

HOW TO BUILD BETTER AND FASTER FOR LESS

Some titles invite skepticism – “Brain surgery for Fun and Profit” and “Making Millions in the Stock Market by Ouija Board” come to mind. My assigned title “Building Better for Less,” is almost in that category; it implies that there are tricks one can use to insure an effective building at a low cost.

The truth is different. Sophisticated construction people realize that one rarely gets something for nothing; they ask, “What am I giving up for what I am getting?” Rightly so, for ours is the cost-conscious world of the “trade-off,” the quid pro quo. And the greatest waste is always the wrong result for you regardless of cost. Rather than thinking of “better for less,” we should aim at “right for me at lowest feasible cost.”

In graduate business schools, they speak of cost/benefit ratios; and I recall former Secretary of Defense Charles Wilson expressing his problem as “getting the biggest bang for the buck.”

In real estate terms,

“Would Versailles have passed F.H.A. scrutiny as a planned unit development?

“How were the acoustics of the Parthenon?”

“What capitalization rate did the mortgagee apply to the Taj Mahal?”

These questions give an idea of the trade-off difficulty. High quality of anything and low cost usually do not go together. The ideal for one

specific use conflicts with flexibility for multiple use, whether you are selecting wine for a meal, designing public spaces or purchasing what in Army-Navy Stores they laughingly call “the tool of a thousand uses.” Lowest first capital cost often means higher maintenance or operating cost later on, and vice versa.

For competent architect or general contractor, the difficulty comes in weighing the trade-offs. In our increasingly complex structures, the penalties for error will become more and more severe.

The owner, or a surrogate, must exercise an owner’s function in weighing the trade-offs and in integrating the analysis, planning, design, and construction functions of a project. His function, if ignored, will be assumed by default by another entity (architect, G.C., Amateur Building Committee, etc.) that may not be qualified to handle it. The trade-off judgments divide into two categories, those of cost/taste/specific-tenant-requirements, and those of general building determinations.

Taking the latter first, every security man knows that physical security and easy control can be designed into a building or can be designed out; every maintenance man knows that efficient maintenance can be designed in or out; so can noise control, atmospheric comfort, efficient pedestrian circulation, sensible waste disposal, proper elevating, and so forth. Best practice indicates that input on these matters should come from security specialists, maintenance specialists, acoustical engineers, etc., and that anyone exercising the owner’s function must be prepared to make (and to accept responsibility for) well-considered judgments, balancing the demands of utility, cost, beauty, speed and similar factors.

The elevator program for a building with a single-tenant occupant requiring much inter-floor traffic is different from that of a building with several unrelated tenants; the key factor is not how many people work on each floor, but what their elevator use will be. Escalators, two-or-three-stop hydraulic elevators, private interior stairways, and carefully planned use of elevator “cross-over” floors should be considered.

The H.V.A.C. zoning and control program for a tenant requiring frequent 24-hour use of small areas scattered throughout a building differs from that of a tenant whose great open bays are used on a 9-to-5 schedule.

The waste disposal problems of a building throwing off routine clerical wastepaper differ substantially from those of a building with many eating facilities and the resulting wet garbage. A bank or investment securities firm whose wastepaper baskets might accidentally contain negotiable securities or irreplaceable documents requires a longer 'holding period' than a building with a routine tenancy. The security treatment for such buildings is also important.

The configuration and massing of a building also involves more than zoning and aesthetics. Many a corporate headquarters finds itself in a tall, thin tower with small floors and the high perimeter-to-interior ratio more suitable to a building occupied by smaller firms involved in law, public relations, etc.

The second category of trade-off judgments reflects cost/taste/specific-tenant-requirements, which require the corporate owner or his surrogate to wear separate hats, those of client and of developer.

"How many and what type of amenities can we afford for the money we have?" is one approach; "How inexpensively can we build the building we want?" is the other.

Some give-and-take occurs in all development situations, with the 'quality-first' job usually being scaled down somewhat as the cost estimates roll, while the stark "budget" job is frequently upgraded in the course of letting subcontracts.

An entrepreneurial builder is in touch with his market and knows what his tenants want enough to pay for; in business schools they refer to this as "the discipline of the marketplace." A corporate owner-tenant developing for his own account has no comparable guide, and the result is often an unproductive over-design.

Over-design is as much a pitfall as under-design, and occurs more often than is generally realized. A management group that automatically equates higher cost with higher quality may actually be proud

of the gargantuan price tag hanging from the neck of their newly acquired white elephant. It does not necessarily follow that more expensive is better.

This year, for example, because of recent accidents, earthquake precautions and fire safety are on everyone's mind. But common sense need not be thrown to the winds. One financial institution recently announced that the frame of its new 48-story building was between 2 and 3 times the local code requirements. I am not familiar with all the specifics, but either that building is over-designed or there are many unsafe buildings in the city.

One question is whether the same effective degree of protection could have been provided at a fraction of the cost.

In another example, a consortium of banks developed a sizable garden apartment job composed of fully fireproofed, reinforced-concrete, two-story structures. The prime movers were dismayed when the renting public attached little importance to that expensive feature; they were also disheartened when the project was eventually sold at a price that reflected its net cash flow capitalized, with no reflection whatsoever of the development costs.

'Moderation in all things' advised the Greeks 2500 years ago, indicating that even when they had lavish 'corporate headquarters' types hanging around the Agora, contrasting with skin-flint speculative types a few yards away asking a drachma or two less per square foot!

Stating a difficulty is one thing; resolving it is quite another. Since the area for greatest savings is at the onset of the project, in its conceptual stage, the solution lies there, too. It is in selecting or creating the entity that makes the trade-off choices on which the success of the venture hinges.

Some major organizations are equipped to handle the development problems of their home office buildings on an 'in-house' basis, but those are few. Others who contemplate getting involved in new construction would be well advised to:

- a) retain on a fee basis the best construction managements teams available;

- b) consider going “joint venture” with a larger, more competent and experienced owner/builder organization; or
- c) arrange for “prime tenancy” in a first-class rental building designed from inception with their needs in mind.

The ‘in-house’ route is the riskiest, and some organizations with high levels of professional ‘in-house’ talent have chosen the ‘joint venture’ or ‘prime tenant’ approach. They work on the theory that they would not like to go to a doctor, no matter how good, who had no other patients.

If ‘in-house’ works successfully, the organization ends up with the right structure, has made a good investment, and has saved fees. When it fails (which is often the case), sums can be “sunk without a trace” and senior corporate management never really knows what happened. A sense of corporate ‘machismo’ seems to prevail, and almost every week one hears of another major organization going down the primrose path.

My guess is that those firms whose “in-house” talents permit them to develop successful investment properties should stay with ‘in house’, the others should run for outside help.

In a construction-management approach, if handled properly, a skilled team of coordinated specialists is involved in the project from conception through to occupancy. The job is treated as an integrated whole. Information-collecting, analysis, planning, design, specification writing, bid analysis, subcontract letting, on-site supervision, what in the space program is called ‘mid-course correction,’ and final occupant acceptance are scheduled and controlled from start to finish, with trade-off judgments along the way made as wisely as the current “state-of-the-art” permits.

If your job actually receives all that, whatever fee you pay is cheap; if not you have been overcharged, regardless of how low the fee.

A small, but growing number of firms do provide such services; a greater number of firms claim to provide those services, but in fact, do not. The competence of a construction manager is crucial. The story is told of the patient who was referred to a specialist who

charged \$100 for the first visit and \$25 a visit thereafter. The patient said that for \$100 the doctor should be able to guess. The doctor looked at him for a minute and commented, "My friend, you don't need a doctor; you need a veterinarian!"

If a client doesn't give even the construction manager the fullest cooperation and information from the start, the job will suffer; what that client really needs is a veterinarian!

The joint venture role and that of prime tenant can be essentially the same, except that in the former case the corporate tenant is willing to make a real estate investment with chance of gain and risk of loss, the degree of control, planning involvement, etc., can be as much or as little as the parties decide. Once again, the choice of bedfellows is the most important decision the corporate tenant must make, and the best basis for selection is the owner-builder's past track record.

CONCLUSION:

- a) Rather than try "to build better for less" we should seek the right building at the lowest feasible cost;
- b) The best time to deal with problems is before they arise;
- c) The heart of the problem is the exercise of proper judgment in determining complex "trade-offs";
- c) Money-wasting over-design is as much a pitfall in corporate building as under-design, although only the company accountant seems in on the secret;
- e) 'In-house' development management, outside professional construction-management on a fee basis, joint venture with an investment builder-partner, and use of a major long-term lease to exert leverage on a building to be built, are all feasible approaches. Experience has shown repeatedly that "in house" is the most popular and least effective; in the other cases, the selection of bedfellows is the most important decision to be made.

At all times common sense working with long-term trends and dealing with the right people is your best policy.

For those on whom you rely, it boils down to the “Whistler” approach. James McNeill Whistler, you will recall, was the 19th century painter once asked by a rival with what he mixed his pigments to get such remarkable effects. Whistler looked him straight in the eye and said, “Sir, I mix my pigments with genius!” Such talent is hard to find, but it’s worth looking for.

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