

Build a high performance team

Mark Zweig lays out the steps you must take to create a successful organization. Also, be a real leader.

While A/E firms may be nice places to work and bastions of civility in a hostile world, I don't think this type of culture breeds business success. We need much more emphasis on performance and a greater willingness to change our team members to attain it.



Mark Zweig

EDITORIAL

One of the most important jobs any leader has is that of building their team. Yet too often, in the typical A/E/P or environmental firm, the team is largely viewed as static. "It is what it is," as some people like to say (too often).

Our industry has a culture made up of firms that operate as if "full employment for all" – no matter how bad you are – is the norm. It's almost akin to a university environment where professors are granted tenure. We seem to aspire to the lowest staff turnover rate possible. We just don't move out the people who aren't cutting it.

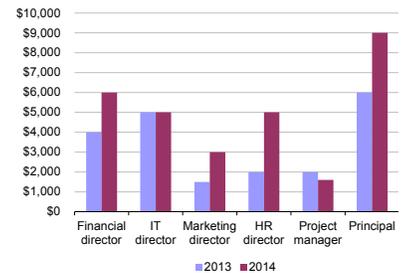
While A/E firms may be nice places to work and bastions of civility in a hostile world, I don't think this type of culture breeds business success. We need much more emphasis on performance and a greater willingness to change our team members to attain it. Here are some thoughts for you on building a higher performing team:

- 1) Define the goals.** Everyone needs to know what they are aiming for. No matter how obvious this may seem to you, odds are it isn't to everyone who works for you.
- 2) Measure results against goals.** Share this information with the entire company. It reinforces those who are doing well and it puts the spotlight on everyone who

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TRENDLINES

Bonus time



Almost all firm management positions saw an increase in median bonus payout from 2013 to 2014, according to ZweigWhite's 2014-2015 Management Compensation Survey. Principals saw the biggest increase, from \$6,000 last year to \$9,000 this year. In addition, financial directors saw a bonus increase from \$4,000 to \$6,000; HR directors from \$2,000 to \$5,000, and marketing directors from \$1,500 to \$3,000. Meanwhile, IT directors' median bonus remained steady at \$5,000, and project managers' median bonus dropped from \$2,000 to \$1,600.

– Margot Suydam, Director, Research

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FOCUS ISSUE
GROWTH
The lessons from the 2014 Hot Firms

Growing pains: The management challenge
Rapid growth: The HR challenge
It's a fact: Growth costs money

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A/E BUSINESS NEWS

REBUILD BY DESIGN The Urban Institute and The Rockefeller Foundation released an evaluation of the first phase of Rebuild by Design. The evaluation explores how the Rebuild by Design competition, an initiative of President Obama's Hurricane Sandy Rebuilding Task Force, was designed, carried out, and could be replicated in other contexts.

Rebuild by Design launched in 2013 as an ambitious, unprecedented public-philanthropic partnership to identify opportunities to build physical, ecological, and economic resilience across the region. The winning proposals, announced earlier this year, represent a shift from disaster relief and recovery, which traditionally focuses on restoring communities to a pre-crisis state. Instead, these proposals reflect an approach to building resilience – championed by The Rockefeller Foundation – that engages designers, scientific experts, and the affected communities themselves to tackle together a set of issues in ways that recognize and anticipate the uncertainty of a future that is not like the past. The Rockefeller Foundation was the lead financial supporter of the competition.

The evaluation revealed that even though the Rebuild by Design competition was limited to the Sandy recovery area, it has the potential to transform the way disaster recovery efforts are designed, funded, and implemented across the United States. The evaluation focuses solely on Phase I of Rebuild by Design, but it demonstrates that collectively communities and decision makers can respond to crises in creative ways and work as a region to become more resilient with adequate resources and knowledge.

In particular, the evaluation found that Rebuild by Design's design competition is an innovative strategy for meeting resilience goals. Rebuild by Design gives hope that large national problems such as coastal flooding, and other climate and weather events – those that have particularly devastating impacts on the poor or vulnerable – can be successfully addressed by taking a resilience perspective that combines multidisciplinary knowledge, design thinking, and federal oversight.

Following an investment from The Rockefeller Foundation of \$3 million to support Phase 1, the six winning Rebuild by Design projects were recently awarded nearly \$1 billion of disaster recovery funding, and Phase II will focus on the implementation of these projects to build more resilient communities in New York and New Jersey.

TWITTER TO THE RESCUE Tweets sent during last year's massive flooding on Colorado's Front Range were able to detail the scope of damage to the area's infrastructure, according to a study by the University of Colorado Boulder. The findings can help geotechnical and structural engineers more effectively direct their reconnaissance efforts after future natural disasters – including earthquakes, tsunamis and tornadoes – as well as provide them data that might otherwise be lost due to rapid cleanup efforts.

"People were tweeting amazing pictures and videos of damage to bridges and other infrastructure systems," said Shideh Dashti, an assistant professor of civil, environmental and architectural engineering at CU-Boulder and an author of the paper.

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isn't. There's nothing wrong with a little peer pressure to succeed.

3) Confront the non-performers.

Do it in a nice way and with a spirit of helpfulness. But by all means, do it.

4) Lay out a timeline and clear expectations for what the non-performers must do to turn it around.

Again, helpfulness and a spirit of optimism about their ability to turn things around are essential.

5) Reassign or replace the non-performers as needed.

Stop rationalizing as to why you cannot do it. Explain to your staff and clients how you are making a change and who will be taking this person's place – either temporarily or for the long-haul.

Dead weight, non-performers not

only drag you down and keep you from achieving your goals but they also drag down everyone else in your organization. There just isn't any room for them because the lowest performer sets the de-facto standard for performance. You want a high performance team – then raise the standards.

One more thing. Look in the mirror. Are you doing your job to the best of your ability and to an acceptable standard? If not, ignore steps 1 through 5 above and start working on yourself – FAST. You set the example. Leadership is never a game of "do what I say." It is rather one of "do as I do." ▲▲

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

During the second week of September 2013, the Front Range was deluged with as much as 17 inches of rain, causing extensive flooding that destroyed roads, swept away houses and washed out bridges.

After a disaster like last year's floods, it's important for geotechnical and structural engineers to collect data about how well infrastructure withstood the extreme event, in order to prevent damage in future similar disasters. Structures are designed to survive a certain amount of stress, but those built-in safety margins are based on mathematical formulas that attempt to describe the real world. Detailed information about what actually happens on the ground during disasters allows engineers to tweak the mathematical formulas and build more resilient infrastructure in the future.

But engineering reconnaissance teams often find there is only a narrow window – between when it becomes safe to enter an area and when cleanup efforts begin to erase evidence of infrastructure performance – for investigation.

By collecting and analyzing the information contained in tweets, engineering reconnaissance teams can quickly determine the scope of the geographic area where infrastructure has been damaged, decide where best to focus their limited time as well as glean valuable information about infrastructure they are unable to see in person, Dashti said.

THE ZWEIG LETTER

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GROWTH

Growing pains: The management challenge

How some of the 2014 Hot Firms are managing to create processes, maintain the culture and keep the focus amidst rapid growth.

By LIISA SULLIVAN
Correspondent

While your firm is kicking it into high gear, you want to ensure that it continues to focus on its core mission. So, what types of management challenges do rapid growth firms experience and, better yet, how do they deal with them?

DEFINE AND PURSUE. Brian Gallagher, director of marketing, **O'Neal, Inc.** (Greenville, SC), a 283-person industrial engineering and construction company and No. 27 on the ZweigWhite 2014 Hot Firm List, says that the company's core markets have been growing and investing in capital projects. As a result, O'Neal has focused on bringing in additional design, procurement and construction professionals. Recently, the firm placed even greater emphasis on redefining its business process and training, which allows the introduction of new employees to "The O'Neal Way" and gets them engaged in projects quickly.

O'Neal has been quite disciplined in focusing on its core markets, target project size, and project type. In fact, the firm developed a strategic business unit structure that allows it to focus on key market segments.

"We have defined filters and models for the types of clients and projects we want to pursue," Gallagher says.

In addition, O'Neal has a proposal review board that examines new opportunities to make sure that projects fit strategic objectives. "This forces us to review opportunities to ensure they fit our mission and business plan," Gallagher says.

Every five years, O'Neal embarks on a strategic planning process. The last strategic plan dates to 2010 and Gallagher reports that they are on target to exceed the goals set then.

"We restarted the strategic planning process earlier this year," he says. "We have participation in the process from different parts of the organization so that we are able to gather input, perspectives and get buy-in to the plan. We also hold monthly meetings where we update all of our employee-owners with financials, business development, project and other information. Being an employee-owned firm

helps enable a greater sense of engagement and focus on our mission as well."

MULTIPLE LOCATION MANAGEMENT. Mark Laska, president and CEO, **Great Ecology** (New York, NY), a 27-person integrated science and design firm and No. 67 on the ZweigWhite 2014 Hot Firm List, says that since 2008 this company has grown extremely rapidly and managed to sustain the growth.

"Managing a rapidly growing firm has its challenges, but managing one across multi-geographies presents additional challenges," he says. "The greatest challenge has been to maintain the culture of one unified company across multiple time zones and locations. This has been crucial to the firm's success and senior leaders have worked to ensure we don't create office silos."

"Managing a rapidly growing firm has its challenges, but managing one across multi-geographies presents additional challenges. The greatest challenge has been to maintain the culture of one unified company across multiple time zones and locations."

As Great Ecology developed technical teams, leaders had to carefully select the team leaders internally and externally to mentor junior staff and support the firm's business development goals. Through experience, the company found that opening a new office in a new geography is the most successful when the office managers are internal staff who already know and understand the company culture.

In terms of support, it had to focus on upgrading various infrastructure components to support the firm's growth.

"Our earlier information systems and IT systems were not scalable as the firm expanded. For example, we had to understand and implement HR regulations which differed by state. Great Ecology was able to grow continuously and rapidly because firm leaders understood the vitality of investing in infrastructure as a tool for managing scalability and growth," Laska says.



Brian Gallagher,
Director of
Marketing,
O'Neal, Inc.



Mark Laska,
President and
CEO, Great
Ecology.



Dale Conger,
President,
Cobb Fendley.

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CALENDAR

HOT FIRM AND A/E INDUSTRY AWARDS CONFERENCE The 2014 ZweigWhite Hot Firm List is out, identifying the 100 fastest growing firms in the A/E/P and environmental consulting industry.

The Hot Firm List represents a look at the firms in the architecture, engineering, planning and environmental industries that posted the highest percentage revenue growth and dollar revenue growth over a three-year period compared to the other entrants.

“Getting on The ZweigWhite Hot Firm list is a tremendous achievement,” says Mark Zweig, firm founder and CEO. “That’s especially true now the economy is doing better. The goal post is getting higher!”

Likewise, the Best Firms Work For in the A/E/P and environmental consulting industries have been identified.

Since the Best Firms To Work For Ranking began in 2001, hundreds of outstanding architecture, engineering, and environmental consulting firms have been recognized for their ability to inspire their teams to perform at the highest levels. These firms create an environment where their people feel valued, can make a difference, and can clearly see their contribution to the overall mission and success of the firm.

Awards were given in the categories of architecture, civil engineering, environmental, multidiscipline, and structural engineering.

Winners of both awards will be celebrated during the all new Hot Firm and A/E Industry Awards Conference, held at the Beverly Hilton in Beverly Hills, Calif., on Sep. 25-26.

Come network, gain knowledge, and celebrate with the top firms in the industry. The 2014 ZweigWhite Hot Firm and A/E Industry Awards Conference is the industry’s largest and most comprehensive business conference for leaders and aspiring leaders of A/E firms in the U.S.

This year’s line-up of speakers will inspire you with new ways to create growth and excitement at your firm.

Successful leaders, newcomers, marketers, HR managers, and their families, from the fastest growing firms in the architecture, engineering, and environmental consulting industry are expected to attend.

For more information or to register for this exciting industry event, call 800-466-6275 or log on to www.zweigwhite.com/conference.

MANAGEMENT, from page 3

“When the firm was only one office with a few employees there was a certain level of natural alignment, but with multiple offices and different productivity criteria, managing this process is extremely complex.”

In addition, Great Ecology professionalized support areas such as sales and marketing, operations, and HR by hiring people with a background in those areas. In other words, the firm focused on setting up the platform for growth.

Bigger teams and more offices required revised firm organization, processes, and procedures to meet and support the growth needs. Developing and implementing scalable processes and procedures can be challenging, especially when there is initial resistance from the troops.

“A critical new process we had to develop was a quality assurance/quality control of work products,” Laska says. “When the firm was only one office with a few employees there was a certain level of natural alignment, but with multiple offices and different productivity criteria, managing this process is extremely complex. Great Ecology developed a comprehensive internal quality control process and team to ensure all work products are aligned – this includes peer technical reviews and aesthetic reviews to ensure consistent branding.”

Another important issue is to ensure high billability across offices, as well as controlling the workflow. A key aspect of managing this challenge has been to create and maintain a collaborative work process. Offices do not operate as separate silos and project work flows across offices, maintaining

a highly collaborative culture – as if the firm had a single office.

In addition, Laska says that leadership needs to understand that a business plan must change as the firm grows.

Central to Great Ecology’s success has been, and is, the firm’s executive leadership. The executive board sets long-term and annual goals, which are further broken into quarterly goals. In addition, annual goals are evaluated and recalibrated quarterly to help the firm stay on track. The goal breakdown and tracking is clearly communicated to staff, quarterly, keeping everyone aligned. As a result, all staff are focused on the core mission and firm’s business plan. Most importantly, this creates a high level of transparency concerning goals and revenue, which also helps align staff.

MAINTAINING CULTURE. Dale Conger, president, **Cobb Fendley** (Houston, TX), a 208-person multidiscipline engineering firm and No. 36 on the ZweigWhite 2014 Hot Firm List, says that its greatest growth challenge has been to maintain an entrepreneurial atmosphere while keeping some rein on the organization.

“Our firm has always provided a lot of independence to profit center managers with management consisting of direct, but informal communication with key staff. As we have grown, there are more moving parts. Although the metrics have always been openly available to these managers and used for management, there is some pushback from people feeling that we are becoming a more ‘numbers driven’ company. So, maintaining culture is a concern,” Conger says.

To date, Cobb Fendley continues to focus on its plan by allowing its profit centers to continue to pursue their businesses. Each one has an expertise and focus and they tend to stay centered on that, so the overall company stays on its intended course.

“This has allowed us to grow to our current 284 employees,” Conger says. ▲▲

TECHNOLOGY

The performance-based design advantage

Several tools enable architects and engineers to gather information up front, thus increasing design quality and delivering a competitive edge.

By LIISA SULLIVAN
Correspondent

The better you show a client that a building will do what it's meant to, the better the chance of swaying and keeping that client.

Performance-based design is an example of how technology is helping maximize the bottom line by helping designers create better buildings.

This article focuses on tools that are helping buildings attain better energy efficiency.

“Real time daylight and glare analysis within Revit enables us to optimize these variables while the design is still at its most malleable.”

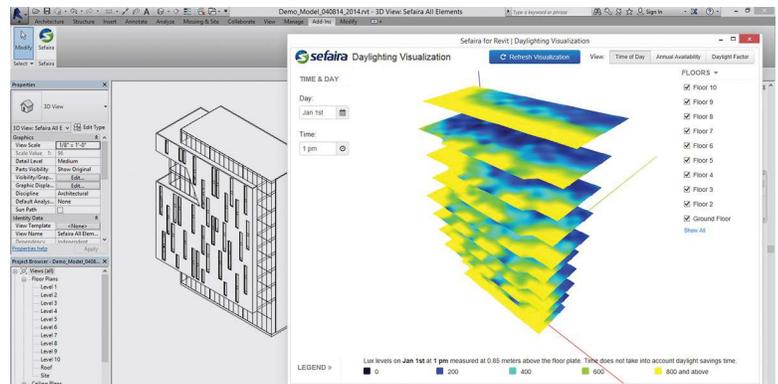
OPTIMIZING PERFORMANCE. Autodesk BIM tools support both *whole building energy analysis* and more targeted *design studies* (e.g., daylighting and solar radiation analysis) to help optimize performance before a stone is set.

A closer look at each of these abilities follows:

1) Whole building energy simulation. Measures expected energy use (fuel and electricity) based on the building's geometry, climate, building type, envelope properties, and active systems (HVAC and lighting). It takes into account the interdependencies of the building as a whole system, so the simulation is a particularly useful way to “keep score” as you work to reduce building energy use.

Green Building Studio is Autodesk's core whole building energy simulation engine and powers the analysis in both Revit and Vasari. Green Building Studio is a flexible cloud-based service that uses the DOE2 simulation engine and allows you to run building performance simulations to optimize energy efficiency and to work toward carbon neutrality earlier in the design process. GBS will help extend your ability to design high performance buildings at a fraction of the time and cost of conventional methods.

Revit supports energy analysis for both conceptual forms and detailed architectural models. Vasari supports energy analysis only for conceptual forms, but



A screenshot of Sefaira's design software.

the “autozoning” features of Vasari make it a better tool for conceptual energy analysis because it follows industry conventions more closely.

2) Performance-based design studies. Revit and Vasari have some additional built-in capabilities that help conduct performance-based design studies. For example, design studies such as climate analysis, sun and shadow studies, and solar radiation studies can be done with whole building energy analysis to help analyze and optimize more targeted aspects of the design. In some cases, they pull from the same back-end data (e.g., climate data) that is used for Autodesk's GBS-based whole building energy analysis.

SOFTWARE HELPS YOU SEE THE LIGHT. Sefaira, a software for high-performance building design, now delivers real time daylighting analysis and visualization within Autodesk Revit. (Now, keep in mind that Sefaira for Revit is not just a daylighting tool, but this is an exciting new benefit.)

Architects can now see key daylighting metrics as well as a visual interpretation of that data right in Revit. Powerful daylighting visualizations help architects make performance-based design decisions through visual interpretation and analysis of daylight in multiple ways. This information can help architects to clearly and effectively communicate design decisions to their clients.

Early adopters of the new feature are already benefiting from daylighting visualization and analysis in Revit.

“We prioritize quality daylight and minimized glare

See PERFORMANCE page 8

‘Me too’ vision and strategy

Why, in a tremendously creative industry, do we suffer from a profound lack of unique vision and differentiating strategy?

This topic has always been a curiosity for me. The built environment design industry attracts some of our most creative, insightful and brilliant minds – but most of the firms in our profession seem to have a blind spot when it comes to motivational business planning. Simply said, few of our creative professionals really stand out from the crowd. It might be traced back to a lack of business savvy, or adversity to risk, or perhaps our tendency to rely on our design solutions to speak for us. Admittedly, our formal education tends to be focused on design or engineering creativity and is critically short on business practices and positioning insights. But we should not allow that to be an excuse for the industry. The safety of “me too” business planning is not acceptable for our firms. We can do better.

CORE STRATEGIC BLOCKS. Looking for creative approaches to growing our practices does not mean that we should be chaotic or disorganized. Rather, being better or different (or both) should be built upon a foundation of solid, thoughtful and time-tested approaches to whatever our business may be. In that regard, having looked at myriad firms in our industry, I have learned that there are four essential or core strategic building blocks to structuring a business well. They include:

- **People strategies.** Your leadership, development and human resource systems and priorities.
- **Client strategies.** These include comprehensive marketing and communications practices that “glue” clients to your firm.
- **Work strategies.** All of your design processes and technology resources that you use to deliver on your promises.
- **Success strategies.** Organizational, management, financial, legal and growth priorities.

Each of the above key strategic areas deserves thoughtful planning leading to the creation of specific and measurable action plans. Don’t allow yourself to get caught in the debate about what is a vision, what is a mission, what is a strategy, what is an action plan, a goal or a task. Design a system that works for your firm – one that can be easily communicated and shared throughout your organization. Yes, everyone in your office should be invested in the strategy and helping to bring it to fruition.

10 TIPS TO BUILD UPON. Getting started is often the most difficult step. We’re too busy chasing or doing work to actually spend any time planning how to do that effectively and more successfully. So here are 10 important strategies you may want to consider exploring for your plan:



Dennis King

GUEST
SPEAKER

- 1) **Hiring.** Recruit the best and brightest people. Forge a strong and visible culture to attract and retain them.
- 2) **Training.** Become a learning organization. Grow leaders rather than followers. Invest in your people and you will be rewarded.
- 3) **Inspiration.** Make your firm a great place to work. Link performance measures to business goals. Share the vision regularly.
- 4) **Listening.** Understanding what’s on your clients’ minds is the most essential thing you do – apart from responding accordingly. Work to develop “clients-for-life” relationships.
- 5) **Systems.** Everything can be repeatable process – even in a creative industry. Creativity will improve when errors and waste stop.
- 6) **Measures.** Once systems are in place, measuring how you’re doing is essential for continuous improvement. Predictability is rewarding.

See DENNIS KING, page 8

Admittedly, our formal education tends to be focused on design or engineering creativity and is critically short on business practices and positioning insights. But we should not allow that to be an excuse for the industry.

Recruiting integral part of client satisfaction

Aim to build lasting client relationships by focusing on a positive work environment and encouraging your team to provide unparalleled client service.

The secret to **EHS Support's** success? Our people. We place as much emphasis on hiring the right people as we do on delivering a quality service to our clients, on time and on budget. We are committed to building a high performance team that can drive a more engaging and gratifying client experience.

At EHS Support we offer careers, not jobs. From the employee's date of hire, they are given the opportunity to take a look at their personal and professional goals for as far out as they are comfortable with – one year, three years, five years, 10 years – and align their career aspirations with company goals. They are encouraged to discuss these plans with their families to ensure their paths are aligning at work and at home. Why is this process so significant? It gives our employees the opportunity to create a satisfying career journey specific to their talents and objectives. It also gives our organization the opportunity to be diverse in ways that other consulting firms may not be as agile.

Research indicates that staff members whose values align with those of their company are more satisfied, motivated, and committed than those whose values fail to match up. EHS Support focuses on culture, delivering innovative and cost effective EH&S solutions for our clients, and recruiting the best in the business to be a part of our team. We place our recruiting focus on hiring people who have the key attributes that we value in each of our current EHS Support team members:

- Self-motivation
- Strong sense of ownership
- Ambitious nature
- Focus on customer service
- Confidence in their abilities
- Resolve to follow through on their commitments

Our recruiting approach is tied directly to our success in client satisfaction and has also proven to be a valuable marketing tool as we continue to brand ourselves in new industries and growing markets around the globe. Our team offers us a competitive advantage over other consulting firms in the industries where we do business. A recent study from Hinge Research Institute (Finding Experts: Why & How Clients Seek Visible Experts: www.hingemarketing.com/library/article/finding-experts-why-and-how-clients-seek-visible-experts) asked a question aimed at understanding how buyers find “visible



Bethany
Evans



Katie
Stern

GUEST SPEAKER

experts” – 30.6 percent of clients said online, 19.1 percent said by recommendation, and 18.8 percent said by way of publications.

These statistics alone should make companies think about how they are building their teams and how they are applying the talents of the technical (visible) experts they've brought on board. By showcasing the capabilities of the firm in their industry, organizations can gain a competitive advantage.

EHS Support has partnered with industry associations to speak at conferences, offered poster presentations, written articles for regional business publications and started a blog – all to utilize the extensive knowledge and industry expertise our team embodies. These are all tactics that companies within the industry are utilizing, but our proactive approach and flexibility to offer our advice, expertise, and our passion for what we're working on has turned into the perfect opportunity to brand EHS Support as a go-to environmental consultant.

See EVANS & STERN, page 8

Our recruiting approach is tied directly to our success in client satisfaction and has also proven to be a valuable marketing tool as we continue to brand ourselves in new industries and growing markets around the globe.

PERFORMANCE, from page 5

AIA SUPPORTS NEW PERFORMANCE-BASED DESIGN GUIDE

The National Institute of Architects is supporting a new, performance-based guide developed by the National Institute of Building Sciences. This guide, the National Performance-Based Design Guide (NPBDG), is the first broad-reaching reference tool for use by facility owners and building industry professionals.

The NPBDG offers four levels of building performance: from “Baseline” performance as the lowest permissible level (commensurate with minimum code requirements) through to “Tier 3 High Performance,” the highest level or stretch goal. The format allows the building owner to work with the design team to select the preferred level to design the building in order to prioritize performance opportunities that stem from climate, site, program, mandates and other conditions.

“The National Performance-Based Design Guide has the potential to improve design outcomes by helping the owner and designer have substantive discussions about the owner’s requirements and expectations early in the planning process,” said Robert Ivy, AIA CEO.

in our designs to ensure human comfort,” says Elizabeth Unruh, intern architect, **Little Diversified Architectural Consulting** (Durham, NC). “Real time daylight and glare analysis within Revit enables us to optimize these variables while the design is still at its most malleable by providing a compelling new layer of information that influences the design’s window to wall ratio, shading strategy, and interior finishes.”

A LITTLE ABOUT MEP. Creating a workflow for mechanical, electrical and plumbing engineering is possible with AutoDesk’s MEP design software. For example, the program allows firms such as **Dunham Associates** (Minneapolis, MN), a mechanical and electrical consulting firm, to design, simulate, and document complex building systems more accurately and efficiently. This provides them with a competitive edge. Or, in another example, firms using ArchiCAD can use the MEP Modeler to create and edit 3D model-based MEP networks (ductwork, pipework and cabling) and coordinate them within the ArchiCAD Virtual Building. The MEP Modeler uses a familiar interface and tools are integrated right in the ArchiCAD environment.

While there are multiple performance-based design tools and types of software to turn to, you only need one reason to use them – winning more work. ▴▴

DENNIS KING, from page 6

- 7) Communication.** We work in teams, so share information with staff persistently. Keep your promises and empower innovators.
- 8) Teamwork.** Great performance is a voluntary action. Assign clear responsibility and authority – and get out of the way.
- 9) Brand.** Superior quality and unequalled service ultimately keep your clients. Brand is not a marketing slogan – it is your reputation.
- 10) Integrity.** This drives all your strategies and your ultimate

EVANS & STERN, from page 7

By building this brand awareness, we are showcasing our great team to attract future employees who will support our mission to provide exceptional service to our clients, while at the same time raising awareness of our firm to potential clients to allow us to continue to provide interesting and challenging work for our employees.

Happy teams make happy customers, and client satisfaction is the new marketing! We aim to build lasting client relationships by focusing on a positive work environment and encouraging our team to provide unparalleled client service. ▴▴

EHS Support LLC placed No. 1 in the 2014 Best Firms To Work For listing in the Environmental Services category.

BETHANY EVANS is business manager and director of HR, and KATIE STERN is director of marketing and business development at **EHS Support**. Contact them at Bethany.Evans@ehs-support.com and Katie.Stern@ehs-support.com.

RESOURCES

FEE & BILLING SURVEY How do you set fee and billing rates that maximize profitability without scaring your potential customers away? Since 1998, thousands of design and environmental firm leaders have turned to ZweigWhite’s Fee & Billing Survey of Architecture, Engineering, Planning & Environmental Consulting Firms for standards on design fees, employee hourly billing rates, subconsultant procedures, and reimbursement policies.

The 2014 edition includes the latest available data on fee structures for every major market type, billing rates and chargeability statistics for 27 levels of employee (from clerks up through principals), ways firms usually charge for subconsultant fees and reimbursable expenses, how firms collect payment, and much more.

In addition to helping you set fees, billing rates, and other contract details internally, this book is also a great tool to show clients or potential clients. Fee negotiations aren’t always as easy as you’d like them to be, so use the data in this report to tell your client exactly why they should pay what your firm is charging.

In addition to statistics on contract types for each of the above markets, industry norms for fees as a percentage of construction costs are given for the following services/disciplines (as applicable for each market): Architecture, land planning, landscape architecture, interior design, civil engineering, structural engineering, mechanical engineering, electrical engineering, and construction management.

For more information or to buy a copy, call 800-466-6275 or log on to www.zweigwhite.com/p-2202-fee-billing-survey-2014.

success. While last on this list, it is not least, and does not go *without saying*.

In order to stand out in our industry, creative firms need to work *ON* their business, not just *IN* it. Identifying differentiating strategies is essential for real success and one of the most overlooked opportunities. Trying to look like everyone else is not an exciting approach in any industry – and certainly not for creative ones. Stand Up and Stand Out. ▴▴

DENNIS KING is a principal at DMKING Consulting LLC, www.DMKINGconsulting.com.

GROWTH

Rapid growth: The HR challenge

Finding people who can deliver, keeping current employees happy and making sure everybody is on the same page cited by Hot Firms.

By LIISA SULLIVAN
Correspondent

Growth is always good, right? Yes, as long as firms can keep pace. We talked to a few of ZweigWhite's Hot Firm leaders to find out if their growth is posing any HR challenges. The answer is yes, but companies are meeting the challenges head on.

A BALANCING ACT. John McGrath, COO, **Advantage Engineers** (Columbia, MD), a 170-person firm, No. 60 on the ZweigWhite 2014 Hot Firm List, says that managing staff expansion is the greatest rapid growth challenge.

"We must balance opportunities and client expectations while staying true to our driving principle of responsible growth," he says.

In order to do so, Advantage focuses on three key tasks to ensure that it can add staff appropriately. They are:

- 1) Frequent and detailed forecasting of current projects and known opportunities.
- 2) Constant talent identification, both internally and externally, in order to generate a candidate pool.
- 3) Constant evaluation and improvement of hiring and onboarding process.

"If we don't hire well, we should not hire at all," McGrath says. "Hiring candidates who are extremely qualified and who understand our objectives on a project and company level is critical to our growth success. It's not easy and takes a lot of effort, but it's worth every bit when done right."

YEAR-ROUND RECRUITING. Kathy Prock, vice president, director of HR, **Wight & Company** (Darien, IL), a 177-person integrated design and construction firm and No. 51 on the ZweigWhite 2014 Hot Firm List, explains that they always try to stay ahead of the game with appropriate levels of staffing. Nevertheless, staffing really does ebb and flow with the amount of work in the pipeline.

The firm tackles the challenge in two ways:

- 1) "We recruit top talent all the time. Even when we do not have specific needs, we hire top talent. And, while there are some candidates who are not ready to make a move at the time we are talking to them, we maintain constant communication with those individuals. If circumstances change, we can then capitalize on that," Prock says.
- 2) "Because we have two office locations in fairly close proximity, there are times that we have employees work in one office or the other, depending on need and project volume," Prock says.

"If we don't hire well, we should not hire at all. Hiring candidates who are extremely qualified and who understand our objectives on a project and company level is critical to our growth success."



John McGrath,
COO, Advantage
Engineers.



Sharon Batchelor,
HR Director,
Kohn Crippen
Berger Ltd.

Sharon Batchelor, director, human resources, **Kohn Crippen Berger Ltd.** (Vancouver, BC), an engineering services firm, No. 49 firm on the ZweigWhite 2014 Hot Firm List, says that the firm has grown from 197 employees to more than 500 in the last 10 years. The firm's HR team was initially very small so one of the first challenges was bandwidth (e.g., how to create new people programs and initiatives while responding to an influx of daily queries and requests).

As the company grew – so did the HR challenges. Some examples include:

- The acquisition of a number of smaller companies, leading to assimilation, geographic and communication challenges.
- Developing consistency in company-wide programs and policies.
- Balancing internal compensation and rewards equity among offices.
- Creating a corporate culture that attracts the best employees to the organization.
- Attracting and retaining qualified talent in a very competitive marketplace.
- Hiring outside the country (adding logistical activities like international relocation, immigration applications and work visas).



Janice Gary,
Director of HR
and Senior
Associate,
A. Morton
Thomas &
Associates, Inc.

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ON THE MOVE

LJA HIRES LJA (Houston, TX), a 425-person full-service consulting engineering firm, announced the hiring of **David Garrett** as senior project manager in the Austin Public Infrastructure Division.

Garrett has 30 years of project management and highway design experience for transportation projects. He also has experience as discipline design lead on numerous design-build projects. His responsibilities have included geometric roadway design, preparation of civil PS&E plans, utility coordination, ROW acquisition, signing and pavement markings, and traffic control plans. His drainage design experience includes urban storm sewer design, open channel, culvert, detention pond, permanent water quality features, stream crossings, and temporary erosion and sedimentation controls.

In his new role, Garrett will be responsible for overseeing the division's QA/QC process, managing projects with TxDOT, local counties, and municipalities. He will also be responsible for roadway design, ROW coordination, traffic control plans, analyses and studies for the preparation of WPAPs and CZPs, hydrology and hydraulics for floodplains, and preparation of PS&E packages for roadways. Garrett will work from the newly established Cedar Park Office.

KLOTZ HIRES Klotz Associates (Houston, TX), a 120-person transportation, traffic, ITS, water and sewer, aviation, drainage, land development, environmental and consulting engineering services firm, welcomed **HoJin Lim** as manager of the firm's Municipal Services Department. He brings 20 years of civil engineering experience to his position.

Lim was previously a senior project manager with another engineering firm, where he handled management of various cities and counties for Texas General Land Office Relief Projects, and was the business development manager for the City of Houston Public Works and Construction Management Departments. During this time,

he also acquired extensive development experience as the client leader for the Port of Houston Authority. In this capacity, Lim was responsible for project management and related communications, coordination and company representation with various state, county and municipal agencies throughout Texas.

D. Wayne Klotz, president of Klotz Associates said, "We are pleased to have HoJin lead our Municipal Services Department. With his extensive knowledge I know he will be an effective manager, and his department will continue to produce outstanding results."

PENNONI HIRES Pennoni Associates (Philadelphia, PA), a multidiscipline engineering, design, and consulting firm, announced that **Pamela Nelson** has joined the firm as the director of marketing. Nelson has more than 30 years of marketing experience, including 15 years with engineering, environmental, and natural resource consulting firms. Her background includes developing marketing processes, overseeing business development programs, implementing online and offline marketing campaigns, managing events, branding, and administering customer relationship management databases.

Nelson will be based in the firm's West Chester office and report to the firm's senior vice president and director of strategic growth, Joe Viscuso.

"As Pennoni enters its 50th year, we are looking to rebrand our company, expand geographically, and add to our complement of services... all while maintaining our high level of client service," Viscuso said. "Pam will direct the marketing initiatives that take our brand into its next phase. Her breadth of experience and knowledge of several industries will bring a new perspective to the way we market ourselves. We're extremely happy that she's onboard."

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- Setting new offices in a variety of locations and multiple time zones to allow the firm to be responsive to clients' needs.
- Creating learning and development program and opportunities to support business initiatives.

Happily, the KCB HR team has also grown and moved on from being reactionary to supporting the company's strategic goals by developing programs for talent acquisition, personal and professional development, and succession planning.

Current challenges include:

- Retaining and rewarding the best employees
- Succession planning
- Developing the next generation of company leaders

"Our HR group is continually working to ensure our people-related programs and resources are aligned with the organization's business needs and that they are refreshed and updated as required," Batchelor says.

An example of a program KCB has recently put into place includes one called, "First Impressions Count."

KCB created a separate external website to ensure candidates looking at them as a future place of employment would feel the organization was an engaging and exciting place

to work. This site (www.klohnjobs.com) hosts all of its job openings through a Taleo applicant tracking system and is continually being updated so external candidates can get a real sense of the opportunities available.

NURTURING GROWTH. Janice Gary, director of HR and senior associate, **A. Morton Thomas & Associates, Inc.** (Rockville, MD), a 430-person civil engineering, landscape architecture, surveying, planning, construction inspection, and subsurface utility engineering firm and No. 37 on the ZweigWhite 2014 Hot Firm List, says that they greet rapid growth as a positive.

"The speed at which we've grown has been the result of diversity, both among our clients and geographically," she says. "This diversity adds to the challenges and experience of each employee. That experience, along with training, increases knowledge and contributes to job satisfaction, which in turn aids employee retention, which gives us a stable base of staff members to support our growth."

Gary says that one of the greatest challenges the firm has faced from a human resources standpoint is making sure that each employee understands the continued importance of his or her role within the firm as the company grows.

"An employee may have joined the firm 10 years ago when we numbered 100, but they are every bit as important to the success of the firm now that we have 430 employees," she says. "Strong leadership adds to career growth and opportunities for everyone." ▽▲

GROWTH

It's a fact: Growth costs money

Hot Firms know that without investment now, the long-term is compromised.

By LIISA SULLIVAN
Correspondent

The old saying, “You’ve got to spend money to make money” rings true for rapid-growth firms. Whether it’s buying new equipment or hiring more staff, finances play a key role.

FOCUS ON LONG-TERM. Douglas McKeown, CEO, **WOODARD & CURRAN** (Portland, ME), an 850-person integrated engineering, science and operations company and No. 29 on the ZweigWhite 2014 Hot Firm List, says that growth, particularly sustained growth, costs money because you tend to prioritize those actions/investments that lead to opportunity. And in this market, with the challenge to attract and retain the best talent, opportunity is the key.

“Without opportunity comes stagnation, which can lead to disengagement of your staff. Business can’t thrive by running in place – you need to move ahead.”

“Without opportunity comes stagnation, which can lead to disengagement of your staff. Business can’t thrive by running in place – you need to move ahead,” McKeown says. “So, whether it’s part of the annual plan, or something more opportunistic that emerges mid-year which fits the strategic objectives we have, we will tend to make the investment if we believe it will lead to growth. We are willing to look at those investments with a balance between strategy, opportunity and discipline, knowing that it results in some dilution of net income in the short term.”

McKeown says that investments often come in the form of senior hires who may be market leaders, junior talent to fuel the leadership pipeline, office openings to support new regions of specific clients, or thinner margins on new opportunities where the firm wants to gain entry into a new market. Additionally, growth requires investments in the business systems to support a larger more complex and

diverse firm.

“In the past few years, knowing the growth plans in front of us, we invested in Workday as an HRIS (HR information system), to enable managers and employees better access to personnel information in an automated way. Short-term investment, but long-term thinking allows us to grow without corresponding head count demand in the HR team,” McKeown says.

Further investments in knowledge management tools today will allow Woodard & Curran continued communication and collaboration across the firm in spite of the expansion to 50 people in 14 offices across the country.

The firm has grown every year in its 35-year history, and has always been profitable. But, to meet the long-term strategy of developing a national footprint, while providing exciting opportunities for its employees, it has embraced a slightly lower overall margin to support that growth.

BOUNCING BACK. While **Slater Hanifan Group, Inc.** (Las Vegas, NV), a 105-person, multi-disciplined civil engineering/consulting firm and No. 33 on the ZweigWhite 2014 Hot Firm List, has grown, it was not immune to the impact of the recession from 2007 to 2011. After shrinking staff, workspace, and reducing benefits to the bare minimum during the recession, SHG had to find innovative ways to retain customers and stay afloat, says Ken Hanifan, president.

Due to a loyal client-base and an innovative culture where employees pride themselves on taking ownership in their company and their work, SHG leaders believe that growth, even during difficult economic times, was a direct result of their commitment to clients and the firm’s ability to take a vision and turn it into reality.

“We have a close-knit relationship with all of our clients, working to provide them customized service,” Hanifan says. “Our main goal during the recession was to stay visible and offer our clients the same level of service we did prior to the recession. Being visible let our customers know that we were able to provide services when so many of the other larger firms had to cut services due to the economic downturn.”

SHG embarked on several major growth initiatives during the recession, including tripling their exist-

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Douglas McKeown, CEO, WOODARD & CURRAN.



Ken Hanifan, President, Slater Hanifan Group, Inc.



John Bierschenk, CEO and President, TerraTherm.

TRANSACTIONS

ARCADIS SNAPS CALLISON Global architecture and design firm **Callison** (Seattle, WA), a 1,000-person global architecture and design firm, announced that it will be acquired by **ARCADIS**, a global natural and built asset design and consultancy firm based in the Netherlands with a U.S. division based out of Highland Ranch, Co.

Callison plans to join ARCADIS, which also owns the built asset consultancy firm EC HARRIS, architectural design firm **RTKL** (Dallas, TX), and Asia's leading construction program planning and value management consultancy Langdon & Seah, in the third quarter of 2014.

ARCADIS employs 22,000 people, operates over 300 offices globally and generates \$2.5 billion in revenue annually. Callison is a global provider of retail design and mixed-use centers, with 11 offices on three continents. The company provides comprehensive services for top retail brands, developers and corporate clients globally.

Callison applies its design approach, "User Driven Design," for the retail market and across a wide range of other industries, such as hospitality, healthcare, corporate interiors and mission critical. The firm has a leading position in China, opening its first office in Shanghai nine years ago, followed by offices in Beijing and Guangzhou. Callison is a top provider of mixed-use/commercial design for developments in China and throughout Asia.

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ing office space and investing significant resources in hiring more than 60 new staff members within the last year.

"Along with our growth, came increased costs including insurance costs, developmental training for staff, and hardware and software costs to keep staff as technologically current as possible. Although these investments initially translated into extensive costs for the firm, the return on investment equaled cost and time savings for our clients through improved staff productivity," Hanifan says.

SHG has not yet embarked on mergers and acquisitions. However, the firm is primed to do so.

"As the firm continues to grow, we have to be more strategic about looking at mergers and acquisitions and the effect it will have on the long-term growth of the firm," Hanifan says. "We have to be smart about our growth and be fiscally responsible to ensure our long-term standing in the marketplace."

FINANCING AND INFRASTRUCTURE. John Bierschenk, CEO and president, **TerraTherm** (Gardner, MA), a 70-person firm specializing in the development and implementation of in situ thermal remediation of organic contaminants in subsurface source zones, says that, based on the current backlog and pipeline, the company is forecasting revenue to increase by 37 percent between 2014 and 2015.

The firm's revenue has increased by 163 percent since, which no doubt helped a placing as the No. 20 firm on the ZweigWhite 2014 Hot Firm List.

"Growing at this pace has presented a number of challenges for the management team and board of directors," Bierschenk says. "As a design/build/operate remediation technology firm, our services require a significant fleet of capital equipment. For example, in the past three years, our firm

SNC-LAVALIN BUYS KENTZ **SNC-Lavalin Group Inc.** (Montréal, QB), a 45,000-person engineering and construction firm, announced that it has completed its acquisition of **Kentz Corporation Limited** (London, UK), a global company with 15,500 employees operating in 36 countries. Kentz provides engineering, construction management and technical support services to clients in the oil and gas sector.

The acquisition of Kentz supports SNC-Lavalin's ongoing transformation into a global Tier-1 engineering and construction company. The transaction creates a group with approximately 45,000 employees, annual revenues of about C\$10 billion and a backlog of roughly C\$13 billion as per 2013 figures. The combined company will also have a strong position in the world's most dynamic growth markets, including the Middle East, North America, Latin America and Asia-Pacific.

The acquisition of Kentz transforms SNC-Lavalin's oil and gas capabilities, creating a group of approximately 20,000 employees with industry-leading expertise for large and complex projects in the upstream, liquefied natural gas, unconventional (shale gas and oil sands), pipelines, offshore jackets and steam-assisted gravity drainage sectors. Kentz will be incorporated into SNC-Lavalin while simultaneously integrating SNC-Lavalin's current Oil & Gas business into Kentz's operations. Christian Brown, Kentz's CEO, now becomes president, Oil & Gas, SNC-Lavalin Group Inc.

purchased about \$6 million of new equipment, including large thermal oxidizers, acid gas scrubbing equipment, and electrical distribution switchgear. In addition, we have made significant investments in the fabrication of our proprietary heating elements."

In 2011, TerraTherm averaged three to 4 projects per year. Today, its teams are designing eight new projects and field implementing another five, simultaneously.

"Obtaining financing for our growth is the single largest challenge, but fortunately the debt markets are strong and the cost of money continues to be historically low," Bierschenk says.

The second greatest challenge is organizational maturity and implementing the required infrastructure upon which to scale the company.

"We have organized into key departments, established budgets, and developed a written execution roadmap for new project managers, engineers, and field teams to use as our standard model," Bierschenk says. "All this organizational build-out requires extensive recruiting, on-boarding, training, and defining a strategic plan that empowers employees to perform."

Setting realistic goals and defining clear expectations across the company has been a major push for TerraTherm over the past year. The firm retained expert consulting advice to benchmark its staff mix and salary structure against its market, as well as to define tightly integrated job descriptions with bonus objectives that cascade from the strategic plan with performance appraisal processes.

These efforts are paying off: For the first half of 2014 TerraTherm achieved its financial performance targets and is on track to finish the year on budget, and with a backlog equal to more than one-year in terms of revenue. ■▲