

# BUSINESS PRACTICES

for successful firms

## Value Based Compensation

### From Concept to Reality

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Structural Engineers and their firms have struggled for more than 100 years with what they consider to be inadequate fees for services. Is this because the public does not understand the structural engineer's value, or because the SE himself does not understand the value he is providing the client and cannot, therefore, effectively communicate the value they bring to a project? The solution to a problem as old as this one will not occur overnight, but you may find it heartening that there are ways of promoting your business to encourage your client to recognize the value you offer and be compensated for it fairly.

### Problem Definition

Structural engineering services have become a commodity. The selection of structural engineering firms for a project is primarily price driven. Price competition has driven structural engineering fees down, despite a strong economy and a shortage of engineers. Many engineering firms have a heavy backlog of work, but are operating at a low level of profitability. Engineering firms routinely require their staff to work overtime in order to keep up with the workload.

In response to diminished fees, many structural engineering firms have compromised the scope of services that they furnish their clients. The low profitability of structural engineering firms has served to keep salaries of structural engineers depressed below those of other professions that require less training and responsibility. This has served to discourage talented students from entering the profession.

### Problem Causes

Although it is easy to blame external forces for the present situation, the structural engineering profession has been an evolutionary process, for both internal business decisions as well as external forces. Structural engineers will often sacrifice profit for the sake of professionalism. Priority is given to guarding public safety and preserving one's reputation. It is rare for a structural engineer to intentionally provide a substandard service to insure profitability.

Structural engineering is a profession that can offer significant gratification from designing structures, and seeing them being built and taking form. Often engineers will pursue projects because they desire the opportunity to design them, not because of the profit they will earn from the project. Taking these desirable projects can motivate an engineer to accept a lower fee than he would if he viewed the project only as a business transaction. Interestingly, these are the same dynamics that attract engineers into the profession, knowing full well that their talents could earn greater rewards elsewhere.

### Cost Based vs. Value Based Compensation

It has been common practice for structural engineers to base their fees on their cost to produce the services. In calculating fees, engineers will usually estimate the hours that a project will require and apply hourly rates that are based on salaries and overhead with a modest profit. If structural engineering fees were based on their value to the project or to the client rather than on their cost, considerably higher fees would be justified. The engineer could afford to perform a more comprehensive and more valuable service. This is often a win-win situation for both the engineer and the client.

### Definition of Value

What is perceived as valuable to an owner is often very different from what a structural engineer believes represents the value of his services. Owners will only pay higher fees for what they perceive as having value. Furthermore, an architect and contractor also have different perceptions of value.

Owners value a structural design that is inexpensive to build. They also want their building built quickly with a minimum number of delays; they certainly do not value a lot of change orders. Disputes and finger pointing between engineers, architects, and contractors is also not valued by owners. Owners value having buildings that do not require expensive maintenance and adapt easily to different tenants and uses.

Architects have less worry for the cost of construction as long as it satisfies the owner's

budget. They value an engineer who can advise them on building code issues and on building systems which may not be part of the primary structural system. They value an engineer who has the ingenuity to make their designs work rather than telling them that it cannot be done.

Contractors value complete and concise structural drawings with practical details. They value engineers who are responsive to their questions and who work with them when an unexpected construction issue arises.

Many engineers believe that performing more detailed and comprehensive structural calculations brings value to a project. Owners, architects and contractors have little or no interest in the calculations that an engineer must perform, or in the fact that engineers must comply with complex codes.

### Reinventing the Practice of Structural Engineering

In order to avoid becoming a commodity, structural engineers need to distinguish their services from those of their colleagues in a manner that is perceived by their clients as having value. They must transform their operation so that the value of their services can be clearly demonstrated.

Each structural engineering firm needs to have something special that differentiates them from their colleagues. Each firm must chart its own course and concentrate on promoting the things that it does best. Developing niche markets can be very effective. If a firm has a special expertise or capability that is not shared by other firms, they can command higher fees for that service.

Developing strong relationships with clients is imperative. Clients need to be spoiled so that they have no desire to work with anybody else.

Structural engineers should not be afraid to break out of their traditional role as consultants to architects. Structural engineers are often well suited to serving as team leaders and contracting with project owners as the prime design professional. This role does not need to be limited to industrial or utilitarian buildings.



Finally, engineers need to have the pride and self-confidence to charge fees that reflect the value that they bring to a project. Of course they also need more practice at walking away from projects and clients that are not willing to pay for their value.

### So How Do SEs Market Value?

There are a few events and discussions taking place within the structural engineering community related to the subject of Value Based Compensation. In May of 1996, Elbert C. Ray, P.E., presented to CASE a concept of promoting professional services which he coined "Value-Based Compensation". He provided his views of how structural engineering firms can effectively define and communicate the value they offer their clients and be compensated for this value. The idea was received so favorably by CASE that a committee was formed to write a document reflecting Mr. Ray's views. This document is called "Commentary on Value-Based Compensation for Structural Engineers".

On a separate track, SEI in conjunction with CASE and NCSEA, organized a workshop in July of 2000 at Stone Mountain, Georgia called "Taking Control: A Workshop on Value-Based Compensation". The workshop was attended by 23 structural engineers from around the country. Some of the questions tackled were: "How do we market Value-Based Compensation?"; "How can we improve recognition and respect for our profession?"; "How can we improve client understanding of what we do?"; and "How do we overcome the overall perception of SE's as problem solvers, rather than leaders?". These questions, and others, were undertaken by first analyzing each issue, then proposing solutions with implementation plans. One result was a presentation by workshop participants, organized by Roger Stroud, P.E., given at the 2001 World Structures Congress in Washington D.C.

Currently, the CASE Business Practices Committee is preparing a new document with the intent of defining the issue of Value-Based Compensation in more detail, essentially updating their 1997 document. The new document will offer specific suggestions on how to provide services with a true value-added component, and how to communicate that value-added component to clients. The

author will represent SEI and work with CASE on this effort, in a continuing effort to bring the three primary structural engineering organizations (SEI, NCSEA, and CASE) together on issues important to our profession.

One of the goals of SEI's Business Practice Committee, Business and Professional Activities Division, is to identify ways to help structural engineers use the concepts of Value-Based Compensation (VBC) as tools to gain more influence and responsibility (value) on projects. In addition, by working together with CASE, the committee will focus on the means of making the new VBC document a springboard for articles and presentations that focus on educating structural engineers, architects, owners, and contractors of the increased value we can bring to projects, given the opportunity.

### Engineering by Example

One of the simplest methods of providing structural engineers with the concept of VBC is to provide examples of what other structural engineers and structural engineering firms have done that make use of VBC. There have been a few recent articles in Structure Magazine that may be referred to as Value Based Compensation, although the authors never gave this name to their idea.

David Stone titled one such article in the February 2002 issue of Structure Magazine "Stop Selling Engineering!". His message was for engineering firms to seek out a niche market and claim expertise. He provided examples of niche markets such as design build, design build operate maintain, or stellar services. This niche is your value. There are hundreds of examples such as these, but in all cases, it means that you have to educate your clients to the promised expertise and, most importantly, follow through with your promises.

Another recent article in the March 2002 issue of Structure Magazine is "From Commodity to Distinction" by Mark Thompson, president of LBJ. Mr. Thompson describes how LBJ has successfully created niche markets in tilt-up building systems, precast modular bridge systems, and integrating safety into the project. These niches have been LBJ's successes.

An upcoming issue of Structure Magazine

will include an article by Bill Fanning from PSMJ with the eye-catching title "Are Low Fees a Problem for You?". His message was to charge more, but your client should see the value in your service.

More articles will appear as a way of providing examples of Value Based Compensation. Our biggest challenge is to find what value our firms provide. Our second biggest challenge is to tout this value to our customers. It is when our customers understand the value possible that compensation is provided.

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