# DECONCENTRATION: A STRATEGIC IMPERATIVE IN CORPORATE REAL ESTATE

by Mahlon Apgar, IV, CRE

### **ABOUT THE AUTHOR**

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Since the Industrial Revolution, work has been concentrated in specific sites and facilities. The resulting workplace model—often defined in modern corporations by large, monolithic buildings in fixed locations—benefited employers and employees alike in the "steady state" world of the past century. Today, however, new needs, new norms and new capabilities are making the Industrial-era workplace a costly, inefficient drag on economic growth and organizational performance.

The Information era offers the opportunity to rethink, reposition and redesign the Industrial-era workplace. Advanced communications and information technologies—when coupled with flexible organization structures and work practices—allow companies to redistribute work to numerous single- and multi-purpose sites, within cities, across regions and globally, without compromising the collaboration and efficiencies of collocation in a specific facility. We call this strategy *deconcentration*. Carefully designed and executed, it may strengthen competitive advantage, improve customer service, increase employee productivity, and reduce total real estate costs.

Deconcentration is no fad. Indeed, it has been the underlying trend in urban development in the U.S. and Europe for more than five decades. The impetus began with manufacturers whose scale and search for efficiencies required vast, horizontal production floorplates. After World War II, corporations of all types began to migrate from cities to suburbs in search of large administrative, research and warehouse space. As a boy in the 1950s, I watched in awe as my father, a pioneer in assembling suburban sites for major companies such as AT&T, Ford, IBM, and Warner-Lambert, envisioned the transformation of farmland to the corporate campuses we now see throughout the metropolitan New York-New Jersey area. Suppliers and service firms quickly followed to support these large enterprises. Their executives and professionals, tiring of long commutes to the city, drove the parallel demand for suburban offices. Residential, retail and hotel development naturally ensued. Consequently, suburban growth has steadily outpaced center city growth, despite the impressive recent progress in revitalizing traditional downtowns in several major cities.

The terrorist attacks on September 11, 2001, accelerated and redefined this long-term trend in the New York region. Many firms' headquarters, branch office and back office operations, clustered in the Wall Street area, were demolished or severely damaged. Companies were compelled to restore operations within days and to relocate within weeks. Executives made quick, profound decisions in hours that would have entailed months of deliberation under normal conditions. Professionals and specialists in many fields learned how much they could accomplish from homes, hotels, and other remote locations. Meetings were hastily rearranged through videoconferencing, with large savings in time and travel.

Today, the sense of crisis within these companies has largely passed. Critical infrastructure has been restored and travel is being resumed. Managers have strengthened and institutionalized security and contingency plans. Workers displaced to back-up or temporary locations have returned to their former offices.

Still, there is—in a very real sense—no going back. Thousands of people learned that they could operate effectively from their homes and other remote locations, and could "meet" electronically with customers and colleagues alike. For the firms most

directly affected, significant reductions in travel time and cost are now being built into business plans and budgets. For all others, the attacks forced reconsideration of long-held beliefs and revealed the potential for change in other metropolitan areas. Concerns about physical security and business disruption will linger. A recent BCG survey revealed that "business continuity" has now surfaced as a top management concern. And continuing economic uncertainty will ensure that global interest in workplace security as well as productivity will remain. As one CEO observed recently, "A year ago, facilities were not even on my radar; now they're right in the center."

For companies everywhere, the upshot is that deconcentrating the workplace is no longer an option, but an imperative. As a result, senior executives across industries and regions have found themselves re-examining their corporate infrastructure. As they do so, the key questions remain the same as ever—yet the answers are no longer as intuitive or straightforward as they once were. Consider:

- Where should we locate—and what should we build? Today, location is increasingly a matter of security and interoperability as well as customer service, cost, and convenience. Advances in wireless communications and computing can both liberate vast numbers of employees from their tethers to specific locations and allow firms to manage broadly dispersed operations. Yet these technologies also increase dependence on power and telecommunications grids. So in planning and building their workplace infrastructure, companies must find new ways to balance three interlocking and potentially conflicting tradeoffs: access (for customers and employees), layout (for efficient and effective operations), and mass (to minimize visibility and over-concentration).
- How can we mitigate and manage infrastructure risks? Financial and environmental risks have long been high on management agendas. Since September 11, physical threats to employee safety and infrastructure security have risen to paramount concerns. Firms must determine how to disperse employees and facilities not only for maximum benefit but also with minimum risk to the individuals, the company, and the community. Tradeoffs between physical and systems security (to pre-empt risk), back-up operations sites (for business continuity in the event of disas-

ters), and insurance (to pay for disaster recovery) require especially robust and informed judgments, as the solutions affect every company stakeholder.

- When and how should we transform the workplace? Managers must decide how to organize functions and people to reduce risks while improving operational efficiency and effectiveness. There are no pat answers to basic questions, such as: Who should work in corporate facilities, and who could work elsewhere? How can we maintain team integrity, as well as the social and intellectual benefits of teamwork, when individuals and work units are dispersed across multiple sites and time zones? Which policies and practices-from removing executive suites to installing individual incentives—will cause employees to accept deconcentration without diluting the underlying values that determine the firm's culture and ensure its long-term success?
- Which facilities should we keep and which should we sell? Decisions to lease, buy, build, or dispose of corporate facilities can be made only after the above three questions are answered. The toughest choices usually involve disposition, simply because most line managers find it easier to acquire new space than to eliminate existing excess space. Therefore, it is up to senior executives to determine which current facilities should be maintained, both to sustain ongoing performance and to ensure business continuity, and which should be disposed. Then, they should move decisively to rationalize the facilities portfolio by separating surplus facilities from the company's mainstream real estate activities. Even large portfolios of "legacy assets" can be reconfigured through disposals and adaptive re-use, provided they are priced to the market and managed separately-but this takes a highly focused, disciplined effort.

Until recently, decision makers tended to ignore these questions about corporate infrastructure until they were confronted, periodically, by needs to relocate operations, build new plants, or reduce staff (and, consequently, realign the facilities that house them). Then, with little preparation, these executives either tried to become instant experts, or delegated the decisions to specialists several rungs down the organizational ladder, or outsourced the function entirely.

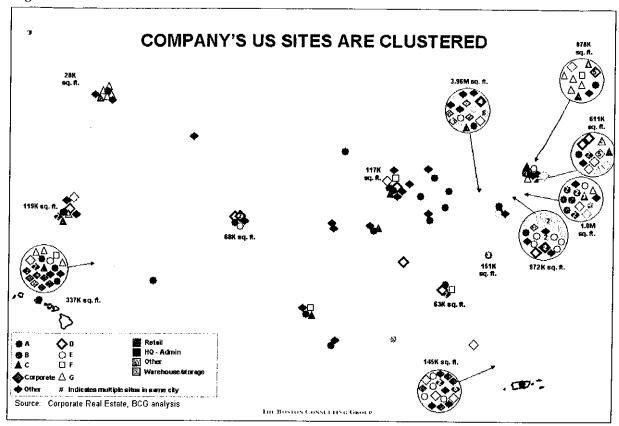
Such an approach is no longer tenable. In most organizations, infrastructure is the largest balance sheet asset and the second highest operating expense. It can help or hinder the achievement of organizational mission and objectives. And it is critically important to the organization's strategic positioning, competitive advantage and operating performance.

# PRINCIPLES OF DECONCENTRATION

Deconcentration changes the paradigm for managing corporate infrastructure. Until recently, a company's infrastructure was defined both by its real estate and by its information systems. These two elements were, and in most firms still are, managed through separate, distinct decision processes and functional organizations. However, in the mid-1990s, several major companies, including American Express, AT&T and IBM began pursuing innovative organizational and systems concepts that fused the places where people work with the technologies they use to communicate and compute, wherever they are. Today, these two elements of the workplace are inextricably intertwined—witness the trend toward global "24/7" operationsand they form the foundation for three broad principles that will help executives to frame and execute deconcentration strategies.

First, the workplace can be anywhere. Deconcentration challenges traditional real estate location theory by allowing companies to move work to the workers instead of the workers to work. Many workplaces, like markets, are now global, not local. Work often is shared through technology, not dedicated in or dependent on specific locations. Time can leverage the redistribution of work, achieving "24/7" operations across geography, functions and business units.

Networks of people, information and resources—not buildings—define the new workplace infrastructure. These networks are linked *electronically*, through the Internet and phones; *spatially*, through "hotel-like" offices; and *socially*, through teams with shared interests and resources. This means that individuals and teams can be efficient and effective anywhere. And as workspaces shift from single locations owned by the company to multiple sites owned by others (including employee and customer homes), the workplace remains essential to production but its economics change radically. Leaders in organizations as diverse as American



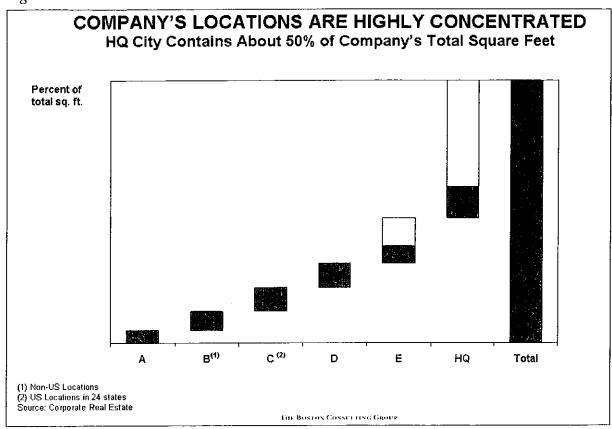
Express, IBM, and Sun Microsystems have championed this concept.

Figures 1 and 2 show the portfolio of one large company that typifies the situation faced by many. Its headquarters' city has about half of its total real estate, including large front office and operations functions. Many sites also are clustered in several other metropolitan areas—the inevitable result of both decentralized operations and multiple acquisitions that have yet to be rationalized. This firm is addressing two strategic issues: whether to consolidate "front office" and retail activities into fewer urban sites, and where to deconcentrate "midoffice" and "back-office" functions among the outlier locations it already has.

As a counterpoint, consider Sun's "anywhere, anytime" strategy. This combines employee and contractor homes, corporate "hubs," "drop-in" centers and satellite offices. Homes are for individual work, connected to the organization by phones and computers. "Hubs" have all of the facilities, furnishings and equipment of the conventional corporate office: individual executive, professional and administrative workspaces; dedicated conference rooms; high-bandwidth communications equipment and systems technology; full meeting

support, travel and clerical services; and permanent paper file storage. "Drop-in centers" accommodate those who periodically need high bandwidth, sophisticated programs and focused teamwork, but they are housed in simple, low-cost, utilitarian buildings. On an average day, 30% of Sun's employees are "on the road." They do not have assigned, dedicated workspaces in hubs and dropin centers, but can reserve offices, workstations, and meeting rooms as needed in those and numerous other locations that are provided either by Sun or by "shared office" suppliers and others. As Sun's CEO Scott McNealy says, "I'm paying rent, depreciation, and utilities on all kinds of office space just so someone can have a nice place to hang a picture of his dog. I include myself in this, by the way. The only tools I need are a browser, a wireless phone, and access to a network.... I tell CEOs to walk down the halls in some of their buildings on Wednesday at 10 o'clock in the morning and note to themselves what the peak occupancy is. It's usually 40%, at most. So why are they paying for all that unused space?" By deconcentrating its infrastructure, Sun expects to cut \$240 million from its \$800 million annual occupancy cost during the next few years.

Figure 2



Second, infrastructure is a strategic resource. Many executives still see infrastructure in simplistic terms—as a necessary (but sleeping) asset and as a fixed (therefore uncontrollable) expense. Meanwhile, line managers treat it as an administrative burden or as a commodity to be traded, not as a resource to be efficiently utilized and protected. They focus on objects, not assets, and price, not value. In such organizations, infrastructure is managed with one of two mindsets: ether technical and cost-driven or transactional and deal-driven. Executives focus on lease terms and financial engineering when location and layout decisions typically drive occupancy costs.

Until executives define, analyze, and convey the strategic implications of infrastructure issues, few have an immediate, intuitive grasp of the underlying factors that drive real estate costs, limit strategic moves, and cloud (or even eclipse) the options for improving their current situation. The keystone is to link "business" data on customer service, employee productivity, financial performance and operations with "facilities" data on locations, costs, utilization, design, construction, and value. These linkages, when combined with creative problemsolving, produce fresh insights for top management and build momentum for real estate initia-

tives. And the analysis of real estate profit economics and key success factors establishes enduring principles for a "business approach" to corporate real estate, and the strategies that are employed by successful entrants;

Figure 3 shows the information architecture that should frame corporate real estate management systems. It combines databases on business economics, operations, and staffing with facilities and real estate market data to reveal utilization, productivity and full occupancy cost. Applied to each business unit, function, and area, discrepancies within the company can be identified more effectively than external benchmarking. Using such metrics, Figure 4 reveals the mismatch between this company's branch locations and its customer base. Not only does it occupy three costly central city sites within a few blocks of each other; it lacks any presence in the very communities it has targeted for customer penetration and competitive success.

Third, mobility enables business continuity. Corporate executives can learn much from the military in preparing for the unexpected. In fact, the military is more advanced than business in many respects, adapting its strategies, structures, and

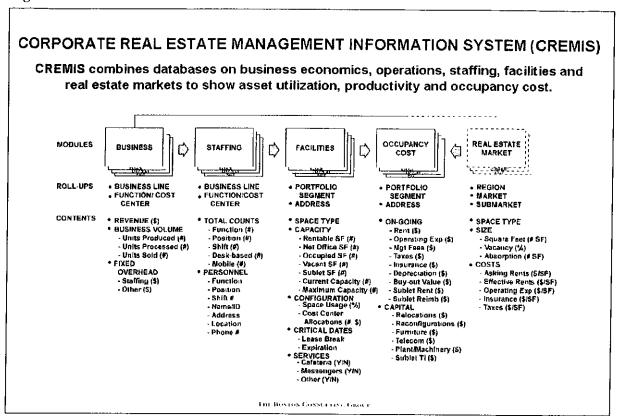
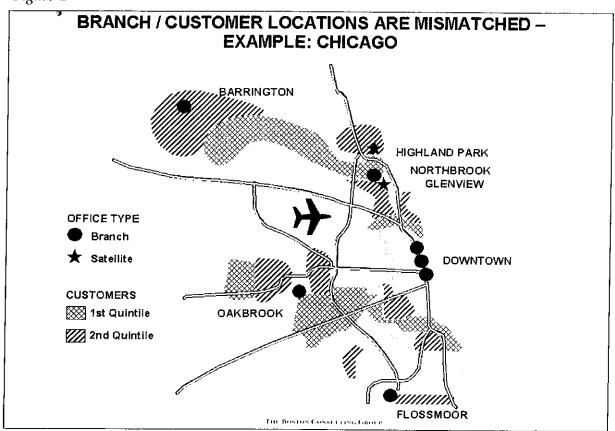


Figure 4



systems to the challenges of unconventional warfare, and employing non-linear thinking about its infrastructure—in particular, the links between mobile operations and contingency planning.

Military doctrine is rooted in "mobility." From the Romans' portable encampments to the current system of "expeditionary" and "special operations" forces, military officers have been imbued with the attitudes and know-how to balance permanent installations and "heavy," fixed, costly facilities with temporary sites and "light," flexible, low-cost structures. Today's strategy of frequent forays to distant lands from fixed home bases is rooted in four capabilities: satellite communications, "justin-time" logistics, multi-unit platforms, and thorough training. While these capabilities can be found in many companies, few have invested equivalent time and energy in planning for the mobile workplace.

IBM's "Mobility Initiative," launched in 1993, was a far-reaching attempt to simultaneously reduce high, fixed infrastructure costs, increase employee productivity and improve customer responsiveness. By capitalizing on the technical capabilities and entrepreneurial motivation of its vaunted sales force, IBM was able to deconcentrate some 25,000 employees (or 17% of its global workforce) over a four-year period. In addition to real estate savings totaling \$1 billion, this program also enabled IBM to significantly improve the sustainability of its customer service operations and reduce the risks of over-concentration in specific downtown sites.

Mobility, supported by contingency planning, also made all the difference immediately after the September 11th attacks. Morgan Stanley (MS), with 3,700 employees in Lower Manhattan, had prepared evacuation and "back-up" plans during the Persian Gulf War, and had reinforced these after the 1993 World Trade Center bombing through disciplined organization, systematic training, and detailed manuals. The approach was developed by a former military officer and based on military experience and practices. MS established alternate facilities in three other New York City locations, with storage and communications systems support in Dallas. These plans were critical in saving nearly all MS employees and quickly restoring operations.

Similarly, Citigroup activated dormant facilities reserved for disaster recovery and "hot seats" for

its critical trading functions. Thousands of professionals and administrators decamped to work from home and various company sites. Citigroup executives and staff continued nearly all of their scheduled meetings without delay, as video-conferencing seamlessly replaced hundreds of preplanned trips that week. In the aftermath of September 11th, these and other firms took bold, decisive actions to reduce the risk of future business breakdowns and are now pioneering contingency planning for disaster recovery and business continuity—mainly by reconfiguring operations to accommodate immediate shifts in workload to distant sites if any one site goes down for any reason.

The regulators too are now weighing in on this issue. The SEC, Federal Reserve Board, and Treasury Department have issued a contingency plan requesting major Wall Street firms to establish backup facilities within a sweeping regional arc up to 300 miles from Manhattan, ranging from Southern Maine to Southern Virginia. These sites would eliminate the dependence of an entire industry that is critical to the global economy on a single power and telecommunications grid, yet would still be accessible within one day's drive of New York. Thus, at this writing, continuity is becoming a matter of corporate compliance as well as best practice.

Figures 5 and 6 illustrate the frameworks managers can use to assess their company's "mobility potential" for alternative workplace sites. By dissecting the linkages between Space, Functions, and Time within each business unit and across contiguous units, they can locate facilities that optimize human resource availability and cost with global time management. Then, they can determine how important "face time" is in the individual employee's work, both with customers and with colleagues, and decide on locations accordingly.

# IMPLICATIONS OF DECONCENTRATION

Deconcentration speaks to a subtle yet profound shift in American values that now affects employers and employees alike. In a society where work is central to the culture and to individuals' self-esteem, the mobile, "24/7" workplace is a compelling notion in theory but a double-edged sword in practice. Technology is eroding the traditional boundaries between worklife and homelife. Employees are rebelling against the ever-increasing encroachments on their personal time. Baby-

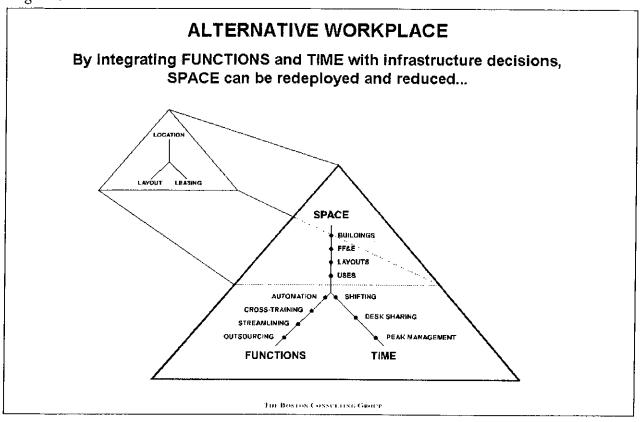
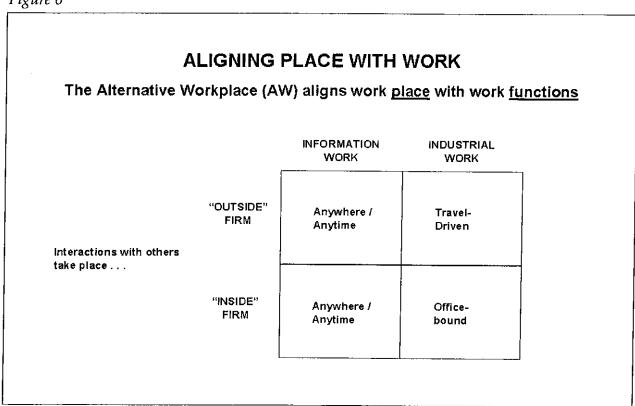


Figure 6



boomers score family pursuits higher than financial gain: two out of three would take two weeks of extra vacation time over two weeks of extra pay. Americans look with envy at Europeans and Japanese who routinely take six weeks of annual holiday. Astute employers are redesigning their work cycles, enabling employees to fit separate half-day blocks into 24-hour work packages and three-day workweeks. But along with the workplace redesign, they must also change corporate norms that heavily favor "face time" to emphasize more objective measures of individual output and productivity.

Deconcentration, in fact, carries far-reaching implications, not only for organizations and their employees but also for cities and communities that house the workplaces, homes, and myriad other facilities that frame people's lives. Consider these possibilities:

- Traditional definitions of the workplace—and, therefore, the norms and conditions of work itself—become obsolete. Face time is less relevant in individual advancement; instead, output, and productivity become the measures of performance and the triggers for promotion.
- Workers can live where they like; their assigned company locations no longer matter. Instead, workers' access to information and to co-workers through electronic media becomes paramount. Conversely, customer locations for sales and service gain in importance. From the Greek agora to the American mall, people still like to buy and sell face-to-face, and to congregate in marketplaces where entertainment facilitates their transactions. Companies that develop interactive communications and intuitive computing to leverage these intensely personal, highly predictable preferences gain a substantial competitive advantage through higher employee productivity in workplaces and shops alike.
- New norms liberate both workers and managers from standards that promote workspace entitlement (such as "the corner office") yet also are derided (such as Dilbert's "cubicle"). Yet managers are challenged to ensure that employees are productive wherever they are, requiring more fluid, flexible schedules, and seamless, "24/7" operations. And workers, while enjoying newfound independence, risk "burnout" if they allow work outside the workplace to overwhelm

their lives. Companies will need to help employees balance work, family, and personal pursuits through effective use of their total time, and not simply leave this to chance.

- Through workplace redesign, companies transform the real estate legacies of command-andcontrol organizations. Space reductions and efficiency improvements save money, increase productivity, and foster innovation. In "hub" offices, space is reconfigured into "neighborhoods" to promote a sense of community. Large, open bays, interspersed with "huddle rooms," "cafes" and other impromptu meeting points, reflect flat hierarchies. Workstations are no longer relegated to secretaries. Managers, administrators and technical staff across many grade levels occupy individual workspace modules of varying sizes reflecting their functions instead of their ranks. Conference space is styled to stimulate creativity and teamwork. And even plant design increasingly reflects these same physical attributes.
- "Trophy" buildings lose their value, as functionality supersedes image and occupants perceive more risk in high-rise, high-visibility, high-rent structures. Building designs return to the fundamentals of "efficient" and "attractive," not dominant and imposing. The added costs of security—from terrorism insurance to back-up operations centers—weigh heavily on industrial, distribution and service firms, especially in older, built-up areas. While declines in asset values and increased operating costs ultimately will show up in pricing, they may impair short-term earnings for those who invest heavily in business continuity.
- "Significance" no longer requires skyscrapers. The office towers that dominate downtowns are triumphs of engineering but only a few excel as urban design. From the 1960s on, building size and visibility proclaimed corporate success. "Curb appeal" became architectural dogma; companies competed for naming rights. As security concerns prevail, occupants now prefer less visible buildings that not only are safer but assimilate better into their environments. The relationships among building height, shape and mass, and surrounding public spaces, reflect a balance of aesthetics and economics. Companies are the fulcrums, for they determine the market. Employees want to be closer to ground and less

crowded. Washington, DC has a 12-story height limit, and public spaces occupy 40% of its land. The five-story Pentagon, though equivalent in size to one World Trade Center tower, suffered far less because of its distributed mass.

- Companies cash out of costly headquarters buildings and corporate campuses, recognizing that they don't have to own real estate to control it and can redeploy scarce capital more productively. Citigroup's recent billion-dollar sale of its New York headquarters spurred a significant quarterly earnings increase. AT&T sold its New Jersey headquarters for \$200 million and McGraw-Hill is pondering a similar \$700 million deal. Yet simultaneously, others such as Merrill Lynch, Nortel, and Lucent are unloading properties at fire-sale prices—one-half to one-third of their replacement cost.
- "Smart growth" policies, which concentrate roads, schools, sewers, and other public facilities in established communities with room to increase their densities, become more politically and sociologically acceptable. Employees, living long distances from their workplaces, increasingly lose valuable time in long commutes. While they enjoy urban density for many activities, they also like suburban living. When people and facilities are spread out and linked by instant communications, their safety enhanced. This accelerates a trend that was spawned in the 1950s by the fear of nuclear attack and enabled by the Interstate Highway System. Now, trains are enjoying a renaissance and transit-oriented development is fueling the revival of older suburban town centers, capitalizing on their distinct community image and distinctive shopping areas around train stations. Cultural facilities complement commercial development and housing.
- "Trading down" takes prominence in companies' decisions to deconcentrate in the wake of recession and renewed attention to reducing their fixed costs of business. Already, cities like Baltimore, Denver, Des Moines, and Las Vegas attract employers looking for business-friendly communities, affordable housing and high-quality workforces. Those in high-cost cities like Boston, New York, Seattle, and Washington, DC are trading down to these second- and third-tier cities, not only for "mid-office" and back-office operations but for regional headquarters, distri-

bution centers and specialty business units. Toyota recently established a 400-person administrative and operations center for its Financial Services unit in a Baltimore suburb. For businesses, the cost savings, recruiting, and productivity benefits are demonstrable. For cities, economic recovery, renewed growth, and local morale boosts are much needed.

■ Corporate real estate enjoys new goals in knowledge-based businesses-frugal, functional, and fun. But to achieve these, new and more robust strategies are required. Large, lavish, specialized headquarters requiring long commutes to work are out. Small, simple, generic workspaces with high functionality and the capacity to telecommute are in. Real estate portfolios may actually increase in size and complexity while the costs per unit are sharply reduced. New conceptual and analytical techniques must be infused in the strategic planning process. The overall global grid optimizes space, functions, and time. The facilities menu offers a limited number of fixed-priced workplace selections for mainstream decision-making, with an a la carte menu of custom offices for special situations. The knowledge box, designed from the inside out, is shrink-wrapped around the functions and operations within. The building skin fits into the neighborhood, but does not seek to make an "architectural statement."

In the end, deconcentration requires top management commitment and bottom-up acceptance. While CEOs reacted immediately to September 11th, corporations now must sustain top-level attention on issues that go well beyond crisis management. There is much at stake. Through concerted management attention and creative deconcentration strategies, AT&T freed up \$550 million in cash flow; IBM reduced total occupancy costs by \$1.2 billion and redeployed \$100 million in annual savings; and one American Express unit increased productivity by 70%.

Corporate leaders should rethink business infrastructure in terms of strategic advantage, productivity and morale. In their zeal to grow and change, many firms overlook the basic business risks of destroyed, impaired, and excessive infrastructure. And ingenious financing schemes, so prevalent in the 1990s bull market, divert companies from applying new technologies and work practices to their infrastructure and business processes.

As recently as 2001, rosy assumptions led many to add space at more than double the rate of job growth, creating a huge real estate overhang. Now they must shed that excess, and then some. As they do so, companies with strong balance sheets and cash reserves should take full advantage of the depressed market and low cost of capital to consider how to streamline and improve the work-place itself. By reinvesting in employee-centered, customer-friendly, cost-saving facilities and systems, they will improve employee safety, satisfaction and productivity.

## **NOTE ON SOURCES**

While this article is based on my experience in consulting with a number of corporate clients, I have benefited from the following publications and research that may also be helpful to readers who are interested in further details about the forces that are driving deconcentration:

Berube, Alan and Rivlin, Alice, "The Potential Impacts of Recession and Terrorism on U.S. Cities," Washington, DC, Brookings Institution, January 2002.

Bureau of Economic Analysis, *Regional Accounts Data*, Washington, DC, Department of Commerce (issued periodically).

Brennan, John and Hill, Edward W., "Where are the Jobs? Cities, Suburbs and the Competition for Employment," Washington, DC, Brookings Institution, November 1999.

Gottleib, Paul D., "Older Central Counties in the New Economy," Cleveland, Case Western Reserve University, October 2001.

Lang, Robert E., "Office Sprawl: The Evolving Geography of Office Space," Washington, DC, Brookings Institution, October 2000.

Persky, Joseph and Wiewel, Wim, "When Corporations Leave Town: The Costs and Benefits of Metropolitan Job Sprawl," Detroit, Wayne State University Press, 2000.