economics and Political Science.

whurley, Founder and CEO of strangeworks.

Connor Teague, CEO and President at Quantum Futures.

Denise Wilson, CEO at FTSE Women Leaders Review.

Denise Ruffner, President at DiviQ.org.

Cecily Josten, Fellow at The Inclusion Initiative at The London School of Economics and Political Science.

Grace Lordan, Founder and Director of The Inclusion Initiative at The London School of Economics and Political Science.



The City Quantum Summit Briefing – Appendix

Research by the Inclusion Initiative: The Good Finance Framework, which gives a step by step guide to creating an inclusive organisation.

wibf.org.uk/images/uploads/documents/WIBF_ACT_Good_Finance_Framework_Report.pdf



Inclusion at work – what does the future look like?

Organizations of all sizes recognize the importance diversity, equity, and inclusion in the workplace, and many are working to implement processes and programs that will help ensure these values become part of their work culture.

I expect that to continue until diversity, equity, inclusion become so ingrained that workers expect it and accept nothing less.

Millennials and Gen Z workers have really pushed inclusion to the forefront and are choosing to work for entities that align to these values. Younger generations will continue to lead this charge and ensure it's not a fad and our workplaces become truly inclusive. ”



What are the two key factors in recruiting and retaining diverse talent?

There are several factors but two that I believe are key are 1) Ensure your hiring, compensation and other policies and procedures support diversity, equity and inclusion efforts and are adhered to throughout an organization. Too often, organizations talk about supporting these efforts but do not have the policies, tools, or training in place to ensure best practices are followed; 2) Retention is a huge issue for organizations and companies, especially those with highly skilled employees. Organizations need to pay attention to their culture and cultivate an environment where different voices and viewpoints are not only heard but encouraged and considered. ”

Denise Ruffner



**The Inclusion
Initiative**

The Inclusion Initiative (TII) at LSE launched in November 2020. TII leverages behavioural science insights to advance our understanding of the factors that enhance inclusion at work. Our first area of focus has been the financial and professional service while we are now also moving into Deep Tech. We are building an open source research repository that houses rigorous and relevant research related to inclusion at work, in the financial and professional services and beyond.

TII's research agenda has three main aims. First, to propose a viable proxy measure of inclusion. Second, to quantify the direct link between inclusion and the core business outcomes it should theoretically improve, such as innovation, creativity and behavioural risk assessment both within and across firms. Third, to propose to firms a menu of cost effective interventions that could improve inclusion of all talent from pipeline to boardroom.

The Inclusion Initiative (TII) is bringing industry, academics and other stakeholders together regularly to exchange ideas, highlight new findings and build partnerships. Please do join the conversation.

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