

Case study: McLaren

McLaren overcomes planning challenges from the ground up, to deliver extra commercial and client value

McLAREN

About McLaren

McLaren Construction is an award winning contractor with an established reputation for consistent delivery of outstanding projects across all market sectors. McLaren is one of the UK's most successful privately owned businesses, with over 480 employees.

It specialises in new build, refurbishment and fit out projects for major blue chip customers.

McLaren's Operations Director, Domonic Egan was awarded a Gold Medal at the CIOB Construction Manager of the Year Awards for this project.

When the owners of Marble Arch House & 62/64 Seymour Street appointed McLaren Construction to create a new seven-story West End office block and remodel the adjoining building, they did so knowing that the firm had never let them down on previous retail work. McLaren recognised the opportunity to extend its services, and determined to do a stellar job. It brought in Operations Director, Domonic Egan, to take charge.

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The project delivered challenges aplenty: neighbour noise issues, the ground-works contractor going bust, plus problems in the ground itself.

Great communication with the client was just one of the reasons that Domonic was awarded a Gold Medal in the CIOB Construction Manager of the Year Awards – but the planning process that the team displayed in coping with challenge after challenge was undoubtedly partially responsible. The entire project was planned using McLaren's standard project management tool: Powerproject.

Planning through change

Domonic's role was to spearhead the project and drive the company's strategy for delivering this £20 million-plus build, as he explained: "Powerproject is used throughout McLaren, so the whole strategy for this project was planned with it, from the tender programme through construction and target programmes. It started as a 77-week contract, and we developed a target programme of 74 weeks. However, we had lots of issues in the ground right at the beginning, and by a third of the way through we'd lost a huge 13 weeks."

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Case study: McLaren

He continued: "We used Powerproject to adjust for all the obstructions we encountered, such as having to slow down work for nearby residents. We re-sequenced the frame, which gained us back between four and five weeks, and re-sequenced the cladding, which gained a further three weeks – so we clawed back around eight weeks in all."

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Senior planner, Graeme Kyle, was one of the people at the sharp end of re-planning to adjust operations around various major events. When the ground-works contractor went into administration, identifying an alternate supplier was only part of the challenge, as he explained: "First we had to analyse the impact on productivity and on all the trades of that one aspect of the work being delayed. We ran several scenarios to understand exactly when we'd need the new contractor available to the works, because without the concrete frame the envelope couldn't be installed, which would delay fitting any services and doing any finishes on the floors of the office block. It impacted everything because it required the tower crane, which was situated within the footprint of the building, running through each floor slab and protruding through the roof. It meant completely resequencing the work and reducing the original lag built in for each level on the programme, for the purpose of analysis. That gave us the ability to understand what we'd have to do to make sure we still handed over the project as near to the original deadline as possible."

In order to finalise the new sequence of work it was also essential to consider the impact on the work of subcontractors and trades. Said Graeme: "At peak the site had around 170 men working across the building. We always have to plan to allow each one as continuous a work-stream as possible from the moment they come to site. Any major event can severely impact the ability to provide that work-stream. Using Powerproject I can programme out the works using the quantities available for each element,

to give the duration for the completion of each task. Then we can link up the programme up and attach all the interdependencies – so that when an event or change happens you can easily understand the impact on each specific activity."

Communicating for transparency

Powerproject was used internally and externally to help Domonic communicate to every stakeholder: "We were able to share the revised and realistic programme with the client, which meant that they knew exactly where they stood – there were no shocks. We used Powerproject to create drop-lines monthly, or even weekly. We will usually do two: an external contractual drop-line alongside a target one, to share with the client and our own board."

In addition to enabling 'what if' analysis to find solutions to problems, Powerproject can also be used proactively to explore possible challenges and identify optimal routes to resolution. This, in turn, enables clear communication with different audiences. As Graeme reported: "Powerproject enables you to analyse any scenario that you can possibly think up, including things which might impact or improve outcomes. The aim is to be able to give both internal and

external audiences as accurate an opinion on where the project is heading as possible. This helps the client, who often has a tenant waiting and ready to take occupation, as well as our directors, who need to plan when we can move onto another scheme."

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It also supported the day-to-day management needs on site, said Domonic: "All our senior managers have access to Powerproject. I expected them to be formulating two-weekly programmes for the areas they were in charge of. For example, one of the construction managers would use it to plan temporary works, another to



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Case study: McLaren

plan the substructure or the cladding works – they could each have a rolling programme for their own works.”

There are several levels of users. Domonic said that “At the start we call on a planner who would put together the tender and contract programmes together with me. Managers on site then don’t have to develop programmes themselves, but have access to simple programmes with their sequence of work and key links. Design and procurement is also developed on Powerproject; these managers can then use the software to monitor their own progress and report on it monthly, so it adds to the picture that external parties have of the overall progress.”

Powerproject’s accessibility is one of the things that makes it useful across the McLaren Group. It allows different users to access information and support the planning process, as Graeme pointed out: “People enjoy using Powerproject, because it’s accessible to all levels of user. You can see that some people are clearly expert users from how they’ve constructed a programme, but it also allows those who aren’t as familiar with the software the ability to produce meaningful and legible programmes too.”

Seeing the big picture

The development involved two different buildings: one an office building and the other a residential block. The dual nature of the project could be planned and managed as one within Powerproject, said Graeme: “Powerproject helps you bring things together. Despite slightly differing completion deadlines and separate project activities we had to ensure, for example, that both buildings were ready for statutory services connection at the same time. Failure to programme that in the correct phase for each would otherwise have directly impacted our ability to complete.”

Using Powerproject to plan and project manage across the development gave the project team the ability they needed to see the big picture and create a realistic, actionable programme. As Domonic stated: “Powerproject helped us to connect all the levels and players because everything linked back to the master programme. We used the software to look at how things would work, and how they would come together. The way we approached this project was actually in two halves – we switched order so the higher side of the development happened before the

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lower side, and we could only do that by programming it out fully, to see how it could come together and what the benefit would be. We plotted it all in Powerproject, and could then see we had a plan we could work with.” In the end, despite the major challenges encountered, the project came in just five weeks later than planned with an extension of time granted by a very satisfied client. For McLaren Construction, it represented a prime opportunity to demonstrate its capabilities in commercial construction for a key client: as part of the re-planning, Domonic and his team had also spotted an opportunity to extend the office block façade to create additional space for letting – adding not just more commercial return for the project, but also more value to the client relationship. This, along with the team leader’s determination not to be set back despite significant challenges, was among the reasons that Domonic Egan was awarded a Gold Medal in the category “New Build and Refurbishment between £20-28 million” at the last CIOB Construction Manager of the Year Awards.

Satisfied Users

In conclusion, Domonic added that: “I have used Powerproject for several years, and been familiar with it for perhaps 12 years – but I don’t consider myself an expert! I do prefer it to other options though; it is a lot simpler to read than Primavera and others. I like it because of how you can drop the progress lines down, put resource schedules together, and run bars alongside each other in order to do comparisons. It has lots of uses.” Graeme, another long-term user, concluded: “I’ve used Powerproject for about 15 years now. It’s very user-friendly and the user interface allows you to understand the output easily. I find it a very useful tool to get my message across in a bar chart format for any audience: internally or externally, up or down the line.”



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