

Business success and self-image

Technical professionals are affected by failure too. Mark Zweig offers four examples.

No one likes to be part of something that loses money. It is bad for the self-image of the individuals involved.



Mark Zweig

EDITORIAL

Many people think engineers and architects don't really care about whether or not the company they work for is profitable.

"They just want to be left alone so they can work on their projects."

"If the projects are good they don't care about the company."

"They don't know anything about business or the numbers of the business so bad financial news doesn't sink in."

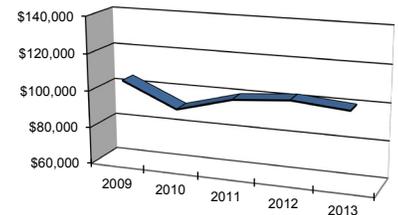
While I'm sure there is a certain amount of truth to some of these statements, one thing I do know: no one likes to be part of something that loses money. It is bad for the self-image of the individuals involved.

The significance of this has been driven home to me more than once – with cases involving both client companies and my own businesses. You would expect losing money to be a "kick in the stomach" to the owners but not necessarily the employees. But it is to them also. Think about it:

1) Their résumé will be forever linked to their employers. If the employer declines and/or ultimately fails, they're tarnished, too.

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TRENDLINES Ups and downs



Marketing directors' total compensation decreased this year after increasing slightly last year, according to ZweigWhite's 2013 Marketing Survey. While marketing directors' total compensation was at a high of \$105,000 in 2009, this number dropped to \$92,000 in 2010. Marketing directors' total compensation climbed to \$100,000 in 2011, and increased again to \$102,500 in 2012. This year, this number dropped back to \$100,000.

– Margot Suydam, Survey Manager

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TZL time machine

Direct mail was all the rage in 1993; open book management, on the other hand, never goes out of fashion.

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2) Their pay is tied to the success (or lack of it) of the enterprise.

Unprofitable companies or unprofitable units inside companies usually find themselves unable to take care of good employees at some point.

3) Their personal development slows down. Training and other off balance sheet investments typically stop when the firm or unit becomes a loser.

4) Their stress increases. The water cooler banter about lack of success takes its toll on morale for everyone. Other employees gripe about being dragged down by groups that aren't profitable. Constant fear that the ax may fall puts people under a lot of stress. Some take it home and end up with marital or other family relationship problems as a result.

The water cooler banter about lack of success takes its toll on morale for everyone.

If you are the owners, it is YOUR RESPONSIBILITY to fix your firm or any unit in it that isn't a solid contributor. Sometimes that means changing management, reducing staff and other overhead, reallocating project workloads, changing pricing, and many other things. You need to take action – do it – for the benefit of your people who work in this organizational unit or your firm.

The economic recovery is well underway, particularly in this bellwether industry we are all a part of – design and construction. Any rationalization for non-performance at this point is just that.

Being a loser is bad for your self-image. As they said once in an old Saturday Night Live skit, "Do it for the people!" ▀▲

MARK ZWEIG is the chairman and CEO of ZweigWhite. Contact him with questions or comments at mzweig@zweigwhite.com.

A/E BUSINESS NEWS

MARKET FLUCTUATIONS: FMI, a provider of management consulting and investment banking to the engineering and construction industry, released its Q2-2013 Construction Outlook. The strength of individual markets is shifting, reducing annual construction-put-in-place predictions to \$913 billion, a 7 percent growth from 2012. This is down nearly \$6 billion from the \$918,897 million, 8 percent growth estimated in the Q1's Outlook. However, FMI does expect growth to return to 8 percent growth in 2014 with annual CPIP reaching \$989 billion.

The major markets adjusted downward. With lower expected growth are:

- Residential construction (-1.8 percent) – FMI continues to forecast a 23 percent increase in construction put in place for single-family housing. However, multifamily housing has dropped from a strong increase of 42 percent in 2012 to a current 31 percent increase for 2013.
- Commercial construction (-0.8 percent) – The current forecast calls for about a 1 percent drop in commercial construction from the Q1 forecast. However, this still represents a modest increase of 6 percent, to \$49.8 billion for 2013. One of the contributing factors is that sales for retail and food service businesses is slower than initially anticipated.
- Healthcare (-3.15 percent) – Contributing factors for the decrease include hospital beds per 1,000 people trending downward and shorter patient stays.
- Amusement and recreation (-2.0 percent) – Given the belt-tightening attitude across the country right now, it will likely be much more difficult to get funding from taxes and municipalities to build new stadiums in the near future.
- Sewage and water disposal (-3.8 percent) – Construction for sewage and waste disposal was off 2 percent in 2012. FMI forecasts another 2 percent drop in 2013. The ability to fund necessary water infrastructure improvements is central to the decline as many municipal water systems still depend on the tax base for funding.
- Water supply (-3.2 percent) – Construction for water supply projects will drop 1 percent in 2013 after dropping 7 percent in 2012. On the bright side, in March the Senate Environmental and Public Works Committee unanimously approved a Water Resources Development Act, including a measure to create the Water Infrastructure Finance and Innovation Act. WIFIA would provide \$50 million

per year from 2014 to 2018 to help fund large-scale water infrastructure projects.

While there is no singular reason for the drop in these markets – each is evaluated on its own criteria – there are a few economic concerns that touch all of them.

- The decline in public construction
- Expectations of more cuts as the sequestration continues
- Tight lending criteria
- Consumers cautious about increasing their debt load

DODGE PAUSES: The Dodge Momentum Index receded in June from the previous month, according to McGraw Hill Construction.

The Momentum Index is a monthly measure of the first (or initial) report for nonresidential building projects in planning, which have been shown to lead construction spending for nonresidential buildings by a full year. After six consecutive monthly increases, the Momentum Index in June slipped 1.5 percent to 113.8, down from a revised reading of 115.5 for May. The June pause came after May produced the highest level for the Momentum Index since March 2009, and indicates that the rising trend for nonresidential building remains subject to the occasional setback.

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STRATEGY

The value of competitive intelligence

Tips for staying in the know from the pros and firm leaders.

By BRYAN SULLIVAN
Correspondent

The term CI (competitive intelligence) is used to describe the process of ethically gathering and refining information enough so that it can be used to make a strategic business decision, according to Fuld & Company, a CI consultant.

“CI is a tool to alert management to early warning of both threats and opportunities; it is not a crystal ball,” says Leonard Fuld, Fuld & Company president.

USEFUL CI TOOLS. While the Internet is viewed as a key source, most CI professionals should spend their time and budget gathering intelligence using primary research – networking with industry experts from trade shows and conferences, from their own customers, suppliers, and so on. The Internet is best used to gather sources for primary research as well as information on what the company says about itself and its online presence (in the form of links to other companies, its strategy regarding search engines and online advertising, mentions in discussion forums and on blogs, etc.).

“CI is a tool to alert management to early warning of both threats and opportunities; it is not a crystal ball.”

Also important are online subscription databases and news aggregation sources that have simplified the secondary source collection process. Social media sources are also becoming important – providing potential interviewee names as well as opinions and attitudes, and sometimes breaking news (e.g. via Twitter).

B2B International, a business-to-business market research company, advises that typical sources of information used in a CI study may include:

- **Press analysis.** Publicly available information such as headline financial figures, changes of key personnel, senior management statements, etc. can be of great interest, and most companies conduct such research in-house on a regular basis. Press analysis can also be used to assess competitors’ marketing strategy (by assessing the messages behind the advertising) and, through examining employment advertisements, gain valuable intelligence on wage rates.
- **Customer interviews.** There isn’t a more effective, reliable or valuable source of competitor information than customers. Buyers are very willing to say exactly what they want, and how they want it, or willing to complain or take their business elsewhere when their requirements are not fulfilled. Customers often display a remarkable level of candor when talking about their suppliers, even those with whom they have a close and collaborative relationship. Issues as diverse as price, service,

contractual details and technical information can be discussed, as well as ‘industry gossip’ such as who is buying who, or which company is in financial difficulties.

- **Interviews with suppliers, distributors, other industry players and experts.** In every industry, it’s worth mapping out the supply chain to assess who might be able to provide valuable market intelligence. Those at the center of the supply chain – intermediaries such as distributors, agents and importers – are often those who know most about the market, as they are in frequent contact with manufacturers and sellers. Most markets have a number of “experts” of some kind who are independent and willing to share the information they possess. Industry associations and journalists at industry publications are typical examples.
- **Company websites.** While an obvious tool, they are an increasingly effective source of competitor information. Information that only a decade ago would have been top secret, or only obtainable by making a visit to the company, is now freely available. Technical data sheets, company vision and strategy, product innovation, staff credentials and a host of further information is available to anyone willing to spend the time sifting through the often substantial content.
- **Speak to a variety of competitors:** If asking a competitor to provide details on their own business is difficult, ask them to talk about other market players; it is more easily achieved.

MINGLE WITH THE COMPETITION. Most members of the A/E industry are connected through professional-related organizations, memberships and affiliations.



Humza Chowdhry,
Principal, HCSE,
Inc.

Humza Chowdhry, principal, **HCSE, Inc.** (Daly City, CA), a six-person structural engineering firm, says that connections made and knowledge gained about other firms through these various affiliations are important to being competitive in the marketplace.

“For example, projects typically go out for bid to various firms and usually the players on each team are known. Considering the numerous professional firms out there, it’s sometimes difficult to find a niche market.

What seems to be the deciding factor for most projects is not what they know, but who they know,” he says. “Planting seeds at networking/social events can grow into a number of unlimited opportunities through the concept of relationship marketing.”

PARTICIPATING IN BENCHMARKING. Mingling with the competition can happen on several levels. For example, benchmarking requires participating in industry organizations.

Susan Arneson, vice president and director of marketing at the **SmithGroupJJR** (Detroit, MI), an 800-person firm providing architectural, engineering and planning services, says

See INTELLIGENCE, page 4

NEWS

Collaboration for green buildings

IFC and World Green Building Council announce global partnership to accelerate growth.

IFC, a member of the World Bank Group, and the World Green Building Council (WorldGBC) announced that they will collaborate to rapidly scale up the construction of green buildings in emerging markets.

The WorldGBC has agreed to connect its network of national green building councils to IFC's investment and advisory program.

The WorldGBC's local affiliate councils will certify green buildings through IFC's EDGE, a new web application that reveals solutions at the early design stage to reduce energy, water, and material consumption by 20 percent.

The partnership will focus on rapidly urbanizing countries with surging population growth that need to build sustainably to avoid emissions growth, bolster energy security, and minimize resource depletion. The built environment is expected to double by 2050;

China alone has the potential to add 53 billion square meters of building space, which is equivalent to the building stock of Latin America today.

To date IFC has invested more than \$570 million in resource-efficient buildings, including directly and through financial intermediaries. IFC has also worked with the governments of Colombia, Indonesia, the Philippines, and Vietnam to help develop their regulatory environments.

"Green buildings are part of a global solution. Beyond emissions reduction and environmental protection, green buildings have extensive co-benefits, including cost-savings, job creation and improved human health and productivity," said Roger Platt, senior vice president, Global Policy and Law, USGBC. "The EDGE tool presents some exciting opportunities as an important steppingstone toward global sustainability."

The partnership was announced at "Transforming the Built Environment in Emerging Markets" on July 16 at IFC's headquarters in Washington.

For more information, visit www.ifc.org/greenbuildings. ▲▲

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that SmithGroupJJR does just that.

"We typically monitor other A/E firms by participating in various benchmarking surveys sponsored by industry or professional organizations such as AIA Large Firm Roundtable, ZweigWhite, PSMJ, industry publication rankings, and more," she says.

Additionally, SmithGroupJJR regularly asks its clients about their perceptions of them as compared with competition. This takes place during debriefs after winning or losing a project, in surveys after completion of a project, and in gathering intelligence as part of its strategic planning process.

"We also benchmark specific services or activities (i.e., as we were launching the redesign of our website, we surveyed websites of other A/E firms, and



Susan Arneson, VP and Director of Marketing, the SmithGroupJJR.

those outside the industry as well, to evaluate aesthetics, content, functionality and user experience," Arneson says.

The same is true of its HR and IT functions – it benchmarks against other leaders in the industry.

"Our leadership also participates in various industry organizations, which gives us access to general industry data or anecdotal information about competition," she says.

So, stay abreast of the competition – it's a vital element to successful forward-thinking plans. ▲▲

RESOURCES

2013 MARKETING SURVEY: If your firm isn't keeping pace with industry standards when it comes to marketing, you're risking the future of your business. But how do you know if your firm is over- or underinvesting in marketing compared to your competition? Do you know which marketing strategies lead to success, and which ones you should avoid? Do you know how many marketing staff firms like yours need to get the job done? If you want answers to these marketing questions and others, you need ZweigWhite's Marketing Survey of Architecture, Engineering & Environmental Consulting Firms. It's the source the most successful A/E firm leaders and marketing staffers have been turning to year after year.

The 2013 edition of this report is a must-have resource that will show you all the benchmarks you need to find out just how your firm's marketing efforts stack up to your peers and your competition. You'll get all the latest available statistics on all areas of marketing – spending, staff, proposals, strategies, and much more! All together, these survey results will help you see where you stand right now and enable you to start making plans and informed decisions about your marketing strategies for the upcoming year.

The topics covered in this comprehensive report are:

- Marketing staff
- Proposals & sales
- Marketing systems
- Promotion
- Marketing expenditures
- Strategies
- Challenges

This is just a sampling of the information you'll get in the 2013 Marketing Survey. Much more is also included! You won't want to miss out on the latest edition of this comprehensive report. Presidents, CEOs, CFOs, marketing directors, marketing managers, marketing coordinators, and business development representatives will find all the statistics they need in this one book. You'll be able to compare your firm's marketing side-by-side with firms just like yours and find out how you stack up. To learn what it takes to get the most bang for your marketing buck and to make sure your firm beats the competition, order your copy today!

For more information or to buy a copy, call 800-466-6275 or log on to www.zweigwhite.com/p-2166-marketing-survey-2013.

HISTORY

TZL *time* **machine**

Direct mail focus of August 1, 1993, issue of THE ZWEIG LETTER, while 10 years later open book management took the headline.

August 1, 1993

Today email marketing rules. In early August 1993 direct mail was all the rage. That's according to an article published in the August 1, 1993, issue of **THE ZWEIG LETTER**.

"DIRECT mail can be an extremely effective means of marketing," the article starts. "Unfortunately, many A/E/P and environmental consulting firm principals just don't 'get it.' They blow the whole marketing budget on developing a slick, four-color brochure jammed with clichés and buzzwords then send it off to every name on the company roldex. Not only are about a quarter of the brochures returned because the company has moved or the recipient has left the firm (or dies), but the brochure generates absolutely no new business. Direct mail is declared a flop."

Than it goes, "But a direct mail campaign, if it is well conceived, planned, and followed up on, does not have to cost a fortune, require an inordinate amount of time, or end up as the company joke."

What follows is bullet list of direct mail strategies and advice.

Direct mail has fallen out of favor in 2013, but some still think it's coming back in the age of inboxes clogged with junk mail. Are you willing to pull the advice from 1993 and give direct mail another try?

Issue #31 of **THE ZWEIG LETTER** also offered advice on performance reviews and Mark Zweig wrote about not letting success lull readers into a false sense of security.

"It's been said before that 'nothing good comes without adversity,' but don't go looking for adversity just so you can overcome it. Don't be lulled into a false sense of security by the good times and abandon all caution. Be vigilant in your efforts to follow the same management practices in good times as you would in bad," Zweig wrote.

Keeping yourself fresh and motivated
 With respect to A/E and environmental firms, I am convinced that one reason young companies often do well in their early years is because their owners are feeling fresh and motivated. The possibilities are limitless. The future could bring anything. There's no bureaucracy, no sacred cow employees that you inherited and can't get rid of, no pointless meetings on stuff you couldn't care less about.
 The typical firm principal is a 50 year-old who has been working in his or her firm for many years. We see what happens when the motivation of these people wanes over time. The company stops performing as well as it once did. It's especially harmful to the firm if it's the person at the very top. I can't tell you how many presidents/CEOs/managing partners we have worked with over the years who, whether they know it or not, were suffering motivational problems.
 So please pay attention if this sounds at all like you. Here are some quick suggestions on what you can do about it:
 1. Get back into working on jobs. It's the work that got you into this business in the first place. If not, you probably would be doing something completely different. And while it's important for you to function at your highest and best level, perhaps you have become alienated from the clients and the people who actually do the work and maybe you are lacking some of the satisfaction that comes from doing work for clients that they are really happy about. Get back into it.
 2. Hire an outside management consultant/sounding board. We all need people to talk to. The higher you go the less of them there are. So perhaps it might make sense to bring in an outsider, someone who can objectively give you some suggestions on how to be more effective, and someone who will listen to you and help you get your ideas better implemented throughout the organization. While not all outsiders are good additions to the mix the right one can be pivotal. Consider it. -

Profits
 After hitting a low in 2001, net pre-tax, pre-bonus profits on net service revenue are on the rise again.
 Source: 2003 Financial Performance Survey of A/E/P & Environmental Consulting Firms (ZweigWhite)

Firm Index
 AMECO, Greenville, SC; LINCOLN STRATEGIES, I.T. Canton, Mo.; AMERICAN INSTITUTE OF ARCHITECTS, Wash, Washington, DC; BURGESS & NIPLE, INC., KEY F. WILSON, INC., FINEST CHANCE, PA.; CLARK+DIETZ, INC., FPA GROUP, URBANORAMA, IL.; FULLER CLINEFELT, Vero, CA.; JEWELL, S.; ASSOCIATES, Spring Green, WI.; JPK BURGESS, Roanoke, VA.; LINCOLN STRATEGIES, I.T. Canton, Mo.; BURGESS & NIPLE, INC., KEY F. WILSON, INC., FINEST CHANCE, PA.; FPA GROUP, URBANORAMA, IL.; SHILLING WARD ARCHITECTURE, BARKSHIRE, SOUTH, VA.; WATSON SCOTT/EMIL, INC., West Chester, PA.; WILKINSON & CO., INC., Charlotte, NC.

Next Week
 The Zweig Letter takes an in-depth look at one company's history, and what it took to make it to the top of our Hot Firm List for 2003.

In this issue:
 • When companies and company owners are young, the possibilities seem endless. But what can the typical 50-year-old firm owner do to adapt some of that momentum? Mark Zweig shares his thoughts. Page 1
 • Weekly News: Burgess & Niple names a new CEO. Plus, California highway work may grind to a halt. Page 2
 • When it comes time for one Seattle company to change its name, the firm decided to take a different route, its CEO says. Page 2
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July 28 2003

If many A/E firms operate under an open-book model, **THE ZWEIG LETTER** may have something to do with it, as the topic has surfaced multiple times in the past 20 years.

In the July 28, 2003 issue of TZL, open-book management is the target of an in-depth article.

"By letting your employees see the company's financial information, they can better understand how their actions affect all levels of the organization. It also helps to foster a greater sense of ownership and trust among staff members, and can create a stronger market for internal ownership since people are unlikely to buy into a company they know nothing about," then-editor Mark Grady wrote.

The article offers advice on some items to include in reports. As the advice is good now as it was then, here it goes:

Profits (including the percentage of revenue)

Net service revenue. Net service revenue, or NSR, is the amount of fees received by the firm, minus the fees that are passed through to subconsultants and reimbursables.

Liquid assets. Liquid assets include cash, accounts receivable, and other assets that can be easily converted to cash.

New sales and proposals. Including information about what proposals are out there – and who is making those proposals – provides your staff one way to gauge what the future workload of the firm might be, and who the rainmakers are.

Including backlog will also help them predict what lies down the road for the company, and may prompt them to do something about it.

Performance ratios. Performance ratios include chargeability, multiplier, revenue factor, overhead rate, and average collection period (ACP). ▀▀

Have you set your priorities?

Don't become indifferent as the economy recovers and stay focused on your plan for success.

During the prolonged economic downturn, firms that survived and, in many cases, thrived have one trait in common. *They identified the key aspects of their business and focused on improvement in those areas.* However, as the economy begins to recover, some of those same firms will no longer maintain their focus because they are enjoying some level of profitability.

Why would you throw away those hard-fought gains made during the tough times instead of continuing to capitalize on improvements as business picks up? For most successful firms, establishing and evaluating priorities is a continual process that typically involves the following areas:

FINANCIALS. This is probably the most obvious and the easiest to track as the data should be readily available. However, sometimes we can become so enamored with the data and the analysis of the data that we lose focus on what truly matters.

We need to know about revenue and expenses as those can have an immediate impact on the day-to-day operations of the company. But we also need to keep a close eye on aged receivables, projected invoicing and backlog, as these can dictate how the firm will perform in the future. If we do not have a clear understanding of what the future may hold, how can we prepare adequately to address future challenges or opportunities?

These future indicators not only give information about the financial health of your firm, but also the financial health of our clients, whose difficulties can become our own if we do not pay attention.

STRATEGIC PLAN. We create itineraries for our vacations and lists to focus our trips to the grocery store, but so many of us do not create a strategic plan for how to operate our business. Absent some plan, a firm will drift and follow a path set by others, some of whom may be your competitors. Establishing a solid strategic plan not only sets a path for the future, but also exposes our strengths and weaknesses and identifies resources needed to accomplish the plan.

By utilizing the plan, we can evaluate business opportunities effectively to determine if a project warrants allocation of staff, our most valuable and usually our most restricted resource.



STEPHEN LUCY

BEST PRACTICES

How many times have you taken on work just because it was offered only to wish later that you had saved those staff resources for a more appropriate or profitable project? Failure to establish a plan or, worse yet, follow a stated strategic plan, sends a very negative message to your staff as they cannot perceive that anyone is leading the firm.

Your staff has entrusted firm leadership with their careers and, once lost, that trust is difficult to regain.

BUSINESS DEVELOPMENT. How many firms do you know that reduced business development staff or budget allocation when the economy shrank as they considered these to be unjustified overhead expenses?

Most believed that the principals of the firms would shoulder the burden and would be just as productive as the eliminated staff. Where is the logic in the argument that overburdened firm leadership can carry the business development load more successfully than staff focused on the task?

See STEPHEN LUCY, page 8

We should identify our staff with the greatest potential for success and devote time and resources to better train and prepare them for the performance of their duties and potentially become future leaders.

That elusive QA/QC plan

Having it is one thing;
using it is another.

Over the years we've received several inquiries for off the shelf QA/QC (quality assurance and quality control) plans and manuals – typically prompted by requirements in a request for proposal. It isn't something we sell and even though the caller is usually in panic and I'm sorry I can't help them out, there also isn't any judgment to be made. Many firms simply don't have one. Of those that do, I'd wager that fewer than half actually have one that is usable – or used.

I was with a client a few weeks ago discussing their project management challenges and the topics of QA/QC eventually arose. Here are a few things we established that will also be of interest to you:

- **QA/QC as a “process” shouldn't be complicated.** When we get calls for a plan or manual on the subject, callers expect a hefty document with flowcharts and layers of safety checks. For an RFP, the obvious intention is to impress the client. For the average architecture or engineering firm, the process should never be this cumbersome. If you are thinking about updating your process or giving a refresher to project managers, be simple about it. It may be as plain as, “Have someone else review it.”
- **Manuals are seldom referenced.** Even if there is a manual somewhere in the office – stored electronically or on a dusty shelf – when was the last time it was opened and used? For my client, half of the group was aware of its existence. The other half didn't know there was an official policy. When new employees join the firm, make sure they know where to find the tools and information they need to do their job. Seasoned employees may not reference that material ever again, but a new employee will want to (and should) get acquainted with it.
- **It's a daily practice.** The manuals are not referenced because QA/QC is a daily practice – or should be. When I asked how many project managers followed the firm's “plan” for QA/QC, I didn't receive affirmatives or negatives as much as I received reasons for why it wasn't followed: not enough time, not enough money in the budget, no one to assist. When I asked what they thought their clients would say if they were in the room with us and heard those responses, I saw many worried faces in the crowd.
- **And that's the reality.** Many firms talk about quality drawings, quality solutions, and the quality of their reports as a differentiator – or understand this is the basic condition to be in business today. But reserving time toward the end to do a worthy quality check is sadly omitted in the rush of a deadline. Is this a terrible thing? Fortunately, very few mistakes go out the door because you're careful every day and you're good



Christine
Brack

PM
PERSPECTIVES

at what you do. You don't need a manual to instruct that. Even a simple plan isn't going to be effective if we don't have anyone else in the firm who can lend that second pair of eyes.

It's always good to clean out and update project management folders and files so everyone is using the same approach and at least understands the firm's philosophy about projects. Trying to write an all encompassing QA/QC policy is one of those things that can rapidly get out of control and miss the original intention. Mistakes can happen with the best policies in place because we're human.

Having a written plan is one thing, practicing it is another because, time and budget aside, without available resources to help with quality control, that plan is rendered ineffective. ▀▄▀

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SURVEY

Deciding on fees harder than ever

Survey finds that competition makes task ever more difficult.

Fees often define a design firm's ability to win work and execute a project profitably. With competitive pressures now higher than ever, setting these fees has been a difficult task for most A/E/P and environmental consulting firms.

According to ZweigWhite's recently released 2013 Fee and Billing Survey, just over half of firms in the industry update their billing rates yearly. Over the past three years, these rates have seen meager median increases of just three percent. Firms still felt some pressure to reduce or discount fees for various reasons, with 52 percent reporting discounting project fees over the past year. Of firms that discounted project fees over the past year, the majority (63 percent) reduced the final price.

In the A/E/P and environmental consulting industry, staff

members' time is often charged by the hour under "time and materials" contracts. Even with lump sum or fixed price contract jobs, firms may measure profit or loss by charging time against the project at billing rates. Most firms in the design industry determine their fees for projects by using hourly billing rates (67 percent), or a formula that calculates cost plus profit (58 percent). Pricing at what the market will bear was a surprisingly unpopular approach; only 17 percent of respondents use it.

The survey found a wide range of billing rates across all design disciplines and positions. The median billing rate for project managers ranged across the industry from \$125/hour to \$160/hour, and was highest at full service engineering or E/A firms and lowest at single discipline engineering firms.

For more information about the Fee and Billing Survey, visit www.zweigwhite.com/p-2163-fee-billing-survey-2013. ▲▲

STEPHEN LUCY, from page 6

Business development should be lead by personnel, principals or staff, who have experience and talents related to client development. You would not place administrative personnel as a technical project manager so why would you place an unqualified person in business development? In my experience, all firms that took this short-sighted approach failed miserably.

As the economy picks up, some work will begin to flow into our offices with little or no effort on our part. This can be a wonderful experience especially considering the last few years, but we cannot reduce our efforts on the development of business opportunities that are most appropriate to our firms. These efforts have a direct impact, positive or negative, on our ability to follow our strategic plan.

STAFF. As firms rise and fall on the quality of the professional services provided, we cannot forget that this quality is a direct reflection of the quality of our staff. Yet how many of us begin to reduce our focus on staff quality and shift to focus on staff quantity when the economy is on the rise? We begin to spend more time on the recruitment of new graduates or the enticement of more experienced staff at other firms than we do on the evaluation of our existing staff.

We should identify our staff with the greatest potential for success and devote time and resources to better train and prepare them for the performance of their duties and potentially become future leaders. Similarly, we should identify underperformers and exit them from the firm as expeditiously as possible as their lack of performance can be like an illness spreading throughout your staff.

If only one lesson was learned from the last few years, it should be that poor quality staff diminishes the quality of all staff.

PROJECT MANAGEMENT. During my career, I have participated in many different training programs regarding the next great approach to becoming a better firm. After much discussion and use of various new catchphrases, each normally revolved around how to improve your process. For most in the AEC industry this means improvement of your project management approach as the majority of our expenses and similarly the majority of our opportunities for cost efficiencies involve how we manage our workflow.

There is no singular project management approach that is universally successful, especially given that almost all projects vary in scope and schedule. However, there are common tasks and processes that are utilized internally by firms to accomplish their work – and those deserve attention.

The more commonality you can create in your project management, the more efficient you can become, which will allow your staff more time to improve customer service and quality. And improvement in this area with your clients normally results in more repeat clients and greater differentiation with your competitors.

REMAIN FOCUSED. Our industry rises and falls on the ebb and flow of the economy, much of which is beyond our control. However, if we remain focused and prioritize the areas of our business that impact our potential for success most directly, we can weather the storm, succeed in down times and prosper as times improve. ▲▲

STEPHEN LUCY is managing principal at JQ in Dallas, TX. Contact him at slucy@jqeng.com.

POLICY

Firms take hands-off approach to BYOD

Whether you are allowing employees to BYOD or to use company equipment for personal matters, both have clear benefits to offer. It all comes down to trust.

By LIISA SULLIVAN
Correspondent

Bring your own device (BYOD) is quickly becoming a common workplace term. Some firms allow it; others don't.

But when it comes to formal policies about mobile devices (whether company or employee owned), firms do agree that it's best to take a "trust first approach."

"By allowing staff to be as productive as possible, we show them that we understand that they often do not have enough hours in the day to deal with their personal and work lives."

Sherry Hennes, director of human resources, **Moffatt & Nichol** (Long Beach, CA), a 600-person global infrastructure firm, says BYOD policy and practice is based on the company's desire to provide a work environment where employees can be productive – whether at their desk, in the field, or just down the hall in a collaborative meeting.

"We allow employees to bring their own devices to work and are happy to provide WiFi connectivity for them so they don't have to use their own data plan minutes," Hennes says. "By allowing staff to be as productive as possible, we show them that we understand that they often do not have enough hours in the day to deal with their personal and work lives, so they can use their device

to take care of personal matters as well without having to leave work."

USE, BUT DON'T ABUSE. At Moffatt & Nichol, when it comes to inappropriate use – whether someone is hogging bandwidth, sending inappropriate communication from a device, or viewing inappropriate material from a device at work – all would result in the same coaching/teachable moment that someone would experience if using a company device.

"If a significant enough issue arose, we would not allow the staff member to bring their device to the workplace in the future," Hennes says. "The good news is that we have not experienced any major issues and probably won't because we have a great group of creative minds who find engineering work to be titillating."

Management at Moffatt & Nichol has no problem with employees using company equipment for personal tasks either.

"For instance, say an employee wanted to take care of some personal banking, schedule a meeting with their child's teacher, or book a flight for their next vacation; we don't have an issue with them using our systems to do this," Hennes says. "However, if someone wanted to print 500 flyers for the school bake sale, or if they spent hours a day surfing the Internet for the next great vacation destination, this would be an inappropriate use of company resources and corrective action would be taken. Again, our approach is to trust our employees. We want them to enjoy being a part of the Moffatt & Nichol family and coming to work each day. We expect everyone to be professional about their approach to work, and in turn, we treat them with the same professionalism and respect."

Overall, it's Moffatt & Nichol's ap-

proach to trust first. As a result, it has not locked down all systems or put lengthy "thou shalt not" types of policies in place.

"With 600 staff scattered around the globe, you can be assured that we have times when someone has a mishap, and when this happens we have a course correction discussion with them, rather than going into lock down mode. This is the approach that fits with our culture best," Hennes says.



Marika Harris,
Director of
Operations
Support, Stantec.

COMPANY EQUIPMENT PREFERRED.

Despite its size, **Stantec** (Edmonton, AB), a 12,000-plus-person firm that provides professional design and consulting services in planning, engineering, architecture, surveying, and project management, with more than 200 offices in

North America, has not adopted any BYOD policies.

Why? Marika Harris, director of operations support, says in part it's based on the benefits. That could change in the future.

"We've found that having team members use company devices as opposed to their own enables us to better control our costs, provides a high-level of technical support and maintains a secure environment," she says. "Additionally, we are reviewing mobile device management (i.e. MDM) solutions for personal tablets that provide access to corporate email, contacts and calendar functions."

Additionally, Stantec provides wireless devices for company business, but understands the reality that employees may use the device for reasonable personal use. Excessive use is managed through communicating with the user and their supervisors. ■■

ON THE MOVE

HLW INTERNATIONAL HIRES: **HLW International** (New York, NY), an architecture, planning, interior design, and engineering services firm, announced that **Manuel Bouza Jr.** will join the Los Angeles office as design director (Shell & Core). Bouza is a licensed architect in the state of California with 26 years of experience in architectural practice in America, Europe, the Middle East and Asia. He specializes in commercial, mixed use, hospitality, retail, and entertainment architecture, and urban design.

Bouza was previously principal at **Manuel Bouza Architect** and prior to that he was a vice president and design principal at **The Jerde Partnership**. He has also worked as a designer with **Hardy Holzman Pfeiffer** and **Richard Meier & Partners** in Los Angeles, and **Foster + Partners** in London.

"We are excited to have Manuel on our team," said Scott Springer, principal-in-charge, Los Angeles and Shanghai, HLW International. "Manuel's extensive international experience – especially on mixed use and retail projects – greatly enhances the capabilities of our professional team at HLW."

PARTNER HIRES: **Partner Engineering and Science Inc.** (Torrance, CA), an environmental and engineering consulting firm, has brought **William Marcus** on board as a new national client manager. Marcus, an environmental professional, has more than 26 years of industry experience in environmental due diligence, site assessment, remediation and regulatory compliance. Marcus will in part focus on furthering Partner's already expanding business in Florida, while working remotely from Jacksonville.

Marcus will also provide national support to a range of commercial real estate clients, including investors, developers and insurance companies. Specializing in real estate portfolio management, Marcus brings to Partner a significant background in serving clients such as Cornerstone Real Estate Advisors, New York Life Insurance Company, UBS, Boston Financial Investment Management and Toll Brothers. He has devoted much of his career to consulting national and international clients on environmental matters during acquisitions, development, disposition and ongoing management and operations.

"Bill has been involved in several pivotal projects throughout his career, and will be a vital addition to the Partner team," said Joseph Derhake, president of Partner. "He brings the skills and experience that will exponentially expand our reach to meet the increased needs of our clients, especially as the commercial real estate industry picks up speed and developers get busier."

"I'm thrilled to join the highly respected team at Partner, and leverage my experience to help grow Partner's business in Florida and nationwide," Marcus said.

GMB WELCOMES: Architectural and engineering firm **George, Miles & Buhr, LLC** (Salisbury, MD) welcomed the following new team members:

Katja Kalinski has joined the Salisbury office as a landscape architect in the Site / Sustainable Design Group.

Patrick Sweeney, a recent graduate of the University of Maryland College Park, has joined the Structural Engineering Group as an engineer.

Billy Tyler has joined the Salisbury office as a summer intern. Tyler is a former GMB Scholarship winner and has just completed his second year at Bucknell University in civil engineering.

Kyle Pepper recently joined the Seaford office as a summer intern. Pepper is a civil engineering major at the University of Delaware, where he will be a Junior this fall.

GZA PROMOTES: **GZA GeoEnvironmental, Inc.** (Norwood, MA), a 335-person environmental and geotechnical consulting firm,

announced that **John Murphy** has been promoted to Northern New England district office manager, operating from the company's Manchester, N.H. office.

In this role, his responsibilities include overall management and development of GZA's services in Northern New England, including Maine, New Hampshire and Vermont.

A resident of Derry, N.H., Murphy has been with GZA for 25 years and is a principal of the firm. His areas of specialization are construction management, cost estimating, facility closures/demolition, hazardous materials management and site remediation. He also manages a variety of building-related services for GZA, including property condition assessments, asbestos, lead, pcb and microbial investigations and remediation.

Murphy has served on the board of directors of GZA for the past four years and as a Salvation Army Advisory Board member for the past nine years. His professional activities include involvement with the Associated General Contractors and the Associated Builders & Contractors of NH.

Meanwhile, GZA promoted **Patrick Sheehan** to MetroBoston district office manager, operating from the company's headquarters office.

In this role, his responsibilities include overall management of GZA's largest district office, which incorporates the firm's Norwood, Boston, Newburyport and Hingham, Mass. operations. Sheehan will also continue his environmental investigation and remediation design and construction practice at GZA.

A resident of Millis, Mass., Sheehan has been with GZA for 22 years and is a principal of the firm. His areas of specialization are environmental engineering, site investigation, remediation system design and construction, construction management and remedial feasibility assessment.

HFI HIRES: **Hall & Foreman, Inc.** (Tustin, CA), a civil engineering, land planning and surveying firm, announced the appointment of **Matthew Okubo** as a principal. In his role as a principal, he will assist the firm's senior management team in the areas of business expansion, strategic planning, and development of company policy and procedures.

As the newest principal for the firm, Okubo serves as vice president / principal – Geomatics.

Since joining HFI in 2002, he has been instrumental in growing HFI's survey practice. In 2008, he was named an associate of the firm.

As leader of the geomatics practice, he directs the firm's surveying operations including client relationships, project scheduling, and business development. As principal, he will participate in the ongoing development of HFI and the implementation of strategic initiatives.

STOPPENHAGEN APPOINTED: **CH2M HILL** sustainability expert **Steph Stoppenhagen** has been named to the Expert Advisory Council of Smart Grid Oregon, a trade association committed to promoting the smart grid industry and infrastructure in the state of Oregon. CH2M HILL (Denver, CO) is a global full-service consulting, design, construction, and operations firm.

Stoppenhagen is recognized as an expert in global sustainability, renewable energies and smart cities technology. Her work for the U.S. Department of Energy's Solar America Communities program received 2011 Environmental Business Journal and Climate Change Business Journal awards.

Smart Grid Oregon is believed to be the first state smart grid trade association in the U.S. While initially focused on Oregon, Smart Grid Oregon is positioned to seek opportunities and partners within the Pacific Northwest and beyond to expand the organization's reach in promoting the smart grid.

BOTTOM LINE

Firms on ZW15 Index ramping up

New projects and partnerships, as well as international work, aiding recovery.

By RYAN RENARD
Financial analyst, ZweigWhite

The ZW15 index, which tracks publicly traded companies in the A/E space, is still in recovery mode, a reflection of the overall economic reality.

While over half of the companies listed on the ZW15 Index reported loss in value over the month of June, many are still ahead of the 50-day moving average. The economic recovery, now gaining steam, is leading to increasing revenues throughout the industry.

While over half of the companies listed on the ZW15 Index reported loss in value over the month of June, many are still ahead of the 50-day moving average.

A few companies in particular have had a tremendous couple of months; most notably **EMCOR Group Inc.**, **Chicago Bridge and Iron Co.**, **Fluor Corp.**, **KBR Inc.**, and the biggest star of late: **TRC Companies Inc.** Some of these leaders have grown through increased work and revenue, while others have been on a buying streak adding new acquisitions to reach new market sectors.

EMCOR Group (Norwalk, CT), a 28,000-person mechanical and electrical construction, energy infrastructure, LEED construction, design/build, life safety, and facilities services firm, has entered a definitive agreement to purchase **RepconStrickland**, a Texas gulf area company for a cash value of \$455 million to its shareholders. RepconStrickland specializes in rapid turnaround in critical process units and is an industry leader in safety. RepconStrickland had a reported revenue of \$440 million in 2012. The other large acquisition was Chicago Bridge and Iron Company's purchase of the **Shaw Group**, a former member of the ZW15 index. This is projected to open up the nuclear power generation segment to CBI.

Recently CBI, along with KBR Inc. and Fluor were identified by Zain Abbas of the Motley Fool as his three predicted big winners of global contracts related to the shale-based natural gas generation boom. All three of these companies have positioned themselves adequately as industry leaders across the divisions of natural gas production infrastructure.

KBR (Houston, TX), a 27,000-person global engineering, construction and services company, is currently involved in projects in Algeria and Australia, while Fluor (Irving, TX), a 41,000-person engineering construction company, with a set focus on higher quality, is predicted to receive more of the North American contracts as it shifts away from lower margin mining projects to focus on higher margin petrochemical and gas-to-liquid infrastructure work. And along with its recent entrance to the nuclear energy market, CBI is optimistic about winning a number of projects as it revised its projected earnings last December, citing the shale boom as the primary cause.

Since it hit its peak in 2001, TRC Companies Inc. (Windsor, CT), a 2,300-person environmental engineering and consulting firm, has run several years at less than stellar performance. This led to a corporate restructuring in 2006 with complete installation of a new operating platform by 2008. Through organic growth and strategic acquisitions TRC has had a dramatically successful past year, posting the highest monthly growth and percent change from 50-day moving average in the ZW15 Index. The past three quarters since returning to profitability, TRC held its momentum with just under 60 percent of its holding in infrastructure, followed by the energy and environmental divisions. This has positioned them to take advantage of surge in infrastructure improvement and energy efficiency upgrade projects.

ZW15 CHARTS

Keep tabs on the publicly traded AEC firms in the ZW15 Index! The charts on page 12 show you the monthly multiples and the stock prices for the firms on the index.

Despite recent losses in the market, one company that may see a turnaround very soon is **Foster Wheeler AG**, a Switzerland-based global engineering and construction firm, as it begins a partnership with Clariant International and **Wilson Engineering** (Bell-

ingham, WA) to construct a test facility for its Vesta SNG (substitute natural gas) technology. The plant will be located in China as the trio believes this to be the most open market, with minimal operation and implementation cost. If this technology is a success it could be fine-tuned to be brought to other areas of the world.

While short-term losses are disappointing, it is always important to take a step back from the graphs of a few days and look at the long-term trends. Some of these companies are down for the week or month, but many of them are near their all-time peaks, experiencing higher revenues and more opportunities to increase their influence than ever before.



ZW15 INDEX

JUNE MULTIPLES

Ticker	Name	Market	Share Pricing							Efficiency			
			Market Cap	Close July 1, 2013	Month Change	% Month Change	Change from 50 -day MA	% Change from 50 -day MA	EPS	Return on Assets	Return on Equity	Price/Sales	Price/Book Value
ACM	AECOM Technology Corp	NYSE	3.24B	31.69	0.9	3%	0.46	1.48%	-0.6	3.81%	-2.67%	0.4	1.54
BKR	Michael Baker Corp	NYSE MKT	268.13M	2731	1.01	4%	1.04	3.90%	0.69	2%	3.32%	0.46	1.17
CBI	Chicago Bridge and Iron Co.	NYSE	6.37B	60.13	-3.17	-5%	3.05	5.39%	2.77	5.32%	18.72%	0.98	3.33
EEI	Ecology and Environment	Nasdaq	43.81M	10.47	-2.39	-19%	-1.88	-15.44%	0.18	3.09%	3.58%	0.31	0.89
EME	EMCOR Group Inc	NYSE	2.76B	41.07	1.32	3%	1.25	3.14%	2.2	5.19%	11.42%	0.43	2
ENG	ENGlobal	Nasdaq	27.08M	0.99	0.35	55%	0.21	27.27%	-1.19	-4.44%	-70.48%	0.12	0.98
EXPO	Exponent Inc.	Nasdaq	807.32M	59.86	3.92	7%	3.37	5.88%	2.59	12.60%	17.72%	2.97	3.68
FLR	Fluor Corp	NYSE	9.41B	59.02	-4.19	-7%	-4.04	-6.52%	2.81	5.93%	16.83%	0.33	2.72
FWLT	Foster Wheeler AG	Nasdaq	2.1B	21.99	-1.12	-5%	-1.99	-8.66%	1.01	4.61%	16.42%	0.64	3.14
HIL	Hill International Inc	NYSE	108.66M	2.79	-0.18	-6%	-0.51	-15.38%	-0.57	2.72%	-12.85%	0.25	0.87
JEC	Jacobs Engineering Group Inc	NYSE	7.11B	55.42	-1.59	-3%	0.77	1.43%	3.15	6.19%	11.21%	0.64	1.8
KBR	KBR Inc.	NYSE	4.73B	32.69	-3.41	-9%	1.96	6.50%	0.95	3.71%	7.83%	0.62	1.81
STN	Stantec Inc	NYSE	1.98B	42.06	-0.52	-1%	0.04	0.10%	2.75	7.99%	17.69%	1.19	2.51
TRR	TRC Companies	NYSE	226.96M	7.74	1.82	31%	1.79	30.65%	0.58	3.39%	24.23%	0.69	2.65
TTEK	Tetra Tech Inc.	Nasdaq	1.52B	23.49	-4.08	-15%	-2.88	-10.97%	1.7	5.65%	11%	0.73	1.41
URS	URS Corp	NYSE	3.45B	47.7	-0.74	-2%	0.1	0.22%	4.06	4.45%	11.14%	0.31	0.97
VSR	Versar Inc.	NYSE MKT	43.02M	4.52	0.31	7%	0.13	2.84%	0.47	8.32%	12.49%	0.4	1.15
WLDN	Willdan Group Inc	Nasdaq	21.69M	2.89	-0.07	-2%	-0.09	-2.99%	-2.13	-1.45%	-60.93%	0.23	1.15
									Average	4.39%	2.04%		
									Median	5%	11.21%		

Information as of June 30, 2013.

STOCK PRICES

Ticker	Name	Market	5/1/2013	6/1/2013	7/1/2013	Change	% Change
ACM	AECOM Technology Corp	NYSE	28.53	30.79	31.69	0.9	3%
BKR	Michael Baker Corp	NYSE MKT	24.1	26.3	27.31	1.01	4%
CBI	Chicago Bridge and Iron Co.	NYSE	52.29	63.3	60.13	-3.17	-5%
EEI	Ecology and Environment	Nasdaq	13.52	12.86	10.47	-2.39	-19%
EME	Emcor Group Inc	NYSE	36.1	39.75	41.07	1.32	3%
ENG	ENGlobal	Nasdaq	0.38	0.64	0.99	0.35	55%
EXPO	Exponent Inc.	Nasdaq	52.05	55.94	59.86	3.92	7%
FLR	Fluor Corp	NYSE	56.15	63.21	59.02	-4.19	-7%
FWLT	Foster Wheeler AG	Nasdaq	20.48	23.11	21.99	-1.12	-5%
HIL	Hill International Inc	NYSE	2.57	2.97	2.79	-0.18	-6%
JEC	Jacobs Engineering Group Inc	NYSE	49.02	57.01	55.42	-1.59	-3%
KBR	KBR Inc.	NYSE	29.32	36.1	32.69	-3.41	-9%
STN	Stantec Inc	NYSE	43.39	42.58	42.06	-0.52	-1%
TRR	TRC Companies	NYSE	5.47	5.92	7.74	1.82	31%
TTEK	Tetra Tech Inc.	Nasdaq	25.6	27.57	23.49	-4.08	-15%
URS	URS Corp	NYSE	43.5	48.44	47.7	-0.74	-2%
VSR	Versar Inc.	NYSE MKT	4.44	4.21	4.52	0.31	7%
WLDN	Willdan Group Inc	Nasdaq	2.25	2.96	2.89	-0.07	-2%

Information as of June 30, 2013.