ChuangChao Investment – Investigation of the WeWork Format's Feasibility in Hangzhou

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Abstract

The sponsor of this project, ChuangChao Investment, looks to provide Hangzhou's growing startup community with a coworking/incubator space that surpasses any competition, including the popular coworking format called WeWork. By first identifying how WeWork functions in the United States and China we then compare our sponsor's format to WeWork's format, and multitude of other formats in the Hangzhou area. The data from our interviews, visits, and analyses leads us to recommendations to improve our sponsor's format. Additionally, some recommendations may be used to benefit other formats in Hangzhou's Xiasha District.

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Executive Summary

Driven by the startup community – many regard Hangzhou, China as the nation's center for tech and entrepreneurship. Literature states that, Hangzhou houses 3.4 times as many successful entrepreneurs than Shanghai per capita with regards to the entire Zhejiang province (Jeffries, 2010) and has the highest disposable income of any province in China. The scale and continuous growth of entrepreneurship leads to the problem of not having enough affordable space, as well as professional services and advising. Thus, both the private and public sector step in to fill the void. The main focus of this report is on the improvement of the private sector since our sponsor ChuangChao Investment is a part of it. However, we still observe nonprofit and government run companies to make a further comparison.

Each company that services startups has three options to capitalize on, as startups typically follow a three stage development process. Startups begin at the coworking stage, move to the incubation process, and lastly transition to the accelerator phase. A coworking space is a collaborative environment where entrepreneurs either look for future business partners or share ideas with other entrepreneurs while they work on building their company's foundation. Startups typically do not spend more than a year at this stage. The incubation process lasts about three to five years and focuses on advising the early stages of a startup so they form properly, gain traction, and eventually turn a profit. The accelerator phase concentrates more on company expansion, entering new markets, and even the initial public offering (IPO) process. When the company is profitable they typically give up a percentage of their profit or company for the advising services.

Having both the public sector and private sector fill this void, leads to an excess of format space and stiff competition. ChuangChao Investment, now faces their first problem of how to grow their business correctly. Our sponsor plans to develop an incubation process to increase their growth. Commonly, the incubation process is more profitable than a coworking space since startups stay longer and also require services in addition to private offices rather than a just a place to work. Additionally, ChuangChao plans to adopt components of a successful format, named WeWork, to further increase their profit. However, this leads to the second problem which is to ensure that WeWork's format is compatible with Chinese culture.

Project Goals and Objectives

We assess ChuangChao, WeWork, and other competitors to determine what features ChuangChao should adopt. In order to meet our project goals, we develop the following research objectives:

- 1. Analyze the structure and functionality of WeWork (in both the United States and China).
- 2. Assess the compatibility of the WeWork format with Hangzhou's startups.
- 3. Identify the benefits and challenges ChuangChao encounters from switching to the WeWork or other competitor's formats.

To analyze the structure and functionality of WeWork in the United States, we research WeWork online to collect data on their membership rates, space layout, services and amenities. For the WeWork in China, we analyze the oldest and most established site and conduct an interview with the manager of that location. From this interview, we gain an understanding of how WeWork in China correlates with WeWork in the United States.

To assess the compatibility of the WeWork format with ChuangChao and other Hangzhou formats we visit nine companies, including ChuangChao, and interview either their CEO's or managers. The companies contain a mixture of incubators, accelerators, and coworking spaces since ChuangChao wants to find what combination is optimal. From our interviews we determine each company's services, layout of space, client base, membership rates, and means of funding. This information allows us to determine what each format values as well as what their clients (startups) value when choosing a format. To further analyze each format we also include data from our three interviews with formats from the United States.

We use a Quality Function Deployment (QFD) analysis to identify what benefits and challenges ChuangChao has in switching to the WeWork format. The QFD factors the correlation between each value we input and provides a rank of importance for each value. The QFD also determines where ChuangChao is behind and ahead of the competition. A QFD is done from our sponsor's perspective, as well as the startup's perspective. From these ranked values we identify the benefits and challenges that ChuangChao might have in making the change.

Findings

Through analysis of our interviews, tours, and online research, we determine the following findings concerning WeWork's format, how they operate across culture, and how they might succeed in Hangzhou. From further assessment, we also determine findings relating to ChuangChao Investment, including what they should or should not adopt from the WeWork format. Additionally we determine how ChuangChao compares to the local competition with regards the features each offer. The following contains all of our findings with respect to each of our objectives:

- 1. Analyze the structure and functionality of WeWork (in both the United States and China). We find that the WeWork in the United States and China are exactly the same except for a few aesthetic fixtures in the space itself. WeWork internationally runs on a 90% private office, 10% collaborative space format. They also offer the same basic services and only provide recommendations for third party companies regarding advanced services.
 - 2. Assess the compatibility of the WeWork format with Hangzhou's startups.

We find that WeWork is successful in Shanghai, and would be able to integrate effectively with Hangzhou's startup community. First Shanghai and Hangzhou have little cultural differences. Second, we find that WeWork has the highest growth rate and largest client base regarding any format we analyze in China. WeWork is currently adding at least one or more spaces per year in China.

3. Identify the benefits and challenges ChuangChao encounters from switching to the WeWork or other competitor's formats.

Our QFD analysis shows that the following are WeWork's most beneficial features: upfront cost, privacy, and shared amenities. Our QFD analysis also shows that ChuangChao Investment is currently behind the market in one key area, startup collaboration. Startup collaboration means the sharing of ideas and opinions between different startups, commonly seen in the early stages of startups. The QFD also shows that ChuangChao is ahead in providing startups with privacy and services and focusing on their target population. We also find the

following features are beneficial for the relevant formats in Hangzhou to focus on: all-inclusive services, privacy, investment acquisition, project quality, and industry experts.

We find that coworking varies little between the United States and China, yet incubators do. In the United States, incubator formats focus on private investment as a large part of the incubation process and are often not concerned with providing physical space at all. However, in China they concentrate on providing basic services and a physical space.

Recommendations

These recommendations relate directly to important features for formats in Hangzhou's Xiasha District that we determine through our methods of data collection and analysis. We recommend that ChuangChao includes more shared amenities and collaborative space features from WeWork's format. For shared amenities we recommend private phone booths, varying size conference rooms, and a full printing station. For collaborative space, we recommend a café area and a social area containing booths and open tables. We suggest that the café area should be entirely free or pay by donation.

Factoring in the QFD rankings above, we recommend that ChuangChao does the following: keep charging upfront for all-inclusive services, emphasize privacy through the use of private offices, focus on investment acquisition, shift focus away from industry experts, and retain selectiveness regarding project quality and target population.

Regarding focus on investment acquisition we also recommend including general private investment plans. We find that startups in the United States require a lot of capital investments to grow and in China private investment options are limited. We recommend ChuangChao looks into different forms of private investing including an angel investor format ("Angel Investor" n.d.) and a venture capital format ("Venture Capital" n.d.), which are two of the most common types. Due to the lack of investments in China there is a large market that can also be capitalized on by the private sector.

We hope that these recommendations help ChuangChao to grow into a well-known and successful format. Between our recommendations and the Excel file containing all of our research and analyses, we hope to make ChuangChao's growth easier, while also providing any future projects with a means for data collection and analysis. Going forward, our sponsor can continue to

study the startup community through our means of analysis and tailor his business to fit his client's needs.

While we were able to analyze and visit a handful of locations in the United States, we acknowledge that future projects may want to focus on this topic more. These recommendations ideally can also help to develop the startup community in Hangzhou's Xiasha District. Due to the recent G20 Summit in Hangzhou and new Government incentives to help startups, now is a perfect time for formats to develop and prosper by identifying what features and values startups desire. Our work is a step in the direction of developing a thriving startup community in Hangzhou.

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1. Introduction

In the developing world of startups, innovation is a key factor for success. Innovation, however, is limited by an individual's thinking and experience. This limitation is often the byproduct of entrepreneurs who may not have the same access to social networks which span across different business departments/specializations as large corporations do. One way to even the playing field is the utilization of coworking spaces and other similar formats such as incubators and accelerators. The idea behind these spaces is not only to offer office space and amenities at an affordable price, but also to offer a collaborative culture where the clients can work with one another to help each other's businesses. The coworking environment allows for the spread of new ideas and constructive criticism between all members of the space, thus giving startups access to new innovations and ideas that they would not have on their own (Gandini, 2015).

Throughout the world, startups increasingly utilize coworking spaces as low cost, reliable, and effective options for developing their businesses (Gandini, 2015). Coworking spaces are locations which contain open work space, allowing for multiple startups to collaborate. However, as the startups develop, they tend to seek professional help from formats other than coworking spaces. Incubators and accelerators specialize in providing services that help guide startups to success. Incubators, specifically, focus more on providing established startups with services that cover a wide variety of business aspects which may include legal advice, marketing assistance, sales training, and accounting services. Accelerators further develop and grow advanced startups, for example accelerators help with a company's initial public offering (IPO). Typically, a startup goes through the formats in the following order: coworking space, incubator, and accelerator. We discuss each of these formats further in our Background.

Hangzhou in particular, has seen successes from its many coworking spaces which have helped to produce 3.4 times as many successful entrepreneurs than Shanghai per capita. This is taken with respect to the entire Zhejiang province (Jeffries, 2010). An example of this success in Hangzhou is Alibaba, which is now one of the largest e-commerce companies in the world. Another measurement of this success is Hangzhou's rapidly growing innovation and entrepreneurship industry which has contributed to Hangzhou's 23% increase in Gross Domestic Product (GDP) in 2015. An increase of this magnitude in GDP indicates a prospering economy,

which is a favorable environment for startups. Coworking spaces continue to further this success by providing startups with essential resources (space, facilities, Internet, etc.) which in turn allows startups to focus more on their work and collaboration.

Our sponsor ChuangChao Investment, a company located in Hangzhou's Xiasha District, focuses on helping small/medium enterprises (SMEs) deal with the intricacies of starting a company. More specifically, ChuangChao focuses on fresh startups and college students. Currently, ChuangChao Investment attracts its clients by providing them with 8,000 square meters of private offices, private spaces, and limited collaborative spaces. However, ChuangChao cannot retain these startups for very long since the successful startups eventually need to move to an incubator format for further development.

Now, ChuangChao looks to expand their coworking private office space to both an incubator and coworking space with collaborative space to further aid SMEs and startups. However, besides coworking spaces like our sponsor offers, other formats fight for startups' attention such as incubators and accelerators. Each of these formats provides startups with different resources and methods for developing their company. Without knowing which startups gravitate towards which format and why, it may be difficult for ChuangChao Investment to develop their own unique niche market.

After researching its competitors, ChuangChao has identified a format that may draw in this desired crowd. This format was created in the United States by an organization called WeWork. In order to integrate WeWork's format into ChuangChao's current system they require a detailed understanding of how WeWork grew in the United States and how it currently continues to grow and draw in startups.

WeWork has taken advantage of the developing coworking trend by providing startups with WeWork's unique format of coworking spaces. Their format includes private offices, personal desk space, printing capabilities, Internet, meeting rooms, the option to collaborate with other startups, and other basic resources. Although, WeWork has expanded from the United States to locations in China like Hong Kong and Shanghai, it has yet to expand to Hangzhou leaving a vacancy in coworking space competition (WeWork, 2010).

This project identifies what features of the WeWork format ChuangChao should adopt, as well as what they should adopt from other competitors in the Hangzhou area. We first determine what currently works well for ChuangChao, then we identify beneficial key components of

WeWork's format to integrate into ChuangChao Investment's format. Lastly we see how WeWork's format fits into Hangzhou's startup community in comparison to other coworking spaces, incubators, and accelerators. We collect information from both primary and secondary sources. Primary sources include interviews with the employees and clients of ChuangChao and other formats. Secondary sources include web articles and reports available online. After analyzing these collected data sets, we make recommendations outlining the best options for ChuangChao and the steps to implement those recommendations. This project helps ChuangChao cement their business in the region by improving their capabilities to match or exceed what a competitor like WeWork has to offer.

2. Background

The initial part of the background explains what a coworking space is, as well as providing a brief history of coworking spaces. We describe variations of coworking spaces, the environments they succeed in, and descriptions of coworking spaces. Following that, we introduce the reader to the history of Chinese entrepreneurship and its current state. In the same section, we discuss aspects of China's economy, covering their GDP growth rate, trade, and statistics on new businesses. Next, we discuss the entrepreneurial environment of Hangzhou. The three main topics of this discussion include the recent G20 Summit, discussion of successful Hangzhou startups including Alibaba, and the resources currently available to Hangzhou's startups. Finally, the background explains the current format of ChuangChao Investment, lists out their past ventures, current system, and their reasons for wanting to change.

2.1 Research on Coworking Spaces

Coworking spaces appeal to a large amount of startups, especially those at the early stages of development. Coworking spaces have become very popular by providing startups with basic low cost necessities that promote startups' growth. The following sections fully describe coworking spaces and their origin, as well as highlighting their benefits to startups.

2.1.1 Description of coworking spaces

Coworking spaces are a recent creation derived from the necessity and desire of individuals and small companies to work around each other. A coworking space, in essence, is a space where multiple companies can rent space filled with various resources such as printing capabilities, Internet, private offices, and many other options depending on the price the customer chooses. It is like renting an apartment or staying at a hotel that already has Internet setup and other appliances that make it easier for the individual living there. These spaces can come in a variety of arrangements and prices, however they all support the same principle. This principle is providing startups and small companies with their own space and resources in an environment that allows collaboration between like-minded professionals, freelancers, and entrepreneurs (Gandini, 2015). Figure 1 provides an example of a coworking space which depicts a coworking

space in Israel that WeWork owns. We labeled this image with sections that are commonly found in coworking spaces such as an open collaborative space, desk space for semi-collaborative work, conference rooms that can be used by any groups, and private offices for work and safe storage.

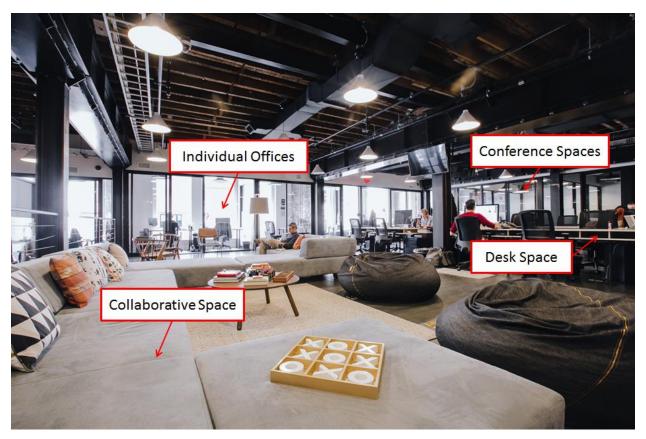


Figure 1: WeWork's coworking example, location in Israel (WeWork, 2010)

The collaboration that coworking spaces encourage is what makes them different from their rivals. One often hears about makerspaces or incubators when talking about developing startups. Despite common belief, all of these formats are different. Makerspaces focus more on providing enterprises with resources in the form of rapid prototyping tools such as 3D printers and low cost building materials. These makerspaces often allow groups of people to work on projects in the same location, however nothing directly promotes collaboration between projects outside of the space's culture. Makerspaces do provide individuals and groups with materials not commonly available, which bring in people working on a variety of projects, and can also inadvertently stimulate collaboration. Once these spaces are accessorized with the proper equipment such as 3D printers, laser cutters, woodworking areas, and others based off the communities' needs, the

spaces are put into use by hosting instructional sessions and taking in projects (Fourie & Meyer, 2015). Groups that work in makerspaces commonly go there already knowing what they need to do and do not require extensive one-on-one consulting. Incubators on the other hand, are locations where companies can consult one-on-one with industry experts on how to further develop their ventures. Incubators also allow multiple startups to develop in a single location, similar to other formats. However, the nature of the one-on-one consulting in incubators hinders cross collaboration and instead promotes introspection to maximize the development efforts of single groups (Beattie, 2014).

Each type of format attracts a specific type of startup with different needs. Coworking spaces, aside from their prominent benefits such as space and proximity to other workers, also serve as a powerful networking tool. With a variety of small businesses in such a condensed location, it is unavoidable to create connections and gain insight from others. Gandini (2015) also argues that there is an inherent culture that coworking spaces create that values networking, lack of direct competition, and the novelty and "coolness" associated with working in a coworking space. These traits give coworking spaces an advantage over other formats and as a result they have been able to survive and find their unique niche in the market for startups (Gandini, 2015).

2.1.2 History of coworking spaces

Modern-day coworking spaces were first formed in 2005 in San Francisco stemming from the high concentration of startups in the area, including Silicon Valley's plethora of companies (Gandini, 2015). The creation of these spaces also serves as a means to preserve in-person collaboration in an age where everything is becoming digital. The very concept of coworking spaces requires interactions between individuals in an environment that fosters innovation.

After its inception, coworking spaces became common in locations of "advanced economies" which is seen by the 129 spaces in Japan, 95 in Brazil, 60 in Australia, and 39 in Russia (Moriset, 2014) with a growing presence in China (Lindtner and Li, 2012) and approximately 2498 registered spaces worldwide in 2014 (Gandini, 2015). These statistics also shed light on how the format of coworking space has expanded over the years from San Francisco to all over the world, displaying that this format is indeed beneficial to startups and small enterprises.

2.1.3 Variations in coworking spaces

Within the realm of coworking spaces, there are many variations and combinations of spaces that compete with each other. These variations range from small differences in aesthetics and ambiance to major differences such as provided resources like tables, individual offices, and levels of membership for accessing these resources. ChuangChao Investment, the sponsor of this project, has its own variation on coworking spaces that they currently have set up in Hangzhou. We explain ChuangChao's variation on coworking spaces further in Section 2.4.

WeWork was founded in 2010 and has their headquarters in New York City. Currently, they have 32 office locations in New York City alone. WeWork's closest office to ChuangChao Investment is in Shanghai. There are currently three WeWork locations open in Shanghai, and a fourth under construction, which is proof that they are still expanding. Each site has its own pricing, but the pricings are all formed around a four-tier system. Ranging from cheapest to most expensive, the tiers are: "We Membership" plan, "Hot Desk" plan, "Dedicated Desk" plan, and the "Private Office" plan. WeWork's "We Membership" lets customers access facilities and interact with WeWork's vast number of clients. The next tier, "Hot Desk", gives the customer 24/7 access to a single location of the customer's choosing and allows the customers to claim various open desks to work at. The price difference between the cheapest plan and the "Hot Desk" plan is significant, jumping from \$45 to \$220 a month (¥ 300 to ¥ 1,465) based off the general prices on WeWork's home website for locations in the United States (WeWork, 2010). The next plan called "Dedicated Desk" allows a member to claim a single desk as their own, allowing for continuous work at a single location. The most expensive plan called "Private Office" gives members the option to claim an office for themselves allowing for privacy and the safe storage of work. Most of WeWork's locations have conference rooms, business phones, powerful Internet, business-class printers, spacious and unique common areas, onsite staff, cleaning services, offices, desks, other furniture, basic refreshments, mailing services, community events, and even discounted healthcare plans in the United States (WeWork, 2010).

WeWork's definition of a coworking space seems to focus more on the space aspect rather than developing a community of coworkers. However, their model is successful thus far as seen by the number of locations that they currently have around the world. Overall, WeWork is located in 16 cities in the United States with international locations in, among others, Germany, Australia, Hong Kong, and Shanghai (WeWork, 2010). Aside from WeWork's global locations, its business

in the United States alone is valued at \$16 billion (Brown, 2016). This shows that people are utilizing the locations enough to help WeWork grow from the ground up from 2010, when it was founded, to now where it is estimated to be worth \$16 billion.

2.2. China and Entrepreneurship

This section provides an understanding of where Chinese entrepreneurship stands, why the culture is so important to this topic, and how relatively new entrepreneurship is. To start off, we provide an economic and statistical background. The background then proceeds into a brief summary of the history of Chinese entrepreneurship and its relation to Chinese culture.

2.2.1 Economic background and statistics

China has been on the fast track for economic development in the past 20 years. The Gross Domestic Product (GDP) in China has averaged around 7% growth for the past four years (2012-2016), with huge growth spurts in the mid 2000's and the early 1990's. See Table 1 and Figure 2 below for year to year GDP growth rates from 1991 to 2014. The GDP growth rates for these time periods average around 10 to 12% (Kushnir, 2016). The Chinese economy is now the world's largest economy after surpassing the United States in early 2014. The average person in China now has twice as much buying power than they did in year 2006 (World Data Bank, 2016). China's growth has slowed to just below 7% from 2012 to 2016, however the sheer amount of buying power in the largest world economy will likely continue to drive the economy for years to come (Shepard, 2016).

Table 1: GDP growth rate (China) statistics (Kushnir, 2016)

	GDP	Billions	\$	per Capita \$	growth, %		Share 9	
		Constant	Prices	Current Prices	Constant Prices	World	Asia	Eastern Asia
Year	Current Price		2005		-000mm			
1991	413.5	435.8	583.4	352.7	9.3	1.7	6.8	9
1992	493.4	498.1	666.8	415.2	14.3	1.9	7.4	9.8
1993	620.5	567.3	759.5	515.8	13.9	2.4	8.3	10.7
1994	564.4	641.6	859	464.1	13.1	2	7	9
1995	734,4	712.2	953.5	598.1	11	2.4	8.1	10.4
1996	864.3	782.7	1 047.8	698	9.9	2.7	9.8	13
1997	961.9	854.7	1 144.2	771.2	9.2	3.1	11.2	15.2
1998	1 028.8	921.4	1 233.5	819.6	7.8	3.3	13.3	17.8
1999	1 092.6	991.4	1 327.2	865.3	7.6	3.4	12.7	16.8
2000	1 208.9	1 074.7	1 438.7	951.9	8.4	3.6	13	17.2
2001	1 336.9	1 163.9	1 558.1	1 046.8	8.3	4	15.4	20.5
2002	1 468.9	1 269.8	1 699.9	1 143.7	9.1	4.3	16.5	22.4
2003	1 660.7	1 396.8	1 869.9	1 285.9	10	4.3	16.8	23.2
2004	1 952.6	1 537.9	2 058.8	1 503.7	10.1	4.5	17.5	24.7
2005	2 291.4	1 711.7	2 291.4	1 755.1	11.3	4.8	18.9	27.5
2006	2 751.9	1 929.1	2 582.4	2 096.6	12.7	5.4	20.9	31.5
2007	3 542.4	2 203.0	2 949.2	2 684.4	14.2	6.1	23.6	36.6
2008	4 564.5	2 414.5	3 232.3	3 440.5	9.6	7.2	26.3	41.1
2009	5 071.1	2 636.6	3 529.6	3 802.0	9.2	8.5	28.8	43.5
2010	6 005.4	2 916.1	3 903.8	4 478.4	10.6	9.1	29.3	45.1
2011	7 442.0	3 193.1	4 274.6	5 520.0	9.5	10.2	31.3	48.5
2012	8 471.4	3 439.0	4 603.8	6 250.2	7.7	11.4	33.6	51.4
2013	9 518.4	3 703.8	4 958.3	6 985.9	7.7	12.5	37.2	57.3
2014	10 430.6	3 974.2	5 320.2	7 616.7	7.3	13.4	39.4	60.1
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Figure 2: GDP growth rate (China) statistics (Kushnir, 2016)

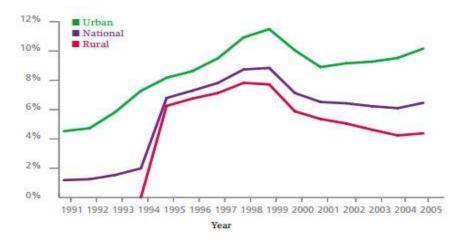
China has also increased the amount of imports, and increased its export rate. Currently both are increasing at a rate of 7% a year. China has also signed many free trade agreements, including agreements with Chile, Costa Rica, Pakistan, Peru, New Zealand, Thailand and Singapore (Focus-Economies, 2016). China has experienced an annual growth rate of around 26.7% of goods exported in the mid 2000's but this has now slowed to around 7% annually, which is still considered strong in most cases (Focus-Economies, 2016).

2.2.2 Chinese entrepreneurship

The history of Chinese entrepreneurship is relatively short. After 1949, under the power of the Communist Party, entrepreneurship was virtually non-existent until the 1978 "Four Modernizations" reform project which aimed to stimulate economic growth. Under this plan the first action was to de-collectivize the agriculture sector and allow it to be run by the local governments. Under this first action, what is known as Town Village Enterprises (TVEs) sprung up and by 1990 accounted for 20% of the Chinese economy (Liao and Sohmen, 2001). The TVEs replaced China's old way of conducting business, namely the State Owned Enterprises (SOEs). Despite the lack of national government support, manpower, and access to new technology, the TVEs outperformed all SOEs, proving that the "Four Modernizations" reform was a big step in the direction of China becoming an economic powerhouse. However, even though this was a step in the right direction for economic growth, private enterprises were still heavily limited in the early 1980's. Although, state run organizations still received the majority of the funding and bank loans making it nearly impossible for private enterprises to get the funding they need (Liao and Sohmen, 2001).

This soon changed, by the year 1987 what is known as *siying qiye* (private enterprises) began to develop rapidly since they were recognized by the state and were put under the protection of the government. *Siying qiye* were classified by the Chinese government as businesses having 10 or more employees. Many of the managers of SOEs left to try their hand at running their own business. By 1988, China confirmed that it had just above 200,000 *siying qiye* employing over 3.5 million people. However, the size of *siying qiyes* was still relatively small, most had fewer than 30 employees and only 1% had over 100 employees (Young, 1995). In 1993, governments on the provincial and central levels took a more active role in promoting *siying qiye* by creating special development zones aimed at providing these businesses with credit linkage, while lessening regulation and promoting connections to other businesses, foreign and domestic. Business in China was by then seen as a useful and necessary economic driver in the development of a productive China. Since 1993 there has been an overall increase in the Chinese employment rate in entrepreneurship. Figure 3 shows that entrepreneurship grew from just 2% of the population in 1993 to about 6% in 2005.

Entrepreneurs as a percentage of total employment in China: national, urban and rural areas



Source: China's National Bureau of Statistics

Figure 3: Entrepreneur employment (Yueh, 2008)

The growth of entrepreneurship has continued to rise, especially after the first business man was able to join the communist party in 2002, which opened the door for more to join and gain political connections. Furthermore, in 2004 the Chinese government took a stance on protecting private property rights, allowing businesses and people to own their own land ("Property rights in China", 2007, March 10). However, since most entrepreneurs had very little educational experience in the field, the eager entrepreneurs soon ran into problems in the mid 2000's and are currently still feeling the effects of slowed growth rate in the market as well as in the national GDP. Such problems include the lack of funding necessary to begin turning a profit, or the ability to find skilled labor necessary to expand and create a sustainable profit (Liao and Sohmen, 2001). The last decade has been referred to as the "lost decade" for entrepreneurship in China (Moodley, 2013). However, even with slowed growth, China still has a huge potential to keep their GDP growth positive due to the gains in entrepreneurial freedom.

2.3 Entrepreneurship in Hangzhou

This section provides an understanding of how startups are supported in Hangzhou. First, we highlight the government's role and then we show the importance of entrepreneurship via a

brief summary of what the G20 summit means to the city of Hangzhou. Lastly, we describe successful startups, mainly Alibaba, to show the scale of entrepreneurship within the city.

2.3.1 Hangzhou government's support to startups

Hangzhou is the capital of the Zhejiang province in China, classified as the fourth-largest sub-province city in China. There are 9,018,000 people and 13,353 sq mi in total in Hangzhou. In 2012, Hangzhou's government developed a three-year plan titled "Opinions on Implementing the Strategy of Strengthening the City through Innovation, Improving Regional Innovation System, Developing Innovation-Oriented Economy" (The CPC Hangzhou Municipal Committee, 2012). This plan describes Hangzhou's commitment to expand and fund opportunities for startups to thrive by improving educational options, increasing the availability of working space, and urging many companies to focus on innovation. In 2015 the Global Entrepreneurship Program published that Hangzhou houses 3.4 times as many successful entrepreneurs than Shanghai per capita with respect to the entire Zhejiang province, and has the highest disposable income of any province in China. There were also 51 incubators designated to helping developing startups (Global Entrepreneurship Program's Articles, 2015). In addition, Hangzhou's government has been supporting new startups via financial support and loans such as "Hangzhou Talent Deal 27", attracting successful companies and "high level individuals" to bring their talents to Hangzhou. "High level individuals" typically means an experienced and successful professional. Hangzhou provides 100 million yuan (\$15.44 million) to support some of the most socially valuable startup programs (Lin, 2015). "We are going all out to turn Hangzhou into a hotbed for innovation, and talent plays a key role in realizing that goal," said Zhao Yide, Party chief of Hangzhou (Xiaomin, 2016).

2.3.2 G20 in Hangzhou

G20, or the Group of 20, is composed of 19 of the world's most prominent economies and was formed in response to the 1999 Asian Financial Crisis. The purpose of G20 is to address the world's financial problems directly (SBS, 2014).

The 2016 summit was the first G20 to be held in China. Out of all of the options for locations including Beijing and Shanghai, Hangzhou was chosen as the sole location to host this summit, due to the city's focus on startups and entrepreneurship (Areddy, 2016). Such a focus

stems from the poster children of Chinese startups housed in the city, the most famous of which is Alibaba.

2.3.3 Alibaba, a prime example of Hangzhou startup success

Alibaba was founded in 1999 by Jack Ma out of his apartment with 18 other people. From there the company capitalized on the e-commerce industry and rapidly expanded until the dot com crash, where they barely managed to survive. They were able to establish business transactions with the United States, which allowed them to grow from a startup to a multibillion dollar company (Alibaba Group, n.d.). Hangzhou is becoming a center for aspiring entrepreneurs in China with the continued support and contributions from Alibaba. The company has donated billions of yuan to the Hangzhou government and city. Alibaba also provides a platform of e-payment (Alipay) that is now entwined with how the Hangzhou citizens process transactions (Liu Xin, 2015). Through Alibaba's support of Hangzhou, hundreds of startups have been created. Such companies include the fashion company Mogujie and Didi Chuxing, which is the largest competitor of ridesharing Uber (Koty, 2016). Alibaba is a prime example for startup success in Hangzhou, and thus indirectly is the reason why the demand for coworking spaces and companies like our sponsor ChuangChao exist in the city.

2.4 ChuangChao Investment

ChuangChao Investment (包巢投资) was founded six years ago (2010), aiming at competing for a slice of Hangzhou's rapidly growing entrepreneurship market. It is currently headed by CEO Zhang Jingwei, who graduated from Zhejiang University of Water Resources and Electric Power. ChuangChao Investment's goal is to help small/medium enterprises (SMEs) deal with the intricacies of creating a startup such as developing or implementing a business plan, creating and maintaining financial accounts, filling out patent applications, and so on. Today, ChuangChao Investment provides their services to close to 2,000 customers. Some of these companies even have more than 10,000 employees. Located in Xiasha District of Hangzhou, ChuangChao Investment is in an ideal location surrounded by other growing companies.

To describe their most recent achievements, in Dec, 2014, during ChuangChao's first phase, they developed a coworking space. The space provides an area for companies to startup

and work, which consists of 1300 square meters and currently hosts about 20 companies. In August 2015, during the second phase, the coworking space was increased to 3000 square meters, and 40 companies were being hosted inside. In the same year in October, four teams in ChuangChao gained the support of angel investors. In June 2016, the third phase of ChuangChao began developing their C+ space (one of their new coworking spaces).

Currently ChuangChao bases their format solely on private offices. They explain that the Chinese culture produces a very different market than the United States' market. The Chinese culture, as our ChuangChao contact stated, is to be private and reserved from talking about business matters with others who are not part of their company or team. Collaboration is a second thought, which is why our sponsor stated that most open space collaborative formats never succeed in China. ChuangChao not only offers space and amenities, but for a fee they also offer professional advising in such fields as the legal and financial services, sales, and marketing. Also, ChuangChao Investment has a very loose structure for how it charges clients with regards to rent. They may offer free rent to companies that have potential to be very successful, however this is arbitrary.

Every six months they evaluate each company that is currently using their services and ChuangChao then decides to continue to provide their services for each company, or stop providing their service, and replace the company with a new one. The decision is on a case by case basis, but the consensus is that if the company is not generating some sort of revenue or on its way to profit, ChuangChao drops them. This is one of the ways they manage their culture and who is allowed to purchase a membership.

3. Methodology

This project assesses the feasibility of integrating with the WeWork format in ChuangChao Investment and Hangzhou. We achieve this goal and provide a well-informed recommendation to these establishments through the development of three objectives:

- 1. Analyze the structure and functionality of WeWork (in both the United States and China).
- 2. Assess the compatibility of the WeWork format with Hangzhou's startups.
- 3. Identify the benefits and challenges ChuangChao encounters from switching to the WeWork or other competitor's formats.

The following sections describe in detail the methods required to fulfill each objective.

3.1 Objective one: Analyze the Structure and Functionality of WeWork in both the United States and China

Online research of the WeWork format in different locations and situations help us understand how culture changes the format. We form a summary focusing on the differences in the types of spaces demanded and membership rates being paid from analyzing multiple locations. Further details are part of a table highlighting major differences between United States, Chinese, and ChuangChao's formats.

A visit to the Yanping Lu WeWork location in Shanghai enables us to compare by observation the differences between WeWork in China and WeWork in the United States. Appendix C.9 contains the information about our interview with the manager.

3.2 Objective two: Assess if the WeWork Format is Compatible with Hangzhou's Startups

The sections that follow describe our methods for objective two. Each one of these helps us identify what currently works in the Hangzhou startup community and which formats are succeeding.

3.2.1 Coworking in Hangzhou

Online research of rival Hangzhou coworking companies help us to better understand what formats may already work in the city. Our sponsor provides us with other data on local Hangzhou companies. The information from our sponsor focuses on amenities, membership rates, and service fees.

Our sponsor aids our outreach to other locations, especially since Chinese culture requires us to have a common contact in order to do an interview.

3.2.2 Other prominent formats (incubators and accelerators) in Hangzhou

We identify other formats and rival coworking spaces that detract from ChuangChao's earnings and market share. We collect research from online articles, websites, and reports for economic statistics and data, and information from our sponsor. We seek the same type of data as before including demand, space usage, and memberships in order to make a correlated analysis.

The choices of companies come from discussions with our sponsor on which companies interest him the most. Some of the companies include Dream-G, Star Plus, and LouYouHui. Our sponsor and student partners from HDU also help us coordinate meetings with all the locations we analyze in our Results and Analysis Section (see Appendix H for a complete list of companies).

3.2.3 Best formats for Hangzhou

Determining the best format for Hangzhou begins with research from online statistics done in the U.S. We compile and compare these data to our observations in China to determine which format has the most success based on the key features.

3.3 Objective three: Identify the Benefits and Challenges ChuangChao Encounters from Switching to the WeWork or Other Competitor's Formats

In order to collect relevant data for our third objective we plan to analyze ChuangChao's current system, identify ChuangChao's reasons for adopting components of WeWork, and find what ChuangChao's clients' opinions are on changing formats. The sections that follow outline each one of these in more detail.

3.3.1 ChuangChao's current system

We collect data on ChuangChao's current system through interviews ChuangChao's CEO (see Appendix D and G), tours of the facilities, and interviews with ChuangChao's clients (see Appendix D and E). The interviews with our sponsor give us valuable information on the inner workings of the space. We collect non-invasive financial data to compare with the other financial data we have for WeWork and other rivals. To clarify, non-invasive financial data includes membership fees, fixed cost, and information on services. This data also consists of other general information such as the most common type of startup each place houses and the number of startups per location.

3.3.2 Reasons for changing to the WeWork format

We host interviews with our sponsor before and after arrival in order to understand why ChuangChao wants to expand, and ensure all details of the project are consistent. We incorporate the WeWork format and other alternatives into our final recommendations since ChuangChao has interest in both coworking and incubator formats.

3.3.3 ChuangChao's clients on the change

We ask our sponsor in an interview, which can be seen in Appendix D.1, if ChuangChao would provide us with what they and their clients think regarding improvements for their format. This information allows us to gauge what they consider important features of each format. This also identifies what features are feasible to adopt without disrupting ChuangChao's current business plan or upsetting any of their clients.

3.4 Methodology Summary

Our project analyzes WeWork's coworking format in both the United States and in China in order to identify why it is extremely successful. We identify which companies we reach out to in the area around ChuangChao to obtain information on their functioning and methods for success. Compiling these data provides us with a clear picture of the startup culture of Hangzhou and an understanding of what features they value. We also assess the current state of ChuangChao's coworking space and determine if a change towards the WeWork or another format is a feasible option for them.

4. Results and Analysis

This section contains three separate parts. The first part details data we collect from various companies in the United States through interviews and qualitative observations. The second part follows the same structure and summarizes data from locations in China. These first two sections provide summaries of each location's space and type of format such as coworking, incubator, and accelerator. Appendices (C.1 through C.17) contain detailed interview notes. The third part consists of comparative analyses and cost analyses that help us formulate recommendations for our sponsor given in Section 5 of this report.

4.1 Formats Researched in the United States

The locations in the following sections are all in the United States, most of them are in Worcester, Massachusetts (MA). We describe each location's type of format and space. From this information we compose comparisons involving each location with our sponsor and WeWork.

4.1.1 Technocopia in Worcester, MA

Technocopia located in downtown Worcester, houses startups, individual entrepreneurs, and a variety of tools for rapid prototyping. As a makerspace, Technocopia's main focus is to promote a culture of creators and provide them with the tools they need to build and create. The community's needs dictate what equipment fills the space. Technocopia offers woodworking machines, 3D printers, laser cutters, and other metal working machines.

An interview with the founder of the space and WPI alumnus, Kevin Harrington, reveals that the strength in Technocopia's format comes from its dedicated volunteers. Mr. Harrington also conveys that collaboration between projects is one of the main values of the space, similar to that of a coworking space. He emphasizes that the process of initially forming a space (including the occupants, tools, and projects) often defines the culture of the space. Appendix C.1 contains all notes from this interview.

4.1.2 Clean Tech Incubator in Worcester, MA

Worcester Clean Tech Incubator (WCTI) has space in the same building as Technocopia. Unlike Technocopia, it provides traditional private office space as well as coworking space. WCTI formulates the space to be more open and collaborative than WeWork, with a total of twenty offices. WCTI also offers five meeting rooms of varying sizes, including one large room only closed off on three sides. They also offer a presentation room, a kitchen, and an event area with a large open space.

WCTI is only a year old and is one of the first coworking spaces in the city. However, WCTI is mostly unoccupied and only has a few private offices being used. WCTI offers three membership rates, varying from a drop-in rate of \$25 (162 RMB) a day to a dedicated desk at \$275 (1,898 RMB) per month, or a private office that fits three people at \$975 (6,338 RMB) per month. With these prices however, WCTI allows access to software which requires an expensive licensing to use. WCTI access includes a SolidWorks license and a Bloomberg Terminal license. The former is software used to design many products, while the latter, Bloomberg, is a tool aiding in tracking and predicting the stock markets. Both licensing software cost thousands of dollars (USD) for a single user to purchase either of them. The company is also government funded, which allows them to operate with this kind of budget. WCTI receives this funding from the United States' Government Clean Energy Initiative. Appendix C.2 contains all notes from this interview.

4.1.3 Running Start in Worcester, MA

Running Start in Worcester is a complete coworking space. With five plans for membership ranging from \$35 to \$500 (¥ 241 to ¥ 3450), Running Start attracts a clientele ranging from individual entrepreneurs to full startups. Each membership plan comes with its own list of perks from basic access to the space to private offices, similar to WeWork's incremental four plan system.

Many people regard Running Start as one of the first coworking spaces in Worcester, which now has its own unique coworking format. In an interview with Running Start's founder, he reveals that Running Start grew from its loyal clients spreading the word about this location which he notes as the best way to gain new customers. This is similar to how WeWork continues to grow rapidly across the globe due to its word of mouth brand of promotion via its clients. Some

clients of Running Start also do not treat Running Start as their home base of operations which is unique in comparison to other coworking spaces in the United States as well as in China.

Appendix C.3 contains all notes from this interview.

4.1.4 WeWork formats in the United States

There are currently 19 cities in the United States that house WeWork spaces for startups and individual entrepreneurs. Each location varies slightly in layout and pricing, but most follow the typical four-tiered pricing system (see our Background for a complete description of this) and focus on private office space matched with a collaborative area.

4.2 Formats Researched in China

Similar to Section 4.1, this section summarizes the details from our visits with locations in China. A majority of these locations are in the Hangzhou area with the exception of WeWork's location in Shanghai. Each description outlines the location's format and space and draws any relevant comparisons to ChuangChao or WeWork. The following list is in chronological order which corresponds with our visits. Our sponsor set up all meetings with these locations since Chinese culture dictates that he must accompany us to each space.

4.2.1 We-Link (Singapore High-Tech Business Incubator) in Hangzhou

Founded in 2006, We-Link has become part of a national incubator and develops startups via their unique format. This format takes in entrepreneurs, helps them develop a team via their WeWork-like public space, then after 6 to 12 months they move successful teams into an incubator phase. The incubation phase usually takes 3 to 5 years where they train the on policies, laws, and finances pertaining to their growth as a startup in one of their four incubation sites. After successfully completing this phase, the developed startups move on to an accelerator phase which focuses on scaling up the startups, expanding their market share and even IPO releases.

Our interview with Ge Wei (衰ඁ෩, a sponsor for We-Link, shows us that We-Link is different in comparison to both WeWork and our sponsor. While this format utilizes a WeWork-like public space this is only for a short amount of time to allow for new startups to cycle through the space. Ge Wei notes that fees for this process increase over time and can continue even after a

company goes public which is different from WeWork and ChuangChao's large payment upfront for all services approach. Appendix C.4 contains all notes from this interview.

4.2.2 Dream-G Space in Hangzhou

Dream-G Space in Hangzhou houses about 20 mobile and web development startups.

Dream-G contains a space structured extremely similar to WeWork and provides startups with the capabilities of incubators and accelerators. However, a developed startup that Dream-G houses provides the accelerator services.

Our interview with a representative at Dream-G further reveals that this space specializes in incubation for teams with less than 30 members and has a pay as you progress process, which is dissimilar to ChuangChao and WeWork. Out of all the locations, this location stands out as one of closest in space to WeWork's layout. Appendix C.5 contains all notes from this interview.

4.2.3 Star Plus in Hangzhou

Star Plus in Hangzhou, formed about a year ago (2015), is a WeWork style space with an incubator currently housing ten teams. With many walled off private spaces, a semi-collaborative desk area, and a generally quiet atmosphere, Star Plus adheres to the "privacy" culture in China according to Cai JinYing (蔡語), the CEO of Star Plus. They mainly take in developed clients, unlike ChuangChao, and they also focus on businesses in the incubator stage. Other than vague resemblances in types of available spaces (private offices and an open desk area) WeWork and Star Plus do not share any similarities. Appendix C.6 contains all notes from this interview.

4.2.4 ChuangChao's locations in Hangzhou

ChuangChao currently owns two separate locations in Hangzhou. The first of which includes three floors of private offices in an apartment building. The second location is new and consists of a single floor of private offices and a conference area in a building. ChuangChao's C+ space's location is in the factory district of Hangzhou. The new location is in an inconvenient area to access due to the lack of buses or trains nearby. With desks, Internet, and other basic appliances, ChuangChao's new space allows for startups to rent out and work in larger offices compared to ChuangChao's original space. Our sponsor also told us that this new space is

specifically for the incubation process. Appendix C.7 and C.9 contain all notes from this interview.

4.2.5 WeWork in Yanping Lu Shanghai

The Yanping Lu WeWork location is the oldest of the three active locations WeWork has in Shanghai. This location includes 100 private offices (all of which are currently occupied by clients) on two floors for teams of 1 to 15 people. Four big booths, two couches, about four to five hotspot tables, and a large self-serve cafe area make up the space for collaboration. Similar to all of WeWork's locations, Yanping Lu offers 4 plans for membership. Specifically, the Dedicated Desk plan costs 2,700 RMB (392 USD) per month and the Private Office plan costs 3,100 RMB (450 USD) per month per person. Each plan comes with a form of access to WeWork's space and clientele, social and business events put on by WeWork, and WeWork's connections to incubators, law firms, and other resources.

Our interview with Joshua Li (季明), the Community Manager of all the Shanghai WeWork locations reveals how WeWork's format gives startups more services, resources, and high quality space in their initial price instead of making a startup pay for each addition individually. Joshua Li states that his previous work experience at other formats WeWork surpasses all of them, in quality, amenities, and culture. He also mentions that since WeWork is a polished entity it seems more attractive to CEOs of new startups. Providing their employees with WeWork's refined space helps these CEOs retain and gain more employees. Joshua Li notes that the WeWorks in Shanghai rarely go out of their way to bring in new startups. Instead, similar to the comments from the CEO of Running Start in the United States, WeWork's clients spread the word about WeWork which draws in more clients.

Overall, Joshua Li notes that WeWork in China and the United States are not different, despite the cultural differences between the countries. Most WeWork locations contain 90% private offices and 10% collaborative options such as the Hotdesks or the cafe area. Chinese startups tend to prefer privacy which explains why 100% of Yanping Lu's private offices are booked. In order to compensate for this, WeWork now has a third location in Shanghai with a fourth on the way. We further observe that as startups become more developed their desire for privacy increases. By this observation a majority of WeWork's clientele consists of at least semi-developed startups since they desire privacy and they can pay for WeWork's membership plans

which are generally more expensive than that of their competition. Appendix C.8 contains all notes from this interview.

4.2.6 LouYouHui in Hangzhou

Founded in 2014 by EGO (a large global company that has a manufacturing and sales branch in China that focuses on various electronics), LouYouHui is a WeWork like space and an incubator. LouYouHui currently has 40 different locations around China, most of which also have different types of spaces. The location we analyze has two floors of collaborative space (mainly desk space), a cafe space for collaboration and public events, and the rest of the building is for the incubator. As teams develop in LouYouHui's collaborative space "tutors" (which are industry experts) guide them for free. Once the teams are advanced enough LouYouHui gives them the option to buy private incubator office space for 800 RMB (116 USD) per month per person.

Li Jiayuan (李佳媛), the CEO of Hangzhou's locations, notifies us that there are currently around 50 teams in this building. Unlike ChuangChao, they do not have a target population and they receive most of their funding from EGO and investments from successful startups that develop through their spaces. Due to their connection to EGO they also have noteworthy connections such as Alibaba which they call on to sponsor events in their spaces. Out of all of the spaces this one seems to be the closest direct competition to WeWork. Appendix C.10 contains all notes from this interview.

4.2.7 Haoyuangu in Hangzhou

After 11 years as an investment company, Haoyuanqu became a coworking space and after three years they now have five different locations in Hangzhou. The location houses 32 startups that specialize in Internet related ventures. The other locations around Hangzhou specialize in other fields. For 2000 RMB (289 USD) a month teams can rent private offices and can attend any events or workshops set up by Haoyuanqu.

In an interview with Chen Dandan (陈丹丹), Haoyuanqu's sponsorship manager, states that Haoyuanqu primarily provides startups with space, but they also recommend teams to local incubators to help further the startups' development. Also in order to stay in business with other coworking spaces such as WeWork, Haoyuanqu continues their investing business to increase their overall revenue. Currently, the revenue they receive from rent directly maintains their

coworking space. Chen Dandan informs us that they may implement a system which makes startups pay a larger sum initially which they later use to spend on different services, similar to using a prepaid card. This system would help them receive more money quicker while increasing startups commitment to Haoyuanqu. ChuangChao is very similar to Haoyuanqu since they both primarily provide space in the form of private offices with desks. Appendix C.11 contains all notes from this interview.

4.2.8 Bioclub in Hangzhou

Bioclub has 10 incubators in total across China that help develop biomedical startups. Some of Bioclub's notable incubation services include O2O services for promotion, investment options from angel investors and Bioclub, and government funded events. Startups have the option to pay 300 RMB (43 USD) per chair per month.

According to Shan Wenlan (单闻澜), a business manager, Bioclub has 30 different projects in total across all of their locations and they continue to take on more projects. Additionally, about 19 previous successful companies actively invest back into Bioclub. Since Bioclub has a very specific target population, it is not in direct competition with ChuangChao or WeWork. Appendix C.15 contains all notes from this interview.

4.2.9 West Lake Makerspace in Hangzhou

West Lake Makerspace is a nonprofit makerspace/coworking space/incubator that houses 20 startups. Since they are a nonprofit organization in a government created facility, rent is free for the startups for three months and the makerspace and incubator services are free for the startups part of West Lake Makerspace. However, after the initial three months West Lake Makerspace charges 300 RMB (43 USD) per spot per month. The space promotes collaboration through its open desk layout with two stations for rapid prototyping. West Lake Makerspace also shares their space with 5050 Accelerator and nodeSPACE which in turn leads to collaboration and shared resources between these companies according to Pan Shanshan (潘珊珊), the Outreach Commissioner for West Lake Makerspace.

Pan Shanshan tells us that there are many locations for the West Lake Makerspace around China, most of which are affiliated with multiple universities. We also notice that the government favors this location by promoting it to specifically foreigners on their website. Despite this

attention, West Lake Makerspace is not comparable to WeWork or ChuangChao since it focuses on its makerspace components and receives government funding. However, West Lake Makerspace does tap into the same reservoir of startups that both ChuangChao and WeWork pull from since they all appeal to startups looking for coworking spaces. Appendix C.16 contains all notes from this interview.

4.2.10 SoloSea in Hangzhou

SoloSea is another unique coworking format that focuses on culture, art, creation, and Internet promotion. SoloSea's space consists of a single floor containing a cafe, a couple of conference rooms, and many desks to promote a semi-collaborative environment. Individual desks cost 800 RMB (115 USD) per month and a private office with more individual desks costs 1200 RMB (173 USD) per month.

Our interview with Wu Anqi (邬安琪), the CEO of SoloSea, reveals that SoloSea is very active since they create many events. The government helps fund SoloSea's events since these events benefit the community. However, despite the large support they receive for their events and their rental fees, Wu Anqi notes that SoloSea, much like other coworking spaces in Hangzhou, is currently losing money. Also SoloSea, unlike WeWork, has a very specific target population that limits their overall income. Appendix C.17 contains all notes from this interview.

4.3 Comparative Analyses

The next sections draw in depth comparisons between the locations from Section 4.2. Specifically, we compare WeWork in the United States to WeWork in China to form a basis for our conclusion for objective 1 which is to analyze the differences in WeWork between the United States and China. Next we tabulate all the spaces to highlight major differences. We also create cost analyses to compare ChuangChao to WeWork, ChuangChao to other relevant spaces in Hangzhou, and WeWork to other relevant spaces in Hangzhou. Each one of these cost analyses forms the foundation for our conclusions to objectives 2 and 3.

4.3.1 WeWork comparison between the United States and China

Table 2 contains information from our research and interview with Joshua Li from the Yanping Lu Shanghai WeWork. This table represents the similarities and differences between WeWork in the United States and China.

Table 2: Comparisons between WeWork in the United States and in China

Category	United States WeWork	Chinese WeWork			
# of cities	19	2			
Duration in Country	Since 2010	Since July 1st, 2016			
Cost for Membership Plan	\$45				
Cost for Hotdesk Plan	\$220				
Cost for Dedicated Desk Plan	\$350	\$404.28 (Yanping Lu)			
Cost for Private Office Plan	\$450	\$452.22 (Yanping Lu)			
General Building Amenities	Cafe, printer, private offices, desks, phone booths, conference rooms, Internet, weekly events	Cafe, printer, private offices, desks, phone booths, conference rooms, Internet, weekly events			

Both WeWork in the United States and China provide their clientele with the same plans for membership, space and amenities, and the same services. While each site may vary slightly in aesthetics, these core components remain constant in WeWork locations between the United States and China. The only differences between the United States and China in our interview with Joshua Li are how the private offices sizes and decorations tailor to the clients in the area. Another difference Table 2 notes is the pricing difference between the Dedicated Desk Plan in the United States and China. Since the Yanping Lu WeWork location has primarily private offices there is higher competition for the limited amount of dedicated desks. We interpret this as the price is higher due to this scarcity, especially in comparison to the general price given by United States locations.

4.3.2 Table depiction of all analyzed locations

All information regarding our visits and interviews are collected in Appendices C.1 to C.17. We use an Excel document to condense all of the data and put it into a filterable format. Then we sort all the information into the following categories; Background, Services, Space, Clients, Membership, and Funding. Each of these categories contains subcategories which provide an in depth look into each location. The addition of filters for each category makes direct comparisons easy and highly specialized. Appendix H contains the Excel file that has all of these details and also has our forms of analysis for all locations.

4.3.3 Quality Function Deployment (QFD)

Quality Function Deployment is a form of analysis that factors in the customer's values, a product's features, and the values of other competition to produce an understanding of how to optimize a product. These factors form a table also known as a house of quality (Subbaian, 2010). Figure 4 depicts the major components and structure of this house of quality.

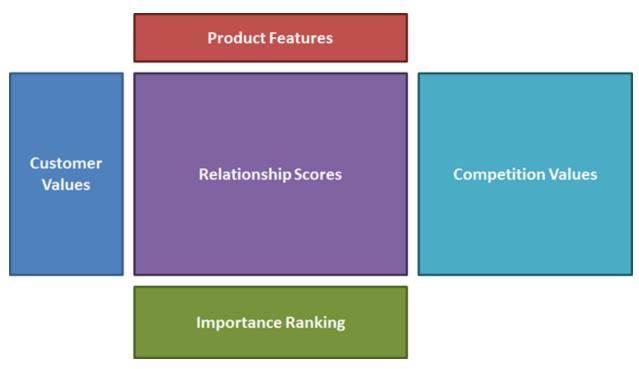


Figure 4: Major components and structure of a house of quality

A QFD analysis provides our project with means of comparing all of the locations and produces results that form the basis for our recommendations. Customer values and product features allow us to narrow down our data to focus on a handful of the most important factors. The importance ranking points out specific qualities of spaces to analyze and the competition values provide us with a means of directly comparing our sponsor to the competition. The QFD is also a form of analysis that our sponsor can continue to utilize as ChuangChao grows.

We note that this method of analysis relies on opinions instead of purely raw data and numbers. For example, relationship scores require us to judge the correlations between a startup's value and an important feature from our previous experience and observations. If another individual such as our sponsor fills this out, his scores may differ from ours since he judges these relationships with his own knowledge and background.

The following subsections elaborate on how we fill out and analyze each of the components in the QFD with respect to our project (Subbaian, 2010).

4.3.3.1 Customer values formulation and justification

The first component of the house of quality consists of the customer's values (the dark blue box in Figure 4). Our house of quality contains five important values for startups and six important values for our sponsor. We chose to include our sponsor as a customer in order to assess how closely his values relate to certain company features. Figure 5 displays all of the customer values, definitions for each, and the multipliers each receive.

	Customer Value	Description	Multiplier
	Cost	The amount of RMB a feature or format is for a startup	5
Startups	Privacy	The amount of privacy features such as private office space provided for a startup	4
	Shared Amenities	Access to printing, wifi, conference rooms, a café, and other public resources offered to startups	3
	Promotes Collaboration	The amount of features such as open work spaces or networking events that encourage startups to interact with each other	2
	Services	The amount financial help, investment help, promotional options or other similar service provided to startups	3
	Incubation process	The services our sponsor provides to semi-developed startup such as investment help and advisors	5
	Space	The space our sponsor currently offers to startups is composed of private offices and conference rooms	3
Sponsor	Privacy	The amount of private offices and private services such as advisors our sponsor offers to startups	3
	Project Quality	The potential a project has to become a successful startup	5
	Profit	The amount of RMB our sponsor produces from recruiting startups	4
	Target Population	The specific clientele our sponsor focuses on recruiting and helping	4

Figure 5: Customer value descriptions

Customer values come from observations and interviews with both spaces and startups such as the 59store and QTSHE (see Appendices C.12 and C.13). Confirmation of our sponsor's values comes from multiple interviews with him (Appendix D). A value analysis that draws out keywords that relate to the most important takeaways from each interview also help us finalize our choice of customer values. For example, our value analysis shows that almost every location talks about privacy, some form of services, and collaboration. Therefore we include these features in our customer values. This value analysis is part of Appendix H. The combination of these two methods produces the list of values for both startups and our sponsor. These methods also allow us to score each of the values with a number between 1 and 5. The least important value to the customer is a 1 and the most important to the customer is a 5.

Looking at our customer values, startups value cost the most in comparison with all of the other options. Most startups focus on cost since most startups do not start with an abundance of money. This leads them to choose locations that provide them with the best services or amenities with the lowest cost. Our sponsor's values show us that he concentrates on the incubation process and looking for projects with high potential. These are our sponsor's two main focuses since he looks to develop a process to incubate companies, which would bring in more profit for ChuangChao. Our sponsor also understands that having a successful startup develop from ChuangChao's space boosts his reputation and business.

4.3.3.2 Company features formulation and justification

The next component a house of quality addresses is the product's features. In this case, the product features are a list of the most popular features found in successful companies. Also, we include each type of format (coworking, incubator, accelerator, and makerspace) in this analysis to see which one correlates closely with the customer's values. Similar to the customer's values, all of the product's features originate from the value analysis, interviews, and observations of each company.

The list of company features consists of private offices, events, startup promotion, connections to industry experts, investment acquisitions, and all-inclusive services. Every feature corresponds to an extremely popular feature. For example every location we analyze contains private offices and provides some form of events for their clients, therefore these are features that are ideal to include in our house of quality analysis. Other features such as all-inclusive services

originate from WeWork's format that offers startups a high upfront cost with the guarantee that they do not have to pay extra for additional services. This method works for their locations in the United States and China alike and in turn it is a valuable feature to analyze.

4.3.3.3 Relationship scores and importance ranking analysis

Once we determine all customer values and product features, we assign relationship scores between these two components. There are three scores to choose from; 1, 3, 10. This scoring system is exponential where 1 defines a weak relationship between a customer value and a feature of the product and 10 defines a strong relationship between the two. This system also causes the most important features to pop out since the scores jump from 3 to 10. For example, there is a strong relationship of 10 highlighted in green in Figure 6 between our sponsor's value in their target population and coworking space since these two factors affect each other greatly. Our sponsor focuses on appealing to fresh startups and fresh startups gravitate towards coworking spaces due to their relatively cheap cost and ease of collaboration.

The relationship scores and customer value scores factor into the formation of the absolute importance scores and ranking. We calculate the importance score by multiplying the customer score by the relationship score and then adding each to produce a final total. Looking at the section highlighted in red in Figure 6 for example, we multiply the startup's value score for cost, which is a 5, with the relationship value for incubators, which is a 10. This produces a value of 50 and this formula continues down the column (privacy which is a 4 is multiplied with the 3 for incubators to produce 12 which is added to 50 and so on). The end product of this is two total scores for each company feature; one corresponding to the startups values and one for our sponsor's values. We rank these totals from the highest score to the lowest score to identify what company features our sponsor and startups deem the most important.

			Customer Value			Formats (1, 3, 10)		
			Score (1 to 5)	Incub	ator	Coworking space	Accelerator	Makerspace	
		Cost	5		10	3	1	3	
		Privacy	4		3	1	10	1	
	Startups	Shared Amenities	3		3	10	3	10	
		Promotes Collaboration	2		3	10	1	3	
Customer		Services	3	10		3	10	3	
Values	Sponsor	Incubation process	5		10	0	0	0	
values		Space	3		10	10	10	10	
		Privacy	3		3	1	10	1	
		Project Quality	5		10	10	10	10	
		Profit	4		10	3	3	1	
		Target Population	4		3	10	1	1	
				•	,				
	Starture		Total		107	78	86	64	
Absolute	Startups		Rank		1	3	2	4	
Importance	Cnancas		Total	13	35.29	95.63	89.25	64.46	
	Sponsor		Rank	1		2	3	4	

Figure 6: House of quality with highlighted sections

From this analysis we determine private offices to be one of the most important features for startups and our sponsor. This finding agrees with our previous observations since every location we analyze has private offices. Chinese culture also highly values privacy especially as a startup develops further. Another feature that we identify to be important is all-inclusive services. This feature is first in ranking for startups since startups prefer to have all services available to them within a single payment. WeWork and our sponsor are both using this method to draw in more clients. Our analysis, however, points out one major disconnect between our sponsor's values and startups' values which is the importance of connecting startups with industry experts. While this is a beneficial feature, our sponsor values it much more than startups do since it ranks as second for our sponsor and fifth for startups. Promotional opportunities and help with acquiring investments both rank in the middle while events are in last. Similar to connecting startups with industry experts, events are beneficial. However, in comparison with the other features, events are less of an important feature. Our analysis additionally shows that incubators have the strongest relationship with startups' values and our sponsor's values. Both our sponsor and startups value makerspaces the least since makerspaces appeal to a specific market which consists of startups that require rapid prototyping resources. A complete list of the rankings is part of Appendix B.

4.3.3.4 Competition values analysis

The final component of our house of quality is the competition values component which provides us with new value scores for each location we analyze in relation to each customer value. The sections we highlight in bright blue in Figure 7 depict examples of this process. We note that SoloSea receives a 1 in relation to the incubation process our sponsor defines in his values since SoloSea does not have an incubator. However, SoloSea receives a 5 in project quality since, similar to ChuangChao, they value projects with high potential to become successful startups. Our interviews and value analysis provide us with the data we require to fill in this component of the house of quality.

							Without Sponsor and without Gov.					
			Customer Value				Funded					
			Score (1 to 5)	SoloSea	WeWork \	ChuangCh	Average	Difference	Average Rank			
		Cost	5	3	4	5	2.75	2.25	5			
		Privacy	4	2	4	4	2.875	1.125	4			
	Startups	Shared Amenities	3	3	4	3	2.875	0.125	4			
		Promotes Collaboration	2	3	3	2	2.375	-0.375	7			
Customer		Services	3	1	2	3	2.625	0.375	6			
Values		Incubation process	5	1	1	5	2.75	2.25	5			
values		Space	3	4	3	3	2.75	0.25	5			
	Cnoncor	Privacy	3	2	4	3	2.75	0.25	5			
		Project Quality	5	5	2	5	3.875	1.125	1			
		Profit	4	4	4	4	3.375	0.625	2			
		Target Population	4	5	1	4	3.125	0.875	3			

Figure 7: Our house of quality competition values section

At the end of this component is an analysis consisting of average scores for each customer value and the difference between the average scores and our sponsor's value scores. This allows us to identify ChuangChao's strengths and weaknesses in comparison to the average score for all locations. We also provide a rank for the averages that show which of the customer values is most common amongst the locations we analyze.

Looking at the average score and differences between ChuangChao and the average columns, we see that ChuangChao is ahead in almost every category except for promoting collaboration. However, ChuangChao is barely ahead in shared amenities, space, and our sponsor's privacy value. ChuangChao exceeds in privacy from the startups point of view and ChuangChao focuses on recruiting high quality startups.

Looking at the average rank columns we see that project quality is first which shows that most locations focus on this value. We also see that promoting collaboration is seventh which is

last. We observe this as most locations currently do not focus on collaborative spaces, especially since Chinese culture favors privacy.

Also, ChuangChao and WeWork share many values such as privacy, space, and profit. However, they differ in the incubation process (since WeWork is not an incubator), the project quality (since WeWork is a well-known and established company that draws in high quality startups due to their reputation), and target population (since WeWork does not have a target population). The full QFD analysis in Appendix B contains all of these rankings and comparisons.

4.3.4 General comparisons between China and the United States

There are two main factors, privacy and the incubation process, to consider when we compare China and the United States. Privacy in the United States is relatively the same as it is in China, with regards to collaboration. The more a startup develops the more privacy they require. Privacy mainly differs with regards to interviews and initial contact. We find that Chinese people require someone they know to introduce the interviewer if they never met him or her before. In the United States, interviews are easier to get without having a previous connection.

We also find that the incubation process in the two countries is important to note. In the United States incubators focus more on the services or private investors rather than developing a workspace. In China, incubators often concern themselves with offering private offices in a single location and bringing industry experts to that single location. Chinese incubators seldom include private investments, where in contrast the United States formats provide private investing as a main service. From further research we find that there are very few private investors in China, and most startups get their money from the founder's relatives or from the government in a unique circumstance. Some startups even look to foreign investors to acquire investments since it is so arduous to receive one from Chinese investors.

4.4 Cost Analyses

This section delves into cost analyses that help highlight major differences between ChuangChao, WeWork, and other relevant competition. First we compare WeWork to other relevant competition in the Hangzhou area which provides a foundation for our conclusions for our second objective (which is to determine if WeWork is compatible with Hangzhou's startup community). Next we analyze WeWork and ChuangChao by specifically looking at their prices and services to produce data that lead to conclusions for our third objective (which is to identify the benefits and challenges ChuangChao encounters from switching to the WeWork or other competitor's formats). We also compare ChuangChao to other relevant competition that helps to strengthen our data for our conclusions.

4.4.1 Cost analysis between WeWork and other relevant competition

We find, through sorting each format with relevance to the format type, target population, and private sector (non-government funded) that LouYouHui, Haoyuanqu, and Running Start are the most ideal comparisons to WeWork. LouYouHui is the closest Chinese format to WeWork and Running Start is the closest format to WeWork in the United States. Haoyuanqu came up due to a strong similarity regarding their focus on private offices.

Table 3: Cost analysis between WeWork and other relevant competition

Characteristics	WeWork (Yanping Lu)	LouYouHui	Haoyuanqu	Running Start	
Location	Shanghai, China	Hangzhou, China	Hangzhou, China	Worcester, MA	
Format type	Coworking	Coworking, Incubator	Coworking	Coworking	
Cost per person per month for private space (in RMB)	3100	800	2000	3,439	
Services extra cost?	No	Yes	Yes	No	
Services included	Advisors, events, promotion, connections to other services	Financial, investments, law, advisors, events, promotion	Financial, investments, events	Events, promotion	
Space and Amenities	Cafe, open desk space, conference rooms, private offices, phone booths	Cafe, open desk space, conference rooms, private offices, incubator space	Conference rooms, private office	Open desk space, conference rooms, private office	
Number of Clients			32		
Fees	Rental	Service and rental	Service and rental	Rental	

Table 3 contains a cost analysis. From this table we see that customers are willing to pay the large upfront cost if a coworking spaces offers sufficient amenities. If a space achieves the correct ratio of private space to public space, customers are willing to pay large upfront costs as we observe at WeWork and LouYouHui.

4.4.2 Cost analysis between ChuangChao and WeWork

Table 4: Cost analysis between ChuangChao and WeWork

Characteristics	ChuangChao (current form)	WeWork (Yanping Lu)			
Format type	Coworking/Incubator	Coworking			
Cost per person per month for private space (in RMB)	1500 (varies with team size)	3100			
Services extra cost?	No	No			
Services included	Financial, investment, law, advisors, events, promotion	Advisors, events, promotion, connections to other services			
Space and Amenities	Conference rooms, private offices	Cafe, open desk space, conference rooms, private offices, phone booths			
Number of Clients	48	>100			
Fees	Rental	Rental			

Table 4 shows that ChuangChao correctly follows WeWork's inclusive upfront cost. ChuangChao can also improve their space and shared amenities by following WeWork as an example. If these improvements are done properly, ChuangChao can even charge more money.

4.4.3 Cost analysis between ChuangChao and other relevant competition

We find through sorting each format with their relevance to the format type, target population, and private sector that LouYouHui, Haoyuanqu, WeWork and SoloSea are the most ideal comparisons to ChuangChao. LouYouHui, SoloSea, and Haoyuanqu all offer relevant services from our observations. WeWork offers a relevant space layout and is a heavy contender in the private sector.

Table 5: Cost analysis between ChuangChao and other relevant competition

Characteris tics	ChuangCh ao (current form)	WeWork (Yanping Lu)	LouYouHui	Haoyuanqu	SoloSea	
Location	China China		Hangzhou, China	Hangzhou, China	Hangzhou, China	
Format type			Coworking, Incubator	Coworking	Coworking	
Cost per person per month for private space (in RMB)	1500 (varies with team size)	3100	800	2000	1200	
Services extra cost?	No	No	Yes	Yes		
Services included	Financial, investment, law, advisors, events, promotion	Advisors, events, promotion, connections to other services	Financial, investments, law, advisors, events, promotion	Financial, investments, events	Events and promotion	
Space and Amenities	Conference rooms, private offices	Cafe, open desk space, conference rooms, private offices, phone booths	Cafe, open desk space, conference rooms, private offices, incubator space	Conference rooms, private office	Cafe, open desk space, conference rooms, private offices	
Number of Clients	48	>100	50	32	45	
Fees	Rental	Rental	Service and rental	Service and rental	Rental	

Table 5 shows our findings that ChuangChao can charge more and still maintain a customer base. If ChuangChao wants to secure further retention of clients and even see further

growth in its customer base it should also focus on developing its space and amenities. We see this at LouYouHui and WeWork which both have more clients than ChuangChao, yet they are only ahead due to their developed spaces and numerous offered amenities.

5. Conclusions and Recommendations

The next sections outline all of our conclusions and recommendations for both our sponsor as well as Hangzhou's startup community. All conclusions and recommendations follow the progression of our objectives. Our first two objectives yield conclusions, but do not form the basis for any recommendations. Our third objective provides the foundation for all of our recommendations.

5.1 Objective 1 Conclusion: WeWork is the Same in China and the United States

After thorough research in the United States as well as in China through interviews, in person visits, and online research we conclude that there are not any major differences between WeWork in the United States and China. In fact, during our time in China WeWork has grown rapidly by increasing their number of Shanghai locations from two to four due to its popularity. WeWork stretches into Beijing where two more locations are on their way. This rapid expansion is similar to WeWork's growth in the United States.

Most importantly, we observe that WeWork has a set formula that they use as they expand worldwide. This formula consists of their four-tiered membership plan and their consistent space layout. Even though some locations may not offer all four plans for the same price, they use the four plans as their pricing foundation for each new location.

The space layout consists of 90% private offices while the remaining 10% consists of a cafe and collaborative space. From our research and multiple interviews, specifically our interview with Li Jiayuan from LouYouHui, we conclude that the more a startup develops, the more privacy they desire. Also WeWork, in comparison to other formats in Hangzhou, costs more per person per month. Through these observations we conclude that WeWork's clientele mainly consists of semi-developed startups since WeWork caters to those that desire privacy and have enough money to pay for their Private Office plan. Our interview with Joshua Li from WeWork's Yanping Lu location reveals that even though WeWork does not have a target population, their clients in both the United States and China value private offices highly regardless of culture.

5.2 Objective 2 Conclusion: WeWork Can Work In Hangzhou

Through the utilization of our tours and interviews at the WeWork in Shanghai and other Hangzhou companies, we conclude that WeWork performs better than other local Chinese formats. Furthermore, with the QFD analysis we back up our conclusion that WeWork performs positively in the Chinese culture since their Shanghai location has more clients than all of the individual locations in Hangzhou. WeWork is also ahead of the competition in all of the features on the QFD except for the target population, project quality, incubation process, and services. WeWork however, already chooses not to focus on these four features since all locations follow the national chain business model, which focuses on coworking with no limitations on customers. The last key point is that WeWork has the highest growth rate out of any format we analyze in China. They are expanding with the addition of one or more locations in China every year.

Since we observe little cultural differences between Hangzhou and Shanghai we conclude that WeWork may experience successful growth in Hangzhou if they add a location there. From this, we also conclude that variations in WeWork's format are compatible with Hangzhou's startup community. Our QFD analysis further supports this conclusion as WeWork provides every feature important to a coworking space. Furthermore, WeWork often provides these features on a larger and more developed scale.

Our last conclusion from this objective is that WeWork would take up a large percentage of the coworking market share in Hangzhou and would be potentially harmful to other coworking formats' success. However, WeWork is not a direct competitor of incubators, therefore a format with an incubation process is less likely to experience a loss. We do not draw any direct recommendations from these conclusions, but rather we use them as supporting arguments for the recommendations given in our objective three conclusion.

5.3 Objective 3 Conclusion: The Benefits and Challenges of ChuangChao Investment Switching Formats

The weighted data analysis done through QFD allows us to conclude that the following features are the most beneficial from WeWork's format:

- *Up Front Cost* WeWork incorporates all services, amenities, and events into the initial cost.
- **Privacy** WeWork contains about 90% private space.
- Shared Amenities WeWork offers the most extensive options for shared amenities that we observed.

From our QFD synopsis of ChuangChao Investment, we conclude that our sponsor is currently behind the market in one key area, which is startup collaboration. Yet, we also conclude that they are ahead with the following three features: privacy, services, and target population.

We recommend that ChuangChao should adopt more shared amenities and collaborative space from WeWork. Specifically, private phone booths, varying size conference rooms, and a full printing station for shared amenities. For collaborative space, we recommend a café area and a social area that contains booths and open tables. We suggest that the café area should be entirely free or pay by donation.

As far as format specifics go, collaborative space should not exceed ten percent of format's area as startups still value privacy very highly. WeWork follows this 90% to 10 % formula as well as LouYouHui who has a similar percentage from our observations during the tour. Concerning cost, there are several ways for ChuangChao to minimize it. ChuangChao can offer options for outside companies to sponsor the products at the café or the printing station. WeWork only buys products from certain suppliers and often, these supplies have advertisements on them.

Once again the weighted data analysis done through our QFD allows us to conclude that the following features are the most beneficial to the relevant competition:

- All Inclusive Services Paying upfront for services instead of paying as you go.
- *Privacy* Format needs to contain a certain amount of private offices.
- Investment Acquisition Investment acquisition needs to be provided to startups in the space. Regular investment may also be included in this term since there are varying degrees of investment intentions.

We recommend that formats focus on these top three features. We identify ChuangChao's important features and make a comparison to the feature rankings of the competitors. From the QFD analysis we find that there is only one major discrepancy between what startups want and

what ChuangChao focuses on: startups rank connections to industry experts as fifth, while ChuangChao ranks it second. The remaining fourth through sixth rankings vary little between the perspectives of ChuangChao and the startups. This means that these features are almost equal in relevance.

We recommend that ChuangChao does the following: continue to charge upfront for allinclusive services, emphasize privacy through the use of private offices, focus on investment acquisition, shift focus away from industry experts, and retain selectiveness with respect to project quality and target population.

Through our research, we determine that investment acquisition and general investments are where the United States and China differ the most. In the United States, connections and services that relate to private investing are major parts of the incubation process. In China, investments either come from the families of startups' founder(s), or in rare cases, from the government. From this finding we further recommend that ChuangChao focuses heavily on the development of a healthy investment plan which includes both acquisition and general investment.

The first step is to retain selectiveness concerning the target population of prospective clients and their project quality. This makes investment options safer for ChuangChao and should make returns more profitable. We recommend further research into different forms of private investing, some of which include the angel investor format ("Angel Investor" n.d.) and a venture capital format ("Venture Capital" n.d.), which are two of the most common types. Due to the lack of investments in China there is a large market that has also capitalized on by the private sector.

Regardless of each format, ChuangChao can mix and match what investment strategy they desire, with respect to the amount of risk and investment options. We recommend that this is an important area to consider for the future incubation process. There is a large opening in the Chinese market and it would separate ChuangChao from the competition, as well as increase startups' chances of success. However, our project focuses more on coworking between the United States and China, as well as what formats work best with the Chinese culture. We are unable to make an in depth conclusion on this recommendation since it is not the main focus of our project and we note that further analysis needs to be done on this subject.

We hope that these recommendations allow ChuangChao to grow into a well-known and successful format. Between our recommendations and the Excel file that contains all of our

research and analyses, we hope to make ChuangChao's growth easier, while also providing any future projects with a means for data collection and analysis. Going forward, our sponsor can continue to study the startup community through our means of analysis and tailor his business to fit his client's needs. While we are able to analyze and visit a handful of locations in the United States, we acknowledge that future projects may want to focus on this topic more. These recommendations ideally can also help to develop the startup community in Hangzhou's Xiasha District. Due to the recent G20 Summit in Hangzhou and new government incentives to help startups, now is a perfect time for formats to develop and prosper through the identification of features and values startups desire. Our work is a step in the direction to develop a thriving startup community in Hangzhou.

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Appendix A: Sponsor Description

ChuangChao Investment (包巢投资) was founded six years ago (2010), aiming at competing for a slice of Hangzhou's rapidly growing entrepreneurship market. It is currently headed by CEO Zhang Jingwei, who graduated from Zhejiang University of Water Resources and Electric Power. ChuangChao Investment's goal is to help small/medium enterprises (SMEs) dealing with the intricacies of creating a startup such as developing or implementing a business plan, creating and maintaining financial accounts, filling out patent applications, and so on. Today, ChuangChao Investment has amassed and provides their services to close to 2,000 enterprise customers. Some of these companies even have more than 10,000 employees. Located in Xiasha District of Hangzhou, ChuangChao Investment is in an ideal location surrounded by other growing companies.

To describe their most recent achievements, in Dec, 2014, during ChuangChao's first phase they developed coworking space which consisted of 1300 square meters and hosted 20 companies. A coworking space provides startups and small companies with their own space and resources in an environment that allows and encourages collaboration between groups. In April 2015, one of these companies, Dream Kitchen, started a "start a business" theme restaurant. In August 2015, during the second phase of the coworking space was increased to 3000 square meters, and 40 companies were being hosted inside. In the same year in October, four teams in ChuangChao gained the support of angel investors. In June, 2016, the third phase of ChuangChao began developing their C+ space.

ChuangChao Investment can be a prominent powerhouse in tapping into the thriving startup community in Hangzhou by expanding their horizons in providing coworking spaces for these eager startups. The exact details of their business plan are a little unclear due to the secrecy of their operation, and we have not had the chance to meet with them in person. However, from what we can gather ChuangChao Investment is eager to set itself apart from the rest of the developing startups, and has developed the following strategies.

What makes ChuangChao Investment so unique is the customer service benefits they offer to their enterprise customers which can be seen in Figure 8. These advantages include (1)

immediately replying to questions online, (2) providing the latest news on policy, (3) consulting businesses twenty four hours a day and seven days a week, (4) one-to-one close service, and (5) providing door-to-door service during the whole process.

ChuangChao Investment, in addition to customer service, has a very straightforward "Handling Process" for each customer. The process starts with verifying the information of the customer and next the contract is signed and the pay is deposited. Then, ChuangChao will provide a personalized plan for their enterprise customer. After that they follow up with the enterprise and take care of all the formalities before they conclude the work and finish the contract.



Figure 8: Customer service benefits

To give a brief background for the market ChuangChao is trying to enter, and the company's opportunity for success, the following information is important to know. In 2012 Hangzhou's government developed a three-year plan titled "Opinions on Implementing the Strategy of Strengthening the City through Innovation, Improving Regional Innovation System, Developing Innovation-Oriented Economy". This plan demonstrates Hangzhou's commitment to expanding and funding opportunities for startups to thrive by improving educational options, increasing the availability of working space, and urging many companies to focus on innovation.

Going forward, ChuangChao Investment is looking to expand their business. Their plan is to capture a large sector of the startup market that is developing in Hangzhou. In order to accomplish this they are looking at expanding into the highly competitive coworking/makerspace industry. Our role in their plan is to first determine if the makerspace model fits China. Next we were asked to see if the WeWork model specifically, will work in China. Lastly we were asked to make recommendations to the local Chinese government on what works based off the results from the previous questions.

Appendix B: Quality Function Deployment

Makerspace
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							Comparative Analysi	s								
			Customer Value		Company Features (1, 3, 10) ces Events Startup Promotion Connections to industry experts Investment Acquisition All inclusive services 10 0 0 0 0 0 0 0 0 0 0 0 1 3 1 1 0 0 0 10 10 10 10 10 10 1 0 0 0 0 10 0 0 0 0 0 10 0 0 0 0 0 10 0 0 0 0 0 10 0 0 0 0 0 11 1 10 10 10 10											
			Score (1 to 5)	Private Offices	Events	Startup Promotion	Connections to industry experts	Investment Acquisition	All inclusive services							
		Privacy	4	10	0	0	0	0	0							
	Startups	Shared Amenities	3	0	0	0	0	0	10							
		Promotes Collaboration	2	1	3	1	1	0	0							
Customer		Services	3	0	10	10	10	10	10							
Values		Incubation process	5	10	1	0	10	3	3							
		Space	3	10	1	0	0	0	3							
	Sponsor	Privacy	3	10	0	0	0	0	0							
		Project Quality	5	1	1	10	10	10	3							
		Profit	4	10	3	1	1	3	10							
		Target Population	4	1	1	1	3	3	3							
	Startups		Total	92	41	37	37	45	110							
Absolute	Startups		Rank	2	4	5	5	3	1							
Importance	Chancar		Total	112.63	20.54	41.08	82.17	63.04	64.46							
	Sponsor		Rank	1	6	5	2	4	3							
	All featur	res definitions are based														
		earch and observations														

			Customer Value	COMPENION VAINE SCOLE LE COST								Without Sponsor and without Gov.						
			Score (1 to 5)	Technoco	Clean Tec	Running S	We-Link	Dream-G	Star Plus Lou	YouHu	Haoyuand Bioclub	West Lake SoloSea	WeWork \	ChuangCh	Average S	Difference	Average Rank	
		Privacy	4	1	2	2	2	2	4	4	3 2	1 2	. 4	4	2.875	1.125	4	
	Startups	Shared Amenities	3	5	3	2	3	3	2	3	3 3	3 3	4	3	2.875	0.125	4	Startups
		Promotes Collaboration	2	5	2	3	3	3	1	3	2 1	4 3	3	2	2.375	-0.375	7	
Customer		Services	3	2	5	1	4	4	3	4	1 5	2 1	. 2	3	2.625	0.375	6	
Customer		Incubation process	5	1	4	1	4	4	4	5	1 5	3 1	. 1	5	2.75	2.25	5	
Values		Space	3	4	1	4	4	3	2	3	2 1	3 4	3	3	2.75	0.25	5	
	Sponsor	Privacy	3	1	2	2	2	2	4	3	3 2	1 2	4	3	2.75	0.25	5	Cnanaar
		Project Quality	5	1	2	3	4	4	5	4	5 3	3 5	2	5	3.875	1.125	1	Sponsor
		Profit	4	2	3	2	3	4	4	2	4 3	1 4	4	4	3.375	0.625	2	
		Target Population	4	4	2	2	1	5	4	1	2 5	2 5	1	4	3.125	0.875	3	
			Total															
Absolute	Startups																	
Absolute			Rank															
Importance	Sponsor		Total															
	·		Rank															
	All featur	es definitions are based																
	off rese	earch and observations																

Appendix C: All Location Interview Notes

Appendix C.1 Technocopia Meeting (9/19, 11:00AM):

Interviewee: Kevin Harrington

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

General Information:

- Started with minimum amount of members
- Technocopia is a nonprofit
- Founded by a WPI alum

Culture of the Space:

- "Don't sell tools or space, sell culture"
 - o Many places fill locations with equipment but lack culture and therefore fail
- Initial setup is extremely important since it dictates what the culture will be
- A sense of community is essential
 - o volunteers can strengthen a community
- Collaboration between projects is the main focus
- "What can you make?" > "How to make something"
- Give and take culture (no micro transactions)

Space:

- Large floor space and 3-4 rooms
- The floor was sectioned off
 - Woodworking
 - Glassblowing
 - o 3D-printing
 - Laser cutting
 - Metal working
- The community dictates what equipment to acquire
- "Never waste money on cheap tools"
- Desks for individuals/projects
- Classes are held in some of the other rooms

Format:

 Provides startups and independent entrepreneurs with a space for collaboration and rapid prototyping

Services:

- Open houses every Thursday
- Events and classes for the community (free)

• Many volunteers are on hand to answers any questions Training on machines (not free)

Appendix C.2 Clean Tech Incubator Meeting (9/19):

Interviewee: Employee of Clean Tech Incubator

Interviewer: Jon McIntyre

General Info:

- Second full time coworking space in Worcester.
- Started in 2016.

Floor layout:

- In a renovated warehouse so they have a large amount of floor space.
- 20 offices or less.
- Kitchen area for clients.
- Three meeting rooms, including one large one, that's not walled off.
- Speaker/event room with small stage area and podium.
- Around 60-70% open collaborative space.
- Lounge for visitors.

Capacity:

- There were about four offices being used.
- Five businesses were operating out of here.
 - Only one was tech.
 - Seemed to be small professional business services as opposed to the traditional startup.
- Space was about 95% empty.

Rent/Membership Fees:

- Drop in membership \$25 per day.
- Dedicated desk space: \$275 per month.
 - o 24/7 access, one key card, all service access.
- Private Office space: \$975 per month.
 - o 24/7 access, three key cards, three desks, all service access.

Accommodations:

- All accommodations included.
- Free kitchen to use.
- Meetings rooms.
- Presentation room.
- Collaborative space provided.
- Internet, printing, Xerox, and scanning available.
- Access to business tools such as SolidWorks, and Bloomberg terminal.
- Parking lot also provided for members.

Services:

- Most services included.
 - SolidWorks Licensing
 - o Bloomberg Terminal
 - o Technocopia Makerspace Membership
 - Worcester's Venture Forum Membership networking forum
 - Included networking events.
 - Pitch events.
 - Mentors are also brought in for this.
- Prototyping space \$1.50 per sqrft/month
- Parking \$45 a month.
- WCTI networking nights and pitch events, are open to the public as well, however, they need to RSVP.

Funding:

- WCTI receives funding from the government from the Renewable and Clean Energy initiative.
 - Hence the "Clean Tech Incubator"
- Grant needs to be renewed every year, and is the reason why they are still operating.

Other Observations:

- WCTI is hard to get to from most schools in Worcester besides WPI.
- Space wasn't fully finished and felt very bare.

Notes on Interviewee:

- Joe explained that the business is in the very early stages and is trying to attract customers.
 - This is why all the services are currently offered to the public. WCTI hopes to bring more people in through this.
- He explained that he didn't want to put too much money into finishing the space, since having different clients would want different things, and he wants to build around the culture they establish rather try to guess what they want.

Appendix C.3 Running Start Meeting (9/30):

Interviewee: CEO of Running Start

Interviewer: Alex Markoski

General Information:

- Founded in 2012
- Was regarded as the 1st coworking space in Worcester
- Clientele is individual entrepreneurs to full startups
- They had 2 initial years of slow growth but it paid off by creating a unique set up

Space:

- Private offices, desks, active work environment (treadmills)
- The space is utilized when people need it, not a home base
- Private offices are usually filled
- 5 plans in total offered (all charge by month)
 - O Day Pass (Access to building on Wednesdays) \$35
 - Fiver (Access to building 5 days a week, 1 hr meeting space, events, printing) -\$100
 - Full Time (24/7 access, 5 hr meeting space, meeting space, events, printing) \$200
 - o Dedicated Desk (Private desk, Full Time perks) \$225
 - Private Office (Private office, 2 Full Time accounts) \$500
- Free coffee and Wi-Fi for all members

Format:

- Doesn't require collaboration but allows for it
- Has on site staff for basic help
- Mainly provides space to work

- The best promotion is from within
 - Running Start switched locations and expanded based off of current clients bringing in more clients for Running Start
- Managing the community is essential to keep clients happy

Appendix C.4 We-Link (Singapore High-Tech Business Incubator) Meeting (10/31):

Interviewee: Ge Wei(葛巍), Sponsor of We-Link

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

Business Background:

- Founded in 2006
- Part of a nationwide incubator

Business Plan:

- Offer two types of space:
 - O Public space- where clients can form small unofficial teams.
 - O Private space- where clients are already in established teams and business and thus require a certain amount of dedicated space.
- Public space clients have 6 to 12 months to build teams and establish a private holding.
 - Similar to WeWork format. They bring in keynote speakers, and offer basic amenities.
 - o If they fail after 12 months it is suggested that they try another venture.
- Once they do so, they can transfer to become a private client in the incubator.
 - O However they need the following:
 - Aligned thinking within their company.
 - Have a technical and financial basis established.
 - Have a large enough team for the task at hand.
- After the transfer they are put through a type of incubator which covers various aspects and trains the clients to become successful in each component of a business.
 - o Takes 3 to 5 years to complete.
 - O Train clients on policies, laws, and financials.
- Last step for developed businesses is that they offer an accelerator stage which deals with services such as full operation, scaling up, and IPO release.
 - O There is no time limit for this stage, but it includes companies that have "gone into society" and operate with steady revenue.

Space:

- Four types/locations of incubators.
 - O Split into technical field, such as:
 - Biology and Medicine
 - Service
 - Technical
- Multi-floor
- Private rooms with multiple desks for teams

Strengths of the Company:

- They are able to allocate resources effectively by having different sections of incubators split by trade.
- Developed strategy for the clients allows for better success.
- Having two sections (public, and private) allows for the company to offer a cooperative WeWork area while still satisfying the private needs of the Chinese Culture.

Fees:

- In the public "WeWork" stage, most services are free if the developing teams and clients show potential.
- In the private sector, standard service fees and rent apply.
- They also get a certain percentage of stock once the company goes public.

Appendix C.5 Dream-G Space Meeting (10/31):

Interviewee: Representative of Dream-G

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

Client Base:

- Only mobile and web development companies.
- Do not accept fresh startups or college students.
 - O However they do have a track through which college students can learn over the course of a couple of months.
- Most clients are in the incubator stage.
- Currently have ~20 teams

Space:

- Set up mainly like a coworking space
- Few private offices which are given to the larger companies.
- Multiple available meeting rooms.
- Multiple kitchenettes.
- Small private "think tank" rooms.
- Mainly desks
- 2 floors

Map App:

- Company based out of Dream-G Space
- This company provides accelerator like services to other companies in the space.
- Good contact to talk to about the client's point of view.

Services:

- WeWork like coworking area for teams
- Incubator services for teams with less than 30 members
- Accelerator services provided by map app company

Fees:

- Rental fees for space
- Service fees
- Discounts for projects with high potential

Appendix C.6 Star Plus Meeting (10/31):

Interviewee: Cai JinYing(蔡锦营), CEO of Star Plus

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

Business Background:

• Started last year

Client Base:

- Switched from Mobile development to the Technical client base.
- Mainly take developed clients
- Currently have ~10 teams
- Clients are chosen by incubator

Space:

- Mainly private walled off spaces for teams
- Very quiet!
- WeWork sized space with an incubator

Fees:

• Rental fees for space

Business Plan:

- Adhere to the "Privacy" culture in China.
 - o Offer lots of private offices.
- Offer services like any other coworking space.
- Focus on the incubator stages of a business.

Appendix C.7 ChuangChao Investment (New Location) (10/31):

Interviewee: Zhang Jingwei, CEO of ChuangChao, Sponsor

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

Location details:

- Many private team offices
 - o desks
 - o internet
- No public area
- Location isolated
 - No buses or subway to get there
- Less than a year old

Appendix C.8 WeWork Yanping Lu Shanghai (11/11, 2:00PM):

Interviewee: Joshua Li (李明), Shanghai WeWork Community Manager

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

General WeWork Info:

- >100 active locations worldwide
- Allows members to book desks or offices ahead of time at any location
- Some locations like the one in Hong Kong accommodate teams of >80
 - Can personalize offices
- There's an online system for WeWork which helps recruit new startups

Floor Layout:

- 90% Private offices.
 - o 100 private offices
 - Positioned to get the most use out of natural light.
 - Currently Yanping Lu location is 100% booked
 - That's why they are opening more locations in Shanghai
 - o Offer different sizes.
 - From single office to a 15 person office.
 - Can accommodate larger teams, but needs to be arraigned.
- Four big booths, two couches, and about four to five hotspot tables make up the collaboration space.
- Reception desk, two waiting chairs, and a cafe table.
- Large self-serve cafe area.
- Large restrooms offered
- Maximum capacity for the space is 514
- Two floors

Rent:

- Base price is 2,700 RMB per month (Hotdesk).
- Private offices are about 3,100 a month per person.
- Offers the typical 4 plans
 - Private offices are the most popular

Accommodations:

- All accommodations come included with the plan purchased
 - Nothing tagged on later unless the customer wants to upgrade
- Mouthwash and toothbrushes for traveling people
- Free printing/scanning (we only saw one)

- Document Shredder provided.
 - Noted that it said, "Provided by GRM and WeWork" possible that WeWork partners with some office supply dealer/company to get special deals.
- Internet included in package
- Free specialty coffee, beer, water, etc. offered at the self-serve cafe.
 - Create a social climate, and increase client employee happiness.

Services:

- Events both social and business related put on by WeWork
 - Helps create a community
 - o Regularly attended by customers
 - Included in the price of membership
- NOT an incubator
- Have companies picked out that offer incubator type services, however there are no fees, and the contract goes through the third party company so WeWork does not make any money off of it.

Comparison versus U.S.:

- Almost exactly the same format.
- Private office sizes are tailored for the clients in the area.
- Some Chinese sentimental decorations.

Other observations:

- Startups in WeWork have not requested a 3D printer
- Apparently there was a group of girls from a university tour WeWork earlier that day for research too
- Our sponsor wasn't required to be with us since this is a global company
- Yanping Lu location is an active and relatively ideal location for a WeWork
- There were what seemed to be other coworking companies on the floors above WeWork
- The picture on the WeWork website for Yanping Lu was different that the actual space

Notes on Interviewee

- Joshua Li, Community Manager at Yanping Lu Shanghai WeWork Location
- Has been with WeWork for about a year
- Has had experience with other formats before WeWork and prefers WeWork over all others
- Says the "typical" coworking formula makes people pay extra for other services as where WeWork includes them with their initial price
- He recommended we give more information to interviewee beforehand to allow them to prepare, as well as feel more comfortable opening up about their business.

- Really hammer home that we are students, working with WPI and HDU studying
 the cultural difference in entrepreneurship, more specifically coworking spaces,
 between the two countries. We can say that we are specifically providing the info
 to both business schools in each university.
- Had recommendations for our survey
 - Recommended price changes in: ideal coworking space price for clients, number of clients in office/space available, rental fee, and service fee.
- Recommended to ask spaces about what their goal is for the space
- WeWork locations help startups retain employees since the location has many high end accommodations and a healthy working environment
 - WeWork is ideal compared to having to pay for all the commodities individually
- WeWork doesn't actively seek out talent however is special cases they will do whatever they can to bring in promising talent
 - o Companies hear about WeWork mainly through word of mouth

We have his card and contact information and he has Henry's information. He may reply to us with results from the surveys we left with him.

Appendix C.9 ChuangChao Investment (Old Location) (11/14):

Interviewee: Zhang Jingwei, CEO of ChuangChao, Sponsor

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

Amenities:

- Office facilities (places, equipment, internet...), low cost
- Help deal with business registration, tax affairs...
- Law (deal with contract or basic legal services)
- Entrepreneurship advisors (they give advice and guidance)
- Organized entrepreneurial activities which help teams find resources and partners
- Financing and investment (working with banks)

Rental Fee:

- For four people and a standard room (30 square feet) they charge 1,500 RMB/month
- Services are included.
- Price then varies by space taken up and team size.
- If the startups are successful, then they may get a discounted price or free rent.

Size:

- Currently, three floors of the building.
- 48 Teams total.
- Soon expanding to new location with more space but still focuses on private offices
- Looking to expand further and add an incubator

Working space observations:

- Rooms have an extra electric key code lock on them.
- Rooms had a good amount of natural light and had plenty of space compared to WeWork's options.
- Rooms were however surrounded by non-glass was and had a closed off feel.
 - That being said, some teams took advantage of this and had the entire walls covered with white board material (Not covered with permanent marker like our meeting room...)
- Limited public space.
 - One of the reasons why they are trying to move into a new space.
 - Described through translation as not extremely functional rooms

Workspace briefing with sponsor:

- Clients move out after one year to an incubator, or they dissolve. (0-1)
 - Looking to expand to a 0-1-100 model which would take teams from initial startups through the incubator phase
 - This new model will help improve profit for sponsor
- Had one successful startup who received 10 million yuan in funding after they left.

Appendix C.10 LouYouHui Meeting (11/16):

Interviewee: Li Jiayuan(李佳媛), CEO of Hangzhou LooYoo Space

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

General Information:

- Started in 2014 by EGO
 - o First location was just a coffee shop
 - o EGO is a huge company
- They started providing WeWork space in 2015
- They have 40 different locations around China
 - Space and pricing varies per location
- Main income for company is from investments
- They don't have a specific target population

Format Details:

- The location visited has two floors for WeWork space
- The rest of the building is an incubator
 - As teams develop in the WeWork space they have to option to purchase space in the other floors for incubator services
- Help to guide teams

Services:

- There are tutors that can coach teams for free
- Host free events to all startups (even outside the company)
 - Held in cafe
 - Many influential sponsors for these events (ex-Alibaba)
 - Used to attract more clients

Space:

- The WeWork floors have no private spaces
- Mainly desk space
- 50 teams currently occupy the space
- They have a nice cafe
 - Mainly used for public work
 - Have to pay for food items
- Rent at this location is 800 RMB per month per person
 - Price may vary depending on the location

Other Notes:

• As startups grow in size so too does their desire for privacy

Appendix C.11 Haoyuanqu Meeting (11/16):

Interviewee: Chen Dandan(陈丹丹), Sponsorship Manager

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

General Information:

- Near to LouYouHui
- Spent 11 years as an investment company
 - Changed to coworking space due to lack of business
- Has been a WeWork space for 3 years
- There are 5 different locations in Hangzhou
- Target population is fresh startups
- The cost of rent is only to maintain the space
- Some successful companies that went through their space invest

Format Details:

- Clients at this location are focused on internet ventures
- Mainly provides space like WeWork

Services:

- Not an incubator but recommends teams to other incubators
- Provides events and workshops for free to members

Space:

- Similar to our sponsor's active space
- Owns the whole building
- Provides teams with private offices with desks
- 32 startups in this location
- Has conference rooms
- Different locations house different types of startups
- 2000 RMB per month per office
 - Rental and Service fees
- The location visited is only 4 months old

Other Notes:

- Since WeWork is such stiff competition many spaces also need another source of revenue such as investments
- They want to implement a plan which makes people pay a large sum upfront and that money is added to a card that can be used to purchase services at the startup's will (similar to a debit card)

Help spaces get more money upfront

Appendix C.12 59store (11/16):

Interviewee: Representative from the 59store

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

General Information:

- Founded in 2011
- Moved into Dream Town in 2015
- Expanded exponentially with an investment of 2 billion yuan
- average age of the employees is 25

History:

- Started in a working space in their college Shanghai Jiao Tong University
 - Stored their inventory outside of their school
 - They had the help/guidance of a professor from their university
- They developed "ahead" of other startups
 - In 2013-2014 the gov put in multiple plans to help startups develop in the way the 59store did
- After graduation they moved to an incubator
 - Acquire basic service
 - Mainly had to pay rent (100,000 per year)
- Eventually they moved to Dreamtown
 - Free rent for 3 years
 - o Far from the city
 - Doesn't provide any services

- They never went through an accelerator
- They are currently looking into IPO
- Their space is mainly comprised of open desk space supplemented with some private offices

Appendix C.13 QTSHE (11/16):

Interviewee: Representative from QTSHE

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

General Information:

- Founded in 2013
- Houses 60-70 employees
- Located within Dreamtown's accelerator
 - Mainly focuses on promotion for the company

History:

- Did not start in college, never went through a incubator or coworking space
- Provides "Job Finder" like services for students

- Not thinking about IPO
- The space consisted of open desk space
 - o Each desk was packed so there was not a lot of space between each employee
 - Low privacy for employees

Appendix C.14 Lingbaoke (11/16):

Interviewee: Ao qingyi(敖清谊), Co-founder

Interviewer: Zitong Jiang, Alex Markoski, Jon McIntyre

General Information:

- Founded in 2005
- Provides apartments exclusively for Startups
 - Houses some Dreamtown teams due to its proximity to the location
- Mainly houses new startups most of which are Internet based
- Directly associated with Dreamtown helps provide teams to Dreamtown

History:

- In 2005-2006 they provided startups with temporary housing
- In 2014 they began providing startups with long term housing

Space:

- Currently own 2 buildings, house 20 companies, which totals to about 180-200 people
- On the ground floor there are public spaces that promote community bonding
- There is a cafe and you pay for food but most drinks are free

- The length of stay for companies varies
- They have an option which allows companies to pay their rent by trading it for stoke of their company

Appendix C.15 Bioclub Meeting (11/29):

Interviewee: Shan Wenlan(单闻澜), Business Corporation Manager

Interviewer: Zitong Jiang, Alex Markoski

General Information:

- Located in a massive complex made by the government to draw in foreign talent
- There are 9 other incubators around China
- Bioclub currently has invested in 30 different projects in total for all locations
- About 19 companies that have been through their space have invested back into Bioclub
- Currently bringing in new companies for incubation

Format Details:

- Primarily an incubator
- Not focused on providing space, their main focus is services
 - Startups pay for each service

Services:

- Options for attaining investments
 - Angel Investors
 - Company Funding
 - Mixed Capacity Fund
- Provides O2O services via
 - o real life activities, example: competition of entrepreneurship, conference
 - o via WeChat and official website
 - Society, like different group and location group and online conference.
- Creates Government funded events
 - o competitions (Bio4P)
 - o forums/conferences
 - Well known sponsors for events

Space:

- The space visited houses 2 companies
- Rent is 300 RMB per chair per month
- Mainly open desk space supplemented with private offices

- They gave us a booklet with information about the company
- We received a pre-planned presentation

Appendix C.16 West Lake Makerspace Meeting (11/29):

Interviewee: Pan Shanshan(潘珊珊), Outreach Specialist

Interviewer: Zitong Jiang, Alex Markoski

General Information:

- Founded in 2013
- This is a nonprofit organization
 - All members can use the makerspace without added fees
- Located in the same complex as Bioclub
- Since it is government funded the first 3 months are free for their incubator
 - After those 3 months it is 300 RMB per spot per month
 - They also receive investments from past startups and associated companies
- They don't have a target population

Format Details:

- It is a WeWork space, Incubator, and Makerspace
 - Overall focused on incubation

Services:

- Provide Incubator services and technical assistance via the makerspace
- Provide multiple events for community
 - One competition took place in 2015 called InnoLive

Space:

- There are multiple locations across China, most of which are associated with universities
- Desk, workstation for low resolution rapid prototyping, a large conference room, and a couple private offices
- Currently there are 20 startups in this space
- Mainly collaborative area
- 5050 Accelerator and nodeSPACE share the room with West Lake Makerspace
 - They collaborate and share resources
- Events do not take place at that location

- Stanley said that the Chinese government favors this space which can be seen by how it is the only one promoted to foreign companies
- Met a startup being developed in the incubator
 - o develops an app for college students to stay updated with worldly news

Appendix C.17 SoloSea Meeting (11/29):

Interviewee: Wu Anqi(邬安琪), CEO of SoloSea

Interviewer: Zitong Jiang, Alex Markoski

General Information:

- Founded on culture, art, creation, and Internet promotion
- Founded in August of 2015
- All startups that become part of SoloSea must also develop a page on SoloSea's website
 - This draws traffic to SoloSea's website which contains ads that give profit to SoloSea
 - This also promotes all of SoloSea's startups

Format Details:

- Coworking
- Specializes in promotion for startups

Service:

- Provides many events focused on topics such as teamwork, finances, investing
 - SoloSea provides the most activities in Hangzhou
 - Results in more funding from the government

Space:

- 90 total rentable space
- 20 other spaces such as thinking rooms and cafe area tables
- 50%-60% of spaces are currently rented
- Cafe area with tables
- Conference rooms
- Thinking rooms
- Many desks
- Some walled off rooms with more desks
- 800 RMB per individual desk per month
- 1200 RMB per room with desks per month

- Anson Wu stated that most coworking/WeWork-like formats are losing money or going out of business in Hangzhou.
 - LouYouHui one of the only locations that isn't losing money

Appendix D: Sponsor Meeting Minutes

Appendix D.1 (10/31/16) Sponsor Meeting

Attendance: Zitong Jiang, Alex Markoski, Jon McIntyre, Professor Pollice, Professor Sturm, Zhang Jingwei, Gin, Stanley

Meeting Lead(s): Alex Markoski

Minutes: Zitong Jiang, Jon McIntyre

Agenda:

- Introduction
- Discuss proposal
 - General feedback
- Ask about the reasons for changing their structure
- Confirm locations for visits (get addresses)
 - o Zhejiang University e-WORKS Venture Lab
 - SOHO 30
 - West Bay accelerator
- Set up a weekly meeting time
 - Thursday at 10:30AM-11:30AM?
- Work at ChuangChao Investment? (Better Wi-Fi?!?)
- Notify of Final Presentation
 - Wednesday, 14 December, 3:00 pm at HDU
 - Offer to present on 12/12 at ChuangChao Investment

Meeting Minutes (10/31):

Physical Assets of the Company:

- ChuangChao currently has multiple locations.
- They are trying to get rid of one current space, and just work with one new location.
- They are planning to expand in this complex to make a full incubator space.

Current Format:

- Act more like an incubator.
 - O Provide technical support in the legal, financial, marketing, and other fields.
 - o Offer basic amenities, and office space similar to WeWork

Reasons for Switching:

- Already based on a similar format that WeWork uses.
- Market towards college students and initial "fresh" startups.

Locations of Other Spaces:

- Sponsor will go with the team to local incubators and coworking spaces.
- Dream town, LouYouHui, West Laker Makerspace

Client Base:

- College student market.
- Initial stages of startups.
- No specific types of businesses (like tech only, or web development only).
- Only private spaces, no public areas.

Proposal:

- Improve on their current project site.
- Analyze the American and Chinese WeWork formats, as well as other imitators.
- Determine how ChuangChao can use this format.

Future Meeting Times:

- Weekly Status Meeting every Monday at 10am.
 - o Location, ChuangChao Exec Offices.

Appendix D.2 (11/7/16) Sponsor Meeting

Attendance: Zitong Jiang, Alex Markoski, Jon McIntyre, Professor Pollice, Zhang Jingwei, Gin

Meeting Lead(s): Zitong Jiang, Alex Markoski, Jon McIntyre

Minutes: Zitong Jiang, Alex Markoski, Jon McIntyre

Agenda:

- Recap on previous meetings with Singapore high-tech business incubator, Dream-G, and Star Plus
 - o feedback
- Notify of Final Presentation
 - Wednesday, 14 December, 3:00 pm at HDU
 - o Offer to present on 12/12 at ChuangChao Investment
- Suggest a change in the regular weekly meeting time so buddies can make it.
- When can we observe the current active "WeWork" space?
- West Lake Makerspace Meeting Set Up
- LouYouHui Meeting Set Up
- Discuss Shanghai WeWork meeting plan
- Find out how we can get in contact with the person who operates HDU's HD We-Link coworking space.
 - We want to learn the pros and cons of this space.
- Discuss connections to other local colleges that have large student entrepreneurial organizations.
 - We want to research more potential clients outside of HDU.
- Talk about the process of funding college students and new startups.
 - Funding from the government, other businesses or investors. We would like to familiarize ourselves further in this area.

Meeting Minutes (11/7):

Outreach:

- Sponsor will give us directions to events and companies to go to within the week.
 - o **On Nov. 10**th, there are two conventions. One across Hangzhou at the G20 convention center, and one in the Xiasha district (TBD on location)
- West Lake is very important for us to see.
 - o We will go next week to check the place out and conduct interviews, and surveys
 - o They are very interested in our project and might be willing to join in our efforts
- LouYouHui is also another important coworking space that we will go to next week.

- Need to follow up with sponsor on Thursday to make sure he has an invitation to these places for the upcoming week.
- DreamTown, is the final important company in the area.
 - Will help us understand all formats since they cover stages from the coworking phase to the accelerator phase.
 - o Government activity in this area. China is going to make "Special Town" economies, dreams town is well-equipped, providing all kinds of services
 - Visit next week
- We-Link HDU Park
 - o Sponsor will get us in contact with the person that runs this space which is the same person from the first space we visited on Monday
- Next Monday, we will talk about reaching out to other entrepreneurial schools in the area. Final Presentation:
 - We decided it will be done before Dec. 14th.
 - Will be for local CEOs and government officials.
 - Sponsor wants us to practice in front of him several times to make sure we get our presentation down, and that we are professional in doing so.

Feedback:

- We can cooperate with other coworking spaces and teams to provide the best results and recommendations.
- Also, it seems that he would use us as leverage to get other coworking spaces to cooperate with ChuangChao.

Investing:

- Of the 14 universities in Xiasha District there are only a handful that have formal organization/WeWork that we can contact
 - Spaces provided are free for students
- Early graduates get money from their parents and part time jobs.
- The cost of entrepreneurship in Hangzhou is rather low (school and gov support)
- Government money comes at a price, not to mention that they usually invest only in developed startups and in people with party connections.

Further Questions to be Answered:

• Will we be able to set up a box to collect surveys at the conventions?

It's going to be hard to do so

- Will there be a translator provided for the final presentation?
- Does ChuangChao charge by month or by year?
- Does ChuangChao make money off of the rent or the investment in the company?

Extra Comments:

- Look into creating some kind of shark tank/hackathon with local coworking companies to bring students in and offer the winners incentive to become clients of the companies.
- Look into foreign investment for clients as well as what cooperation between local companies can bring.

Appendix D.3 (11/14/16) Sponsor Meeting

Attendance: Zitong Jiang, Alex Markoski, Jon McIntyre, Professor Sturm, Zhang Jingwei

Meeting Lead(s): Zitong Jiang, Alex Markoski, Jon McIntyre

Minutes: Zitong Jiang, Alex Markoski, Jon McIntyre

Agenda:

- Discuss WeWork visit and HEDA Conference takeaways
- Setup next time to tour Dream Town, West Lake Makerspace, LouYouHui
- When can we observe the current active "WeWork" space?
- Ask for exact statistics on what ChuangChao charges, so we can make a comparison with other companies.
 - o Full list of amenities offered.
 - Membership rates.
 - Average rental fee.
 - Average cost of service charges.
 - Exact number of current clients.

Meeting Minutes (11/14):

Coworking Meetings This Week:

- Our sponsor will take us there on Wednesday, at 9am.
- We will return at 5pm.

He didn't have any questions about WeWork:

- We still need to follow up with WeWork's Joshua.
- Get in contact with HDU park operator.

Amenities:

- Office facilities (places, equipment, internet...), low cost
- Help deal with business registration, tax affairs...
- Law (deal with contract or basic legal services)
- Entrepreneurship advisors (they give advice and guidance)
- Organized entrepreneurial activities which help teams find resources and partners
- Financing and investment (working with banks)

Rental Fee:

- For four people and a standard room (30 square feet) they charge 1,500 RMB/month
- Services are included.
- Price then varies by space taken up and team size.
- If the startups are successful, then they may get a discounted price or free rent.

Size:

- Currently, three floors of the building.
- 48 Teams total.
- Soon expanding to new location with more space but still focuses on private offices
- Looking to expand further and add an incubator

Presentations:

- We will do a presentation with the other entrepreneurship group to the Xiasha district CEOs.
 - Each team will have a half hour to present.
 - Alex and Jon will do the presentation, Henry will do translation.
 - o Be very specific for presentations since the audience is looking for details
- The time and date will be decided within the next one to two weeks.
 - o So by Nov. 28th.

Working space observations:

- Rooms have an extra electric key code lock on them.
- Rooms had a good amount of natural light and had plenty of space compared to WeWork's options.
- Rooms were however surrounded by non-glass was and had a closed off feel.
 - That being said, some teams took advantage of this and had the entire walls covered with white board material (Not covered with permanent marker like our meeting room...)
- Limited public space.
 - One of the reasons why they are trying to move into a new space.
 - Described through translation as not extremely functional rooms

Workspace briefing with sponsor:

- Clients move out after one year to an incubator, or they dissolve. (0-1)
 - Looking to expand to a 0-1-100 model which would take teams from initial startups through the incubator phase
 - This new model will help improve profit for sponsor
- Had one successful startup who received 10 million yuan in funding after they left.

Appendix D.4 (12/7/16) Sponsor Meeting

Attendance: Zitong Jiang, Alex Markoski, Jon McIntyre, Zhang Jingwei, Professor Pollice, Professor Sturm

Meeting Lead(s): Zitong Jiang, Alex Markoski, Jon McIntyre

Minutes: Zitong Jiang, Alex Markoski, Jon McIntyre

Agenda:

- Synopsis of visits to Bioclub, West Lake Makerspace, and SoloSea
- Describe data and analysis
 - Explaining our plan
 - Ask for what his organization values
 - Show ranking system
 - Feedback
- Ask about
 - Star Plus and West Lake Makerspace services
 - Number of members of Dream-G, Singapore, and Star Plus
- Presentation discussion
 - o Feasibility?
 - Topics for presentation to Xiasha district
 - Schedule dates?

Meeting Minutes (12/7):

- Past Synopsis
 - West Lake Makerspace?
 - SoloSea: Use an event ticket which the government usually helps subsidize. The subsidy can help the company cover the cost of the event especially if it's held off site.
- Data Analysis:
 - Check Mark Sheet: (Yes, No, ?)
 - Singapore High Tech is relatively small.
 - Star Plus & WLM services:
 - All offer basic services such as legal and financial help.
 - Basic services are covered in all services?
- QFD
 - Sponsor suggested adding "Project Focus"
 - He confirmed all of the other values and gave us further insight on how he valued each

Appendix E: Interview Questions (All Employees)

- What is the scale of your business?
 - o 0 to 10 customers.
 - o 20 to 40 customers.
 - o 50 to 75 customers.
 - 75 or more customers
- What would be the ideal working space setup of your company?
- What type of Small or Medium enterprise startups exist at this working space, and is their going to be a change of the type of enterprise in the near future?
- What is the most convenient form of communication for us to contact you?
- What do you charge for membership fees? Are there different options?
- What is the most popular choice of membership fee at your company?
- Do you have any questions for us?
- How many clients occupy the space?
- What percentage are strictly coworking?
- What percentage are developed businesses?
- What percentage are in the incubator stage?
- What percentage are in the accelerator stage?
- How would you use collaboration of other coworking spaces to benefit your company, and the WeWork format in Hangzhou as a whole?
- Would you be open for collaboration with other companies in the area?
- What does your company specialize in, and is this still what you want to focus in?
- May we contact you for further questions to aid our research?

Appendix F: Interview Questions (For Execs and Managers of our Sponsor and other formats)

- How would you classify your business: Makerspace, Coworking Space, Incubator, or other?
- What spaces have you tried thus far, and why did you chose the setup you have today?
- What do you charge for membership fees? Are there different options?
- Do you receive funding from the government or private sector? Which do you prefer if you do?
- Can you send us more information about the company, demand details for spaces, and accommodations?
- Would you classify your company as successful, or are you still making major improvements?
- What is the most popular choice of membership fee at your company?
- What is the scale of your business?
 - o 0 to 10 customers.
 - o 20 to 40 customers.
 - o 50 to 75 customers.
 - o 75 or more customers
- What is the most convenient form of communication for us to contact you?
- Do you have any questions for us?
- How many clients occupy the space?
- What percentage are strictly coworking?
- What percentage are developed businesses?
- What percentage are in the incubator stage?
- What percentage are in the accelerator stage?
- How would you use collaboration of other coworking spaces to benefit your company, and the WeWork format in Hangzhou as a whole?
- Would you be open for collaboration with other companies in the area?
- What does your company specialize in, and is this still what you want to focus in?
- May we contact you for further questions to aid our research?

Appendix G: Interview Questions (For our Sponsor contact, CEO Zhang Jingwei)

- What is the scope of the project?
- What would be the ideal outcome be to help the company?
- Do you have any updated information about the company (ChuangChao) that you could send to us?
- How does this project fit into the company's goals?
- Are you developing a makerspace, coworking space, or something else?
- What has ChuangChao tried thus far?
- What type of SME's/startups are being targeted?
- Why WeWork?
- (Is it beneficial to spend our time looking for other formats or is it better to focus on WeWork?)
- What is the most convenient form of communication?
- Can you send us more information about the company (new website)?
- Do you have any questions for us?

Appendix H: Electronic Submission of the Excel Analysis (Location details, Value Analysis, Quality Function Deployment, and Customer Value Description)