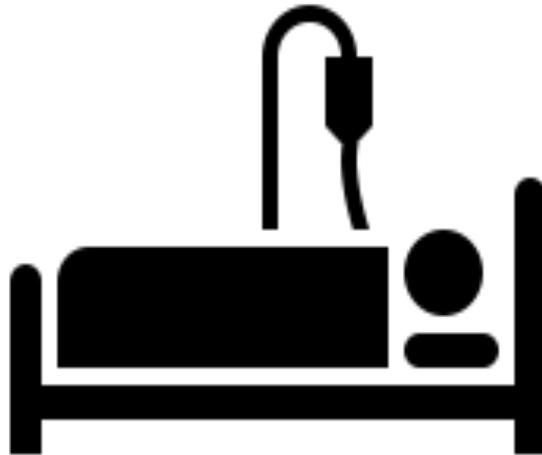


# **Construction Needs Intensive Care**

## **A Report on the Health Hazard of the Failed Business Model**

*Hedley Smyth, Meri Duryan, Aeli Roberts and Jean Xu*



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Pictures of crowded tubes the morning after the Prime Minister's lockdown announcement, many of whom were construction workers, is more evidence of the failed business model. It is also further evidence of the precarity of workers across the construction sector. Crowded tubes put construction workers at risk. Workers then arrive on site, many if not most are necessarily working in close proximity to others, which poses further risks. This is simply an incubator for spreading COVID-19 at work and during travel. Workers may then take the infection back at home and into the shops that are still open. The situation was frankly not helped by some ministers endorsing the continuation of construction work despite the lockdown measures. Some more level headed contractors decided to withdraw from operations sooner than others, but that in itself can pose problems for the self-employed. Many clients, including government organisations, continued to expect operations to continue. Clients unfortunately frequently connive with and reinforce the bad practices of the sector.

#### **A Problem with Health and Safety**

Health and Safety (H&S) statistics have plateaued in many developed countries over recent years. The UK is no exception. The panacea, especially among many leading main or tier one contractors, has been an increasing focus on wellbeing in the hope it will induce an indirect positive effect on H&S and therefore the statistics too. To date there is little or no evidence to support this hope becoming a reality. The current main barrier to improvement in occupational health, safety and wellbeing is the organisational behaviour emanating from the firm and filtering onto site, which itself is rooted in the failed business model for firms, especially main contractors.

The headline failure among tier one contractors is the focus upon compliance. H&S is not intrinsically driven by care for the workforce but being able to demonstrate compliance with the legal requirements. If there was ever doubt about this, then just look at the danger construction workers have been put into as the COVID-19 situation has worsened. Across the industry, many have acted irresponsibly from senior management to operatives on site.

Organisational behaviour has to change. Simply responding to legislative mandates does not automatically result in continuing improvement in safety, health and wellbeing. For example, surely no longer can the working environment of stress and fatigue prevail. Mental health and suicides in the sector are receiving attention, yet fundamental action to redress the conditions is absent in offices and on site plus intense site working for self-employed and agency staff

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are recipes for putting people at risk in the workplace. This is a prevailing problem. Under the threat from COVID-19, suicides remain a bigger problem than accidents and fatalities. Stress and fatigue probably exacerbate vulnerability in the current environment. Long hours to meet deadlines in the office and on site plus intense site working for self-employed and agency staff are recipes for putting people at risk in the workplace. This is a prevailing problem. Under the threat from COVID-19, the recipe draws people to work exposing them to a serious health risk, else they face the drying up of their income. At the extreme, these workers face the prospect of being unable to adequately look after themselves and their loved ones. It is an unacceptable trade off in a so-called civilised society. But it is compliance, not care, that provides the get out clause. Responsibility is pushed along the supply chain to the self-employed construction worker on the tube or the proverbial 'man in a van'. Even in the fourth week of lockdown it was reported that more construction workers were travelling on the London tubes than health workers<sup>2</sup>. Sites and such travel modes encourage spread among these communities and across to others. It is a symptom of the wider problem with the business model.

### **The Problem with the Business Model in Construction**

Organisational behaviour stems from the prevailing business model. Virtually all aspects of construction have been reformed apart from the management and how it is conducted, which largely remains unchanged since the modern main contractor emerged in the Second World War. The business model has been underpinned by low expenditure and minimal investment, so rather than the traditional return on investment (ROI), there has been a dependency on the return on capital employed (ROCE) derived from trade credit, delayed payments to suppliers and subcontractors, cash flow management and investing surplus working capital. There is less scope to do all these and especially in the continuing low or zero interest environment. Profit margins have steadily fallen since the 1960s, shored up to an extent by overseas earnings and selective acquisitions, then facilities management in recent times since the austerity drive from the public sector post the Financial Crisis<sup>3</sup>. It is unsustainable. Carillion and Interserve and now the coronavirus have exposed the raw edges in very palpable ways. The business model must change or the sector will be superseded by disruptors<sup>4</sup> and by the project management professional consultants.

Anyone who knows the recent history of construction in the UK will be well aware of the successive government stimulated reports on improving construction and project performance. The results from follow up action have successively fallen short of expectations. There are multiple reasons for this, but one of the most overlooked and ignored is the failure to change the way construction firms are managed. Senior management teams need to move

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<sup>2</sup> **Daily Mail (2020) Construction workers outnumber NHS staff': Fury at Sadiq Khan for 'doing nothing' as Tubes farce is now daily routine - but he insists he 'can't run more trains, Thursday 16<sup>th</sup> April, <https://www.dailymail.co.uk/news/article-8224775/Construction-workers-outnumber-NHS-staff-Fury-Sadiq-Kahn-doing-nothing.html>. Accessed Friday 17<sup>th</sup> April, 2020.**

<sup>3</sup> Smyth, H. J. (2018) *Castles in the Air? The Evolution of British Main Contractors*, [www.ucl.ac.uk/bartlett/construction/castles-in-the-air](http://www.ucl.ac.uk/bartlett/construction/castles-in-the-air).

<sup>4</sup> Bartlett, K., Blanco, J.L., Rockhill, D. Strube, G. (2019) *Breaking the mold: the construction players of the future*, *Voices*, September, McKinsey & Co..

away from ROCE towards ROI. Investment in people, especially human and hence organisational systems is key. Educating clients and investment markets to support this is a related part of this picture. Technology is expensive and depreciates. Social or human capital appreciates with use. It is a “no brainer” in investment terms, for example investing in systems integration to break down silos, putting in place programme management to consistently coordinate pan-project – note that the amazing innovations across megaprojects have been transferred through the labour market, not through the firms that have failed to embed and roll out the innovations onto other projects.

### **The Health and Safety in the Forefront of Change**

Take H&S as the example. Contractors operate in the opposite way to most companies which have strategies or templates for international and global operations within which regions and branch plants or offices can develop nuanced contextualised approaches. Contractors do not have this. Detailed and prescriptive H&S measures are implemented top down in a tactical and ‘one size fits all’ way. A strategic template would allow the workforce in developing countries, in which these firms operate, to benefit from the practices transferred from developed countries. It would allow developing economics to learn from the best worldwide and improve their lot quicker. At a domestic level as an example, most contractors have developed good safety management systems for information capture and to a degree processing. Most contractors now have nascent yet partial knowledge management systems for a degree of knowledge transfer. The two do not meet, yet H&S would benefit from learning and knowledge management, while knowledge management systems would benefit from the more concerted information sharing of safety management systems. This is the kind of integration, preferably supported by effective investment in programme management that could yield improvement for the firm and projects in general and specifically for H&S<sup>5</sup>. This type of investment can be linked in self-reinforcing ways. For example, the client management or key account management (KAM) is a programme level management function. As clients are interested in H&S on their sites and have the power to set the H&S and wellbeing ethos across their supply chain. Committed interactions with any key client is likely to strengthen the H&S management and help trigger cultural change in subcontractors. Procurement, if shifting to a transformational approach, for example moving beyond threshold selection criteria towards dynamic rates of improvement, may well place H&S a key value outcome, hence further reinforcement is added. Successive investments can induce a virtuous spiral – a long way from meeting value in terms of satisfying the minimum requirements and compliance around H&S specifically.

### **New Potential Frontiers in H&S and for a Transformational Business Model**

Current research being embarked upon, funded by the UK Research and Innovation through the *Transforming Construction Network Plus*, is bringing technology, in particular digitisation,

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<sup>5</sup> Smyth, H., Roberts, A., Duryan, M., Sherratt, F., Xu, J., Toli, M. and Rowlinson, S. (2019). *Report of the UK Workshop: a comparison of the health, safety and wellbeing environment in construction between HK and UK*, The Bartlett School of Construction and Project Management, UCL, London, [www.ucl.ac.uk/bartlett/construction/occupational-health-report](http://www.ucl.ac.uk/bartlett/construction/occupational-health-report).

and organisational systems and behaviour together. We are looking at this as one way to transform construction and improve H&S, and begin to shift the business model in so doing. The aim is to see the scope for joining up existing technologies using construction industry's version of a 'black box' to detect exposure to harmful elements or situations in real time, to analyse the data and share the findings across the industry. It introduces possibilities to triangulate real time data to improve self-management and learning as well as data for retrospective analysis to improve performance, specifically health, safety and wellbeing at the organisational level. This might include anything from activity trackers, such as Fitbits, and tablets to CCTV and drones on site to more effectively monitor and learn from failures, near misses as well as good practices.

Applying digital solutions as a quick fix to improved monitoring and accountability for compliance will be seen as too invasive. It will drive away people from the sector and harm the image for recruitment, which is a critical concern for the health of the industry post-Brexit. It is important to acknowledge also that it is not enough to simply invest in digital solutions; a holistic view on H&S systems and parallel organisational systems to support the process are needed if comparison with aviation, aerospace and the medical professions teach us anything. The one size fits all approach to top down prescription has been useful but has had its day. If construction employs a transformational approach it can induce nuanced learning from the bottom up to develop practices to task and operational context. Greater acceptance of transformation is also achieved by integrating multiple efforts from the supply chains, which builds upon consistent relationships and trust. This revolves around care not purely compliance. It takes responsibility down the supply chain. Rather than passing the buck to the next subcontractor to the self-employed labourer, care embraces the range of actors, whether employed in the contractor, subcontractor or through self-employment and agency suppliers. Improvement will help increase performance and reduce some expenditure. Effectiveness will improve the ability to be able to move towards less stressful and tiring working environments from the key decision makers to those on site. A new business model will impinge upon multiple activities. How activities are conducted with wellbeing as well as H&S in mind, alongside improved profitability, is surely what business leaders and investors would now like to see.

### **Concluding Recommendation**

In the post-COVID-19 economy, we need a healthy construction sector. We do not have one. This period can be seen as a time for management to put it into intensive care to reconsider the business model. Occupational health, safety and wellbeing is as good a place to start as any. It is the road to survival and reasonable rates of return long term. What will construction industry look like in the future? The jury is out, but the industry now needs intensive care.

