

extensive fitted furniture, whether it's dressing-room furniture units, as at Glyndebourne, or whether it's the seating in the auditorium. There are also lots of little rooms as well as the big spaces, and they all have their functions, and they all require fitting out. Dressing rooms, of course, also need plumbing, and theatres are some of the most intensively serviced buildings there are. The plumbing at Glyndebourne can be seen on the soffit of the dressing rooms. Our commercial client, of course, will have value-engineered his building and arranged his toilets in a nice, neat vertical stack over the top of the drain. In theatres they are often spread horizontally to serve dressing rooms and people at stage level – and sometimes even at basement level, so they need to be pumped! The density of wet services, and services in general, is always far greater in theatres.

Vertical transportation may also be an issue – we often need to get large numbers of people to upper levels in a very short period of time. We also have technical systems, like fire alarms, evacuation systems, backstage communications and foyer paging, which can be extensive and specialist, and there is always the issue of coordination between these.

So we come to the stage and backstage, equipment. This covers the engineering associated with moving scenery, the lighting, sound and specialist communication installations. In terms of the comparison, of course, these are a pure extra. These costs are a complete premium on top of the other costs and, as I have explained, if your building is small, then this sum is divided by a much smaller area, making a much bigger number. Over the last three days there have been numerous sessions about the ins and outs of technical equipment, so I'm not going to dwell on the details here, other than from a quantity surveyor's perspective. When planning technical installations, it is necessary to look at productivity and flexibility, and at capital versus revenue expenditure.

Finally, preliminaries. These are a complex mix of scope, value, risk and time. They are normally expressed as a percentage, which is why the preliminaries number starts as a bigger one on theatres, because the percentage is applied to a bigger number. Preliminaries are affected by a lot of other things, though. We talked earlier in

the Conference about procurement methods; the five buildings I've chosen were procured here our cost advantage have established suppliers repeat business. Many of our clients, and those related about the various buildings repeat business.

*Clients, funders, governments all believe that arts buildings are disproportionately expensive; they do not realise a theatre is cross between a high-class hotel, an office block and a factory fitted with very specialist equipment. Here two experienced cost consultants set out some of the reasons and point out where savings can sometimes be made. When built, the cost of maintenance becomes an issue and the approach to this is explained in relation to the Sydney Opera House.*

Once upon a time, contractors liked working on theatres, because they liked the prestige, they liked the nice pictures in their brochure. However, those contractors have now largely done their performing-arts buildings – and many have lost money into the bargain.

There is distinct market apathy in the UK at the moment towards arts buildings, and theatres in particular, not helped by these sorts of headlines. The market perceives theatres as extremely high risk. If you can go and build a shed in a field and make the same amount of money, why not do that?

So does that explain why theatres cost so much? Well, not entirely. A typical development budget may look like the pie-chart: we've been talking about the yellow slice, 60% of the total budget. There's been a lot of debate at the Conference about contingencies and risk, and clearly these are higher on a theatre than they would be on our commercial building due to the complexities, the amount of coordination and, I'm afraid, the nature of our clients!

