



WORKING SMART: VALUE MANAGEMENT FOR CORPORATE REAL ESTATE

A report prepared by CFO Research,
in collaboration with IBM

CFO
research

IBM®



Contents

Who Should Read This Report / About This Report	2
Tuning Real Estate to Business Needs	3
Renewing the Growth Imperative	3
Cost Control Remains Important.....	5
Right-sizing Your Real Estate	5
Technology as an Enabler of Change	7
Lease Accounting: Change Is Coming (sidebar).....	8
Adapting to the Future Workforce.....	10
Sponsor’s Perspective.....	12



Who Should Read This Report

This report will have the most relevance for finance executives and real estate executives from large companies that rely on extensive or complex portfolios of corporate real estate (CRE) assets in the conduct of their business. It provides insights into the ways that CRE functions can provide value for financial and strategic planning at their companies.

About This Report

In an electronic survey conducted the second quarter of 2014, CFO Research gathered responses from 150 senior executives on how their companies manage their corporate real estate functions, and the value they find from that. All of the respondents were employed at companies with annual revenues in excess of \$1 billion. Two-thirds of the companies represented in the survey maintain real estate assets for their businesses outside of North America.

Respondents work for companies in a broad range of company segments, as follows:

Annual revenue (in US\$)

\$1 billion–\$5 billion	44%
\$5 billion–\$10 billion	13%
\$10 billion–\$20 billion	19%
\$20 billion+	24%

Titles

Director of finance	33%
Controller	23%
Chief financial officer	9%
VP of finance	9%
EVP or SVP of finance	5%
Treasurer	3%
Other senior finance executive	17%
CEO, president, or managing director	1%
Other	1%

Note: Percentages may not total 100%, due to rounding.

Respondents work for companies in nearly every industry, with companies from the financial services industry (including real estate and insurance) comprising the largest segment (23%).

The survey findings were supplemented by interviews with Gary Crowe, Chief Financial Officer for Ricoh Americas Corporation, and Jeffrey Weidenborner, Executive Managing Director–Corporate Solutions at Colliers International.



Tuning Real Estate to Business Needs

Finance executives recognize that, in today's business environment, they must be able to get the most value possible out of corporate real estate (CRE) assets. That's one of the key findings from a survey and interviews conducted by CFO Research in collaboration with IBM, the sponsor of this study. For this research, we sought out the perspectives of senior finance executives at large companies, with more than \$1 billion in annual revenues; most of these companies also maintain real estate assets in a range of countries.

In the past, real estate may have been treated almost as an afterthought in a company's business planning. Securing the lowest cost per square foot was seen as the most important evidence—and sometimes, the only evidence—of an effective real estate management function. However, our research shows that corporate real estate executives can now expect to be held to new standards, reflecting the importance that corporate leaders are placing on the strategic management of these core assets.

Today, it's likely that CFOs who relegate real estate to the back office do so at their own peril. The business environment has witnessed seismic changes—among them, global recession, waves of mergers and consolidations, and the emergence of an increasingly mobile workforce—that have cut across industry lines.

In this new world, the finance executives in our survey show a growing awareness of the importance of actively integrating real estate considerations into growth plans, above and beyond reducing occupancy and operating costs. For those respondents who acknowledge that CRE makes a meaningful contribution to their business, more than half (56%) say that the most important objective for their real estate functions is related to growth, either through expanding their business (23%), improving profitability (21%), or increasing revenue (11%).

In other words, a company's leadership team needs to “become smart about your real estate,” urges Jeff Weidenborner, the Executive Managing Director—Corporate Solutions at Colliers

International. Colliers is one of the largest providers of integrated real estate services for firms worldwide. According to Weidenborner, being smart about real estate, more and more, means “aligning your workspaces with the way you do business in a changing world”—that is, figuring out how to configure the workplace in ways that increase productivity, boost creativity, and spur the company's growth.

Working smart can mean different things for different companies—and often, it means different things even for the same company. For example, a senior vice president of a services company writes in our survey that, over the next three years, his company will be pursuing “strategic acquisitions at some locations, consolidation at some locations, [and] disposal of some assets at many locations.” As a company's strategies shift, so do its real estate needs, and its portfolio of facilities—offices, warehouses, service centers, distribution centers, etc.—must continuously be tuned to business realities.

Renewing the Growth Imperative

As the economic outlook continues to strengthen, companies are planning for growth again. In fact, nearly half of finance executives overall (47%) expect that a change in the scope of their company's operations (e.g., business growth, geographic expansion) will increase their CRE expense within the next three years.

The expectation of increased expense most probably reflects increased activity more than it does rising costs. Respondents do not appear to view operating and occupancy costs as especially volatile. Over the next three years, almost no respondents expect CRE costs to change substantially in either direction: 36% expect costs to increase “somewhat,” 23% expect them to decrease “somewhat,” and 32% don't expect them to change.

To support growth, then, surveyed companies are more likely to increase the number of real estate assets they maintain than decrease them, both domestically and abroad. For example, a plurality of respondents (36%) expect the number of real

CFOs who relegate real estate to the back office do so at their own peril.



estate assets their companies maintain in North America to increase over the next three years. (See Figure 1.)

Outside of the U.S. and Canada, respondents are targeting China and Central/South America (other than Mexico), in particular, as areas for growth over the next three years. On a normalized basis, approximately 30% of executives expect their companies to increase the number of real estate assets they maintain in each area. (Percentages were normalized by excluding responses indicating no assets were maintained in that country.)

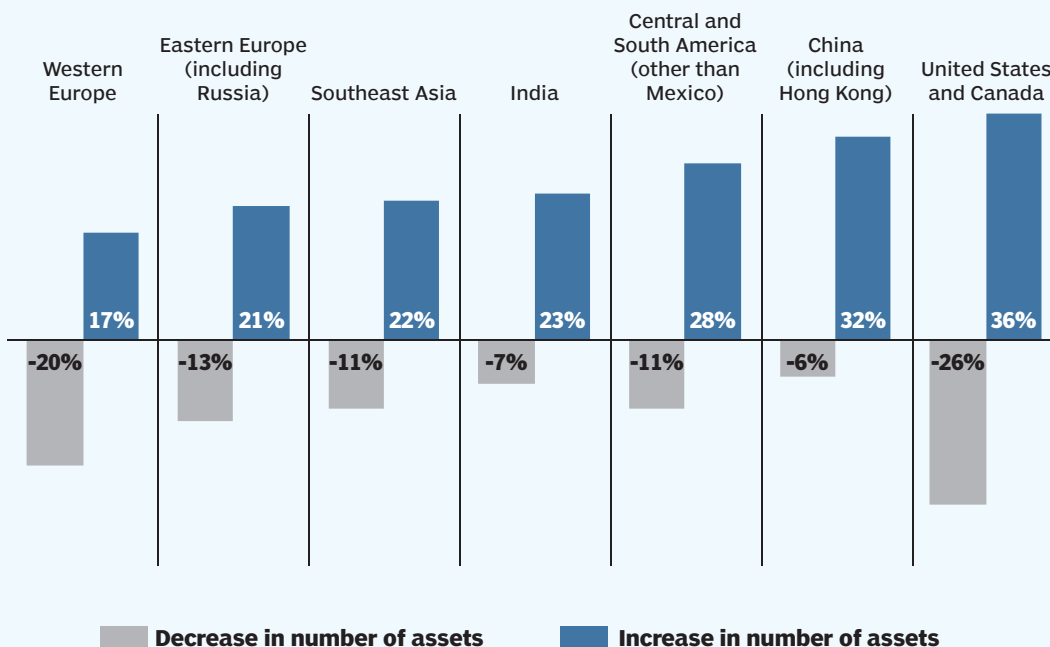
Other emerging economies also appear in companies' crosshairs as they seek out growth areas. Approximately one in five finance executives reports that they expect to increase their real estate assets in rapidly developing countries such as India, those in Southeast Asia, and even Eastern Europe. The more mature business zones in North America and Western Europe are more likely than other regions to see cutbacks in real estate assets. In fact, Western Europe is the only region in our survey where more respondents anticipate

a reduction in real estate assets than expect an increase, indicating the more-intransigent economic troubles those countries have been experiencing.

As corporations expand overseas, effective real estate management becomes simultaneously more important and more difficult. Gary Crowe is CFO of Ricoh Americas Corporation (RAC). Ricoh is a global technology company specializing in office imaging equipment, production print solutions, document management systems, and IT services. With financial responsibility for Ricoh's operations in both North and South America, Crowe is in a good position to make comparisons. "The U.S.," he says, "aside from state-to-state laws, is fairly homogeneous. But in Latin America, we operate in many different countries, each with different sets of rules, different regulations, and different approaches. It's different country by country, making it a much more complex process."

To support growth, surveyed companies are more likely to increase the number of real estate assets they maintain than decrease them, both domestically and abroad.

FIGURE 1. Over the next three years, what kinds of changes, if any, do you expect in the number of real estate assets your company maintains in the following regions?





Cost Control Remains Important

However, coming out of this last recession, the economic recovery remains slow and uncertain, and finance executives must still be cautious about spending too freely. At the same time that companies are seeking to expand their operations and their real estate holdings, they are also looking to reduce the overall cost of maintaining those assets. A plurality of finance executives (44%) say that effective management of corporate real estate assets is most important for reducing costs.

Growth plans must continue to be balanced with careful cost management, and CRE expense can be a substantial portion of a company's cost structure. More than half (55%) of finance executives place CRE among the four largest components of corporate operating costs. (See Figure 2.) Executives from these real-estate-intensive firms estimate that occupancy and operating costs account for an average of nearly 12% of total operating costs, compared to just above 5% for the other companies in the survey.

CRE costs are more likely to be in the top three for companies in the financial services or wholesale/retail industries than for those in other industries. These two industries alone account for nearly half (48%) of the companies ranking CRE as one of their three largest expense categories.

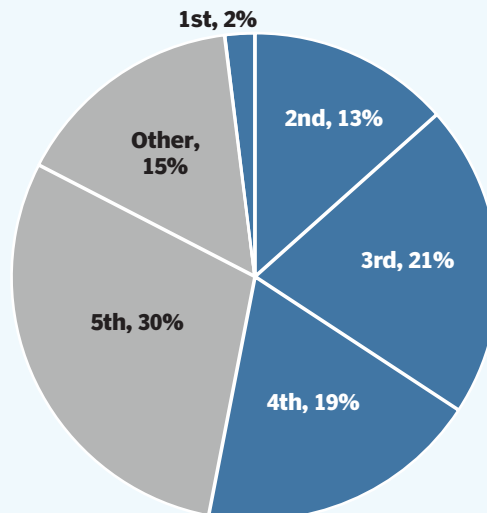
It makes sense, then, that CRE expenses are a target for cost reduction at three-quarters of the companies in the survey. Nearly seven in ten respondents (68%) say that CRE will provide either a substantial (8%) or a small-to-moderate (60%) portion of their companies' total cost reduction initiatives, while another 7% of respondents say that they have already reduced their CRE expenses. Only 19% of respondents are not considering any programs to reduce CRE expenses. Overall, respondents estimate that CRE will account for an average of 9% of the total dollar amount from all of a company's cost-reduction initiatives.

Respondents estimate that CRE will account for an average of 9% of the total dollar amount from all a company's cost-reduction initiatives.

Right-sizing Your Real Estate

In balancing growth and cost management, finance executives say they will pursue a range of real estate strategies to better match facilities with both changing work practices and economic conditions, or "right-sizing the portfolio to match employee demand," as one director of finance puts it. In "right-sizing" their real estate portfolios, finance executives are looking to hold down costs as they expand by improving utilization of facilities and by disposing of excess assets where available.

FIGURE 2. Within your company's cost structure, where does corporate real estate and facilities expense rank as a cost of doing business?





Finance executives in the survey are equally likely to prioritize cost management and value optimization: half (50%) select reducing facility operations and occupancy costs as one of the top three objectives for corporate real estate, and nearly as many (47%) select improving utilization of real estate assets. (See Figure 3.)

Improving utilization may not fall to the bottom line as cleanly and directly as slashing costs—but it does improve return on the types of assets that companies are locked into, and is more in line with changing views of the workplace. For example, finance executives looking for above-average reductions in their CRE expense are also the ones most likely to say they need to adapt their real estate portfolios to changes in the size or type of workforce (53% vs. 22% of others). As the Baby Boomer generation starts to head off into retirement, their spots in the workplace will be filled by growing ranks of technology-dependent and technology-savvy Millennials.

For that reason, a controller in the media/leisure industry writes about “moving to a virtual workforce or hoteling structure for

operations.” Similarly, a finance director from a telecommunications firm says that his company will be “reducing facilities to catch up with the increase in telecommuting that has already occurred over the last several years, [and] creating shared workspaces or central first-come, first-serve offices.”

Alternatively, some companies find themselves swimming against the virtual flow in order to improve utilization. A finance executive writes that his company will “bring in employees who were once remote [and] utilize existing space,” in addition to reducing the number of facilities and consolidating operations into “centers of excellence.”

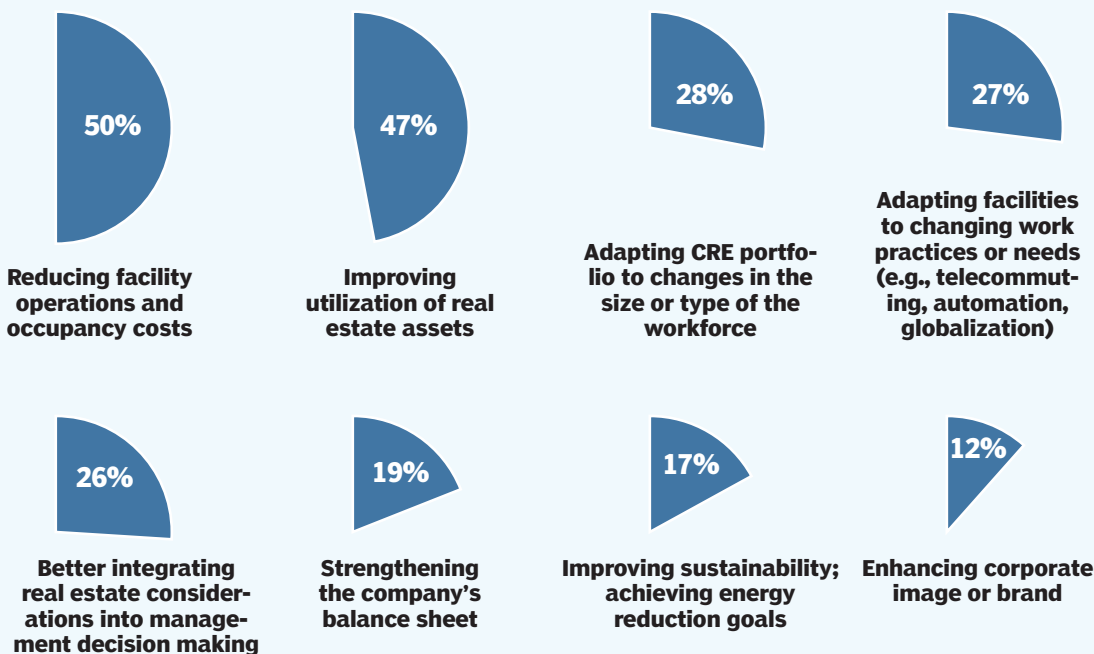
The effects of the global economic slowdown also contribute to the problem of excess capacity. While the Great Recession may be over, it has left in its wake unemployment rates stubbornly resistant to remediation, and strings of largely empty offices, factories, and warehouses.

As a result, one finance director from the financial services sector writes of the need to “manage the

Finance executives in the survey are equally likely to prioritize cost management and value optimization.

FIGURE 3. Which of the following corporate real estate objectives will be most important for your company over the next three years?

Respondents were asked to select up to three objectives





downsizing of both the company and the number of employees.” But another presents a more mixed outlook: “Our company is looking to expand facilities in two cities and downsize in another. The best thing they can do is get a good deal on their purchases and build facilities that are world class.”

The lingering effects of the recession are felt in other areas, as well. Some respondents touch on the difficulties they are experiencing with managing long-term leases in a changed economic climate. The CFO of a pharmaceutical company writes, “My CRE function needs to come up with creative ways to buy out bad leases that were executed in a different real estate environment. Now I’m stuck with above-market expenses and they say there is no option to exit.”

Technology as an Enabler of Change

CFOs and CRE executives will need all the information they can get to help them manage real estate assets in this changing and difficult environment. For example, one respondent says that his greatest need is “[More/better] forecasting for new projects to find the best possible leases as well as improved leases after renovations and relocations.”

As they adapt the real estate portfolio to a new business environment and shifting demand for resources, a number of executives stress the importance of “improving tracking and reporting to determine project success/failure,” as a controller from the services sector says. In the same vein, a senior finance manager from a technology company acknowledges the need to upgrade information capabilities in order to match real estate strategy with corporate strategy: “Keeping in mind the goal of the company—expand the business—we need to act proactively and ensure that the data pertaining to real estate acquisition or lease is accurately prepared and highlighted to the appropriate authorities, within the organization.”

However, although CRE strategies are becoming more and more integrated into corporate strategies, a majority of respondents report that

the technology they use to track and manage their real estate assets may not be keeping pace. A third (32%) say that their real estate functions still rely on personal productivity tools such as spreadsheets and email. In addition to the time required, this level of manual effort invariably leads to errors and oversights in data collection, leaving finance and real estate executives with incomplete or inaccurate information on which to base their real estate strategies.

To help manage CRE activities, half of the finance executives (50%) report that their real estate functions employ commercial off-the-shelf (COTS) products, and 27% have developed their own real estate applications in-house. (Respondents were asked to list all the information systems their companies used in managing CRE activities, and most respondents identified multiple types of systems.)

But even at companies that have specialized corporate real estate systems, finance and real estate executives often need to spend time and resources on integrating these systems with their other enterprise systems and processes; 35% of respondents employ enterprise financial management tools, such as ERP systems, asset management systems, or human capital management systems. The effort required to coordinate these types of capabilities with enterprise systems can tie up valuable resources and lead to more errors and oversights. (See sidebar, “Lease Accounting: Change Is Coming.”)

CFOs and CRE executives will need all the information they can get to help them manage real estate assets in a changing and difficult environment.



Lease Accounting: Change Is Coming

Companies will soon need to determine the extent of change required to adapt their current financial and corporate real estate systems to a proposed rule change in global lease accounting standards. For a number of years, the Federal Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have been working on a joint proposal for this revision to the accounting rule for lease transactions. As of this writing, FASB and IASB have diverging opinions on how to structure the accounting change, but they retain a common goal: to require all long-term operating leases to appear as liabilities on a company's balance sheet. Their thinking is that this will improve the transparency of financial statements and give analysts and investors a clearer snapshot of a company's financial health.

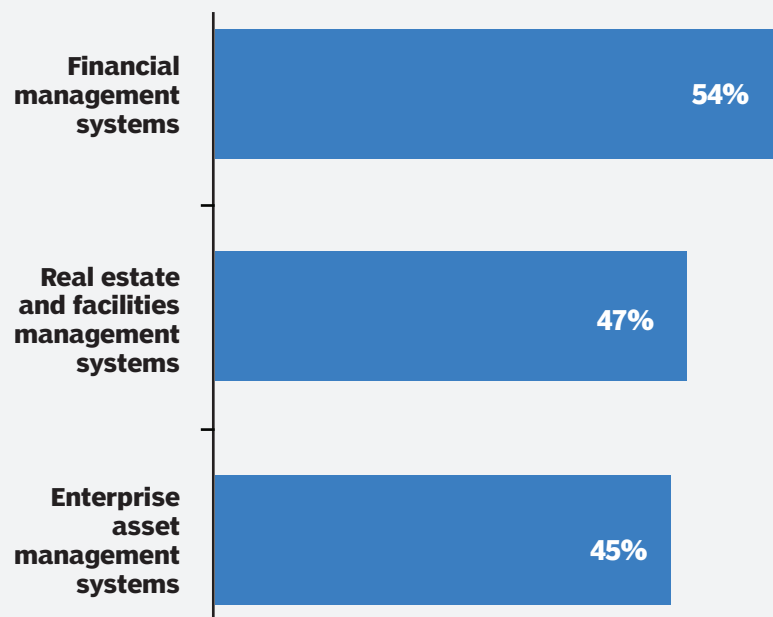
Once the new standard is implemented, the impact could be substantial for companies that now rely on operating leases for their facilities. More than half of the respondents from a previous CFO Research/IBM study thought that the new accounting rule would change the way they measure financial performance and would cause their companies to change contracting processes to accommodate tax implications. In the current study, a controller from a large manufacturing firm writes, "New accounting and reporting principles will surely increase the importance of proper real estate management. The adoption of such practices is the most important thing."

The accounting change can have real impacts on business processes—including CRE activities—and on the systems used to manage real estate portfolios: financial transaction systems, real estate management systems, enterprise asset management systems, financial planning, budgeting and forecasting systems, and tax planning and compliance systems. In our current survey, between 45% and 55% of respondents expect they will have to reprogram, upgrade, or implement new asset management, financial management, and real estate and facilities management systems. (See Figure A.)

In addition, two-thirds of finance executives (66%) believe that the proposed changes to lease accounting standards will make it more important than ever to optimize real estate portfolios—for example, by consolidating or disposing of underutilized assets. When all leasing activities are required to appear on the balance sheet, companies will be even less willing to carry unproductive or underutilized real estate assets. Leases offer more flexibility than ownership for real estate assets, and can have favorable accounting treatment. One-third of the executives (33%) expect to increase leased real estate assets over the next three years, while fewer (23.5%) expect owned assets to increase.

At the minimum, companies will need to make sure they have a good understanding of the financial impact of exercising future lease options, which will require better data tracking, better collaboration, and more communication with real estate teams. One vice president of finance from the healthcare industry writes: "Generally, while the RE portfolio has been very well managed from a maintenance perspective, the capital structure of our real estate portfolio has been under-managed. [The] need is in monetizing excess real estate and

FIGURE A. What information systems or applications do you expect will need to be adapted in order to handle the changes in lease accounting rules?





optimizing the real estate portfolio to strengthen the balance sheet.”

Many—but not all—companies with substantial portfolios of real estate leases have already begun to evaluate the impacts on their organizations. Nearly half of surveyed finance executives say that their companies either already are prepared for the accounting change (15%) or have begun to prepare (32%). Another third (34%) expect to begin preparations within the next year. (See Figure B.)

If they haven’t already done so, companies can take a few initial steps to help get ready for the change.

First, they can form cross-functional teams that include representatives from finance, real estate, and IT. It will be important to have each of these perspectives taking an integrated and comprehensive look at the impacts and implementation requirements throughout the organization.

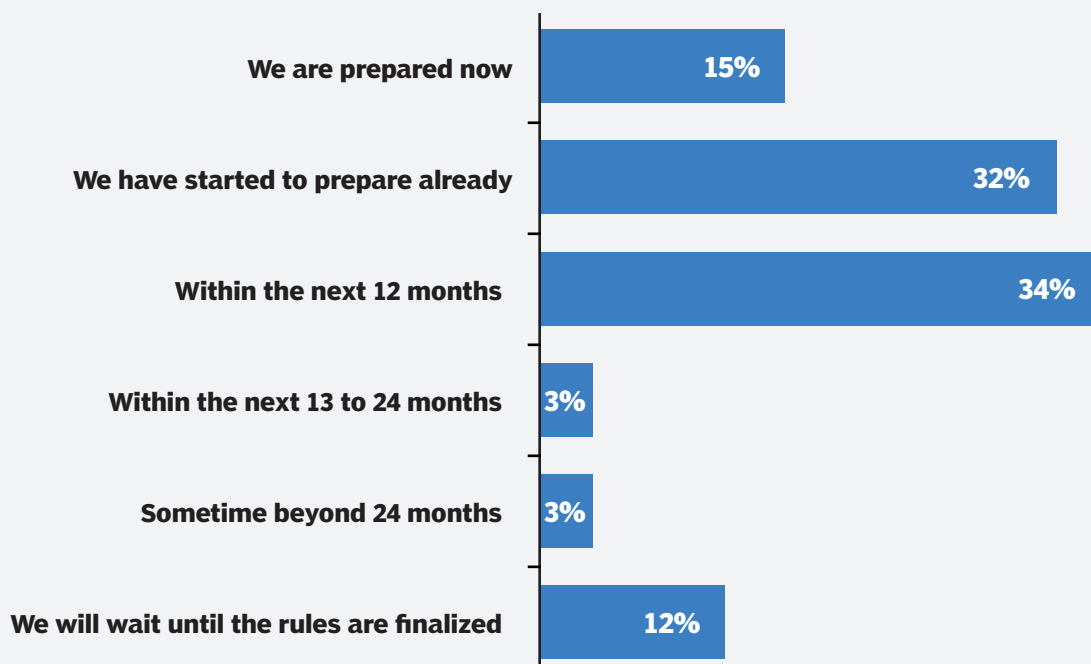
Second, they will need to collect the data they need to evaluate the impact of the change on the balance sheet, income statement, and key financial measures. The rule change may provide

the motivation to take a comprehensive inventory of all a company’s leases, consolidating and categorizing lease information into a central enterprise-class repository.

This information will be needed to develop pro formas and make an initial assessment of the impact of the new accounting rule on financial statements. It will also be needed to allow management to make decisions on lease renewals and lease terms that are grounded in a holistic view of corporate impacts. In a previous CFO Research/IBM study, titled “Beyond the Balance Sheet: Assessing the Impact of the New Lease Accounting Standard”, John Merino, Chief Accounting Officer at FedEx, commented, “Anyone who is foolish enough to think they can do this on a spreadsheet is only a few quarters away from having a big problem.”

Finally, companies will need to determine what kinds of impacts will extend beyond accounting practices and affect business processes and corporate information systems. Here’s where the cross-functional teams can prove themselves most valuable in smoothing the implementation path for change.

FIGURE B. At what point do you think your company will start preparing for the lease accounting changes?





Adapting to the Future Workforce

“How do we build the office of the future?” asks Gary Crowe of Ricoh Americas Corporation (RAC). He’s not being rhetorical—answering that question sits right at the top of his to-do list.

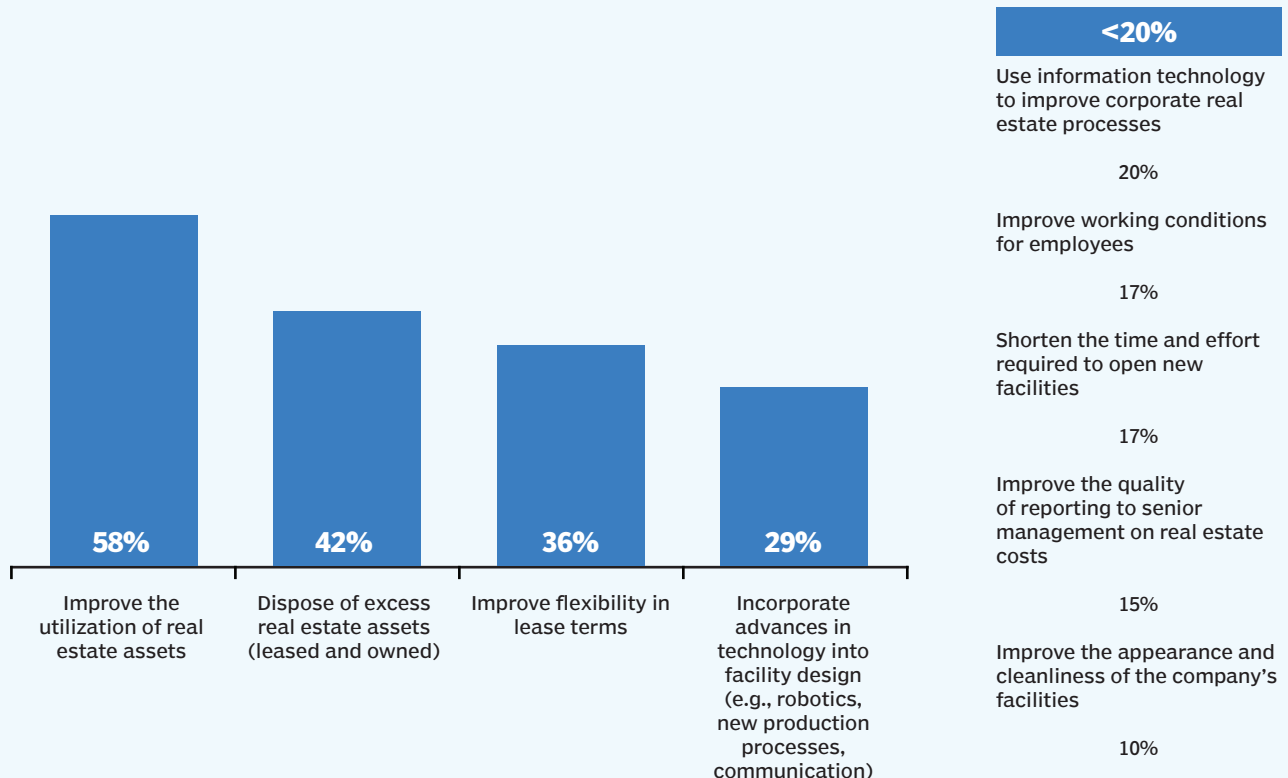
In our survey, the majority of finance executives (58%) say that improving the utilization of real estate assets is one of the best ways to increase the value of CRE activities. (See Figure 4.) Crowe would agree with his peers, in this instance. Over the past five years, RAC’s growth path was along a string of mergers and acquisitions. A good chunk of Crowe’s time was simply sorting through the resulting collection of assets, consolidating offices and facilities.

As he winds down that activity, says Crowe, he is turning his attention to the next big opportunity. Reconfiguring the company’s facilities is now the priority for him, in order to

adapt to changes in the company’s workforce and the company’s strategy, emphasizing services that make information work for customers. The “low-hanging fruit” has already been gathered—for example, consolidating redundant warehouses. “We’ve taken out significant cost for infrastructure through other activities and now I’m looking for the next areas of savings and productivity improvements,” Crowe comments.

Advances in information technology are at the core of the drive to reconfigure workspaces. Colliers’ Weidenborner notes, “Especially with this younger generation, traditional models of workspace planning don’t apply.” With this new generation of workers, he continues, “your phone follows you”—or your laptop does or your tablet. Employees who grew up in a wireless world gravitate towards more open work plans, shared spaces, and a collaborative mobility—you can go where the ideas are. These principles are being embodied in the current trend of “hot desking,” where employees outnumber individual desks or work stations by design.

FIGURE 4. In your opinion, what are the best ways to increase the value that corporate real estate activities can deliver to your company?





RAC's Crowe shares that vision of the workplace of the future. In an echo of Weidenborner's remarks, Crowe says that his next significant opportunity lies in "getting smarter with the space I have." He continues, "It's not just cost-savings from real estate. It's asking, how do we make employees more productive? Having the ability to access information, the ability to work remotely, to work at customer sites when we're performing assessments and delivering proposals, versus having to drive back and forth between offices—that's a productivity play, beyond just the real estate savings." That means "looking at not just the footprint but at operations, and how we maximize the value of those operations."

Crowe believes firmly in the principle of aligning work space with corporate strategy. RAC's sales strategy is changing to position the company more as a solutions provider, beyond its historical core of hardware and related services. The strategy will require a different approach for the sales offices to succeed. "In three to five years," Crowe concludes, "I will need to have a footprint to match that changing behavior, based on changing our underlying go-to-market strategy."

The company currently maintains "one desk per body" in many of its sales offices. The CFO is pushing his real estate function to "go beyond hoteling to a completely open format," affording the sales team maximum flexibility and optimal utilization of the facility, while also gaining productivity through enhanced communications and employee interactions.

Getting it right takes collaboration—turning real estate teams into what Colliers' Weidenborner calls "true centers of excellence." For Crowe, that means "working with the various business owners, saying, what do you need to be more effective? What do you need, from a real estate footprint, to have the right type of meetings, right type of facility, or right presentation to customers? And so, it's very collaborative."

Crowe sees the payoff going beyond simply lowering costs. According to the CFO, adapting work practices and work spaces in this way potentially could lead to a scenario in which the company might be investing in more locations over the next five years, while still reducing its square footage. He believes this real estate strategy might be needed to support the company's changing strategic focus, as well as meet the requirements of the changing working environment: "Beyond just reducing our footprint, workspace optimization could give us an opportunity to invest in even more locations, in a way that we can have a better representation for our brand and better serve our customers, but still reduce our overall cost structure."

And beyond that? Time will tell—it pays to keep an open mind. "There is no such thing as a final strategy," Crowe notes sagely. "It's always the current strategy."

**Gary Crowe,
CFO for Ricoh
Americas
Corporation,
firmly believes
in the principle
of aligning
work space
with corporate
strategy and
"maximiz[ing]
the value
of [our]
operations."**



Sponsor's Perspective

For senior finance and corporate real estate executives, the stakes have never been higher. Following an era of hard-line cost reduction programs, a majority of companies have shifted their focus to programs that fuel corporate growth—a shift that nearly half of executives (47%) agree is best achieved by “right sizing” their corporate real estate (also known as CRE) portfolios. This isn’t unexpected when one considers that CRE currently represents a top-four cost of business—yet less than half (49%) of workspaces are in use at any given moment.ⁱ

For companies in Europe, the U.S. and many other countries, the stakes are even higher. In these regions, new standards for lease accounting will place leased real estate obligations on the balance sheet, highlighting differences in the capital allocation strategies of companies like never before—and creating an opportunity for companies to gain increased investor confidence and competitive advantage through increased facility utilization. As companies undertake the detailed work to prepare for the new standards, two-thirds plan to eliminate underutilized assets from the balance sheet, before they impede critical financial ratios.

We know this because we sat down with senior finance and real estate executives from many of the world’s most impacted companies. We established a customer advisory board and focus groups; interviewed analysts; and underwrote several important studies with CFO Research. They shared the financial and operational impact of shifting corporate priorities on corporate real estate management, as a result of these changes.

In order to act strategically, successful organizations now look to technology as a catalyst for change. To right-size their real estate portfolio, many are gaining visibility and data-driven insight into occupancy, operational costs and facility usage. To achieve this level of visibility, they moved away from personal productivity tools, enterprise resource planning (ERP) and in-house solutions. Instead, they rely upon real-estate-specific software suites delivered via the cloud, installed on-premise or via a combined hybrid—depending on which model suits business needs best. When implemented at a global level, such software can provide a complete view of how facilities are utilized—or underutilized. With this portfolio view, companies can utilize key insights to drive revenue growth, even while increasing the number of facilities.

Organizations seeking to right-size their facilities portfolio on an ongoing basis should also prioritize achieving balance across the real estate supply and demand spectrum. If inaccurate, estimation and forecast of the demand for space can quickly escalate to significant and detrimental financial impact, as it is the primary metric upon which rent is calculated. To achieve equilibrium, companies require simple-to-use, strategic facility planning solutions which deliver rigorous space forecasts, scenario modeling and analysis based on defined business objectives, contract terms and market conditions to identify opportunities for improvement and to forecast impacts on the balance sheet and income statement.

In addition to reducing facility costs and increasing usage, executives must consider changes in demographics and the nature of work as workplace trends shift. For example, the mobile workforce has changed when, where and how business is done, and this yields major challenges or opportunities for real estate executives seeking to increase facility utilization—depending on how they cope with this shift. Successful organizations employ operational capabilities such as real time occupancy tracking, self-service workspace provisioning and resource scheduling to increase productivity of the distributed workforce and the workplace.

This strategic approach, when correctly applied, provides substantial savings to drive financial growth. For example, one IBM customer—a European manufacturer—increased facility utilization by 17% when it reduced its overall portfolio by approximately three million square feet, helping to save nearly EUR14 million [USD19 million].ⁱⁱ

In conclusion, the results of this survey highlight the need for organizations to transform their corporate real estate function from a focus on short-term, operational efficiency—characterized by expense management—into a longer-term focus on portfolio efficiency—characterized by increased return on assets.

Whether motivated by financial goals or driven by a changing workforce, the opportunity for increased facility utilization serves to underscore the profound strategic and financial impacts that the corporate real estate management function can contribute to overall business performance.

For more information about IBM’s real estate and facilities management solutions, please contact your IBM sales representative or IBM Business Partner, or visit the IBM website: ibm.com/software/products/category/facilities-management

Organizations seeking to right-size their facilities portfolio on an ongoing basis should also prioritize achieving balance across the real estate supply and demand spectrum.

ⁱJohnson Controls, “Building half full or half empty”, 2012, <http://bit.ly/building-half-empty>

ⁱⁱIBM, “A European manufacturer... Saving nearly USD19 million through improved workplace management”, 2012



Working Smart: Value Management for Corporate Real Estate is published by CFO Publishing LLC, 51 Sleeper Street, Boston, MA 02210. Please direct inquiries to Linda Klockner at 617-790-3248 or lindaklockner@cfo.com.

CFO Research and IBM developed the hypotheses for this research jointly. IBM funded the research and publication of our findings. At CFO Research, David W. Owens directed the research and wrote the report.

CFO Research is the sponsored research group within CFO Publishing LLC, which includes *CFO* magazine, CFO Conferences, and CFO.com.

August 2014

Copyright © 2014 CFO Publishing LLC, which is solely responsible for its content. All rights reserved. No part of this report may be reproduced, stored in a retrieval system, or transmitted in any form, by any means, without written permission.