PSMJ PROFESSIONAL SERVICES MANAGEMENT JOURNAL

A/E STRATEGIES FOR SUSTAINABLE SUCCESS

AUGUST / 2017 • VOL / 44 • ISSUE / 8

FLAT

Total direct compensation remained flat for A/E Business Development Directors. This, even though bonuses decreased by slightly more than 30 percent from 2016, reports PSMJ's *2017 A/E Management Compensation Benchmark Survey Report.*

INSIDE:

COMBO PLEASE: SELLER-DOER WITH A SIDE OF CLIENT-CENTRIC STRATEGY

Though the concept of seller-doer has been around for quite a while, it's still relevant and, combined with a client-centric strategy, the model can mean big wins for design firms.

Research shows that typically an A/E firm gets 80 percent of its revenues from current and past clients who are kept in the fold by their seller-doers. Further, the work of business development is not redundant with that of seller-doers. Rather, BD staff enhance the effectiveness of seller-doers.

When pursuing major projects, experts recommend the two work in tandem, with the seller-doer functioning as proposal manager and the business developer working as a sales lead. CONTINUED / PAGE 2 ▶

COE FIRMS READ PSMJ TO ACHIEVE MORE

When PSMJ announced the members of the elite 2017 Circle of Excellence (COE)—more than one-third (23) were PSMJ subscribers. Seventy-three exceptional architecture and engineering firms made it onto the exclusive list this year—a new record for the award that highlights firms that are successfully managed and demonstrate outstanding achievements in areas such as profitability, overhead management, cash flow, productivity, business development, staff growth, and turnover.

The Circle of Excellence represents the top 20 percent of participants in PSMJ's 2017 A/E Financial Performance Benchmark Survey, based on 13 key performance metrics. Among those firms that are in COE and subscribers are Aguirre & Fields, TX, InSite Engineering, NJ, and Weber Thompson, WA.

"The Circle of Excellence is consistently made up of a diverse set of firms that come from all corners of the A/E space. This is hard proof that success isn't defined by a specific firm size, location, or market niche," says Frank A. Stasiowski, FAIA, Founder and CEO of PSMJ Resources. "The top-performing firms just think and act differently than the rest of the pack to achieve extraordinary business performance." ●

For the full list of 2017 winners go to: https://www.psmj.com/news-and-media/psmj-resources-inc-announces-top-performing-architecture-engineering-firms-2017

SELLER-DOER (continued from page 1)

The following chart shows how combining both skill sets helps to win a big pursuit:

ACTIVITY	SALES LEAD	PROPOSAL MANAGER
Identify specific opportunities with quality clients	◆	
Make go/no go recommendation	◆	
Recommend a proposal manager	◆	
Develop "win" themes and strategy	◆	◆
Establish a proposal team, budget, and schedules	◆	◆
Obtain client intelligence (ongoing)	◆	
Assess the competition	◆	
Manage the proposal effort		◆
Lead the "red" team	◆	
Ensure success	◆	◆

ORGANIZATIONAL SHIFT

To deliver true client-centric service everyone needs to work together to provide a seamless customer experience. To do this well and differentiate your firm in the process, consider these five questions:

1. How should we change incentives and priorities?
2. Does our organizational structure work?
3. How can we provide personalized customer experiences (technology) that allows us to still make a comfortable profit?
4. What business processes need to change?
5. How do we make necessary adjustments without disrupting current operations? ●

BY THE NUMBERS

70%

Seventy percent of architecture firms use seller-doers. Engineering firms are the most likely to use a seller-doer (84 percent).

Sixty-six percent of construction firms use seller doers. Source: SMPS's "Sell. Do. Win Business. A Report on How A/E/C Firms are Using Staff to Win More Work"

76%

Salaries for Business Development Directors may have gone up and bonuses decreased (see "Flat" on p. 1), yet 76 percent of BD Directors receive bonuses.

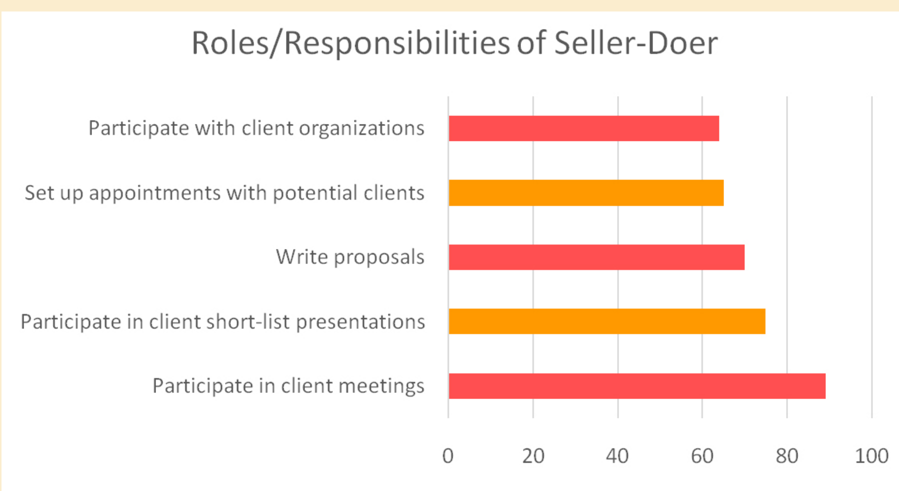
These bonuses are seven percent of their individual salary, says PSMJ's 2017 *A/E Management Compensation Benchmark Survey Report*.

27%

Twenty-seven percent of Business Development Directors drive a company car. Three percent receive paid overtime, says PSMJ's 2017 *A/E Management Compensation Benchmark Survey Report*.

CLIENT-CENTRIC SELLER-DOERS

Many current seller-doers' responsibilities are extremely client-oriented:



But they have their challenges and to provide true client-centric service, some training may be necessary. According to Scott D. Butcher, FSMPS, CPSM, seller-doers have very specific traits and tasks:

- Typically not trained in sales techniques (unlike BDs)
- Manage client relationships and drive new business from existing clients
- Balance billable work with sales responsibilities, which could fluctuate between 10 percent and 50 percent of their time
- Often are the only employee engaged in business development in smaller/ specialized firms

Source: SMPS's "Sell. Do. Win Business. A Report on How A/E/C Firms are Using Staff to Win More Work"

TIME TO RETHINK UTILIZATION AS THE BEST WAY TO PROFITABILITY

Utilization is a matter of simple math for professional services firms—billable hours equal revenue earned. It's also one of the most commonly and closely tracked metrics used to gauge financial performance in the design industry, and can be a borderline obsession for some A/E firm leaders. Michael Kuppinger, P.E., Ph.D, a consultant and engineering company executive who studies the habits of high-performance firms, argues that this is a misguided view.

CONVENTIONAL WISDOM MAY BE WRONG

In examining PSMJ's Circle of Excellence (COE) firms—those among the top 20 in many performance measures (See page 1 for more on COE)—Kuppinger identifies the trait of maintaining "small, stable teams for dynamic client response" as a significant differentiator. Within this dynamic, Kuppinger has found that utilization is not as significant a contributor to a firm's overall success as conventional wisdom suggests it is.

"In contrast to A/E firms that continually move staff from team to team to maximize utilization, high-performance firms focus on continuous improvement through team stability," Kuppinger says. He reached this conclusion after a 20-year career in engineering firm management, complemented by research completed for his consulting and an upcoming book on the secrets of high-performing firms.

TIME TO CHANGE THE FOCUS

"I had 240 engineers working for me, and the focus was always on utilization," Kuppinger says. "When I looked closer, though, I found smaller, more stable teams that had pretty good, but not great utilization, but whose project profitability was always high. I thought maybe they were just charging more, but I eventually found out that these teams were so much more effective than everyone else. They learned from each other and were incredibly efficient."

Kuppinger, who jointly delivered a presentation on the differentiators of high-performance firms with PSMJ principal David Burstein, P.E., at last year's Thrive A/E industry conference, says there are better measures for firms to use."I always somewhat believed the message that utilization was over-emphasized," he says. "But after the research I've done, I believe it even more. When you use utilization as a key factor, that's where you start to break teams apart. I suggest instead using effective multiplier or some combination of billable hours and what the firm got paid."

By taking the focus off utilization and placing it on working effectively in small teams of four to eight people, firms will ultimately achieve greater degrees of profitability and staff stability, Kuppinger says. He adds that utilization doesn't correlate with profitability, in part because staff pressured to achieve high utilization can figure out ways to be highly utilized on a time card while not necessarily doing what is in the best interests of the firm. "Focusing on utilization causes more damage than it ever helped," he says. ●

3 KEYS TO SMALL, STABLE TEAM SUCCESS

One of Michael Kuppinger's secrets to better financial performance for A/E firms is to ensure that project teams are small and stable, where everyone feels they have a home base that they can return to even if they temporarily join another team. Kuppinger's three keys to small-team success are:

1. **Made up of at least four members, but not more than eight**. When teams grow larger, communication becomes more difficult, relationships grow more complex, and self-interest begins to trump team achievement.

2. **Bound by clear rules regarding who can—and cannot—be on the team**. This means defining which roles should be filled by permanent team members, as opposed to temporary supporting roles provided by extended team members.

3. **Long-term stability that allows for collective learning and improving**. As a rule, high-performing core teams stay together for an average of 10 years and a minimum of three to four years. "In companies that had people move around, individuals learned fast from other people, but the groups never came together as teams," Kuppinger says. "The number of errors were higher because the individuals didn't cover for each other."

"One of the things that was clear in firms that successfully maintain small, stable teams is that the project team knew up front who the core team is," Kuppinger says. "Everyone knew their responsibilities and everyone was accountable to each other."

DISRUPTION: NO EMPLOYEES? NO PROBLEM—THE VIRTUAL FIRM HAS ARRIVED

Until six years ago, the career path for Peter S. Macrae, AIA, was traditional. That all changed in 2011 when he parted ways with the recession-ravaged firm where he was managing principal and started his own firm. Macrae ARCHitecture, Inc., based in a suburb of Columbus, OH, has a website, 25 or 30 clients, and an annual portfolio averaging 150 projects. It has everything that a typical architecture firm has, with one notable exception—employees.

THE VIRTUAL FIRM

Macrae's firm is a thriving, high-production design firm that delivers architecture, interior and graphic design, project management, and 3D modeling services to clients in the commercial, residential, and civic markets. And he is its only full-time staff. "My goal was to start a firm without any cash," Macrae says. "I thought that it must be possible to have a full-service, national architecture practice with zero fixed overhead. No rent. No equipment. No payroll. Just a laptop, with everything in the Cloud. And it worked like a charm. I put money into an account on day one just in case, but I've never touched it."

5 KEYS TO RUNNING A 'VIRTUAL' FIRM

Here are five key factors that allow Macrae ARCHitecture to complete an average of 150 projects a year with only owner Peter Macrae as a full-time employee:

1. Financial discipline. Despite almost no overhead, Macrae ARCHitecture, Inc. charges the market rate for its services. Macrae also requires clients to pay half the fixed-fee up front and the remainder before receiving the final contract documents.

2. Focus on results, not hours. All projects are fixed-fee. "I've actually convinced all the people doing this with me to never again think about how many hours it takes to do something," he says. "All that matters are the deadline and collectively realizing the profits."

3. Successful independent contractors. "Every one of the people who works with me is an independent firm owner with their own clients and projects," says Macrae. "I insisted on it and now we are just one of each other's clients."

4. The right clients. The vast majority of Macrae's clients are in the private sector, largely because public-sector clients won't agree to his contract terms and can sometimes limit a firm's profit.

5. Appropriate technology. Macrae and his contractors hold meetings using apps like GoToMeeting and Skype, while exchanging files with Dropbox and similar tools.

INSPIRED BY CIRCUMSTANCES

Macrae says the idea came to him in his prior position when he noticed that, although they were in a room together, his staff was working, more or less "virtually." "The CEO is in the corner office and there's a big bullpen with all the staff in their ten-by-ten spaces. It's the same work environment as when I started forty years ago, but instead of having a set of drawings rolled out on a drafting desk, they have ear buds in and they're throwing electronic files to each other."

In building his firm of independent consultants, Macrae had a ready-made talent pool from the good employees that his firm laid off as it dwindled from approximately 20 people to six. Even more doors opened with the passing of the Affordable Care Act, easing the considerable worry of high healthcare premiums among his contractors.

PRESENT COMPANY INCLUDED

Macrae's total stable of talent consists of about 16 contractors, but he works regularly with up to eight. The firm works throughout the U.S., as well as in Canada and Mexico, having grown to six teams. Five are led by mid-career professionals and the sixth by Macrae himself. "We have team leaders located in four different states and five different cities. Four teams serve national accounts, one team does high-end corporate interiors, and I head up the group that does the one-of-a-kind stuff."

The "virtual" state of the firm remains out of its clients' view; there's nothing on the website or in any communications indicating that the firm isn't like any brick-and-mortar establishment. Macrae's few overhead costs include regular license renewals, periodic software upgrades, and the necessary liability insurance. "I don't pretend that this virtual practice model is the great disruptor or that it's going to be the only way architects are going to deliver services in the future," Macrae says. "It's just an alternative. The Internet and all its connectivity have made this type of practice viable." ●

WHEN PPM IS PART OF THE OLYMPICS, IT'S TIME TO TAKE ANOTHER LOOK

Five years after the London Olympics entertained the world, lessons learned from the Games' use of project portfolio management (PPM) may still offer insight into improved A/E/C firm performance.

Defined by the Project Management Institute (PMI) as the "centralized management of one or more project portfolios to achieve strategic objectives," PPM is standard practice for public projects in the United Kingdom. The UK government offers reams of information about portfolio, "programme," and project management, and, until recently, required project teams to follow PPM best practices on public-sector projects.

BILLIONS IN CONSTRUCTION

The London Olympic games involved about $11 billion in infrastructure construction on hundreds of projects over the course of six years. The UK government determined that the way to successfully deliver this massive, high-profile, and complex project was with the aid of an efficient, comprehensive portfolio, programme and project management process (sometimes called "PPPM"). "The government knew they needed a coordinated effort with consistency in delivery across all project types," says John Henry Looney, managing director of London-based environmental consultancy Sustainable Direction, Ltd. (SDL). "They couldn't constantly reinvent the wheel and be successful."

As these were not "one-size-fits-all" projects, the PPM process also allowed for flexibility within the broad spectrum of project conditions that design and construction teams encountered. At the same time, the process—with the assistance of PPM software tools—had to capture the knowledge being generated in the project delivery process, and deftly redistribute this information to the relevant stakeholders at the appropriate times.

THE PRINCE2 STANDARD

Looney, who is also a PSMJ correspondent and consultant in London, says that the focus on PPM resulted in 13 to 14 percent of the budget going to governance and overall project management. To avoid meeting overload, PPM leaders ensured the meetings were regularly scheduled, focused, and efficient. They also credited the PPM process with driving quick decision-making and reducing change orders.

The UK's PPM approach is based on a structured project management method called PRINCE2 ("PRojects IN Controlled Environments). This standard was developed by the UK government in the late 1980s and is an internationally recognized best practices approach.

Its Olympic success and popularity in the UK notwithstanding, PPM use among construction-related companies lags that of other project-based industries, such as finance and information technology. According to a study by PM Solutions, as reported by software company Wrike, construction was dead last among 12 industries surveyed about PPM. The study reported that 71 percent of all firms surveyed had PPM processes in place, compared with 34 percent of construction firms. "Defense" was second-to-last at 51 percent, while "Finance" topped the list at 87 percent.

Many of the largest U.S. firms practice PPM, but its use is less common among small and mid-sized organizations. While the ROI can be difficult to quantify for some firms, improved coordination and comprehensive management of a firm's full portfolio can only benefit the project delivery process. PPM software solutions span from generalist enterprise management products to niche construction-industry focused providers. Many of the former can be found in IT consultant Gartner's review of what it calls the "Magic Quadrant" of PPM providers, while softwareadvice.com offers a comprehensive list of construction-based products. ●

John Henry Looney can be reached at JHLooney@PSMJ.com or +44 (0) 7817 809018

7 PRINCIPLES OF PRINCE2

Here are seven principles that must be in place in the PRINCE2 process:

1. **Continued business justification**
2. **Learn from experience**
3. **Defined roles and responsibilities**
4. **Manage by stages**
5. **Manage by exception**
6. **Focus on products' definition, delivery, and quality**
7. **Tailor to suit the project environment**

LET YOUR COMPETITOR PAY YOUR BEST EMPLOYEES—UNTIL YOU NEED THEM

Hiring is a messy process. You can't hire everyone right away, and sometimes not even the people you want to hire most. It's that pesky issue of balancing budget with that robust talent pool you've assembled, with the scale always tipping towards the top-heavy latter. So what do you do?

Andrea L. Anderson, Regional Human Resources Manager for Stantec says,"The key is to be proactive to the extent possible." She then adds, "The stronger the collaboration and partnership between the operational leadership and the human resources and/or recruiting team, the better." Stantec—ranked number one A/E firm in the U.S. by Building Design & Construction's "2014 Giant 300 Report"—knows a thing or two about building a healthy employee pipeline.

"In terms of our recruitment approach," Anderson says, "Our talent acquisition consultants aim to maintain a constant flow of candidates to not only meet our current needs, but also our potential future needs as well—technology further enables this, along with various candidate pipeline and 'warming' strategies." She adds, "Without proper planning, companies run the risk of having projects under-staffed, which can result in staff burnout and/or unnecessary overtime leading to reduced margins, higher turnover, lower productivity, etc." Stantec uses networking and marketing: "To the extent that our brand resonates with what our candidates (and clients) connect with, the more likely we'll be successful in filling our talent needs (and business development)."

COST OF BAD DECISIONS

But Stantec understands that while hiring is a particularly taxing job that needs to be done quickly, done wrong, the consequences can be pretty nasty. Its human resources department trains its hiring managers on "the cost of a bad hire"; which includes the "tangibles"— e.g. salary and benefits, training, and lost clients — as well as the "intangibles," such as immeasurable damage to company reputation and staff morale.

Anderson says, "We believe hiring for attitude and cultural fit is extremely important. While our candidates need to have the knowledge, skill, and ability—KSAs—to perform a role, often times people fail because of their personality fit more so than their technical competence." ●

CHIEF PRICING OFFICER (AND 2 MORE TACTICS) THAT YOU NEED TO REVISIT

Optimizing your pricing strategy is a key way to gain an advantage over your competitors while also increasing your profits. PSMJ's senior principal, Dave Burstein, P.E., provides three unconventional ways to get more value when it comes to pricing:

1. Rank your competitors.

Study your main competitors' pricing of services enough to be able to rank them from most expensive to least expensive, Burstein says. "That way, when you see several low-priced competitors on a short list from a price-sensitive client, you can pass on this 'opportunity' before spending a bunch of time and money on a losing proposal (or worse yet, submit a winning proposal that loses money)," he says.

2. Set a structure and keep to it.

Last-minute meetings to set a final price for a firm's newest product or service have become a regular occurrence amongst some organizations. Most times the attendees are unprepared and research is limited. Burstein explains the importance of adopting a separate pricing structure for each major market and state. "Once you have done this, appoint a 'Chief Pricing Officer' who must pre-approve any proposal that goes out with a price less than this structure," he says.

3. Spend lots of time on high-profit clients.

Companies often make the mistake of putting too much effort into customers that account for only a small amount of the company's profits. Generally, 80 percent of a company's profits comes from 20 percent of its customers. As Burstein states, "Don't skimp on spending marketing money on your existing clients—especially the profitable ones." ●

IS YOUR FIRM A STEPPING STONE? EMBRACE IT

Common wisdom is that you strive to keep your best and brightest talent. You've spent the time and money training them, so you want to retain them. Not necessarily, proposes David Tan and Christopher Rider, researchers at the University of Washington and Georgetown University.

According to the pair, employee departures, especially those that are the result of being hired by a competitor, "can enhance a firm's competitiveness in the market for human capital by signaling to potential employees that the firm offers a prestigious employment experience, which can help them obtain attractive positions with other employers." In other words, your firm becomes known for producing highly desirable employees capable of moving up the corporate ladder into high-status firms.

VALUE GIVEN TO FUTURE WORTH

According to LinkedIn data, Millennials will make up half of the global workforce by 2020 and they will most likely have worked at four different jobs by the time they're 32. They are highly mobile, attracted to jobs in mid-sized cities, like Durham, NC and Austin, TX. "As the job market has evolved, Millennials have continued to thrive and adjust, and as our findings show they are not shy of changing jobs or advancing their careers in less urban cities," writes Rachel Bowley, a blogger for LinkedIn.

Tan and Rider took this into consideration when interpreting the data and took it one step further. "Individuals recognize the likelihood of changing employers during their careers but they especially value employers that enhance their future external mobility prospects." Analyzing data on U.S. law firm hiring and industry surveys of firm associates between 2004 and 2013, Tan and Rider found a correlation between increased rates of employee departures and increases in a firm's prestige when the departures were for promotions with high-status competitors. And according to business expert Sydney Finkelstein in *The Wall Street Journal*, this finding holds up in most businesses that rely on human capital such as architecture and engineering.

The researchers concede that firms who lose talent do incur economic losses, but contend that those losses are offset by the positive reputation they gain in the eyes of potential employees. "In particular, we find that when more of a firm's employees accept promotions in rank and leave for high-status competitors, the firm is subsequently perceived as a more prestigious employer by the other junior employees in the industry."

If this sounds like rationalization of a tough situation, it may well be. However, as Tan and Rider suggest, the real value of their findings lies in directions for the future. They advocate examining the net impact of these offsetting effects on firm profitability and how that may affect a firm's recruiting and retention strategies. "The literature on strategic human capital management would benefit greatly from a comprehensive assessment of the various pros and cons of firms' investments in human capital and their efforts to retain it." ●

NEED TO INCREASE CLIENT SATISFACTION? TRAIN YOUR PMs

Training has a definite impact on client satisfaction, reports A/E firms when asked about both formal project manager training and client satisfaction. In fact, when PSMJ asked firms about the impact of training on their project managers (PMs), those who train all of their PMs report the highest impact of PM training on client satisfaction. Inversely, those with no formal training programs show no impact of training on client satisfaction, says PSMJ's A/E project management study, "How Today's Most Successful A/E firms Keep Their Projects Under Budge and Their Clients Happy."

WHO GOES THROUGH TRAINING

Not all design firms train their PMs. Not surprisingly, large firms(750 employees or larger) are more likely to train all of their project managers—82 percent say they have a formal training program for all PMs. ●

Currently, PSMJ subscribers get access to our this and other studies. , Find "How Today's Most Successful A/E Firms Keep Their Projects Under Budget and Their Clients Happy" only when you sign into the online portal.

PURSING NEW, HIGH-PROFIT MARKETS CAN WORK WITH A LITTLE WORK

The allure of higher profits can drive A/E firms to dive headlong into markets that they don't understand and where they don't belong.

But chasing profitable markets is not always a mistake. Despite the potential pitfalls, firms can increase their margins by strategically and intelligently adding and dropping client sectors.

"For every firm that successfully added a high-profit market sector to its portfolio mix, there is probably at least one failure," says Jerry Guerra, principal of The JAGG Group, a marketing consulting, communications and market research firm serving the A/E industry.

"This is because firms often don't do sufficient legwork to ensure that the market fits their corporate culture and structure, or they underestimate the commitment needed to succeed in the market. They go in too fast and give up too soon."

Guerra recalls a civil and structural engineering firm that was drawn to the environmental remediation market by short-term profits and long-term growth potential. The firm bought a small consulting company that introduced them to the market, but quickly found that they were a fish out of water.

"The company wasn't built to support the kinds of projects that the remediation group did—small, one-off kinds of cleanups," says Guerra. "The acquiring firm's sweet spot was large projects for long-standing public clients. The new group's approach was totally foreign to the firm's leaders and it never fit."

The firm was eventually acquired by a mega-company with a large remediation group. ●

3 STEPS TO NEW MARKET SUCCESS

Guerra offers the following advice for firm leaders who have identified a market (or markets) to potentially diversify into:

1. Self-assessment. Look inward to ensure that your firm is structured to succeed in the market. Do you understand and empathize with the typical client? Are your project and financial management systems organized to accommodate the way business is done? Will your staff's technical expertise mesh with the market's highest priority needs? Can you hire or acquire your way in?

2. Research. A hot market today may be ice cold in two years. If a firm invests time, money, and resources to pursue a high-profit sector, it should ensure that the factors driving its current success will be there long term. Researching the market will also shed light on why it's yielding better-than-average profits, which is essential to understanding how to capture the higher margins. "A higher profit margin for the average firm in a market is no guarantee that it will translate to your firm," Guerra says.

3. Planning. New market exploration is a perfect component of a firm-wide strategic planning process. If the timing of a new market opportunity doesn't line up, incorporate business planning elements into the new market campaign. Use the results of the research and self-assessment steps as a foundation, then build an action plan by determining goals, key participants, critical tasks, and deadlines. If you can't articulate why, who, when, where and how, you probably shouldn't do it.

"I'm sure there are firms that fell into a high-profit market and did spectacularly well," says Guerra. "But that's just dumb luck and I'd never advise a firm to build a strategy around dumb luck."

PSMJ PROFESSIONAL SERVICES MANAGEMENT JOURNAL

PUBLISHER / Frank A. Stasiowski, FAIA
EDITOR / Cathy Cecere
GRAPHICS/LAYOUT / Marc Boggs
PUBLISHED BY / PSMJ Resources, Inc.
10 Midland Avenue, Newton, MA 02458
TEL / 617.965.0055
EMAIL / *customerservice@psmj.com*

VOLUME 44 | ISSUE 8

PSMJ is published monthly by PSMJ Resources, Inc.
Annual Subscription Price: $397. Single Issue Price: $49.95.

LOW MARGINS? IT MAY BE TIME TO SERVE OTHER MARKETS

Despite the economic recovery, too many architecture and engineering firms still operate with low profit margins. Sometimes the reason for this situation is that the firm serves clients that focus only on low price.

Given this inherent problem, many firms have made the move to diversify into more profitable markets.

PROFITABILITY IS A MARKET THING

PSMJ has analyzed all the major A/E markets based on the profitability of firms that serve those markets compared to the overall A/E industry. The following table shows which sectors have been more profitable, which have been less profitable, and which have been volatile over the past six years.

"Some markets are consistently less profitable than the overall A/E industry," says Dave Burstein, P.E., PSMJ Senior Principal. In the case of the transportation market, this may be because of the extreme pressure that many DOTs place on FAR overhead rates and salary caps.

The healthcare market, on the other hand, has become low-profit because of increased competition and "bid shopping." Other markets (like industrial) tend to generate above average profits every year, he says.

CONSIDER YOUR MARKET

So don't feel trapped into serving only the markets you serve now, Burstein says. Diversify into markets that not only offer high revenues, but also high profits. "And look for those markets that deliver these margins consistently," he says. ●

"Market Sector	Profitability vs. A/E Industry Median					
	2016	2015	2014	2013	2012	2011
Transportation	-2.2%	-3.9%	-1.5%	-0.8%	-1.3%	-2.8%
Government Buildings	+6.5%	+2.3%	+2.3%	-2.2%	+0.1%	+2.6%
Water/Wastewater	-2.3%	+0.1%	-1.6%	+4.8%	+1.9%	+4.6%
Industrial	+4.9%	+4.3%	+0.6%	+1.5%	+14.0%	+5.1%
Energy-Utilities	-2.5%	-2.4%	+3.7%	+5.3%	+10.5%	-1.4%
Commercial (Users)	+7.9%	+5.9%	-7.6%	0%	+3.4%	-0.6%
Commercial (Developers)	+8.2%	+9.1%	+20.6%	-5.8%	+6.1%	NR
Housing	+12.6%	-1.5%	+6.2%	+11.3%	-3.7%	-10.1%
Healthcare	-4.2%	-4.1%	-4.5%	+2.3%	+3.0%	0%
No Specialty	-1.3%	0%	-0.5%	-0.9%	-0.6%	-1.1%

USE A BETTER BENCHMARK TO MEASURE HR PERFORMANCE

Larger firms have proportionately fewer HR staff than smaller firms. That's the finding of PSMJ's A/E 2017 Financial Performance Benchmark Survey.

RATIO OF TOTAL STAFF TO HR STAFF	MEDIAN	MEAN
Overall	**65.0**	**72.0**
Staff Size 1 to 20	**15.0**	**15.0**
Staff Size 21 to 50	**33.0**	**33.0**
Staff Size 51 to 100	**71.0**	**69.0**
Staff Size 101 to 200	**76.0**	**86.0**
Staff Size 201 to 350	**102.0**	**111.0**
Staff Size 351 to 750	**76.0**	**82.0**
Staff Size over 750	**126.0**	**110.0**

Source: PSMJ's A/E 2017 Financial Performance Benchmark Survey

While these figures may represent an economy of scale, how does HR to staff ratio affect company performance, and do these ratios need to be more equitable? According to industry experts, these may not be the right questions since figures are industry-specific. For example, a manufacturing concern might be fine with a higher employees-to-HR employee ratio than a sales organization. The better question for A/C/E firms is "How can HR impact our total productivity?"

First, dispel the notion that HR staff are overhead. A few years ago, guest blogger Brian M. Fraley wrote on PSMJ's Pulse Blog about the stigma attached to HR jobs at A/E/Cs. "[M]any A/E/C firms make it clear that billable folks are more valued than those in overhead positions." But Fraley points out that such an attitude eclipses the full potential for these staff members. Their marginalization causes a cascade of events: morale is crushed, which affects the bottom line. There's a correlation between morale and financial performance, and when morale is down, so is annual revenue and profitability.

Secondly, you are most likely not reaping the full potential of these so-called overhead positions. Tim Asimos, VP and Director of Digital Innovation at circle S studio, points out that HR has existed in isolation from other departments in a firm, noting that "the war for talent—especially in the A/E/C industry—has been escalating. And now, the battle for the best and brightest talent in a competitive marketplace necessitates new approaches to recruitment and talent acquisition." ●

5 STEPS TO REVAMP HR RELATIONSHIPS

Asimos suggests five key points for revamping the relationship between HR and the rest of your firm:

1. **Align your brand.** Consider a close alignment between your culture-building efforts and the way you appear to potential clients and job candidates. HR can help to ensure that messaging is aligned with the realities of the internal culture, employees, and infrastructure.

2. **Build effective recruitment.** Attracting and engaging a job candidate is not very different from attracting and engaging a potential client. It requires a deep understanding of your audience, creating relevant content, and a strategy to leverage it (mostly digital these days). Your marketing department can play a role in guiding HR's new modern marketing tools, tactics, and channels available to determine those that are best suited for the firm's specific needs.

3. **Promote Internal Communications.** Internal communication helps employees feel engaged and positively contributes to a firm's culture, but a lot of employees report feeling that they're not in the loop. HR can help by working with firm principals and other leaders in producing emails, events, surveys, and Intranet web site.

4. **Enlist employees.** With their personal social networks and connections, your employees represent an untapped resource. There's evidence to show that employee advocacy may result in increased web traffic and job leads. HR can help create employee advocacy programs to improve engagement and ensure communications and firm-wide goals are consistent

5. **Develop a firm-wide mind-set, oriented towards promoting your firm and its services.** Not everyone can or should be a marketer, but all your employees should be able to speak intelligently about your firm: how it's positioned for growth, what training opportunities are available, and what growing trends and best practices you use. HR can help by meeting with key stakeholders and then disseminating information via intranet and corporate training.

TURBOCHARGE YOUR NETWORKING WITH REFERRAL BONUSES

Firms report that the most effective way to recruit for the talent is networking and employee referral bonus programs. In fact, the most successful firms use employee referral bonus programs to turbocharge the networking that already goes on naturally.

Here are some of the hallmarks of the best programs we've seen:

1. Bonuses that represent real money. If these seem high, compare them with what you'd pay for a headhunter:
- $1,000 minimum for any position
- $2,000 for degreed professional
- $3,000 for licensed professional
- $5,000 for "hard to find" positions (you define these on a case-by-case basis)

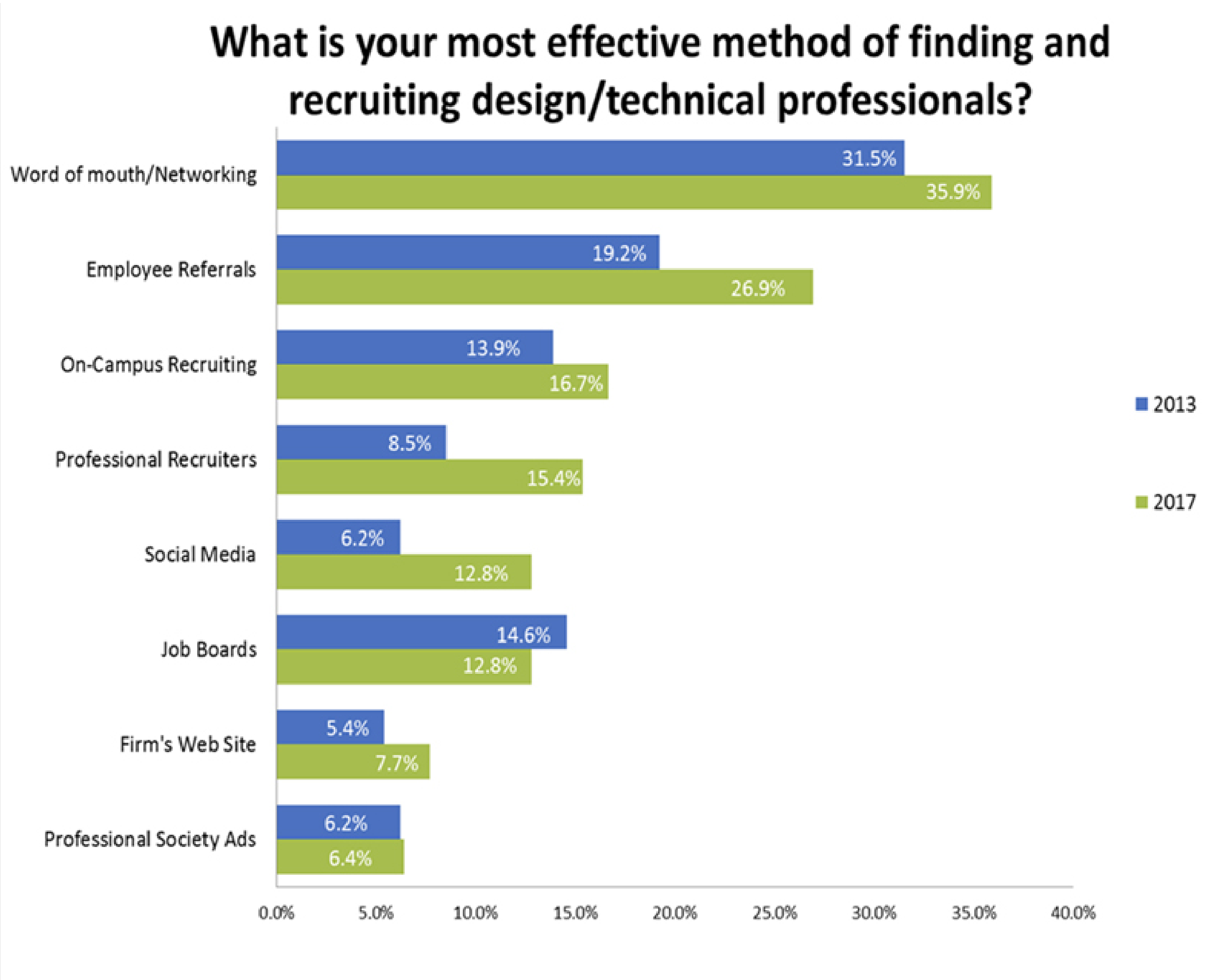
2. Truth in advertising. The amount you say an employee will receive for bringing someone to the firm should be the amount on the check. (Gross it up for withholding taxes.)

3. Ask how the employee know the candidate. The employee must know the candidate personally (no resumes from Craig's List).

4. Don't let the employee wait for his or her money. Virtually all new employees hired this way will make it through the waiting period, so don't unnecessarily delay giving the bonus.

5. Publicize the payment. Hand the check to the referring employee on the new hire's first day—during the all-hands meeting to introduce him or her to your staff. Two celebrations are better than one.

Currently, PSMJ subscribers get access to our latest recruitment study, "How Today's Most Successful Firms Find and Recruit Talent" as part of their subscription. Find it online under "Special Reports." ●



3 WAYS TO STRENGTHEN YOUR FIRM—WITH MILLENNIALS

You don't have to spend long on the internet to find complaints about Millennials. This generational cohort gets blamed for everything and the picture their older colleagues paint of Millennials at work is an entitled, hypersensitive generation. And yet, despite what the latest article about the gig economy would have you believe, Millennials are at work all over the country, and if some generational conflict is to be expected, it's important to recognize that these younger workers bring not only challenges, but also advantages with them, and that attracting and retaining young talent can make your firm stronger. Glenn Ebersole, an engineer, consultant, coach, and currently market development manager at High Concrete, identifies three key areas in which Millennials excel:

1. TECHNOLOGY

These digital natives have a fundamental comfort with technology. This includes not only how to maintain a social media presence, but also "researching huge databases with ease, using mobile digital marketing, understanding core computer technology, and using time saving productivity tools." While managers may get push back from older employees when introducing new technology, Millennials are more likely to accept and embrace new technology as they have been doing every few years for most of their lives.

2. ADAPTABILITY

Millennials, Ebersole says,"thrive in environments of creativity and change," which makes them especially valuable as the pace of change in the workplace and society in general seems to increase daily. Their comfort with the speed of change also translates to a desire to work at the same lightning pace.

3. COLLABORATION AND DIVERSITY

While working in teams can be challenging for workers of all ages, "Millennials arrive in the workplace knowing how to work collaboratively with a solution-oriented mind-set," according to Ebersole. ●

WHAT INTERNS WANT—STRAIGHT FROM AN INTERN

by Megan C. Rajner

Fresh in the field and prepared to get a head start above our peers, we're competitive, eager, and ready. In fact, we'll even tell you we were born ready. Although some students only apply to fulfill internship requirements, there's a greater chance that we applied for a more important reason—to learn. Therein lies the hardworking process of putting in overtime, figuring out what we don't already know, and triple checking to make sure it gets done to the best of our potential. It might take a little reminding to get you to understand us, but this is how we thrive. If we didn't, we probably wouldn't be here! However, it shouldn't always fall on us interns to create our own motivation in a healthy working environment. There's always two sides to the equation:

1: SATISFACTION = ACKNOWLEDGEMENT + CHALLENGE OVERLOAD US

We chose your firm with intent and interest, what harm would it do to put a little faith in our capabilities? Being dependable employees is how we're going to gain the most experience, but we need to be given the chance to do so. We understand the low man on the totem pole might not always be given their utmost desires, and that we won't always be given the project that wins awards. However, considering we're the next generation of designers, helping us rise to the higher expectations upheld at your firm will benefit you as well.

2: COMMUNITY WORKPLACE = DESIGN TEAM / POSITIVE VIBES

Many of us are coming from design studios where we're used to high energy and constant engagement with our peers. Change is inevitable (and often good), but preventing a loss of that atmosphere is key to providing an essential sense of community in the workplace where productivity can be arguably increased. Creating design teams divided into a number of people working on a project certainly entertains this ideology, while keeping us newbies involved and in the loop.

3: INTERGENERATIONAL SUCCESS = US + (ALL YOU PROFESSIONALS) NETWORKING

Ah, the never-ending events. Here's a secret: we enjoy them! Speaking as a student constantly looking to attend for the sake of growing a professional network, never assume we're not interested. The more of you we know, the more of an asset we will become. Not only are we grateful to tag along for the experience, but we also appreciate the act of being included in itself. ●