

## **ROLE AND SELECTION OF CONSULTANTS**

### **7.1 The Meanings of Consultant**

From a contractual, formal perspective, consultant usually refers to a consulting firm that enters into legal agreements with clients, owners, and customers for the provision of services.

On a personal basis, individuals within many client, owner, and customer organizations view “consultant” as a particular person, or perhaps a small group of professionals, on the staff of a consulting firm who have demonstrated competence and with whom they have established a mutually-beneficial relationship. One indication of this interpretation of “consultant” is the strong allegiance to individual professionals that clients, owners, and customers show when a particular engineer or other technical professional moves from employment in one consulting firm to employment in another firm or establishes his or her own consulting practice. Another indication of this personal view of “consultant” is when a person who works for an organization that uses consulting firms moves to another organization that uses consulting firms “takes his or her consultant along.”

This second, more personal interpretation of “consultant” suggests that a trustful relationship is critical in carrying out the consulting function—expertise is necessary, but clearly not sufficient. One of the highest compliments that an individual consultant can receive for him or her, or for his or her firm, is to be retained on a sole-source basis by a prospect that is a potential client, owner, or customer. The necessary trust is earned, in part, through consistent, long-term, no-matter-what-happens ethical behavior.

### **7.2 Why You Should Care**

As an engineering student or entry-level engineer or other technical professional on the staff of a government entity, a manufacturing organization, a contractor, or other organization that may retain consultants, you should be familiar with the role and selection of consultants. Similarly, if you are on the staff of a consulting organization, essentially all of the projects you work on will be the result of the selection process described in this lecture.

Although as an entry-level professional you will not play a major, formal role in the consultant selection process, you will have opportunities to participate in it. If, for example, you are on the

professional staff of an organization that utilizes consulting firms, you should observe the manner in which various firms present themselves and, then if selected, provide services and, as opportunities arise, share your preliminary conclusions with colleagues and superiors within your organization. If you are a member of a consulting firm, you can note the variations in the expectations of your clients, owners, and customers and share that information with others. Understanding the role of consultants, being familiar with the selection process, and acting on that knowledge will enable you to be a more productive young professional regardless of where you are.

Looking beyond your early career, you may already see the possibility and desirability of starting your own business. It might be a consulting firm that provides services or a business that uses such services. Whether you are a student or young practitioner, you may be asking yourself questions like the following within a decade of completing your formal education:

- Is my job security fading?
- Would I prefer career security, that is, always being employed doing what I love and being fairly compensated for it?
- Is the corporate, government, academic, or other bureaucracy getting me down?
- Am I stagnating intellectually and/or emotionally?
- Am I increasingly concerned about how much I work relative to how little I earn?
- Am I tired of pay-for-performance talk?
- Do I want more autonomy?
- Could I “do better” in achieving success and significance?

Depending on your particular set of questions at that future time, you may decide that now is the time to “fly solo,” to go out on your own, to start your own business. With that possibility in mind, you should be even more mindful the role and selection of consultants:

### **7.3 Why Retain a Consultant? Let’s Do It Ourselves!**

Consultants, in the form of consulting firms or individual professionals, are typically retained for one or more of the following five reasons:

**1. Temporarily Acquire Necessary Expertise:** In this increasingly technological world, many business, government, academic, volunteer, and other organizations, even those with engineers and other technical professionals on staff, do not have certain types of expertise. While they could develop such expertise, they are often reluctant to do so, to incur the necessary cost, unless they see a continuous need for the expertise. Accordingly, they seek a consultant who has that expertise. Executives of organizations planning to develop in-house expertise should consider contracting with one or more consultants to provide education and training in the desired area of expertise, in addition to completing the project or projects at hand.

**2. Supplement In-house Personnel:** Regardless of whether or not an organization has the necessary in-house expertise to carry out a project or accomplish a task, they may not have a sufficient number of staff members available at a given time to complete the project or task on schedule. Accordingly, they solve their “people power” shortage through the temporary use of consultants.

**3. Provide Absolute Objectivity:** A business, government, academic, volunteer, or other organization, even one with wide expertise and sufficient staff, may find itself embroiled in controversy, the resolution of which requires a high degree of objectivity which can be provided by a carefully-selected consultant.

**4. Perform Unpleasant Tasks:** Carrying out unpleasant tasks or doing the “dirty work” is rarely the sole or principal purpose a consultant is retained, although it may be the principal focus of a management consultant. However, engineering and other technical projects, particularly those in the public sector, often involve unpleasant and stressful tasks. For example, the long-term and frequent failure of crucial city facilities and services such as water supply, wastewater, transportation, and flood control can lead to deep-seated and widespread frustration among citizens of a community. Consultants are often retained to find a planning and engineering solution to such problems. Regardless of the other reasons why the consultants might be retained—such as to provide expertise, needed staff, and objectivity—the consultants are often expected to release, deal directly with, and re-channel the pent-up frustration within the community. Consultants may also be asked to facilitate cooperation among conflicting private and public entities.

**5. Reduce liability:** This, the fifth and last reason for retaining a consultant should “raise a red flag.” You and your firm may be retained partly or primarily to absorb risk that will be shifted

from someone else or some other organization to your firm. Your client, owner, or customer may be a consulting firm, a contractor, or a government entity. Technical specialties within engineering that are generally considered to be more risky include geotechnical, structures, and hazardous waste. Consulting firms offering these services should be especially cautious with contract and agreement language, exercise great care in performing tasks and writing reports, and secure errors and omissions insurance.

#### **7.4 Characteristics of Successful Consultants**

**1. Inquisitiveness and Currency of Knowledge:** Recall that the consultant is often retained to provide expertise the client, owner, or customer does not possess. Consultants, as individuals or as organizations, should define their areas of expertise and remain current in them. On the surface, one might think that consultants are successful primarily because of the answers they provide based on their knowledge and skill.

However, the questions they ask those they serve and themselves, based on their knowledge, skill, and experience, are more important than the answers they give. Once key questions are asked, the consultant knows how to find the answers. The successful consultant is a perpetual student.

**2. Responsiveness to Schedules and Other Needs:** Recall that the consultant may be retained because the client, owner, or customer does not have the personnel to complete a task or do a project. If the effort is late because of the consultant, the principal reason for retaining the consultant is negated. Responsiveness to client, owner, or customer needs and schedules requires that the consultant have a strong service orientation. Too many engineers think that consultants are in a technical business that just happens to provide service. A more productive perspective is to view their effort as being in a service business that happens to focus on technology.

**3. Strong People Orientation:** Although technical professionals plan, design, construct, manufacture, and care for “things,” they do this for the benefit of people. The consultant is the very important part of the interface between the wants and needs of people and the possibilities of meeting those expectations with the applications of science and technology. Wants and needs, and the distinction between them, are discussed in the next chapter. Because responding to wants and needs is critical, effective consultants strive to develop excellent communication skills. Successful consultants enjoy interacting with people—even under unpleasant circumstances. The people

challenges of consulting are further complicated by frequent changes in current and potential clients, owners, or customers and their liaison persons.

**4. Self-motivation:** Even though an individual consultant is “working for” a client, owner, or customer, that entity’s representative often does not know how to direct the consultant or have the time or the inclination to do so. Accordingly, most of what consultants do for those they serve is at the consultant’s initiative within the overall framework established by the agreement between the two. The organizations being served typically assume that if they are not hearing anything from “their consultant,” the consultant is proceeding with the project in a timely fashion. Moreover, the consultant will be available, on a very short notice, to answer a question, give advice, or provide a status report or other accounting of the efforts to date. Consultants must have the self-discipline to be proactive to the point of being intrusive in their relationships with those they serve.

**5. Creativity and Innovation:** Consultants must have the ability to be creative and innovative, to synthesize, and to see previously unforeseen patterns and possibilities. The typical technical project involves technical, regulatory, financial, economic, personnel, and other facets, all of which can be easily assembled in a variety of ways, most of which are suboptimal. A consultant’s combination of knowledge, skill, varied experiences, and objectivity should enable him or her to suggest approaches and solutions not apparent to others.

**6. Physical and Emotional Toughness:** The successful consultant needs physical and emotional strength to withstand pressure, long hours, and travel. Some of the consultant’s meetings and presentations are difficult because they occur in situations highly charged by personality conflicts, political pressure, financial concerns, and liability issues. In addition, consultants are often not selected for projects even though they believe they were the most qualified or had the best proposal. Frequent rejection can take its toll on conscientious and competent individuals, but is one of the realities of the consulting field.

### **7.5 Consultant Selection Process**

The process by which a client, owner, or customer selects a consultant to provide planning, design, construction, manufacturing, operations, facilitation, education-training, or other services is, at the detailed level, unique to each situation. However, you can gain useful insight into consultant selection by considering the overall approach or model presented in this section.

### **7.5.1 Cost versus Quality**

Almost always the consultant selection process is driven implicitly or explicitly by the natural tension that exists between the quality of service and the total cost of that service and what it produces or yields. In a rough way, as the proposed cost of well-defined consulting services for a given project diminish, the quality of the resulting plan, design, or other product is likely to diminish and the capital and operation and maintenance costs associated with the product are likely to increase. Whether functioning as an individual, in our personal lives, or as a clients, owners, or customers in professional life, we get what we pay for.

### **7.5.2 Price-Based Selection**

The price of consulting services is certainly important and this can lead to price-based selection (PBS), that is, selecting a firm solely or mostly on the basis of price (fees plus expenses). Because price can be readily quantified relative to other selection factors such as experience, creativity and innovation, responsiveness, communication effectiveness, and productivity, it tends to assume excessive influence.

Unusually low fees proposed by consultants sometimes reflect a lack of experience and, therefore, unawareness of all necessary aspects of a project. At other times, low fees might reflect an individual consultant or a consulting firm's desire to obtain a contract for a new type of project on which they can gain valuable experience. They are, in effect, willing to "buy" (lose money or make little or no profit on) the assignment in exchange for the knowledge they will gain. This objective might be achieved at significant additional cost to the client, owner, or customer.

Most people and organizations retaining consultants know that they should avoid being penny-wise and pound-foolish. However, a completely rational approach is not always possible because of insufficient information. Consultants must put themselves "in the shoes" of the prospect's decision-makers, particularly those who are public officials subject to public scrutiny. The basis for that scrutiny could be an article in the next day's local newspaper or a feature on a news program that compares proposed fees plus expenses for various consulting firms. Officials may be hard pressed to justify a large proposed price over a small proposed price when, at least at the surface, the resulting proposed deliverables appear identical. Remember, at the time of consultant selection, the total cost of the project (consultant fee plus expenses, construction or other

implementation, and long-term operation or use) is usually not known or is not perceived as an important factor.

Refer to Table 7.1, which is an accounting of all costs for a hypothetical project. Note that the consulting cost ultimately paid by the owner is a small part (2.5 percent) of the total present worth cost that will be incurred by the owner in obtaining and using the structure, facility, system, product, or process.

Table 7.1 Consulting fees are typically a very small fraction of the total life-cycle cost for an engineered project as suggested by this hypothetical accounting of costs.

Design fee proposed by consultant	KSh.10,000,000.00
Construction/manufacturing cost to client, owner, or customer (usually not known when consultant is being selected)	200,000,000.00
Total initial capital cost to client, owner, or customer	210,000,000.00
Operation and maintenance cost (present worth) incurred by client, owner, or customer over the economic life of the structure, facility, system, product, or process (usually not known when consultant is being selected)	190,000,000.00
Total (present-worth) cost to client, owner, or customer (usually not known when consultant is being selected)	KSh.400,000,000.00

While professional service costs proposed by various consulting firms are often known before the potential project gets underway, the remainder of the total project cost, and by far the largest part of the total project cost, is largely unknown. Therefore, the decision makers within the prospect organization must make a decision without complete fiscal information. This is one reason some users of professional services slide into PBS, that is, they place too much emphasis on relative magnitudes of the proposed consulting costs and not enough emphasis on the likely total cost that they will incur as a result of the consultant they select. The wide range in consulting fees proposed on ostensibly the same project further complicates the matter.

Note in Table 7.1 that a Ksh.1000, 000 or a 10 percent savings in the consulting fee reduces the total cost to the prospect by only 0.25 percent for the hypothetical example. Of course, this assumes that the consulting firm billing 9,000,000 can produce the same quality product as the consulting firm billing 10,000,000. If they can't, because of insufficient knowledge, experience, or attention,

the resulting increases in construction, manufacturing, operation, and maintenance costs could easily more than offset their lower up-front fees.

Even much larger savings in up-front consulting fees will tend to result in only small savings in total project costs. For example, if one consulting firm proposes to do the hypothetical project for 5,000,000, a 50 percent savings relative to the consulting firm proposing to do the project for 10,000,000, the reduction in total project cost is only 1.25 percent. This unrealistically assumes that the “low cost” firm can produce a product of similar quality to the “high cost” firm.

### **7.5.3 The Ideal Selection Process**

Ideally, clients, owners, and customers should select consultants based on the goal of minimizing their total costs. This ideal selection concept is illustrated in Figure 7.1. The costs or prices proposed by potential consultants A, B, and C vary widely with the largest cost being approximately twice the smallest cost. Similarly, there are significant variations, although not as dramatic in a relative sense, in the present worth of the construction, manufacturing, operation, and maintenance costs that the prospect would incur over the life of the structure, facility, system, product, or process.

Of course, as already noted, the organization seeking professional services is not likely to know these total costs, or even relative values of these costs, at the consultant selection stage. If they were known or could be known, the prospect would obviously determine the total cost associated with each of the three potential consultants and select the consultant that would offer the lowest total cost. This would be consultant B in Figure 7.1. While design accounts for a small fraction of the total project cost it is the primary determinant of that total cost. Retaining competent design professionals increases the probability of achieving the lowest total cost consistent with quality that is, meeting all project requirements.



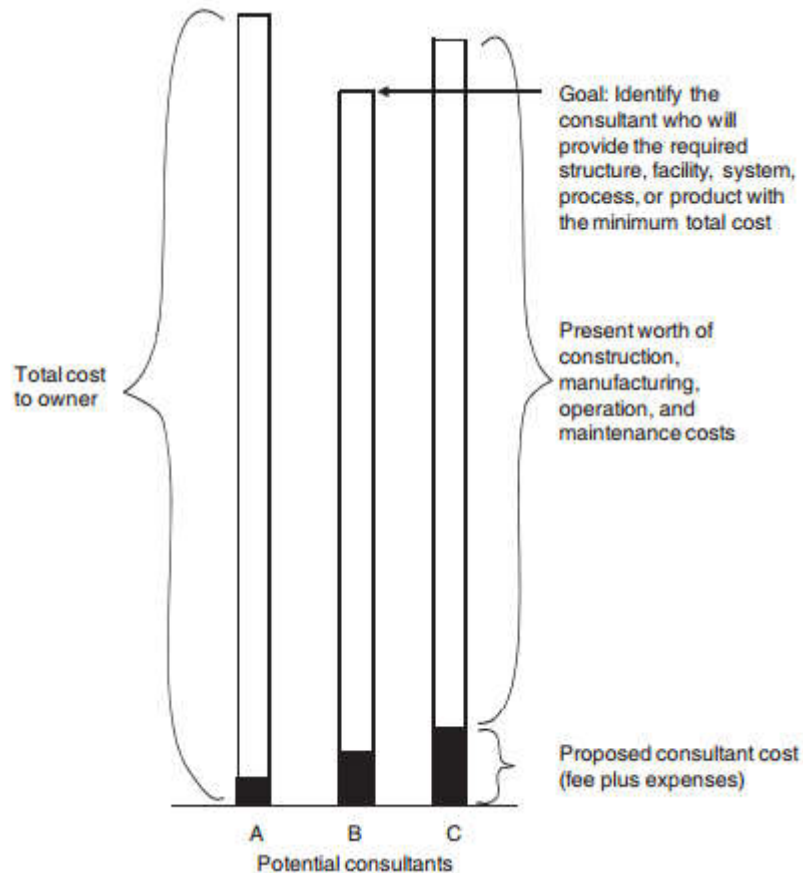


Figure 7.1 Ideally, the process used to select consultants should consider total costs.

#### 7.5.4 Qualifications-Based Selection

As an alternative to PBS, the consulting industry and others advocate qualifications based selection (QBS). This consultant selection process may be described as follows. “After firms are evaluated and short-listed based on their qualifications, the top-ranked firm is selected for price negotiations, and a fair and reasonable price is reached based on a detailed scope of the project. If agreement on price cannot be reached with the most qualified firm, negotiations commence with the second most qualified firm. In the vast majority of cases the top ranked firm is selected at a price that fits the client’s budget.” Adding credibility to QBS is its endorsement by professional organizations that are not within the consulting industry.

Researchers “conducted an extensive survey of projects and analyzed the impact of QBS on project outcomes” (Chinowsky and Kingsley 2009). Key findings of the study, quoted from it, are that QBS:

- Ensures cost-effectiveness: Hiring the most qualified professional design services provider at a reasonable price is the best way of ensuring that the final constructed project is completed on time and on budget.
- Lowers risk for complex projects: Owners expressed special interest in using QBS on projects with higher risk factors and/or higher design complexity.
- Results in better projects and highly-satisfied owners: 93 percent of owners surveyed on QBS projects in the study rated the success of their final project as high or very high.
- Takes account of emerging societal issues: The team found that QBS procurements were more likely to address emerging social needs, such as sustainability, than cost-based procurements.

Encourages innovation, protects intellectual property: The study confirms widely-held views that QBS promotes a higher level of innovation. In addition, there was a high degree of satisfaction on the part of design firms that the intellectual property included in the innovation was properly protected.

- Supports owner capacity building: QBS allowed owner organizations to gain specialized quality services from design firms as an extension of staff.

### **7.5.5 Steps in the Selection Process**

As noted at the beginning of this discussion of consultant selection, the detailed process a particular client, owner or customer uses to select a consultant to provide other services, whether under PBS or QBS, is unique to each situation. However, many steps common to the consultant selection process can be identified and linked together as shown in Figure 7.2, for discussion purposes. Beginning with “Start,” the most formal and involved selection process is the series of Steps 1 through 12 proceeding clockwise around the figure. Various optional shortcuts are possible and are frequently used by users of professional services, especially those in the private sector.

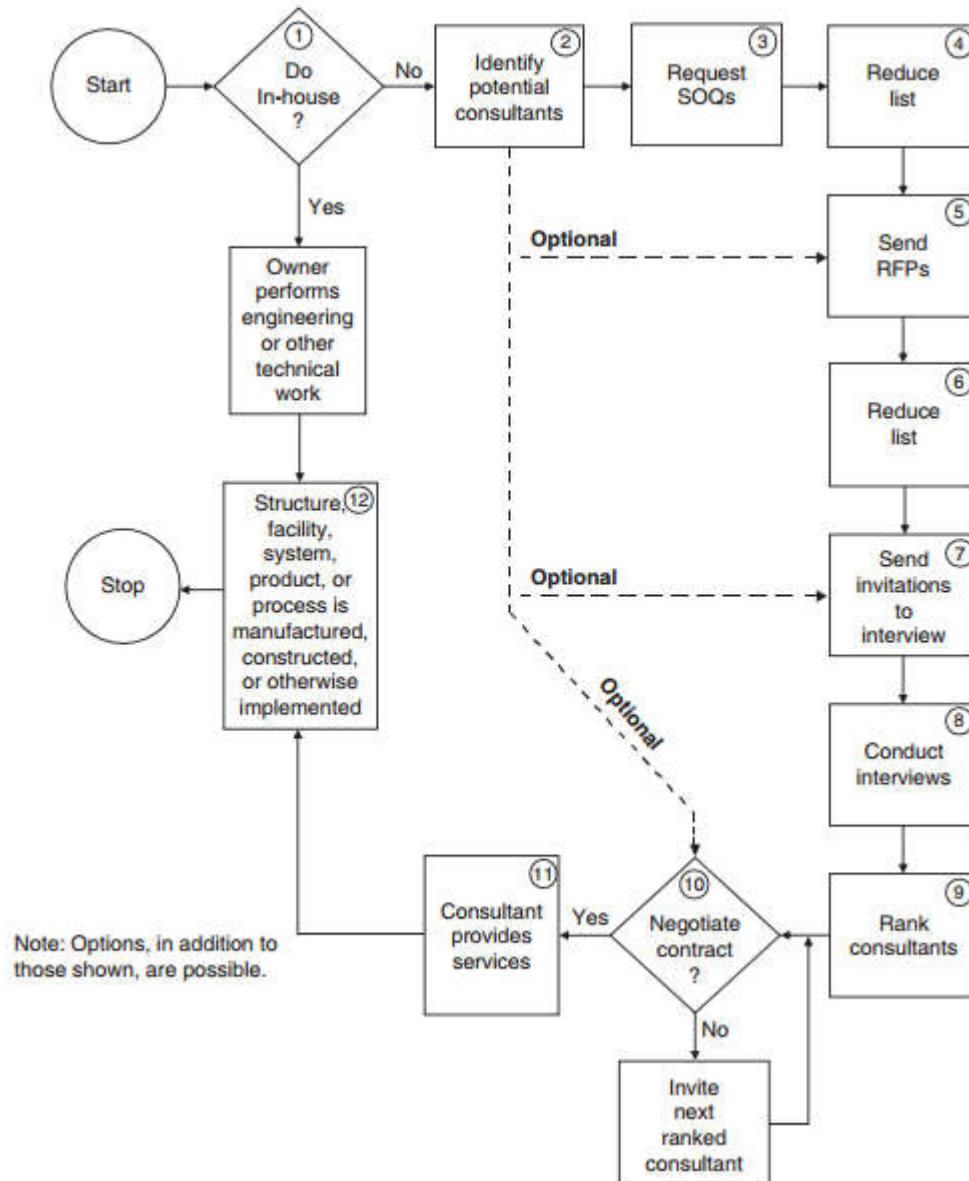


Figure 7.2 While the process used by clients-owners-customers to select consultants is unique to each situation, most selection processes are combinations of some of the steps shown here.

**Step 1-Do in-house?** The client, owner, or customer determines whether or not a consultant will be retained for a task or project. Recall the five basic reasons to retain a consultant as discussed earlier in this chapter. Assume a consultant is to be utilized.

**Step 2-Identify potential consultants:** The entity needing a consultant, possibly with the assistance of a selection committee, identifies potential consultants. A list of potential consulting firms might be assembled using personal and other first-hand knowledge, referrals from colleagues

at other organizations, formal listings such as those appearing in directories of engineering organizations, business cards appearing in professional publications, internet searches, and even the yellow pages in telephone books. Some firms may have been prequalified for certain service categories.

**Step 3-Request SOQs:** After screening the list, the client, owner, or customer requests statements of qualifications (SOQs) from consulting firms that presumably have the ability to provide the necessary services. In some cases, and they are usually government organizations, a request for SOQs is published, as in a newspaper or on website, and any firm may respond. SOQs are usually standard, “off-the-shelf” items or documents readily assembled from standard text and graphics maintained on computer systems. SOQs usually include basic information about the consulting firm such as its size; office location or locations; services offered; clients, owners, and customers served; references; experience with emphasis on projects similar to that about to be undertaken by organization receiving the SOQ; and resumes of selected professional staff on relevant projects. An SOQ typically does not address the manner in which the consultant, if selected, would approach the specific project. However, respondents may decide to include some project-specific ideas and information.

The checking of a firm’s references, that is, a representative list of current and past organizations they have served, would seem to be a very effective way to screen consultants. After all, who is in a better position to comment on a firm’s services than those who have received those services? Of course, and as noted, the references must be truly representative. One way to assure this is for the client, owner, or customer to ask each candidate consultant to provide the names of all organizations receiving certain services (e.g., manufacturing process, highway planning, and management assistance) over the past few years, along with permission to contact any or all organizations on this list and inquire about any aspect of the services received.

**Step 4-Reduce List:** One or more of the prospect’s professionals review the SOQs and match the perceived needs of their project with their interpretation of the experience and ability of each consulting firm. Firms judged to not have adequate qualifications are eliminated from further consideration. Other factors are likely to influence this step such as trustful or mistrustful relationships between individuals employed by the client, owner, or customer and those employed

by one or more consulting firms. The next chapter stresses the importance of trust in marketing consulting services.

**Step 5-Send RFPs:** The organization seeking a consulting firm now invites firms remaining on the eligibility list to describe how they would complete the specific project and often asks interested firms to include an estimate of the cost of their services. RFPs typically include items such as a letter of explanation and invitation; a description of the project; an explanation of the required scope services (e.g., feasibility study, preliminary engineering, preparation of plans and specifications, construction management, start up, education and training); a project schedule; and the due date for the proposal. A list of available related reports, studies, and investigations; a description of available data and information from or known by the prospect; the name of a contact person; an indication of whether or not the proposers should provide an estimate of the cost of services; and/or a description of Youth Business Enterprise, Women’s Business Enterprise, and Disadvantaged Business Enterprise, requirements may also be included.

Each consultant receiving the RFP typically re-visits its initial decision to pursue the project. In the interim, a firm may have learned more about the project and, based on that new knowledge, may decide to not pursue the project further. The effort required to prepare a proposal in response to the RFP is typically an order of magnitude greater than the effort required to assemble and submit the SOQ because, as noted, the SOQ is assembled from pre-prepared materials. In contrast, a proposal that is submitted in response to a RFP is a largely original document requiring considerable time and effort, including that of high level and, therefore, costly professional personnel. In fact, the likelihood of a consultant successfully and profitably completing a project, assuming it is ultimately selected, depends on the care used to prepare the proposal. The typical proposal must be prepared with a clear understanding of the project requirements and, in response, what the consultant will do, how the consultant will do it, how long it will take, and what it will cost. In a sense, the project is worked out “on paper” as part of the proposal preparation process.

**Step 6-Reduce List:** Using the project-focused information provided by consultants receiving the RFPs, the prospect’s personnel eliminate some consultants from further consideration. Factors may include one or more of the following: poor responsiveness to the RFP; indications of creativity and innovation, that is, including too much or too little; specific personnel to be assigned to the project;

experience or lack thereof on similar projects; results of reference checks; list of deliverables; and, of course, the proposed price if it was requested under a PBS approach.

**Step 7-Send invitations to interview:** The selecting organizations invite the remaining consultants to interview for the project. Each firm receiving an invitation to interview is likely to accept. However, as was the case when a firm was invited to prepare a proposal in response to a RFP, a consulting firm may re-visit its initial decision to pursue the project. In the time that has passed since submitting the proposal, additional information may have been obtained about the potential project or the prospect might cause a reversal of the original decision. This re-visiting of earlier decisions to pursue the project is prudent because of the additional time that will now be required to prepare for the interview. Although, in some cases an interview is a relatively informal affair requiring minimal preparation, in other situations an interview is a formal event requiring a major investment by the consulting firm. The labor and expenses invested in assembling SOQs; preparing proposals in response to RFPs; and getting ready for, participating in, and following up on interviews all add to the consulting firm's overhead.

**Step 8-Conduct interviews:** Each interview is typically conducted in private. The consulting firm's team usually consists of a principal of the firm, the person who would manage the project, and one or more members of the designated project team possibly including a specialist with expertise specifically related to the project. Incidentally, consultants sometimes send a team to the interview that is not representative of the team, particularly the project manager and key members of the project team, that would actually work on the project. This "bait and switch" tactic, while it might enhance the interview, is a poor business practice and some would argue is unethical. The best approach to follow is "what you see is what you get." The consulting team may provide additional text, tables, figures, and other printed material prior to or at the interview. In addition, the consulting team may use audio-visual materials such as posters, computer presentations, slides, transparencies, videotapes, and equipment demonstrations. After some sort of formal presentation by the consulting team, the prospect's team typically asks questions and a general discussion ensues.

The consulting team attempts to develop rapport with the prospect's selection team and the selection team tries to determine if a good working relationship could be established with the consulting team. Although difficult to measure and sometimes denied, interpersonal "chemistry"

probably becomes a significant factor at this point in the overall selection process because the selecting organizations and each potential consultant are now interacting with each other in a manner that roughly approximates the working relationship that would exist on the project. Interviews often conclude with a closing statement by someone on the consulting team.

**Step 9-Rank consultants:** Based largely on the interview, but perhaps on additional consideration of the proposal received prior to the interview, the client, owner, or customer representatives typically rank the competing consultants. This is a difficult task because of the voluminous amount of quantitative and qualitative information, including the personalities of participants, that is now available.

**Step 10-Negotiate contract:** The prospect and the first-choice consultant try to negotiate a contract. The first-ranked consultant is invited to prepare an estimate of the cost of services, or maybe a complete contract for professional services, and present it in draft form as the basis for negotiation. Typically the consultant will re-visit the proposal submitted earlier, convert it to contract language, make modifications based on ideas and information obtained during and subsequent to the interview, and submit the new document to the prospect. Somewhat self-laudatory language and other terminology that sometimes appear in proposals should not appear in a draft contract or agreement.

After a draft agreement has been sent to the client, owner, or customer, typically one or more of their representatives meet with one or more representatives of the consulting firm to review the document in detail and arrive at a mutually-agreeable contract. Occasionally the two parties are not able to arrive at a mutually-acceptable agreement, in which case the organization seeking a consultant is most likely to enter into negotiation with the second-ranked consulting firm.

**Step 11-Consultant provides services:** The consulting firm now draws on its technical expertise, coupled with much of the professional knowledge, skills, and attitudes discussed in this course, to provide the agreed-upon services. This is “where the rubber hits the road” and the likelihood of future engagements, positive references, and career-long relationships is determined.

**Step 12-Structure, facility, system, product, or process is constructed, manufactured, or otherwise implemented:** Sometimes the consulting organization is involved in this step. For example, a mechanical engineering consulting firm that designed a new manufacturing process

might be retained to supervise the installation and start-up of the process. A civil engineering consulting firm that designed a high-rise structure may be retained to monitor, but not supervise, its construction so that the structure's owner knows the degree to which the construction is conforming to the plans and specifications. Some consulting firms provide even broader services with respect to engineered structures, facilities, and systems. For example, design-build firms do both design and construction; other firms offer operation and maintenance services; and a few organizations offer all or most of the preceding plus finance services.

### **Welcome Exceptions**

As indicated earlier and illustrated with the dashed line examples in Figure 7.2, several optional, shorter, and simpler consultant selection processes are possible and often most welcome because they reduce costs for all concerned and reflect the positive effect of trustful interpersonal relationships. For example, the client, owner, or customer generally familiar with the consulting community might move directly from Step 2, identify potential consultants, to Step 5, send RFPs, thus eliminating requesting and reviewing SOQs. An even shorter version of the overall process is to move directly from Step 2, identify potential consultants, to Step 7, and extend invitations to interview. This shortcut might apply in situations where a client, owner, or customer is very familiar with the qualifications of a set of consulting firms and wants to focus immediately on how any one of those firms would go about doing a particular project.

Sometimes most of the process is omitted, and this is most likely to happen in the private sector, when the experienced user of professional services goes from Step 2, identify potential consultants, to Step 10, and negotiate a contract. The organization desiring professional service predetermines which consulting firm is most likely to provide the desired services at an acceptable cost and invites that firm to learn about the project and negotiate a contract. As noted at the beginning of this chapter, one of the highest compliments that an individual consultant or consulting firm can receive is to be retained on a sole-source basis.

### **7.5.6 Price-Based Selection: Three Costs to the Consultant**

Participating in PBS, instead of QBS, can result in up to three “costs” to the consultant and often all three.



## **Offering Less Than We Could**

The first cost occurs during the proposal and contracting phase. Because price will drive the selection, the professional must carefully and narrowly respond to the prospect's RFP or other description or knowledge of wants and needs. The proposal preparer must "sharpen his or her pencil."

Some of the relevant and valuable knowledge gained through education and experience may not be used – the budget won't allow it. For example, the consultant preparing the proposal may believe that a stakeholder involvement program is needed if the designed facility is to be ultimately supported by the public and be constructed.

However, stakeholder involvement is not being requested and would, therefore, add upfront costs that are likely to jeopardize selection.

Or the type of solution that the prospect wants may not, in the judgment of the professional, be the most effective in the long run. If a range of options were to be explored, which would add design costs, a solution with a lower life-cycle cost would be likely. But, the extra professional service costs would be counterproductive in the PBS environment.

You might ask what is this first cost to the consultant? It is the frustration caused by not being able to fully share the benefit of one's education and experience with the prospect. Even the ethically-disadvantaged service provider would seem to be affected, that is, to experience this frustration. The foundation of our profession is its growing body of knowledge that we strive to learn, add to, and use to serve others. Underutilizing that body of knowledge in order to win in a PBS process seems just plain wrong. Would we want our medical doctor, financial advisor, attorney, or child's teacher to draw on only part of what they know about meeting needs in exchange for reduced compensation?

## **Further Reduction in Profit**

The second cost to the consultant, which is related to the first cost, occurs during the project. Assuming that we have been fortunate (or unfortunate?) to be selected based on our low "bid," which probably included a less-than-normal profit, we now begin to provide the promised scope and deliverables. Our intent is to do so in as "bare bones" a manner as possible.

As we proceed, however, those important project elements we omitted to yield the lowest bid, simply do not go away. They are now planted in our subconscious mind and keep creeping into our conscious mind. We try to clip them but many of us, remembering what we left out when preparing the price-base proposal and possibly driven by ethical concerns, succumb to the temptation to put some of those valuable elements back into the project.

Maybe we are compensated for some of this consultant-driven scope creep because we are able to convince the client, owner, or customer that the additions are warranted. In many cases, we unilaterally add services for which we are not compensated and lose monetarily. Our firm, in effect, further reduces its profit margin or effective multiplier on the project or our effective hourly rate declines even more. This is a monetary cost attributed to our choosing to participate in PBS; it comes out of our pockets.

### **Damaged Reputation**

The third consultant cost arises when our portion of the project, be it a study, a plan, a design, construction, manufactured product, a process, or workshop is completed.

Maybe it begins even before our work is done. This cost emanates from the client, owner, or customer increasingly realizing that the project is deficient. Perhaps citizens and their elected representatives are expressing opposition to the project. In retrospect, stakeholder participation should have been an element of the project. Or maybe insightful decision makers are asking questions about other options considered and the real or life cycle-cost of the option that was selected from the outset. More analyses should have been conducted. Or in-house workshop participants complain that the outside facilitator was not aware of important organizational issues and, therefore, the workshop fell far short of expectations.

An ethical client, owner, or customer will accept some of the blame for what are increasingly seen, as a project progresses, to be project deficiencies. Others won't. Regardless, our professional services firm is likely to be criticized for not learning and addressing all the issues and for not appropriately drawing on our and our professions' body of knowledge. Increasingly, the client, owner, or customer and perhaps stakeholders will ask "what were we, the consultants, thinking?" Thus we arrive at the third consultant cost of PBS: Frequent and widespread allegations of deficient services. And we consultants rise or fall on our reputation.

## 7.6 Final Thoughts

Perhaps you agree with, or are you at least considering the merit of, the preceding three consultant costs of participating in PBS. If so, a logical follow-up question is: why do consulting firms do it, that is, why enable ourselves and our firms to incur these costs?

One reason we do this is to survive. In the short run, little or no profit seems better than none at all. Another reason to engage in PBS is to “win” a project for the knowledge and/or contacts it may provide. I have done this, “lost my shirt” in the process as planned, and may do it again. However, these are focused and few and far between.

Maybe we participate in PBS because we are in the commodity business. We reason that many organizations do what we do, that is, the services we provide. We all do it essentially the same way. Therefore, price is the differentiator. Perhaps your firm is doing well financially and psychologically with this commodization business model. If so, ignore the preceding three-cost argument.

For the rest of us, let’s include in our Go/No Go process careful probing of the probable bases for consultant selection. Study the RFP; question the prospect; review previous experience with the prospect; and ask colleagues about their experiences with the potential client, owner, or customer. If “price” is going to be a major selection factor, think of the three costs we may incur if we are “fortunate” enough to be selected.

Think also of the ethical implications of participating in a process that, from the outset, is not designed to serve the long-term best interest of those we serve and their stakeholders. Besides the three costs we are likely to incur, consider the costs that will probably be incurred by those we serve, as explained by the English philosopher John Ruskin:

It is unwise to pay too much, but it is worse to pay too little.  
When you pay too much, you lose a little money, that is all.  
When you pay too little, you sometimes lose everything  
because the thing you bought is not capable of doing the thing it  
was bought to do.

The common law of business balance prohibits

paying a little and getting a lot—  
it can't be done.

If you deal with the lowest bidder,  
you might as well add something for the risk you will run  
and if you do that,  
you will have enough to pay for something better.

Already as a student, you should understand the role and selection of consultants because you may want to be one during some of your career and/or your organization, or even you, may use their services. Consultants are essential within the engineering profession because, depending on the situation, they provide necessary expertise, supplement in-house personnel, offer objectivity, perform unpleasant tasks, and reduce liability. Being a consultant is both demanding and satisfying. The consultant selection process, whether viewed as a member of a consulting firm or a member of an organization that uses consulting services, is complex and costly. The use of PBS or QBS inevitably influences the outcome. Use of QBS is more likely to lead to a win-win result, that is, protect the best interests of clients, owners, customers, and stakeholders and the consulting firms that serve them.

The bitterness of poor quality  
remains long after the sweetness of low price is forgotten.

(Anonymous)