



# Practice Management Digest

News & Best Practices from the PM Knowledge Community



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## Features

### Focus on Construction Drawings: Innovative Project Delivery Methodologies

by Michael F. Czap, AIA; Alan L. Mays, AIA; and Grant A. Simpson, FAIA

Over the last 25 years architects have had to keep up with and incorporate changing technology into their practices. Because the drafting room of today is frequently abuzz with conversations on how best to structure and sort information, drawings often end up organized more along the lines of software code. This is a result of forgetting the fundamentals of good visual communication and giving little thought as to how to best present the information to be usefully and easily perceived by the document users. Many construction document problems are a result of poor visual communication.

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### Managing Design, An Oxymoron for the Ages?

by Sara A McCann, AIA

If you're involved in the architecture profession, chances are that you've been awake at two in the morning pulling out your hair over some minute design issue on a recent project. Is it possible to manage design or is that simply an oxymoron? Design is not a linear process. You can take one step forward, then two steps back, all to return to the same concept that was developed months ago. The process interjects multiple goals and values from designers and clients and relies on effective communication throughout the process. This article provides a synopsis of the ideas gathered in the 2007 AIA National Convention workshop, Managing Design, An Oxymoron for the Ages.

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### Beyond Redlines: Creating a Practice-Based Quality Management Program

by Cliff S. Moser, AIA, MSQA

Deming and other quality gurus recognize the feedback loop to be an essential part of any quality system. A feedback loop provides a process or system with information to adjust actions accordingly. Nature employs negative and positive (or bipolar) feedback loops to adjust its process cycles; if more food is available, a population increases; as food availability diminishes, the population declines.

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### Manage Clients' Expectations: Require Clients to Set Aside Appropriate Contingency Funds

by Michael Strogoff, AIA

Michael Strogoff, AIA, and David Ericksen, Esq, presented a four-hour workshop, Managing Clients' Expectations, at the 2007 AIA National Conference in San Antonio. The workshop was sponsored by the AIA Practice Management Knowledge Community. This article summarizes a key point discussed: requiring clients to set aside appropriate contingency funds.

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### Financial Management for Design Professionals: The Path to Profitability

by Steve L. Wintner, AIA, and Michael Tardif, Assoc. AIA

In the highly competitive design industry, many design professionals believe their options for business decisions to be severely limited by factors beyond their control. Like so many of their colleagues, they focus primarily on winning new clients. This emphasis often means that they frequently neglect the most critical component of their business practice: financial management. A firm can only sustain itself for so long without maintaining its profitability before it succumbs to failure. It doesn't have to be that way; design firms can be

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successful both professionally and financially.

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### **Little Workshop of Horrors—An In-Depth Analysis of Claims that Threaten Architects**

This article summarizes The Little Workshop of Horrors, a workshop on risk management that was presented at the AIA National Convention in San Antonio on May 2. The presenters all have many years of experience in the field of risk management as it applies to the practice of architecture—Jim Atkins, FAIA; Hollye C. Fisk, Esq, FAIA; Grant A. Simpson, FAIA; and R. Craig Williams, Esq, AIA.

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## **News**

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### **Note to Self: Join the AIA Documents Committee**

Susan B. McClymonds, AIA, CSI, CCS, a member of the AIA Documents Committee since 2004, explains the self-actualizing satisfaction of working on the AIA Contract Documents Committee. The committee, which has a limited number of positions to fill this year as members rotate off, will be considering applicants beginning in July. If you are interested in being a part of crafting the AIA documents, [click here](#) for the guidelines that cover how you can be a part of this historic process.

### **Announcing Scholarship Opportunity for Young Professionals**

The AIA Practice Management Knowledge Community is offering two scholarships for young professionals to attend the 2007 Practice Management Fall Conference, The Future of Professional Practice: The Next Generation of Integrated Delivery, Emerging Technology, and Practice Management. [Click here](#) for more information as to conference details, eligibility, and the application process.

### **Call for Submissions—Upjohn Research Initiative**

The AIA Board Knowledge Committee and the AIA College of Fellows has created the Upjohn Research Initiative to provide funding for applied research projects that advance professional knowledge and practice. The research must relate to one or more domains of architecture knowledge: leadership, practice, design, or building performance. Up to four grants between \$15,000 and \$25,000 will be awarded for each selected project. These funds will need to be matched. Recipients will have their findings and outcomes published both electronically and in a nationally distributed publication. Preference will be given to proposals that have teams comprised of both academics and practitioners. Beneficial to selection are long track records of collaboration by the teams. To view the complete call for submissions, please [click here](#).

### **Call for Volunteers—2007 Advisory Group**

The AIA Practice Management Advisory Group is seeking volunteers for its 2008 advisory group. The AIA Practice Management Advisory Group is composed of leaders of the AIA Knowledge Agenda and the AIA itself. Advisory group members actively contribute to the strengthening of the architecture profession. In that capacity, it is important that knowledge communities continue to attract volunteers who understand the importance of those roles. Volunteers must not only commit their time but also content, expertise, and professional credibility to the knowledge community's work as stewards of knowledge generation and dissemination. [Click here](#) for more details about what it's like to serve on the advisory group.



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## Focus on Construction Drawings: Innovative Project Delivery Methodologies

by Michael F. Czap, AIA; Alan L. Mays, AIA; and Grant A. Simpson, FAIA

### Working in Context

Working in Context is a process to simplify the preparation of and augment the understanding of drawings. It is based on the premise that the organization and presentation of information is as important as the information itself. It is both analogous to defragmenting our drawings and to telling a story. It is ensuring that the “whole is greater than the sum of the parts” by combining related drawings to create more understandable groupings of information that are more simply referenced and easier to find.

Working in Context may be a new term, but it is not a new idea. Our grandfathers and their grandfathers used these ideas well to graphically communicate the often complex fenestration and spaces they were imagining. The stunning richness of the architecture of generations past was often conveyed in surprisingly simple ways. Much thought was given as to how to combine the various drawings in a meaningful manner to communicate within the context of the design itself. In fact, many sets of construction documents for very complex designs were prepared using no referencing overlay system at all.

### Instructional Systems and Default Scheduling

*Instructional systems* are drawings that graphically coach the drafter or contractor on understanding project conventions such as dimensioning or documenting methods like the default scheduling systems discussed below.

*Default scheduling systems* employ a methodology to schedule building components such as toilet accessories, doors, partitions, sealants, etc. These take form as pre-organized, ready-to-use, “drop-in” sheets complete with schedules, details, general notes, and notes to the drafter and contractor. The schedules are pre-populated, based on previous work—ready to be edited for a particular job. If set up within a BIM software template, they will populate as you add information to the model.

### Project Planning

Planning a set of documents is the first step to having a well-coordinated set of drawings. The use of cartoon sets and network diagrams can help in the planning process. Common CAD standards in use today typically espouse a one size fits all, “mail slot” approach to project organization, but as a network diagram will show, it is not an effective way to organize the set. Instead, arranging drawings in a “contextual” manner will result in sets with fewer sheets and will require less cross referencing between sheets.

### 3D Documentation

From the days of manual drafting, when construction documents were considered a craft or artwork, the use of the 3-dimensional (3D) drawing has rarely been used. That did not change when we moved to CAD software for drafting our projects; instead, we essentially made “clean” 2D versions the same as we did when we drew by hand. By contrast, the BIM software used today creates 3D, virtual models of our designs right inside the computer. Architects can now easily place 3D views of the building on our construction documents that better explain project complexities to contractors and owners, as well as to ourselves.

### Summary

To better serve our clients and to truly leverage our software investment, architects must think beyond layers, levels, and worksets. We need to devise intelligent documenting methodologies and use contextual drawing organization practices that better communicate the graphical story that a set of construction documents presents.

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*Michael F. Czap, AIA, Alan L. Mays, AIA, and Grant A. Simpson, FAIA, are all with RTKL Associates Inc.*



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## *Managing Design, An Oxymoron for the Ages?*

By Sara A. McCann, AIA, NCARB

Design is not a linear process. You can take one step forward, then two steps back, all to return to the same concept that was developed months ago. The process interjects multiple goals and values from designers and clients and relies on effective communication throughout the process.

This article provides a synopsis of the ideas gathered in the 2007 AIA National Convention workshop, *Managing Design, An Oxymoron for the Ages*. Moderator Sara McCann, AIA, 2008 AIA Practice Management Knowledge Community Advisory Group chair, along with panelists Carl Roehling, FAIA, president of SmithGroup; David Lake, FAIA, founding principal of Lake/Flato Architects; and Steven Ehrlich, FAIA, NCARB, design principal of Steven Ehrlich Architects presented their strategies and philosophies of managing the design process.

From small boutique firms to large service firms, we all sell the same product—design. Representing firms ranging from 30 to 800 in staff size, the panelists' descriptions of their process for design were much the same. Larger firms tend to break down employees into smaller groups, or "studios," to provide a collaborative, team-driven department that is manageable in size. Smaller firms embody a similar team environment where each staff member participates in all of the venues of the firm.

The design process is an artistic expression of an object, drawn by technicians, approved by a client, built by contractors, all for a real budget. To complete this process, an architect has to provide clear communication of the design intent. Without it, conflicts can often arise between the architect and the client. Imagine proposing a building similar to the Sidney Opera House to a client who, influenced by a recent trip to Tahiti, has been thinking more along the lines of a native grass hut. If the architect does not effectively express his or her intent to the client, the results could be disastrous and the project timeline and budget blown beyond their limits.

Design process management is integral to avoiding design-related conflicts. Effective design communication by all parties is essential for project success. Carl Roehling states that you never know what you'll get with design, for SmithGroup, a great design isn't something that is stylistically bombastic or satisfies designers' egos. Great design is something that strikes the perfect balance across all parameters: price, aesthetics, schedule, and function.

In the five years it takes to get an architecture degree, students focus on learning the design process in an unlimited time frame and are praised for their extensive work. Upon graduation, students are thrust into the architecture profession, where they find that efficiency is critical, time and budget are limited, and praise is doled out to those who perform fast, efficient work.

The design process is a creative act. Management styles of architects can vary from one end of the spectrum to the other. From a coaching style that empowers staff to innovate and create freely to the dictator style that seeks to provide a signature style firm-wide, there is no right or wrong answer. The different management styles, however, can be confusing to younger staff who are trying to make their own mark on the architecture footprint of the world. Design becomes a synthesis of competing values. Individual versus team goals evade the process throughout. For success, a firm must combine effective communication skills, delegation of the design process, and the goals of designers versus others into a consistent design vision that is in sync with the vision of the client.

David Lake believes that to manage the client's expectations, one must set parameters for success in budget; build function and performance; seek the

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best ideas together through a collaborative design process; bring the client along in the process through sketches, precedent images, and 3D renderings; and select the contractor early in the process as a pivotal team member.

Consider the following factors in evaluating the design process in your firm:

### **1. Aligning resources with your firm's strategy**

- Analyzing corporate strategy in relation to design
- Identifying and seizing design needs
- Planning and implementing management activities related to those needs

### **2. Organizing design resources for optimization**

- Identifying processes
- Assigning roles and tasks
- Coordinating and following up

### **3. Assessing results to improve efficiency**

- Setting up and applying control indicators
- Analyzing the results
- Readjusting resource allocations consequently.

Whether a firm has one or 1,000 employees, an effectively managed design process can be directly correlated to the firm's success or failure. The group debate and comments at the workshop revealed that communication is the key and everyone has his or her opinion on how the process can or should be managed. Different styles of managing the design process can produce drastically different results.

*Sara McCann, AIA, NCARB, principal for Slack Alost Architecture, is currently serving a five-year term on the AIA Practice Management Advisory Group.*



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## ***Beyond Redlines: Creating a Practice-Based Quality Management Program***

By Cliff Moser, AIA, MSQA

In creating a sustainable and continually improving quality program, a firm should create a feedback loop that measures and corrects processes. In the 2007 AIA National Convention workshop Beyond Redlines: Creating a Practice-Based Quality Management Program, I discussed how the architecture firm can use a RISMI feedback cycle to create a self-improving quality management program.

**RISMI stands for review, identify, standardize/stabilize, measure, and improve.**

### **Review Current Processes**

This step includes identifying the project checklist or checklists and reviewing the project's required deliverables with the team. Ensure that all team members understand the project requirements and deliverables. Then, using the same checklists, the team should review the deliverables (drawings, specifications, cost estimates) for compliance at the end of each phase, or at the times the deliverables are submitted. (Note: Although a separate review team provides a new set of eyes; avoid taking away the project team's responsibility for its own checklists and checking. Shigeo Shingo of Toyota instituted a self and successive inspection program where workers inspect their work before passing it along to the next worker when it is inspected again. This process reduced assembly-line process errors to near zero.) The review process should detect the differences between compliance and deficiency and make the previous team member aware what is needed for correction (e.g., correction of the deliverables and the processes that led up to the deliverables).

### **Identify Process Weaknesses or Deficiencies**

Use results from the review of current processes to determine areas that need improvement, such as

- Information capture and dissemination
- Project requirements
- Consultant coordination

Once the weaknesses have been identified, the firm should take actions necessary to prevent and correct them. Such actions may include further training, additional standardization of work, more explicit instructions, and additional identifiable delivery milestones.

### **Standardize and Stabilize Workflow**

Pareto theory states that at least 80 percent of every project consists of standard work involving drawings or processes. Identify that work and processes (partition, door, and opening schedules, abbreviations, ADA mounting heights and clearances, even details such as window and door heads). Standardizing and sharing this information through forms and standardized drawing sheets can free up time and fee in order to spend the remaining unique 20 percent of the project requirements. Listing process and product standards can mitigate the risk of showing wrong or incomplete information. For example, the project documents can list and draw UL partitions and assemblies, Wood Institute standards for casework, ADA manuals and references for clearances, and contractor and manufacturer trade references for constructability issues.

Standardization shouldn't stop at drawings. All business processes should be standard or have significant components that can be standardized, such as

- Organizing CAD files and layering

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- Invoicing
- Conducting office meetings
- Training

Once quality variation has been removed from processes through prevention, the processes should be stabilized. This can be achieved by the use of root cause analysis tools such as value stream mapping (VSM). VSM is another tool created through Toyota's Lean processes, is similar to process mapping or flow-charting, except that it identifies the process's customer and value to that customer.

Does the client care about CAD line number or colors? Yes—if it needs to match their system. No—if they are only interested in hard-copy deliverables. In one variance-prone issue-tracking construction administration process, the team found that a number of issues were being forgotten and unresolved. The VSM process uncovered and corrected handling issues. A spreadsheet and flowchart were developed for team members to track, answer, and route the construction administration issues. Additional improvements were also identified which, in turn, made the system more efficient and stable

### **Measure Performance**

Quality cannot be improved without measurement; however, measurement is one of the most overlooked quality steps. Even simple metrics such as registering on-time drawing delivery or error-free client invoices can be an important and successful differentiator for the architecture firm.

Once a system is stabilized, the use of metrics can promote and improve its stability. The firm should establish and track metrics incorporating people, processes, project participants, and finance. Additionally, lagging indicators (e.g., orders filled, training hours spent, and customer retention and referral percentage) should be combined with leading indicators (e.g., orders in process or booked work, and staff enrollment in training) to provide the most accurate measures. Tracking both lagging and leading measures helps ensure that the team and firm have control over their processes and are planning for the future. Auditing is critical to validate everyone's involvement in the program. The audit process identifies problem areas as well as areas of success. An audit program measures and reports against the policy requirements. Examples of quality management (QM) audits include performance reviews, design audits and reviews, postoccupancy evaluations, and client satisfaction surveys.

### **Improve Quality Continuously**

As noted earlier, QM is as much about quality improvement as it is about quality maintenance. Once a team or firm has validated that QM policy and program requirements have been met, it strives to further improve the QM functions and processes. Improvements may include such things as faster turnaround times, additional standardized work, and pre-completed drawing sheets. It may also include identifying and revamping processes that aren't adequate for particular clients or projects.

To be successful, quality improvement can't just address processes that management has determined are important. Improvement also calls for creating QM initiatives that build on the ideas of employees. Fostering an innovative firm will help nourish a more effective QM program. Rather than pushing improvement onto project teams, make improvement ideas a feature (if not a requirement) of staff and project meetings. Simple questions, such as "how can we improve this process?" or "what are the operational constraints in finishing this task?" can identify frustrating hurdles that the frontline staff deals with everyday of which management may be unaware.

Keep in mind that small, front-line ideas are the primary means for organizational learning and improvement. Small ideas are also an excellent source for larger ideas, to leverage team, project, and organizational improvement. Creating a QM program, which integrates idea generation as a problem-solving and improvement tool acknowledges the ability of frontline staff to leverage small improvements into a creative and evolving organization.

Once embedded in the organization, the RISMI feedback loop can benefit from its own RISMI review. For example, augment RCA techniques with a Six Sigma project, or take the RISMI program to your contractor or client. In the words of Peter Drucker, "It is not necessary for an organization to grow bigger;

however, it must grow better.”

*Cliff S. Moser, AIA, MSQA, is a principal at Healthcare Los Angeles Studio, RTKL Associates Inc., and serves on the AIA Practice Management Knowledge Community Advisory Group.*





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## ***Manage Clients' Expectations: Require Clients to Set Aside Appropriate Contingency Funds***

By Michael Strogoff, AIA

Clients react to extra charges and cost overruns in different ways. One owner might willingly pay for services not originally included within an A/E team's scope, accept construction change orders as part of the normal course of business, and dip into a reserve fund to pay for unexpected project costs such as higher financing costs or additional site acquisition costs. A different owner might balk at any additional fees regardless of the cause, seek reimbursement from the architect for every change order, and downsize the project to pay for unexpected project costs. The course an owner takes depends largely on whether the owner planned for the unexpected.

To reduce the likelihood of an owner balking at additional fees, filing unwarranted claims against your team or unnecessarily changing the project parameters late in the game, persuade the owner during your initial contract negotiations to include three different contingency funds: one for additional professional fees, one for construction changes, and one for unexpected project costs.

### **Allowance for Additional Professional Fees**

It is difficult to determine ahead of time the precise scope of every design professional's involvement, and it is unnecessarily expensive for an owner to negotiate fees that encompass every conceivable service that might be required. On the other hand, the need to negotiate additional fees for changes as they occur places a design professional in an uncomfortable position and often jeopardizes the owner-design professional relationship. Unfortunately, some owners cling to unrealistic expectations that, once a contract is signed, a design professional should provide whatever services are required. Some owners think, "You're the expert and I relied on your knowledge of which services should be required when we negotiated your fees." Other owners are unwilling to approach other stakeholders on behalf of the design professional, while still others simply refuse to part with more money regardless of the cause.

The best solution is to persuade the owner to carry a contingency fund specifically earmarked for paying additional fees. This gives the owner more flexibility to make changes without renegotiating or amending its contracts, such as revising the project scope, amending prior decisions, providing updated information, expanding the design professionals' services, or adding additional consultants. With institutional clients, it also eliminates the need for an owner to obtain formal approvals—a huge barrier for many project managers—since the funding has already been encumbered. Such a contingency also makes the design professional's task of obtaining additional fees for legitimate changes much easier and less confrontational.

### **Construction Contingency Fund**

Every architect knows that the perfect set of drawings and specifications has yet to be produced. Not so with all owners, some of whom expect an error-free set of documents. Yet design professionals do little to dispel an owner's unrealistic set of expectations. In fact, most architects and engineers do just the opposite: they lead owners to believe that design professionals are so highly educated and skilled that mistakes are few and far between. Imagine an architect, in the middle of an interview, telling a prospective client that his documents will surely contain some errors and omissions, but probably no more than the average architect practicing in the same community.

Persuading the owner to include a construction contingency fund in his or her project budget is a far better way to educate an owner about the imperfect nature of an architect's or engineer's drawings and specifications, and thereby reduce the likelihood of that owner seeking reimbursement. A construction contingency fund sets aside a portion of the owner's budget, either a specific

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dollar amount or a percentage of the budgeted construction costs, to pay for the costs associated with the imperfect nature of architecture and engineering services.

During your negotiations, talk to the owner about what he or she should expect with regard to the completeness of your design and the accuracy of your drawings. Tell your client that change orders during construction are inevitable and that most contractors expect additional money for every slight change, whether such changes result from errors, substitutions, unexpected site conditions, or owner-initiated changes. A client who understands that your team cannot achieve perfection, no matter how skilled or how high of a fee it is paid, is less likely to hold you responsible for the costs associated with your errors and omissions.

After candidly talking with your client, try incorporating a provision similar to this one into your owner-design professional agreements:

"The Owner and the Design Professional agree that certain increased costs and changes may be required because of possible omissions, ambiguities, or inconsistencies in the drawings and specifications prepared by the Consultant and, therefore, that the final construction cost of the Project may exceed the estimated construction cost. The Owner agrees to set aside a reserve in the amount of \_\_\_ percent of the Project construction costs as a contingency to be used, as required, to pay for any such increased costs and changes."

Some attorneys advise design professionals to add a clause that prevents the owner from suing you for extra costs that fall within the contingency amount, such as:

"The Owner further agrees to make no claim by way of direct or third-party action against the Design Professional or its subconsultants with respect to any increased costs within the contingency because of such changes or because of any claims made by the Contractor relating to such changes."

Beware: this clause could also work against you. By creating a threshold below which the client cannot recover its costs, you might actually encourage the client to pursue reimbursement from you when that threshold is crossed. Make sure your client understands that a contingency fund is meant to cover some changes, not every conceivable one.

### **Project Contingency Fund**

Beyond additional professional fees and construction change orders, owners should budget for other unexpected costs. Among the most common project changes that add to an owner's budget woes: schedule delays, changes in agency requirements, programmatic changes, owner-initiated design changes, unknown site conditions, unexpected construction cost escalation, and added financing costs.

Again, educate each owner during contract discussions about these potential costs. Suggest ways to help prevent these costly changes. For example: make sure the owner's schedule is realistic and allows adequate time to meet with approving agencies during the early design phases; incorporate a comprehensive programming effort; negotiate fees for building a model or producing three-dimensional rendering to make sure the owner understands the design before proceeding into the production phases; insist upon current site surveys and soils reports; include a professional cost estimator on your team; and suggest that the owner either lock in financing terms or include a separate allowance for added costs.

When advising an owner to incorporate each of these contingencies—one for additional professional fees, one for construction change orders, and one for other unexpected project costs—reinforce that, in the final analysis, the owner will receive a better product and avoid needless headaches and legal wrangling. And, by the way, all of this makes clients much easier to manage.

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*Michael Strogoff, AIA, is an AIA Practice Management Knowledge Community Advisory Group member. His firm, Strogoff Consulting in Mill Valley, Calif., provides practice management, ownership transition, negotiations, risk management, and strategic marketing advice to design professionals. For more information, visit [www.StrogoffConsulting.com](http://www.StrogoffConsulting.com), call 866-866-272-4364,*

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## ***Financial Management for Design Professionals: The Path to Profitability***

By Steve L. Wintner, AIA, and Michael Tardif, Assoc. AIA

This half-day financial management workshop provided easy-to-follow, clearly defined linear steps to put any firm on the path to profitability, a blueprint that enables a firm of any size to develop and implement a sound financial management system, thereby enhancing its opportunities for increased profitability.

The workshop offered guidance on many aspects of financial management, from developing an annual budget and profit plan to calculating the seven key financial management indicators that provide a firm's principal with the critical metrics to make sound financial management business decisions and become a more effective steward of the firm's financial resources.

Financial management and accounting are not the same thing. Firm principals do not need a degree in accounting or an MBA to competently manage their firms' finances. Instead, the workshop focused on the financial management knowledge that firm leaders need to understand the relationship between "dry numbers" and their firms' business and professional goals, and shows that once this knowledge is acquired, a firm leader can successfully manage a firm's finances by devoting only a few hours to financial management each month, regardless of a firm's size.

The workshop explained the method and rationale for calculating "true" overhead and profitability, the most critical piece of information for firms that want to know the true cost of delivering every project. Armed with accurate cost information, firm leaders can accurately determine a value-added profit percentage and arrive at a desirable fee. When accurate cost information is combined with a defined scope and list of deliverables from a client's request for proposal, a win-win negotiation process is assured. Win-win, in this instance, is defined as a negotiation in which each party can make an informed decision to accept or decline the negotiated terms and conditions. The design firm may well decide to decline the project, but even this decision is a win for the firm, which might otherwise have accepted a final offer that would not have provided a sufficient profit margin for the firm to cover contingencies and earn a reasonable profit.

*Steve L. Wintner, AIA, is an architect and management consultant, offering professional consulting services to professional design firms. Michael Tardif, Assoc. AIA, Hon. SDA, a freelance writer and editor in Bethesda, Md., was formerly director of the AIA Center for Technology and Practice Management.*

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# Practice Management Digest

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## ***Little Workshop of Horrors: An In-Depth Analysis of Claims that Threaten Architects***

The Little Workshop of Horrors was presented at the AIA National Convention in San Antonio on May 2. The presenters were Jim Atkins, FAIA; Hollye C. Fisk, Esq, FAIA; Grant A. Simpson, FAIA; and R. Craig Williams, Esq, AIA. These four have many years of experience in the field of risk management as it applies to the performance of architecture.

### **Overview**

The presenters began the workshop by acknowledging that architects are now practicing in an apocalyptic age in terms of today's market and legal environment. Although the standard of care for architects was addressed in *Coombs v. Beede*, a case rendered by the State Courts of Maine in 1896, wherein it addresses an architect's services, "the undertaking does not imply or warrant a satisfactory result," and "there is no implied promise that miscalculations may not occur." Nonetheless, architects are besieged with claims and lawsuits that assert that any errors or miscalculations are inexcusable and are thus solely the fault of the architect.

Architects are also plagued by the continuing debate that they serve in a *fiduciary* capacity to the owner and should be held responsible for all financial decisions the owner makes. The claimants seem to want to ignore the conflicting requirement in A201, Section 4.2.12, wherein the architect, "...will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either..." By definition, one cannot have a fiduciary relationship without showing partiality.

Contracts were examined in detail including its relationship to the standard of care, indemnities, the effect of ambiguities, and the danger in working without a contract. The importance of contract management and maintenance of subconsultant agreements and additional services is addressed, including the requirements for establishing an in-house contracts management program.

### ***AI*Architect Article Series—Best Practices in Risk Management**

Important claims issues were explored in a review of the Best Practices in Risk Management article series in *AI*Architect authored by speakers Jim Atkins and Grant Simpson.

The article, "[A Loss Cause](#)," examines betterment, or value added to the project through changes, and real-time examples were given for illustration. The effect of time on damages were discussed, and how damages rapidly increase after construction has started.

The article, "[Drawing the Line](#)," explores the requirements of the contractor to produce a work plan and finalize work coordination through shop drawings, coordination drawings, and clarification sketches. Emphasis is given to the fact that the architect's drawings alone are not sufficient to construct the project. Supplemental contractor-produced documents are necessary to construct the project.

The process of substitutions was examined and how cost-reduction efforts are often inaccurately described as value engineering. Suggestions were given for maintaining design quality through management and documentation of the VE process by managing them as substitutions and, in some cases, not changing the drawings if the architect does not accept the change.

The issue of drawing to budget was discussed along with the challenging effects of fast track scheduling and early guaranteed maximum cost promises. Protection through owner education and strict documentation was emphasized.

The second half of the session began with a review of the risks associated with activities during the construction phase, including submittals, site observations

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and reporting, payment applications, substantial completion, final completion, and special inspection and testing.

The *AIArchitect* article, "**According to Hoyle**," which examines the submittal process in detail, was reviewed along with suggestions for managing and more effectively documenting the process.

Site visits and construction observation was discussed in the context of the *AIArchitect* article, "**Visible Means**" including a review of the areas of risk that arise if documentation and the appropriate conferences are not adequately administered.

The daunting challenges of substantial completion were reviewed as addressed in the article, "**Substantial Completion, Where Art Thou?**" Conflicts of interest between the parties, failure to complete the work, and the question of who actually controls the completion date were among the topics examined.

The issue of who is responsible for nonconforming work was discussed as addressed in the article, "**Absolute or Absolution**," including the contractor's express warranty and potential risks of approving payment applications containing nonconforming work.

The discussion concluded with a review of "**Certifiable Risk**," a *Texas Architect* May/June 2007 magazine article authored by the speakers; it will be republished in *AIArchitect* in July 2007. This article examines the risks in certifying payment applications with nonconforming work, administering stored materials, and the impact of the notarized warranty that is given by the contractor with each application.

### **Case Studies**

Two exercises to stimulate thought and discussion were given in the form of case studies based on numerous actual projects.

#### *Cast Study No. 1*

The project involves a \$30 million fast-track-delivered, mixed-use and office complex; the project cost was based on the DD drawings. Ultimately, the drawings had four reviews by the city, six sets of addenda, and 600 RFIs. The contractor claimed damages of \$6 million allegedly due to poor quality drawings as evidenced by the numerous RFIs. The owner's allegations include poor drawings and mismanagement of the permitting process. The architect's explanation was that such problems are to be expected in a fast-track scheduled delivery.

The audience was divided into three groups, designated as owners, architects, and contractors. They were asked to defend their positions and explain why it was valid. The exchange provided a holistic view of the claims, each party's position, and how their position of interest affected the claims made. Actions to be taken on future projects to avoid or better manage these issues were emphasized.

#### *Case Study No. 2*

The project is a \$15 million hospital in a small town. Challenges include an intensive VE effort to reduce costs resulting in a design change from three-quarter-inch, three-coat exterior cement plaster, sheet metal flashing, and a self-draining window wall, to a one-half-inch, one-coat proprietary stucco over a weather barrier, fixed-glass nailing fin residential windows, and a flexible flashing.

Although the architect objected to the changes, the owner directed the architect to proceed. The architect approved shop drawings, certified payment applications, and issued a certificate of substantial completion with no notations on the punch list.

The windows leaked and the stucco began to crack. An investigation revealed that the flexible flashing was not installed around the windows, and there was no weather barrier over the OSB sheathing.

The owner claimed that the architect was at fault because he failed to inform of the design problem, failed to report defective work, approved submittals, certified payment applications, and certified substantial completion with no exceptions.

The contractor claimed that they were not responsible for the design and that the architect failed to inform them that the subs were installing improperly. The architect maintained that the proprietary stucco system was design-build by the contractor and that they were not responsible for defective work or supervision of the subs.

The three audience group designations were rotated from the first exercise, and they were asked to defend their assigned positions. Again, the ensuing discussion provided an in-depth view of each party's position and the positions of interest driving the allegations. The discussion also included actions to be taken to avoid or better manage these issues on future projects.

*All four presentors of this workshop practice in Dallas at the following firms:*

*James B. Atkins, FAIA, is with HKS Architects.*

*Hollye C. Fisk, Esq, FAIA, is with Fisk & Fielder, PC.*

*Grant A. Simpson, FAIA, is with RTKL Associates Inc.*

*R. Craig Williams, Esq, AIA, is with HKS Architects Inc.*



# Practice Management Digest

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## ***Announcing Scholarship Opportunity for Young Professionals***

### **The Opportunity**

The AIA Practice Management Knowledge Community (PMKC) is offering two scholarships for young professionals to attend the 2007 Practice Management Fall Conference, The Future of Professional Practice: The Next Generation of Integrated Delivery, Emerging Technology, and Practice Management

The conference will provide a roadmap to professional practice in the 21st century with a focus on

- Emerging technology, integrated delivery methods
- New contractual relationships, global collaboration, and competition
- Digital tools for developing, managing, and communicating project information
- New educational and management paradigms, and client relations and expectations
- A growing shortage of qualified professionals

Through case studies, plenary discussions, and concurrent seminars, the conference will help attendees explore and discuss the technologies and strategies that will enable them to expand their influence and better manage their practices.

### **Purpose of the Scholarship**

The PMKC is offering this scholarship to

- Support young professionals' participation in PMKC activities
- Broaden young professionals' understanding of PMKC initiatives
- Include the ideas of young professionals in formulating PMKC thinking
- Celebrate the value of professional conferences to young professionals

### **Conference Details**

The conference will be held December 2–4 in Washington, D.C, in conjunction with the AIA Technology in Practice (TAP) Knowledge Community. [Click here](#) for conference information.

### **Scholarship Details**

Two scholarships will be awarded. Each scholarship will provide up to \$1,500 to cover the registration fees, cost of the conference, per diem, and travel expenses. Each recipient will be required to submit a detailed expense report for reimbursement after attending the conference.

### **Who is Eligible**

Anyone who is an AIA or Associate AIA member with six or fewer years experience in the profession is eligible to apply for these scholarships.

### **How to Apply**

To apply, submit an essay answering the following questions:

- Why are you interested in Practice Management?
- How will attending this specific conference benefit your career?
- How will you share the knowledge and information from the conference with your peers?
- How will your attendance at the conference benefit the PMKC and the AIA?

E-mail your essay to [Bruce Bland](#), AIA PMKC project manager.

### **If Selected**

In return for receipt of the scholarship and as a condition of reimbursement, each scholarship recipient will be required to write a 400-word summary of the benefits he or she received by attending the conference. The 400-word essays will become the property of the AIA, will be posted to the PMKC Web page, and will also be included in the eNewsletter PMKC Digest.

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**The Schedule**

Submittal essays from interested young professionals must be received by e-mail to **Bruce Bland** on or before Wednesday, August 1, 2007 (12:01 8-2-07 AM PT). Winners will be announced on Monday September 24, 2007.





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## Call for Volunteers—2007 Advisory Group

The AIA Practice Management Advisory Group is seeking volunteers for its 2008 advisory group. The AIA Practice Management Advisory Group is composed of leaders of the AIA Knowledge Agenda and the AIA itself. Advisory group members actively contribute to the strengthening of the architecture profession. In that capacity, it is important that knowledge communities continue to attract volunteers who understand the importance of those roles. Volunteers must not only commit their time but also content, expertise, and professional credibility to the knowledge community's work as stewards of knowledge generation and dissemination.

### Travel and Time Commitments

Prospective AIA Practice Management Advisory Group members should be aware of the time and travel commitments inherent in any advisory group appointment. The advisory group is a five-year commitment. The time commitment includes active and informed participation in conference calls, planning activities, development of annual action plans, leadership of subcommittees, facilitation of AIA state and local practice management knowledge communities, and attendance at certain events, including the annual AIA Knowledge Assembly, AIA Grassroots Conference, AIA Practice Management Fall Conference, and the AIA National Convention. Advisory group members are not compensated for their leadership service but will be reimbursed in accordance with AIA guidelines for authorized and budgeted knowledge community-related expenses.

### Desired Qualifications

Among the traits and knowledge that AIA Practice Management Advisory Group members should possess are leadership skills, ability to think strategically, strong interpersonal and communication skills, networking skills, and knowledge in key practice management areas (e.g., business practices and trends, delivery methods, financial management, human resources management, innovation management, integrated practice, intern development, leadership development and transition, marketing and business development, operations management, project management, quality management, risk management, social responsibility management, strategic alliances, and strategic planning). Although anyone is welcome to submit his or her qualifications, preference in 2008 will be given to practicing professionals.

Interested parties are encouraged to submit a curriculum vitae/resume and letter of intent describing their goals as a AIA Practice Management Advisory Group member to [practicemanagement@aia.org](mailto:practicemanagement@aia.org) by August 1, 2007. The selected candidates will be notified August 31, 2007.

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