

Hiring a third party to manage building information modeling is the right option for some AEC firms — but not all. Here's how to determine which route is right for you.

he role [of BIM manager] is an evolving one as your firm develops their BIM content, processes, and protocols," states Scott Chatterton in his blog, The Revit Jedi. And, he adds, "[It] will be a staple component of all projects."

Chatterton is correct on both counts. Good management of a building information modeling (BIM) initiative is vital to its success, meaning that every firm must treat the role seriously, ensuring that a BIM expert is in place to manage the myriad technical, procedural, and collaborative responsibilities that define the role. As these responsibilities evolve, and as BIM and related technologies continually advance, BIM management becomes increasingly challenging — and increasingly vital.

Often, however, a firm can't afford a dedicated in-house BIM manager or needs support while it searches for a new hire. Neglecting BIM management only adds layers of stress for staff, increased potential of project mistakes and delays, and even dissatisfied clients and missed business opportunities. What's the answer?

Many firms opt to outsource BIM management, working with outside experts to address in-house needs. But that approach isn't right for all firms. This whitepaper will help you determine if outsourcing is the best option for your firm, explaining its benefits and drawbacks as well as the pitfalls to avoid if and when you outsource the service.

BIM MANAGEMENT: A COMPLEX ROLE

BIM management should not be confused with CAD management, which usually focuses only on the "computer-aided design stuff," writes David Light in a post on his Revit blog, <u>CAD is not BIM</u>. "This typically means dealing with support, maintenance of the system, successful deployment, training, and standards."

BIM management is a broader role that demands a new combination of skills and experience, combining technical support with procedural support; project guidance; design, engineering, and/or construction expertise; and business savvy.

Duties vary with each position, but typically include some or all of the following:

- establish and foster BIM vision
- help select, implement, and maintain BIM software and hardware
- stay apprised of trends and evangelize use of new technologies that can support BIM projects and expand services — for example, 3D laser scanning, energy analysis, prefabrication, cloud-based project collaboration, and computer-aided manufacturing
- establish and enforce use of file templates, standards, workflow parameters, and collaborative procedures that ensure consistency across projects
- · train, educate, and evaluate BIM staff
- · help develop project proposals and contracts
- ensure that each element of the design and construction process is fully integrated throughout every phase of every BIM project
- collaborate with and update all management, staff, clients, and consultants regarding all BIM-related aspects of a project
- help market BIM services

The Association of General Contractors states that a BIM manager also should advise the team on intellectual property issues, identify potential insurance and bond coverage limitations, and even manage risk allocation provisions for all BIM projects - clearly, serious responsibilities that require very specialized expertise.

Examining the responsibilities that comprise BIM management, it's easy to see why the role is so vital to BIM success - and why it isn't always viable for a firm to maintain this skill set in-house.

A LOOK AT OUTSOURCING

Looking to a third party for BIM management support not only can cover the many responsibilities of the role, it also can free up valuable staffing resources, provide access to the collective BIM expertise of a consulting team, and allow you to focus on business development and client service instead of laboring over software deployment. Plus, it can even enhance your bottom line by increasing the productivity of BIM staff and winning new business.

Finding the right partner is key to successful outsourcing. A good BIM management service should be able to provide strategic and technical support, including:

• Day-to-day tactical assistance. For firms that don't want to devote valuable employee hours to BIM management, outsourcing can provide experts to help with essential tasks without draining staff resources. Services provided include quick answers to technical questions, creating content such as standards documentation and styles development, and software configuration and deployment.

 Assistance for in-house CAD/BIM managers. Some firms have a BIM or CAD manager but more work than that individual can manage. A BIM management service will provide experts who are ready to help with strategic projects, such as evaluating BIM use in the firm, and with tactical initiatives, such as training employees to customize BIM



software and other high-priority work.

· Access to industry best practices.

A technical services team can share extensive knowledge and experience with BIM across many industries — which benefits your firm without the cost of having a cadre of experts on staff. If you're still working toward full BIM implementation, a BIM management service can help you implement BIM standards and best practices based on the consultant's experience in the industry.

• Tailored services. The best consultants will examine your firm's needs and work with you to develop a BIM management plan that provides precisely the support you need.

WHEN OUTSOURCING IS RIGHT — OR NOT

How does an AEC firm determine if BIM management outsourcing is the right solution?

Finding the right partner is key to successful outsourcing. A good BIM management service should be able to provide strategic and technical support.

Joe Eichenseer, Director of Building Lifecycle Solutions for IMAGINIT Technologies, believes that it makes sense to outsource BIM management when you have an immediate need, such as when your BIM manager takes leave or changes jobs, or if you're a small firm that doesn't need a full-time BIM manager. "There is also the case in which a firm may want professional help until they

are in a better position take on some or all of the role of BIM manager in-house," Eichenseer adds.

That leads to one of the great benefits of outsourcing BIM management: You can contract for the level of support you need — whether full-time or part-time, permanent or temporary — depending on your needs and the offerings of the service provider. For example, if your staff is largely autonomous, part-time BIM management support could be the right option. Or you might elect to outsource temporarily while you use this same external resource to build up internal skill sets to take on BIM management responsibilities, says Eichenseer.

If your staff is largely autonomous, part-time BIM management support could be the right option.

BIM management outsourcing typically is not the best option for larger firms that have the resources to support an in-house position or that can more easily respond to staff changes thanks to personnel redundancy. It's preferable to maintain an in-house BIM manager, Eichenseer says, and such firms are usually equipped to do so. Multi-office firms that already have strong, consistent BIM standards in place across all locations, as well as the ability to share staff expertise among offices, also are not likely to find significant value in outsourcing.

To determine whether your firm needs BIM management support, ask the following questions:

Outsourcing BIM Management: A Success Story



When a firm loses a BIM manager, it should fill that gap as soon as possible — usually. It takes a creative team to find innovative alternatives to traditional solutions. Such was the case with Rainforth Grau Architects and IMAGINIT Technologies.

Rainforth Grau first partnered with IMAGINiT when Autodesk released a significant Revit upgrade several years ago. A mid-sized firm specializing in K-12 education architecture, Rainforth Grau found itself facing incompatibility issues that its CAD manager couldn't resolve. The firm selected IMAGINiT to find the cause of the problem and devise a solution to keep projects on schedule.

"IMAGINIT came back quickly with a comprehensive report that identified we had both video card and processor problems," said Teri Jamison, principal. "Basically our computers didn't have the

- Is your BIM staff stable?
- Have you established BIM standards and guidelines?
- Are your BIM standards effective and working consistently?
- Is your firm busy and/or large enough to maintain a full-time, in-house BIM manager?
- Does your BIM staff have time to devote to professional development?

graphics capacity they needed to keep up with the latest improvements to Revit's performance." Rainforth Grau worked with IMAGINiT to put in place an infrastructure that would support the firm's immediate needs as well as take it into the future.

When the CAD manager later left the company, Rainforth Grau once again called on IMAGINiT. Rather than rushing to hire a replacement, however, IMAGINiT proposed a unique approach to managing the gap: Form an in-house Revit Support Group to increase efficiency, strengthen the internal staff, review software needs and trends, and provide supplemental training. That team proved so valuable that, years later, it still meets monthly, and the firm still operates without an in-house BIM manager.

"Our culture fosters a close-knit, positive, and creative workplace, so it was pretty simple to adopt this method of maintaining and reviewing our software and hardware needs," said Jamison. "We've saved a lot by not having an IT manager and CAD manager employed onsite, and we've gained a huge amount of industry and technology expertise by working with IMAGINIT. They are always available. We know they won't quit until solutions are found, and their team of experts know more than anyone in-house could possibly be expected to know."

- Are you knowledgeable of industry best practices, and are you incorporating them in your BIM procedures?
- Does your BIM manager have the background and industry knowledge to assist with long term strategic initiatives?

If you answered "no" to any of these questions, outsourcing part-time or full-time may be a good option for your firm.

AVOID PITFALLS OF OUTSOURCING

As is true for nearly any new technology, implementing BIM can be fraught with unexpected challenges and upset. So, too, can BIM management outsourcing — but knowing what to look for as you journey down this path can help you avoid many potential pitfalls.

- Don't assume you know what you need. "Work with your partner to understand the extent of services that are possible, not just what you think you need," advises Eichenseer.
- Choose a dedicated partner. Take the time to consider whether the consultancy has a real interest in your firm. Can it readily provide access to high-level industry experts? Is it fully invested in vour success?
- Don't overlook the relationship. Often, says Eichenseer, what makes a BIM management partnership successful or unsuccessful comes down to the relationship. Meet with the people that you'll be working with to evaluate how you'll interact, he says. In a good working relationship, outsourcing can become a natural extension of your business.

• Get buy-in from your staff. If your employees feel threatened by a BIM management consultant, they're not likely to cooperate with that person, Eichenseer observes. If, on the other hand, they understand that a BIM consultant is there to support and enhance the efforts of the staff, then the foundation is set for good things to happen.

IS IT TIME TO OUTSOURCE **BIM MANAGEMENT?**

Drawing on the expertise of a BIM management service can help your company focus on what's important: getting and maintaining clients by delivering consistent, high-quality designs. When you're bogged down by staff changes, loss of procedural knowledge, or gaps in technology, you're not delivering your best work. You see it — and your clients will see it, too.

"We provide the ability for our clients to get work done better and more efficiently and to be able to accomplish more because they don't need to worry about overhead administrative tasks," says Eichenseer. "They have a dedicated team supporting them whenever they run into software [and] technology challenges."

Whether you need to implement or revise BIM guidelines and standards, fill a vacancy, expand BIM expertise, tap into best practices, round out your strategic plan — or all of the above — working with a third-party BIM manager can help you get on top of the BIM issues that stand in the way of better business. Whether you need temporary or long-term help, full- or part-time, the right partner will deliver a solution that fits your needs, whenever you need it.

IMAGINIT Technologies and all other trademarks mentioned herein are property of their respective owners.

© 2015 Longitude Media, LLC. Reproduction in whole or in part is strictly prohibited without written permission of the publisher.



A RAND Worldwide Company

800.356.9050 www.imaginit.com/OutsourceBIM