



## What Business Are You In?

By John A. Mercer Jr., P.E.  
CASE Chair

*Author's Note: Because of a change in employment and subsequent resignation by Doug Ashcraft, I have recently assumed the chair position of CASE. I would like to take this opportunity to thank him for his past committee participation and leadership on CASE RMP committees and as Chair of the CASE Executive Committee, and wish him well in his new endeavors. The CASE Executive Committee encourages Doug to stay engaged in our sister organizations, NCSEA and SEI, as time allows.*

Looking forward as CASE Chair, I will continue to rely upon the active leadership and participation of CASE members to share their time, energy, ingenuity, and expertise with our fellow structural engineers in CASE, NCSEA, and SEI when it comes to Risk Management and Business Practices.

As we continue to move forward, we are reminded constantly that today's economy has presented a daunting challenge to all of our country's companies, corporations, and individuals, not the least of which includes our structural engineering firms. Firms have had to take a hard look at themselves in structure, staff, and markets to assess their survival potential until there is a turn around in the recent downward financial trends.

Traditionally, firms have been grown around Finders, Minders, and Grinders. In the past growing economy, there was a shortage of each, stimulating acquisitions to fill the gaps to grab market share.

Finders are typically the firm principals responsible to feed a firm's hungry appetite for work. Minders are those few engineers that have moved up to a project management role to maintain contact with the client, manage firm resources including staff, and keep a project on schedule and hopefully under budget. Finally, grinders include the staff engineers and support staff that turn out the work of engineering analysis and design, document preparation, and construction services support. They typically include entry level engineering staff, itching to design something.

This scenario should be familiar to you. But why is it important? Financially, a firm must be at minimum, break-even, and profitable by design when possible. Firm CFO's are challenged with keeping overhead rates in line using project multipliers as gauges to evaluate the performance of the firm's staff, project type, and client.

When the economic environment declines as we have recently experienced, it may be appropriate to re-evaluate how you define and practice your business. Buggy whip manufacturers experienced this sort of situation when Henry Ford automated the auto manufacturing business. What are we missing in today's picture? Who or what is it that is consuming our revenues and profits? I would suggest we need to take a look at the internal and external line items comprising our overhead.

Internally, we can include our IT needs. We depend on computers and software just as our predecessors relied upon the pencil and eventually calculators. But computers and software cost more than pencils. The basis of our overhead is impacted by these types of cost increases. Some of us have in-house IT departments while others outsource this capability, maximizing cost efficiency. We can make a list of our overhead line items to include equipment, software, IT staff, communications systems, cell phones, Internet bandwidth, heat, lights,



rent, vehicles, supplies, advertising, non-billable staff time and the list can go on and on.

One outside influence impacting our firms today is the illusion that BIM, perpetrated on our engineering community by the software industry, is the ultimate answer in document preparation. BIM can actually be a Trojan horse that will eventually erode the quality of our work product and increase firm risk, if we continue to allow this myth to become an unchecked part of our Culture. BIM is only a tool. BIM causes restructuring of our production departments and puts firms behind a new learning curve. We need to ask if it will make firms money or increase our risk?

Another external influence is LEED certification. LEED was created by architects with intentions to provide our society with energy saving buildings and sustainable developments. We need to evaluate the real cost to firms and our clients. It has become another way for a few to extort money out of us and our clients, as overseers of a perceived greater good.

It is my intent that this editorial be the first in a series that will introduce the concept of creating profit centers out of our overhead items while maintaining multipliers for government audit purposes.

What if you could save just one job in your firm? Could it be yours? Just what business are you in? ■

