

# BOMA • Kingsley QUARTERLY

Practical Industry Intelligence for Commercial Real Estate  
THE BUSINESS INTELLIGENCE ISSUE | FALL 2006

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# Consensus & CHALLENGE

As this issue of BKQ came together, it was striking how quickly people throughout the real estate industry reached two areas of consensus about the term “business intelligence” (known throughout this publication simply as “BI”). The first was about the definition of the term itself. Everyone, whether a representative of an institutional advisor, a service provider or a technology firm, agreed that BI is the synthesis of data from disparate sources into an informative whole that supports sound business decisions.

Having settled on a working definition of the concept, this same group reached another conclusion that is equally important, if unsurprising: real estate lags other industry sectors in its current ability to bring BI to bear in a practical sense. While there are multiple theories on why this is the case (see “Why the Lag?” page 8), the fundamental implication is that there is enormous opportunity for firms that can efficiently deploy the right BI systems to create a significant competitive advantage.

There is enormous opportunity to create a **significant competitive advantage** by deploying the right BI systems.

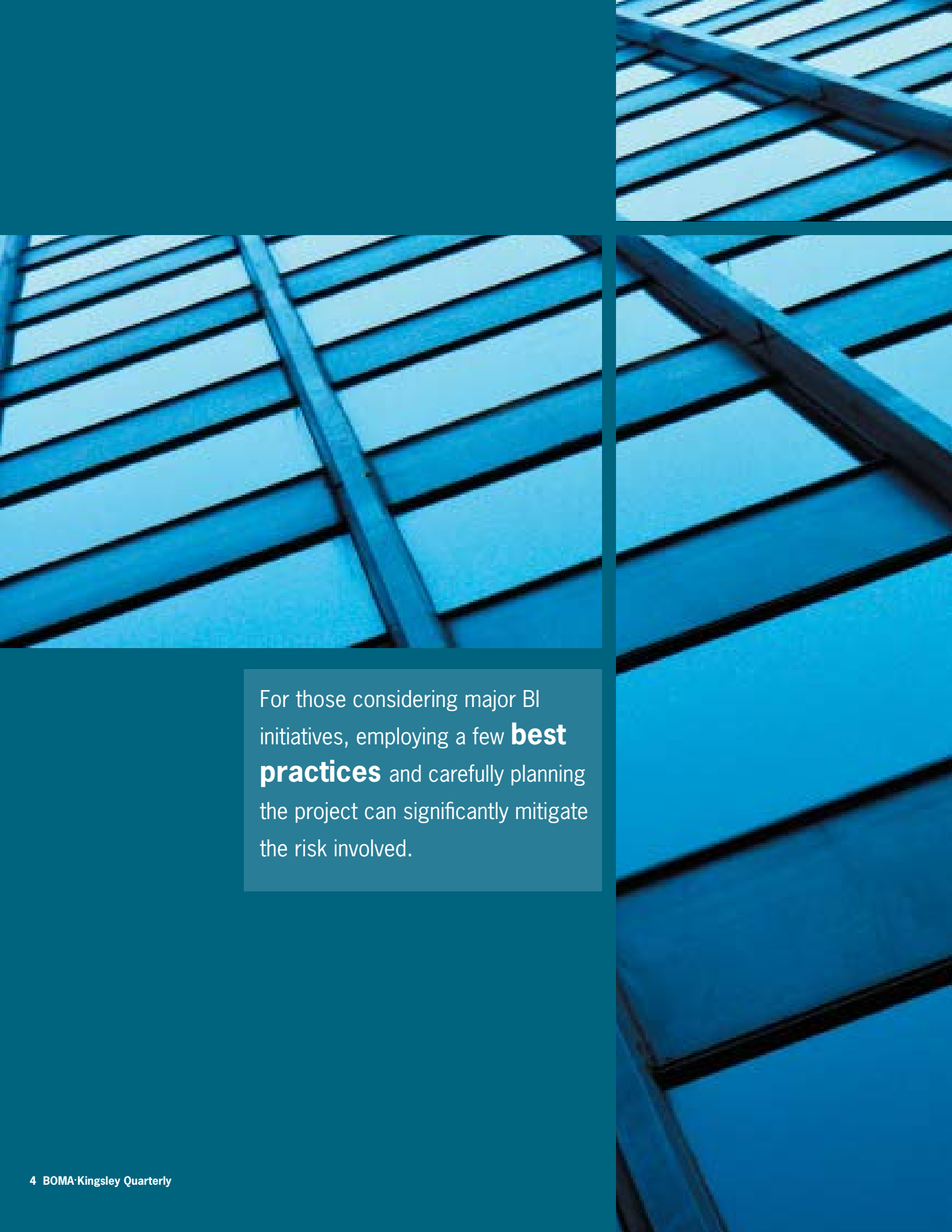
Principal Global Investors is among a select group of investment management firms that believes this enough to make a substantial investment in developing a BI system to streamline reporting and information access. Their experience is profiled in this issue’s case study.

As usual, asset managers can find themselves caught in the middle as they struggle to leverage BI capabilities to enhance value. In “Questions an Asset Manager Might Ask,” BKQ goes straight to

the people who have the answers.

Of course, it is at the building level that the nuts and bolts of BI arrange themselves. In “On the Front Line of BI,” two real estate technology providers, YARDI Systems, Inc. and Kardin Systems, Inc., offer their assessment of the unique challenges and opportunities faced by property managers in dealing with BI, the impact of which goes well beyond four walls.

At every turn, the issues of BI cut across the traditional divisions that so often fragment the real estate industry. From the build-versus-buy decision to the grueling process of maintaining data integrity to the ever-present question of who foots the bill, questions about BI touch everyone in the industry. It is our hope that this issue will help you toward a solution that truly adds intelligence to your business.



For those considering major BI initiatives, employing a few **best practices** and carefully planning the project can significantly mitigate the risk involved.

# Taking the PLUNGE

*Nick Murray, Kingsley Associates*

Undertaking a major business intelligence initiative can be risky business. Typically, these initiatives are capital and time-intensive, difficult to execute and involve mission-critical business functions. Prioritizing these initiatives, defining the business requirements and managing “scope creep” are all paramount. The decisions to be made are substantial: Should we develop proprietary solutions or employ off-the-shelf tools? Should we engage an industry consultant or rely on in-house expertise? The questions go on and on.

For those considering major BI initiatives, employing a few best practices and carefully planning the project can significantly mitigate the risk involved. While the real estate industry as a whole tends to lag the business world in terms of technology and BI solutions, several firms are leading the charge toward better data management and decision support. Going forward, these firms are able to move faster, leverage data from across their organization to unlock portfolio value and improve client and customer retention.

Principal Real Estate Investors is among those companies leading the BI charge. The firm’s successful on-time and on-budget development of its Equity Data Warehouse – phase one was rolled out Sept. 1 – makes for an excellent BI case study. BKQ interviewed Anne Severs, the real estate information and technology manager for Principal Real Estate Investors, to discover the best practices to be gleaned from the firm’s experiences and how they can be applied.

## **A Typical Situation**

Like many large real estate investment managers in the United States, decision-support and reporting at Principal Real Estate Investors have historically been hampered by numerous disparate systems, labor-intensive report creation and slow query access. A wide range of specialized systems has been deployed throughout the organization, and it seemed unlikely that any single platform could replace all this functionality. At the same time, asset and portfolio management desired more efficient access to the wealth of information and felt overwhelmed by these disparate systems. They believed that the integration of some systems could unlock value-add opportunities.

At a root level, Principal Real Estate Investors desired a single-source information warehouse that would integrate data from many of their necessary functional systems. This warehouse would improve data quality and consistency, support ongoing decision-making and improve reporting efficiency. The initial target users were to be asset and portfolio managers, but access could be granted to external users down the road, as well.

## **A Unique Solution**

Beginning in 2003, Principal Real Estate Investors embarked on the development of its real estate Equity Data Warehouse. The Business Solutions Group, a specialized department within real estate Asset

# BKQ BEST Practices

*A summary of best practices from  
Principal Real Estate Investors*

- 1 Empower a steering committee** to lead the initiative, make decisions and cut through political red tape
- 2 Identify a team** of cross-functional departmental representatives who understand business requirements
- 3 Define the project scope and phasing**, set an attainable timeline and stick to it to avoid “scope creep”
- 4 Involve an objective consultant** who can leverage the experiences and best practices gleaned from similar projects
- 5 Test rigorously** to ensure data integrity and accuracy to source systems
- 6 Highlight important outcomes**, positive and negative, and move forward

Management dedicated to managing information technology initiatives, along with a small steering committee, called the Equity Information Management Design Group, were assigned the task. These groups assembled a cross-functional project team of 22 departmental subject matter experts (SMEs) to provide input and assist with coordination.

The first step toward launching the Warehouse was a thorough business requirements analysis to document the firm’s needs. The cross-functional team reviewed reporting requirements and helped prioritize needs. “While we only included the SMEs as necessary, their input was essential to the business requirements planning at the outset of this project,” explained Severs, who is a 13-year asset management veteran and heads up both the Business Solutions and Information Management Design Groups for Principal Real Estate Investors.

After documenting its business analysis, the team put out an RFP – with alternatives for developing a proprietary system or leveraging an off-the-shelf solution – to prospective vendors and consultants. Severs was aware of the benefits of developing a proprietary system tailored to the company’s unique needs, but in the end Principal Real Estate Investors selected a product readily available in the market. “Utilizing a platform that was already available meant we could move faster, and our vendor has been extremely involved in our implementation,” she says. The choice of a readily available application also ensured that Principal Real Estate Investors was receiving a proven platform and, going forward, technical support and software updates.

From the outset it was clear that the Equity Data Warehouse was a large project that would need to be phased in over time. The steering committee decided that the first stage would be focused entirely on the integration of the general ledger accounting platform with the company’s valuations system. “For phase one, we kept it as simple as possible, which kept the scope clear,” explains Severs. “With a project this big, we absolutely wanted to avoid scope creep and set an attainable timeline.”

Managing internal client expectations for the Warehouse and prioritizing needs for the initial rollout became a tremendous challenge. As the project progressed, the team received many additional requests for reports and functionality that were not part of the final business plan. But the steering committee stood firm, recognizing the perils of changing scope midstream. "Other data warehousing projects have blown up because of trying to do too much," states Severs. "Maintaining scope was paramount."

But the largest roadblock Principal Real Estate Investors encountered during the execution of phase one of the Warehouse was ensuring that the output from the Warehouse matched data in the source systems. "We spent six months, with many people involved, to make sure the warehouse data matched the source systems and reports," recalls Severs. The company even went so far as to engage a testing consultant to assist in a thorough vetting of the system.

### **Immediate Results**

While testing the Warehouse output took much longer than initially expected, phase one was delivered more or less on time in September 2006. Presently, the Warehouse contains over 80 million rows of general ledger and valuations data. From a functionality standpoint, the system has 40 pre-designed reports and metric charts for graphing. "Before, if we wanted to run a portfolio rent roll report it could take up to an hour; now it takes a matter of seconds," says Severs.

Naturally, these accomplishments don't come without serious costs. Severs estimates that the completion of the first stage entailed 8,600 internal hours and 6,000 vendor and consultant hours. To be sure, the Warehouse is a major investment for Principal Real Estate Investors. But Severs is confident that it has all been worthwhile, "The Warehouse will help us retain clients, make better decisions, allow for easier data access, and improve data quality and consistency."



A project as big as the Equity Data Warehouse does not lend itself to traditional cost-benefit analyses, but that does not mean Principal Real Estate Investors took a shot in the dark. "We simply looked at the opportunity costs and efficiencies that would be created by the Warehouse and that alone justified the initiative," explains Severs. "We determined at the outset that we would save \$500,000 by improving just two of the processes touched by phase one; I'm sure we will see payback within a year or two at most."

The next step for the Warehouse is simply staying current with software upgrades in order to maintain a supportable platform. Beyond that, Principal Real Estate Investors plans for phases two and three to integrate additional systems. "In the first quarter of next year, we will start on the business requirements for the second phase," notes Severs. Principal Real Estate Investors has made great strides in implementing the Warehouse, but Severs and her team won't be running out of things to do anytime soon.

### **About Principal Real Estate Investors:**

Principal Real Estate Investors is the fourth largest institutional real estate manager in the United States based on institutional tax-exempt assets under management and manages or sub-advises \$36.2 billion in commercial real estate assets. The firm's real estate capabilities include both public and private equity and debt investment alternatives.

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## BKQ PERSPECTIVES

# WHY THE ..... LAG?

The consensus among industry insiders is that real estate is behind the rest of the world when it comes to BI. Here are five popular explanations for why that might be the case – and what some firms plan to do about it.

### ***The Late Adopter Theory***

One school of thought suggests that the primary traditional owners of real estate (private and institutional investors) are just more conservative and change-resistant than other investors because they have not had to deal with the pressures of short-term returns and real-time pricing. Growing access to real estate for small investors through vehicles like REITs and 401(k)-type retirement plans are altering this landscape.

### ***The Customer Distance Theory***

In perhaps no other industry are there so many middlemen between the owner of a product and its ultimate customer (the occupant, in this case). In the institutional world, owners are insulated from market pressures to adapt, and that includes technology platforms. It's not a coincidence that some of the best BI systems in the industry belong to REITs, whose personnel are as apt to be at the front desk as in the back office. This is especially true in the multifamily arena, where the face of the consumer can change literally every day. As more firms develop their brands to face forward (even leapfrogging the middleman), the drive to invest in BI will increase.

### ***The Fragmentation Theory***

As much as it seems like institutional ownership has been around forever, the reality is that real estate is a small business success story. For most owners, BI used to mean nothing more than walking around a building. In many ways, the current absence of BI reflects the common approach of viewing each asset independently. But with continuing consolidation, firms are managing more and more value without adding additional overhead. Indeed, Kingsley Associates' own research has shown a steady increase over the last five years in the number and value of assets under the purview of the typical institutional asset manager. BI will need to catch up to support this trend.

### ***The "No Push" Theory***

For various reasons, investment managers do not always push their property management and leasing service providers toward systems. Some are concerned that doing so would isolate property teams from their own organizations' BI expertise, quality controls and training programs. Others are reluctant to bear the cost of implementation and don't have the market power for an un-funded mandate.

### ***The Cost-Benefit Theory***

Underlining the previous four theories is the notion that BI in real estate lags because it simply hasn't yet been worth it for stakeholders to make the investment necessary. Ownership structures such as governmental entities and owner-occupants have different goals and incentives than investors, and thus may be more likely to invest in BI. However, pressures like greater regulation and transparency, more public access to investment information and the need for more sophisticated valuation models are rapidly changing the cost-benefit equation.



In perhaps no other industry are there **so many middlemen** between the owner of a product and its ultimate customer.



# QUESTIONS?

## an asset manager might ask

*Phil Mobley, Kingsley Associates*

How does BI fit into the mission of value creation for an asset manager? We posed some of the key questions about BI to those who know best what is happening on the front lines: providers of real estate and technology solutions. Our panelists included the following:

- **Michael Lee** is Sr. Vice President of Leasing and Management for **Jones Lang LaSalle**, a full-service real estate service provider. He describes himself as “passionate about BI” because his people provide the informational link between the owners and occupants of real estate.
- **Spencer Stewart** is a Regional Sales Manager with **Yardi Systems** and a former property manager himself. He sees BI technology as a means to ease the pain of property managers by allowing them to dig themselves out of the burden of reports and spend more time focusing on tenant interactions. Yardi seeks to offer a full range of software for the property and asset management functions.
- **Karen Schwartz** is Vice President of Sales and Marketing at **Kardin Systems, Inc.** **Adam Schwartz** is the president of the firm. Kardin provides software that aids the budgeting and forecasting processes by layering on top of existing accounting and customer management systems.

**Q: What Should I be Looking For in a BI System?**

*A: Spencer Stewart, Regional Sales Manager, Yardi Systems*

'Nirvana' for BI would be to approach real-time pricing, similar to the airline model. For example, there might be reasons to lower rates until you reach 80 percent occupancy, then raise them

until you hit 90 percent, then lower them again. Beyond that, the trend is definitely toward the ‘One Ring to Rule Them All’ model, or using the best single application for multiple functions, as opposed to the silos of the 1990s, or the ‘Best of Breed’ strategy – using the best financial system, the best work order system, the best leasing system, etc. But there will never be a single BI technology provider. This is America! I had to deal with four different systems when I was with a third-party manager.

*A: Michael Lee, Sr. Vice President of Leasing and Management, Jones Lang LaSalle*

We have to ensure that the platform is ‘system-agnostic’ – that it can communicate with the plethora of functional systems that various clients might employ. It might be JD Edwards for accounting and Peoplesoft for HR and MRI for leasing and 360 Facility for work order tracking, or it might even involve data from something like CoStar... you get the idea! Any system that plays in this space will have to be 100 percent customizable. We’ll never be able to force-feed a client our system. We’ve got to maintain the single point of entry, yet make it sortable and customizable for clients.

**Q: Who Ends up Paying for BI Systems?**

*A: Spencer Stewart, Regional Sales Manager, Yardi Systems*

The pricing model has changed from what it was in the late 1990s. There’s no more big capital expenditure with a small maintenance fee. Now it’s priced much more like a lease. It’s basically an operating expense. Because of this, BI is passing the hurdles to pass the cost through. BOMA’s *Escalation Handbook for Office Buildings* has two primary tests to determine whether or not an expense could be passed through to tenants. One, is it tenant-neutral? Two, is it occupancy-neutral? Leased software passes both hurdles. The next questions are whether the lease allows for it and whether the market will bear it. Some asset managers are imposing systems on third-party providers as a cost of doing business, and the managers are passing the cost through to tenants.

*A: Karen Schwartz, Vice President of Sales and Marketing, Kardin Systems, Inc.*

Because the industry can be transactions-oriented and management firms may be on a 30-day contract, there is sometimes a reluctance to invest in technology. Some owners pass these costs through to the property, while others may expect the managers to pay for the tools.

*A: Michael Lee, Sr. Vice President of Leasing and Management, Jones Lang LaSalle*

Commodity pricing of management and leasing services makes it difficult for service providers to rationalize the investment. We can’t get away with shifting the cost to the property. Today’s frothy markets are putting an added focus on managing property expenses. But we believe we have to rationalize it and make it part of our service offering. The push is really coming from the corporate side. One reason why, is that while it’s very unusual for a single provider to have all the business of an institutional owner, it’s not so unusual to have it for a corporate client. Thus, for that client, it becomes an issue of portfolio standardization. We’re trying to apply that capability to the owner side. Our philosophy is ‘if we build it, they will come.’ There’s no question it will help us compete.

**Q: What Other Issues Should I be Thinking About, Beyond Decisions about Cost and Development?**

*A: Michael Lee, Sr. Vice President of Leasing and Management, Jones Lang LaSalle*

The implementation can be very difficult. Not only do you have to be careful to ask for the right information, but you also have to make sure it’s accurate and consistent. When you start using

Today’s frothy markets are putting an added focus on **managing property expenses.**



Once they see the results and the **power of using the information**, they love it.

data in this way, you can find discrepancies because no one has ever had a reason to look at it in this way before. There's a lot of scrubbing that has to go on to maintain the integrity of the data. And that requires pushing into the various departments, the accounting and HR and IT departments. It takes time to re-check data. But once they see the results and the power of using the information, they love it.

*A: Adam Schwartz, President, Kardin Systems, Inc.*

One technical challenge is that there are so many different systems and tools that people are using, and the asset managers use different systems than the property managers. A big challenge is getting the data from the field and maintaining its integrity. Currently, so much is done with spreadsheets, or sets of spreadsheets. This can too often lead to errors in the data that are passed up through reports before someone catches it. With a desktop product, property managers can do what they need to do, and there are also tools on each end for integration.

*A: Spencer Stewart, Regional Sales Manager, Yardi Systems*

Keep the input at the closest point to the event. For example, the best person to input data on hot calls would be the building engineer who received the call. The best person to collect tenant information would be the property manager.


## **Conclusions**

While our panelists did not always agree on every question, they all touched on some key issues. As usual, cost is chief among them. There is likely to be a continuing tug-of-war over who ends up footing the bill as BI systems are developed and implemented. Summarizing information into one clear format, whether through a single system or a tool that leverages off the capabilities of several others, is tremendously challenging, as is maintaining the integrity of all the data being fed into the BI machine. However, once achieved, this has enormous potential to get management teams out of the weeds of reporting and back onto the floors where tenants reside. The potential benefits, from leaner staff to happier tenants, can unlock a lot of value at the asset level and beyond.

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Despite efforts to consolidate and integrate various **building information systems**, there are still considerable technical challenges.

# On the FRONT LINE

*Laura Horsley, BOMA International*

## **Reporting Manager?**

When it comes to BI, property managers (PMs) are, in many respects, the captains of the ships. They often know more about what's happening in their buildings than anyone else and therefore are in the best position to capture, aggregate, manage, filter and transmit that intelligence up the line to asset managers, portfolio managers and owners in an efficient and useful manner. Sound complicated? We're just getting started!

To accomplish their "transmission mission," PMs have to relay all that information to their various customers in very specific and often customized reports. In other words, they all want the data, and they want it their way! Further complicating this scenario is that PMs often have to work with non-compatible management and accounting software applications, leaving them with the feeling that their job is more about report management than property management and dooming them to hours of tinkering with Microsoft's ubiquitous software products. For many property managers, heavy reporting requirements mean less time in the field with tenants, a practice vital to adding value to the asset.

"PMs don't get into the business to be typists or reporting managers," says Spencer Stewart, Regional Sales Manager with Yardi Systems and a former property manager himself. "We know and love operations and interfacing with tenants. Ironically, we often see 'technology' in the form of customized systems as getting in the way of those interactions." Stewart believes that software systems should actually be helping PMs dig out from under their reports so they can focus on operations. After all, technology should be about easing pain, not creating it – right?

## **We've Come a Long Way!**

The good news is that progress is being made. In the last decade or so, the industry has begun to leverage technology, especially Web-based tools like Yardi, to create centralized repositories of a wide range of building data that PMs can access in real-time. These tools have improved efficiency because everyone can work from the same set of data, rather than pulling information from a variety of spreadsheets.

Adam Schwartz, President of Kardin Systems, agrees that the industry has come a long way, but also notes that it is still behind. "Ten years



Some property management companies are beginning to see **technology** as a **differentiator** in the third-party management world.



## The **biggest challenge** may be just getting data from the field while simultaneously **maintaining its integrity**.

ago, there were modern companies using DOS systems for accounting. That has changed in the last five years, but it's still hard to say that real estate is on the same level technologically as, say, manufacturing."

As Kardin's Vice President of Sales and Marketing, Karen Schwartz has closely observed the impact of technology trends on PMs. "There has been and continues to be a trend toward centralized accounting systems," she explains. "What we've seen is that managers don't have access beyond running some reports as these systems are driven by accounting departments." Kardin has thus worked hard to ensure compatibility between its software and various accounting applications. A potential advantage of using this type of system at the property level is that PMs can re-forecast based on rising expenses (such as energy or insurance) and start billing tenants immediately, as opposed to waiting on a big reconciliation at the end of the year.

### **Not as Simple as it Sounds**

Despite efforts to consolidate and integrate various building information systems, there are still considerable technical challenges. "It's never simple" Karen Schwartz says. "There can be different manager systems within the same advisor portfolio or different versions of the system that come in through acquisition." The implication is that tools designed to work across multiple platforms require constant updates themselves, not to mention deployment and training.

But the biggest challenge may be just getting data from the field while simultaneously

maintaining its integrity. As Adam Schwartz explains, a typical example of this might be tracking data for forecasting, a process commonly done with spreadsheets. "Sets of spreadsheets can be prone to challenges with the integrity of data, as errors can occur in the data and be passed up through reports before the errors are noticed," he says. The other way to track data for forecasting is through the accounting-based budgeting systems that are centralized. "The issue with these tends to be access," Adam Schwartz notes. "There is a disconnect between the field and the person making the budgeting assumptions. Ideally, the person on the ground should have a way to make assumptions and pass them up the chain through a flexible exporting capability."

Those kinds of solutions are precisely what products like Yardi and Kardin are designed to create. And it is working. But there might be a lot more on the horizon.

### **The Future: BI as Competitive Advantage?**

Some property management companies are beginning to see technology as a differentiator in the third-party management world (See comments by Michael Lee, Sr. Vice President for Leasing and Management at Jones Lang LaSalle in "Questions an Asset Manager Might Ask"). Yardi's Stewart envisions a scenario where two third-party management firms are making a pitch to an asset manager for a property management engagement. The firm that offers real-time Web-based access to their entire portfolio might have the upper hand. When technology can help seal the deal, justifying a large BI investment gets easier.

More and more, business intelligence is translating into business advantage. Adding a tenant portal may only be incrementally more important to the tenant, but it could be the decisive factor in competitive bids. The property management firm that can aggregate data quickly and relay it to the asset manager will certainly have an efficiency advantage. "You might have fewer boots on the ground," Stewart says. "Rather than a 'property manager,' you could have a regional management office to oversee four properties."

As competition drives management fees ever lower, BI technology tools may allow PM firms to streamline their property management operations and yet deliver the same or even higher levels of service to their asset managers and owners. And that will ease everyone's pain.

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# BOMA International

Founded in 1907, the Building Owners and Managers Association (BOMA) International is an international federation of more than 90 local associations and affiliated organizations. BOMA's 19,000-plus members own or manage more than 9 billion square feet of commercial properties in North America and abroad. The mission of BOMA International is to enhance the human, intellectual and physical assets of the commercial real estate industry through advocacy, education, research, standards and information.

BOMA International plays a leadership role in educating the commercial real estate industry on achieving environmentally responsible buildings. The BOMA Energy Efficiency Program (BEEP), an operational excellence program developed by the BOMA Foundation and the U.S. Environmental Protection Agency's ENERGY STAR® program, teaches no and low-cost strategies for reducing energy consumption in commercial properties. Additionally, the BOMA North American Commercial Real Estate Congress® and The Office Building Show, June 24-27 in Dallas, features a series of education session focusing on energy efficiency practices, and the BOMA Green Pavilion and ENERGY STAR® Showcase brings together the top environmentally-friendly and energy efficient certified products.

BOMA International - leaders in commercial real estate.



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# Kingsley Associates

Kingsley Associates has been delivering results for real estate companies since 1985. Our strategically-focused solutions enable our clients to drive organizational efficiency, increase profitability, and position for success. Kingsley Associates' focused research and seasoned professionals distill intelligence from data and action from information. Kingsley Associates is at the convergence of real estate business intelligence, working with the best and brightest in the industry. Sustained involvement. Thought leadership. A finger on the pulse of industry trends.

Kingsley Associates is a leader in real estate research initiatives such as tenant/resident satisfaction surveys, client perception studies, strategic consulting and operations performance benchmarking.

Business Intelligence for the Real Estate Industry.



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