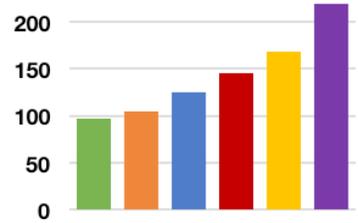


## TRENDLINES

### Average hourly billing rates



According to Zweig Group's 2016 Fee and Billing Survey, the average hourly billing rate for engineers rises about 18 percent for each upgrade in classification. Average billing rates in dollars: **Engineer I** (97), **Engineer II** (105), **Engineer III** (126), **Engineer IV** (145), **Engineer V** (168), **Engineer VI** (218). The largest jump (30 percent) in billing rates was between Engineer V and Engineer VI. Engineer VIs are typically branch managers or those at the VP level. The lowest adjustment (8 percent) was from Engineer I to Engineer II. As a reference, the average effective net revenue multiplier for firms on direct labor in 2016 was 3.18. (Special discount to TZL subscribers: Use code **SRVY35off** to order surveys at 35 percent off at [zweiggroup.myshopify.com/collections/frontpage](http://zweiggroup.myshopify.com/collections/frontpage))

## The trouble with engineers

“Engineers have problems. You heard me. Engineers have PROBLEMS! I have been working with engineers for 37 years now. That’s a long time and I’ve seen it all!”



Mark Zweig

### EDITORIAL

I’m about to make some generalizations that could get me in trouble with people I care about. If this includes you, please forgive me!

Engineers have problems. You heard me. Engineers have **PROBLEMS!** I have been working with engineers for 37 years now. That’s a long time and I’ve seen it all! And these problems I am referring to impact their success in both business and in their personal lives.

Here are a few of the “problems” I am referring to:

- 1) Can’t make a decision.** Engineers too often really struggle with this one. There’s never enough information. Therefore, it is deemed best to do nothing. This kills you when you are in business where your clients and employees need answers – or where delays implementing critical strategic initiatives translate into lost opportunities. I can’t tell you how many times over the course of my career I have been asked by an engineer-firm-owner this kind of question: “How many other 27-person MEP firms in Duluth have done this?” (Referring to a change we have recommended). That’s ridiculous. Beyond that, it virtually ensures the firm will at best be a follower and imitator of another company and not be a leader or an innovator.
- 2) Cannot take a risk.** We once worked with a company in Oklahoma that was stuck at \$20 million in annual revenue for five years in a row. Their owners decided in a business planning retreat to “commit” to a 15-percent revenue growth goal for the coming year. To accomplish that we suggested they increase both marketing and recruitment spending. One of

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# Conference call: Mike Gialketsis

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## ON THE MOVE

**RPS KLOTZ ASSOCIATES ANNOUNCES NEW APPOINTMENTS** Texas-based civil engineering firm **RPS Klotz Associates** (Hot Firm #43 for 2016) named William Abbott, PE, as president, and announced new senior leadership roles for Brent Christian, PE, and David Balmos, PE.

Abbott will leverage more than 35 years of experience in the engineering industry, including more than 20 at RPS Klotz Associates, where he most recently served for six years as senior vice president overseeing operations.

Christian, previously vice president and regions practice manager for the firm's Austin and San Antonio offices, will apply more than 30 years of industry experience in his new role as senior vice president of operations for the firm's locations statewide.

Balmos will use more than 20 years of experience in transportation and expertise in directing the firm's transportation marketing to expand his role firm-wide as senior vice president of marketing.

"It's an exciting time in our business as we celebrate unprecedented growth and the opportunities it presents for our next generation of leaders," firm founder and senior principal Wayne Klotz said. "I am pleased to announce these appointments and look forward to working with each of these proven professionals in their new roles as we continue building on our firm's success."

MARK ZWEIG, from page 1

the engineer owners was vehemently against that because, as he said, "It would be irresponsible to risk the bonus pool." They wanted to grow but were ultimately unwilling to do a single thing differently or take any risk to make it happen. Ridiculous! And I could give you 100 similar stories.

**3) Introverted.** You have all heard the joke about how you can tell when an engineer is extroverted? The punchline is, "He looks at your feet when he speaks rather than looking at his own feet." That's sad but true. And the problem with introverts is they don't get out and meet people. Because of that they may be less likely to have the relationships it takes to solve problems both inside and outside of the organization.

**4) Passive aggressive behavior.** We have seen so much of this over the years and still do. Passive aggressive behavior kills productivity and morale for everyone involved. A good example is an engineer who doesn't like someone else they are working with on a project so they get to a point where they need information from that person and instead of asking them for it, they do nothing. Only when the project deadline is jeopardized is the problem discovered. But instead of it being the problem of the engineer who stopped work waiting for information, they turn it into the person's problem who didn't voluntarily give them that information. This is ridiculous, of course, but common with engineers.

**5) Not honest about feelings.** Between being introverted and non-confrontational, one of the biggest issues with engineers is they often aren't honest about their feelings. This leads to more misunderstandings and problems throughout the organization, with people inside and out. Problem situations don't ever get resolved without management's involvement which sucks time and saps mental energy.

**All this stuff is real. Certainly – and thankfully – there are engineers who don't share these characteristics. Thank God for that! They are the successful ones. And we need more of them!** ▀

MARK ZWEIG is Zweig Group's chairman and founder. Contact him at [mzweig@zweiggroup.com](mailto:mzweig@zweiggroup.com).

**PLEX SYSTEMS NAMES RICHARD MURRAY GROUP VICE PRESIDENT OF ENGINEERING** Plex Systems, the leader in cloud ERP for manufacturing, announced industry veteran Richard Murray as its new group vice president of engineering. Murray will be responsible for research, development, and engineering as a member of the company's executive leadership team. Murray brings to the position a proven track record of product engineering accomplishments and a passion for innovation spanning enterprise software, cloud, Software-as-a-Service, and cyber security.

Murray was most recently senior vice president of engineering at Bromium, where he led development for the company's global enterprise cyber security solutions. His leadership was pivotal in building the team, processes, and architecture to deliver both quality and innovation, resulting in a 1,000-fold increase in product deployments during his tenure. Murray previously served as senior vice president of engineering, operations, and support at CollabNet, pioneering the delivery of cloud-based solutions for software application development.

Murray held executive positions at *Reuters* and at TIBCO Finance Technology, where he built the firm's first U.K. product engineering group. He also held leadership and hardware engineering positions at Digital Equipment Corporation, British Aerospace, and GEC-Marconi.



[thezweigletter.com/category/podcast/](http://thezweigletter.com/category/podcast/)

**THE ZWEIG LETTER**

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Published continuously since 1992 by Zweig Group, Fayetteville, Arkansas, USA. ISSN 1068-1310.

Issued weekly (48 issues/yr.). \$475 for one-year subscription, \$775 for two-year subscription.

Article reprints: For high-quality reprints, including Eprints and NXTprints, please contact The YGS Group at 717-399-1900, ext. 139, or email [TheZweigLetter@TheYGSGroup.com](mailto:TheZweigLetter@TheYGSGroup.com).

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## 30 vs. 300

If your firm is small but you want it to be big, don't be afraid, just hold onto your values as you also accept inevitable changes.



**Bill  
Murphey**

**CONTINUING  
ED**



**A** company's growth directly correlates with the company's culture. Smaller firms usually take on a family feel, while larger firms can have all the coziness of a Costco store.

There's a significant difference between leading a 30-person firm compared to leading a 300-person firm. I've led both sizes and learned that what works in one does not work for the other.

As the leader of a smaller company, you get to know your team very well. Successes are shared with everyone, because everyone has a hand in each project. You know the names and ages of your employees' children. Births are celebrated because the entire office has been betting on the due date. When one of your employees has a crisis, everyone pitches in to help.

As the leader of a larger company, you'll probably

“Smaller firms generally take on family environment feel, while larger firms can have all the coziness of a Costco store.”

know the names of your top leaders, but the names below that strata tend to blur. Only the largest successes are shared with the entire company, while the smaller successes are shared within departments and offices. You might

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remember that Susan in civil engineering is engaged, but you didn't realize her wedding was two months ago. You may not even recognize one of your employees if you walked by them at the local supermarket.

“There's a significant difference between leading a 30-person firm compared to leading a 300-person firm. I've led both sizes and learned that what works in one does not work for the other.”

This isn't to say that one size is better than another. It's simply to point out that leading different sized companies requires different techniques.

When I led a 15-person organization, we were an amazing team as everyone was connected with every project. We played off each others' strengths and accomplished some impressive feats. Yet, despite our cohesiveness, we may have become tired of each other, as we had petty bickering like I'd never seen before.

When I led a 400-person business, it took me about three months to learn the names of those just two levels below me and another six months to learn the names of my employees one level below that. The further down the chain, the less I knew about my employees.

It wasn't that I didn't want to get to know everyone, but my interaction with people several layers below me was intermittent. It took a concerted effort to get to know everyone even at a basic level.

I'd run into people at the grocery store who worked for me and they'd greet me. Sometimes I would recognize them, but wouldn't know their name. Other times, it was as if I'd never seen them before. I hated that feeling of not knowing everyone on my team.

I've had some senior leaders tell me they're afraid to grow their company because they're concerned it will lose its identity and stray too far from the founder's original design. While it's true that a 30-person firm that grows into a 300-person company will lose some of its initial character, there are plenty of reasons for embracing growth.

Large firms have more resources for servicing larger clients and more ambitious projects. That translates into opportunities for recruiting talent, gaining expertise, and positive branding.

Large firms will likely spin off professionals who would like to start their own firms. Celebrate the fact that your firm provided them with the experience they'll need to be successful.

Large firms, if run correctly, tend to have deeper pockets and can offer their employees greater benefits. It is in this way that you can do more for the people who worked to make the firm the success that it is.

“Having led both large and small companies, I can't say I prefer one over the other. They each have their positives and negatives, and if correctly led, a company can retain its original values and stay connected at any size.”

My point here is to not fear growth. Growth is healthy. Having led both large and small companies, I can't say I prefer one over the other. They each have their positives and negatives, and if correctly led, a company can retain its original values and stay connected at any size. ▀

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## UPCOMING SEMINARS



### GROWING A PROFITABLE AND ENTREPRENEURIAL AEC FIRM

This seminar will help you renovate every area of your business so your firm can grow in a purposeful manner. You need this seminar if you want to start thinking differently and leading with intention toward growth. This seminar will create entrepreneurial leaders who seek to grow their firm exponentially by capturing market share, winning contracts that will grow their business, and by infusing the entrepreneurial mindset throughout their firm.

**date:** March 29-30

**location:** Boston

**more info:** [bit.ly/2jBaSTE](http://bit.ly/2jBaSTE)



**FINANCIAL MANAGEMENT**  
FOR NON-FINANCIAL MANAGERS

### FINANCIAL MANAGEMENT FOR NON-FINANCIAL MANAGERS

This is a one-day seminar that was specifically developed to help design and technical professionals become more comfortable dealing with financial management and accounting. This course helps attendees become better stewards of the company's resources and to better understand how to leverage resources and maximize profit.

**date:** April 19

**location:** Washington, D.C.

**more info:** [bit.ly/2jj0FTY](http://bit.ly/2jj0FTY)



**LEADERSHIP SKILLS**  
FOR AEC PROFESSIONALS

### LEADERSHIP SKILLS FOR AEC PROFESSIONALS

This two-day seminar was developed to provide design and technical professionals with the skills to become more competent leaders. This course helps attendees develop and reaffirm the leadership skills, strategies, and techniques that will help them grow personally and professionally.

**date:** April 25-26

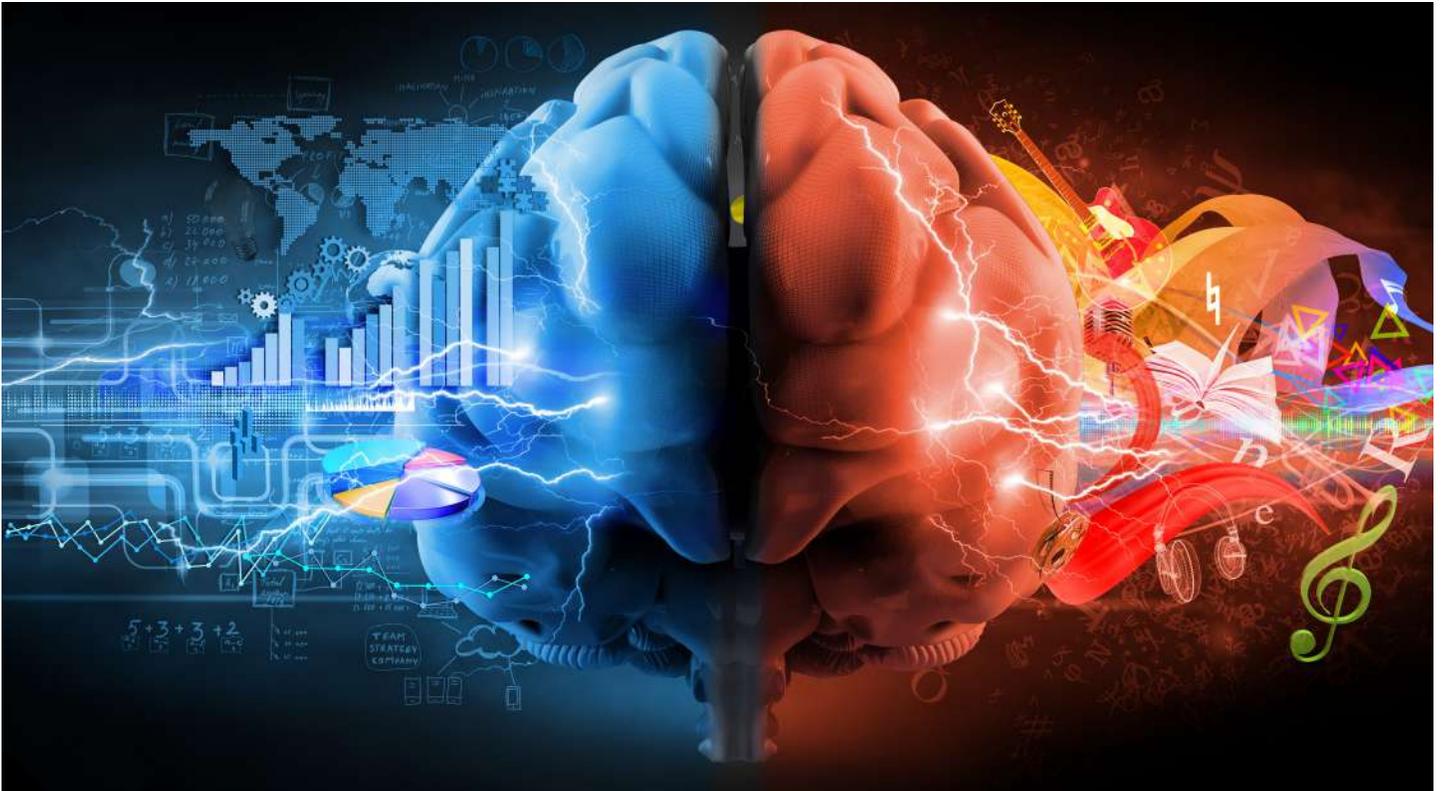
**location:** Washington, D.C.

**more info:** [bit.ly/2kx6Snj](http://bit.ly/2kx6Snj)

**WHY CHOOSE ZWEIG GROUP EDUCATION?** The content of Zweig Group's seminars is focused on the challenges you face, and the faculty are industry experts with first-hand A/E experience. We cut straight to the bottom line to give attendees just what they need to know about the topic at hand.

All Zweig Group training programs can be presented as an in-house program. We'll customize the program to what's important to you and will infuse it with our extensive industry data.

To sign up for a seminar or for more information, visit [zweiggroup.com/seminars/](http://zweiggroup.com/seminars/) or call 800.466.6275.



## Turning STEM into STEAM

Science, technology, engineering, and math are great, and adding art to the mix can elevate all of them.



Randy  
Collins

GUEST  
SPEAKER

**I**t's an age-old debate: Right brain or left? Science or art? Or today's version: STEM or the arts? As architects, we've struggled to pick a side because our profession pulls equally from both the sciences and the arts. But, with education funds shifting toward STEM and away from the arts, we need to be honest with ourselves. We need both.

And it's time we stand up for ourselves.

**FROM STEM TO STEAM.** Some may say, "With a focus on science, technology, engineering, and math we can improve our economy and come out on top in global competition." Those same people might say that STEM is our gateway to new environmental solutions for our planet, life-changing product development for healthcare, and computing innovations that break down barriers around the world. While these may be correct, there's more to the story.

Truth is (to borrow a phrase), all science and no art make Jack a dull boy. With many fields being commoditized through technology, the only way to compete in a global market is through innovation born of creativity. Engineering is design after all. Music brings math to life and

"With many fields being commoditized through technology, the only way to compete in a global market is through innovation born of creativity."

dance explores the limits of the human body. Creative or cultural content is often the critical differentiator that makes something marketable.

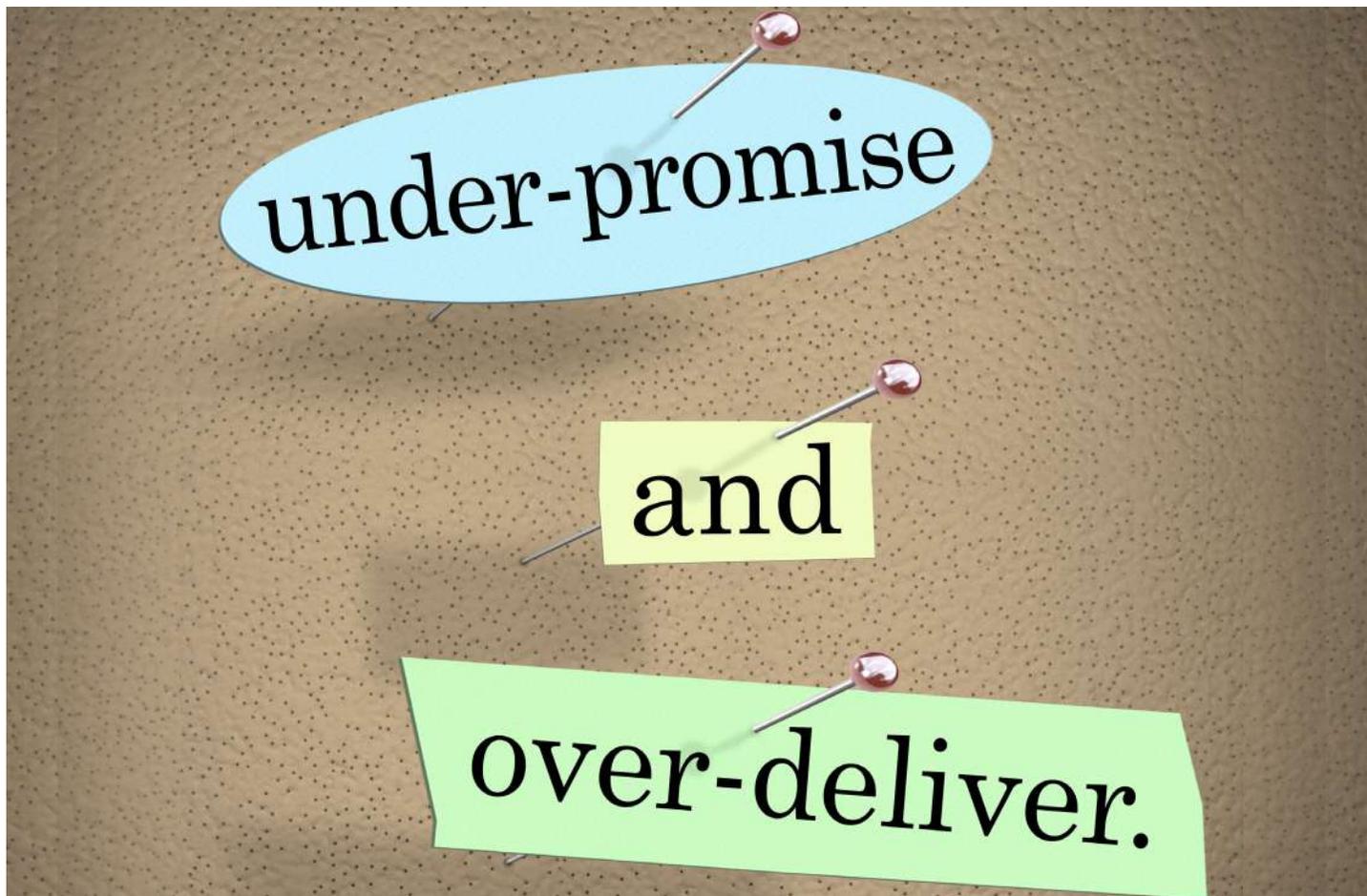
To move us all forward, we need both the arts and sciences. Changing STEM to STEAM (including the arts) is essential to business, our economy, and our profession.

See RANDY COLLINS, page 8



# SPOTLIGHT ON: Gialk

## PROFILE



## Conference call: Mike Gialketsis

President and one of the founding partners of San Diego-based Rincon Consultants, Inc. (Hot Firm #35 for 2016), a 115-person environmental planning and engineering firm.



Mike Gialketsis, President and Founder, Rincon Consultants, Inc.

By LIISA ANDREASSEN  
Correspondent

**M**ike Gialketsis shares his insights on collecting fees, discusses the importance of a strong marketing team, and reminds firm founders not to get greedy when it comes to ownership transition.

### A CONVERSATION WITH MIKE GIALKETSIS.

**The Zweig letter: What's your philosophy on fee/billing and accounts receivable? How do you collect fees from a difficult client?**

**Mike Gialketsis:** We bill as aggressively as our

contracts will allow and, where possible, we negotiate contracts that include aggressive payment schedules. We are comfortable with time and materials and fixed pricing billing structures that are designed to correlate to actual time spent during the billing cycle. We secure retainers or front-loaded payments when feasible and especially from new private sector clients without an established payment record.

We maintain close communication with all clients regarding payment expectations and have offered fast pay discounts for larger clients to facilitate prompt priority payment. For difficult clients, we

make regular phone calls and require payment for completed work prior to moving on to subsequent phases of a project.

**TZL: What's the recipe for creating an effective board?**

**MG:** Ensure that all board members are in alignment with company values and goals and that all voices are heard prior to taking key actions.

“We maintain close communication with all clients regarding payment expectations and have offered fast pay discounts for larger clients to facilitate prompt priority payment.”

**TZL: Is there a secret to effective ownership transition?**

**MG:** Establishing and maintaining trust and respect between founders and new leaders. Empower new leaders and facilitate versus resisting the inherent change. Facilitate open and honest communication that seeks fairness for all parties. Founders must be realistic, fair, and cannot be greedy.

**TZL: How do you go about winning work?**

**MG:** There are a few ways to approach this:

- Successfully execute existing projects
- Develop programs tailored to each client's needs
- Develop a team that clearly differentiates itself from the competition and meets the client's most critical needs

**TZL: What's the greatest problem to overcome in the proposal process?**

**MG:** Making a sound go/no-go decision. Realistically identifying the key client needs and drivers (differentiators) that will ensure the success of the proposal effort.

**TZL: Once you've won a contract, what are the “marching orders” for your PMs?**

**MG:**

- Understand the client needs and project objectives
- Communicate regularly with client (no surprises)
- Follow the contract
- Under-promise and over-deliver
- Become the “best consultant” the client has experienced
- Develop long lasting professional relationships

**TZL: How does marketing contribute to your success**

**rate? Are you content with your marketing efforts, or do you think you should increase/decrease marketing?**

**MG:** Our marketing team is instrumental in helping the management and technical staff pursue professional opportunities, identifying key client needs, developing strong relationships and project intelligence prior to the release of a request for proposal, and assembling a winning proposal strategy. We are very content with our level of marketing effort that we have but are integrating and improving our CRM capabilities and outreach training at all staff levels.

**TZL: What has your firm done recently to upgrade its IT system?**

**MG:** We have upgraded our server architecture and cyber protection capabilities. IT systems upgrades are an ongoing endeavor.

**TZL: What's the best way to recruit and retain top talent in a tight labor market?**

**MG:** Strive to be a “best place to work” firm and network and provide incentives through existing staff and professional connections.

**TZL: What's the key benefit you give to your employees? Flex schedule, incentive compensation, 401(k), etc.?**

**MG:** There is not one single benefit that stands out, but incentive compensation, employee recognition, strong internal communications, and high quality group social events are all important benefits that resonate with staff.

“Our marketing team is instrumental in helping the management and technical staff pursue professional opportunities, identifying key client needs, developing strong relationships and project intelligence prior to the release of a request for proposal, and assembling a winning proposal strategy.”

**TZL: How do you raise capital?**

**MG:** We are self-capitalized, so we do not raise outside capital.

**TZL: What's your preferred strategy for growth – M&A or organic? Give us a synopsis of how your firm effected growth in the recent past.**

**MG:** We have not engaged in M&A growth so all of our growth has been organic. Our growth has been, at least

See CONFERENCE CALL, page 8

RANDY COLLINS, from page 5

**STEAM IN ACTION – THE A/E OFFICE.** Look no further than an A/E office to see why STEAM, an integration of science and art, drives success and innovation. For example, in a single day, the members of our team at **CSArch** may be practicing and exploring:

**Earth science:**

- Measuring where the sun will rise and set, regional weather and wind patterns, and more so we can refine site selection and design lighting and heating systems
- Studying geothermal properties to assess opportunities to capitalize on the earth's heat to optimize energy usage

**Design:**

- Conceptualizing the massing and shape of a new building or addition
- Drawing, sketching, or illustrating a new façade for a historic building
- Brainstorming the right combination of materials, textures, color, furniture, and more to create a space conducive to evolving human needs

“STEM is important and we can't ignore this. But we're remiss to think that architecture as we know it can survive without advocacy for the arts.”

**Social sciences:**

- Integrating lessons in cultural anthropology, psychology, sociology, and more to make sure doors can be found, stairs can be climbed, and rooms feel comfortable and welcoming

**Computer/information technology:**

- Using software such as AutoCAD, Revit, and BIM to bring concepts to life for clients and their stakeholders
- Implementing an array of digital project management, time management, collaboration tools and more to help the entire team communicate and work together

CONFERENCE CALL, from page 7

partially-driven, by our continual commitment to improving our practice, cultivating an outstanding workplace, and developing strong professional relationships with our team. Our organic growth is fueled by our commitment to a healthy professional business culture.

**TZL: What's the greatest challenge presented by growth?**

**MG:** Maintaining a great workplace culture during the inherent change caused by firm growth and keeping up with internal infrastructure needs are two of the greatest challenges that we have faced.

**TZL: What's your prediction for 2017 and for the next five years?**

**MG:** 2017 is looking to be another strong year for the firm

**Performance:**

- Presenting to a school board, advocating for our solutions, and demonstrating the value of the project
- Speaking on a panel, sharing our expertise to help move our industry forward
- Hosting a lunch-and-learn event for our staff, creating an experience to help the team grow personally and professionally

“To move us all forward, we need both the arts and sciences. Changing STEM to STEAM (including the arts) is essential to business, our economy, and our profession.”

**Math/finance:**

- Calculating the cost of a current project, or helping a client understand what future projects and ongoing development may entail

**Writing:**

- Generating reports to communicate concepts, details, and specifications for a project.
- Composing copy for proposals so prospective clients understand our value and abilities
- Developing case studies, articles, or marketing materials to share our work with others

**WHAT'S ARCHITECTURE WITHOUT THE ARTS?** Music programs can't maintain their instruments. Theater courses have lost their stage to perform. Drawings and handwritten letters are becoming things of the past.

STEM is important and we can't ignore this. But we're remiss to think that architecture as we know it can survive without advocacy for the arts. With a simple inclusion of the letter A in the push for STEM, we could make all the difference for the future of our profession. ▀

RANDY COLLINS is president and founding principal of CSArch. He can be reached at rcollins@csarchpc.com

“Maintaining a great workplace culture during the inherent change caused by firm growth and keeping up with internal infrastructure needs are two of the greatest challenges that we have faced.”

in terms of both internal and external development. Looking beyond 18 months is more difficult, but I remain optimistic about the ability of a well-managed firm to navigate changes in market conditions. As for market conditions, our firm is focused on California and I envision that the California market will remain strong due to the need for infrastructure upgrades, forecasted population growth, and land use changes driven by large scale changes in the transportation systems. ▀



## Retrievable receivables

Install rigorous controls with your PMs when it comes to the average collection period, and watch the money flow back into your accounts.



Ted  
Maziejka

**FINANCIAL**

**FITNESS**

**A**s 2016 fades into the past and we prepare the year-end analysis, one of the most important New Year's resolutions that all CFO, controllers, and financial managers need to stress to senior leadership and the project management teams is cash flow optimization. An example of a firm that really took our suggestions to heart illustrates how important optimizing cash flow can be and how valuable it became.

We were engaged in early 2016 by the CEO and COO of a firm that's doing \$18 million gross revenue, but had serious cash flow issues. Their AR was \$4 million, and the "over 61 days" was at \$2.2 million. They had less than \$400,000 in the bank. The firm's average collection period was more than 110 days.

They had 57 project managers who didn't seem to understand that part of their job was to ensure adherence by clients to contract terms.

We started by instituting weekly AR reviews on all 57 PMs, and insisted that comments on when they would see cash inflows and how much was coming

"An example of a firm that really took our suggestions to heart illustrates how important optimizing cash flow can be and how valuable it became."

were entered into the Deltek Vision accounts receivable system. We instituted weekly cash flow reviews projected out 26 weeks.

By August, the controller was not embracing the program and a replacement was made with a

See TED MAZIEJKA, page 10



TED MAZIEJKA, from page 9

highly dynamic and experienced controller, who came from a larger firm and was clearly looking to modify the project managers' behavior.

"As 2016 fades into the past and we prepare the year-end analysis, one of the most important New Year's resolutions that all CFO, controllers, and financial managers need to stress to senior leadership and the project management teams is cash flow optimization."

By November, the firm still had AR of \$4 million, the "over 61 days" was at \$300,000, they had \$2.2 million in the bank, and the ACP was at 53 days!

The program we integrated worked due to the fact that the CEO and COO were 100 percent behind the program, and the results dramatically proved what happens when financial management works with project management to effect positive change.

The following are recommendations to get your firm in a cash flow optimization mindset:

- 1) **Adherence to contract terms.** Getting the financial management team to hold the clients to performance of contract terms is critical. They can only be effective up to the terms of the agreement. When the client stops paying beyond contract terms, it is first up to the PM to determine where the problem is. If they can't get resolution within two days, it needs to move into the hands of the project principal.
- 2) **Is the right person in the role of controller?** Guiding the financial direction of a firm requires the controller to be a strong-willed, effective professional that stresses process, procedure, and adherence to the terms of agreement. In our firm's example, the controller would not challenge the technical staff, and did not hold them to the commitments they were providing. The controller has to ensure that the project management team is diligent with the client and has to be the gatekeeper to provide effective cash management.

"The program we integrated worked due to the fact that the CEO and COO were 100 percent behind the program, and the results dramatically proved what happens when financial management works with project management to effect positive change."

- 3) **Weekly AR review.** This firm recognized that reviewing the project managers on a weekly basis put everyone on notice of the issues. Project principals were held accountable for the performance of their project managers. The project management accountant was rigorous about providing not just a

weekly analysis of the AR but of sorting the AR by PM from high AR to low. The project managers could no longer hide.

- 4) **Monthly work in progress review.** Monthly review of the WIP was instituted and not only was WIP reviewed at the gross level on the balance sheet, but just like the AR, the WIP was aged monthly and then sorted from high to low to see where the issues were with the project managers. WIP, uncontrolled, becomes a cash flow killer.
- 5) **Weekly cash flow review.** Integration of a weekly cash flow review that provided a predictive look 26 weeks out proved invaluable in allowing the new controller to target the outflows with real data that supported the cash inflows. By marrying anticipated AR with the projected, the report and data became highly valuable. With the bank balance increasing, the timing of the cash outflows became much more strategic in nature and the ability to broadcast accurate, predictive information to senior management took much of the worry away. The controller and the financial management team were proud of the way they supported the project managers, and ultimately, the project managers saw how valuable this was to the firm.

"The realignment of the 57 project managers' responsibilities, the replacement of the controller, the review process, reporting process, and insistence on performance took some time to take hold. However, for this firm, there is no going back."

- 6) **Monthly metric review and simple reporting.** Streamlining the monthly reporting to effectively a one page review of vertical office and horizontal lines of business performance at a profit and loss level created a clear understanding of the information. Critical metrics were reviewed for each office and the lines of business, and the starting point in this firm's case was office/firm ACP. Other metrics such as effective multiplier, revenue factor, breakeven multiplier and operating multipliers, average payment period, and a few others, all assisted in streamlining the information. Now, instead of sifting through a 20-page report, the starting point was the one-page review. If the office or a line of business required a deeper dive, the information was provided. The most critical aspect of this reporting was an effective qualitative assessment by the new controller on areas that needed attention. The delivery of the information was also accelerated from seeing the reporting on the 20th of the month to the 10th of the month.
- 7) **Sounds simple, not easy.** What the firm went through sounds like an easy program, but it wasn't easy. The realignment of the 57 project managers' responsibilities, the replacement of the controller, the review process, reporting process, and insistence on performance took some time to take hold. However, for this firm, there is no going back. There is a clear understanding by the PMs of why holding the client to the terms of agreement is critical. They changed their cashflow picture by putting their hard-earned money in the bank rather than leaving it in the clients' hands. ■

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## OPINION



# Growing a company

Should you buy a firm or sell yours? That's the question, and regardless of the answer, there's a lot that goes into a successful merger or acquisition.



**Joseph  
Viscuso**

**GUEST  
SPEAKER**

**I**n the ever-evolving AEC industry, both large and small firms must constantly evaluate the market and make decisions about how to best position themselves for success. Often, this evaluation causes firm leaders to ask the age-old question: Should we buy a firm or sell ours?

The merging and acquiring of firms grows increasingly popular within the engineering community. Before diving into the M&A pool, it is important to better understand where your firm best fits.

First and foremost, leadership must decide if their firm is the buyer or the seller. This seems like an obvious choice, but you should give it some deeper thought before thinking you know the answer. If your firm has the capital, perseverance, and culture that can cultivate growth from an exterior source, you may be well positioned as a buyer. If there is no in-house "heir," you lack capital, and no foreseen opportunities in outside markets or geographies, you and your firm may better benefit as the seller.

If you've been determined as the seller, there is

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much preparation to be done! Like dating, first impressions when on the market are imperative. Financials/balance sheets need to be cleaned and the office space must be organized – as we all know, appearances matter. Beyond attracting a buyer, it's important to consider your staff and your clients. How will they take the news? What will their perceptions be? How will your role

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## BUSINESS NEWS

**LJA ENGINEERING OPENS NEW OFFICE IN CONROE, TEXAS** LJA Engineering, Inc. (Hot Firm #2 for 2016) has opened a new office in Conroe, Texas. After celebrating the official open house on December 1, 2016, LJA is pleased to offer expanded depth and breadth of services in its 21st location.

“As true partners with our clients, we want to be where they are. This new location allows us to elevate our level of service and better leverage our talent and resources,” said Jeff Cannon, vice president of public works.

LJA landed at No. 2 on the *Houston Business Journal's* Largest Houston-Area Civil and Structural Engineering Firms List, based on 2015 gross local billings of \$106.45 million, and completed the most projects of any of the top 25 companies. LJA also ranked on *HBJ's* Fast 100 list in 2016 and 2015.

“We fully expected the company to employ more than 650 people by yearend 2016 and to generate approximately \$115 million in revenue. We have exceeded those goals and are anticipating even greater growth in 2017,” said Calvin Ladner, president.

**PENNONI PRESIDENT TO RECEIVE OPAL AWARD** Anthony S. Bartolomeo, president and CEO of **Pennoni Associates, Inc.** (Hot Firm #48 for 2016), a multidiscipline firm in Philadelphia, Pennsylvania, will be honored by the American Society of Civil Engineers as one of five 2017 Outstanding Projects and Leaders award

winners. Bartolomeo is being honored for leading the development of the ASCE Grand Challenge to reduce our nation's infrastructure lifecycle costs by 50 percent by 2025, encouraging youth to attain 21st century skills and post-secondary education, and for his ongoing commitment and leadership to community and non-profit organizations. He will receive the award on March 16, 2017, during ASCE's annual OPAL Gala in Arlington, Virginia.

“Anthony is an exceptional leader committed to excellence in everything he does. Pennoni has been overwhelmingly successful and is a coveted place to work, thanks to his dedication and expert leadership,” said Norma Jean Mattei, president of ASCE.

Bartolomeo is a respected and recognized leader in both the greater Philadelphia region and the architecture, engineering, and construction industry as a whole. During his time on former Pennsylvania Governor Tom Corbett's Marcellus Shale Advisory Commission, Bartolomeo's efforts directly contributed to greater measures regarding the safe, efficient, and environmentally responsible extraction and use of unconventional natural gas reserves in Pennsylvania.

As past chairman of the Board of the World Trade Center of Greater Philadelphia for seven years, Bartolomeo was instrumental in accelerating global business growth

for companies in the greater Philadelphia region. Under his direction, the WTGCP assisted companies in generating more than \$1 billion in increased export sales, creating more than 12,500 jobs. The growth and success of the WTGCP during his tenure reflects his dedication and support for the organization, earning Bartolomeo the *Philadelphia Business Journal's* Outstanding Director Award in 2014.

Under Bartolomeo's leadership, Pennoni has grown to more than 1,200 employees in more than 30 offices across the country. Offering a variety of planning, design, and construction services, the firm is committed to delivering projects that are innovative and resilient, that are cost-effective throughout their duration of use and meet stringent standards of quality. Across all market sectors, Pennoni works with project owners, end users, stakeholders, and teaming partners to develop solutions that help to close the ever-widening infrastructure gap, truly making Pennoni a “partner for what's possible.”

Bartolomeo joined Pennoni in 1986 and has more than 40 years of engineering experience. Bartolomeo holds a bachelor's degree in civil and urban engineering from the University of Pennsylvania.

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change with them? Announcements must be strategic and planning this transition is key. The last thing you want to do in this situation is leave your loyal employees out of the loop due to a lack of communication with them. A well thought out path needs to be planned in order to maximize your value.

Determining value is an artful dance between the buyer and the seller. Know your approximate value and utilize tools available to aid in this determination. Be aware that firms can have different values depending on the needs and strategy of the purchasing partner.

“If your firm has the capital, perseverance, and culture that can cultivate growth from an exterior source, you may be well positioned as a buyer.”

Although much preparation is to be done by the seller, the buyer must put in effort as well. The most important decision, even more than financials, is deciding what role the merger or acquisition will fill within the buying organization. Do they add value to a specific geography or market sector? Do they provide more employees to handle the growing backlog?

“If there is no in-house ‘heir,’ you lack capital, and no foreseen opportunities in outside markets or geographies, you and your firm may better benefit as the seller.”

Integrated culture can't be forced. Like a successful project, it needs to be designed and again, effective communication is key. It's imperative that before any transaction takes place, that an integration plan is developed. The seller must encourage staff to engage and spend as much time as possible with the buyer. It's the buyer's responsibility to engage the seller, make efforts to cross pollinate, and promote internal relationships across senior, mid, and junior level staff.

As with any transaction, it's natural to feel remorse after completion. Problems will arise and success is determined by the solutions applied. The buyer and seller should meet early and often to continually improve the integration process. As the seller, embracing change is key. As the buyer, it's important to keep focused on the end-goal, but realize the journey is just as important. M&A's are long-term solutions for both the buyer and the seller. Patience is the key. As Steve Jobs once said, “If you really look closely, most overnight successes took a long time.” ▀

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