
FFE and interior fit-outs

Oliver Del Mar, associate at Currie & Brown, discusses the importance of fittings, furnishings and equipment (FFE) in interior fit-outs.

Spending millions on a major construction contract and then finding that the furniture doesn't fit in the building properly may sound like the sort of scene you would find in a TV sitcom.

But it happens. And when it does, it can be disruptive, cost money, cause project delays and lead to different parties squabbling over who is to blame.

Every building needs an interior fit-out, and fittings, furnishings and equipment (FFE) are critical to its functioning. Rather than being an afterthought, the FFE should be factored in at the very beginning and be a key driver of the design process. Unfortunately, this is not always the case.

There are some occasions when FFE changes may be unavoidable during the build phase. For instance, if a café operator is only identified during construction, significant changes such as room reconfiguration or additional ventilation requirements, both of which can have a critical effect on adjacencies, may be required. Inevitably this can cause programme delay and additional cost.

Another scenario where getting full visibility on FFE at an early stage might be difficult is if technology changes during building work. For example, on a recent healthcare project, a new blood testing machine was developed and introduced during construction. The new technology meant samples could be analysed in the ward rather than being sent away to a lab. The room housing the new equipment, however, wasn't fitted with a data port so a change to the contract was necessary to take be able to use the new technology.

It is not unusual for projects to experience challenges to time and cost because of inadequate forward planning. Standard practice dictates that all end users and stakeholders should be engaged in the project from the design outset, but getting the right people to buy into this process at the right time isn't always straightforward.

Principal users who will work daily in the new building, such as nurses in a new healthcare facility or teachers in a school, are often enthusiastic about being asked for their thoughts and tend to offer meaningful input into the fit-out, albeit requests can often exceed the project budget.

It can, however, be more challenging to get early engagement from those who will service the new facility, such as the IT department, housekeeping or security. It is not unusual to find these members of the client body reluctant to engage in detail at the early stage. However, once the construction process has commenced and they start to understand the building layout, they can become increasingly interested in the design of a facility that they will have to maintain. Changes requested at this stage can cause programme and cost challenges.

On one project, the IT department had not grasped the extent of server requirements needed for the facility until after the project had started on site. It became clear that the contract layout for the server room was both too small and inadequately ventilated. This led to the loss of some office layout next door to accommodate a bigger server room, aborted costs to remove and reinstall partitioning, additional ducting requirements and a delay to the programme.

It is important that clients know the dimensions of large equipment. During one healthcare project, the Trust didn't provide the architect with an exact model of a trolley it needed as part of its equipment inventory. The end result was that it didn't fit into the cupboards designed for it, which in turn created a debate about whose fault this was and who had to pay for the larger cupboards which had to be retro-installed.

Another important part of FFE is to ensure that the client has a clear understanding of the programme and knows when equipment needs to arrive by. On one project, the client failed to purchase the computer desks on time, which meant that an alternative cable routing was required. The installation of floor trunking necessary to contain the cables led to a costly variation.

Wall-mounted equipment is another consideration. If it is heavy, a plywood pattress is likely to be required, which is relatively inexpensive if the partition has not yet been installed, but is costly if lining must be taken down and put back up again.

Finally, services to equipment must always be considered. In some instances, especially if partitions are not yet installed, this may be relatively minor in impact, although naturally the cost and time risk is increased the later in the project the change is made.

In some cases, though, the effect on services can be considerable. For instance, if an additional set of workstations in a laboratory is required, this could increase the gas input, which could mean that the distribution pipe is inadequate and even that the incoming supply is insufficient.

How do you avoid, or at least minimise, the risk of problems like this? As well as setting up the discussion process early, it is important to identify exactly who in the client team needs to be involved. This should be captured in a project execution plan or similar document.

The design team should have an initial workshop with the client group to identify the equipment needed. This will then inform decisions about the size and shape of the rooms. Layouts should then be generated in the form of C-sheets, preferably with wall elevations, and further workshops held to modify as required.

This process should conclude with a formal written and dated notice of approval for each room layout, with the clear message to the client that further changes risk incurring additional cost and programme delay.

Everyone should be kept informed of project timelines and the need to adhere to them as work cannot be held up while decisions are taken.

The key to success is to maintain focus, involve as many people as necessary in the FFE decision-making process (without the process becoming unwieldy) and not to allow timescales to slip.

That way, budgets and timings will be kept under control, high quality will be delivered, and the new building will perform to its optimum, both inside and out.

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