

A Study of the Co-Working Operating Model

by

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Submitted to the Program in Real Estate Development in Conjunction with the Center for Real Estate in Partial Fulfillment of the Requirements for the Degree of Master of Science in Real Estate Development

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ABSTRACT

After explosive development in the past half decade, the co-working industry is seeking changes to enhance the sustainability of its business model. Despite early success, the buy-bulk-sell-piece model does not promise a high return today due to the increasing cost of rent. Floating revenue and high fixed cost make the model fundamentally risky, imposing challenges for co-working companies to withstand the next recession. In the face of intensifying competition, major co-working players are expanding their businesses aggressively, aiming to benefit from economies of scale. The demand for funds is greater and more urgent than ever. Aside from commercial loans and venture capital, co-working companies are seeking more flexible and sustainable financing sources for growth. On the supply side, traditional real estate companies now have fewer doubts and greater interest in participating in the co-working business. While a small group have chosen to start their own spaces, more are looking for strategic cooperation with co-working players that have proven track records.

This thesis conducted a study of the co-working operating model in an attempt to elucidate the optimal solution that benefits both sides of the business. Following a brief industry overview, it discusses the revenue and cost structure of the co-working space and the pros and cons of five co-working operating models. With that understanding, it constructs a DCF model of a mock-up co-working project and develops cash flows for both participants to analyze their return and risk profile under each operating model. The results suggest that the joint venture model is the optimal solution for co-working companies in business expansion, and property owners with passive investment positions. Further, the management model is the best choice for more matured co-working companies with strong brand influence and concentration on management service. It also indicates that the transformation from the lease model to the management and franchise model requires co-working companies to have a strong brand, proven track record, and an established member network. While for property owners, such transformation depends on its willingness of exposure to the co-working business, as well as the capital cost, risk tolerance, and investment horizontal.

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Chapter 1: Research Introduction

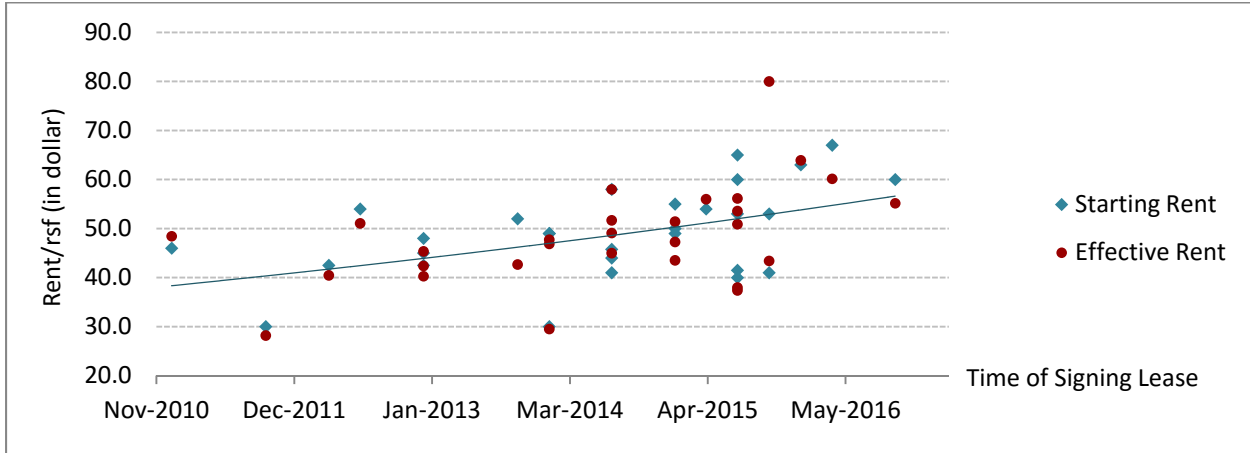
1.1 Research Background

Building momentum for years, the co-working business has been experiencing explosive development since the end of the global financial crisis. The total number of co-working spaces worldwide is estimated to have exceeded 10,000 in 2016, a ten-fold increase from 2013¹.

Early established co-working companies that seized the opportunity in the last downturn had received significant returns by signing long-term leases with low rents and selling timely-use units at higher prices after remodeling. According to WeWork, which was founded in 2011 and is the largest and most renowned shared workplace competitor in the world, the average operational margin of its space is around 40%² with an ROI over 50%.

Now, this arbitrage opportunity has gone, at least in the U.S. Rents of office real estate in gateway cities have surged to historical highs. Spaces that signed their lease at a market spike are facing shrinking margins. The structure of elastic revenue and high fixed costs make the original business model intrinsically risky, calling for alternative solutions to survive another recession.

Exhibit 1 WeWork’s New York Space Lease Rent (2011-2016)³



Industry competition has intensified as evidenced by the proliferating number of co-working spaces. Major co-working players are expanding their businesses aggressively, aiming to seize

¹ Deskmag. First Result of the 2017 Global Co-working Survey. 2016

² Excluded upfront cost.

³ Data Source: CompStak

larger market shares, and benefit from economies of scale. The demand for funds is greater and more urgent than ever. Aside from commercial loans and venture capital, co-working companies are seeking for more flexible and sustainable financing sources to grow their business.

WeWork has developed close business relationships with the leading property owners in key U.S. and international markets. Under its “Asset Light” lease structure, the landlord will contribute 80% of the required up-front capital in exchange for an ongoing profit share. In the foray into India, it formed a partnership with Embassy Group, one of India’s largest commercial property owners, putting local expansion plans on a fast track. Another co-working startup, Serendipity, adopts the franchise strategy, under which the franchisees pay much of the cost of construction, allowing it to grow quickly without raising hundreds of millions of dollars itself.

The shared workplace movement also has a significant implication on real estate property owners and developers, who now have fewer doubts and greater interest in participating in the co-working business. In early 2015, Westfield, the international shopping center company, opened its second generation co-working space, Bespoke, in the San Francisco Mall two years after it first established the Westfield Lab. With the purpose of innovating the retail ecosystem, Bespoke provides co-working, event, and technology demo spaces all under one roof.

While a small number of real estate companies chose to start their own spaces, more are looking for strategic cooperation with co-working players that have proven track records. Capital Land, the Singapore-based real estate company, teamed up with co-working specialist Collective Works, and together launched the first premium co-working space in Singapore’s central business district in June 2016. A few months later, Gaw Capital Partners, the Hong Kong-based private equity fund, invested 15 million dollars in taking a stake of Naked Hub, a co-working space network in Shanghai.

Once disrupting the office industry, the co-working business is anticipating internal change. Both the co-working company and the landlord are exploring more creative, meaningful, and strategic relationships; and a more sustainable operating model is to be developed to help the industry better prepare to withstand a full economic cycle.

1.2 Research Objective and Thesis Structure

Many articles have discussed the drivers and influence of the co-working movement, some have

analyzed the valuation and underlying risks of the co-working industry, but few have explored the operating model of the co-working business.

This thesis conducts a study of the co-working operating model with a focus on the relationship between co-working company and property owner. It attempts to find out the optimal solution that can benefit both sides of the business.

The research of the thesis consists of four parts. The first part provides a brief overview of the co-working industry. The purpose is to understand the basics of the business. The second part decomposes the revenues and costs of co-working spaces and identifies the profit drivers. In the third part, the thesis examines the mechanism and capital structure of five co-working operating models, aiming to understand the pros and cons from both the co-working operator's and the property owner's perspectives.

In the fourth part, the thesis conducts a case study of a mock-up project with assumptions based on the research contained in the preceding parts. It first constructs a DCF model of the mock-up project and then develops cash flows for both participants under each operating model's capital arrangement. Based on the modeling results, the thesis analyzes the return and risk profile for each party under each model, and compares the results of different models to determine the optimal solution for both sides of the business.

Chapter 2: Industry Overview

Co-working spaces, which are collective environment where people work independently with shared resources and as part of a member network, have been revolutionizing how, when, and where people have worked in the past decade.

Spurred by technological, social, and economic forces, today’s co-working spaces are born out of several generations of private and public sector-sponsored business stimulation efforts. As the latest evolution of more than 50 years of innovation workplace development, co-working spaces are the most influential type among all alternative workplaces, including incubators, accelerators, and innovation centers.

Exhibit 2 Types of Innovation Workspace⁴

Workplace	Inception	Purpose
Incubator	1959	Rent empty space by stimulating commerce through grouping together small business. Later incarnations added business assistance and financing opportunities.
Innovation Center	1999	Provided office space and services to young companies, initially to tech startups. Focus on commercialization of innovation and entrepreneurship.
Accelerator	2005	Programming-based workplaces designed to help startup companies grow more rapidly by providing them with technical and educational assistance, mentoring, networking opportunities and workspaces.
Co-working Center	2006	A membership-based, interdisciplinary workplace for independent workers and startup companies, providing community, business services, collaboration opportunities and a place to focus on work as well as to participate in social and educational events.

Distinguished from other types of innovation workplaces, the co-working space offers (1) membership based access to (2) a mixture of both dedicated and flexible spaces with (3) multipurpose uses to (4) a variety of tenants. It also differs from executive suites, another type of shared office, in emphasizing the social elements.

The co-working model fuses the features of a hotel, fitness center, and social network business. It leases the space by timely-used unit, sells membership with flexible access, and connects members within an ecosystem.

⁴ Foertsch, Andrea P. “Workplace innovation today: the co-working center”. NAIOP. January 2014.

2.1 Production Factors

Three mutually reinforcing pillars support the business model: space, service, and community.

Space

Space is the fundamental production factor in the co-working business. It usually consists of single and multi-person private spaces and open desk areas, as well as thoughtfully designed kitchens, lounges and meeting spaces that are shared among members. Typical features of a co-working space include high-speed internet, printers and copiers, meeting rooms, and office supplies. The use of the space can be varied, including classrooms, studios, showrooms, and most commonly, offices for companies ranging from one to dozens of employees.

Service

Service is the advanced production factor and profit generator of the co-working business. The co-working company enters into strategic partnerships with external service providers to offer business services at discounted prices to its members and shares profits from the cooperation.

The partnership structure is multi-beneficial: members receive high-quality service at preferred rates; service providers gain a powerful distribution channel to the highly fragmented small-medium-sized business market; and the co-working company earns revenue without the challenges of product development, inventory, and overhead.⁵

Community

The community is the core of the co-working business. It distinguishes the co-working space from other alternative and innovative workplaces. The design of the space, events, and technologies all pivot on the community to inspire fresh thinking and facilitate meaningful connections.

The cultivation of community is critical to the successful growth of the business, which embeds the feature of an internet business into traditional real estate, and benefits from the effects of economies of scale. A highly engaged community will source talent, projects, referrals, ideas, and capital from the co-working ecosystem, propelling the growth of the member marketplace, in which increased demand and greater value become mutually reinforcing.

⁵ WeWork Companies, Inc., Company Overview. October 2014.

2.2 Macro Drivers

The increasing demand for flexible and collective workplaces is fueled by a confluence of technological, social, and economic forces.

Technology

The development of communication technology empowers a mobile workforce to conduct business anywhere at any time in a frictionless way, while online platforms make the matching of companies and individual workers more convenient and cost effective than ever.

Demographics

The rising generation has new needs and behaviors that are fundamentally changing the way people work, live, and consume. They are the driving force of the freelance and sharing economy. In comparison with the earlier generations, they are more willing to share a workplace and ideas with others who have similar interests, valuing both autonomy and the sense of belonging. They tend to cluster in highly developed urban areas to enjoy the proximity to cultural and social amenities as well as intellectual and financial sources. Convenience, value, and experience highly affect their consumption decisions.

Economy

Entrepreneurship, freelancing, and small business formation are surging. People are becoming increasingly drawn toward entrepreneurship due to the recent development of technology, unprecedented access to funding and diminished corporate appeal⁶. The surge of co-working spaces reflects the rise of an independent workforce. In the U.S., the growth of independent workers is outpacing hiring within the overall labor force.⁷ The overall economy is shifting toward small businesses, where there is net growth, resulting in increased demand for flexible office space.⁸

All those macro shifts have vast implications for the traditional office real estate market, spurring the explosive development of co-working spaces, which are meeting the need of the emerging workforce, and have subsequently become the largest within the alternative workplace movement.

⁶ WeWork Companies, Inc., Company Overview, October 2014.

⁷ Capas, Audra. The Future of Shared Office Space. NAIOP. January 2016.

⁸ Foertsch, Andrea P. "Workplace Innovation Today: The Co-working Center". NAIOP. January 2014.

2.3 Risks and Economic Cycles

Booming after the last recession, most co-working companies have so far existed only in an expanding economy. Despite the surging number of spaces during the booming economy, there is inadequate data to examine the correlation between co-working businesses and the macro economy.

Economic Downturn

Different causes of economic downturn have various impacts on the co-working business. The collapse of a particular tenant industry is fatal to spaces with a single primary tenant source. One example is Regus's bankruptcy after the burst of the dot-com bubble, during which time many holding long-term leases on vast amounts of office space with a majority of tenants from the internet industry were suddenly underwater.

The bust of the real estate market, however, creates the bottom finishing opportunity for co-working companies, which are more financially well prepared. The original arbitrage model of the business was just born out of the last slump in the real estate market.

The influence of economic recession on the independent workforce--the primary tenant of co-working spaces, also varies. While receding capital hinders the growth of startups, company downsizing, especially in high intellectual industries, encourages entrepreneurship and leads to the surge of freelancers, startups, and small businesses. Those impacts may counterweigh each other in affecting the size of active members.

The term and space flexibility offered by the membership makes the co-working space a more attractive and affordable option than the traditional office in an economic downturn. By separating online and physical access, co-working companies can avoid the loss of members and still earn revenue from membership fees in the recession, when people retreat to cafés and their homes but reserve their spot in the online community.

Economic Upturn

The co-working company benefits from economic prosperity, in which independent workers and startups have greater opportunities and easier access to capital for growth. The primary concern in an up-cycle economy is rent surge, which occurs in markets with increasing demand and insufficient stocks. It does not affect companies that have secured leases in the downturn but

would be a significant risk for those that are pressed to expand to compete for market share.

In summary, a diversified tenant portfolio, a large scale of membership, a healthy financial structure, and good timing of entering the rental market are crucial for a co-working companies and spaces to withstand economy cycles.

2.4 Major Players' Strategies

The following strategies are most commonly seen for co-working companies in expanding their business.

Create and leverage on economies of scale. Co-working companies facilitate meaningful connections among members via both offline events and online platforms. It can negotiate better service for its members by leveraging the size of the community, and develop new product and generate revenues continuously based on a cultivated extensive ecosystem.

Co-working companies also benefit from the effect of economies of scale in saving cost. Larger locations tend to have more tenant-favorable lease terms and higher layout efficiency. The industry-wide gross margin for locations less than 20,000 square feet is 5-15%, while companies with large space portfolios can achieve a gross margin around 40% with an average of 50,000 square feet per location.

Establish strategic relationships with landlords. Under a reciprocal framework, co-working company shares profits with the landlord in negotiation for a free rent period, tenant improvement allowance, and reduced deposit. Aside from the ongoing profits, the landlord also values the opportunity of securing potential tenants, whose company grows up from the co-working space.

Standardize workflows of new space development. Co-working companies use technologies to make the new location development process highly streamlined and efficient. By standardizing the workflows, co-working companies can grow faster and manage it business more effectively. It can also franchise the proprietary management system, as well as brand, to expand the geographical distribution.

This thesis will focus on the strategic relationship between the co-working company and landlord in the study of operating models.

Chapter 3: Earning Drivers

Chapter 3 will first discuss the major components of revenue and cost, and then analyze the earning drivers of the co-working business.

3.1 Revenue

3.1.1 Revenue Components

The major revenues of a co-working business comprises of two parts: the membership fee and the service fee. While the membership fee constitutes the core of revenue, service income is the key driver in enhancing the profit margin.

Membership Fee

The membership fee is what the member—the tenant of the co-working space—pays to access and use the co-working space. It is usually charged by month and includes the utilities, internet, and cleaning fees. The amount of the membership fee varies depending on the use of space and the service it contains. Exhibit 3 outlines the four common types of membership plans.

Exhibit 3 Four Types of Membership Plans

Plans	Workplace& Location	Access Time	Office Facilities	Fee
Basic Membership	- Access to the online network - Flexible locations - Can book the hot desk location for an extra fee	- Usually includes one visit per month with option to purchase more on a daily basis	Pay on use	Lowest entry fee + highest marginal fee
Hot desk:	- Work in open common area; - Each day the space is first come, first serve - Usually one location	- Can only use during certain hours. (The open area may have other uses, e.g. events, in the after hours)	Pay on use	Low
Dedicated desk:	- Work in a shared office with dedicated desk, chair, and lockable cabinet - One location	- Usually 24/7 or the opening hours of the co-working space	Free monthly quota + pay for extra use	
Private Office:	- Work in a private, lockable office with lockable cabinet - One location	- Usually 24/7 or the opening hours of the co-working space	Free monthly quota + pay for extra use	Varies depending on headcount

The membership fee contributes to the major part of the total revenue⁹. This portion varies depending on the services included in the membership fee. It tends to decrease as the co-working company’s business becomes mature and has more revenues coming from ancillary services.

Service Fee:

Service Fee is what the members pay to have business and personal services provided by the co-working company and service partners. It is usually charged upon use. The breadth of services depends on the co-working company’s ability in understanding the members’ needs as well as sourcing, negotiating, and establishing partnerships with service providers. Exhibit 4 outlines the four categories of services.

Exhibit 4 Four Categories of Services

Services	Contents	Revenue
Basic Services	- Refreshments, e.g. coffee, beer, and snacks	- Some co-working companies provide refreshments (included in the membership fee) to attract members
Business Services	- Conference room booking, printing and copying, telephone service, mail and package handling, and other administration services - Events space booking and services - Virtual office	- Either charged upon use or included in the membership fees. Printing and copying can be free for certain amounts then be charged upon use - Virtual office service is usually charged by month
Corporate Services	- HR services, health care insurance; accounting and legal consulting, cloud and IT Services - Training and education	- Profit sharing arrangement with service providers - One time lead generation fee plus percentage of lifetime revenue
Personal Services	- Food and fresh delivery, laundry - Gym membership	Profit sharing arrangement with service providers

The co-working company usually includes refreshments and essential business services (e.g. printing and copying) in the membership fee to attract potential members by providing “free service.” It’s worth doing so as the margin of such services is relatively small and the average consumption level can be estimated. The add-on options, event service, and virtual office are

⁹ According to WeWork’s 5-Year Forecast in October 2014, membership fee accounts for 95% to 88% of the total revenue. The percentage is estimated to decline as WeWork plans to increase its service product line.

charged separately based on individual's needs and have higher margins.

The real profit comes from the cooperation with service partners. Co-working companies with larger memberships and an established brand can leverage the size of its community to negotiate below-market rates for members while also securing a revenue or profit sharing arrangement with the service provider. WeWork's healthcare and human resources partnership with TriNet (TNET) is such an example. In exchange for marketing TriNet's healthcare and HR services to its members, and offering sign-ups through the WeWork mobile platform, WeWork receives a one-time lead generation fee of \$125, plus 15% of lifetime revenue generated from the member company.¹⁰

In general, service fees contribute to 5%-10% of the total revenue of the co-working space. Despite the small percentage, this segment has a greater growth potential and a higher margin compared to the revenue from membership fees. The growth rate of average service fees reflects not only the increase of service price and commission fees from third parties, but also the growth of service options and the members' willingness to use ancillary services; thus it tends to be higher than the growth rate of the average membership fee.

3.1.2 Revenue Drivers

The revenue of a co-working company is directly correlated with the average membership fees, the average service fee, and the total number of members.

The average membership fee is the weighted average amount of the prices for all available membership plans. For a single space, the average fee is usually close to that of a dedicated desk in a shared office. The location of the space, the influence of the brand, and the size of the member network are key factors that affect membership pricing.

The average service fee is determined by the breadth of service options, the pricing of each service option, the profit sharing arrangement with the service provider, the substitutability of service, the members' willingness of using the service, and the member's stickiness to the co-working network.

The total amount of revenue goes with the number of members. It can fluctuate considerably

¹⁰ WeWork Companies, Inc., Company Overview, October 2014.

during the business cycle as the membership offers both size and term flexibility. A higher level of tenant diversification can help protect the co-working company from suffering significant membership loss due to the downturn of an individual industry.

3.2 Cost Drivers

3.2.1 Cost Components

The cost of co-working business comprises upfront costs, operating expenses, and financing costs.

Upfront costs

Costs occurred in the preliminary stage include the build-out cost of construction, furniture, fixtures and equipment, and IT system, the soft cost of design and engineering, the cost of legal consulting and brokerage fee, and other administrative expenses.

Build-out cost is the largest initial capital expenditure in running a co-working space. It can be measured on either square footage or desk unit. The unit build-out cost varies greatly in different cities due to the differences in the pricing of materials, labors, and professional fees. The build-out cost of co-working space is much lower than that of a new office space, as the co-working space uses less finishing materials and less expensive materials. Also, standardizing the design of spaces can help the co-working company reduce soft costs. In WeWork's financial forecast, the average unit improvement cost was \$85 per usable square feet in 2014. The same year average unit construction cost of fitting out a new office in the cities that WeWork entered is around \$130 per usable square feet according to CBRE Global Workplace Solution's research.

Operating Cost

Costs occurred in the operating stage include rents, building operating expenses (utilities, building insurance, property tax, and regular maintenance expenditures), space operating expenses (coffee, fruit, printing and copying, cleaning, etc.), marketing cost, corporate payroll, administrative expenses, and major capital expenditures for space upgrading and renovation.

Rent is the largest regular cost item during the operating stage, accounting for 60-80% of the total operating cost. Unlike other operating expenses, the amount of rent and rent growth are determined when the lease is signed. Thus, the timing of entering the rental market is critical for

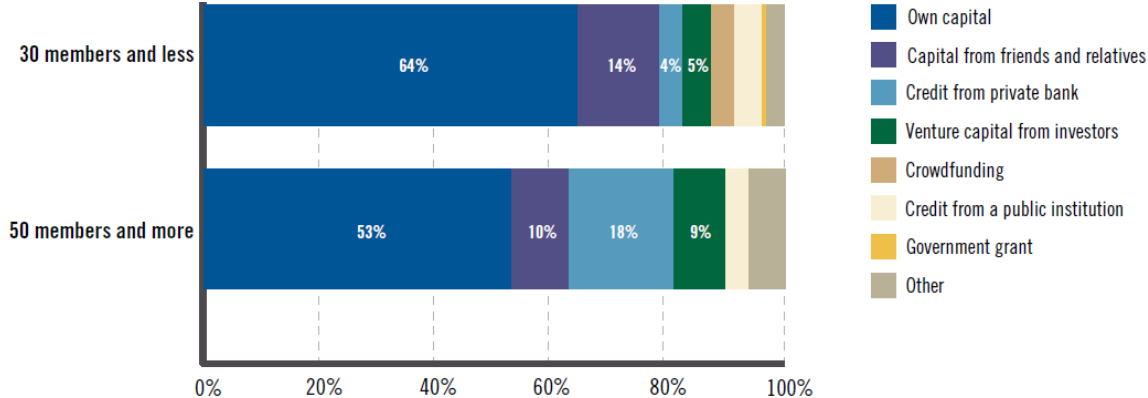
the co-working business. Many renowned co-working companies have seized the opportunity after the financial crisis. They signed long-term leases when the rental market was in a downturn, and made surprisingly high-profit margins in the following years. This original arbitrage model doesn't work today as both asset prices and market rent have increased significantly. That urges the co-working company to explore more revenue sources and better control other operating costs.

Most operating expenses can be estimated on a square footage basis while marketing costs can be forecast either by unit cost per square footage or as a percentage of total revenue.

Financing cost

The financing source and cost vary for co-working companies at different stages and with different size of assets under management. Unlike the traditional office real estate industry, the co-working business does not have a very high initial capital requirement. Over 50% co-working spaces in the U.S. are financed by the founders' own money; larger co-working spaces have a higher percentage of their financing sourced from banks and venture capital.

Exhibit 5 Financing Sources in Launching a Co-working Space¹¹



3.2.2 Cost Drivers

Lease term is the most important cost driver as rent accounts for 60% to 70% of the total operating cost. The commonly seen lease term of co-working spaces runs from 10 to 20 years

¹¹ Deskmag. The Second Global Co-working Survey, 2012

with rent ramp-up every 4 to 5 years. Some contracts include a three to six-month free rent period at the beginning of the lease. Such an arrangement is very helpful as it helps to alleviate the financial pressure on the co-working company, which has to invest a significant amount of money in the preliminary stage.

Another cost driver is the size of the space. On the one hand, the total cost of co-working space can be estimated on a square footage basis—a smaller space has less total cost than a larger space. As discussed in the revenue drivers section above, the space layout efficiency is also important in controlling the total cost. At the same capacity, the higher the layout efficiency the smaller space needed, and the less the operating cost will be. On the other hand, the co-working space needs to have a certain size to make the business feasible. Large spaces usually have lower unit costs because the upfront fees, staff salaries, marketing cost, IT system development cost, and other overhead costs can be shared by larger total square feet (or more members).

In general, the total cost goes down with the number of square feet. It is a relatively stable cash-flow item, as the total rentable area and the largest operating cost item—namely the rent—are fixed once the lease is signed.

3.3 Earning Drivers

The profitability of co-working spaces is determined more by revenue generation than by cost control. At the space level, occupancy and average monthly per member revenue are the most meaningful indicators of the operational profitability. Exhibit 6 shows a simplified example of unit-level EBITDA analysis. The EBITDA margin is 26% in the base case and drops to 13% in the downturn as both the occupancy and the average monthly per member revenue decline. Rent also has a substantial effect on the EBITDA margin. In this example, a 10% higher rent will squeeze the EBITDA margin by 5%.

Exhibit 6 Simplified Example of Unit-level EBITDA Analysis

	Base Case	Downturn	High Rent	Low Density
Key Drivers				
Average square footage per desk	60	60	60	70 (+10)
Occupancy	90%	80% (-10%)	90%	90%
Avg. Monthly Revenue/Member	550	523 (-5%)	550	550
Unit-Level P&L (per USF)				
Revenue*	99	84	99	85
Rent	50	50	55(10%)	50
Unit OpEx	18	18	18	18
Corporate Management Payroll	5.0	5.0	5.0	5.0
Cost**	73	73	78	73
Unit EBITDA	26	10.6	21	11.9
EBITDA Margin	26%	13%	21%	14%
Breakdown Occupancy	66%	70%	71%	77%

*Unit Revenue = Avg. Monthly Revenue/Member * 12 * Occupancy / Average square footage per desk

**Unit Cost = Rent + Unit OpEx + Unit Corporate Management Payroll

Average square footage per desk

Distinguished from the traditional office sector, where occupancy is the percentage of the total lease-out area to the total leasable area, the occupancy of a co-working space is the percentage of the total desk sold to the total desk available. The converter between desk unit and area is “the average square footage per desk,” an indicator that reflects the space layout efficiency. In the simplified example, a 10 square feet increase in the average per desk space will drop the EBITDA margin to 14%; it almost has the same effect of a business downturn.

According to CoreNet Global, the average square footage per employee in the U.S. has dropped significantly from 225 square feet in 2010 to today’s 175 square feet, and is estimated to fall to 100 square feet or lower in within the next five years. In the co-working space, the number is only 50-80 square feet: efficiency increases dramatically as investment shifts from more space to better services.

The high-density layout of co-working space results from a well-organized combination of open desks, small offices, and single worker booths. While the high-ceiling, loft style, spacious lounge provides people a first impression of what the co-working space is like, the majority of the space is filled with 20 square feet small units to 600 square feet shared office seating 1 to 20 people. As many members have a flexible working schedule, space may not be fully occupied even with 100% occupancy. So the actual space feeling would be better than purely looking at the average square footage numbers. Staggering using time is another way to enhance space efficiency. For example, the lounge and open desk area can serve flexible members in the daytime and hold events and parties in the afterhours.

In practice, co-working companies carefully control the lounge area to have the per desk square footage at a feasible level. They can use the estimated total cost, average member revenue and occupancy rate to calculate the maximum per desk space.

At the corporate level, economies of scale are key to the business profit model. With a wide space distribution, the co-working company can sell more memberships than the desks it owns by staggering the using time on a centralized reservation system. With an extensive member network, the co-working company can enhance its bargaining power to the service providers, and generate revenues from both the offline space and the online community.

Chapter 4: Operating Model-Qualitative Analysis

In the past, the industry practice has been signing a long-term lease, in which the relationship between the co-working company and the property owner has not had much difference with that of a conventional office lease. Nowadays, both sides of the market have shown greater interest in creative lease structures and operating models as a strategy for sustainable business growth.

Chapter 4 will discuss the mechanism, characteristics, and pros and cons of five co-working operating models that are either prevailing or emerging in the market. The analysis is qualitative and is conducted based on the following dimensions.

1. Operating Mechanism: What are the roles of the two parties in this model? What are their obligations and rights?
2. Capital Structure: What is the typical arrangement of capital contribution? What is the typical arrangement of cash flow distribution?
3. Pros and Cons: What are the benefits and motivations for each party? What are the risks and concerns for each party? When will the operating model work best?

4.1 The Lease Model

In the Lease Model, the co-working company signs a lease contract—usually, ten to twenty years—with the property owner, and makes contractual payments following the lease term.

Most co-working operators will experience negative cash flows during the initial months. The pain points come from both the significant upfront build-out expenses and the misalignment between rent payment and leasing/sale schedule—as leasing up space (i.e. selling membership) needs time, the operator has to pay rent from its capital reserve until reaching breakeven. Also, shortage of funds may hinder the co-working company's business from developing at an ideal pace. The property owner earns revenue from the rent payments—straightforward and clear. No profits from the co-working space will be shared, as it has no stake in the business.

So far, the Lease Model is the most commonly seen operating model in the co-working business. With the "co-working" concept being widely accepted and well developed, many property owners become interested in partaking in the business, aiming to take a share from the prospect.

4.2 The Joint Venture Model

In the Joint Venture Model, the co-working company and the property owner will enter a joint venture agreement. The property owner, as the investing partner, contributes the majority of the initial investment and has the priority in receiving profits; the co-working company, as the managing partner, puts in a small amount of capital and has the operational control of the co-working space(s). It receives profits after the property owner's preferred return. The total return for the co-working company depends on the operating profits. It is usually disproportionate to the initial capital contribution and can be very rewarding when the business goes well.

The Joint Venture Model benefits both partners. It alleviates the co-working company's initial capital stress and allows it grow the business rapidly without raising hundreds of millions in funds. The property owner will not only enjoy a preferred return from the investment but also get an in-depth learning about the co-working business. The knowledge and expertise acquired from the joint venture experience can help it better identify and seize future optimal investment opportunities, and can also be a useful resource should the property owner plan to operate its own independent co-working space in the future.

The most important characteristic of the Joint Venture Model is interest alignment. Both partners will benefit from the business' prosperity and suffer from its adversity. In designing the waterfall structure, it is important to match the expected return with the risk exposure for both partners.

4.3 The Management Model

In the Management Model, the co-working company and the property owner will enter a management agreement. The property owner is responsible for all the capital investment and is required to reimburse all the operational costs upon occurrence. The co-working company is in charge of the design and operation of the space, marketing and sales of membership, event organizing, and community building. Usually, it does not contribute capital or only puts in a nominal amount of equity if required by the agreement.

The co-working company earns a management fee that consists of two parts—the base management fee, which is usually a percentage of the total revenue, and the incentive fee, which builds on the adjusted profits. The operating proceeds go first to pay the base management fee and then to satisfy the property owner's preferred return. The distribution of the remaining profits

can either favor the property owner or the co-working company.

Although the Management Model is still new to the co-working business, it is commonly seen in the hotel industry, in which the hotel management company uses proven operational methods, leverages brand influence and membership program, and centralizes advertising, marketing and sales for the properties under management. The co-working business has a lot of commonalities with the hotel industry regarding short-term lease, unit sales, and occupancy fluctuation; also, brand influence, customer experience, and member network/royalty program are important in both fields. With a strong brand and an extensive member network, the co-working company can concentrate its business on management service, growing it quickly with a light balance sheet.

While the Management Model allows both parties to focus on their specialties, there may be disagreements on business strategy. For example, the co-working company may want to increase capital expenditures to upgrade the space and keep its competitiveness or take aggressive marketing and sales strategies to squeeze market share from its competitors, while the property owner is reluctant to do so. Such disagreements may be more likely when returns are weaker and may result in litigation if the two parties fail to reconcile. In that case, both sides will lose if such litigation interrupts the space operation to the detriment of the brand.

There may also be interest misalignment between the two parties if the co-working company has no stake in the space. To solve this problem, the property owner can require the co-working company put in its equity or reduce the portion of the base management fee while increasing that of the incentives. Either measure will make the model more like a joint venture. The property owner can also require the co-working company to make payments to it if the space does not achieve a specified level of operating profit.

4.4 The Franchise Model

In the Franchise Model, the property owner is responsible for all capital investments and operates the co-working space by itself. As the franchisee, it pays the co-working company an upfront franchise fee plus annual royalty fees to use its brand, member network, and technologies. The co-working company, as the franchisor, provides expert guidance, staff training, and ongoing supports to the franchise space throughout the preliminary stage to the operating period. It also provides interior design modules for the use of test-fit, along with specifications for the

franchisee's design team to follow when creating construction documents. Furthermore, the co-working company conducts centralized advertising, marketing, and sales, as well as reservation and online services for the franchise space, with all costs reimbursed by the franchisee.

The Franchise Model requires the co-working company to have a strong brand influence and an established member community. Those intangibles are a guarantee for the successful debut of new spaces. From the co-working company's standpoint, it can grow the member and space network even faster and benefits from economies of scale in the business—for example, a better price from third party service providers. A strengthened brand can also help to consolidate its market shares, squeezing competitors, especially small players, out of the market.

The property owner will have a very steep learning curve of the co-working business by getting hands on the detailed workings of designing, refurbishing, leasing, and operating. It reduces the operational risk by adopting a proven management method and leveraging an established brand while keeping a greater level of business independence in comparison with that of the Management Model.

Brand consistency is crucial in this model. To avoid losing control of the franchise spaces during rapid expansion, the co-working company should standardize the product, service, visual identification, and workflows, and ensure the effective execution of those standards. In case the franchisee fails to follow the brand standards, the co-working company should require termination of the agreement to protect its intangible assets.

4.5 The Owner-Operator Model

The Owner-Operator Model has two cases: the co-working company purchases the property where its space locates; or the property owner starts a co-working space in the property it owns. The latter case is more commonly seen in practice because the capital requirement of real estate investment is much higher than that of running a co-working space, and the profit model encourages co-working companies to develop their business in an asset-light approach.

In comparison with co-working companies, property owners—the real estate development and asset management companies—have greater financial strength and higher risk tolerance. They can balance the profits of a co-working space with that of the other assets. For those companies, the co-working space is more of an attractive feature that contributes to the ecosystem and

overall performance of the existing properties than of an independent business or profit generator.

Global real estate companies such as Westfield have opened self-operated co-working spaces in shopping centers and office properties. Within the Westfield San Francisco Center, the co-working space “Bespoke” is “a trifecta of co-working, demo, and event spaces..., where tech and retail marketplaces converge”¹².

In some markets where office properties are oversupplied, real estate companies also use co-working spaces as a temporary strategy to lessen excess inventories.

¹²www.bespokesf.co

Chapter 5 Operating Model-Quantitative Analysis

Chapter 5 will analyze the financial characteristics of the previously discussed operating models from both the co-working company's and the property owner's perspectives through a quantitative approach. The analysis is conducted by the following steps:

1. Make assumptions of a mockup co-working space project, projecting its revenues and costs under optimal, neutral, and pessimistic scenarios.
2. Build a 10-year discounted cash flow (DCF) model that reflects the project's financial performance throughout a full business cycle specified in the assumptions; calculate the project level pretax cash flow (PBITCF) and return.
3. Design the capital structure for each operating model, including the arrangements of capital contribution and cash flow distribution.
4. For each operating model, calculate the cash flow and return for each party, comparing the characteristics of the two cash flows.
5. For each operating model, conduct sensitivity analyses of each party's IRR to the key inputs of capital arrangement; discuss the major influence factor of return and both sides' negotiation power.
6. For each operating model, conduct sensitivity analysis of each party's IRR under Better, Normal, and Worse Scenarios, comparing the two parties' investment efficiency (return vs. risk).
7. Compare the results of different operating models and draw conclusions.

5.1 Assumptions

5.1.1 Basic Assumptions

The underlying project is a new co-working space located within a core urban area in a U.S. gateway city. The project company is an LLC, which does not pay tax at the entity level. The space is operated under an established co-working brand amid its business expansion. The two parties involved in the project are the Co-working Operator (C.O.) and the Property Owner (P.O.).

The co-working space leases 20,000 sqft in an office building at a warm dark shell condition. The building efficiency is 80%; thus the usable square footage is 16,000 sqft—we use the “usable square footage (USF)” as the unit in standardizing the revenue and cost items. The average square footage per desk is 60 USF, so there are 267 available desks in total.

We assume there are three scenarios for the co-working business—Optimistic (O), Normal (N), Pessimistic (P). The business has a 10-year cycle, of which there are six Optimistic consecutive years and two Pessimistic consecutive years with one Neutral year at each interval. We assume the business starts at an Optimistic year in the middle of the upward trend, which is reasonable as people seldom start a business when they hold a pessimistic view of the foreseeable future. Exhibit 7 shows the business cycle assumption.

The occupancy rate varies under each scenario as shown in Exhibit 8. As marketing and selling take time, we assume the first year occupancy is 80% of that of a stabilized year¹³.

Exhibit 7 Business Cycle Assumption

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
O	O	O	N	P	P	N	O	O	O

Exhibit 8 Building and Occupancy Assumptions

Building Efficiency	80%	Scenario	Occupancy
Rentable Square Feet (RSF)	20,000 Sqft	Optimistic	90%
Usable Square Feet (USF)	16,000 Sqft	Normal	80%
Average Square Feet per Desk	60 Sqft	Pessimistic	70%
Total Available Desks	267 Unit	First Year	72%

5.1.2 Revenue Assumptions

We use the average membership fee and the average service fee to estimate the total revenue. Both items are on the per month per member basis. For each item, the growth rate decreases from the Optimistic scenario to the Pessimistic scenario. The growth rate of the average service

¹³ The first year occupancy is calculated as 90% * 80% = 72%.

fee is greater than that of the average membership fee as discussed in Chapter 3.

Exhibit 9 Revenue Assumptions

Revenue items	Unit price (/member/month)	% of per member revenue	Growth Rate (O/N/P)
Average Monthly Membership Fee	\$600	92%	7.5%, 3.5%, -5%
Average Monthly Service Fee	\$50	8%	20%, 10%, -5%
Total Revenue Per Member	\$650	100%	

5.1.3 Upfront Cost Assumptions

To simplify the assumption, we categorize the upfront costs into two items: the fit-out cost and the other upfront cost.

Fit-out Cost includes the cost of construction (hard cost), design (soft cost), IT system, furniture, fixtures, and equipment. According to CBRE Global Workplace Solutions, the average fit-out cost for a regular non-customer facing commercial office space based on a warm shell condition in gateway cities is around \$170/usf in 2015¹⁴. We apply a 60% coefficient to the construction and FF&E costs as the interior of co-working space is usually less costly than that of a regular office space. The estimated unit fit-out cost for the project¹⁵ is \$109/USF as shown in Exhibit 10.

Exhibit 10 Fit-out Cost Assumptions

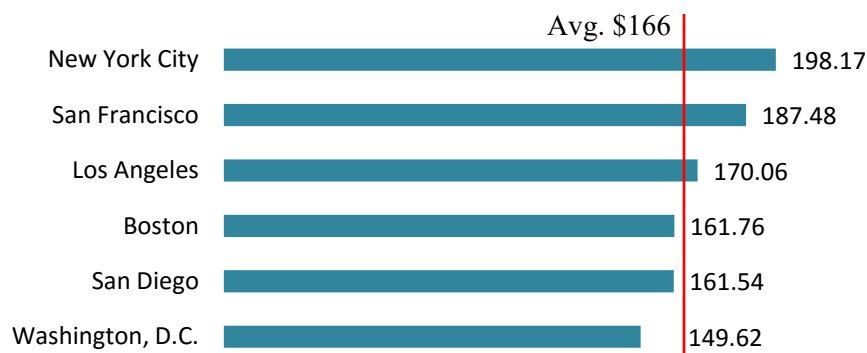
Cost Items	Regular Office	Co-working Space
Construction (Hard Cost)	56.3%	*60% = 33.8%
FF&E	29.3%	*60% = 17.6%
IT System	5.0%	5.0%
Fees	2.9%	2.9%
Move Costs	1.6%	0.0%
Design (Soft Costs)	4.9%	4.9%

¹⁴ CBRE Global Workplace Solution. North America Occupiers' Fit-out Cost Guide. 2015. Assume all the outfitting work is completed with single shifts in regular time. The space is clear with no demolition required, and includes fire wet pipe sprinkler horizontal distribution throughout, floor main electrical panels, and floor main mechanical cooling with duct headers to core walls. The landlord has provided finished restrooms at regular standard.

¹⁵ We assume the project is a new co-working space locates at the core urban area in a U.S. gateway city.

	100.00%	64.2%
Fit-out Cost	\$166/usf	\$109/usf

Exhibit 11 Average Fit-out Cost in U.S. Gateway Cities, 2015



We assume there is a total of \$10,000 in other upfront costs, which include all expenses occurred in the preliminary stage except for the fit-out cost—for example, the legal consulting cost, brokerage fee, and other administrative costs.

The capital expenditure for space upgrading and renovation is estimated to be 10% of the total fit-out cost or \$10.9/usf. It occurs every five years.

Exhibit 12 Upfront Costs and Capital Expenditures Assumptions

Fit-out Cost	\$109/usf
Other Upfront Cost	\$10,000, onetime upfront cost
Major Capital Expenditure (CapEx)	10% of the total fit-out cost, or \$10.9/usf; occurred every 5 years
Depreciation	10 year, straight line method

5.1.4 Lease Assumptions

We collected 31 leases that WeWork signed for their New York spaces during 2011Q1-2016Q4¹⁶. The lease terms run from 7 to 20 years, with a mean of 14.8 years. The free rent periods vary from 0 to 15 months, with an average of 10.6 months, which is approximately 6% of the average length of lease. The average base rent has increased from \$43.13/rsf in 2013-2014

¹⁶ Data source: CompStak.

to \$63.3/rsf in 2016. For this mockup project, we assume the lease term is 10-years with a \$60/rsf base rent growing 6% every four years. To be conservative, we set the free rent period as 3 months, which is shorter than that of the WeWork's lease proportionally to lease term.

Exhibit 13 WeWork's New York Space Lease Term (2011-2016)

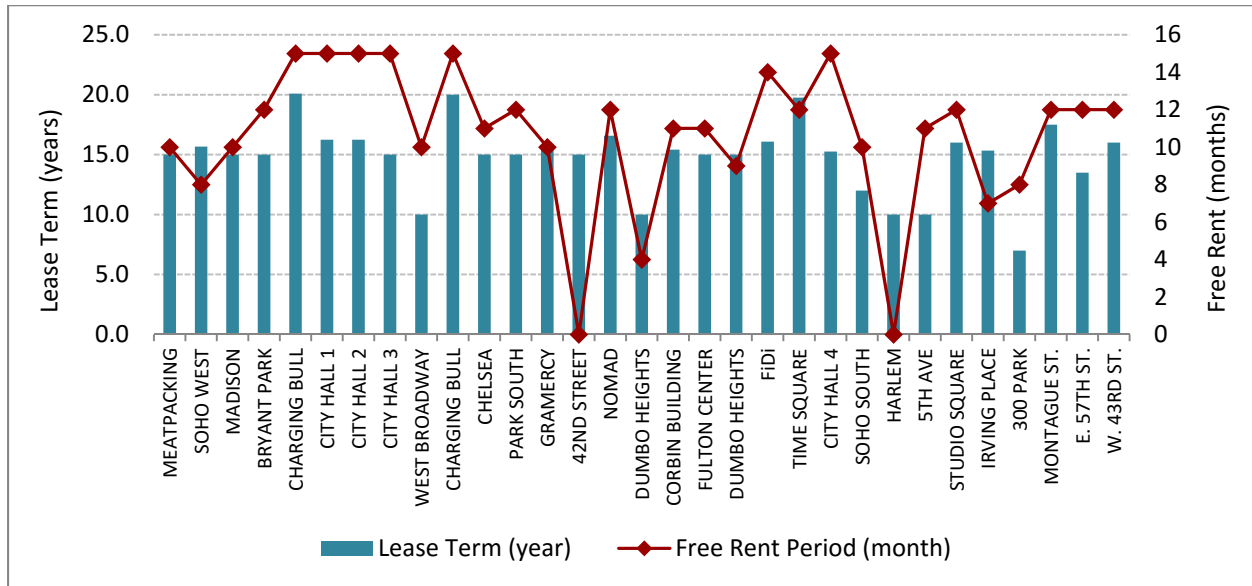


Exhibit 14 Lease Assumptions

Annual Base Rent	\$60.00	/rsf/year	Free Rent Period	3	Months
Lease Term	10	Year	Growth Rate%	6%	On the year 5 and year 9

5.1.5 Operating Cost Assumptions

To simplify the assumption, we categorize the operating costs into three items: building operating expenditure (OpEx), business operating expenses and marketing expenses. Building Operating Expenditure (OpEx) includes utilities, building insurance, property tax, and regular maintenance expenditures; it is estimated to be \$18/usf. Business operating costs include the space daily operating expenses (coffee, fruit, printing and copying, cleaning, etc.), corporate payrolls, and administrative expenses; it is estimated to be \$5/usf.

Exhibit 15 Operating Cost Assumptions

Operating Cost Items	Growth Rate%
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Building OpEx	\$18.00 /usf/year	3.0%
Overhead Cost	\$5.00/usf/year	3.0%
Marketing Cost	1% (O), 2.5% (N), 4% (P) , 4% (first year) of total revenue	

Marketing costs can be estimated as a percentage of total revenue. The portion goes up under the pessimistic scenario as the co-working company needs to strengthen the marketing to increase the occupancy rate. Marketing costs in the first year equals to that of a Pessimistic year.

5.1.6 Exit Assumptions

At the lease expiration, the co-working company can renew the lease and continue the operation of the space; alternatively, it can sell the business to another company, or liquidate the assets and exit the business. In the real world, no renowned co-working company (and its space) has been running for more than ten years. The co-working company's average holding period of space is unknown. For simplicity, we will discount the projected NOI of the 11th year at an exit rate to estimate a residual value of the co-working space business at the end of the 10th year, assuming the rent increases by 3% at renewal. We assume the residual values are the same whether the co-working company continues the operation or sells the business, ignoring the expense of lease renewal and sale.

5.2 Project Level DCF Analysis

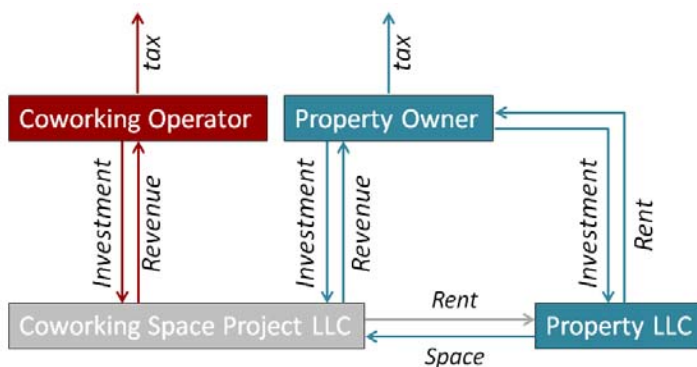
Exhibit 17 shows the 10-year discounted cash flow (DCF) model for this mockup project based on the above assumptions. As the first year revenue is not stabilized and there is a 3-month free rent period, we use the second year NOI to calculate the initial yield, which is 25.1%. We take 28% as the exit rate to be conservative—the 3% difference is for the consideration of exit expenses and market change.

Exhibit 18 shows the project level IRR, cash flow multiple, average NOI margin%, and initial yield of the mockup co-working project.¹⁷ They also reflect the Co-working Operator's pre-tax unlevered performance under the Lease Model.

Rents Consideration

In this example, the Property Owner receives proceeds from two sources: the NOI from investing and operating of the co-working space, and the NOI from the original property investment. We do not combine the two cash flows because the two businesses have various risk characteristics. Moreover, as the co-working space occupies only part of the property, it would be difficult to calculate the proportionate asset value of the co-working space.

Exhibit 16 Cash Flow Diagram



¹⁷ Note, those indicators do not reflect the financial performance of the Property Owner's original real estate business, which regards the investment and operation of the property that the co-working space leases and occupies. The base rent paid to the Property Owner is a cost item in the project's cash flow and an income item for the Property Owner's original real estate business.

Exhibit 17 10-year Discounted Cash Flow (DCF) Model

Year	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Scenario		O	O	O	N	P	P	N	O	O	O	O
Occupancy		72%	90%	90%	80%	70%	70%	80%	90%	90%	90%	90%
Total Members		192	240	240	213	187	187	213	240	240	240	240
<u>Revenue</u>												
Membership Fee Growth%		0.0%	8.0%	8.0%	3.0%	-5.0%	-5.0%	3.0%	8.0%	8.0%	8.0%	8.0%
Avg. Mth. Membership Fee		600	648	700	721	685	651	670	724	782	844	912
Service Fee Growth%		0.0%	20.0%	20.0%	10.0%	-5.0%	-5.0%	10.0%	20.0%	20.0%	20.0%	20.0%
Avg. Mth. Service Fee		50	60	72	79	75	71	79	94	113	136	163
<u>Rent</u>												
Rent Growth%		0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	0.0%	6.0%	0.0%	3.0%
Rent/RSF		60.0	60.0	60.0	60.0	63.6	63.6	63.6	63.6	67.4	67.4	69.4
<u>Other Expenses</u>												
Bldg OpEx Growth%		0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Bldg OpEx		18.0	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.8	23.5	24.2
Business OpEx Growth%		0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Business OpEx		5.0	5.2	5.3	5.5	5.6	5.8	6.0	6.1	6.3	6.5	6.7
Mktg % of Rev.		4.0%	1.0%	1.0%	2.5%	4.0%	4.0%	2.5%	1.0%	1.0%	1.0%	1.0%
<u>CapEx</u>		0.0	0.0	0.0	10.9	0.0	0.0	0.0	10.9	0.0	0.0	0.0

Year	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
<u>Initial Invest</u>												
Fit-out Cost	1,744,000											
Other Upfront Cost	10,000											
<u>Revenue</u>												
Membership Fee		1,382,400	1,866,240	2,015,539	1,842,455	1,536,676	1,459,843	1,712,700	2,084,187	2,250,922	2,430,996	2,625,475
Service Fee		115,200	172,800	207,360	202,435	168,839	160,397	200,968	271,731	326,077	391,292	469,551
Total Revenue		1,497,600	2,039,040	2,222,899	2,044,890	1,705,515	1,620,239	1,913,667	2,355,918	2,576,999	2,822,288	3,095,026
<u>Operating Cost</u>												
Rent		900,000	1,200,000	1,200,000	1,200,000	1,272,000	1,272,000	1,272,000	1,272,000	1,348,320	1,348,320	1,388,770
Bldg OpEx		288,000	296,640	305,539	314,705	324,147	333,871	343,887	354,204	364,830	375,775	387,048
Business OpEx		80,000	82,400	84,872	87,418	90,041	92,742	95,524	98,390	101,342	104,382	107,513
Mkgt Cost		59,904	20,390	22,229	51,122	68,221	64,810	47,842	23,559	25,770	28,223	30,950
Total Operating Cost		1,327,904	1,599,430	1,612,640	1,653,246	1,754,408	1,763,422	1,759,253	1,748,153	1,840,261	1,856,699	1,914,281
NOI		169,696	439,610	610,259	391,644	(48,893)	(143,183)	154,415	607,765	736,737	965,589	1,180,745
<u>CapEx</u>		-	-	-	174,400	-	-	-	174,400	-	-	-
Operating PBITCF		169,696	439,610	610,259	217,244	(48,893)	(143,183)	154,415	433,365	736,737	965,589	
Reversion PBITCF	Exit Rate 28%										4,216,946	
PBITCF	(1,754,000)	169,696	439,610	610,259	217,244	(48,893)	(143,183)	154,415	433,365	736,737	5,182,535	
Unlevered IRR	22.1%											
NOI Margin%		11.3%	21.6%	27.5%	19.2%	-2.9%	-8.8%	8.1%	25.8%	28.6%	34.2%	

Exhibit 18 Project-level Performance

Unlevered IRR	22.1%	IRR of the before debt service and pre-tax cash flow, i.e. PBITCF;
PBITCF Multiples	4.1x	The ratio of the sum of all positive PBICF to the sum of all negative PBICF;
Avg. NOI Margin%	16.4%	The average of the NOI to revenue ratios;
Initial Yield	25.1%	Second year NOI divided by the total amount of initial investment.

Exhibit 19 Project Operating Cash Flows and NOI Margins

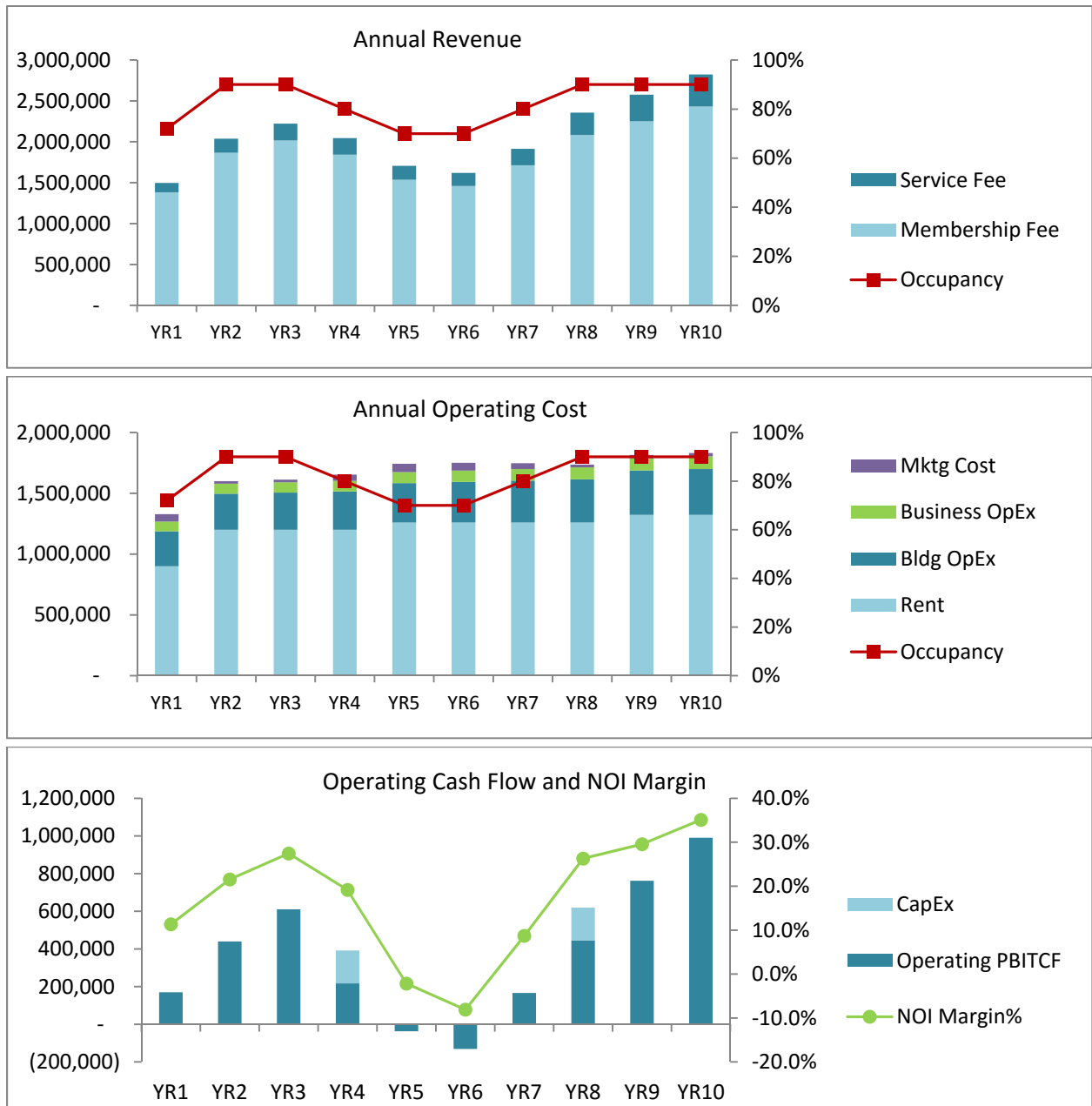


Exhibit 20 Arrangement of Capital Contribution and Cash Flow Distribution

Operating Model	Lease Model		Tenant Improvement		Joint Venture Model		Management Model		Franchise Model	
	P.O.	C.O.	P.O.	C.O.	P.O.	C.O.	P.O.	C.O.	P.O.	C.O.
<i><u>Investment Arrangement</u></i>										
Fit-out Cost	0%	100%	50%	50%	90%	10%	90%	10%	100%	0%
Other Upfront Cost	0%	100%	0%	100%	90%	10%	100%	0%	100%	0%
CapEx	0%	100%	0%	100%	90%	10%	100%	0%	100%	0%
Rent	0%	100%	0%	100%	90%	10%	100%	0%	100%	0%
Bldg OpEx	0%	100%	0%	100%	90%	10%	100%	0%	100%	0%
Business OpEx	0%	100%	0%	100%	90%	10%	100%	0%	100%	0%
Marketing Cost	0%	100%	0%	100%	90%	10%	100%	0%	100%	0%
<i><u>Cash Flow Distribution</u></i>										
Mgmt Fee (% of Revenue) (Franchise Royalty Fee)	--	--	--	5%	--	0%	--	4%	--	2.5%
Upfront Franchise Fee	--	--	--	--	--	--	--	--	--	10% of the total upfront cost
Operating Cash Flow Distribution	0%	100%	45%	55%	11% preferred return for P.O., then split the remaining cash flow by 50/50		11% preferred return for P.O., then split the remaining cash flow by 80/20 for P.O. and C.O.		100%	0%
Reversion PBITCF Distribution	0%	100%	0%	100%	First to satisfy P.O.'s 11% preferred return (including equity); then to payback C.O.'s equity; split the remaining cash flow by 50/50		First to satisfy P.O.'s 11% preferred return (including equity); then to payback C.O.'s equity; the remaining cash flow all goes to P.O.		100%	0%

5.3 Capital Structures

There are five operating models in doing the project: (1) the Leveraged Lease Model, (2) the Tenant Improvement Model; (3) the Joint Venture Model, (4) the Management Model, and (5) the Franchise Model. The first two models are variants of the Lease Model discussed in the previous chapter, using either debt or equity financing. We do not include the Owner-Operator Model because the Owner-Operator usually has specific operational purpose and its project level cash flow is not comparable with that of the other models.

Exhibit 20 outlines the arrangement of capital contribution and cash flow distribution for each operating model. Those arrangements do not affect the project level cash flow.

Debt and Tax Considerations

In this example, we assume the project is all equity financed and will compare the two parties' cash flows on a pre-tax basis except for the Leveraged Lease Model. The assumption is based on the following considerations.

The use of debt neither affects the project level cash flow nor increases the value of the LLC, which is a pass-through entity. For a leveraged project, the total distributable cash to the equity investors is identical under the five operating models. Thus, at pre-tax level, the leverage structure does not affect our analysis and conclusion of the operating models.

For the equity investors, who pay tax at the corporate level, the use of debt is likely to increase the value of the deal as they may benefit from the interest tax shield. The amounts of interest tax shield vary depending on their tax status, which are independent of the project operating model. For each party, who holds the same corporate tax status, the effect of debt on its after-tax cash flow will be the same under each operating model. Therefore, the use of debt does not affect our analysis and conclusion of the operating models based on after-tax cash flows.

5.4 Analysis of Operating Model

5.4.1 Analysis of the Leveraged Lease Model

In the Leveraged Lease Model, the Co-working Operator finances 50% of the fit-out cost by a 10-year amortization loan with 5.5% interest rate (Exhibit 21). The debt holder has the first claim of cash flow and the amount of debt payment is fixed each year regardless of the profitability of

the business. Although such arrangement provides the Co-working Operator a considerable profit when the business works well (Optimistic Scenario), it worsens the situation when the business is under stress (Pessimistic Scenario). For example, at year 5 and year 6, the Co-working Operator will need additional cash, either from the accumulated proceeds of the previous years or from other sources, to pay for the debt as it has negative operating cash flows in those two years.

Exhibit 21 Cash Flows under the Leveraged Lease Model

Year	YR0	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
<u>Financing</u>											
Commercial Loan	872,000										
Scheduled PPMT		67,726	71,451	75,381	79,527	83,901	88,516	93,384	98,520	103,939	109,655
Scheduled IPMT	@5.5% int.	47,960	44,235	40,305	36,159	31,785	27,171	22,302	17,166	11,748	6,031
Repayment											0
Debt Cash Flow	(872,000)	115,686	115,686	115,686	115,686	115,686	115,686	115,686	115,686	115,686	115,686
Debt IRR	5.5%										
NOI Coverage Ratio		1.5 x	3.8 x	5.3 x	3.4 x	-4 x	-1.2 x	1.3 x	5.3 x	6.4 x	8.3 x
PBITCF	(1,754,000)	169,696	439,610	610,259	217,244	(48,893)	(143,183)	154,415	433,365	736,737	5,182,535
Unlevered IRR	22.1%										
EBITCF	(882,000)	54,010	323,923	494,573	101,558	(164,579)	(258,869)	38,728	317,679	621,051	5,066,848
Levered IRR	29.6%										
<u>Tax</u>											
Tax	35%										
Depreciation		139,520	139,520	139,520	139,520	139,520	139,520	139,520	139,520	139,520	139,520
DTS		48,832	48,832	48,832	48,832	48,832	48,832	48,832	48,832	48,832	48,832
ITS		16,786	15,482	14,107	12,656	11,125	9,510	7,806	6,008	4,112	2,111
Tax		(6,224)	89,549	150,652	75,588	(77,069)	(108,456)	(2,593)	157,878	204,914	1,762,944
Tax Paid	-	-	83,325	150,652	75,588	-	-	-	-	174,674	1,762,944
Tax Deferred	-	(6,224)	-	-	-	(77,069)	(185,525)	(188,118)	(30,240)	-	-
EAITCF	(882,000)	54,010	240,599	343,921	25,970	(164,579)	(258,869)	38,728	317,679	446,377	3,303,904
After-Tax Levered IRR	21.7%										

Exhibit 22 Cash Flows under the Tenant Improvement Model

Year	YR0	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
Total Revenue		1,497,600	2,039,040	2,222,899	2,044,890	1,705,515	1,620,239	1,913,667	2,355,918	2,576,999	2,822,288
NOI		169,696	439,610	610,259	391,644	(48,893)	(143,183)	154,415	607,765	736,737	965,589
CapEx		-	-	-	174,400	-	-	-	174,400	-	-
PBITCF	(1,754,000)	169,696	439,610	610,259	217,244	(48,893)	(143,183)	154,415	433,365	736,737	5,182,535
Tenant Improvement @ 50% of Fit-out Cost	872,000										
Mgmt Fee @ 5% of Rev.		74,880	101,952	111,145	102,244	-	-	95,683	117,796	128,850	141,114
Distributable Operating Income		94,816	337,658	499,114	289,400	(48,893)	(143,183)	58,731	489,969	607,887	824,474
Cash Flow to P.O. @ 45% of distributable Operating Income		42,667	151,946	224,601	130,230	-	-	26,429	220,486	273,549	371,013
Total Cash Flow-P.O.	(872,000)	42,667	151,946	224,601	130,230	-	-	26,429	220,486	273,549	371,013
IRR-P.O.	8.3%										
Total Cash Flow-C.O.	(882,000)	127,029	287,664	385,658	87,014	(48,893)	(143,183)	127,985	212,879	463,188	4,811,521
IRR-C.O.	29.7%										
Depreciation @ 12.5%/yr		139,520	139,520	139,520	139,520	139,520	139,520	139,520	139,520	139,520	139,520
Depreciation Tax Shield		48,832	48,832	48,832	48,832	48,832	48,832	48,832	48,832	48,832	48,832
Tax @35%		(4,372)	51,850	86,148	42,663	(65,944)	(98,946)	(4,037)	86,716	113,284	1,635,200
Tax Paid	-	-	47,478	86,148	42,663	-	-	-	-	31,072	1,635,200
Tax Deferred	-	(4,372)	-	-	-	(65,944)	(164,891)	(168,928)	(82,212)	-	-
EAITCF	(882,000)	127,029	240,185	299,509	44,351	(48,893)	(143,183)	127,985	212,879	432,116	3,176,321
After Tax IRR-C.O.	23.9%										

5.4.2 Analysis of the Tenant Improvement Model

Alternatively, the Co-working Operator can finance the upfront cost from the Property Owner. In the Tenant Improvement model, the Property Owner provides 50% of the fit-out cost in exchange for shares of operating profits of the business. The Co-working Operator earns a management fee for its effort in running the space. Exhibit 22 shows the cash flows under the Tenant Improvement Model.

The arrangement specifies that the management fee is the lesser of the net operating profit (positive NOI) or 5% of revenue. The remaining proceeds after the management fee will be split as 45% to the Property Owner and 55% to the Co-working Operator. In the case of operating loss, the co-working operator receives no fees and bears all the loss. The property owner receives profit only when the NOI margin exceeds 5%, otherwise, it neither gains nor loss.

The net operating profit does not include the capital expenditure (CapEx), which is a fixed periodical expense and does not reflect the operational profitability. Such arrangement ensures the Property Owner receive profits when the net operating cash flow is positive. Otherwise, the Co-working Operator may decrease the amount of distributable cash flow by adjusting the amount and timing of CapEx.

Cash Flow Pattern

The Co-working Operator's cash flow is more stable comparing with that under the Leveraged Lease Model. It does not have to put in additional capital to service the investor in the case of operating loss, and only distributes profit when the NOI margin exceeds a specified level. Such arrangement alleviates its financial stress in difficult times, but also reduces the proceeds it can get in the good years. As a result, both its positive and negative cash flows are smaller than that under the Leveraged Lease Model. Exhibit 23-24 shows the comparison of cash flows under the two models.

The Property Owner gains the upside of the business without bearing operating loss. The portion obtained by the Property Owner increases as the profit margin goes up. Exhibit 25 shows each party's cash flow as a percentage of NOI at different profit margins.

Exhibit 23 Operating Cash Flow-Leveraged Lease Model

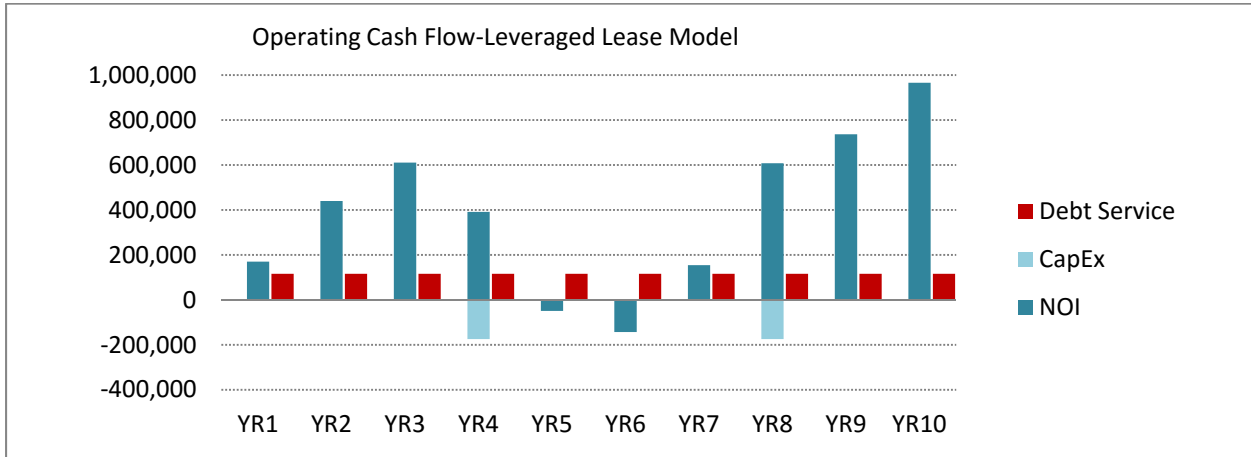


Exhibit 24 Operating Cash Flow-Tenant Improvement Model

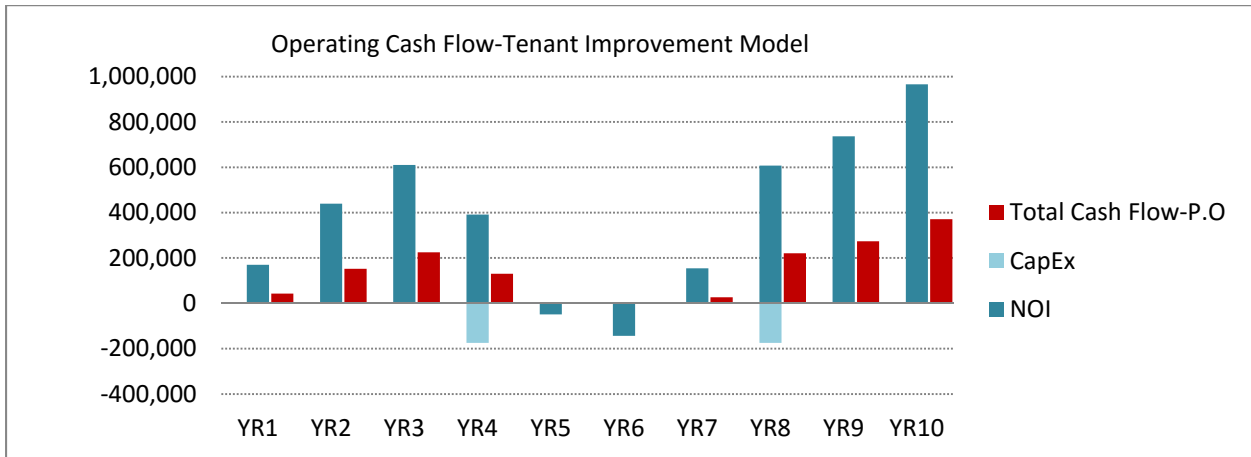
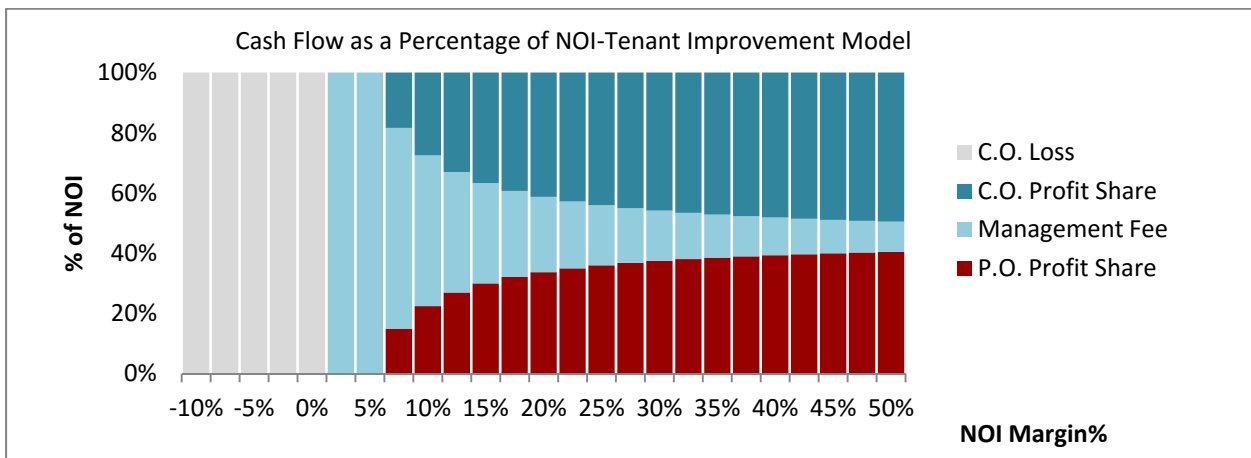


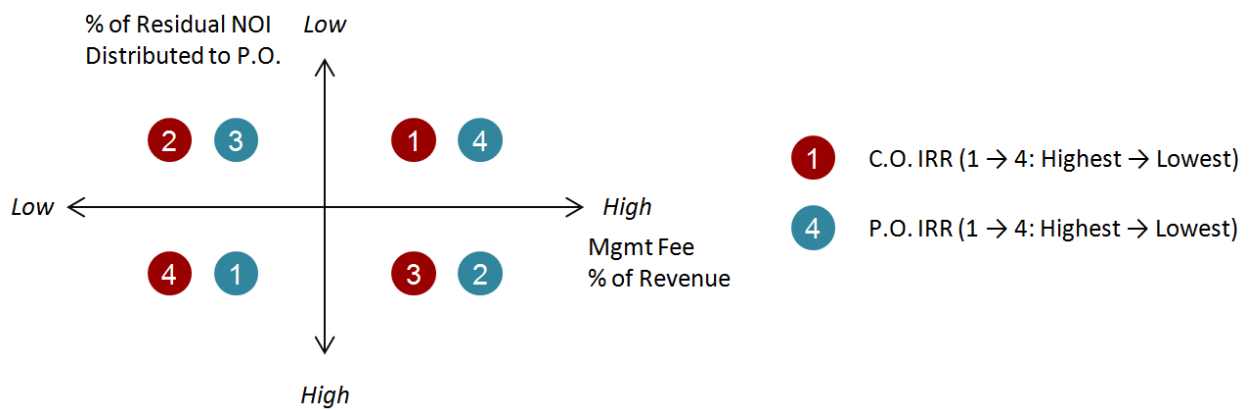
Exhibit 25 Cash Flow as a Percentage of NOI-Tenant Improvement Model



Profit Sharing Arrangement

In the cash flow distribution arrangement, the split of remaining profit outweighs the percentage of management fee on both parties' IRR. That is to say, the Co-working Operator would prefer to lower the percentage management fee and distribute a smaller share to the Property Owner than vice versa. The Property Owner, to the opposite, would prefer to have a larger share of profit while providing a higher percentage management fee than vice versa. Exhibit 26 shows the two parties' preferences of cash flow distribution by ranking their IRR under different arrangements.

Exhibit 26 Preferences of Cash Flow Distribution Arrangement



The Property Owner's IRR is highly sensitive to the changes of cash flow distribution arrangement, while such changes have a small impact on the Co-working Operator's IRR. Exhibit 27 shows the sensitivity of IRR to the change of management fee and remaining profit split. The coefficient of variation¹⁸ (CV) of the Property Owner's and the Co-working Operator's IRR results are 1.70 and 0.05 respectively, indicating that the Property Owner's IRR has a larger variation under different arrangements. Thus, the Co-working Operator will have a larger room in negotiating the cash flow distribution.

¹⁸ Coefficient Variation = Standard Deviation / Mean

Exhibit 27 Sensitivity of IRR to the Cash Flow Distribution—Tenant Improvement Model

IRR-P.O.-Tenant Improvement		<i>Loan Interest-Leveraged Lease</i>					5.5%	←Mgmt Fee % of Revenue
	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%		
25.0%	-1.26%	-2.05%	-2.86%	-3.69%	-4.45%	-5.22%	<i>Mean = 2.39%</i> <i>Std. = 4.06%</i> <i>CV = 1.70</i>	
30.0%	1.47%	0.61%	-0.28%	-1.18%	-2.01%	-2.85%		
35.0%	3.93%	3.00%	2.04%	1.07%	0.17%	-0.74%		
40.0%	6.20%	5.19%	4.17%	3.12%	2.16%	1.18%		
45.0%	8.31%	7.24%	6.14%	5.02%	3.99%	2.96%		
50.0%	10.31%	9.16%	7.99%	6.81%	5.71%	4.61%		
↑ % of Remaining Profit Distributed to P.O.								
IRR-C.O.-Tenant Improvement		<i>IRR-C.O.-Leveraged Lease</i>					29.64%	←Mgmt Fee % of Revenue
	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%		
25.0%	33.76%	34.10%	34.45%	34.79%	35.12%	35.46%	<i>Mean = 32.46%</i> <i>Std. = 1.72%</i> <i>CV = 0.05</i>	
30.0%	32.73%	33.14%	33.55%	33.96%	34.35%	34.75%		
35.0%	31.71%	32.18%	32.65%	33.13%	33.58%	34.04%		
40.0%	30.70%	31.23%	31.76%	32.30%	32.82%	33.33%		
45.0%	29.70%	30.29%	30.88%	31.48%	32.05%	32.63%		
50.0%	28.71%	29.35%	30.00%	30.66%	31.29%	31.93%		
↑ % of Remaining Profit Distributed to P.O.								

Interest Alignment

The Co-working Operator and the Property Owner may have different expectations of the business when entering the Tenant Improvement Agreement. From the Co-working Operator’s perspective, the Tenant Improvement Model provides more downside protection and less upside benefit than the Leveraged Lease Model does. If the Co-working Operator believes the business will continuously run well, it will use debt rather than equity financing to achieve a higher total return. With a more realistic view, Co-working Operator would prefer the Tenant Improvement Model, which provides a similar return in the normal situation but a higher return when the business underperforms expectations in comparing with that of the Leveraged Lease Model.

The Property Owner likes the Tenant Improvement Model only when it has a strong belief in the business. It can receive a considerable profit when the project outperforms expectation but will

either lose or fail to achieve the opportunity cost of capital when the project falls flat.

Exhibit 28-29 shows a numerical example of the changes of IRR under Normal, Worse, and Better Scenarios. The Normal Scenario is the same with the underlying assumptions, a 10-year cycle with a downturn in the 5th and the 6th year. We change the 4th and 7th year from "Neutral" to "Pessimistic" to replicate a Worse Scenario, in which the project's actual performance is below expectation; and change the 5th and 6th year from "Pessimistic" to "Neutral" to replicate a Better Scenario, in which the project's actual performance is beyond expectation.

Exhibit 28 Scenario Assumptions

Scenario	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	Y91	YR10
Normal (Expectation)	O	O	O	N	P	P	N	O	O	O
Worse (Underperform)	O	O	O	P	P	P	P	O	O	O
Better (Outperform)	O	O	O	N	N	N	N	O	O	O

Exhibit 29 Scenario Test for IRR—Tenant Improvement Model vs. Leveraged Lease Model

Scenario	Worse	Normal	Better	Mean	Range	Mean/ Range
<u>IRR-P.O.</u>	(2.62%)	8.31%	17.54%	7.74%	20.15%	0.38
<u>Pre-tax IRR-C.O.</u>						
Tenant Improvement	14.69%	29.70%	38.82%	27.74%	24.13%	1.15
Leveraged Lease	11.19%	29.64%	40.97%	27.27%	29.78%	0.92
Difference	3.50%	0.07%	(2.15%)			
<u>After-tax IRR-C.O.</u>						
Tenant Improvement	10.65%	23.88%	32.25%	22.26%	21.61%	1.03
Leveraged Lease	5.61%	21.73%	32.32%	19.89%	26.71%	0.74
Difference	5.04%	2.15%	-0.07%			

In the Normal Scenario, the Co-working Operator's IRRs under the two Models are very close (29.70% vs. 29.64%). The IRR under the Tenant Improvement Model is higher in the Worse Scenario (14.69% vs. 11.19%) and is lower in the Better Scenario (38.82% vs. 40.97%). The result holds the same with the after-tax IRR in considering the benefit of interest tax shield under the Leveraged Lease Model. The Property Owner's IRR is 8.31% in the Normal Scenario; the

return doubles in the Better Scenario and turns negative in the Worse Scenario.

This result may imply a potential misalignment between the two parties' expectation of the business. The Property Owner enters the Tenant Improvement Model in the belief that the project will go well—if it is really so, however, the Co-working Operator would be more likely to use debt, which provides a higher, though not much, return than equity financing does.

Investment Efficiency

The Property Owner's investment is less efficient than the Co-working Operator's under the Tenant Improvement Model. In the above numerical example (Exhibit 29), we can use the Mean-to-Range Ratio to compare how well each party's investment is maximizing the return received for its volatility. The higher the ratio the more efficient the investment is. The Property Owner has a lower ratio (*0.38 vs. 1.15*), indicating its return does not compensate its risk in comparing with the Co-working Operator's investment. The Co-working Operator has a higher ratio (*1.15 vs. 0.92*), under the Tennant Improvement Model, enhancing its investment efficiency from the Leveraged Lease Model.

Other Concerns

The Property Owner benefits more from the Tenant Improvement Model with a long-term lease than a short one. In this example, if the lease term were 20 years instead of 10 years, the Property Owner would gain a higher IRR as there would be potentially ten more cash flow distributions. Conversely, it might suffer a loss if the Co-working Operator quits the business before the lease expires. To protect its interest, the Property Owner should negotiate for a compensation payment at the premature termination to satisfy a minimum IRR.

Exhibit 30 Cash Flow under the Joint Venture Model

Year	YR0	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
Total Initial Investment	1,754,000										
<i>Preferred Account (P.O.)</i>											
Beginning Equity Balance	-	1,578,600	1,582,550	1,578,600	1,578,600	1,578,600	1,796,250	2,296,348	2,765,765	2,976,921	2,636,634
Annual Investment @90%	1,578,600	-	-	-	-	44,004	128,865	-	-	-	-
Preferred Return Earned @11%		173,646	174,081	173,646	173,646	173,646	197,587	252,598	304,234	327,461	290,030
Preferred Return Paid	-	169,696	174,081	173,646	173,646	-	-	154,415	304,234	327,461	290,030
Payment of Previous Earned	-	-	3,950	-	-	-	-	-	129,131	340,286	-
Accrued Unpaid Return	-	3,950	-	-	-	173,646	371,233	469,417	340,286	-	-
<i>Subordinate Account (C.O.)</i>											
Annual Investment @10%	175,400	-	-	-	-	4,889	14,318	-	-	-	-
<i>Operating PBITCF Allocation</i>											
Operating PBITCF	-	169,696	439,610	610,259	217,244	(48,893)	(143,183)	154,415	433,365	736,737	965,589
Operating PBITCF Paid to P.O.	-	169,696	178,031	173,646	173,646	-	-	154,415	433,365	667,748	290,030
Residual Operating PBITCF	-	-	261,579	436,613	43,598	(48,893)	(143,183)	-	-	68,990	675,559
Allocation to P.O. @50%	-	-	130,790	218,307	21,799	-	-	-	-	34,495	337,779
Allocation to C.O. @50%	-	-	130,790	218,307	21,799	-	-	-	-	34,495	337,779
<i>Reversion PBITCF Allocation</i>											
Reversion PBITCF	-	-	-	-	-	-	-	-	-	-	4,216,946
Allocation to Satisfy P.O.'s Return Requirement	-	-	-	-	-	-	-	-	-	-	2,636,634
Return of C.O.'s equity	-	-	-	-	-	-	-	-	-	-	194,608
Residual Reversion PBITCF	-	-	-	-	-	-	-	-	-	-	1,385,704

<hr/>											
Allocation to P.O. @50%											692,852
Allocation to C.O. @50%											692,852
<hr/>											
Total Cash Flow-P.O.	(1,578,600)	169,696	308,820	391,953	195,445	(44,004)	(128,865)	154,415	433,365	702,243	3,957,296
<i>IRR-P.O.</i>	<i>19.5%</i>										
Total Cash Flow-C.O.	(175,400)	-	130,790	218,307	21,799	(4,889)	(14,318)	-	-	34,495	1,225,239
<i>IRR-C.O.</i>	<i>43.3%</i>										
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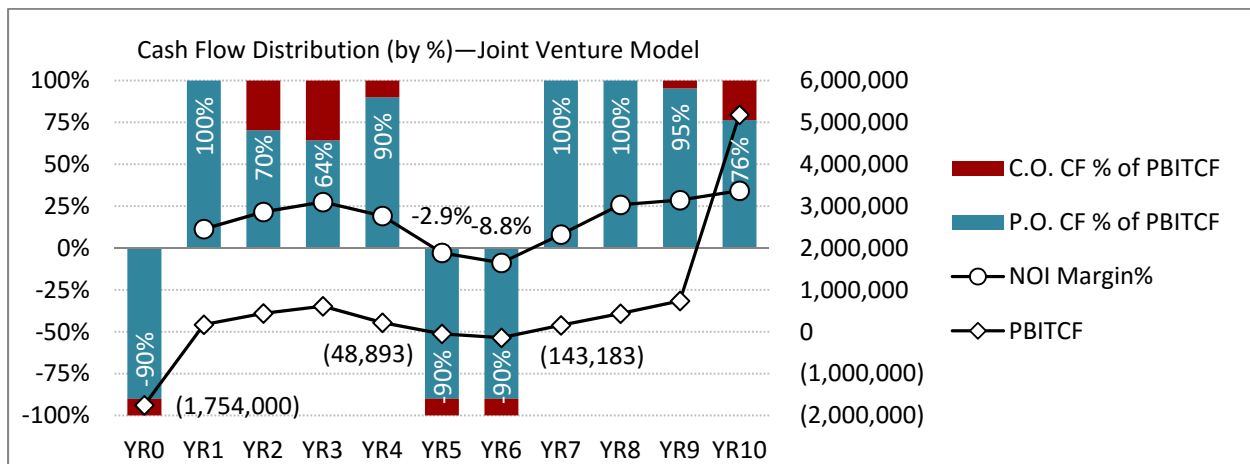
5.4.3 Analysis of the Joint Venture Model

In the Joint Venture Model, the Property Owner contributes 90% of the total investment, while the Co-working Operator contributes the rest and has operational management control of the project. The Joint Venture Agreement between the two partners specifies that the Property Owner receives an annual preferred return of 11%, with any unpaid current return accumulating forward with annual compounding. Any positive net cash flow from the project will go first to provide the Property owner’s preferred return, with any extra operating cash flow after that being split 50/50 between the two partners. The reversion cash flow will go first to provide the Property Owner’s 11% preferred return; any remaining reversion available cash after that will go first to pay back the Co-working Operator’s capital contribution and next will be split 50/50 between the two partners.

Cash Flow Pattern

Exhibit 31 shows the cash flow distribution as a percentage of total cash flow. In the case of net profit, the proceeds received by the Co-working Operator fluctuates more than its partner's, because it is subordinate to the Property Owner's preferred return and is disproportionate to its capital contribution. In the case of operating loss, the two partners will always bear on a 90/10 base¹⁹.

Exhibit 31 Cash Flow Distribution (by %)—Joint Venture Model



¹⁹ In this joint venture structure, we didn’t include the “clawback” provision, which requires the operating partner to pay back part of its carried interests earned previously to the investing partner in the case that the current NOI fails to meet a predetermined level. The clawback provision would make the Co-working Operator’s position riskier, as it has both upside promotion and downside punishment. But the Co-working Operator can also negotiate for a higher portion of remaining cash flow or a lower hurdle rate to adjust the risk to match with the expected return.

Waterfall Structure

The change of waterfall structure has a larger impact on the Co-working Operator's IRR than on the Property Owner's IRR. Exhibit 32 shows the sensitivity of IRR to the changes of hurdle rate and remaining cash flow distribution arrangement. The Co-working Operator's IRR is more sensitive as its coefficient of variation is higher than that of the Property Owner's IRR (0.76 vs. 0.08). This result implies that the Property Owner will have a larger room in negotiating the waterfall structure.

Regardless of the remaining cash flow distribution, the Co-working Operator's IRR drops significantly when the hurdle rate exceeds 14%, while the Property Owner's IRR has subtle changes. When hurdle rate is below 14%, the hurdle rate and the split of remaining cash flow will have equal weights in affecting the Co-working Operator's IRR.

Interest Alignment

The return-hurdle-with-promote joint venture arrangement well balances risk and return for both partners. The Co-working Operator has a riskier position in the cash flow distribution arrangement as it can only receive proceeds after the Property Owner's hurdle is met. But that risk is compensated by the promote return in the split of the remaining cash flow. The Property Owner's position is more stable as it has the first claim of proceeds. Accordingly, its expected return is lower than its partner's. In the case of forced liquidation, the Co-working Operator, who has only a small initial disbursement and a relatively smaller exposure to the business, is subordinate to the Property Owner in getting back its equity. We conduct the scenario test (as described in the Tenant Improvement Model) for the two partners' IRR and find their IRR's mean-to-range ratios are very close (1.12 vs. 1.09, Exhibit 33). This result indicates that the two partners' returns are proportional to their risks.

The Joint Venture Model also well aligns the two partners' interests. Both partners' IRR increase when the business outperforms expectation and decrease in the opposite scenario, while the Co-working Operator's IRR has a wider movement in both directions.

Exhibit 32 Sensitivity of IRR to the Waterfall Structure—Joint Venture Model

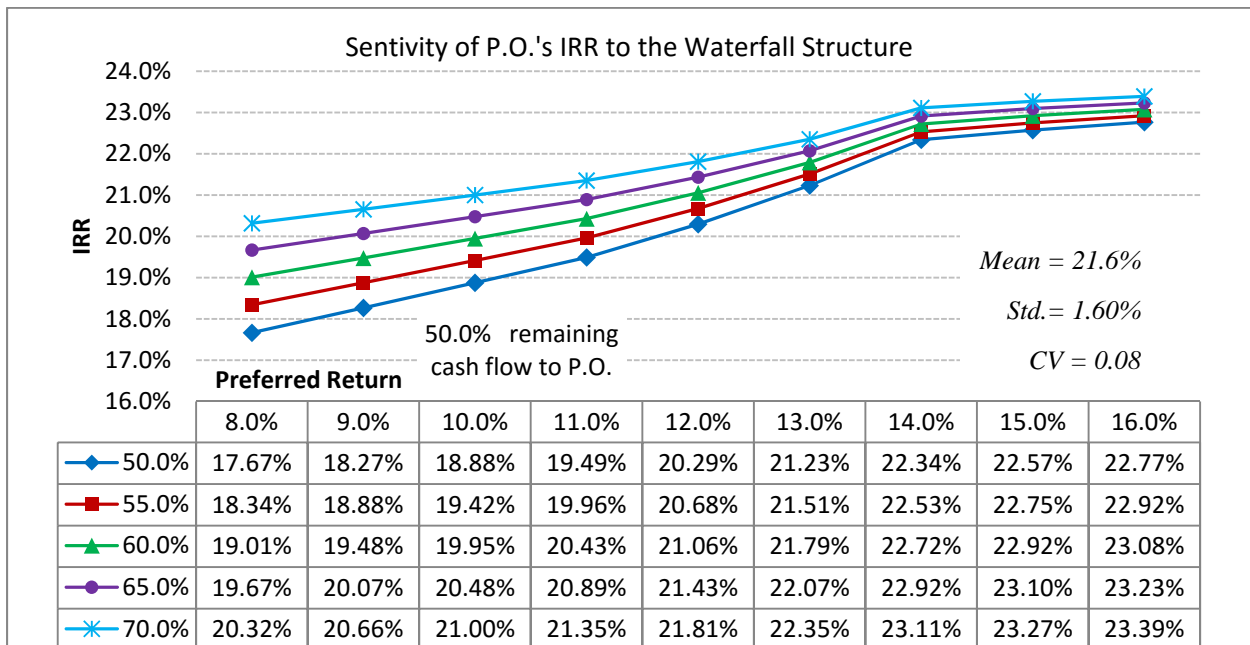
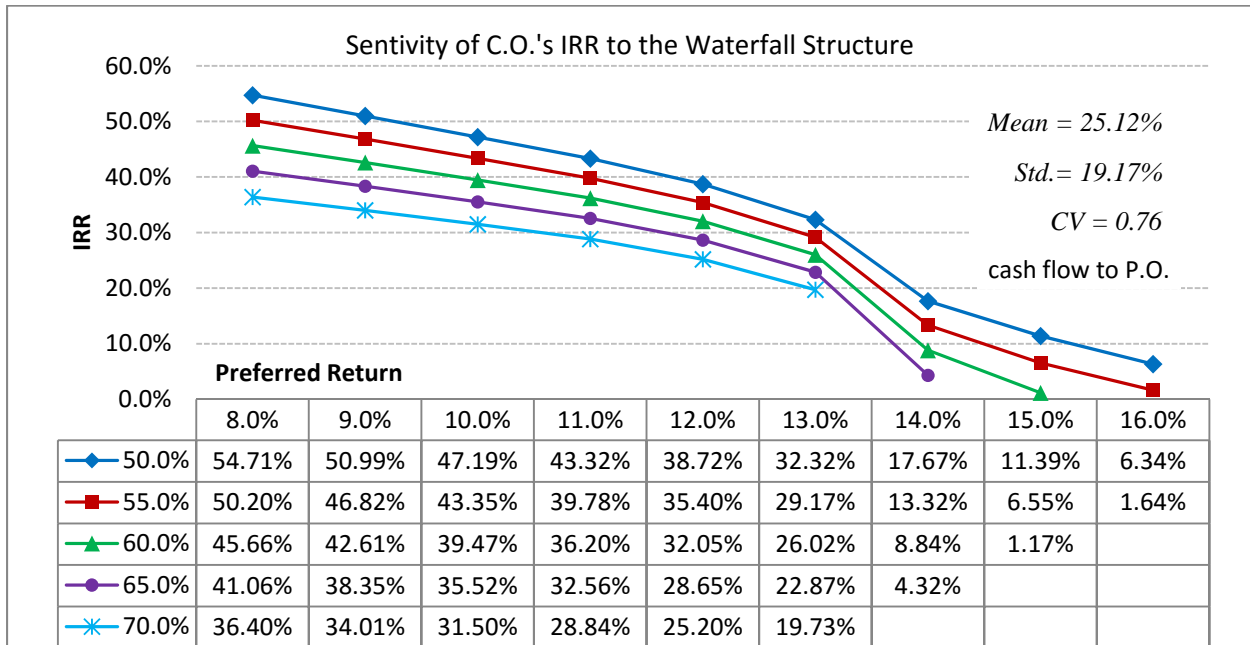


Exhibit 33 Scenario Test for IRR—Joint Venture Model

Scenario	Worse	Normal	Better	Mean	Range	Mean/ Range
<u>IRR-P.O.</u>	8.93%	19.49%	24.66%	17.70%	15.73%	1.12
<u>IRR-C.O.</u>	21.93%	43.32%	60.31%	41.85%	38.38%	1.09

Exhibit 34 Cash Flow Distribution under the Management Model

Year	YR0	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
Total Revenue	-	1,497,600	2,039,040	2,222,899	2,044,890	1,705,515	1,620,239	1,913,667	2,355,918	2,576,999	2,822,288
NOI	-	169,696	439,610	610,259	391,644	(48,893)	(143,183)	154,415	607,765	736,737	965,589
CapEx	-	-	-	-	174,400	-	-	-	174,400	-	-
Operating PBITCF	-	169,696	439,610	610,259	217,244	(48,893)	(143,183)	154,415	433,365	736,737	965,589
Initial Investment	1,754,000										
C.O. Initial Investment @ 10%	(175,400)										
Mgmt Fee @ % of Rev.		59,904	81,562	88,916	81,796	-	-	76,547	94,237	103,080	112,892
Distributable Operating PBITCF	-	109,792	358,048	521,343	135,449	(48,893)	(143,183)	77,868	339,128	633,657	852,697
<i>Preferred Account (P.O.)</i>											
Beginning Equity Balance		1,578,600	1,642,454	1,578,600	1,578,600	1,616,797	1,881,735	2,447,955	3,062,398	3,672,312	3,825,084
Annual Investment @ 90%	(1,578,600)	-	-	-	-	(48,893)	(143,183)	-	-	-	-
Preferred Return Earned @ 11%	-	173,646	180,670	173,646	173,646	177,848	206,991	269,275	336,864	403,954	420,759
Preferred Return Paid	-	109,792	180,670	173,646	135,449	-	-	77,868	336,864	403,954	420,759
Payment of Previous Earned	-	-	63,854	-	-	-	-	-	2,264	229,703	382,476
Accrued Unpaid Return	-	63,854	-	-	38,197	216,045	423,036	614,443	612,179	382,476	-
<i>Operating PBITCF Allocation</i>											
Operating PBITCF-P.O.											
Preferred Return	-	109,792	244,524	173,646	135,449	-	-	77,868	339,128	633,657	803,235
Residual Operating PBITCF	-	-	113,524	347,697	-	(48,893)	(143,183)	-	-	-	49,462
Allocation to P.O. @ 80%	-	-	102,172	312,927	-	-	-	-	-	-	44,516

Allocation to C.O. @20%	-	-	11,352	34,770	-	-	-	-	-	-	4,946
<hr/>											
<i>Reversion PBITCF Allocation</i>											
Reversion PBITCF	-	-	-	-	-	-	-	-	-	-	4,216,946
Allocation to Satisfy P.O.'s Return Requirement	-	-	-	-	-	-	-	-	-	-	3,825,084
Return of C.O.'s equity	-	-	-	-	-	-	-	-	-	-	175,400
Residual Reversion PBITCF	-	-	-	-	-	-	-	-	-	-	216,462
Allocation to P.O. @100%											216,462
Allocation to C.O. @0%											-
<hr/>											
Total Cash Flow-P.O.	(1,578,600)	109,792	346,696	486,573	135,449	(48,893)	(143,183)	77,868	339,128	633,657	4,889,297
<i>IRR-P.O.</i>	20.5%										
Total Cash Flow-C.O.	(175,400)	59,904	92,914	123,686	81,796	-	-	76,547	94,237	103,080	293,238
<i>IRR-C.O.</i>	42.4%										
<hr/>											

5.4.4 Analysis of the Management Model

In the Management Model, the Property Owner owns the project and contributes 90% of the initial capital and 100% of the subsequent investment. The Co-working Operator invests the rest of the initial capital and provides operational management to the project. The Management Agreement between the two parties specifies that the Co-working Operator receives an annual management fee composed of a base management fee, which is the lesser of 4% of the revenues or the net operating profit (positive NOI), and an incentive management fee, which is calculated as a percentage of the remaining cash flow after the Property Owner's return hurdle is met. The Co-working Operator will not earn a management fee in the case of an operating loss.

The net cash flow after management fee will be distributed following a rate-hurdle-and-promote arrangement. It specifies that the Property Owner receives an annual preferred return of 11%, with any current unpaid return accumulating forward with annual compounding. Any positive net cash flow after management fee will go first to provide the Property owner's preferred return, with any extra operating cash flow after that split be 80/20 between the Property Owner and the Co-working Operator. The reversion cash flow will first satisfy the Property Owner's 11% preferred return, and then pay back the Co-working Operator's equity. Any remaining reversion cash will be obtained by the Property Owner.

The Co-working Operator is responsible for purchasing supplies as well as hiring, training, and supervising the managers and employees of the project. Also, the Co-working Operator provides centralized online membership service system, and advertising, marketing, and promotion services as well as various accounting and data processing services. The Property Owner is required to reimburse those costs.

Cash Flow Pattern

Exhibit 35-36 shows the cash flow distribution under the Management Model. The Co-working Operator's cash flow is much safer under the Management Model than under the Joint Venture Model. It does not bear the operating loss but has the first claim of any project proceeds.

The Property Owner's share of operating profit is smaller under the Management Model than under the Joint Venture Model in general. Despite the same hurdle and a more favorable split of remaining cash flow, the Property Owner's return has to go after the payment of the base management fee, which also reduces the amount of remaining cash flow. Its share of the reversion cash flow is larger than that under the Joint Venture Model, as the Co-working Operator receives no more than the amount of its initial contribution.

Exhibit 35 Operating Cash Flow--Management Model

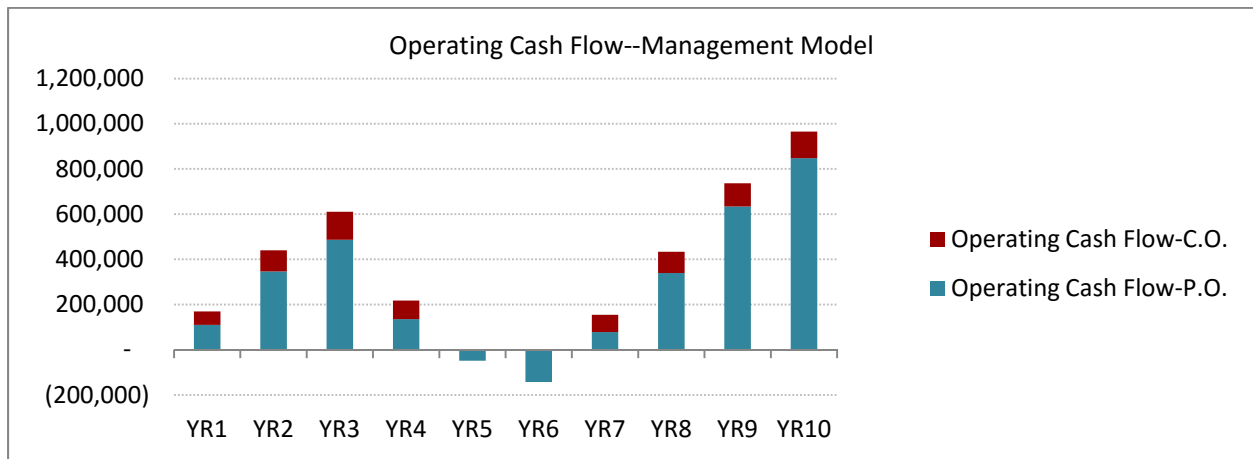
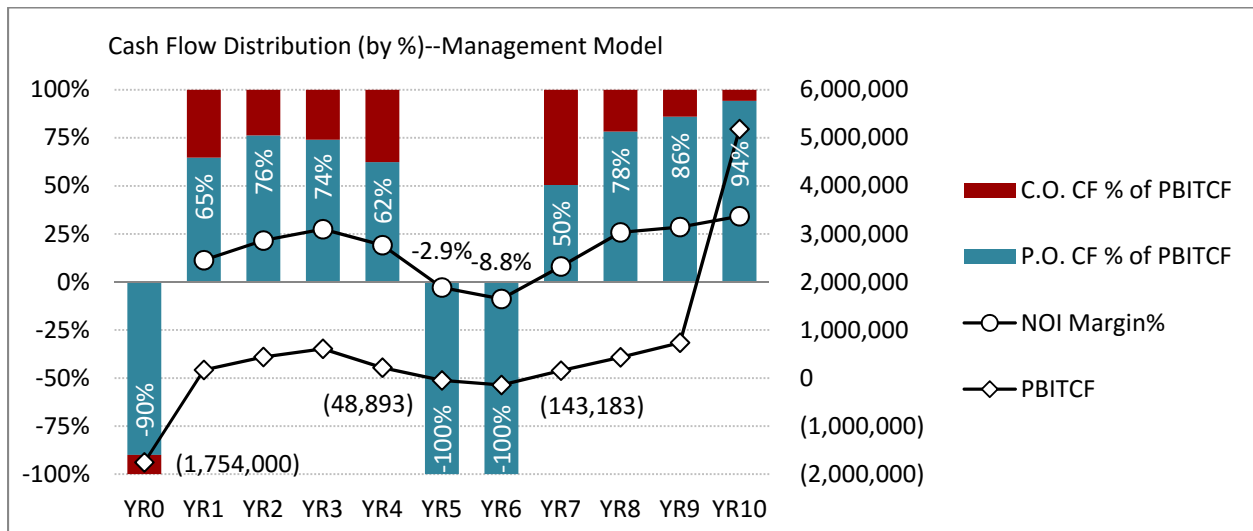


Exhibit 36 Cash Flow Distribution (by %)--Management Model



Cash Flow Distribution Arrangement

There are three factors in structuring the cash flow distribution: the base management fee, the preferred return, and the split of the remaining cash flow. We conduct sensitivity analyses of

each party's IRR to the changes of the three factors. The coefficient variation of each party's IRR under the three groups of sensitivity analysis is shown in Exhibit 37.

The results indicate that the Co-working Operator's IRR is more sensitive to the change of the cash flow distribution structure than the Property Owner's IRR, as the coefficient variation of its IRR results is slightly larger in all three groups.

The three factors' impact on IRR is decreasing in order. The two parties' IRR results have the smallest coefficient variation in Group 2 (at a fixed management fee), and the largest coefficient variation in Group 1 (at a fixed split of remaining cash flow). This result indicates that the base management fee has the most significant impact on IRR while the split of remaining cash flow has the least.

Exhibit 37 Sensitivity of IRR to the Cash Flow Distribution—Management Model

Sensitivity Analysis	Group 1		Group 2		Group 3	
Base management fee	2.0%-7.0%		[4%]		2.0%-7.0%	
preferred return	8.0%-16.0%		0%-16.0%		[11%]	
Remaining cash flow	[80% (to the P.O.)]		50%-100% (to the P.O.)		50%-100% (to the P.O.)	
<i><u>IRR</u></i>	<i><u>P.O.</u></i>	<i><u>C.O.</u></i>	<i><u>P.O.</u></i>	<i><u>C.O.</u></i>	<i><u>P.O.</u></i>	<i><u>C.O.</u></i>
<i>Mean</i>	20.35%	45.72%	20.22%	47.32%	19.84%	53.19%
<i>Std.</i>	1.22%	16.28%	0.78%	8.90%	1.09	15.42%
<i>Coefficient Variation</i>	0.06	0.36	0.04	0.19	0.05	0.29

Scenario Test

Exhibit 38 shows the result of scenario test for IRR under the Management Model. Both parties' IRR react in the same direction to the change of situation.

Compared to the results of the Joint Venture Model, the range of the Co-working Operator's IRR is much narrower under the Management Model due to a smaller decrease of IRR in the Worse Scenario. In the Better Scenario, the IRRs under the two models are very close. Despite a smaller promote, the Co-working Operator can also enjoy the business upside from the base management fee, which is proportional to the total revenue. The mean to range ratio of IRR increases from 1.09 to 2.33, indicating the Co-working Operator's investment efficiency is enhanced under the Management Model. In the Normal Scenario, the Management Model has a higher IRR but a

smaller cash multiple²⁰. This result indicates the total proceeds generated by per dollar investment are lower in the Management Model, but the cash flows are more evenly distributed in each year, and thus achieves a higher total return.

In comparison with the results under the Joint Venture Model, the range of the Property Owner's IRR expands (20.78% vs. 15.73%) due to a greater increase of IRR in the Better Scenario. As the Property Owner takes a larger share of the remaining cash flow (80% vs. 50%), it has more upside benefit under the Management Model. In the Worse Scenario, the Property Owner's IRR is slightly lower under the Management Model. Although it needs to bear 100% of the operating loss, the capital contribution increases only 10% from that under the Joint Venture Model (100% vs. 90%) and thus has a limited impact on the total return. In the Normal Scenario, the Property Owner's IRRs under the two Models are very close. So do the mean to range ratios.

In summary, the Co-working Operator enjoys both downside protection and upside benefit of the business; its investment efficiency is significantly enhanced. The Property Owner enjoys a higher upside benefit while exposed to a larger downside risk. But the changes of return in both directions are limited. Its investment efficiency is slightly reduced. The results indicate that with the same amount of initial investment²¹, the Co-working Operator would be more willing to choose the Management Model, while the Property Owner would prefer to the Joint Venture Model.

Exhibit 38 Scenario Test for IRR—Management Model vs. Joint Venture Model

Scenario	Worse	Normal	Better	Mean	Range	Mean/ Range
<u><i>IRR-P.O.</i></u>						
Management Model	7.40%	20.19%	28.18%	18.59%	20.78%	0.89
Joint Venture Model	8.93%	19.49%	24.66%	17.70%	15.73%	1.12
<u><i>IRR-C.O.</i></u>						
Management Model	37.29%	47.01%	57.56%	47.29%	20.27%	2.33
Joint Venture Model	21.93%	43.32%	60.31%	41.85%	38.38%	1.09

²⁰ Cash multiple is the ratio of the sum of all positive cash flows to the absolute value of the sum of all negative cash flows. It represents how many dollars the investor can get for one dollar he invests regardless of timing.

²¹ Investment decision also depends on the investor's capital constraints. In the absence of alternative investment opportunity, the investor would rather have a larger initial disbursement in the project to get a lower IRR but a larger NPV than the opposite.

Interest Alignment

The Management Model is commonly seen in the hotel industry, in which the hotel management company usually does not contribute capital to the hotel project. In this example, the Co-working Operator is required to contribute 10% of the initial investment to align its interest with the project. Its IRR will increase significantly as we reduce the percentage of capital contribution. However, in that case IRR would not be a meaningful indicator.

With less capital invested in the project, the Co-working Operator has transformed its core business to management service. The proceeds it receives from the project is more like a professional service fee than an investment return. It contributes intangible assets (brand and member network) rather than financial capital in the project. The costs and risks correlated with the development of those intangible assets are not reflected in the project-level cash flows.

5.4.5 Analysis of the Franchise Model

In the Franchise Model, the Property Owner, as the franchisee, invests, owns and operates the projects. It pays the Co-working Operator, the franchisor, an upfront application fee and annual royalty fees (as a percentage of total revenue) to use its brand, management system, and member network. The Co-working Operator owns the brand, and provides training and consulting services to the project. It also conducts centralized advertising, marketing, and promotion services for the space. The Property Owner is required to reimburse those costs.

Both parties' business positions have changed under the Franchise Model. From the Co-working Operator's perspective, there are many commonalities between the Management Model and the Franchise Model regarding selling intangibles. The difference is that the Co-working Operator no longer participates in the business operation as a franchisor. Its business model becomes lighter and focuses more on brand management. The Property Owner's business position has completely changed from passive investment to active management. Financial factors may not be the primary consideration in making this switch.

As discussed in the Management Model, IRR is not a meaningful indicator for the Co-working Operator because it provides intangibles rather than capital under the Franchise Model. In this example, the Property Owner's IRR would be lower than that under the Management Model because the effect of the increased upfront cost outweighs that of the increased subsequent

profits. However, it is not appropriate to use the same project level cash flow, because the franchisee's operating performance varies from that of the Co-working Operator and will result in different cash flows.

5.5 Comparison and Conclusion

Exhibit 39-40 shows the IRR and the cash multiple for both the Co-working Operator and the Property Owner under different operating models.

Exhibit 39 Co-working Operator's IRR and Multiple Comparison

Models	Business	Worse	Normal	Better	Mean	Range	Mean/Range
Lease Model (Project)	Investment & Management	9.29%	22.14%	30.82%	20.75%	21.53%	0.96
		<i>1.63</i>	<i>4.08</i>	<i>7.32</i>			
Lease Model (Levered)	Investment & Management	11.19%	29.64%	40.97%	27.27%	29.78%	0.92
		<i>1.61</i>	<i>5.38</i>	<i>13.24</i>			
Tenant Improvement Model	Investment & Management	14.69%	29.70%	38.82%	27.74%	24.13%	1.15
		<i>1.99</i>	<i>6.05</i>	<i>11.70</i>			
Joint Venture Model	Investment & Management	21.93%	43.32%	60.31%	41.85%	38.38%	1.09
		<i>1.26</i>	<i>8.38</i>	<i>27.64</i>			
Management Model	Management Service	37.29%	47.01%	57.56%	47.29%	20.27%	2.33
		<i>3.32</i>	<i>5.57</i>	<i>10.65</i>			
Franchise Model	Brand Franchising	-	-	-	-	-	-
		-	-	-	-	-	-

The Co-working Operator's asset becomes lighter from the Lease Model to the Franchise Model. By utilizing the Property Owner's capital, it can grow faster without raising million-dollar funds and spread its brand more efficiently through providing management service and brand franchising.

In the Lease and the Tenant Improvement Model, the Co-working Operator's business involves both investment and management. To leverage the business, it can either use debt or the Property Owner's equity. While using debt provides a higher return when business goes beyond expectations, a favorable tenant improvement arrangement will provide more downside protection when business fails to meet expectation.

The Co-working Operator further leverages its investment in the Joint Venture Model and the Management Model by having a small stake and taking operational control of the business. While the Joint Venture Model provides slightly higher upside benefit when the project outperforms expectation, the Management Model can significantly reduce the downside risk in an adverse business situation and thus improve the efficiency of investment.

The Co-working Operator's IRR increases significantly with the enhancement of leverage. However, the higher IRR is based on a smaller initial investment. It is a better approach if there are a large number of projects that the Co-working Operator can spread its capital base in small batches in a highly levered way. Otherwise, it would be better to invest the capital in a more concentrated way to get a lower IRR but a higher amount of total return.

Without contributing capital, the Co-working Operator transforms its business focus from investment and management to management service and brand franchising. In the pure Management Model and the Franchise Model, IRR is no longer a meaningful indicator because it only measures the return of financial capital without taking into consideration the involvement of intangible assets.

Exhibit 40 Property Owner's IRR and Multiple Comparison²²

Models	Business	Worse	Normal	Better	Mean	Range	Mean/Range
Tenant Improvement Model	Investment	-2.62%	8.31%	17.54%	7.74%	20.15%	0.38
		<i>0.86</i>	<i>1.65</i>	<i>2.88</i>			
Joint Venture Model	Investment	8.93%	19.49%	24.66%	17.70%	15.73%	1.12
		<i>1.67</i>	<i>3.60</i>	<i>5.06</i>			
Management Model	Investment	7.40%	20.19%	28.18%	18.59%	20.78%	0.89
		<i>1.51</i>	<i>3.93</i>	<i>6.95</i>			
Franchise Model	Investment & Management	-	-	-	-	-	-
		-	-	-	-	-	-

The Property Owner gets deeper involvement in the co-working business from the Tenant Improvement Model to the Franchise Model. In the discussed example, the Tennant

²² The Property Owner's IRR and Multiple only measure its investment in the co-working business; they do not reflect the return of its original real estate investment. Rent and the co-working space's revenue are two independent cash flows in this example.

Improvement Model can provide the Property Owner a significant return when the project runs really well. However, in most cases, it may only earn a return at the cost of capital, or cannot even get back its initial investment. Without a realistic understanding of the business, the Property Owner may be misled by the optimistic prospective of the business.

The Property Owner gets larger exposure to the co-working business in the Joint Venture and the Management Models by contributing a majority of capital. While the expected returns under these two Models are very close, the Joint Venture Model can better align the managing partner/manager's interest with the business performance and thus reduce its investment risk.

In the Franchise Model, the Property Owner's position completely changes from passive investment to active management. Rather than purely pursuing a higher investment reward, taking a hands-on role in the business and keeping the independence of operations are important considerations in choosing the Franchise Model. Compared with starting a co-working business from scratch, the Franchise Model can reduce the Property Owner's business risk by using proven operational methods, and leveraging the brand influence as well as the established member network.

In summary, for the Co-working Operator, the transformation from the Lease Model to the Management and Franchise Model requires a strong brand, a proven track record, and an established member network. For the Property Owner, such transformation depends on its willingness of getting exposed to the co-working business, as well as its capital cost, risk tolerance, and investment horizon.

For Co-working Operators that want to spread their brand, seize market share, or enter a new market, and for the Property Owners that want to become involved in but not have a hands-on role in the co-working business, the Joint Venture Model will be the optimal choice. For the more mature Co-working Operators that have strong brand influence and want to focus on their core business, the Management Model will be the best option.

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