



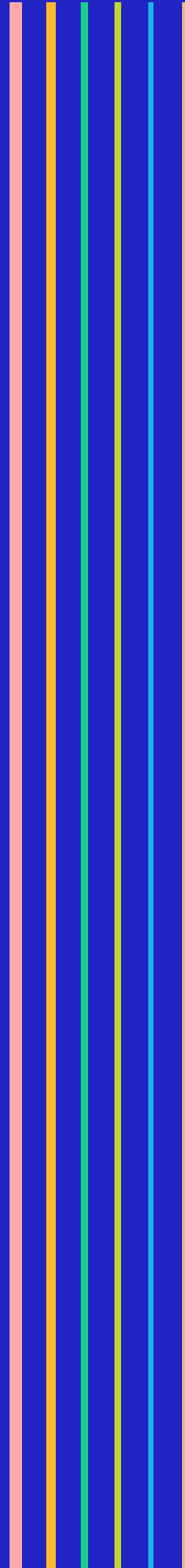
CIOB

The Chartered
Institute of Building

Building Up Wales: professional insights from the construction sector in 2023

CIOB Policy & Research

May 2023



Executive Summary

Building Up Wales: Professional insights from the construction sector in 2023 examines the built environment and construction industry in Wales. Thanks to the participation of construction professionals from across Wales, it presents a 'boots on the ground' view of the industry's issues and opportunities.

In particular, this report focuses on six key areas of discussion:

- Public procurement, bureaucracy, and social value, and the effects – positive and negative – that these place on the construction industry.
- Inflation and the barriers created by the current high inflation economy, and how the industry and partner organisations need to collaborate to overcome these.
- Recruitment and retention, and how the industry needs to improve its perception to bring more people into the sector.
- Diversity and inclusion, and how CIOB members are leading the charge for this in the sector.
- Innovation, and where construction companies in Wales are focusing their investment.
- Health, safety, and mental wellbeing, and how to foster a safer construction sector for everyone.

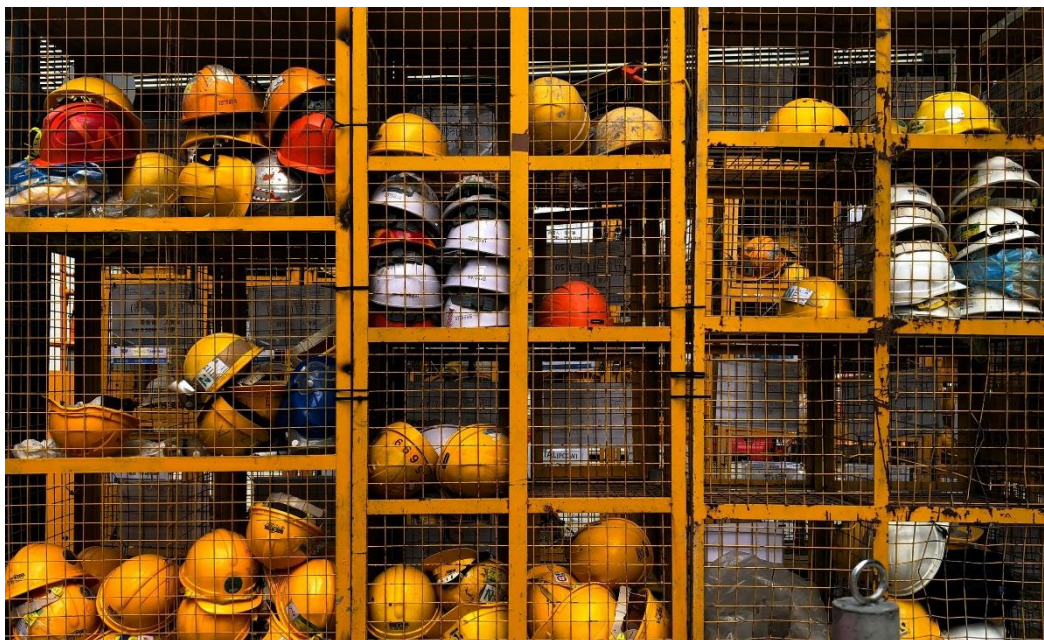


Photo by Pop & Zebra on Unsplash

Introduction

Building Up Wales: Professional insights from the construction sector in 2023 focuses specifically on bringing to the fore unique issues the Welsh construction sector and built environment faces.

Wales faces continued economic pressure. A shortfall of £1.1 billion as a result of leaving the European Union is well documented (Evans, 2022), and the wider effects of Brexit are ongoing. EU structural and investment funding accounted for around £2.1 billion per year in Wales between 2014 and 2020. This was around four times the UK average per person due to Wales's higher number of "less developed regions" (Goddard, 2021).

This geographical, rural versus urban split in Wales is particularly prevalent in the built environment. Homes in rural Gwynedd, for example, are far more likely to be in fuel poverty, in part due to the older property stock (Ifan & Siôn, 2022). Rural areas of Wales also face greater skills shortages, and a lack of large-scale construction projects that means – typically young – construction workers leave their hometowns in favour of large projects in the South-East or across the border in England. This has subsequent issues for the prevalence and continuation of Cymraeg in these areas.

There are reasons for optimism, however. Welsh Government, for example, has recently published its *Wales Innovates* strategy and *Net Zero Skills Action Plan*. This long-term, joined up policy approach means that Welsh Government is aware of issues, and working with the construction and built environment sector to combat them. Alongside Wales's [Built Environment GCSE](#), these could positively shift the perception of the construction industry and improve the uptake of apprenticeships and jobs in the sector.

This report examines these issues and more, drawing on the views of construction professionals from across Wales.



Photo by Jonny Gios on Unsplash

National Profile

Wales's construction output was above £5.5 billion in 2022, representing about 3.2% of the Great Britain (GB) total. Wales accounts for 4.8% of the UK population which means, on a per capita basis, its share of construction is below the UK average (The Chartered Institute of Building, 2023). However, Wales has the oldest population in the UK, with estimates suggesting that around 30% of Wales's population will be over 60 by 2026 (The Older People's Commissioner for Wales, 2022). This has contributed to swathes of the construction industry retiring during the Covid-19 pandemic, leaving a gap of experienced professionals in the that is proving difficult to fill. It does, however, present the opportunity to take the initiative and upskill this section of the industry. The knowledge and experience of older workers could be used to train new recruits, ensuring their knowledge is not lost when they do choose to retire (The Chartered Institute of Building, n.d.).

Nonetheless, Construction Industry Training Board's Construction Skills Network (CSN) estimates that Wales needs to recruit an additional 9,100 workers before 2027 (2023). With the ageing population, and well-founded concerns about the growing skills gap in the industry, recruiting sufficient numbers is no mean feat.

Before the pandemic, the Welsh economy was among the more buoyant in the UK. Growth (measured by Gross Value Added, or GVA) was above the UK average. However, Wales-specific construction data shows that pre-pandemic construction output growth was among the lowest in the UK, suggesting that the majority of Welsh firms were benefitting from work done outside the country. Around 9% of construction workers living in Wales find work outside the country (The Chartered Institute of Building, 2023), due to the porous nature of the border with England. Construction in the North-East of Wales, in particular, note that they are losing workers to the North-West of England and large-scale projects there.

There has undoubtedly been a drop in infrastructure work in Wales outside of urban regeneration areas in the South-East. This may be contributing to the high numbers of people working across the border with England. Despite this, Wales has seen significant increases in housebuilding and Repair, Maintenance, and Improvement (RMI) works. This has been driven by Welsh Government's Optimised Retrofit Programme (ORP) and social housing drive. In time, Welsh Government hopes to take learnings from these programmes and apply them to private housing, so the likelihood is that this is a sector that will continue to grow.

CITB's CSN forecast, however, estimates that workloads in Wales are set to fall by about 1.4% in 2023. This dip is projected to be followed by modest growth, rising from 1.2% in 2024 to 2% in 2027. Industrial is slated to be the main growth sector, as it is across the rest of the UK, and Wales's growth is expected to be in line with the rest of the UK average. Most other sectors are expected to grow at or below the UK average (Construction Industry Training Board, 2023).

Major Projects

As alluded to above, most of Wales's substantial construction work is happening in the South-East. Among these projects, Swansea's new *Blue Eden* tidal lagoon – the new guise for the Swansea Bay Tidal Lagoon – is estimated to cost around £1.7 billion. This three-phased project will include a solar panel farm floating atop the lagoon and other state-of-the-art facilities (Swansea Council, 2021).

The *Shaping Swansea* initiative to regenerate the city is also underway, with around £1 billion already being spent as part of the package. Cardiff Council is also undertaking work to revitalise the city centre as part of a five-year project, with Welsh Government funding the ongoing construction of the new £8.2 million Cardiff Bus Interchange (TFW, n.d.). There is also a £360 million mixed-use development underway on Taff's Mead Embankment that includes 2,500 homes and an array of commercial elements.

Elsewhere in Wales, in Deeside, Arup has been appointed to lead a £600 million plan to modernise and revitalise the Shotton Paper Mill. This is slated to create 700 jobs as well as develop a mill capable of recycling all wastepaper generated in Wales and produce 750,000 tonnes of cardboard each year (Ranger, 2022).

Transport For Wales (TFW), is also leading on its commitment to revitalise the country's railways with the development of the South Wales Metro, involving upgrading all stations along the line, building two new stations, and electrifying 170km of track on the Core Valleys Lines. TFW estimates this will cost three quarters of a billion pounds, £100 million of which has already been spent on the construction of a new depot and Metro Control Centre at Taff's Well in Rhondda Cynon Taff (TFW, 2023).

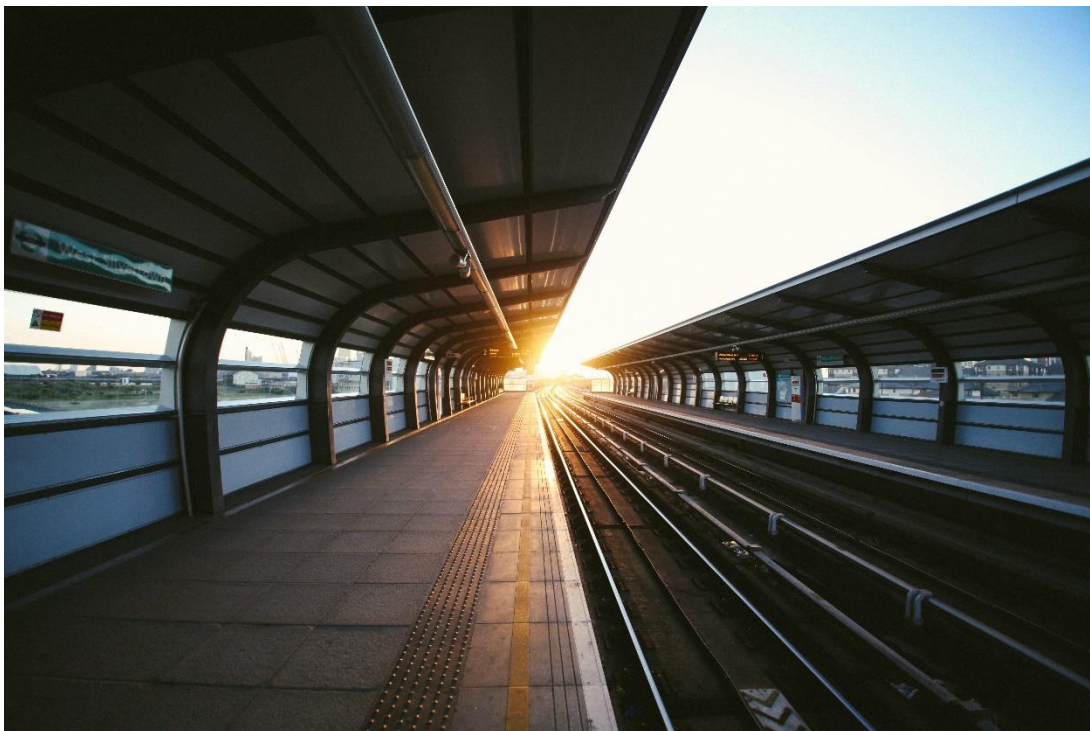


Photo by Charles Forerunner on Unsplash

Wales Roundtable

In February 2023, CIOB gathered a group of senior members covering the breadth of the construction industry, from Tier One contractors active in a range of public and private sector projects, to SME housebuilders, to discuss the state of play in Wales's construction sector. Despite the variation of members' backgrounds, all the roundtable members acknowledge the scale of the challenge the industry faces.

Public Procurement, Bureaucracy and Social Value

All members agreed that the balance of the construction industry in Wales is heavily weighted in favour of public sector projects over private sector. This has positives and negatives. On the one hand, public sector work provides a constant stream of projects, particularly around refurbishment and maintenance of public buildings such as hospitals and schools, urban regeneration, and social housebuilding. On the other, members agreed that there is significant bureaucracy, particularly around obtaining planning permission and access to funding. This leads to significant delays and subsequent issues with recruitment and retention of staff. SABs (Sustainable Drainage Systems (SuDS) Approval Body) were notable obstacles for several members.

Despite contributing to these bureaucratic challenges, legislation such as the *Wellbeing of Future Generations Act* creates a level of socioeconomic and environmental responsibility that is not typical across the rest of the UK. Members agreed that the Act was broadly positive, and resulted in projects having a more positive impact once they did get off the ground.

Bureaucracy does mean that projects are often subject to long, multi-stage approval processes before commencing, during which time budgets need reforecasting to better reflect new, higher costs of materials. One member who builds affordable housing with Welsh Government and Housing Associations across Wales said that while there was some back-and-forth, the problems were rarely insurmountable.

Despite these difficulties, members agreed that most of their work has a positive impact on the local area; one participant questioned why anyone would start a project that would not have tangible, longstanding benefits. Others were looking at new ways to measure social value in the same light as economic benefits. Work is still ongoing on how best to do this, and how to communicate to clients that social value metrics must be given proper consideration, shifting from procurement models based solely on economic scales. One participant noted that this was a particular hurdle with clients and gave the analogy that you can have "Bank of England pounds or social value pounds, but you often can't have both in equal measure", and more emphasis should be placed on the latter.

Inflation and collaboration: “the machinery in Wales doesn’t run quick enough”.

Notwithstanding the above, roundtable members cited inflation as the primary barrier to starting and completing works. A Tier One contractor stressed that this was the single biggest barrier to his organisation’s projects, making it harder and harder to get them across the line. Another Tier One contractor said that “the machinery in Wales doesn’t run quick enough”, and that for so long public bodies have been used to a low inflation economy and are struggling – or refusing – to adapt to high inflation. Members agreed with this, with many saying that it often took weeks to get final approval on a project, by which time the negotiated price had to increase due to material cost rises and had to be re-approved. While some public bodies in England had put blanket increases on their project funding to better reflect inflation, members were unsure whether any such blanket increases had happened in Wales. Instead, everything must be dealt with on a case-by-case basis, creating further delays.

When reflecting on cross-border differences, an SME housebuilder – who has satellite offices in the North-East of England – noted that the differences between public sector funding and support in Wales and England was “night and day”. They felt far more supported by Welsh Government, whereas local authorities in England “were not budging”, and the company was locked into a contract that did not accurately reflect recent price increases.

Early communication, then, is key to ensure budgets accurately reflect material costs. Private sector contractors are also feeling the pinch, with one member saying that the extent to which inflation has affected his organisation’s projects depends largely on when the contract was signed. In recent contract negotiations, the member suggested it was becoming more common for financial risk to be completely placed on the contractor and

their supply chains. This leads to long, drawn-out negotiations, with numerous clarifications and points of contention needing to be ironed out before work can get underway. Subsequent cost increases were common as a result.

In contracts negotiated in a lower-inflation environment, it was more common for contractors to sign up to a long-term, lump sum deal, with a lot of sub-contractors used throughout the project. That is no longer the case, and for ongoing projects locked into these costs, the scope of work has had to be significantly dialled back to deal with inflationary pressures and to deliver projects within cost.

Inflationary pressures have also created distrust among the supply chain, from both the client and contractor perspective. Roundtable members raised concern that many organisations were hiding behind inflation: some clients are seemingly unwilling to accept the price increases, which mean that the pressure is placed on the primary contractor’s shoulders and has negative affects throughout the rest of the supply chain. Equally, some members claimed that they are aware of contractors also hiding behind inflation to pursue higher profit margins by giving astronomical quotes for work, and then not sharing the profits along the supply chain.



Photo by Isis França on Unsplash

Recruitment and Retention: “Qualified does not mean competent”.

CIOB consumer research from February 2023 found that 21.9% of those surveyed in Wales described the sector as “dirty”. Around 8% described it as “low paid”, and just under 5% as “lacking in prospects”. This negative perception of the industry needs to change if the sector is to weather the challenges it currently faces.

All roundtable members recognised the stark picture, agreeing that the hiring pool is no bigger than it was in 2022, and that there are constant recruitment difficulties. This was especially true for the SMEs in the group, who all agreed that they are facing significant competition from, and are losing staff to, Tier One contractors in urban development areas of South-East Wales and across the border in England.

A Tier One contractor responded that in the current cost of living crisis, people are more likely to stay in their current role for the sake of job security. Partly, this is what is contributing to the stale recruitment pool. The two Tier One contractors noted that a job needed much more than a good salary to recruit and retain employees nowadays. As such, many organisations have improved their sick pay offering, instituted a menopause policy, and increased parental leave, to give a few examples. They hope that introducing these policies now will keep more people at their organisations and make them a more attractive opportunity in the long term for potential new recruits from a more diverse range of backgrounds.

Retaining staff also allows these larger organisations to ‘grow their own’ and upskill their current staff to fulfil necessary roles in their businesses. This is time consuming, and done to varying levels of success, but SMEs in the group responded that, while they had similar upskilling initiatives in place, they were taking a lot longer due to the size of the company. One member said that it would

take his organisation three to four years to do this, whereas he imagined a Tier One contractor could do it in under two. There are also no guarantees that doing so means these staff will not be poached by larger contractors.

A grow your own approach was not necessarily possible for everyone, however, due to the time commitment required. While some organisations were able to step back and recruit the right people at the right time and work within their resources, other organisations need continued growth to keep pace with competitors, the market, and with their own projects.

Geographically, however, there is a big gap in the market. Two problem areas identified were South Wales and North-East Wales, both of which are losing work to organisations across the border or, in the case of South Wales, to larger-scale city deal projects. There are simply not enough competent people to fill the necessary roles, something that will only worsen in the coming months. Site managers are particularly challenging: plenty of site managers look good on paper with the relevant qualifications and salary demands to match. Unfortunately, highly qualified does not necessarily mean competent, and as such these potential site managers find it difficult to get roles with Tier One contractors, who can afford to be more selective in their recruitment. Those still on the market subsequently move into the SME market, where their employers are forced to spend valuable time and money upskilling them to the necessary competence or offload them and start the search again.

Many of the members also accepted that they had lost large swathes of their workforce during the pandemic. The older, on-site staff, who had been invaluable in training apprentices, retired in droves.

Questions were raised about whether Governments' drive for highly-qualified, theoretically competent people in the industry, especially in legislation such as the Building Safety Act (BSA), would actually worsen recruitment problems. One Tier One member noted that plenty of the staff in his organisation, some of whom retired during the pandemic, did not have degrees or professional qualifications, but were some of the most skilled, hardest working people in the organisation. In the drive for competence these people often felt alienated, and reluctant to gain qualifications, questioning their value as they never needed them before. They were also missing out or losing jobs to younger – less competent – people with requisite degrees. These people perceive it as a “hassle” to continue to do the job they love and have done for many years, and that is especially the case in the BSA, where they may be personally liable for mistakes or accidents. One member questioned why anyone would enter the industry given the high levels of liability.

Training people up to the required levels of competence now takes time. Public bodies are demanding levels of competency that many construction organisations, especially SMEs, may find it difficult to meet. While this is more feasible for the Tier One contractors in the group, the SMEs were less certain they would be able to provide or recruit degree-qualified, chartered, properly trained staff to meet requirements. The financial – and attitude – barriers to training are difficult overcome. One member noted that this “takes people away from the value they provide” and favours qualifications over competency and experience.

| Annual earnings | 2022 | | 2012 | | Change 2012 - 2022 | |
|--------------------|--------|--------|--------|--------|--------------------|-------|
| | Median | Mean | Median | Mean | Median | Mean |
| (Full-time male) | | | | | | |
| Construction | 32,990 | 35,334 | 24,448 | 28,023 | 34.9% | 26.1% |
| All industries | 32,229 | 35,915 | 25,607 | 29,165 | 25.9% | 23.1% |
| Difference | 2.4% | -1.6% | -4.5% | -3.9% | - | - |
| (Full-time female) | | | | | | |
| Construction | 24,582 | 27,952 | 19,122 | 19,497 | 28.6% | 43.4% |
| All industries | 28,257 | 31,097 | 20,607 | 23,736 | 37.1% | 31.0% |
| Difference | -13.0% | -10.1% | -7.2% | -17.9% | - | - |

ONS: ASHE, Annual pay - Gross (£) - For male full-time and full-time female employee jobs
 Note: Where sample sizes are small figures may be missing. These are denoted with an "X"

Equality, Diversity, and Inclusion (EDI): “the world they inhabit.”

Members overwhelmingly understand the importance of diversity in the sector, heralding it as part of the solution to the skills crisis. One member, whose organisation prides itself on its inclusion strategy, said that it was particularly important for young people and potential new recruits to the sector, and it is “the world they inhabit”. The construction industry and organisations in the sector need to accept this perspective and adapt or die. This is a sentiment echoed in CIOB’s consumer research results: to attract more new recruits of any age to the industry, a combined 42% of consumers in Wales thought the industry needed to be more attractive and inclusive for ethnic minority groups and women. Some organisations – including CIOB – have taken steps to hire Inclusion and Diversity Directors, and many of the members recognised the value in [CIOB’s EDI charter](#) and similar schemes.

The question remains as to how to attract people from diverse backgrounds into the sector, however, given the clear image problem the industry has. Some of this will solve itself as people retire and are replaced by new starters, but members agreed that a conscious decision needs to be made to practice inclusivity.

One member said that they were being led by their staff, allowing them to create the workspace and environment they want to work in in the hope of making them a more attractive proposition for new recruits. The same member said that they had started collaborating with local schools and so-called “problem” pupils, who were not particularly academic. These young people were offered work experience on the tools, highlighting the value of skills outside of academia. When the time came, some of these pupils started apprenticeships, either within the company or at another one.

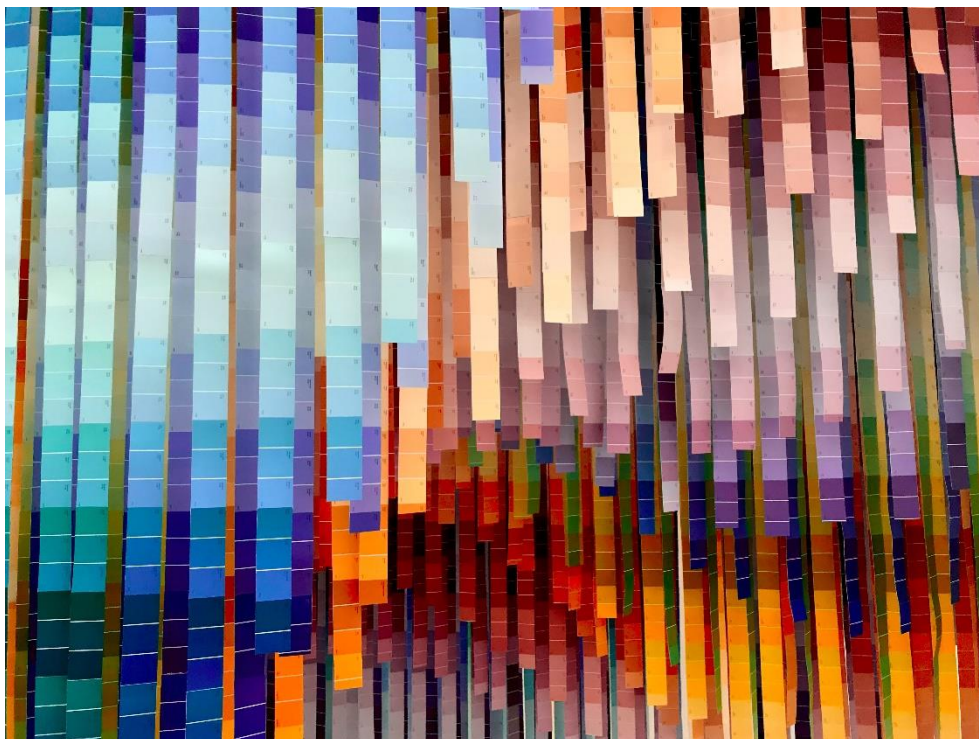


Photo by John Schaidler on Unsplash

Innovation and Data: “A completely new set of wheels”.

Members agreed that another way the industry was shifting for the better was in its use of data and digital innovation. Just over 12% of respondents in CIOB’s consumer research suggested that promoting the use of technology in the industry would help young adults into the construction industry.

Most members were investing heavily in Power BI, Building Information Modelling (BIM), and the people behind it, as well as platforms to streamline their business on site. Platforms to collate and manage data, allowing them to accurately forecast prices, project costs, and timings, are integral to one Tier One contractor’s current business plan and longevity of their organisation.

Circling back to the previous discussion on liability, another Tier One contractor noted they were investing in technology to host the Golden Thread. While this is a requirement in the BSA, it also acts to reassure those liable for safety that the organisation has their back, and that everything necessary is easily accessible.

Other key areas of investment were augmented reality and Artificial Intelligence, and how these can be used to revolutionise, modernise, and streamline on-site practices in terms of record keeping and risk mitigation.

Only one member said that they had taken advantage of the UK Government’s R&D Tax Credit scheme and noted that they were working closely with organisations such as Construction Innovation Hub to facilitate knowledge sharing and best practice. This member also had concerns that the construction industry would create “a completely new set of wheels” that would pose problems for interoperability along the supply chain and increase the gap between Tier One contractors and SMEs, as well as make it even hard for new companies to break into the market.

He said it was important to remember that innovation, technology, and digital can – and should – have positive, industry-wide effects instead of only benefitting a few.

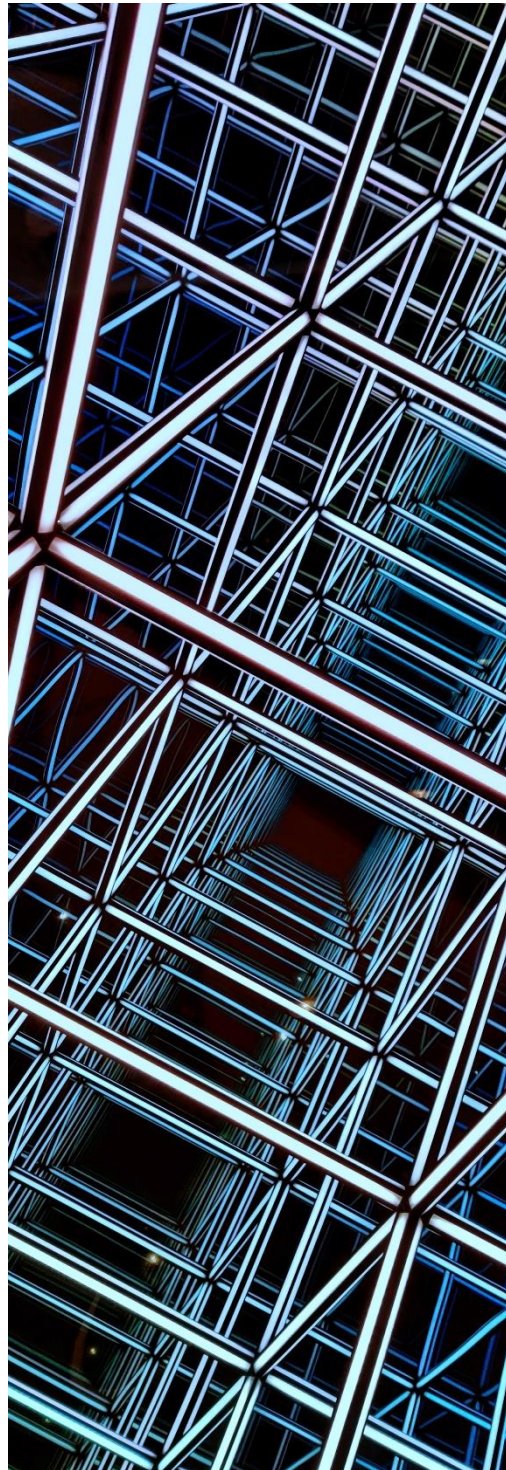


Photo by H Liu on Unsplash

Health, Safety, and Mental Wellbeing

The last discussion centred on health and safety, and mental wellbeing in the construction industry. Responding to CIOB's consumer research, 25.7% of respondents said that they thought the construction industry was "dangerous".

One member, who started working in the industry in the 1980's, noted that health and safety procedures and practices were far more prevalent nowadays. Members agreed, with all of them refuting perceptions that the industry was high-risk, and saying they were unaware of many accidents on site.

Giving the example of falls from height, members said they "don't see this", and questioned that this was as prevalent an issue as it was made out to be. Falls from height, they argued, are far more common among individual construction professionals or micro businesses who should be using a scaffold instead of a ladder, but due to time, financial, or other constraints, choose not to. This would still count as a construction accident, contributing to the negative statistics and press. Accidents, then, are seemingly the result of poor personal choice instead of a lack of safety measures on site.

According to members, there is a greater risk of accidents as a result of poor tendering processes that aim to do things for the lowest cost. Customers need to understand that you pay for what you get, and if there is a significant cost difference in the quotes of two companies, then the work they undertake will not be comparable. This member gave the example of maintenance work on a stairwell: his organisation quoted circa £50,000 for the work, including the use of a scaffold. A competitor undercut this price by around £15,000 and was planning to do the work without a scaffold, favouring instead the installation of nets to catch any workers who may fall. These are the kinds of practices that contribute to

negative accident statistics: despite tight budgets all around, from both the contractor and customer side, compromising health and safety for the sake of a tender was not worth the risk.

Contrasting this, members did agree that the industry has a problem with poor mental health. Members all agreed that construction was a uniquely high-pressure career, with long hours often spent on site in poor weather conditions. One member called for a mental health helpline specifically for the industry, where you can talk to a mental health first aider with specific experience of being in the industry. Another Tier One member agreed with the need for a helpline and added that his organisation already has at least two mental health first aiders on each of their sites.

One member noted that his organisation had recently encouraged staff to take a long break and go to breakfast on Friday mornings. He argued this helped break down barriers, as a site manager could sit and have a chat about something other than work with a labourer, and facilitated healthy, open conversation.

In a similar vein to EDI, members agreed that young people were driving a positive shift. By being more open about their mental health in their everyday lives they were breaking the stigma, which in turn is having positive effects on the older, more experienced staff on site who had only worked with this 'machismo' discourse.

Conclusion

There are no easy, clear-cut solutions to the myriad barriers Wales's construction sector faces. Nevertheless, there is reason to be optimistic: roundtable members spoke about the positive benefits of bringing younger people through the ranks, including increased diversity in the workforce and a greater understanding of mental health and how to better protect it.

Positive developments are also happening at Welsh Government level with their latest package of *Wales Innovates* strategy and the *Net Zero Skills Action Plan*. This long-term, joined-up policymaking and ongoing collaboration with the sector may not hold all the answers, but it is likely to provide a good starting point on which the industry can build.



References

The Chartered Institute of Building. (n.d.). *Ageing Workforce*. Retrieved May 22, 2023, from <https://www.ciob.org/industry/policy-research/policy-positions/ageing-workforce>

The Chartered Institute of Building. (2023). *The Real Face of Construction*. <https://d8.ciob.org/media/1893/download>

Construction Industry Training Board. (2023). *Construction Skills Network: The skills construction needs*. <https://www.citb.co.uk/media/edsoltu2/csn-lmi-wales.pdf>

Evans, R. MS. (2022). *Written Statement: Loss of funding to Wales as a result of the UK Government's arrangements for replacement EU funding*. Welsh Government. <https://www.gov.wales/written-statement-loss-funding-wales-result-uk-governments-arrangements-replacement-eu-funding>

Goddard, J. (2021). *Brexit: Replacing EU funding in Wales*. House of Lords Library. <https://lordslibrary.parliament.uk/brexit-replacing-eu-funding-in-wales/>

Ifan, G, & Siôn, C. (2022). *When ends don't meet: a cost-of-living update*. Wales Governance Centre. https://www.cardiff.ac.uk/__data/assets/pdf_file/0018/2610360/cost_of_living_report_08Mar2022.pdf

The Older People's Commissioner for Wales. (2022). *Understanding Wales' ageing population: key statistics*. <https://olderpeople.wales/wp-content/uploads/2023/01/221222-Understanding-Wales-ageing-population-24-November.pdf>

Ranger, J. (2022). *Arup to lead £600 million transformation of Shotton Paper Mill*. Retrieved May 22, 2023, from <https://www.arup.com/news-and-events/arup-to-lead-600-million-transformation-of-shotton-paper-mill>

Swansea Council. (2021). *£1.7 billion Blue Eden project announced for Swansea*. Retrieved May 22, 2023, from <https://www.swansea.gov.uk/BlueEden>

Transport For Wales (TFW). (n.d.). *Cardiff Bus Interchange FAQ*. Retrieved May 22, 2023, from <https://tfw.wales/projects/metro/south-wales-metro/metro-central/cardiff-bus-interchange-faq>

Transport For Wales (TFW). (2023). *South Wales Metro: Core Valley Lines Transformation*. Retrieved May 22, 2023, from <https://tfw.wales/projects/metro/south-wales-metro/work-progress>