



# Design drift is hurting construction – how can we support a culture of designing to cost?



**Where there is a lack of collaboration, realism, and discipline in project design it can badly affect a construction project.**

The relationship between contractors, consultants and customers comes under intense strain when projects are delayed, and costs mount, due to design drift.

In a hyper-competitive market, firms can be quick to over-promise to secure a lucrative contract, or offer solutions to a brief they've failed to understand.

When aspiration or interpretation clashes with reality, customers are left returning to the market late in the day, having incurred fees they can't recoup and facing an uphill battle to hit development milestones.

Interpreting a cost plan carefully into a design brief is fundamental. The only way you can do that is to have all the right disciplines around the table to interpolate that brief at the earliest stage and communication here is key to get it right at the outset.

## **Oxford Round Table – Thought Leaders**

**James York** | Morgan Sindall Construction

**Darcy Blake-Jones** | Morgan Sindall Construction

**Jonathan Daly** | Influential

**Crissie Gizzi** | Morgan Sindall Construction

**Matt Jones** | Hoare Lea

**Fergal Kelly** | Ramboll

**Iain Stevenson** | IKS Consulting

**Chris Kimber-Nickelson** | Savills

**Mark Shipton** | Oxford Architects

**Gary Edgar** | Imtech

**Marcus Goodwin** | Faithful + Gould



**It stands to reason that the initial cost plan is generally correct, because that is how much money the client has. What then so often happens is that the design becomes divorced from that cost plan, leading to panic, re-work, “value engineering”, and general inefficiency.**

The prize for successfully overhauling the way the sector approaches management of design is huge. Not only can it greatly enhance the experience for customers, it can also be a key driver in reducing construction waste and improving the industry’s productivity.

We brought together a round-table of experts to discuss the factors responsible for design drift, along with the tools, strategies and ways of working necessary to address it.



There was widespread agreement that failure to produce a thorough client brief in the earliest stages set things on a course it was hard to recover from.

One attendee noted: “Briefs can be loose – sometimes due to a lack of technical expertise on the customer team. Even when that knowledge is there, it may not

extend to the person ultimately making the purchasing decision.” Another added: “Crossed wires at this early stage can be disastrous. If the client thinks the designers are adhering to a cost plan, while the design team thinks they are working to a brief, you can quickly find yourself in a perfect storm.”

**We have to stop design from becoming divorced from the cost-plan. That takes discipline and collaboration.**

The consensus was that early and open dialogue between all parties combined with a diligent approach to communicating the cost plan allowances was key to avoiding this. One participant said: “It can be difficult for consultants operating in silos to know what the cost plan will allow for.

“The solution is effective communication. We need to bring all of the right people – designers, consultants, contractors and supply chain – around the table to develop the brief from the cost plan.

Time and resources put into this kind of open and inclusive discourse nets an incredible return on investment.” Another echoed this: “Collectively, we need to be braver with clients.

We need them to understand and buy into investing in the briefing process. Initially, they may not be happy with that – but you can’t have a baby without the labour pains.”

There was some suggestion that a shift away from involving two architectural firms in the briefing process had a part to play in design drift: “Historically, some customers would commission one architect to suggest a vision and concept, and another to challenge that and ensure it was grounded in reality.



But we rarely see that these days,” said one expert. Adding to this, a participant said: “That’s true, but we’re actually now seeing a trend where more architects themselves are choosing to bring in third-party firms to sit in the initial briefing, challenge appropriately and record specifics of those discussions. An impartial sounding board can be powerful in stress testing the brief.”

Encouraging customers to see design as a process and conveying the value of appropriate changes was a continuous challenge, one participant noted: “Design is an iterative process. There’s no getting away from that. The key is to work within a budget and ensure that changes are made only to optimise and add incremental benefit, rather than simply as a means of value engineering.”

**Gone are the days when architects held themselves at the top of the pyramid. It absolutely has to be a collaborative effort, working as one team to deliver the client’s vision.**

Everyone at the table agreed that designing to cost was easier to implement in some sectors.

One consultant said: “Residential developers are traditionally budget-led. They’ll make a calculation first then the project is ultimately dictated by that.

But if you look at a heritage project, it’s the other way around. That is almost always brief and design-led. The quality of the project is prioritised and there’s a sense that it will cost what it’ll cost.”

This was echoed by another expert who pointed out that the weighting given to certain aspects of design has changed, stating: “20 years ago we designed to black and white, easily-defined and measurable criteria.

Now we are designing for emotion and the outcome of the building. It’s not just about the physical room performing. Customers are looking to link the output – be it R&D, teaching or healthcare delivery – to the design, and that poses its own set of challenges.

The prevailing view was that qualitative measures were nebulous, but often all-important to the end user and couldn’t be overlooked.

“It’s important to work really hard to extract the two or three things that really, really matter to a client because you’re going to have to deliver on them,” said one attendee.

They continued: “It might be a wow factor when they walk into the building, or a more functional element. You ring-fence that and then everything else you can perhaps flex and compromise and we’ve had some real success taking that approach.”

While all agreed that involving all parties in the design process at an early stage was key, many pointed out that managing these stakeholders was a challenge which required a unique skill set.



One participant noted: “Historically, M&E sat as a really discrete item and a siloed approach could work.

But as buildings become more intertwined and connected, that’s no longer possible. We can’t split the disciplines neatly anymore, so a project manager’s job can be incredibly difficult.”

Another added: “A role that’s developed in answer to design-and-build contracting, is the design manager. We have five in our office and they’re arguably the most important people. Some are former architects, some ex-engineers. We’ve then given them commercial and project management training.

They’re now invaluable and have a unique set of skills that enables them to manage a range of specialities effectively.

**“The best design managers are like midfield generals: able to see the bigger picture, galvanise a team, and implement a game plan under pressure.”**

Seconding this view, a consultant said: “When you get a good design manager on board and their only task is looking at that coordination, it’s immensely helpful – they knit it together nicely.”

Soft skills and the ability to work effectively with multiple personalities were seen as key attributes of a design manager. But the role technology, and BIM in particular, was increasingly playing in the process was also highlighted.

“The difficulty is getting a system that everybody subscribes to,” one attendee said. “We use SmartSheet, a cloud-based system to embed change control which is live.

The whole design team has live cost reporting, but it needs everyone to buy into the system for it to be effective.

These systems are totally workable but, if it’s rubbish in, then it’s rubbish out. It comes down to the human element,” they continued.

Another at the table said: “Closing the loop in terms of design changes and attributing a cost to that is key. We’ve been using the Revit model and the cost



integration process it provides, I think it's possibly part of the solution. Getting more immediate measurements and cost implications out of the BIM model has been helpful."

Not everyone at the table agreed on the value of BIM in its current state, but there was a consensus that standardisation was required, with one expert noting: "BIM needs to quickly move to be 'just how we do things' so that extra money doesn't need to be factored into a project for it be delivered.

**We need one standardised model which everyone subscribes to, understands and can access.**

## Top four takeaways

**One** | Interrogate the brief thoroughly; be brave with clients

**Two** | Early collaboration with contractors and their supply chain

**Three** | Ring-fence non-negotiable design elements

**Four** | The cost plan is right. Good design management is needed to stop the design getting divorced from the cost plan - consultants can't do it alone