

Health and Safety

Construction sites across the UK present a constantly changing, highly hazardous and potentially risky working environment. The industry employs over 2 million employees across the UK, who are vulnerable to both work-related illness and injury.

Statistics from the Health and Safety Executive relating to the UK construction industry demonstrate the scale of the problem:

- The construction industry loses 2.2 million days of work (on average, per year).
- 3% of workers – an estimated 66,000 individuals, sustain work-related injuries per year (average 2013-2016).
- There were 38 deaths in the construction industry in 2017/2018. These accident-related fatalities are more than twice the average of other industries.
- 64% of issues arise from musculoskeletal work-related disorders (average 2013-2016). At a total of 1.2 million lost working days, these injuries account for over half of the days lost per year.



Building site safety can be improved by setting up digital workflows in the form of checklists, issue management and safety reporting. Created safety specific checklist templates can be assigned to team members and statuses tracked. While on site, the mobile app can be used to complete any checklists and where relevant, add notes, attach photos or create an issue to reinforce safety standards. Issues can be categorised by root causes to allow analysis of trends and potential areas of risk.

In utilising a digital workflow, it is possible to look at trends across all safety aspects of a project, and gain insights into good and bad behaviours across staff and sub-contractors alike. Moreover, it is possible to aggregate this data across projects to identify best and worst performing sub-contractors.

BIM 360 contains a module called Construction IQ. Construction IQ is a built-in Machine Learning (ML) and Artificial Intelligence (AI) set of tools that assimilates data across the entire BIM 360 platform.

Construction IQ sorts through millions of data points from construction documents, issues, checklists, related metadata, and historical data, and analyses it to provide predictive insights and identify leading indicators to help safety managers proactively focus on problem areas specific to every project.

Bringing the model onto site also brings benefits for morning briefings and site awareness sessions to keep the whole team informed of activities to be carried out around their working area. Large touch screen information centres can be distributed around the site to increase the engagement with connect live data stored in the cloud.



For more information on our construction services please call 01992 807 444 or email marketing@excitech.co.uk.

Features and Benefits of Digital Health and Safety

- Daily log to record safety observations and incidents
- Perform safety inspections on mobile devices
- Assign and monitor safety issues to identified team members
- Links to wearable technology for safety monitoring (hard hats, Hi-Viz vests etc.)
- Log standard root causes
- Creation and distribution of detailed and summary safety checklists and reports.
- Cross project reporting for collation of "common" issues
- AI and ML capability for predictive risk alerts.