

The Relationship Between Real Estate Investment Trusts and Building-Centric
Telecommunications Providers

by

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B.A., English, 1991

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Submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the
Degree of Master of Science in Real Estate Development

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ABSTRACT

This exploratory paper will examine the business relationships that have developed between REITs and building-centric telecommunications providers (BCTPs), including what types of business relationships are being formed between them, why they are being formed and what is important about these relationships. It shall be demonstrated that though there are a number of driving forces behind the proliferation of the REIT/BCTP relationship, including direct economic benefits to REITs and the influence of Wall Street, it is the indirect economic benefits that ultimately drives this relationship.

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Introduction

Propelled by dramatic advances in all aspects of technology, our economy is experiencing changes at a pace not seen since the industrial revolution. Once dominated by goods-based production, our economy has undergone a dramatic transformation into what is best described as knowledge based. No longer does the brawn of a low to moderately skilled labor force drive growth. Rather, it is those highly-educated, innovative, and cutting-edge individuals and organizations who embrace, harness and apply knowledge and technology that will drive innovation forward. As noted in Peter Drucker's *From Capitalism to Knowledge Society* land, labor and capital have become secondary factors of production to knowledge, "the only meaningful resource today."¹

Nowhere is knowledge as a resource linked more directly with technological advancement than in the area of telecommunications. At its very core, telecommunications is the ability to communicate knowledge, and advances in telecommunications are driven by a desire to access, harness and disseminate knowledge faster, more accurately, and more productively. Those individuals and organizations that have embraced advances in telecommunications and the importance of knowledge as an indispensable resource are driving economic progress forward. This is evidenced by not only those companies that now have the greatest market capitalization (Microsoft, Cisco, etc.), but by the incredible number of start-ups engaged in advances in telecommunications and thus the proliferation of knowledge. Furthermore, the dramatic impact of telecommunications and the importance of knowledge as a resource are now evident in areas

one would not typically associate with modern advances in telecommunications. One such area, office REITS (Real Estate Investment Trusts) and their connection with cutting-edge telecommunications is at the heart of my thesis.

Tenants of all sizes are requiring access to cutting-edge telecommunications services, including broadband connectivity, high-speed internet access and an array of products to be discussed later in this paper. Large tenants, who typically occupy an entire building or campus, have both the financial and technological capabilities to access and implement cutting-edge telecommunications services into their overall business strategy. Small and medium size office tenants, however, oftentimes have neither the financial nor the technological wherewithal to access these same services.

Office REITs, which are publicly traded property firms that control millions of square feet of office buildings, are the fiduciary overseers of large portfolios of multi-tenant office buildings. As such, a major concern of REIT managers is to improve tenant satisfaction in order to maximize tenant retention and rent. Providing tenants with cost-effective access to cutting-edge telecommunications is one way of improving tenant satisfaction. However, telecommunications is not a core competency of REITs.

Entrepreneurial individuals, with telecommunications as their core competency, sought to profit from the provision of cutting-edge telecommunications services to small and medium size tenants. Based upon a shared services model, which emphasizes aggregating the expenses of a costly innovation to multiple users, entrepreneurs looked to wire entire multi-tenant office buildings with advanced telecommunications technology and to market broadband access and an array of telecommunications services to the tenants. However, such a model requires access to entire buildings and portfolios of multi-tenant office buildings.

The solution to the telecommunications needs of small and medium size office tenants, the concerns of office REITs and the business plans of entrepreneurs eager to access the small and medium size office tenant market is emerging in the form of business relationships between office REITs and building-centric telecommunications providers (BCTPs). The term “building-centric” refers to telecommunications providers that work with building owners in order to gain access to multi-tenant buildings. By contracting directly with office building owners, who control access to a building’s inside wiring, BCTPs are able to obtain access to millions of square feet of multi-tenant office space.

Though BCTPs have formed relationships with both REITs and privately held real estate companies, I have chosen to address REITs at the exclusion of other real estate investment vehicles, including C-Corps, for the following reasons. First, since all REITs must follow the same legal restrictions, by limiting discussions to REITs, I am able to maintain a high level of comparability between companies. Additionally, REITs, like most large publicly traded companies, have both scale and a high-level of sophistication—characteristics that impact the speed and manner in which the knowledge economy and technological advancements such as telecommunications are embraced.

To effectively analyze the business relationships between REITs and BCTPs, information has been obtained from a wide range of sources including: reports developed by Wall Street brokerage houses, recent articles on the web, REIT and BCTP web sites, recently completed industry surveys and additional literature on related issues. Whenever possible, I used information completed within the past six months—the relationships between REITs and BCTPs are advancing so rapidly that information completed earlier is oftentimes dated.

I conducted structured interviews with executives from twelve office REITs and five BCTPs. Respondents represent a wide range of geographic specialization both in terms of regions of the United States and urban/suburban concentrations. Though most REIT respondents are seasoned veterans in the world of real estate and most BCTP respondents are well experienced in the world of telecommunications, the fact that building-centric telecommunications is in its infancy means that none of the respondents have long histories of developing REIT/BCTP business relationships. Respondents provided numerous insightful quotations that are included throughout this paper. However, having agreed to preserve anonymity, quotations and data from interviews are included without attribution.

An analysis of the connections between office REITs and modern telecommunications begins with an explanation of the events that made a relationship between the two possible. These events include the deregulation of telecommunications, technological advancements in telecommunications, and the proliferation of Real Estate Investment Trusts (REITs).

Chapter 1

TELECOMMUNICATIONS AND THE REAL ESTATE INVESTMENT TRUST

Deregulation of the Telecommunications Industry

In conjunction with broad-based technological advances, the main driving forces behind what many have termed the telecommunications revolution are the divestiture of AT & T in 1984 and the Telecommunication Act of 1996. Prior to the 1984 divestitures, AT & T had a monopolistic hold on both local and long distance phone service. However, the breakup of “Ma-Bell” in 1984, in which the Justice Department divested AT & T of control of the 22 local phone companies in the United States, and transferred ownership to seven Regional Bell Operating Companies (RBOCs), helped set the stage for a competitive landscape. From 1984 to 1986, the RBOCs retained the rights to sell local and toll service within prescribed areas, to produce white and yellow pages, and in 1988 to offer enhanced services such as voicemail. However, they were neither allowed to manufacture equipment, nor to sell long distance phone service.² In essence, the 1984 divestiture of AT & T was merely a stepping stone on the way to a competitive environment.

The Telecommunications Act of 1996 was the watershed event that brought open access and competition to the industry. The 1996 Act, put forth in order to bring competition to the \$193 billion local telephone service market, fostered dramatic changes throughout all aspects of the industry—most notably allowing RBOCs to enter the long distance market. Other entities,

including long distance carriers, cable companies, wireless service operators, broadcasters and gas and electric utility companies, could also sell local telephone services. Additionally, RBOCs were now forced to allow other companies access to their networks—competitors could now lease the facilities, features, and functions that had previously been the sole domain of the RBOCs.³ With open access came a multitude of telecom service providers and thus the intended outcome of the 1996 Telecommunications Act, competition and innovation. For office building owners, the 1996 Telecommunication Act was manifested both in terms of choice and quality; multiple telecommunications providers could now offer services to tenants within a building and the bar was raised for the level of telecommunications services potentially available to tenants.

To begin to grasp the enormity of technological advancement made in the area of telecommunications, consider its outdated definition, “the science or technology of communication by telephone or telegraph.”⁴ Today, the definition of telecommunications encompasses a vast array of technological advances, including data transfer, teleconferencing, and wireless communication, in addition to what many have argued to be the single greatest influence on our knowledge economy—the proliferation of the Internet. Started in 1969 by the Department of Defense’s Advanced Research Projects Agency to enable scientists at distant universities to share information,⁵ the Internet today is a worldwide link between people of all nationalities and businesses of all types. The Internet has become an indispensable tool for businesses who use it to exchange electronic mail, place and receive orders, communicate with suppliers, provide customer service, conduct research, download software, maintain web-sites, and a countless number of other applications driven by cutting-edge technology.

Advanced telecommunications, including Internet access, require faster transmission speeds than ever before—a factor that oftentimes limits a tenant’s full access to the information superhighway. Speed limitations are primarily related to the transmission vehicle being utilized.

Telecommunications Transmission

The primary route over which Internet and other telecommunications traffic travels is referred to as the “backbone.” The backbone is analogous to vast interstate highways—large quantities of vehicles travel long distances over highways and large quantities of data travel over the Internet’s backbone. To utilize the backbone requires connections from a tenant’s suite to transmission equipment located within the building (the last inch), which in turn is connected with switching equipment located at a central office (the last mile). From this central office connections are made to the backbone and, in essence, the information superhighway.

Most telecommunications customers are connected to a central switching office via copper wiring⁶. Initially intended to transmit voice traffic, copper does not provide the optimal speed to transmit applications that demand a high level of bandwidth. Examples of such applications include streaming audio and video, digital photos, teleconferencing, interactive applications, multimedia, and other advanced telecommunications. The term bandwidth refers to a spectrum of transmission speeds, with copper wiring on the narrowband side of the spectrum and fiber optic cable on the broadband side. Narrowband provides speeds up to 128Kbps, whereas broadband provides up to 100Mbps.⁷

Transmission speed limitations due to insufficient bandwidth are most pronounced over the last mile where bottlenecks typically occur, limiting a tenant’s access to the information superhighway. Three bandwidth solutions for transmission from an office building to a central

office are most commonly implemented: Digital Subscriber Lines, Fiber-Optic Cabling and wireless transmission.

Digital Subscriber Line (DSL) technology enhances transmission speeds for existing copper wiring. DSL, however, has limited applications. DSL is available only within three miles of a central switching office—eliminating some non-urban tenants from consideration. Also, though DSL increases the bandwidth of existing copper wire, the obtainable bandwidth is still substantially less than that achieved through fiber-optics.

Fiber-optic cables between a building and a central office are able to provide tremendous data transmission speeds—each strand in a fiber optic cable is capable of carrying thousands of times more traffic than a strand of copper wire. Though an optimal broadband solution from a technological standpoint, use of fiber optic cabling presents financial constraints. Due to the high costs associated with laying fiber optic cable and installing the equipment required for optical transmission, fiber optic cabling is used on a limited basis. Most commonly fiber optic wiring is used in urban areas with dense office use. It is estimated that of the approximately 700,000 commercial office buildings in the United States, less than 2% of these buildings have full fiber-optic access.⁸

At present, wireless transmission speeds are faster than DSL, but slower than transmissions over fiber-optic cables. Wireless, however, has a tremendous cost advantage over fiber-optics—the equipment necessary to provide a building with access to broadband wireless is a fraction of the cost of laying fiber-optic cables because wireless providers avoid the costs associated with cabling from the building to the switching office. Rather, they transmit wirelessly from building rooftop equipment to receivers at the central offices. As a result, wireless transmission technology is widely used in less densely populated areas, where fiber-

optic cabling is simply cost prohibitive. Though wireless is used in urban areas as well, interference created by dense high-rise buildings in urban areas sometimes limits the use of wireless technology.

The Emergence of Building-centric Telecommunications Providers (BCTPs)

As noted earlier, the term “building-centric” refers to telecommunications providers that work closely with building owners in order to gain access to multi-tenant buildings. By contracting directly with office building owners, who control access to a building’s inside wiring, BCTPs are able to obtain access to millions of square feet of multi-tenant office space. BCTPs install cutting-edge telecommunications equipment throughout these buildings, and compete for tenants telecommunication needs by offering tenants access to broadband connectivity, high-speed Internet access and an array of telecommunications services.

The origin of BCTPs is connected to the broader framework of shared tenant services, the concept of small and medium size companies sharing a technology that is otherwise cost prohibitive. The roots of the tenant services model can be traced back to the late 1960s and early 1970s and computer time-sharing. Computing power was so expensive at that time that to have a computer (a main frame—PCs were not yet in use) in house was cost prohibitive to all but the largest companies. Furthermore, most companies did not have the technological ability within their organization to run these early generation computers. As a result, companies that did not have the resources to have their own main frame sent information via modem to main frame computers maintained by outside companies such as IBM and Honeywell. Computer time-sharing companies aggregated the high costs of a cutting-edge technology to multiple users and

worked with these users to help them integrate cutting edge technology into their business.

Unlike BCTPs, however, such services did not involve building-specific relationships.

The advent of the personal computer in the early to mid 1970s provided a cost-effective alternative to the main frame and negated the need for computer time-sharing companies.

However, the shared tenant services model re-emerged in the early 1980s with the application of the model to telephony. According to Jason Krause, writer for *The Standard*, “In the early ‘80s, shared tenant services became the rage. Companies would install telephone equipment and aggregate the demand for services, with some advanced calling features that a small company couldn’t afford without the group discount.”⁹ The companies referenced were providers of shared telephony services including special features such as voice mail. Like computer time-sharing of the late ‘60s and early ‘70s, shared tenant services of the early 1980s aggregated the high costs of services to small and medium size users. Additionally, shared tenant services moved one step closer to the BCTP model in that they targeted entire buildings.

According to industry experts, the shared tenant services providers of the early ‘80s had difficulties maintaining market share for several reasons. First, in some instances, building owners themselves began to compete against the shared services companies. Second, the costs of upgrading telephony equipment were oftentimes prohibitively high. Third, following the break-up of “Ma-Bell” and the deregulation of the telecommunications industry, telephony costs fell—both in terms of transmission charges and in terms of add-on services such as voice mail. Falling transmission charges from competing telecommunications firms made it less economically viable for shared tenant service companies to aggregate usage because they needed to cover their costs as an intermediary. Furthermore, the price of telephony add-ons fell to the point where they were affordable to businesses of all sizes.

Both computer time-sharing and shared tenant services for telephony followed a similar progression. A costly technology targeted at large companies emerged. The technology was prohibitive (either in terms of cost or expertise) to small and medium size companies. Shared tenant service companies were formed to aggregate these services among small and medium size tenants. As a result, tenants of all sizes could afford access to technology once reserved for large companies. Tenants continued relationships with the shared service companies until the cost of the technology fell to the point where small and medium size tenants no longer needed to share services. Industry experts see demands for high-speed broadband connectivity in the late '90s following a similar progression.

Broadband connectivity and high-speed Internet access has become a base-line service for large companies. Most small and medium size companies, however, do not even have basic Internet access. According to Forrester Research, only twenty percent of the estimated 6.5 million small and medium size business in the United States is online.¹⁰ The Yankee Group estimates the number to be 10-15%.¹¹

One of the limiting factors to greater numbers of small and medium size companies having broadband internet access is cost—equipment and wiring costs required for broadband access have been prohibitively expensive. A second limiting factor is that most small and medium size companies lack the technological expertise to implement cutting-edge telecommunications services into their business strategies. This sentiment is reflected by Michael Kennedy, co-founder of telecommunications consulting firm Network Partners, LLC, who recently wrote that small and medium size enterprises “lack the in-house IT expertise and market power needed to obtain customized solutions, operate 24x7 and put all the pieces together.”¹²

However, if telecommunications firms were to wire entire office buildings for broadband connectivity and provide tenants access to user friendly applications, many small and medium size office tenants could become consumers of cutting-edge telecommunications technology. The telecommunications market for small and medium size tenants is estimated to be worth \$12 billion.¹³ This opportunity led to the emergence of a new breed of telecommunications companies in the late 1990s, building-centric telecommunication providers.

By contracting directly with office building owners, who control access to a building's inside wiring, BCTPs are able to obtain access to millions of square feet of multi-tenant office space. BCTPs install cutting-edge telecommunications equipment in these buildings and compete for tenants' telecommunications needs. The telecommunications services provided by BCTPs, including high-speed broadband connectivity, Internet access and a vast array of related applications (see chapter 3), are available from traditional service providers. Traditional service providers include: incumbent local exchange carriers (ILEC), regional bell operating companies (RBOC) and competitive local exchange carriers (CLEC). Therefore, BCTPs are not differentiated from traditional service providers by the services they provide, but rather by the ways in which they market and support these services. Five examples of characteristics that differentiate BCTPs from traditional providers are detailed below. They include marketing to both the tenant and the landlord, concentrating on small and medium size tenants, bringing access over the last inch, compensating property owners for building access and providing a high level of direct customer interaction.

- BCTPs market to both the landlord and the tenant, while traditional providers market to tenants only. BCTPs first form business relationships with owners of multi-tenant office buildings in order to gain access to entire buildings. After wiring the entire

building for broadband connectivity, BCTPs market their services to every tenant in the building. BCTPs make a commitment to building owners not to cherry pick—they offer their services to even the smallest tenants in a building.¹⁴

- BCTPs provide their services to a niche market—small and medium size businesses located in multi-tenant office buildings. The telecommunications market for small and medium size businesses, estimated by Forrester Research to be between \$60 and \$100 billion a year¹⁵ has to a large extent been ignored by traditional providers. According to the Yankee Group, an international technology and consulting research firm, “The small and medium size business market residing within MTUs (multi-tenant units) has been underserved by the majority of telecommunications companies, which are primarily focused on capturing the consumer or large enterprise markets.”¹⁶
- BCTPs bring broadband access right to tenant suites (the last inch). When servicing the needs of small and medium size tenants, traditional providers concentrate on bringing wiring into the building. To emphasize this point during an informational interview, a REIT executive used the following analogy: The incumbent providers are like the water company in that they will gladly bring water service to the building. However, the building-centric providers are like plumbers because they bring the service right to the tenants. The infrastructure needed to bring high-speed access to the last inch is paid for by the BCTPs. When a tenant uses a traditional provider, the infrastructure to specific suites is typically at the tenant’s expense.
- Another differentiating factor between BCTPs and traditional providers is that BCTPs compensate building owners for access to their tenants. Examples of compensation may include flat fees, revenue sharing, equity and stock warrants. (see chapter 3)

Even when traditional service providers serve tenants in multi-tenant office buildings, they do not offer compensation to building owners.

- Traditional service providers deliver a high level of customer service to large tenants. BCTPs are bringing this same level of service to small and medium size tenants. REIT respondents noted that BCTPs dedicate specific employees to market and service specific buildings. Additionally these building-specific employees work directly with tenants to help them integrate cutting-edge telecommunications services into their business. For example, On-Site Access, a BCTP, assigns at least one building communications manager (BCM) to each building. Large buildings have multiple BCMs.

The BCTP Playing Field

The BCTP landscape, like most technology sectors, consists of a few leading corporations followed by numerous smaller entities. Based upon interviews with BCTP and REIT respondents, as well as an array of articles relating to building-centric telecommunications providers, I have divided BCTPs into four categories. These categories are organized based upon how the companies were formed.

1. **Subsidiaries of Larger Corporations:** According to industry experts, a number of cable television companies have formed business units designed to target the building-centric telecommunications market. One such example is Lightpath, a business unit of Cablevision. Emphasizing its connection to a larger corporation, Lightpath proclaims on its website, “Lightpath is backed by the strength and resources of Cablevision Systems Corporation, one of the nation’s leading communications and

entertainment companies.” Cablevision owns cable television packages, national television program networks and professional sports teams.¹⁷

Lightpath provides broadband connectivity, telephony services, high-speed internet access and an array of telecommunications services—brought to the tenant’s office over fiber optic cabling. At present, Lightpath provides its services to multi-tenant buildings in New York, New Jersey and Connecticut. Like all BCTPs, Lightpath emphasizes not only products but also customer service. On the first page of Lightpath’s web-site is the statement “Along with sophisticated communications, every customer receives care and attention from a personal service representative.”

2. Corporations Unto Themselves: In the rapidly emerging BCTP playing field, a majority of building-centric providers have been formed not as a subsidiary of a larger corporation but as a business entity unto itself. Urban Media provides such an example. Urban Media was launched in December, 1999 by three of the founders of AtHome Network. Urban Media, which targets businesses with between 50 and 1,000 employees, presently claims to have 350 million square feet of property.¹⁸

Urban Media’s business strategy calls for giving away free broadband access in order to accelerate tenant penetration. The company’s revenue model is then to upsell an array of higher-margin services. Currently, the array of services offered by Urban Media includes high-speed internet access, local and long distance telephony, e-mail, software rentals, IVPNs, wireless LAN and PBX services.¹⁹

3. Consortia: Some BCTPs were formed as the result of a consortium among large property owners who pledged portfolio access to a BCTP in exchange for revenue sharing and oftentimes equity in the BCTP. Broadband Access is such an example. On October 5, 1999, the venture capital firm Kleiner, Perkins, Caufield and Byers along with eight large office building owners—CarrAmerica, Crescent Real Estate, Duke-Weeks Realty, Equity Office Properties, Highwood Properties, the Hines organization, Mack-Cali Realty and Spieker Properties—launched the Broadband Office consortium. This list of players, who, with the exception of Hines, are all

REITs, provided access to 500 million square feet of office space, propelling Broadband Office into the forefront of the BCTP arena.

Currently, services offered by Broadband Office include broadband connectivity, local and long distance telephony, web hosting, IVPNs, remote access, business broadcasting, digital satellite television, digital desktop equipment, voice mail and managed firewall services.²⁰

Real Estate Investment Trusts

The late 1980s and early 1990s saw a dramatic downturn in the value of commercial real estate throughout the United States. It was not uncommon, for instance, for office buildings to be valued at sixty percent of replacement cost. Unable to sell buildings above debt levels and faced with high vacancy rates, many commercial real estate investors desperately needed to access capital. However, the availability of private debt, institutional debt and equity capital had all but evaporated. As a result, many investors opted to go public. Those who became publicly traded companies now had access to capital (Wall Street). They were able to hold onto existing properties and to purchase additional buildings at bargain prices.

The Real Estate Investment Trust (REIT) became the tax vehicle of choice for most large publicly traded commercial real estate companies. A REIT is a publicly traded company that is exempt from taxation at the firm level and whose primary focus is to invest in real estate assets and/or mortgages. To maintain special tax status, however, a REIT must follow certain legal restrictions. These include maintaining at least 100 shareholders, investing at least 75% of its assets in a combination of real estate, cash and government securities and distributing at least 90% of income to shareholders.

As opposed to direct one-off, asset by asset investment, a REIT is almost always a collection of numerous assets including buildings, land and ownership positions in mortgages. The mere size and complexity of these assets necessitates a high level of sophistication common to all large publicly traded companies. Therefore, REITs have assembled teams of highly skilled professionals, who tend to be sophisticated consumers of technology and who have embraced the knowledge economy and the telecommunications revolution in two distinct ways. First, as consumers of technology themselves, they have implemented cutting-edge telecommunications solutions within their own organization. Examples include: internal communications being streamlined by the adoption integrated voice mail/e-mail, self-promotion via interactive web sites, and internet based business solutions including; bidding for construction projects, brokerage and financing. Salomon Smith Barney's Real Estate Technology Report from March 28, 2000 reports, "Nearly every aspect of the business [real estate] is being morphed into its online equivalent."²¹ Adoption of these commercial-real-estate related technological initiatives should prove financially beneficial to commercial real estate owners—for example, better financing and lower construction costs.

The second way in which REIT management teams have embraced the knowledge economy and advances in telecommunications is by addressing the changing technological needs of their tenants. Aware that it has always been, and continues to be, the satisfaction of the tenant that determines the success or failure of a real estate portfolio, REIT management teams have taken a pro-active role in responding to their tenants ever-changing telecommunications needs.

Chapter 2

Why REITs Embrace Business Relationships with BCTPs

Chapter one detailed the necessary ingredients for potential business relationships between REITs and telecommunications providers—telecommunications deregulation, technological advances in telecommunications, the evolution of the shared tenant services model and a highly sophisticated real estate ownership vehicle. Chapter two will put forth the factors that have driven REITs to embrace business relationships with BCTPs. These factors include Wall Street, changing tenant demands, direct compensation and concerns over core competence.

Influence of Wall Street

Wall Street has a heavy hand in influencing decisions made by REIT managers. If Wall Street disapproves of REIT policy, the stock price is quickly punished and the board of directors reacts accordingly—in extreme cases terminating key executives. If REIT management decisions are viewed favorably by Wall Street, the stock price typically rises and the board of directors oftentimes rewards management. This relationship is termed signaling—that is, swings in stock prices signal to REIT managers whether Wall Street views their actions in a positive or negative light.

From September, 1997 to December, 1999 Wall Street investors signaled that they were displeased with the REIT sector. During this time the REIT index, determined by the National Association of Real Estate Investment Trusts, fell nearly 24%. One of the most compelling

arguments for such poor performance by the REIT sector is that Wall Street is far more enamored by technology companies than by those companies more closely tied to the old economy. Even with increased demand and limited supply, the REIT sector has been unable to match technology's lure of double and even triple digit returns. Many investors transferred monies from REITs, and other sectors associated with the old economy, into technology and knowledge based companies.

Wall Street's obsession with the new economy is demonstrated by a comparison of valuations placed on new vs. old economy companies. Valuations of publicly traded companies are oftentimes quantified in terms of Price to Earnings Ratio (commonly referred to as the P/E ratio), which is determined by dividing the company's current stock by the company's past year's earnings. Typically, stocks traded on the NASDAQ, which has a high concentration of technology companies, trade at a much higher P/E ratios than do REIT stocks, which are typically traded on the NYSE.

If Wall Street views alliances with telecommunication providers as a sign that an old-economy industry, real estate, is developing a new-economy twist, will Wall Street assign higher multiples, and therefore higher stock prices to REITs? Some Wall Street analysts are alluding to such possibilities. For instance, an analyst from Deutsche Banc Alex Brown reported in a real estate report dated May 15, 2000, "In our view, stock prices could climb for the companies [REITs] that embrace the New Economy and firmly position themselves on the Internet Speedway."²² In a real estate technology report dated March 28, 2000, an analyst from Salomon Smith Barney reported "the broadband telecommunications revolution is adding tremendous value to REIT portfolios."²³

Changing Technology Demands of Small and Medium Businesses

Evidence from industry experts demonstrates that small and medium size tenants are increasingly demanding access to cutting-edge telecommunications such as broadband connectivity, high-speed Internet access and an array of telecommunications services. Interestingly, this increasing tenant demand for cutting-edge telecommunications is a component of a broader trend—as part of their business strategy, small and medium size businesses are embracing the information technology revolution, especially the Internet.

Greater technological demand by small and medium size businesses is the result of dramatic changes in the way these companies are using technology. For example, whereas computers were once used by small and medium size businesses as a tool to supplement their activities, most companies now view computers as a necessity. According to the Cahners In-Stat group, even small businesses increasingly rely on computers to perform daily duties—resulting in increased computing per firm.²⁴

Over the last several years, according to industry experts, small and medium size tenants have also expanded their adoption of basic computer technology to include integration of the Internet in their business strategies. According to Access Media International there are three major steps a small business must undertake to embrace the Internet. First a company builds the basic infrastructure—acquiring the necessary hardware, peripherals and applications. Second, a business adopts connectivity solutions—servers, basic Internet access and data lines. Third, a company leverages the Internet by implementing Web sites, e-commerce, Web-related services and broadband width.²⁵ Based upon this model, access to broadband connectivity is a component of a small business embracing the Internet. Since broadband connectivity is cost

prohibitive to most small businesses, provision of building-centric broadband access by BCTPs is critical to small businesses embracing the Internet.²⁶

Another factor that has encouraged small and medium size tenants to embrace the Internet, as well as information technology in general, is that hardware and software are more available and less expensive.²⁷ According to industry experts, as a result of falling hardware and software costs, smaller businesses are more likely to have the resources to join the new economy.²⁸ Broadband access and advanced telecommunications services present an interesting twist to this observation. Though the costs associated with purchasing advanced telecommunications equipment are prohibitive to most small and medium size businesses, building-centric telecommunications providers are in essence aggregating these costs to multiple users. As a result, the costs born by a specific user are no longer cost prohibitive.

Greater Tenant Sophistication

What a tenant demands from a building owner today is far different from what was demanded in the 1980s and the first half of the 1990s. To understand why this is so requires a historical perspective. The strong commercial real estate market of the mid-1980s was characterized by demand for office space outstripping supply. With landlords in the driver's seat, tenants requested few "extras," essentially limiting a landlord's role to that of overseeing the major building systems and collecting rent. Furthermore, tenants sometimes entered into lease agreements without being aware of all the available amenities.

With the downturn in the real estate market in the late 1980s and early 1990s, office owners found themselves with high levels of vacancies. Brokers, in an attempt to fill vacancies, aggressively marketed to tenants. Oftentimes, multiple brokers approached a tenant, and each

broker touted the amenities available at the properties she represented. Furthermore, tenants typically received counter-offers from brokers, oftentimes offering tenants even more amenities. This process served to educate tenants as to the vast array of services available. As a result, tenants became more sophisticated and made greater demands of landlords.

In the mid 1990s with a dramatic strengthening in commercial real estate, many experts expected a return to the old paradigm. However, this was not to be so. In part because information had become more widely available, tenants continued to demand an array of amenities, and access to cutting-edge, cost-effective and user-friendly telecommunications services became an additional tenant amenity requirement. In response to this new requirement, REITs formed business relationships with BCTPs and offered their tenants telecommunication amenities including broadband connectivity, high-speed Internet access and an array of telecommunications services.

Direct Compensation

In exchange for building access REITs are compensated by BCTPs. However, there appears to be a wide disparity in terms of compensation. On one end of the spectrum are BCTPs who aggressively compensate owners with a combination of revenue sharing, equity and stock warrants. On the other end of the spectrum are BCTPs that offer to pay rent for access to the telecommunications room and in the case of wireless providers the rooftop, but will neither offer revenue sharing nor stock warrants.

BCTPs that offer high levels of compensation seem to have at least three characteristics in common. First, they are all wired providers. Second, they are aggressively fighting for market penetration and are willing to highly compensate REITs in hopes of rapidly gaining building

access. This phenomenon is commonly referred to in telecommunications related literature as “the land grab.” Some respondents noted that such a business strategy is driven by a belief that to survive in an increasingly competitive environment it is imperative to gain critical mass as quickly as possible. Other respondents noted that rapidly gaining critical mass may make them the BCTPs’ valuable takeover targets. This sentiment is reflected by Carl Garland, an analyst from the research firm Current Analysis, who states in an interview with *Interactive Week*, “Frankly I see many of these companies [BCTPs] as acquisition targets that could provide other carriers an instant customer base.”²⁹

The third characteristic common to BCTPs that provide high levels of compensation to REITs is that they are concentrating their efforts on urban areas, especially central business districts. BCTPs are aggressively competing for these areas because they offer a high density of office buildings and a high density of tenants per building. Higher density means not only more potential customers, but lower infrastructure costs for wired providers. Unlike suburban office building which are oftentimes too far from a central station to make laying fiber cables cost effective, buildings in urban areas are rarely far from a central station.

On the opposite end of the spectrum are BCTPs who provide only minor compensation to REITs in exchange for building access. Respondents noted that most providers in this category are wireless providers. Winstar, a wireless provider, is an example—Winstar offers neither revenue sharing nor warrants. Interestingly, even without providing landlords high levels of compensation, Winstar has made remarkable strides in the battle to access buildings, having gained access rights to over 8,000 buildings.³⁰

Core Competence

The REIT/BCTP relationship exemplifies a growing trend in real estate—as tenant service demand has become more sophisticated, highly specialized firms have established critical service offerings. In the case of building-centric telecommunications, tenants demand access to sophisticated telecommunications services, but this is not a REITs’ core competence. In order to satisfy their tenants’ telecommunication demands REITs are developing business relationships with building-centric telecommunications providers. Data regarding the types of business relationships being formed between REITs and BCTPs, the factors driving REITs to embrace these relationships, and the factors that influence tenants to choose a specific telecommunications provider shall be examined in chapter 3.

CHAPTER 3

THE REIT/BCTP RELATIONSHIP

Growth in the Office Sector

From 1986 to 1995 office-based employment grew at a rate consistent with growth in total employment. However, from 1996 to the present growth of office-based jobs outpaced the overall growth in national employment. As a result, over this time period there has been nearly a 100-basis-point increase in national office employment growth as a percentage of total national employment growth. A large component of this increase in office employment, according to analysts from Banc of America Securities, stems from the growth of small and medium sized technology companies—especially Internet, multimedia and software companies.³¹ Furthermore, according to the Bureau of Labor Statistics, the percentage of jobs related to information and technology is projected to continue growing—from 44% today to 49% of the national workforce by 2006.³²

However, since Fortune 500 companies are downsizing their workforces, one may ask, will smaller workforces in these leading corporations negatively impact the demand for office space? According to industry experts, the answer is no. Recent research shows that though fortune 500 companies are operating with a smaller workforce, their gross receipts and sales have been stable or growing.³³ Economists know that this takes place when a larger share of a company's output is produced through subcontracted services and intermediate goods—a form

of “vertical disintegration.”³⁴ Smaller and mid-sized companies are growing to provide larger companies with these services. As a result, though jobs are leaving the corporation they are not disappearing from the economy.

Telecommunication Demands Transcend IT Companies

Growth in the office sector has been particularly strong in the information and technology sectors. Furthermore, since telecommunications is critical to information and technology-related companies, there is, according to a number of REIT respondents and Wall Street analysts, a high level of demand by such companies for access to cutting-edge telecommunications services.

However, is this increased demand limited to information and technology-related firms?

According to most REIT respondents, though technology related firms have the greatest need for access to cutting-edge telecommunications, such access is becoming an important consideration for office tenants of all business types. For example, one REIT respondent related a recent situation where a law firm chose one space over another because of the telecommunications services offered in the building. One respondent went so far as to state, "The importance of telecommunications technology for small and mid size tenants today is a no brainer because they need to fight with the big guys as well as the little guys. By having access to these people [BCTPs], they can utilize the same tools as fortune 100 companies." Another respondent noted, "Increasingly, tenants in their RFPs are asking about telecommunications infrastructure in the building. This used to be with just large tenants, but now it's with smaller ones as well."

Even respondents who noted that many small tenants are just starting to embrace cutting-edge telecommunications technology acknowledged that it is becoming an important issue. One such respondent stated, "While many smaller tenants have not clamored for this technology in

the past, there has recently been a dramatic increase in such requests. We're now on the cusp of it becoming important to them."

Many REITs now consider telecommunications such an important component of demand for office space that it has become a topic on their company web-site. One can find the following on the web-site of CarrAmerica, a national office REIT:

"As CarrAmerica's customers become increasingly dependent on telecommunications and the technology infrastructure necessary for high-speed and broadband communications, technology becomes a key component of the services Carr America delivers to its customers."³⁵

Additional evidence of the increasing importance of telecommunications to office tenants is demonstrated by a growing connection between advanced telecommunications services available in a building and leasing decisions. In order to confirm such a connection, the Building Owners and Managers Association (BOMA) recently completed a telecommunications survey of over 600 tenants. Tenant responses demonstrate a dramatic increase in the importance of telecommunications on future leasing decisions. When tenants were asked about the impact of telecommunications services at the time they located in their current building, less than half of those tenants surveyed indicated that access to such services played any importance in their leasing decision. However, when asked the same question regarding future renewals, positive responses increased dramatically with nearly 70% of those surveyed assigning some level of importance to telecommunications.³⁶ Clearly, tenants are placing ever-increasing weight on telecommunications when making leasing determinations.

Array of Services

In an effort to identify the full menu of telecommunications services available today as well as the telecommunications services emerging on the horizon, BCTP respondents were asked

to detail current and future service offerings. In doing so, three overriding similarities among service offerings emerged. First, high-speed broadband connectivity is the primary service provided by all of the BCTPs. Second, the overall menu of services is contingent upon broadband access because most of the services require the speed associated with broadband connectivity. Third, it is not broadband access itself, but an array of value added services that will provide the majority of revenue generation to BCTPs in the future. This sentiment is supported by a recent report by the Yankee Group that states that multi-tenant service providers “cannot continue to be narrowly focused on [broadband] access in the long term: they must diversify their service portfolio and offer a greater suite of IP (internet protocol) value-added services to remain profitable.” The Yankee Group estimates that the value-added services component of the Internet services market was \$893 million in 1997 and will grow to \$13.4 billion in 2002.³⁷

BCTP executives and industry experts agree with the Yankee Group’s findings that to remain profitable they must offer more than just broadband access. For example, Kenneth Osowski, vice president of marketing for Interspeed, Inc., a provider of DSL solutions for the building-centric market, stated in a recently published article that a new generation of converged IP services that combine data, voice and video over the same high-speed pipe are necessary to elevate broadband beyond commodity status.

Though not all BCTPs offer identical services, interviews with BCTPs point to a range of services common to most BCTPs. For purposes of this work, services have been divided into four categories—traditional, core, enhanced and emerging.³⁸

Traditional Services

- **Telephony:** Telephony service itself is traditional in nature. BCTPs, however, have added a twist—they are providing voice and data services over a single line which is oftentimes more cost effective than paying for separate access lines.³⁹ While all BCTPs provide data transmission, not all provide telephony—apparently some BCTPs are waiting for advancements in voice over IP (see “emerging services” below).

Core Services-staples

- **Broadband Connectivity:** As noted above, high-speed broadband connectivity is provided by all BCTPs and is critical to the implementation of most of the other service offerings. However, the method of providing broadband access varies among BCTPs. All three transmission methods detailed in chapter one, DSL, fiber-optics and wireless are used by BCTPs to provide high-speed broadband access.
- **Internet Access, Electronic Mail and Voice Mail:** Though not too long ago these three services were considered technological innovations, they are now core services to most small and medium size business.

Enhanced Services

- **Unified Messaging:** The ability to integrate voice mail and e-mail.
- **Video Streaming:** High-quality, one-way video, either real-time or recorded.
- **Video Conferencing:** Two-way, real-time video meetings and group collaboration.
- **ASP Platforms:** Accessing applications, services and resources located on external servers run by outside companies. Advantages to ASP include the ability to rent, instead of buy, oftentimes costly software and application licenses and upgrades.

Emerging Services

- **Voice over IP (internet protocol):** Providing voice service over broadband lines.
- **Video on Demand:** The ability to provide an array of recorded video content directly to users whenever they want it.

- IP Virtual Private Networks:
- IP Multicasting: Enables service providers to broadcast voice, video and data over the Internet without depleting network resources.

Criteria Used By Tenants when Choosing a Telecommunications Provider

As BCTPs aggressively vie for the opportunity to provide tenants with the telecommunications services noted above, tenants face the challenge of differentiating among competing BCTPs. In making a choice among providers, what factors are most important to a tenant? To make such a determination, the Building Owners and Managers Association (BOMA), as part of a recent survey of 600 tenants, asked respondents to rank what they considered to be the most important characteristics both when choosing a provider for internet and telephony. The top four responses are as follows:

TENANT DECISION FACTORS (BOMA)	
<u><i>Internet Services</i></u>	<u><i>Telephony Services</i></u>
1) Reliability	1) Reliability
2) Price	2) Price
3) Speed	3) Customer Service
4) Customer Service	4) Ease of Integration

Source: BOMA, Critical Connections, 2000.

As demonstrated by BOMA’s survey, tenants have defined specific characteristics that they expect from a telecommunications provider, including reliability, price, speed, customer service and ease of integration. Interestingly, with the exception of speed and ease of integration responses were the same for both Internet and telephony services. Presumably, speed does not

show up as a criteria under telephony because it is presently not an issue. With the evolution of voice over IP, however, it should become a major consideration.

In order to determine whether or not REITs are cognizant of why tenants choose specific providers, REIT respondents were asked discuss the factors they believe are most important to their tenants in their choice of a telecommunications service provider. The most common responses, as noted below, were speed, reliability and ease of use.

Speed. All respondents named speed as either currently or soon to be an important telecommunication requirements of office tenants. One REIT executive, who addressed both current and future concerns, stated, "High-speed access has become an important issue to tenants when they lease space. Some of this has to do with what technology is available now and some with what is potentially coming down the road." Three respondents went on to relate the current level of importance of high speed access to a portfolio's tenant mix—those portfolios with high percentages of tenants for whom technology is their primary business have the most immediate and critical need for high speed telecommunications access.

Reliability. In addition to greater speed/bandwidth requirements, REIT respondents addressed issues of reliability. Most respondents explained reliability in terms of redundancy requirements. Redundancy is achieved in two ways. First, tenants that use more than one telecommunication carrier achieve redundancy—if one telecommunications carrier becomes non-operational, a tenant typically retains telecommunications access from the other carrier. If a tenant uses both a wired and a wireless provider, there is an added level of redundancy—even if wired connections from the building fail completely, wireless transmissions may remain functional. Therefore, companies with mission-critical telecommunications needs oftentimes use both a wired and wireless provider. A second definition of redundancy refers to fiber-optic

transmissions—if there is ever a break in a fiber-optic cable, the transmission is automatically re-routed and a transmission disruption does not occur. Copper wiring, on the other hand, does not provide redundancy.

Until recently, small and medium size tenants had few alternatives with regard to telecommunications providers. However, with the proliferation of building-centric telecommunication providers, this has changed. Tenants of all sizes are demanding and receiving access to multiple providers from whom they can choose. Such choices include not only wired alternatives to incumbent local exchange carriers, but in many office buildings, wireless alternatives as well. Additionally, with multiple providers vying for tenants' telecommunication requirements, there has been downward price pressure on telecommunications services. Prices have fallen because there is an aggressive battle going on between BCTPs for market share. Most BCTPs have lowered the cost of their services in hopes of obtaining high tenant penetration rates. One BCTP is even offering tenants free broadband connectivity to the internet in hopes of capitalizing on tenants' additional telecommunications requirements.

Most REIT respondents referenced both price and choice as important derivatives of their relationships with BCTPs. Noted one respondent, “Tenants benefit from these relationships [REIT/BCTP] because they have a wider variety of choice, better service and better price.” Additionally, several respondents noted that telecommunications choice and competitive price are critical components for tenants when choosing to occupy a specific building.

Ease of Use: Several respondents emphasized the importance of making cutting-edge telecommunications user friendly. For example, one respondent noted that in the past telecommunications services had been a mystery to many tenants, like a black box. However,

this new breed of telecommunications companies, the building-centric providers, make telecommunications services easier to use. In some instances, for example, BCTPs pre-wire all offices and areas within a tenant suite so that a new tenant can in essence “plug and play.”

A comparison of BOMA’s tenant survey and results from interviews with executives at office REITs demonstrates that indeed office REITs grasp the importance of telecommunications to their tenants. Most REIT respondents clearly acknowledged that tenants require telecommunication services that provide high levels of speed and reliability in conjunction with competitive price and choice of providers. Furthermore, most respondents viewed changes in tenant telecommunication requirements as one component of a broader trend—the ever-increasing service demands of tenants. Tenants are now looking to property owners to provide a vast array of concierge type services that were once associated with facilities management firms and consulting companies. Providing tenants with easy and cost-effective access to cutting-edge telecommunications exemplifies such a service.

Why REITs Have Embraced Relationships with BCTPs

Conventional wisdom several months ago suggested that direct financial compensation and the influence of Wall Street were the primary reasons why REITs are embracing business relationships with BCTPs. However, REIT/BCTP relationships are still in their infancy, and as oftentimes occurs with any rapidly evolving business relationship, the forces that propel the business relationship may change dramatically. As detailed below, REITs are now embracing business relationships not so much because of pressure from Wall Street and direct compensation, but in response to indirect benefits associated with building stronger tenant

relationships—higher retention and rental rates. Also, several respondents chose to embrace relationships with BCTPs based upon a risk analysis.

Wall Street: REIT respondents were asked if Wall Street analysts influenced REITs to embrace business relationships with BCTPs. Most respondents did not view Wall Street as a strong driving force in the development of relationships between REITs and BCTPs. Most noted that Wall Street had only minimal or no influence. One respondent, for example, stated, “Pleasing Wall Street is not at all our purpose—we’re not doing any of this to please analysts.” One respondent even went so far as to state that investors, after being fooled in the 1990s into believing that REITs were “go-go stocks” (i.e. fast growth), would not be made to believe that relationships with telecommunications providers would increase REIT price to earning ratios.

Two respondents alluded to Wall Street playing a moderate role with regard to influencing REITs to embrace BCTPs. One respondent, for example, stated, “There is clearly an interest by Wall Street; however, the level of pressure is questionable.” Another acknowledged that though it doesn’t hurt that Wall Street is enamored by technology and though this topic has gotten a lot of air play, it is unrealistic to believe that these relationships are being formed only because of Wall Street.

Only one REIT respondent referenced Wall Street having a strong influence over the formation of business relationships between REITs and BCTPs, but not as an initial impetus. This respondent explained that it was the most technologically sophisticated REITs that had sparked the interest of Wall Street which now looked to other owners to do the same.

Direct Compensation: Each of the REIT respondents was asked to discuss the importance of direct compensation in their decision to form relationships with building-centric providers. Most respondents considered direct compensation from BCTPs secondary to the indirect economic

benefits derived from stronger tenant relationships. Why did almost all the respondents consider direct financial compensation to be a secondary driving force in their decision to embrace relationships with BCTPs? This question is of particular interest in light of the fact that many REIT analysts on Wall Street have emphasized the tremendous potential of such compensation. For example, Salomon Smith Barney's real estate technology report *Clicking on Real Estate*, pointed to the potentially strong REIT valuation creation from equity and revenue sharing provided by BCTPs in exchange for building access.⁴⁰ JP Morgan's report from April 12, 2000, *Real Estate and Technology*, provides a list of publicly traded real estate companies that "have potential money-making relationships with real estate-related technology companies."⁴¹

The most common response as to why revenue sharing is secondary to indirect rewards such as increased tenant satisfaction is that even if building-centric providers are highly successful, the resultant revenue sharing will only be a small component of a REIT's overall revenue. As one respondent stated, "We've always looked at the revenue side as pennies, as gravy money, as compared to our core business." Another respondent referred to compensation provided by BCTPs as merely "a sweetener that came after primary goals." However, one respondent did note that though such compensation makes up only a small percentage of overall revenue, it may have a more significant impact on revenue growth. Revenues derived from BCTP relationships go straight to the bottom line without capital expenditures on the part of the REIT.

Impact on Tenant Retention and Rental Rates: By definition, Real Estate Investment Trusts are required to have at least one hundred shareholders. In reality, all of the REITs examined for this paper have far more than one hundred. REIT executives have a fiduciary responsibility to maximize value for these shareholders. A major component of maximizing

shareholder value is to increase rents and retain tenants. Therefore, one may ask, does access to cutting-edge telecommunication generate higher rents and tenant retention?

Results from a BOMA survey of 1,097 building owners and managers provides evidence that there is a connection between telecommunications and tenant retention—73% of BOMA respondents agree that providing tenants access to advanced telecom services and multiple telecommunication providers increases tenant retention rates.⁴²

Most REIT respondents concurred with BOMA's findings—that buildings that offer tenants access to cutting-edge telecommunications services tend to generate higher rents and tenant retention. Most REIT respondents related forming business relationships with BCTPs to building stronger long-term relationships with tenants. For example, one respondent stated, “Technologically competitive buildings result in more satisfied tenants, which translates into higher occupancy and rental rates.” Even the one respondent who did not believe that there was currently a strong link between cutting-edge telecommunications and tenant relationships noted that this could certainly change in the future.

Reputation: An examination of REIT/BCTP relationships demonstrates a high level of risk to a REIT's reputation. As most respondents agreed, tenants ultimately associate the level of telecommunications service with the property owner. One respondent stated, “If the provider doesn't meet our expectations, it reflects poorly on us.” Such a view was further substantiated by a respondent, who stated, “These guys [BCTPs] could do colossal damage to tenant relationships.” One respondent went an additional step and explained that though he believed that tenants should no more consider the REIT responsible for telecommunications transmissions than they should hold the REIT responsible for the delivery of an overnight package, they do so. “In the lobby of every building I've allowed FedEx to put a mailbox, but I can't guarantee

delivery of the package. I've allowed telecommunication providers to wire buildings, but the world hasn't figured out that I can't guarantee delivery of telecommunications service." The analogy of building-centric telecommunications with overnight package delivery, however, seems to miss an important distinction between the two—package delivery, unlike telecommunications, is not building-centric in nature. Even if a REIT does not allow FedEx to place a mailbox within a building, a tenant still retains easy access to FedEx. On the other hand, if a landlord does not allow a BCTP access to a building, tenants in that building are unable to utilize the BCTP's services. Package delivery is a direct business to business relationship between a tenant and a delivery company whereas building-centric telecommunications involves the property owner as well. Therefore, the level of risk to a landlord's reputation is far greater with building-centric telecommunications than with overnight package delivery.

The level of risk to a REIT's reputation due to business relationships with BCTPs is related to performance. The more a REIT markets a BCTP, the greater the extent to which tenants will associate any negative telecommunications issues directly with the REIT. Snow removal provides a simplistic analogy. A property owner who calls up tenants and endorses a particular snow plow company has a higher reputational risk than does a property owner who provides tenants with a list of potential vendors. If plowing is sub-par, tenants in the first example will associate poor service with the property owner to a far greater extent than in the second example.

This analogy holds true for REITs forming relationships with BCTPs. The level to which REITs market the services of BCTPs relates to the REIT's level of reputational risk because marketing enhances their exposure. The more a REIT becomes involved in marketing a BCTP, the greater the potential association with telecommunications services and the greater the risk.

Putting REIT/BCTP Agreements in Place

Respondents provided a wide range of answers as to how they negotiated contracts with BCTPs. Whereas a minority of respondents gained access to BCTPs who approached them first, others took a very proactive role, hiring someone with a strong telecommunications and real estate background to evaluate multiple RFPs. However, the majority of respondents involved outside consultants, termed riser and rooftop managers, in the selection process. These companies have emerged not to provide telecommunications services, but rather to provide telecommunications expertise to real estate organizations. Their menu of services includes advising landlords on the best telecommunications strategies for their portfolio, negotiating contracts (on behalf of the building owner) and overseeing the activities of telecommunications providers. Overall, they provide an alternative to a property owner having to develop a full array of telecommunications expertise in house and act as the property owner's representative in dealing with telecommunications providers.

Respondents were asked why they use or do not use riser/rooftop management companies. The most common reason for using such companies was to access their level of expertise. Though some REITs have developed high levels of expertise in house, others noted that it was more efficient to outsource such requirements to riser/rooftop management companies. Two respondents noted that the critical mass of certain riser/rooftop management companies allows them to effectively negotiate for an entire real estate portfolio. One respondent added, "They yield lots of power because they represent so many buildings."

REITs that do not use riser/rooftop management companies, noted that the overriding reason for their decision was that they believe that they can effectively manage

telecommunications with their own expertise. Additionally, they noted that it is more efficient for them to negotiate contracts directly with telecommunications providers.

Types of Relationships Between REITs and BCTPs

Oftentimes, when a new business relationship emerges, those involved in the formation of this new relationship term it a strategic alliance, though more often than not the businesses become involved in a traditional business relationship. This holds true with the REIT/BCTP relationship. Still in its infancy, many call the relationship between REITs and BCTPs a strategic alliance, though a deeper understanding of the interactions between REITs and BCTPs points to traditional business and preferred provider relationships.

Traditional contracts are characterized by standardization of product and an effort to reduce costs. Preferred providers, while still aiming to reduce costs, also strive to improve on quality. However, products are still standardized. Exclusive providers not only strive to reduce costs and improve quality, but they attempt to reduce cycle time for the delivery of products and services. Some level of customization emerges with exclusive providers. Strategic Alliances, in addition to the objectives of an exclusive provider, strive for a high level of innovation. Additionally, companies involved in a strategic alliance frequently pool technology or other critical resources.⁴³

Missing from the REIT/BCTP relationships are certain characteristics that help define a strategic alliance. There is no evidence of high levels of customization—BCTPs offer identical services to numerous REITs. Also, there is no evidence of pooled technology or other critical resources between BCTPs and REITs. REITs provide building access, while BCTPs provide telecommunications expertise, technology and infrastructure.

Rather than showing the characteristics of a strategic alliance, REIT/BCTP relationships more closely resemble traditional contracts or preferred provider relationships. Consistent with the service definition of traditional contracts, REIT/BCTP relationships demonstrate concerns over reduced costs. According to REIT respondents, an important benefit of their relationship with BCTPs is that the BCTPs pay for the capital infrastructure costs associated with wiring office buildings. If this were not the case, REITs would incur large capital expenses to wire their buildings. The REIT/BCTP business relationship also has characteristics of a preferred provider relationship, including improved quality. Respondents noted that factors that should be considered when assessing the quality of a BCTP include access speed, reliability of connections, range of services and level of customer attention.

In the case of the REIT/BCTP relationship, another differentiating factor between traditional and preferred provider relationships is one of marketing. REITs typically provide building access to a number of BCTPs. However, REITs give preferred providers marketing advantages not offered to traditional contractors. These marketing advantages fall into three categories and respondents were almost evenly divided between the three. At one end of the marketing spectrum are firms that provide their preferred provider(s) with tenant leads and sometimes make initial introductions, but discourage overly aggressive solicitation of tenants, such as going door to door. In the middle of the spectrum are REITs that introduce BCTPs to tenants and provide tenants with details about the preferred provider(s) services. Examples of such additional marketing may include literature given to tenants, conversations between property managers and tenants, or e-mails from the REIT. Furthermore, REITs in the middle of the spectrum allow preferred providers to directly solicit tenants, oftentimes door to door. At the far end of the spectrum are REITs that actively co-market the preferred providers. Examples

include what one respondent deemed having their leasing agents really push during the leasing process and what another respondent described as organizing sporting events between tenants and a preferred provider.

Traditional providers do not receive any of the marketing supports noted above. However, perhaps even more of a handicap is that in most instances non-preferred providers are not allowed to solicit tenants in person. Typically they are limited to sending advertisements and making phone introductions. Since many preferred providers are given tenant contact information before new tenants have even moved into their space, such efforts may prove fruitless.

Characteristics of REIT/BCTP Agreements

Most REIT respondents were reluctant to provide specific details regarding their agreements with BCTPs. However, all respondents addressed general characteristics of these agreements. The major components of the business relationships between REITs and BCTPs demonstrated a number of similarities, including exclusivity, typical length of contract and compensation structure.

Exclusivity: All of the respondents reported that their REITs have non-exclusive relationships with BCTPs. Therefore, even though many REITs help market specific providers (preferred providers), this does not prohibit additional non-preferred business relationships. As one respondent noted, “We have a preferred provider relationship with [company x] and they have the exclusivity of being named preferred provider, but this doesn’t make them the sole provider.” BCTP executives confirm a lack of exclusivity. For example, Dan Chu, vice president of business services at Broadband Office told *Interactive Week* that though his

company has agreements to provide telecom services to about ten percent of the country's office building market, the agreements are not exclusive.⁴⁴

REITs avoidance of exclusive relationships with BCTPs relates directly to their primary driver—to enhance tenant relationships. According to respondents, exclusive agreements with BCTPs could potentially endanger tenant relationships in two ways. First, respondents are fearful that tenants would view an exclusive BCTP agreement as an opportunity for the building owner to force tenants to use a service that would financially benefit the landlord. Interviews with BCTP executives further supported this view. For example, one BCTP executive stated, “Most landlords have come to agree that their role needs to be seen as enabling new services rather than as providing monopoly services from which they profit.” On a similar note, Dan Chu of Broadband Office is quoted in a recent article as stating, “We’re not about denying service to the competition. Our plan is to just offer a better product and service than they do, which will be why our tenants choose us over the competition.”⁴⁵

Second, as noted by most REIT respondents, in a world where tenants demand choice and competition, having multiple providers puts a building at a competitive advantage. If building owners were to limit tenant choice to an exclusive provider, notes a REIT respondent, “tenants would vote with their feet.” A recently published BOMA survey of 1,097 building owners and managers confirms that tenant choice provides a competitive advantage—76% of BOMA respondents believe that the presence of multiple telecommunications providers gives them a competitive advantage.⁴⁶

Third, respondents feared “putting all their eggs in one basket” and allowing one BCTP to service their entire portfolio. Stated one REIT respondent, “The ground rule is nobody gets an exclusive—we get deals with many of them and therefore don't have to know who will survive.”

Additionally respondents did not want to be locked into any exclusive arrangements that could constrain future decisions.

Length of Contract: Though most respondents did not wish to provide the exact duration of their contracts with BCTPs, a majority of respondents acknowledged that their telecommunications contracts are typically five years in duration. A recent BOMA report states that, “The average duration of a telecommunications agreement in a building is 5.17 years. The most common contract lengths are 5 years (54% of respondents), 3 years (16%) and 10 years (11%).”⁴⁷ Most BCTP respondents consider this to be a short commitment in relation to the capital infrastructure costs borne by the BCTPs. For a mid-rise office building, the initial infrastructure costs are approximately \$150,000, with the costs varying according to the size of the building and the number of tenants being serviced.⁴⁸

Limiting telecommunication contracts to relatively short periods appears to be a logical business decision--REIT respondents noted that it does not behoove a REIT to agree to a long-term contract with a provider since the REIT is unable to predict with certainty how well a provider will reflect on the REIT. Again, this reflects back to a REITs overriding concern for tenant relationships—shorter-term contracts assure REITs of being able to provide their tenants with cutting-edge telecommunications. With termination dates always close at hand, BCTPs are more likely to update building-centric systems and infrastructure on an ongoing basis.

As evidenced by interviews with with BCTP executives, BCTPs aim to turn these short-term agreements into long-term relationships. One BCTP respondent stated, “We really want long-term, it [our business model] is about building long-term relationships.” Furthermore, BCTP executives noted that though there is an aggressive battle among telecommunications

providers over market-share, their investment in a building's capital infrastructure is ultimately based upon the building's potential for revenue generation.

Direct Compensation: Most respondents acknowledged that their company was presently receiving a combination of revenue sharing, stock warrants and equity from BCTPs in exchange for building access. Respondents, however, were typically reluctant to detail compensation structures. However, a review of information provided by prospectus during the initial public offering process of publicly traded BCTPs provides information on compensation structures. For example, the February 10, 2000 IPO of Cypress Communications (CYCO) and the associated prospectus details Cypress' compensation to office building owners. As part of master licensing agreements between CYCO and 18 real estate companies, CYCO signed property-specific agreements to pay the property owner six percent of gross revenues. Additionally, as calculated by Salomon Smith Barney, CYCO provided real estate companies approximately 57 warrants (strike price of \$4.22) per 1,000 square feet of office space, for a total of 11.164 million warrants.⁴⁹ Since a warrant is the right to purchase a share of stock at a certain stock price, the value of warrants rises or falls with the stock price. As of August 28, 2000 CYCO stock was trading at approximately \$4.50/share, just slightly above the strike price. Approximately six months earlier, CYCO stock was trading at just under \$30/share. Clearly, stock warrants are an extremely volatile component of the compensation agreements between REITs and BCTPs.

Since the value of stock warrants and equity are linked to the overall performance of a BCTP, the level of compensation a REIT receives from stock warrants and equity is for the most part beyond their control. One exception to this is a REIT holding a seat on the board of a BCTP, a term that some REITs have negotiated as part of their overall BCTP agreement. Having such enables a REIT to have a greater say in the overall business operations of the BCTP. This

sentiment was reflected by a REIT respondent who stated, “By having a seat on the board we can make sure that the service our tenants receive matches what we expect.”

Revenue sharing provides a greater opportunity for REITs to influence the financial compensation they receive from BCTPs. Revenue sharing is based upon building-specific gross revenues. Therefore, by encouraging tenants to use a BCTP’s services, REITs may influence gross revenues from building-centric telecommunications. By doing such, REITs impact the level of compensation they receive from revenue sharing.

Since the revenue sharing component of a REIT’s compensation package from BCTPs is directly tied to tenant usage, one may expect REITs to closely monitor the services provided to their tenants by BCTPs. It would seem that REITs are in a perfect position to monitor BCTPs because they manage their own buildings. Interestingly, though, most REIT respondents noted that they did little or no monitoring of services provided by BCTPs. However, according to a majority of REIT respondents, they expect in the near future to monitor BCTP services on a limited basis—by addressing telecommunications issues directly in future tenant surveys.

Results vs. Expectations

Three months of research showed that my initial assumptions regarding the REIT/BCTP relationship provided only a partial view of the factors that drive this relationship. Initial readings and informational interviews pointed to direct compensation and Wall Street as important factors that drove REITs to embrace business relationships with BCTPs. However, detailed interviews with REIT and BCTP executives, as well as analysis of numerous articles, demonstrates that neither Wall Street nor direct compensation are primary reasons for developing

relationships with BCTPs. Rather, the primary driver for these relationships is indirect economic benefits including greater tenant retention and higher rental rates.

These results have provided me with a different perspective on the REIT/BCTP relationship. When I commenced this paper I viewed the REIT/BCTP relationship only in terms of these two players. However, research demonstrated that the BCTP/REIT relationship is really triangular. That tenants are demanding access to cutting-edge telecommunications and that both REITs and BCTPs are responding to these needs demonstrates that all three parties are inextricably linked together.

Conclusion

BCTPs allow REITs to provide cutting-edge telecommunication access to their small and medium size tenants. This, in turn, leads to stronger tenant relationships and the indirect economic benefits of greater tenant retention and higher rental rates. Access to cutting-edge telecommunications service is so important to small and medium size tenants that it impacts their leasing decisions. This points to a broader issue—the changing information and technology demands of small and medium size tenants. Not that long ago, small and medium size tenants viewed advanced telecommunications services as an emerging technology. Today, however, broadband connectivity and internet access are core services for tenants of all sizes. In the near future, connectivity is likely to become a traditional service, just as telephony is today.

The indirect benefits of greater tenant retention and higher rental rates can also be viewed in terms of competitive advantage. Since only a small percentage of office buildings are presently wired for broadband connectivity, REITs that offer broadband access have a step up on their competition. Such an advantage, however, is only temporary. As most office buildings become wired for the telecommunications revolution, broadband connectivity will no longer be a differentiating factor among buildings. At that point, broadband access is unlikely to result in the indirect benefits of greater tenant retention and higher rental rates.

Over time, the importance of access will be complemented by content and ever more advanced services. For example, some BCTPs are starting to capitalize on the ASP market—hosting computer applications and content on external computers and providing access to tenants via their broadband access lines. Voice over IP, which allows telephony over the Internet, is an

example of advanced services expected to roll out in the near future. An inability to transition from access to content is one of several reasons that the shared tenant services model eventually disappeared when applied to the provision of telephony in the 1980s. It will be interesting to see how BCTPs respond to a similarly challenging environment as they continue to target growth.

The question arises, however, into what will BCTPs grow? One possibility is that they will be purchased by large traditional service providers such as regional bell operating companies. Both respondents and articles referenced such a possibility. Furthermore, traditional service providers have to a large extent ignored the small and medium size tenant market—something that may change in the future. As the market for large tenants matures, traditional telecommunications providers may find that it behooves them to adopt a building-centric approach to small and medium size office tenants. If this comes to fruition, it would be interesting to analyze how this impacts REITs as well as small and medium size tenants.

Endnotes

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