

Advancing the Practice of Architecture

Winter 2012 Issue

As the Practice Management Knowledge Community, our mission is to advance the practice of architecture through discovering, generating, organizing, and sharing insights, resources, and tools that enable architects to practice more effectively.

Features

Letter from the Editor

By Ray Kogan, AIA

At the end of 2012, the architecture profession is undergoing substantial shifts, both seismic and subtle. Architects' services are in danger of further commoditization as firms often find themselves painted into a corner by other design and construction team members. Architects are being asked to assume more risk not commensurate with their rewards. Traditionally lucrative markets continue their roller coaster ride. Within firms, aging baby boomer principal owners are casting one eye on the door as they near the ends of their careers. More and more firms are being acquired—by design or default—as the industry continues to consolidate.

Architects are project-oriented and task-oriented individuals, by nature, and further reinforced through schooling and practice. Recognizing that tendency, this last 2012 quarterly issue of the Practice Management Digest is built around the theme of trends in our profession, which I hope will encourage all 10,000+ members of the Practice Management Knowledge Community (PMKC) to lift up your heads

and take a fresh look at the outside world. We've collected seven articles by industry experts spanning a range of forward looking topics pointing toward the future of our industry.

- We kick off this Digest with Phil Bernstein, FAIA of <u>Autodesk</u> advocating a restructuring of architects' value proposition in an article entitled "*Repositioning Practice for the Future*" as further refinement of his outstanding presentation at the Practice Management Lunch at this past annual convention. <u>Read...</u>
- On a related topic intended to broaden architects' thinking beyond the limits of our own
 profession is "Getting Out of Our Silo" by Michael Strogoff, FAIA of aecKnowledge. Michael is
 also a past member of the PMKC Advisory Group. Read...
- Also advocating a new outlook toward collaboration is "Five Trends Reshaping Practice" by Nancy Egan, FSMPS of <u>New Voudoo</u> consulting. Nancy's article is yet more valuable content derived from the PMKC's blossoming alliance with the Society for Marketing Professional Services. Read...
- Then, as changing clients' behavior requires architects to evolve their risk management strategies, Suzanne Harness, Esq., AIA of Harness Project Solutions discusses trends in risk management in "The Future of Claims and Insurance." Read...
- The bumps and grinds in the economy have shaped many trends, including more firms turning
 their attention to the federal government as a prospective client. Jennifer Sakole of <u>Deltek's</u>
 Federal Information Services team offers her advice in "Building a Better Federal Pipeline."
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- An indisputable trend is that aging baby boomers who are principals are looking toward
 eventual transition of their firms. Ian Rusk of <u>Rusk O'Brien Gido + Partners</u> displays his
 understanding of the dilemma as well as offering some solutions in "Small Firms Face Unique
 Ownership Transition Challenges." Read...
- Even casual observers are aware of the growing trend toward consolidation in the industry as
 larger firms continue to acquire smaller firms. David Cohen, Esq., ASA and Matt Fultz of
 Matheson Financial Advisors discuss how this trend affects your firm in "What's Happening in
 the World of Mergers and Acquisitions?" Read...

entire issue, including all articles, as a single PDF for your ease of printing and reading later.

Upcoming Issue

This is my last issue as editor of the Practice Management Digest, as I will be rotating off of the PMKC Advisory Group after four gratifying years. Our new editor, and also a new member of the Advisory Group, will be Deborah DeBernard of Dewberry, who will be developing the editorial calendar for 2013. If you would like to provide input or an article for consideration, or know someone who would, please contact her at ddebernard@dewberry.com.

Articles

Repositioning Practice for the Future

By Phillip G. Bernstein, FAIA

As architects emerge, ever so slowly, from the economic crisis that began in 2008 we shouldn't miss the opportunity for a little introspection. Changes in market conditions after the crisis, the increasingly role of technology in design and construction, and the transformative effects of sustainability all suggest a series of challenges to practice. Rather than seeing them as further headwinds, perhaps these challenges present an opportunity to refine the value proposition of design.

The downturn put fierce pressure on architectural profits, with many firms reporting zero (or even negative) margins negotiated simply to keep the lights on in their underutilized practices. That these fees are predominately based on a fixed basis1 and suggest that clients see architectural services much like the balance of the building supply chain: a commodity selected by lowest first cost. We have, in the main, failed to articulate a value proposition that correlates the importance of services to economic return by paying clients, in face of an industry widely considered to be inefficient and in need of radical modernization.

The Digital Impact

1 The last three AIA Firm Surveys consistently indicate that a preponderance of architectural compensation is derived from "fixed" methods: stipulated lump sums, percentage of construction cost, fee per square foot.

The construction industry is in the earliest stages of embracing the digital revolution. And it's certainly the right time. Increasingly powerful, interconnected computers can provide high-resolution building information models that can simulate reality with great precision. This computational potential arrives at a perfect time to address the analytical challenges of sustainability, where finding the best answers is a process of analysis and synthesis, iteration and selection, and computerized models are a platform for such techniques. Defining outcomes, measuring solutions, predicting results and making commitments to performance will characterize a "certified sustainable building" in the future, far beyond the LEED standards in place today.

To face these new realities, architects will need to confront challenges to our work process. In a world that is moving rapidly toward an integrated, digitally-enabled, collaborative work process, architecture remains bound to values, production/communication techniques, and attitudes that can be traced to the Renaissance or even earlier. Our adherence to drawings as primary instruments of service is not up to the task in the digital age where teams increasingly rely on rapid Internet-enabled communication.

Perhaps this is a moment when architecture might reconsider its methods toward more effective ends. Construction is often compared unfavorably with manufacturing in an erstwhile effort to transfer the disciplines and methodologies of manufactured production to those of building. But construction is not a single process but rather an interaction of a series of complex systems designed to address and solve the "wicked problems" that result from the unpredictable stew of client demands, local conditions, design and construction capabilities, social factors, and economics and subject to constant, adaptive change. The necessary processes to accomplish these ends are therefore unsuited to the exacting, repeatable procedural strictures of manufacturing2.

Architects solve these wicked problems, but do so using the relatively imprecise tools of two-dimensional drawing and rules of thumb, and with extensive reliance on engineering consultants (who provide essentially "outsourced" technical analysis that architects generally don't perform themselves). Those results are, in the main, both unmeasured (except by code compliance and cost) and, not surprisingly, uncorrelated to the fixed fee negotiated at the outset of the project when neither the architect nor client had much if any idea about the final result or any precise notion of the process that would create it.

² For an interesting analysis of construction as a "panarchic" system of process and product complexity, see "The Systematic Nature of the Construction Industry" in Architectural and Engineering Project Management Volume 4, 2008, by Jose Fernandez-Solis of Texas A&M.

The Value Proposition

So rather than telling louder stories about the value of design, why not redefine the proposition, and reposition our place in the market accordingly? Changes in technology and project delivery, coupled with the increasing importance of sustainability in all projects, are the key.

Changing delivery platforms might be a start. BIM creates a three-dimensional digital simulation of the project before it is built, allowing designers and builders to test assumptions and measure results with a digital prototype. Sustainable design certification is moving from "assertion" (what does the design allege to do?) to performance (how does it actually perform?) Project delivery models are increasingly integrated, where designers and builders commit to mutual goals and manage risk together. As design process moves from intuition, rules of thumb, and judgment based exclusively on deep experience to measured outcomes that can be the basis of value beyond the ineffable goal of "good design," architects can commit to measured outcomes with results that are proof of performance. As management guru W. Edwards Deming is purported to have said: "In God we trust, all others bring data."

I am not arguing that architecture be replaced with architectural engineering, and that the lessons of other more digitized, disciplined, and routinized industries be incorporated whole hog into architecture. Our artistic design aspirations should be put forth supported by measured performance that can be predicted prior to design, instantiated during construction, and proved during building operation. This means value is created by commitments to measured outcomes that are delivered by design and construction teams moving toward common goals. Such an approach would reposition the value of architects to bring both the ineffable and immeasurable to building while simultaneously proving that our buildings are great by measurable results.

The Fundamental Changes

Making this shift is no small matter, however, and isn't simply a question of implementing BIM and trying out a few IPD contracts on your green projects. The profession must re-examine some fundamental precepts, unchallenged assumptions, and foundational components of practice. We'll need to redefine what is "professional judgment" in a digital, integrated world where the idea of "responsible control" meets BIM and IPD head-on. Licensing regulations and professional testing and registration must respond in kind. We'll need to educate future architects with less slavish focus on the ineffable, and more toward understanding the relationship between the sensibilities of the Bauhaus and the Beaux Arts. And most importantly, practices themselves will need to learn to work flexibly, applying fundamental architectural design principles across a wide range of project issues and taking advantage

of a new-found realization in construction that making buildings—in both process and result—a wicked problem that architects can solve. We can demonstrate the value of those solutions by measuring, optimizing, and committing to results. And our role as professions and our value to society will accelerate accordingly.

About the author: Phil Bernstein is a vice president at Autodesk and teaches professional practice at Yale. This article is based on a presentation Phil made as the featured speaker at the Practice Management Knowledge Community Practice Management Lunch at the 2012 Convention. Phil can be reached at phil.bernstein@autodesk.com or at (781-839-5380).

Getting Out of Our Silo

Why Architects Are Losing Their Creativity and Influence

By Michael Strogoff, FAIA

For too long, architects have operated within their own silo, much as engineers have operated within theirs and contractors theirs. We belong to different trade associations (e.g., AIA, ACEC, NSPE, AGC, etc.) that seldom interact. Only a few professional organizations such as CSI, DBIA and ULI are either inherently multi-disciplinary or emphasize collaboration among trades. Ironically, as architects we see ourselves as the maestros of the design team and the masters of collaboration, and we believe that this project oversight role leads to greater creativity and innovation.

An Inward Focus

As problem solvers, we focus on our clients' pain points and inspirations, site and programmatic challenges, and increasingly on urban and societal problems. Yet we reach out to professionals in other disciplines and consult resources outside of our profession only to the degree needed to solve specific problems. Our interactions with engineers, contractors, fabricators, and product representatives are limited to the knowledge and collaboration needed to deliver our projects, and our professional curiosity is typically confined to the projects we have on the boards.

Within the fragmented design and construction industry, we attend conventions largely led by other architects, the exceptions tending to be conventions focused on specific building types and attended by potential clients. Architects teach other architects, engineers teach engineers, and contractors teach

contractors. The only people teaching all three professions seem to be attorneys, insurance companies, and technology providers. With such an inward focus, it's little wonder that our broader industry influence continues to dwindle, and our profession feels a need to "reposition" itself to regain its leadership and to persuade consumers to see architects as more relevant.

The Need for Greater Collaboration

We can choose to remain within our comfort zone, rejoicing when our projects get published in our trade journals and when the organizations to which we pay dues honor us in their annual awards programs. And we can perpetuate our firms in the short-term with architects educated and trained in the same narrow traditions as those who currently operate our firms. However, the move toward more integrated forms of project delivery, the growing complexity of materials and building techniques, the stringent performance requirements expected by increasingly sophisticated clients, and the expanding needs to address environmental and urban issues outside of single buildings all point to the need to broaden our skills and knowledge base by embracing closer collaboration with professionals from disciplines outside of architecture.

What's responsible for our self-imposed silo? First and foremost, the architectural profession is comprised of a disproportionate number of introverted individuals, as documented in studies emanating from the widely accepted Myers-Briggs personality test, with seemingly few interests outside of design. At professional gatherings, our discussions focus on topics closely related to our practice: design, technology, building performance, and the environment. Stuck in our cerebral, analytical, problemsolving mode, we often don't initiate discussions unrelated to architecture. We tend to be humorless—when was the last time you heard an architect tell a joke?—and migrate toward other likeminded architects whenever possible. Collectively, we are an inward-looking profession stuck in a decades-long soul searching exercise.

Breaking Down the Silos

Online resources and some professional organizations are starting to break down the silos. Architizer creates connections between architects and potential clients. aecKnowledge (founded by the author) aims to "transform how architects, engineers, contractors, allied professionals and other people throughout the AEC industries collaborate with and learn from each other." USGBC's membership spans numerous disciplines including architects, engineers, contractors, realtors, and building officials. And, according to an article highlighted in Engineering News Record, the American Society of Civil Engineers is

advocating a broader knowledge as part of engineers' BS degrees due to increasingly complex demands on the skills required once licensed.

A quick look at Stanford University's School of Design provides important insights into how an interdisciplinary approach to solving problems leads to greater innovation. According to Stanford University, "d.school is a hub for innovators . . . Students and faculty in engineering, medicine, business, law, the humanities, sciences, and education find their way here to take on the world's messy problems together. . . We focus on creating spectacularly transformative learning experiences, and inevitably the innovations follow. Along the way, our students develop a process for reliably producing creative solutions to nearly any challenge."

To reclaim our influence, increase our relevance, and leverage our creative skills, our profession must adopt a more collaborative and interdisciplinary approach to solving clients' and society's problems. We must embrace project delivery methods that include early and continuous input by allied professionals. We must offer a wider range of services. We must expand our methods for solving clients' problems to include fields of knowledge beyond those for which architects have traditionally been trained.

In the coming decade, successful architecture firms, large and small, will extend their interests and services beyond traditional architecture. They will employ professionals with more diverse skill sets and a broader knowledge base (e.g., public outreach professionals, behavioral scientists, sustainability experts, technologists, etc.) who are adept at working together to solve complex problems. In addition to design, technical and management abilities, these firms will hire for collaboration, problem-solving, and communication skills. They will position their firms as the bridge that brings value to owners, users, service providers (the A/E/C team), product providers, and facility operators.

The alternative is to remain within our comfortable silo and become increasingly marginalized. And we can continue to lament our fate as we huddle amongst ourselves.

About the Author: Michael Strogoff, FAIA, provides practice management, strategic planning, and ownership transition consulting services. His advice is based on 13 years as the managing partner of a 40-person architectural firm, 15 years of management consulting, and extensive study of business practices. Michael is a past Chair of the AIA's Practice Management Knowledge Community's Advisory Group and the founder of aecKnowledge, a knowledge-sharing platform that delivers insights from thought leaders throughout the architectural, engineering and construction industries. You can reach Michael at Michael@aecKnowledge.com or at 415-383-7011.

Five Trends Reshaping Practice

Nancy Egan, FSMPS

As the long, wrenching recession abates, practitioners across the country are letting out a collective sigh of relief. The AIA Architecture Billing Index for October was positive for the third straight month, housing starts are up, and many firms are hiring again. While the profession finally has an opportunity to look up, the overarching challenges that were background during both the long boom and the recent downturn are now front and center in the larger discourse about resources and priorities. Globalization, demographics, increased urbanism, inadequate infrastructure, rapid advancements in technology, climate change — all demand attention.

Although these broad issues are compelling, architects and their colleagues in engineering and construction are dealing with the impacts of these forces in more specific forms. Among the trends that are reshaping practice, five stand out:

- Increased complexity of problems and the need to work across different fields of knowledge and multiple networks of collaborators and stakeholders.
- 2. Interoperability of systems and the demand for integrated design including BIM and Integrated Project Delivery (IPD).
- 3. Hybrid business models are being created to meet client needs that require more than multi-discipline building design skills, bringing architects together with unexpected partners from other professions, from software to manufacturing.
- 4. Changing nature of networks and relationships, especially as they are influenced by the increased use of social media and other technological advances.
- 5. Firm cultures and brand identity in an era of mega-firms.

Complexity

In many ways the issues are interrelated. "Clients are dealing with nested sets of problems," observes Paul Nakazawa, AIA, international practice and business strategist and Lecturer in Architecture at Harvard's Graduate School of Design. "Their dilemmas are complex — urban, political, economic. They need firms that can work across different fields of knowledge, are technologically skilled and have the connectivity to tap into multiple networks of collaborators, as well as those of the societal stakeholders."

In other words, after three or four years focused on staying in business, firm leaders are advised to look wide to position their practices for a challenging future. Senior marketing professionals, charged with helping to guide their firms into this new terrain, are of necessity on the front lines.

Recent conversations with a select group of Fellows in the Society for Marketing Professional Services (www.smps.org), all senior leaders in their firms as well as valued consultants, reveal an understanding of the altered landscape and an acknowledgement that change will take time.

Integrated Design

"We continue to underestimate the challenge of complexity," says Ted Sive, FSMPS, principal at Ted Sive Consulting in Seattle. "Buildings are increasingly complex; no one builds a hospital by themselves. The different disciplines have to work together to find better ways of delivering projects." Scott Butcher, FSMPS, VP of JDB Engineering concurs with Sive that "BIM has made a tremendous difference on project delivery," but adds, "It still hasn't lived up to the hype." Among the reasons they cite are the varying levels of proficiency and experience among and within firms.

IPD, too, so promising for the kind of collaboration that is required in the long run, has fallen short in part because of hesitancy on the part of owners as well as design professionals and, as Sive notes, because the recent economy favored a bid-driven process. "The promise is still there," adds Butcher, "but as an industry we're kind of in the awkward teenage years. We've grown a lot, but we still have much maturing to do."

Nonetheless, large-scale complex projects demand sophisticated teaming and integrated delivery, and there are many more of them. Laurin McCracken, AIA, FSMPS, CMO at Jacobs Global Buildings NA, points out "ten years ago there were as few as four projects valued at over \$1billion in construction costs. Today there are over 150 projects at that scale." The depth of experience and the financial wherewithal required limits the field of competitors to big players, and they are driving integration.

Business Models

While the growth of complex mega-projects contributes to the increase in the number of mega-firms and increases the pressure on smaller practices, there are ample opportunities for firms of all sizes if they are willing to move beyond traditional discipline boundaries. "What's in the way of the building?" is the first question Bruce Lea, coach advisor at Wayne O'Neill Associates in Atlanta, asks his clients. For any number of clients other urgent issues — from funding to operations to legislation — take

precedence over needed new buildings. Solutions to these problems may be building-related, but may not be architecture.

Lea sees firms that take the time to delve deeper into the client concerns are finding new ways to provide expanded services, often with new collaborators — from specialty engineers to software developers to fabricators. To be effective such collaborations require a partners' mindset and a willingness to share client intelligence and intellectual property — practices that encourage new, hybrid business models.

Networks and Relationships

In response to the demand for broader resources and expanded networks, more and more individuals and firms are leveraging the power of the Internet, including social media. While few believe that social media will ever replace in-person relationships or traditional marketing, it has fundamentally altered interactions among professionals and between clients and their consultants. Yes, your prospective clients are googling your firm and looking up proposed team members on LinkedIn.

While there is still skepticism, Butcher captures the sentiment of many saying, "I view ROI with social media as a Reputation Originating Investment. We are in an era that demands that key staff carefully cultivate their reputations, because hiring decisions are increasingly about people more than companies. By building social networks or blogging about topics of interest you create a positive reputation. Not having a social media presence, not having a social network, says something about you. And that is not necessarily a good thing."

Culture and Brand Identity

In other words, individuals and firms have more opportunities than ever before to control their message and sending the right message is evermore critical. Branding, once seen as a luxury pursued by the largest firms, is better understood today as the consistent representation of the core values and vision of even small practices. "In an era of mega-firms and mega-mergers, firm culture and brand identity matter like never before. A strong, robust culture and a strong, vivid brand do more than anything else to differentiate firms," says Randle Pollock, regional director at HDR Architecture in Houston. "Brand has become a differentiator in the marketplace, and the best firms get it as a tool both for establishing and sustaining an external identity, and also as an internal tool for recruiting and retaining top talent."

Dana Birkes, FSMPS, CMO (Chief Marketing Officer) at Flintco in Tulsa, also talked about the role of

identity and culture in helping the 104-year old, family-owned firm transition to its third generation of

leadership. "We took time to deeply know our people across the company, understanding what they value and aligning our culture and our brand," Birkes says. "The next generation has to be able to carry the values forward and deliver on the brand promise."

Birkes' comments touch on what may well be the next trending issue for many firms as Baby Boom leaders prepare to retire. Are firm leaders ready to transition not just the ownership of the assets but also of the vision and mission of the firm to the next generation?

The challenges are real and daunting yet these conversations suggest that firm leaders have the knowledge, tools, and desire needed to positively reshape the profession to meet the future.

About **the Author:** Nancy Egan FSMPS, principal of New Voodou, a marketing and content strategy consultancy writes about marketing and design issues from offices in Venice, California and Santa Fe, New Mexico. Her articles appear frequently in the SMPS Marketer and Urban Land Magazine. She can be reached at egan@newvoodou.com or at 310-943-7194.

Claims and Insurance in the Future

By Suzanne H. Harness, Esq., AIA

Over the past year some architects have seen their clients demand substantially higher professional liability policy limits than would seem to be warranted by the risks of the project. Architects may also be aware that their clients, whether a project owner or a design-build contractor, are purchasing professional liability coverage to protect only themselves. Architects may not be sure whether or not this trend is a good thing for the profession, and it is too soon to say for sure, but looking into how these client behaviors interrelate may shed some light.

Higher Policy Limits

Over the last year, owners are more frequently requiring by contract that architects substantially increase the amount of insurance they typically purchase. For many years, most firms carried no more than \$1 to \$2 Million in coverage per claim and in the aggregate per policy year. Recently, many owners on larger projects have begun to require limits of \$4-5M per claim, and some are requiring limits of \$10M. The cost of requiring higher limits affects the entire design industry when these requirements are made to prime architects and then passed down to subconsultants.

The reason most likely has little to do with the actual costs of claims, but that owners are becoming more sophisticated regarding what they can expect to recover from a typical professional liability practice policy. These owners know that, within the policy year, each of them is only one of many of the architect's clients expecting to recover on the same practice policy, which may have its limits eroded by other claims and the legal costs of defense. The owner's not-so-surprising solution to that problem is to require higher limits, thus increasing the size of the pie to be divided with other claimants.

Why are owners becoming more sophisticated about insurance coverage? Because more owners are represented by legal counsel, and owners' counsel have become better informed about the mechanics of professional liability coverage. Once considered a dry and boring topic best left to brokers, insurance coverage has become a hot topic at the conferences targeted to construction lawyers. Also, owners are motivated to require increased limits based on the relationship between the architect's policy limits, and the premium the owner pays for its own professional liability coverage.

Owner's Protective Professional Liability Policy

An owner's protective policy protects only the owner. Owner's policies have been available for only a few years, but they are an expanding part of the market for larger professional liability insurance carriers. The policy provides two kinds of coverage: the indemnity portion and the liability portion.

The Indemnity Portion

The indemnity portion of the owner's policy addresses the issue of low or eroded limits on the architect's professional liability policy by allowing the owner to recover amounts in excess of those limits. To trigger coverage, the owner must first file a professional liability claim against the architect, pursue and win a judgment or arbitrator's decision in favor of the owner, and recover from the architect's insurance policy. Any settlement must be approved by the owner's carrier. If the amount recovered is less than the amount of the owner's proven damages, then the owner's policy will fill the coverage gap up to the limits on the owner's policy. If the design professional's policy limits are not available for some reason, then the owner's coverage will fund amounts in excess of an amount the owner self-funds, called a self-insured retention. To decrease the amount of any payment that the owner's policy must pay above the proceeds from the architect's policy, the owner's policy prohibits the owner from agreeing to limit the architect's liability. The owner's premium decreases as the architect's policy limits increase, thus providing an additional incentive for the owner to require high limits from the architect.

The Liability Portion

This coverage solves another problem that owners find with architect's professional liability coverage. Owners frequently require by contract that the architect "indemnify and defend" the client from claims. The owner expects that if it is sued by a third party that alleges a design error, the architect should come forward and pay for the owner's attorney and other costs to defend the claim. Owners are not pleased to hear that the architect's professional liability policy will provide a defense only to the named insured architect, not to the architect's client, the owner. The liability portion of the owner's policy solves this problem, because it provides a defense to the owner in the same way that the architect's professional liability policy provides a defense to the architect after a client files a claim. For each claim, the owner will receive a defense after first spending the amount of a self-insured retention established in the policy.

Contractor's Protective Professional Liability Policy

The contractor's protective professional policy operates in a similar manner to the owner's protective coverage discussed above. It provides two parts of coverage, the indemnity and liability parts, and protects only the contractor. The contractor's carrier will assume the rights of the contractor to recover from the architect any amounts paid out to the contractor, which is usually not the rule under the owner's policy.

What the Future Holds

Connect the dots between the behaviors described above and it becomes quite clear that owners and contractors are getting a lot more serious about recovering money damages for any mistake made by architects under contract to them. While the new owner's and contractor's policies provide substantial benefit to those parties, it is not clear that they will inevitably lead to more litigation against architects because claims may still be settled with the cooperation of the insurance carriers. Nevertheless, given that these policies require that a claim be filed and pursued to its conclusion before coverage can be triggered, architects should expect that their clients will comply with that requirement, resulting in potentially more claims. Also, the amounts claimed will likely be higher because the policies prohibit limitations of the architect's liability. These policies are too new for anyone to know exactly how they will affect the claims resolution process, but everyone in the design and construction industry is sure to find out, because the policies are increasing in popularity.

About the Author: Suzanne Harness, Esq., AIA a construction lawyer, risk management consultant, mediator, and arbitrator in the Washington, DC area. She formerly served the AIA as Managing Director and Counsel for AIA Contract Documents. You can reach Suzanne at sharness@harnessprojects.com or at 703-283-8772.

Building a Better Federal Pipeline

What to Consider in the Coming Year

By Jennifer Sakole

Architecture firms that want to better understand federal market trends and where to find new business should always start with historical federal spending and budgetary requests to see where the money has gone and will likely go next. This gives a solid foundation to either confirm the trajectory of their current plan or to realign strategy. Following this initial assessment, firms should move on to building a business pipeline that supports their plan. Let's walk through the steps a typical firm that is interested in federal architectural services would take to see the process in action.

Historical Spending

From fiscal years (FY) 2008-2011, the federal government reported spending \$2.2 trillion for various goods and services. Of that sum, \$229.4 billion was spent on Architecture, Engineering and Construction (AEC) contracts, which represents 11% of total reported spending. AEC is consistently in the top five categories for federal spending, followed by Defense and Aerospace, Professional Services, Information Technology and Research and Development.

Figure 1 shows that reported federal AEC spending totals vacillated from year to year, with an annual average of \$57 billion.

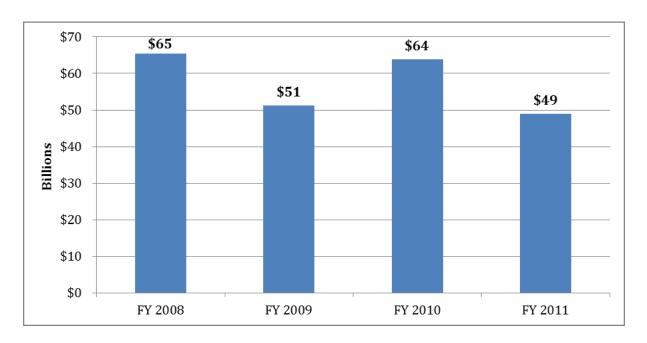


Figure 1: Total Reported Federal Spending for AEC, Fiscal Years 2008-2011

When looking at how federal AEC money is spent, firms should analyze obligations made by categories like department, vendor or North American Industrial Classification System (NAICS) codes. The top spending departments were: the Army with \$109.6B in reported AEC spending, the Navy with \$32.7B, the Air Force with \$14.7B, the General Services Administration (GSA) with \$12.6B, and the Department of Energy. The top vendors were: Hensel Phelps Construction with \$5B in reported AEC obligations, CH2M Hill with \$4.3B, The Shaw Group with \$3.6B, Bechtel with \$2.8B, and URS with \$2.8B. The Top NAICS was 236220, Commercial and Institutional Building Construction, which at more than \$105B accounted for 49% of total AEC spending, as shown in Figure 2.

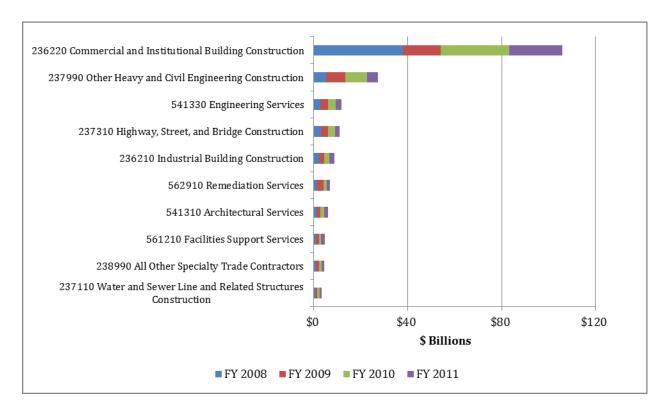


Figure 2: Top 10 NAICS Reported Federal AEC Spending, Fiscal Year 2008- 2011

Now that we have an understanding of the federal AEC market as a whole, let's focus on our sample firm's line of business and review spending within NAICS 541310, Architectural Services. The total reported spending under NAICS 54130 for fiscal year 2008-2012 was just under \$6 billion, or 3%, of total AEC spending, making it the seventh top NAICS as shown in Figure 2. The top departments for reported architectural services spending were the Army with \$2.1B, the Department of Veterans Affairs (VA) with \$1.1B, the GSA with \$825M, the Navy with \$440M and the State Department with \$296M. The top vendors in the sector were AECOM Technology with \$198M in reported obligations, Jacobs Engineering with \$89.8M, HDR Inc. with \$83.6M, URS with \$81M, and HITT Contracting with \$79.6M

President's Budget Request

When the President's Budget Request for FY 2013 was released, Deltek's Chief Knowledge Officer Ray Bjorklund analyzed the AEC budget request in his report <u>Federal Outlook® 2013 Prospecting for Gold:</u>

Where Are You Going to Dig? The FY 2013 AEC budget request was \$27 billion, down from 2012's \$32.1 billion.

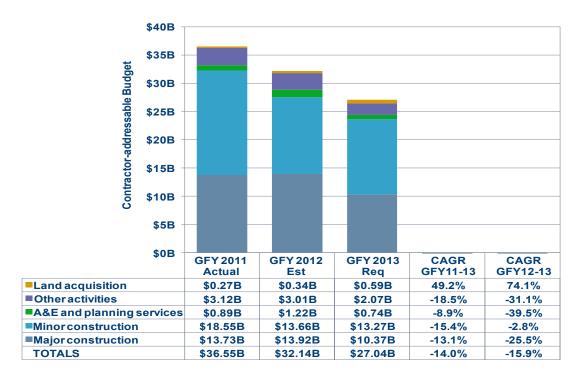


Figure 3: Deltek Analysis of Fiscal Year 2013 President's Budget, Based on Net Contractor Addressability

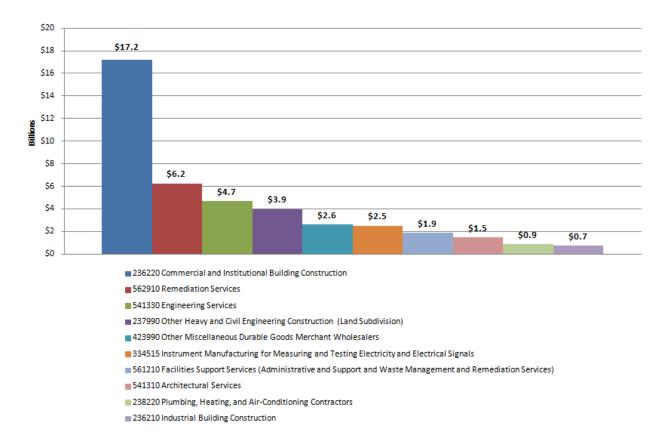
Two trends of note in the 2013 budget request for the AEC market are shifts from funding major to minor construction and pure planning and design to integrated design-build contracts. For our sample firm, this means that when developing their federal business pipeline, they need to be aware that the budget is less than it has been in previous years and projects may be smaller in scope. They may also need to leverage relationships with prime contractors to ensure their position on a team that bids/wins the contract.

Building a Business Pipeline for Architectural Services

Using Deltek's GovWin IQ to identify federal AEC opportunities released December 2012-December 2013, the total value of the anticipated AEC opportunities is \$55.7 billion. Analyzing what is being procured by NAICS, opportunities that fall under NAICS 541310 - Architectural Services total \$1.46 billion, or 3%, of the total federal AEC pipeline for the year. The opportunity percentage is consistent with reported federal spending within this sector for 2008-2011.

Deltek's recent <u>Top Ten Federal AEC Opportunities for FY 2013</u> report illustrated anticipated spending will likely be used on infrastructure and modernization of existing facilities. Additionally, new and follow-on Multiple Award Task Order Contract, or MATOC, opportunities abound in the federal AEC pipeline.

Like in other segments of federal spending, agencies are establishing contract vehicles that leverage a pool of pre-selected contractors that are qualified to complete the work required, doing so efficiently and with great speed.



The following examples of high dollar value architectural services opportunities support these conclusions:

<u>Global Architect Engineer Infrastructure Services</u> being procured out of the U.S. Agency for International Development (USAID) for water resources, environmental/sanitary engineering and civil engineering in support of USAID missions worldwide. Deltek anticipates the value of the contract to be \$500 million and the solicitation to be released in early CY 2013.

The Navy's Naval Facilities Command (NAVFAC) is releasing an <u>IDIQ Contract for Medical Projects</u>

Located Throughout the NAVFAC Area of Responsibility (AOR) Worldwide to provide services like

design-build, interior space planning and design and engineering consultation services during construction. Deltek anticipates the value of the contract to be \$100 million and the solicitation to be released in August 2013.

What Does This Mean?

For our sample firm, the key take-aways when developing a business development plan for the next year are:

- The federal government has historically spent money in the AEC market, making it one of the top five industry segments for federal discretionary spending;
- The FY 2013 budget request reflects budget cuts imposed in fiscal year 2012 and represents a shift in types of projects being planned, as well as the federal government's approach in transitioning from pure design to integrated design build contracts;
- Budget cuts are impacting the federal market as a whole, and vendors of all types are competing
 more intensely for the fewer federal projects that are being procured. With \$1.46 billion in
 anticipated architectural services opportunities, market intelligence is more critical than ever to
 ensure a company's position to bid and win contracts.

About the Author: Jennifer Sakole is a principal analyst at <u>Deltek</u> and a member of Deltek's Federal Information Services team, providing federal market, regional and past performance analysis. Sakole specializes in public sector business development, market research and analysis, and training. She can be reached at JenniferSakole@deltek.com.

Small Firms Face Unique Ownership Transition Challenges

Planning for ownership transition is a challenge in any firm, but for small firms, sometimes it can seem like the deck is stacked against you. Imagine this: You're the founder and majority owner of a 35-person civil engineering firm. You're 62 years old, and while you still enjoy what you do, it doesn't feel quite so fun anymore. The recession set you back four or five years in terms of your revenue and staff levels, and unfortunately, that included the loss of two key managers. You had envisioned an internal ownership transition that would involve your next tier of managers, but now those ranks have dwindled, as has their enthusiasm for buying stock.

So what do you do now? Is it possible to resuscitate your internal ownership transition plan? Would a strategic buyer (a larger A/E firm) be interested in a small firm like yours? Maybe an employee stock ownership plan (ESOP) would be the way to go, but is your firm big enough?

This is the dilemma so many small firm owners are facing right now. Unfortunately, there are many misperceptions and no small amount of misinformation out there when it comes to ownership transition strategies. Here are some common misperceptions and our own attempt to "fact-check" them.

"We're too Small a Morsel for the Serial Buyers"

It's the big deals that often make the headlines, like AMEC's acquisition of Mactec, or CDM's purchase of Wilbur Smith. But for every headline-making mega-merger, there are scores of small transactions, including acquisitions of firms of ten or fewer employees. In fact, of the 170 or so transactions in the architecture, engineering and environmental consulting industry so far in 2012, the median staff size of the selling firm has been just 30 employees.

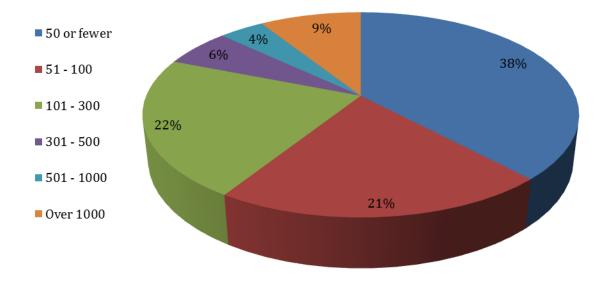
The key for a small firm is having some unique value to bring to a strategic buyer, like access to a niche market, a specialty service, or strong relationships with "blue chip" clients. Take the recent example of Perkins+Will's acquisition of 15-person Envision Design in Washington, DC. In its August 13th press release, Perkins+Will cited Envision's market leading position in sustainable design and listed its many high profile clients and numerous design awards.

Unfortunately, the days of firm's making acquisitions just to add bodies are over. If you're a small firm considering a sale to a strategic buyer, you must first identify those unique benefits you would bring to a buyer then identify the buyers that would benefit the most by acquiring your firm.

"We're not big enough to sponsor an ESOP"

While ESOPs have a certain level of fixed costs that are easier for larger firms to manage, you don't need to have 100 or more employees to make an ESOP work. In fact, a recent study by the National Center for Employee Ownership (Oakland, CA) indicates that 38% of the 10,900 ESOP companies in the U.S. have 50 or fewer employees. As the chart below indicates, ESOP companies are most heavily represented by small firms. And in case you were wondering, the A/E sector is among the four most common industries represented by ESOP companies.

ESOP Company Size (# of Employees)



Source: National Center for Employee Ownership

There are other considerations as well. Company culture, management structure, and corporate governance structure are all factors to consider. Generally speaking, firms that practice open book management and promote employee participation in management are better suited for ESOP ownership than those that do not. So don't let your firm's size be the only factor in considering an ESOP as part of your ownership transition plan. A feasibility analysis prepared by a qualified financial advisor is the only real way to tell if your firm is financially capable of sponsoring an ESOP

"We just don't have the next generation of leaders needed for an internal transition"

This is an increasingly common refrain among owners in our industry. Small firms by definition have a smaller pool of leadership candidates to begin with, so they often feel this constraint much more acutely. Compounding this is the tendency of small firm owners to hoard management responsibilities and even client relationships, rather than training the next generation in business management and business development.

There's also a tendency among some baby-boomer owners to fail to recognize the potential of the younger generations within their firm. Let's face it. Owners in this sector are a rather homogenous bunch of 50-somethings, and often they look (unsuccessfully) for their successors to be carbon copies of themselves. Generations X and Y may think and work in different ways than baby-boomers, but that

doesn't make them unfit to lead. For proof of this, just look outside of our industry; CEOs under 40 years old abound in the technology and internet sectors (think Larry Page of Google).

Owners of small firms (or any size firms for that matter) would benefit by re-examining their preconceived notions of what qualifies an employee to be an ownership candidate. Must every owner be a licensed professional? Must they have a certain number of years of experience or tenure? Cast a wider net and you might be surprised to find more leadership potential in your small firm than you first believed.

Conclusion

Yes, the ownership transition journey is often a tougher one for smaller firms, but virtually all the paths available to larger firms are also available to smaller ones. For small firm owners, a successful transition simply requires more careful and thoughtful planning.

About the Author: Ian Rusk is a principal with <u>Rusk O'Brien Gido + Partners</u> and has spent the past fifteen years working with hundreds of architecture, engineering and environmental consulting firms large and small throughout the U.S. and abroad with a focus on ownership planning, business valuation, ESOP advisory services, mergers & acquisitions, and strategic planning. Ian is a professionally trained and accredited business appraiser and holds the Accredited Senior Appraiser (ASA) designation with the American Society of Appraisers. Ian can be reached at irusk@rog-partners.com or at (617) 274-8051.

What's Happening in the World of Mergers and Acquisitions?

By David S. Cohen, Esq., ASA and Matthew K. Fultz

Have you been inundated with notices of firms that have been transacted over the last year? Or, more to the point, have you received phone calls, emails, or letters inquiring about your interest in selling your firm or buying another? Since mid-2010, the deal marketplace has been building momentum and, as we move further away from the Great Recession, these solicitations are becoming more common. Along with the increased deal chatter, the question we encounter most frequently is "what is driving the marketplace rebound?"

Factors Motivating Sellers

As we all know, many acquisitions prior to the Great Recession were motivated simply by the need to add staff. It was easier to purchase a 30-person firm than it was to hire a similar number of employees.

But, it's the other reasons that were driving the hot M & A markets of 2006 and 2007 that are stoking deals now. These include a generation of entrepreneurs who started firms or have been leading firms for the last 10-20 years who are now securing their retirement. Sure, the troubling economy may have postponed some retirement timeframes by a couple of years, but plans were not shifted a decade. Having weathered the recession, these founders/owners/sellers are still seeking a viable strategy to obtain liquidity for their investment.

We often see these retiring owners look over their shoulders to see if the next generation of firm leaders exists within the company ranks to make an internal transition feasible. However, what they find, in many cases, is a second tier who is less interested in becoming "the leadership group" or does not have the entrepreneurial inclination to lead a firm through a leveraged or management buyout (what occurs in an internal ownership transition). Perhaps the second tier simply cannot afford a management buyout, or they may believe, because of their past contributions to the business, that they are entitled to ownership at a discounted price, sometimes even for free.

If a capable second tier steps up and wants to take over the reigns, an internal transition may work, but only if the program is designed so that the company's cash flows are sufficient to fund a significant portion of the buyout. We believe it is imperative that buyers make at least a down payment (skin-in-the-game) to show commitment and acceptance of the risk associated with the investment that could ultimately lead to financial reward.

However, some reasons why this may not be working are: sellers who have not "reset" their perception of the company's value following the economic downturn and are thus looking to be bought out at a price not supported by what the company can afford; or sellers looking to maximize the return on their investment—especially given the impact the last several years may have had on their other investments, retirement accounts, home prices, etc. Another often overlooked factor is that many firms are transacting shares internally at a price based on accounting book value of equity as opposed to fair market value, which is often higher. As a result of this artificially low price, there is an understandable interest in selling externally—specifically when an external transaction may result in a three-plus times multiple to the book value.

Factors Motivating Buyers

While these reasons are motivating sellers, what is driving the buyers? One word, growth! It is all about growth, especially at the larger firm level. The weak economy has made project funding scarce in certain sectors and geographic regions and, as a result, organic growth may be more difficult to achieve. More

firms are now including acquisitions as part of their strategic plan to achieve geographic diversification, market sector penetration, and adding additional services. Certainly, most transactions seek to add bench strength and synergies that the combined firm can capitalize on going forward.

Savvy buyers want to follow the money or be where the money is headed. Geographic regions that once were "the place to be," and then so quickly became proverbial ghost towns in terms of design and construction activity, are appearing on the radar again. The southeastern United States over to Texas remains a hot region—and yes, this includes Florida, which is rebounding. Despite the budget issues in California, this state remains one the largest economies in the world and an active deal marketplace. Heck, with a couple of bad winters and a stronger housing market, it might be just a matter of time before Arizona comes back.

Market sector choices are being analyzed the same way. Healthcare remains atop the list and energy related firms are attracting a great deal of interest as well. Education remains a sought after sector, including both K-12 and higher education. Of great interest is the trend of engineering firms acquiring architecture firms and firms with a history in the public sector acquiring private sector focused design firms. This reinforces the trend that growth and diversification continues to motivate the marketplace.

Deal Structures

How are these deals being structured? Buyers remain interested in asset purchases so they may pick and choose the specific assets and liabilities they are acquiring. Sellers remain interested in selling their stock so they may transfer all contingent liabilities and recognize capital gains, as opposed to ordinary income, on the transaction. Currently, there is a wide disparity in the after-tax impact to the sellers in comparing an asset sale to a stock sale. However, given the potential, long-discussed tax increases affecting capital gains, the gap between capital gains and ordinary income taxes will likely be closing. This will not impact the buyers' desire to avoid certain liabilities, so the percentage of deals being structured as asset deals will likely remain constant or increase.

Once the deal structure is set forth in the Letter of Intent/Term Sheet (which are becoming more detailed to better outline the deal and allow for an easier negotiation of the definitive agreements), the type of consideration—cash, stock, and/or earn-out—is also negotiated. Obviously, sellers want more in cash at closing and may be willing to take a lower price to achieve this. Often the larger, serial buyers tend to bring more cash at closing when compared to less-frequent purchasers. In addition to cash, buyers are using more of their own stock to align their interests with sellers and to assist with integration. This is often a more acceptable version of an "earn-out" for both parties as it allows the

sellers to benefit from the overall success of the company and, by not tying earn-out payments to certain performance metrics, this better promotes integration and allows for all shareholders to benefit from deal synergies.

About the Authors: David Cohen is a Managing Director and Matt Fultz is an Associate with Matheson Financial Advisors, and they specialize in business valuations, ownership transition planning, and mergers and acquisitions as part of exit strategies and strategic plans. They also conduct seminars on financial management topics for design industry organizations, as well as conducting in-house educational presentations for firms nationwide. David can be reached at dcohen@mathesonadvisors.com or 508-655-9700 and Matt can be reached at mfultz@mathesonadvisors.com or 703-760-9122.

Best Practices

One of the PMKC's initiatives is to continuously improve the AIA's Best Practices. AIA Best Practices represent the collective wisdom of AIA members and related professionals. We like to highlight one or two new best practice articles in each issue of the Practice Management Digest that relate to our theme, and this quarter, consistent with the theme of new trends in practice, we have "Architects Leading the Commissioning Process in New Construction" by Michael Chelednik of URS and "Building Enclosure Commissioning" by Mike Lough of Integral Consulting. You can see all of the best practices at aia.org. Just click "Practicing Architecture" at the top left, then "Best Practices." If you would like to share a best practice with your fellow practitioners, contact the chair of our Best Practices Committee, David Richards, AIA, at drichards@rossetti.com.

Webinars

Our upcoming webinar, also illustrating a growing trend, is "Opportunities and Understanding for International Practice, and will be presented by Douglas Parker, AIA with <u>Greenway Group</u> and Thomas Fridstein, FAIA with <u>Cunningham Group China</u> on January 8, 2013 from 1:00-2:15 EST. Registration is free and you will earn 1.25 CES credits. You can learn more and register here.

PMKC Archived Webinar Resources:

Throughout the year the PMKC produced quarterly in-depth webinars covering subjects pertinent to firm practitioners. Visit the PMKC Webinar Resources page and view archived 2012 webinars as well as 2011 recordings and handouts.

Best Practices in Business Development

Presented October 18, 2012 | Webinar Resources: PDF Handout, Q&A Log | Youtube

Human Resources: Creating the right workforce for your future

Presented June 28, 2012 | Webinar Resources: <u>PDF Handout and Q&A Log | Youtube | Human Resources Workbook</u>

Beyond Marketing: Social Media for Recruiting and Retention, Research and Devleopment, and Knowledge Management

Presented March 22, 2012 | Webinar Resources: PDF Handout | Youtube | Q & A Log

View all upcoming Knowledge Community webinars via the online webinar calendar.

New Advisory Group Members

The changing of the guard at the PMKC Advisory Group happens at the end of each year. Going forward into 2013 and beyond, the Advisory Group will have the benefit of three new members: Jason Pierce, AIA of HOK, who has been representing the Young Architects Forum (YAF) will become an official member of the Advisory Group. In addition, the previously mentioned Deborah DeBernard, AIA of Dewberry and David Barkin, AIA of JCJ Architecture will join the Group. With these talented individuals, you can expect even more benefits of being a member of the Practice Management Advisory Group in the future.

Online Resources

See everything that the Practice Management Knowledge Community has to offer at http://network.aia.org/practicemanagement/home/

Visit the Practice Management Digest <u>archives page</u> for past issues.

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