

BEST PRACTICE

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Master of the House

Why a Company Should Take Control of Its Building Projects

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Coming in on budget and on time isn't good enough.

Granted, that's no small feat in itself: Take on a big building project, and virtually every construction professional you meet will kindly inform you that the large majority of people who run such projects are fired when their buildings are completed—usually late and over budget—if not before.

But if you want to avoid squandering what is probably your company's largest capital investment, keep in mind that meeting your schedule and your budget is just the starting point. It's important to create something that truly propels your business forward. A building that dynamically reflects your company's mission—brand instead of bland. A building with innovations that, combined, produce an energizing work environment instead of enervating clusters of cubicles.

And you won't get this kind of package—great design and innovative features that together further your business goals—unless you take an active role in the project's planning

and construction. It isn't enough to simply write a check and then delegate project oversight to consultants, no matter how able they are. Unless your voice is in the mix, you will get, at best, well-intentioned guesses by others as to what you want. At worst, you'll get something that is incongruous with your goals. Actively assemble the right team, and then stay an integral part of the process, asking hard questions about things that are generally taken as givens. Articulate a vision of your future work space, and drive the search for ways to realize this vision. In short, be a builder, not merely an owner.

It's easy to understand why this approach is the exception rather than the rule. To most companies, design and construction seem foreign and forbidding, rife with pitfalls. Moreover, since this is one of the rare places in business where failures are memorialized in steel and concrete, to be painfully revisited day after day, companies are hesitant to make the bold moves that will yield true innovations. Because of the murkiness of the field and a lack of expe-

rience and confidence, most companies play a relatively minor role in their construction projects and ask very little of the team dragged for the task: Basically, avoid the embarrassment of being over budget and behind schedule.

It's a giant mistake, though, to be a passive consumer when it comes to one of your most important assets. The deadening combination of a hidebound construction industry and risk-averse building owners has resulted in a shameful number of soulless, mediocre buildings that miss two tremendous opportunities—to say externally what the business is about and to say internally what the company aspires to be.

This is the story of how we have tried to seize those opportunities in building the New York Times' new headquarters, a 52-floor, 1.5-million-square-foot building in midtown Manhattan designed by Renzo Piano, in association with the architectural firms Fox & Fowle and Gensler, and scheduled to open in the summer of 2007. The Times will own and occupy the first 27 floors, and our development partner, Forest City Ratner, will own and operate the rest.

Clearly, we don't have all the answers. (In fact, writing this article as the steel is still going up undeniably risks inciting the wrath of the Construction Gods.) But in the course of multiple construction projects—not only our new headquarters but numerous offices and production facilities—we have learned a series of lessons that other companies may find useful as they consider their own projects. Implicit in all these lessons: You have to push yourself as hard as you push your contractors.

Insist on Great Design

An architect friend recently recounted a conversation he had with the head of a large financial services company. The firm had just built a satellite office on the outskirts of its main community. Because the building was simply backroom space for the company, it got treated as such architecturally—nice enough but nothing special. However modest its profile in the company's overall strategy, though, the facility is visible to the community, and people refer to the building by the bank's name. The result: A prestigious company is branded with a mediocre facility.

Like it or not, all your buildings reflect your

identity. Because of that, they should be consistent with it. You don't wear Hush Puppies with an Armani suit, and you shouldn't build a Hush Puppies building—unless, of course, you're a Hush Puppies kind of company. At the same time, forget the conventional wisdom that a well-designed, well-conceived building that elegantly and distinctively conveys your company's image will cost significantly more than an ordinary structure. It needn't; in fact, it will increase the value of your investment.

But great design doesn't just materialize. Early on, think carefully about your vision for the business—both how you want it to be perceived and where you want to take it. This vision will act as a filter for selecting your designers and, as a result, will inform the building's design. If our experience is indicative, you will almost magically connect with the right architects, who will offer themes that resonate with your view of the company.

Our vision grows out of our core values: good corporate citizenship, a commitment to our employees, and the integrity and quality of our news and information. Thus, we wanted a building that would make a positive contribution to the city, create a superior work environment, and reflect our journalistic mission. An ostentatious, forbidding fortress would not express the transparency at the heart of this mission: our openness to our readers and our central function of providing news in an open and democratic society.

Renzo Piano's concept for the building perfectly meshed with this principle. After visiting the Times' newsroom during the election-night excitement of the 2000 U.S. presidential race and listening to our description of the company and its mission, Piano proposed a building in which the dynamic "factory" of the newsroom would be visible through floor-to-ceiling windows. The city would be able to see us at work—and we'd be able to see the city. The feeling of openness would extend to the lobby: Instead of the customary large and exclusionary security desk set in front of an impregnable wall of stone, the architects created an inviting space by separating the elevator banks so that visitors would be able to see almost 375 feet through the lobby to a central garden and, beyond that, to a glass-fronted auditorium.

But this grand vision of openness presented a tremendous challenge. One of the funda-

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mental difficulties in skyscraper design is how to shed the heat load of the sun warming the glass of the tower. Conventional approaches include making small windows (think of the 1960s-vintage buildings lining upper Sixth Avenue in New York) or coating the windows with reflective film (think of any suburban office complex). The trouble with these solutions is that they result, in Piano's words, in "selfish buildings" that obscure their inner workings from the street and leave employees with a dimly lit, winter-in-Helsinki workplace.

Piano's unique fix: Add to the building a sec-

ond skin, one created out of slender, horizontal ceramic rods that hang 18 inches off the glass, spaced to allow clear views but sufficient in number to block half the sun's energy. This approach gives occupants lots of natural light and the open feeling of floor-to-ceiling glass. And it offers people on the street a building animated by the movement of employees within. The view is further enlivened by the rods' glazed finish, which subtly assumes the colors of the day and season.

Shortly after we hired the architects, we assembled a broad group of leaders at the Times

The Art of Value Engineering

The surest sign that a phrase has been overused and a concept distorted is a noun morphing into a verb. Things get even fuzzier when that verb is made into an acronym. This is the case with "value engineering." It is common to hear construction folk talk about "VEing" an item out of a project because preliminary cost estimates have come in above budget.

In its crudest form, value engineering simply involves cutting the quality or quantity of materials to be used in a construction project. At its most sophisticated, value engineering is about making the project less expensive and better. Wielding a hatchet is easy and, alas, often necessary; sculpting is harder but far more satisfying.

Whether reaching for the hatchet or the chisel, avoid compromising on the elements of the building that reflect your philosophy and design. If a large open stairway that physically and symbolically links departments is an essential complement to your company's mission, as it was designed to be in the New York Times' new headquarters, you shouldn't try to achieve the same effect with a gussied-up fire stairway painted in bright colors. However, through careful collaboration, you should be able to reduce costs and meet your aesthetic objectives—for example, by adjusting the size or materials of the stairs.

The challenge of value engineering is all the greater because the exercise is usually preceded by a heart-stopping preliminary cost estimate and a conversation suffused with the all too natural panic, depression,

and dejection that follow a near-death business experience. Without the firm hand of a caring owner, there will be a rush to find the "VE" in "eViscErate."

Involve everyone. Draw on the collective talents of your team, and don't let anyone off the hook. Press the contractor to explain why the estimate is as high as it is and to seek materials and methods that could achieve the desired effect at a lower price—for example, bolting instead of welding steel connections. (If you dig, you will find cushions that have been built into the estimate as a hedge against the contractor's risk.) Press the engineer to identify instances where he's been too conservative in his design assumptions—for example, creating extra space above the ceiling to make it easier for contractors to fit in pipes, ducts, and wires. Press the architect to identify the design features that are nice but not essential—such as custom light fixtures that could be readily substituted with standard materials without compromising the aesthetic vision. And press your own organization to make choices—for instance, decreasing the floor loads versus preserving the option of high-density storage sometime in the future.

A word of caution: The voice that is likely to get drowned out in the process is the architect's. The bare-knuckle world of scrounging for savings is not particularly conducive to discussions of design philosophy. However, philosophy—and its execution in the details of a building—does affect the integrity and unity of the design, so the owner needs to ensure it is given due, but not absolute, weight.

Go where the money is. It sounds elementary, but start with the big issues. For example, reductions in square footage, more than anything else, will lower costs. Such changes, when you're working with expensive materials like steel, can yield huge savings. Many of these changes will be invisible. By contrast, going cheap on the lobby—which sets the tone for the entire building—hardly saves enough to be worth the dramatic cutback in design.

Plan rather than panic. Value engineering should not be reactive. It should be scheduled as an essential step, particularly in complex or difficult projects. Whether or not the preliminary estimate meets your budget, you will want to evaluate the project design in light of the estimate. Make systematic reviews part of the schedule, and require the architect to include as a basic service any redesign needed to stay within budget.

Hedge your bets. Estimating is an inexact science, and there is a risk that you will denude the building of special features in reaction to early estimates that later prove to be unduly conservative. When faced with difficult choices in preliminary estimates, work with your architect to create a list of building features that you want if money allows. Prioritize the list, and, more important, tie decisions to specific dates. The type of roof is an early, big-number decision, but you can wait to select bathroom tile. Working closely with your contractor, you can carefully preprice options as alternates and lock in no-penalty decision dates in the subcontracts.

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for a discussion about how the design could go beyond the building's facade to reinforce the company's vision and core values. These conversations informed a wide range of decisions, from the placement of private offices against the core of the building (letting people in the open-plan work spaces enjoy the windows and light) to our embracing Piano's proposal for stairways connecting the floors. Instead of making the fire stairs more inviting to encourage people to walk between floors, we will have an interconnecting series of stairways against the windows at the corners of the building with the best views. This refined version of the exterior escalators of Piano's Pompidou art museum in Paris doesn't only further our aim of bringing the interior of the building to life for passersby; placing the stairs in the location of the proverbial corner office physically expresses our dedication to breaking down barriers between departments.

Without an initial engaged effort to figure out just what you want your new building to say to the world and to employees, you are unlikely to achieve this happy match between architect and project. Furthermore, absent a guiding design principle, it's easy to lose your bearings during the inevitable compromising and cost cutting that will take place as the project progresses. (For a discussion of the pressures of cost cutting on design principles, see the sidebar "The Art of Value Engineering.")

Demand Meaningful Innovation

Every project offers an opportunity to reexamine the technologies that help shape your work environment. Forget this fact, and you won't get the full value of your investment.

Although your architects, engineers, and contractors will play an important role, you'll need to provide leadership to counteract the surprisingly risk-averse nature of the construction industry. "I want to be the first one who does something for the second time" is the way one of our (quickly replaced) construction professionals articulated this prevailing sentiment.

That we, the building owners, needed to drive innovations became apparent to us only through long experience. Starting in the early 1970s, the New York Times built a series of offices and production facilities for newspapers it owned across the country. The buildings were largely cookie-cutter. They worked fine, looked OK, and were built within budget. But

we never stepped back and asked what they said about the company, how they affected people's work, or how they might transform our business.

The epiphany came when we moved our printing operations from the basement of our midtown Manhattan building to two cutting-edge production facilities, one in Edison, New Jersey, and the other in Queens, New York. We found in planning those facilities that the printing equipment in the market simply didn't meet our needs for color quality, speed, and automation. So we worked with manufacturers to create new generations of equipment, a process that forced us to stretch ourselves and eventually to get comfortable with the idea of championing innovation.

That mind-set carried over to our new headquarters building, where we have made it a priority to enhance the quality of the work environment for employees. The innovations have ranged from the seemingly trivial (toilet stall doors that fit the frames without gaps and thus offer more privacy) to the obviously significant (improvements in lighting and ventilation). Experience has taught us a number of things about innovation.

Don't be afraid to think big: The lighting story. Lighting designers typically strive for an even light level—approximately 50 foot-candles, to use the technical term—throughout a building and throughout the day. Five years ago, when we built new offices for our Internet operation, we installed lighting that followed this textbook prescription. After people moved in, employees turned off the circuit breakers controlling all the lights in two large departments. Our people were asking us something that the industry, with its uniform lighting standards, clearly hadn't been hearing: Why can't we have flexible lighting levels? And then we wondered, Why can't the lights in our new headquarters automatically adjust to take advantage of the amount of daylight that will come through the floor-to-ceiling windows?

We took these questions to our architects and lighting designers, but there wasn't much practical precedent for them to draw from. So we began researching the issues ourselves—contacting people in the trade, talking to lighting experts at universities, reading everything we could on the subject. Our research led us to the Building Technologies Department at the

Lawrence Berkeley National Laboratory at the University of California. We took a ten-person team—Times people, architects, electrical engineers, and lighting designers—to the lab, where we spent a day trying to understand the gap between what the market offered and what should be standard practice. This meeting led to further pursuit of a dynamic-lighting system that would allow departments to set their own light levels and would automatically adjust the artificial light to take advantage of sunlight—and would cost no more than a conventional lighting system.

One of our first steps, spurred by the discussion at Berkeley Lab, was to transform the furniture mock-up for our new headquarters building into a full-blown test lab for lighting and shade controls. We constructed a replica of the southwest corner of the new building, its sunniest aspect, and equipped it with an array of competing technologies and products: lighting fixtures, fluorescent lighting ballasts, automated window shades. With the financial support of the New York State Energy Research and Development Authority, scientists from Berkeley Lab used 107 sensors to collect minute-by-minute data, from the winter solstice to the summer solstice. We also had employees tour and work in the space in order to test the dynamic-lighting concept.

The testing convinced us of the value of dynamic lighting. But we could never afford a one-of-a-kind installation. So, to share information and generate interest, we invited more than 450 design professionals to come and see the mock-up. We spoke at lighting trade shows, challenging the industry to adjust its pricing to make dynamic lighting a standard product. Then we solicited bids for the lights, shades, and controls. The result is that two companies, Lutron and MechoShade, are creating a package of dynamic lighting and shades that is within the typical lighting budget for a Class A building.

The effect of this lighting is profound. For much of the day, the test space is lit with the soft glow of natural light instead of harsher artificial light. An important but unanticipated dividend is that the quality of the light and the feeling of the space change with the season and the time of day. A natural circadian rhythm replaces the time-frozen-in-aspic feel of standard offices. (If you're reading this article in your office, can you tell from the light

what time of day it is? What season?)

By taking a risk on a new way of thinking and by tapping into the enormous interest and intellect of academics, engineers, government authorities, and manufacturers, we could end up helping to change the commercial lighting industry. But that's incidental to our central goal of enhancing the working environment for our employees.

Dare to challenge the experts: The under-floor-air story. Everyone knows how bad the air in office buildings can be. To address this problem, we've opted for a nascent technology that gently brings up air from under a raised floor instead of forcing it down from the ceiling. This will result not only in greatly improved air quality but also in reduced energy usage.

Look up at your office ceiling, and you will likely see two vents, one to bring in fresh air and the other to take out stale air. This conventional building practice makes little sense. To get the cool, fresh air to penetrate the warm, stuffy air that has risen to the ceiling, buildings chill the incoming air to around 55 degrees Fahrenheit and force it into the room at fairly high pressure. Sit under the vent and you freeze; sit ten feet away and you sweat. Moreover, since the return-air duct is usually placed a few yards away from the supply vent, a substantial amount of the chilled fresh air scoots across the ceiling and out the return, never coming near the people who are working in the space.

There is a better way: Leave the return vent in the ceiling but gently circulate the chilled air by pumping it through the space beneath a raised floor, the kind increasingly used by businesses to provide flexibility for future wiring needs. The cooler air naturally fills the lower, occupied area of the room; when it meets warm objects such as people and computers, convection sends it toward the ceiling vent, where the stale air is expelled. Since the system doesn't fight physics, incoming air can be chilled to a moderate 68 degrees and brought in at low pressure through adjustable floor vents placed in virtually every workstation. For added comfort, carbon dioxide sensors in the return-air ducts automatically increase the amount of fresh air when the vented air is stuffy. This approach saves energy because it requires less refrigeration and, given the higher temperature of the air pumped in,

You have to push yourself as hard as you push your contractors.

there are significantly more days when the space can be cooled at low cost with outside air. The work space is more evenly cooled, the fresh air actually circulates, less energy is used, and people have control over the local environments of their workstations.

As sensible as all this sounds—and although the concept is fairly well-known in Europe and in parts of the United States—our building will be the first large installation of underfloor air in Manhattan. Why? People think it's prohibitively expensive. The CEO of a company building its own new headquarters took a tour of our lighting mock-up, in which we'd also installed an underfloor-air system. At one point, he turned to his construction adviser and asked why their new space was designed with traditional air-conditioning. The adviser, a seasoned and respected professional, replied that underfloor air had been rejected because it would have cost \$9 a square foot.

His answer was authoritative and definitive—and wrong. The discussion-stopping estimate did not take into account the substantial savings a raised-floor system would provide—in ductwork, energy costs, and simplified workstation wiring. When you factor in those benefits, underfloor ventilation is only marginally more expensive than a ceiling system.

Challenging the cool calculus and conventional wisdom of consultants is an important step toward real innovation in your work space. Many construction professionals tend to reach for tools that are in their comfort zones. But if they are pushed to consider alternatives and to dig deeper into the true costs and benefits, they will often sharpen their cost calculations and get caught up in the excitement of doing something interesting and significant.

Of course, it's one thing to challenge conventional wisdom but quite another to rush into a faddish new design or let your contractor embark on a task when there is no solid body of knowledge about how to accomplish it. Indeed, we visited one underfloor-air installation in London at which the contractor was freelancing a solution that changed from floor to floor—an incredibly messy and inefficient approach. So we called together the 40 professionals working on the heating and ventilation for our headquarters building and another Times building in Sarasota, Florida, for an "underfloor summit" to develop a protocol for the construction of these two—and any future—

underfloor-air projects.

We also hired a lab in Texas to test the headquarters' air design in a separate mock-up. We then hired a noted professor of fluid dynamics from the University of California, San Diego, to double-check the Texas lab's experiment. These extra steps have allowed us to continue to improve the design before we install the system throughout the new headquarters building. Similarly, we bid the fixtures and controls for our dynamic-lighting system a year and a half earlier than we normally would have and then equipped the mock-up with the winning design, giving the manufacturer the opportunity to fine-tune the system before it is actually installed. The more innovative you are, the more you have an obligation—or at least the dictate of self-preservation—to make sure that bright new theories will actually work.

Don't pay a fear premium: The ceramic rods story. One of the critical design features of our new headquarters building is the double facade: floor-to-ceiling glass and an outer screen of glazed ceramic rods. The challenge was finding a way to build this unique enclosure—and doing so within a tight budget.

The usual equation for new materials is simple: new design + fear = premium price. That is, subcontractors, because they are uncertain about a new design concept, build cushions into their bids to cover unforeseen problems. In our case, the risk was heightened because a skyscraper's exterior (called the curtain wall) usually represents around 20% of the cost of the building. Even small premiums for this part of the project would have resulted in substantial monetary pain.

So the Times and its development partner, Forest City Ratner, decided to experiment with a new purchasing paradigm. We hired four curtain wall manufacturers, all likely bidders for the job, to engineer and build a sample of the wall. Going through this exercise demystified the design and removed fear from the price formula. And by drawing on the insights of four manufacturers, our architects were able to identify and simplify unduly expensive elements of the design without compromising its integrity. Having tamed everyone's fears, we invited the manufacturers to bid on the wall. Their quotes were well below initial estimates and fell within our budget.

Even then, we had a long way to go. And because we were pioneering an innovative con-

cept, it was important that we be open to serendipitous detours from the path we had laid out.

Since ceramic rods are not standard building items, the architects had to be creative in sourcing the material. Their detective work yielded a range of possible suppliers, from a company that makes tiles for the walls of the Paris Metro to a firm that makes ceramic sewer pipes. Then, to better understand how easily and uniformly rods could be manufactured, the Times and Forest City Ratner sent a team of architects and the construction manager to observe production runs at a ceramic-sewer-pipe factory in Leipzig, Germany.

There, our team watched clay being extruded, like sausage, into pipes that were then stood on end on pallets and sent on a week-long journey through a kiln. While observing this process, one member of our team noticed that the conveyor belt for the kiln was made of uniformly sized ceramic rollers that were precisely manufactured in a diameter that was very close to what we wanted. The architects located the manufacturer of the conveyor rollers and included the company in the bidding process. This firm is now manufacturing the 170,000 rods that will grace our building.

As this story illustrates, the more you push the innovation envelope, the more time you will need to investigate possibilities and develop solutions. It doesn't take a lot of time to pursue a better layout. It does take time, however, to develop a different purchasing strategy, such as the one employed for the curtain wall of our new building. It takes even more time to get an entire industry to economically offer a new product, as we did with dynamic lighting.

Get Involved in the Details

As should be readily evident, innovation is a team sport. This makes it all the more important for the building's owner to take special care in assembling the team—the architect, the engineer, the contractor, the owner's representative, and, in the case of our new headquarters building, a particularly creative developer with deep construction expertise—and in setting the tone for its work. Each member has a unique perspective and skill set, and the power of all these independent voices will be greater if the owner has taken the effort to hire wisely and create the proper team dynamic.

Sounds logical, but it doesn't usually work this way. For one thing, owners typically don't hire a contractor until the design process is well along, so they usually lack a third party who can provide a reality check for the architect's ideas. Indeed, one of the key attributes of a good contractor is the ability to offer effective preconstruction advice. Although every firm will claim to have this skill, it is surprisingly rare. If you can find a company (or, more likely, a person within the firm) with the right mind-set and creativity, the value of the advice will be enormous.

Moreover, owners all too frequently talk primarily with the architects and not with the engineers who report to them. Architects clearly have a critical role to play, but engineers also make all kinds of decisions—and compromises—that have an effect on the quality of the finished building. For example, the under-floor-air system would not have been possible if we hadn't had a quality engineering firm like Flack and Kurtz that had already done pioneering work in this area.

In selecting your team, don't just focus on the top people. In our recent projects, we have participated in the interviews of everyone reporting directly to the architect, from the acoustician to the food service designer. Reserve the right to pick team members and to veto any person about whom you have the slightest doubt. This sort of deliberation can be difficult under the pressure to keep a project moving forward, but it's time well spent if you can avoid the consequences of getting the wrong people on your job.

Once the team is assembled, the owner must set a tone of collegiality and the expectation that people will exchange information freely and challenge one another. The contractor should be free to ask questions about the intent of the design. The architect should feel comfortable questioning the means and methods. The aim is to establish creative tension leavened with mutual respect (and, of course, held in check by the budget).

One crucial point: The spirit of collaboration you establish with the architect, the contractor, and the subcontractors must be extended to the people within your company. The worst mistake you can make is to build without involving employees, at all levels. The next worst thing you can do is to make the involvement fake. Don't ask people's opinions

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Everyone on the team should conduct a detailed review of the plans and “walk the space,” looking for elements that don’t work.

unless you are willing to listen. Clearly, you are not going to conduct a popular vote on every element of the project. If you did, you’d replace design and vision with homogenized shades of gray. But you can offer people a number of choices. For our new headquarters building, we narrowed down the options for workstation partition height to three and the number of potential furniture vendors from 12 to six. With the input—not a vote but meaningful input—of a broad range of employees, we decided on the height of the partitions and finalized our furniture choices.

It’s also important that you pay careful attention to your relationship with the executive committee of your company. For instance, educate the committee about the avoidable evils of change orders, which can destroy your budget and wreak havoc on your schedule, and establish formal processes to preclude them. Given the complexity of our headquarters project and the cumulative nature of basic decisions about its design and construction, we created a request-for-guidance form. The RFG presents the company’s executive committee with an issue to settle, includes the information necessary to do so, and records the committee’s decision. By documenting such decisions and creating an institutional memory, the form not only prevents confusion but helps instill a discipline about keeping changes to a minimum.

Active involvement in the details of a project can reduce change orders in other ways. For example, everyone on the team should conduct a detailed review of the plans and “walk the space,” looking for elements that don’t work. Moving a line on a drawing is cheap; moving a wall is markedly more expensive. (If you and your people are new to reading architectural plans, make sure that everyone receives a complete primer on the symbols and other conventions.) Start at the front door, walk through what will become the corridors,

stop at the bathroom, go to your office, pretend to hang up your coat and plug in your laptop, and so on. We typically do this as a team in all-day review sessions that we call our “Where’s Waldo?” exercises because they involve searching for small but significant items—as in the Waldo children’s books—amid a dizzying amount of detail. Knowing your new building inside and out before plans leave the drafting table prevents expensive change orders.

You’ll want to remind the contractor and consultants that the price of their early admission to the process is participation in this detailed review. Otherwise, you won’t take full advantage of the opportunity to identify problems early and fix them before the bidding begins. Additionally, review the contractor’s standard specifications to make sure they accurately reflect your job and to anticipate issues that will likely arise. Elements free for the asking in the bid process are, again, very expensive once the project is under way.

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Even in this age of rampant outsourcing, a business doesn’t cede control of its core marketing, sales, and strategic decisions. Similarly, there is no reason to divorce yourself from the process of creating the environment for your business. Buildings are simply too large an investment to ignore. Push your organization to articulate its values. Convey those guiding principles to your consultants. Then work to ensure that those values are translated into a wonderfully designed and innovative structure that is a productive place to work. Whether or not you make these efforts, the financial investment is the same; the effect on your company will be remarkably different.

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