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HURUN REPORT

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Introduction

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In recent years, the makerspace campaign has become a new global wave with entrepreneur service carriers distributed in over 100 countries and regions, among which China and the United States have the largest number and size. Recently, Hurun Report released a list of the world's most successful entrepreneurs under the age of 40 who started from scratch. I was most impressed by the United States and China where number of those entrepreneurs account for 80% of total, indicating their deep-rooted entrepreneurial culture and a vital development trend rising from the vigorous development of the younger generation. Speaking of entrepreneurs, I have seen many successful and enviable cases from the alumni associations of prestigious universities.

In 2017, we released a report on alumni associations in mainland China, where people share similar values and cultures, which enable entrepreneurs to find partners and talents of similar minds in the associations. At the same time, it's easier for entrepreneurs to successfully find investors through the wide alumni network.

Shanghai, an inclusive and open-minded metropolis, is perfect for the development of innovation and entrepreneurship. The rise of makerspace is derived from the policy of "Mass Entrepreneurship and Innovation". As one of the earliest-established and fastest growing sci-tech business incubator in China, Shanghai makerspace has been booming since 2013. As of December 2016, the city has established more than 500 makerspaces. Meanwhile, more than 80% of makerspaces enjoy the innovation and entrepreneurship policy issued by Shanghai Municipal Government, especially for the star label: R&D and intellectual innovative and entrepreneurial industries. In future, Shanghai makerspace will work towards internationalization and professionalism, specifically including commitment to the construction of incubating function; creation of the ecological circle of whole industrial chain; enhancement of the vertical depth by encouraging research institutes, colleges and universities and leading enterprises to set up makerspaces; establishment of hardware stores and related professional venture workshops; introduction of foreign talents to China and in the mean time helping local makerspaces and entrepreneurs "go global".

We are hereby honored to prepare "Shanghai Incubator and Accelerator Report 2017" on Shanghai's entrepreneurship and innovation industry and expect this report could inspire entrepreneurs and encourage more people to participate in the innovation and entrepreneurship. In order to ensure objectivity, comprehensiveness and authority of the report, we have collected and visited more than 80% of makerspaces in Shanghai, and have conducted qualitative and quantitative research on more than 1,200 entrepreneurs who have entered makerspace, covering 16 districts and counties in Shanghai, interpreting to readers the current market development, future trend of Shanghai makerspace and real demands entrepreneurs. We hope that you will benefit from the paper and look forward to your valuable suggestions.

Please enjoy your reading!

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Report Highlights

I. Shanghai Makerspace in Booming Trend

Shanghai makerspace has been booming since 2013 and over 500 makerspaces come into existence by December 2016, between which period, more than 60% of the makerspaces are created. The largest number is between 2015 and 2017, accounting for 43.4% of the city's total.

II. The Government's Significant Support Allows 80% of Makerspaces Enjoy Innovation and Entrepreneurship Preferential Policies

The Shanghai Municipal Government shows significant support to the innovative and entrepreneurial industries, which allows more than 80% makerspaces to enjoy preferential policies, among which "government subsidies", "rent subsidies" and "talent policy" are most widely applied. At the same time, "financial subsidies" is the 4th revenue

sources for makerspace, accounting for 13.2% of the total revenue.

III. R&D and Innovative Services has Become Distinct Labels of Innovation and Entrepreneurship in Shanghai

"R & D and Innovative Services" startups are the most widely distributed in Shanghai, and they settle in more than 80% of makerspaces. In average, there are 15.2 "R & D and Innovative Services" startups or projects exist in each makerspace. The star industry "e-commerce" in recent years ranks second and joins in nearly 70% of makerspace, with average of 9.3 startups. The "training consulting" industry takes the third place, accounting for 48.4% with average 4.9 startups. Additionally with people's increasing awareness to health, the "great health" industry is getting increasingly popular, almost 40% of makerspaces are settled with great health startups, with average of 3.7 startups.

IV. Internationalization, a Vital Developmental Strategy for Shanghai Makerspace

Presently, 31.9% of makerspaces run international business, which accounts for 7.8% of their total business and involves more than 30 foreign countries. While in response to the city's appeal of "internationalization", "professionalization" and "brandization", makerspace is gradually enlarging its international business targeting 25.4% of total. The international expansion includes attracting international makerspaces to settle in Shanghai, introducing overseas resources, talents, technology, bringing local makerspaces to international market, etc. Additionally, more than 50% of makerspaces are calling for the gravity in talents development, technology, policy support, finance and intellectual property rights, while establishing the internationalized sci-tech innovation supporting services.

V. Portrayal of Shanghai Startups: Teams under 10 Persons, Short Term Settlement in Makerspace

In order to achieve cost-effectiveness and make the most of each member, startups usually begin with a small team. More than 60% of starting makerspaces have less than 10 team members, among which most are 4-6 members, accounting for 29.7%. Due to cost considerations and rapid development, most startups settle in makerspace for moderate and short term, and 72.5% settle less than 1 year.

VI. Capital and Ecosystem Resources Sharing, the Major Motivation Attracting Entrepreneurs

Capital and ecosystem resources sharing is the major attraction to entrepreneurs. In terms of capital, entrepreneurs can enjoy the Shanghai government's preferential policies, therefore, gaining cost advantages and minimizing risks. Makerspace will attract capital investment for startups at certain stages. In terms of resources, makerspaces not only provide entrepreneurs with infrastructure but also integrate internal and external resources within the business ecosystem, including supply chain resources, peer exchanges,



Attracting international makerspaces to settle in Shanghai, introducing overseas resources, talents, technology



media and talent resources sharing and hardware store developments.

VII. Personalized "One-Stop" Incubation Services Become a Mainstream with Entrepreneurs' Escalating Demands

As entrepreneurs' demands are escalating, which is no longer limited to office facilities, but more about choosing a practical business incubator like makerspace. We realize that entrepreneurs pay great attention to "professional", "personalized" and "one-stop" services during the service. To provide personalized and comprehensive incubation proposals is crucial, especially for support in talent attraction, cost control, resource matching and mentor services. Demands of startups at different stages are slightly different, new startups usually focus on cost-effectiveness but developing and mature enterprises on capital.

VIII. Shanghai Makerspace Satisfaction High, Will Focus on Micro-enterprises and Enhance Professionalism and Financing Capacity

The study shows that the startups are quite satisfied with Shanghai makerspace at average 4.57 (total 5). Excellent service team, influential brand effect and cost-effectiveness are most recognized. Currently, the most important directions for Shanghai makerspace are expansion of mentor and expert teams and comprehensive improvement of financing capacity. Additionally, some entrepreneurs mentioned that Shanghai's preferential policies and tax relief are more oriented to large enterprises, and support to micro-entrepreneurial business seems weak.

Chapter 1: Status Quo of Shanghai Makerspace

1.1 Concepts and Types of Makerspace

Makerspace, proposed from "Mass Entrepreneurship and Innovation", is a new business platform for makerspace service collectively, dedicated to build low-cost, convenient, all-factor, open-style new business makerspace service platform for mass innovative entrepreneurs through market mechanism, professional services and capitalization approach.

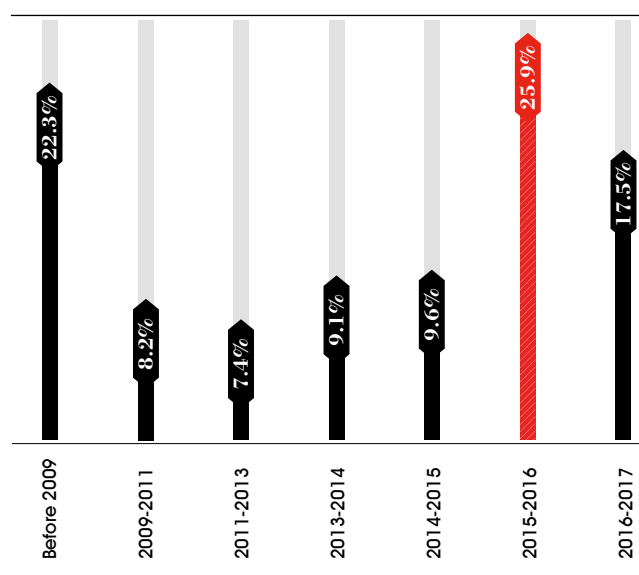
Makerspace are in various types: makerspace, geek space, venture coffee, new media, training camp, virtual incubator, entrepreneurial community and other innovative business organizations as well as sci-tech enterprise incubator, sci-tech enterprise accelerator, university sci-tech park, small businesses base and other entrepreneurial service platforms.

1.2 History of Shanghai Makerspace

Shanghai is one of the areas earliest established with national sci-tech enterprise incubators with most rapid development. From the historic perspective, Shanghai makerspace has been booming since 2013 and over 500 makerspaces come into existence by December 2016, between which period, more than 60% of the makerspaces are created. The largest number is between 2015 and 2016, accounting for 25.9% of the city's total and the second largest between 2016 and 2017, accounting for 17.5%.

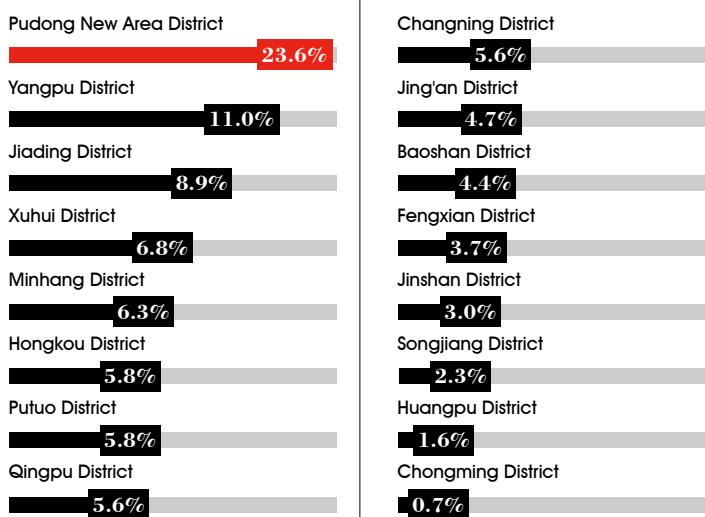
Shanghai makerspace has gone through three historical stages. The 1.0 version of makerspace only provided basic office hardware facilities for startups. The 2.0 version began to bring in various basic supporting

Makerspace Distribution as per Time of Establishment

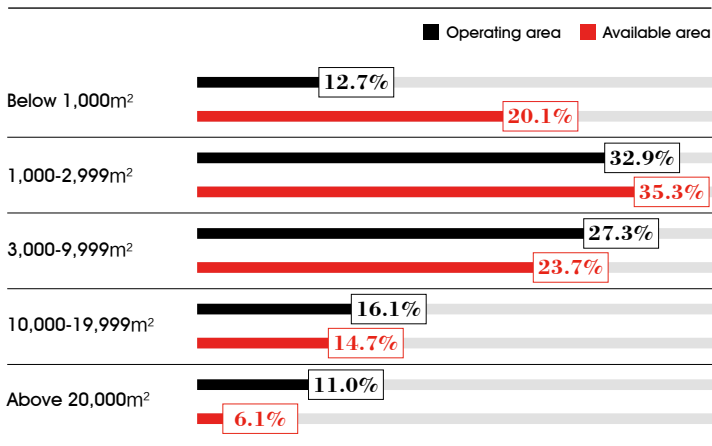




Makerspace Geographical Distribution



Overall Distribution of Makerspace as per Coverage



services, including corporate sponsorship assistance, business counseling and matching with government departments. At present, Shanghai makerspace is launching its 3.0 version, focusing on investment and financing linkage mechanism, fill in the vacancies of financing support to startups, including search of venture capital and own funds investment.

1.3 Shanghai Makerspace Geographical Distribution

Presently, Shanghai makerspaces establish a basic self-oriented, brand licensing and franchise. These two models are relatively small. Pudong New Area is the core area of Shanghai's global sci-tech innovation center. Shanghai has the fastest growing and largest number of makerspaces, accounting for 23.6% of the city's total. Secondly, Yangpu District, as the regional representative of Shanghai makerspace, accounted for 11.0%. Other areas with relatively high distributions are: Jiading District, Xuhui District, Minhang District, Hongkou District, Putuo District, Qingpu District, and Changning District, each of them accounting for more than 5%.

1.4 Scale of Shanghai Makerspace

Overall, Shanghai makerspace covers a total area of more than 3.2 million m², about 2.3 million m² available. Individually, each makerspace covers an operating area of 7,662 m² in average, about 5,740 m² available. The most common coverage of makerspaces is between 1,000-2,999 m², accounting for 30%. Currently, the majority of makerspaces in Shanghai are in the stage of self-entrepreneurship, while they play the role of carriers and service providers to startups. It is crucial for entrepreneurs to choose the appropriate size according to their own strength, not only to better control the operating costs, but also to ensure sustainable development.

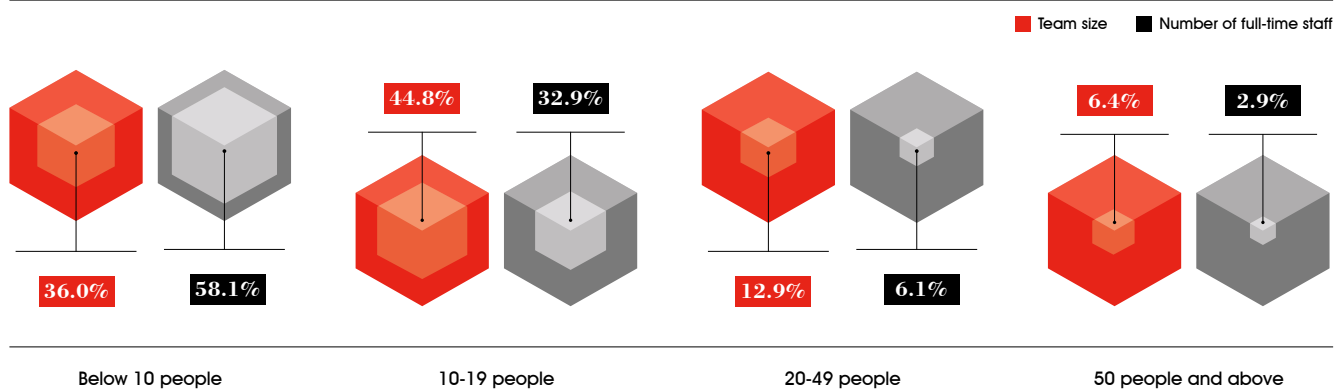
1.5 Distribution of Shanghai Makerspace Station and Price

Shanghai makerspace provides with entrepreneurs open office space platforms, semi-open stations, independent rooms, negotiation areas, leisure areas and others in order to meet various demands of startups at different stages. Each single space has a total number of 323 stations in average, among which total number of 200 or less is of the largest proportion, accounting for 57.8%. In terms of the price, a single station costs about CNY 886 per month in average, and makerspaces of CYN 1,000 and below accounted for more than 60%, which is very cost-effective for beginners. Besides, some stations cost only CNY 100 or less, for one reason that some makerspaces hope to enroll outstanding startups by rent relief, thus to improve their brand awareness and attract

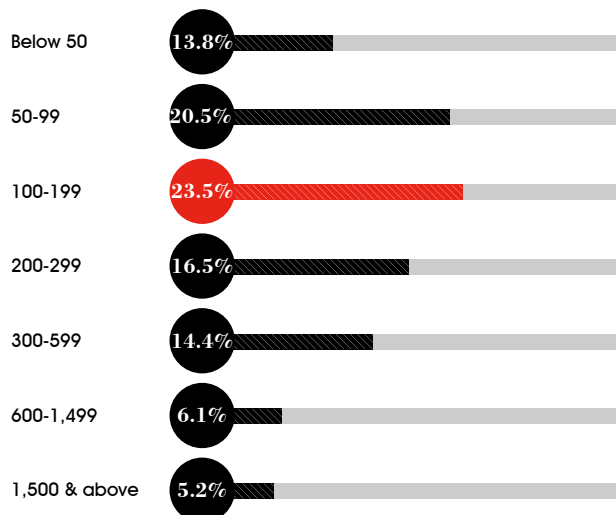
Monthly Unit Price Distribution of Makerspace Stations



Makerspace Operational Team Size



Total Number of Stations per Makerspace

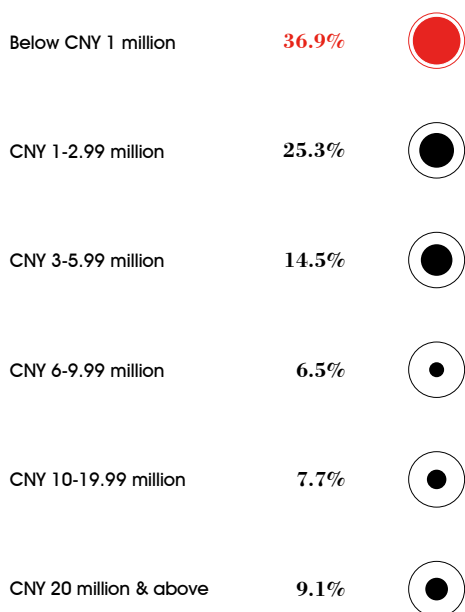


more startups, while the other reason is the government's significant support.

1.6 Shanghai Makerspace Operational Team Size

The operational team of Shanghai makerspace is relatively streamlined, with 16.2 members each in average, among whom an average of 11.8 full-time staff; 80% above of makerspaces have team members below 20, those of 20 and less full-time staff is up to 91.0%. For startups, to be supplied with various resources and high quality services and help them solve the weak points during the startup process is more important instead of number of service staff.

Makerspace Annual Revenue Distribution

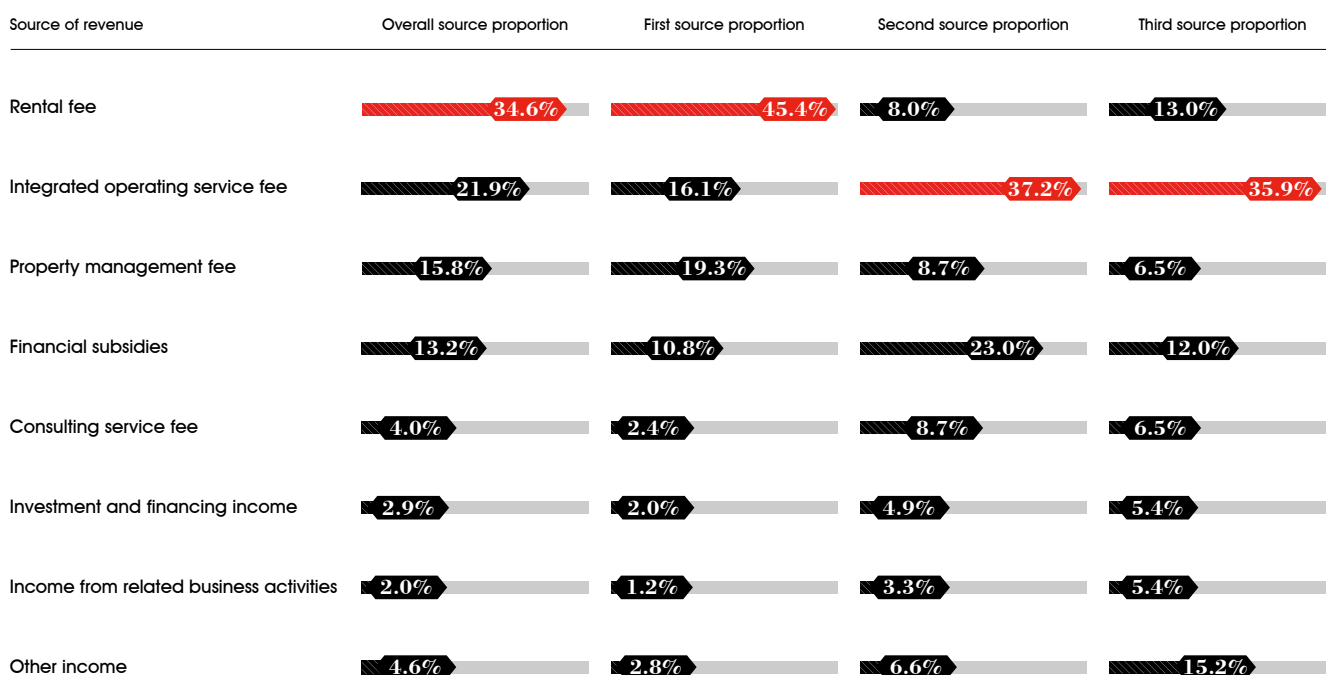


1.7 Shanghai Makerspace Source of Revenue

In 2016, the average annual revenue of Shanghai makerspace was CNY 9.62 million. But actually about 80% of makerspaces earn lower than the average level, mainly due to the rapid development of the industry, fierce competitions, limited income sources and short development of makerspace, etc. Makerspaces of annual total income over CNY 10 million only account for 16.8%. Most of them are large-scale sci-tech enterprise incubators and accelerators which were established earlier and offers relatively more complete ecosystems, resources and services.

According to research, the main source of revenue for Shanghai makerspace is rental fee so far, accounting for 34.6% of the total income. The second source is integrated operating service fee, accounting for 21.9%. To make profit from entrepreneurial services, makerspace must be highly proficient and provide better service. The property management fee income comes to third, accounting for 15.8% of the total income. As Shanghai Municipal Government pays greater support to the innovation and entrepreneurship industry, the financial subsidies alone have accounted for 13.2% of the total, ranking the fourth.

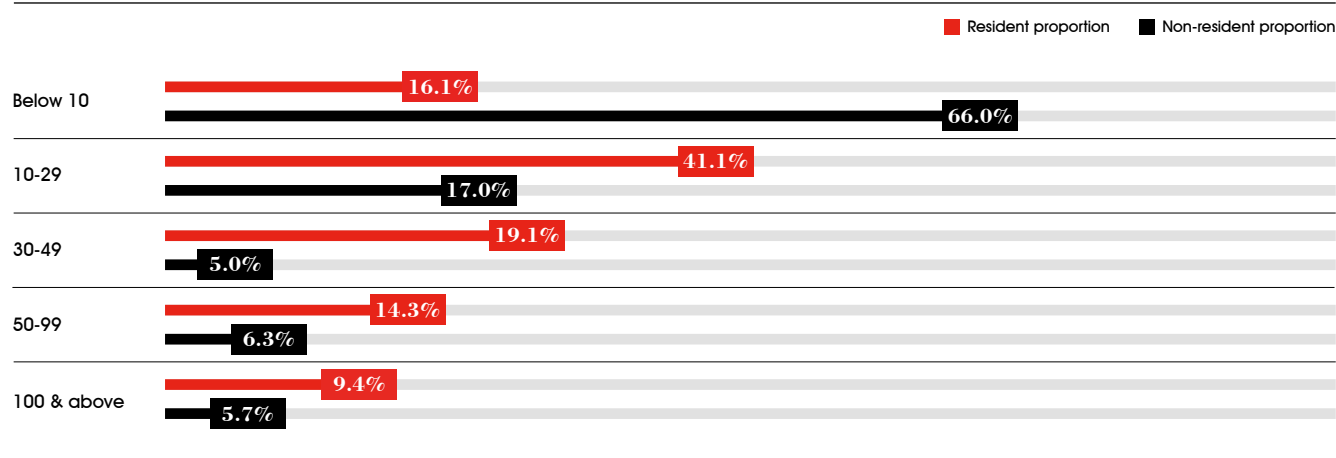
Distribution of Makerspace Sources of Revenue



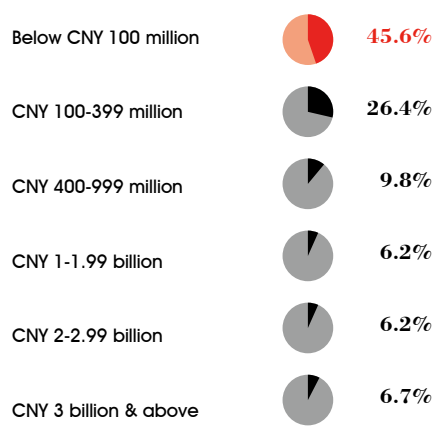
★ First source: second source: third source = 70%: 20%: 10%



Quantity Distribution of Enterprises Settled in Makerspace



Total Evaluation of the Enterprises Settled in Makerspace



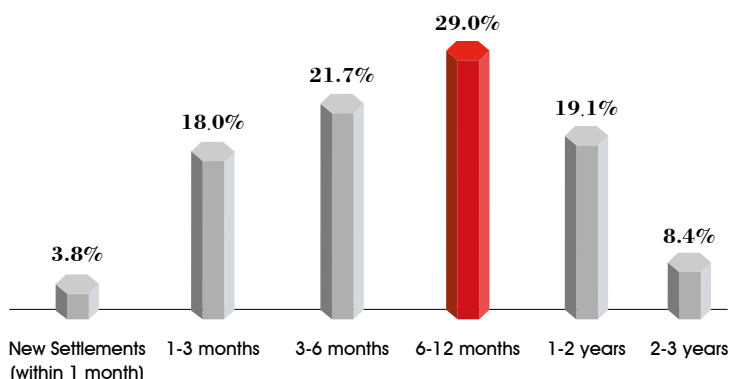
1.8 Shanghai Makerspace Settlement Status Quo

In 2016, the number of resident startups in Shanghai makerspace was more than 16,300, and the number of non-resident enterprises was about 13,500, among which largest number of startups settled in makerspace is between 10 to 29, accounting for 41.1%. The second largest number is 30-49, accounting for 19.1%. According to the makerspace's valuation on the resident startups, the startups in a single makerspace is valued over CNY 100 million, accounting for more than half of the overall.

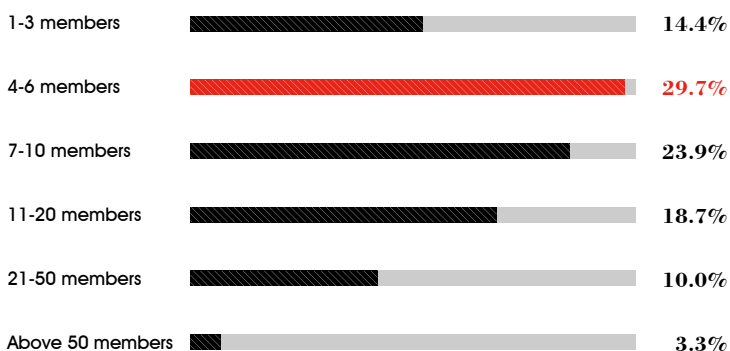
With the gradual escalation of entrepreneurial demands, they no longer simply pursue the joint office class leasing model, but rather favor the practical startup incubator function.

Due to the rising of makerspace, coupled with the dynamic characteristics of continued growth of startup projects Shanghai startups usually enter into makerspace for short-term. The average time of

Startups' Settlement Period in Makerspace



Team Size of the Startups

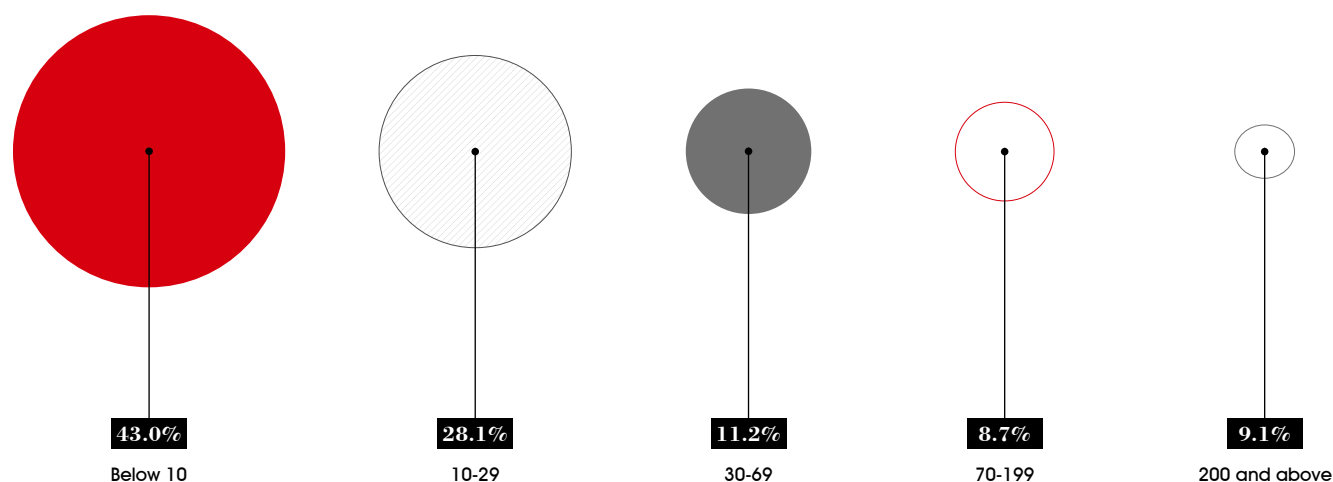


settlement is 9.9 months. More than 70% settled for less than 1 year. Among them, the largest ratio of startups settled within 6-12 months, taking 29%, followed by 3-6 months, the later accounts for 21.7%.

In order to achieve cost-effectiveness and make the most of each member, the scale of startups are mostly "small but delicate", more than 60% of startups have less than 10 members, among which 4-6 members accounts for the largest proportion by 29.7 %, followed by 7-10 members (23.9%). Teams of above 50 members account for only 3.3%.

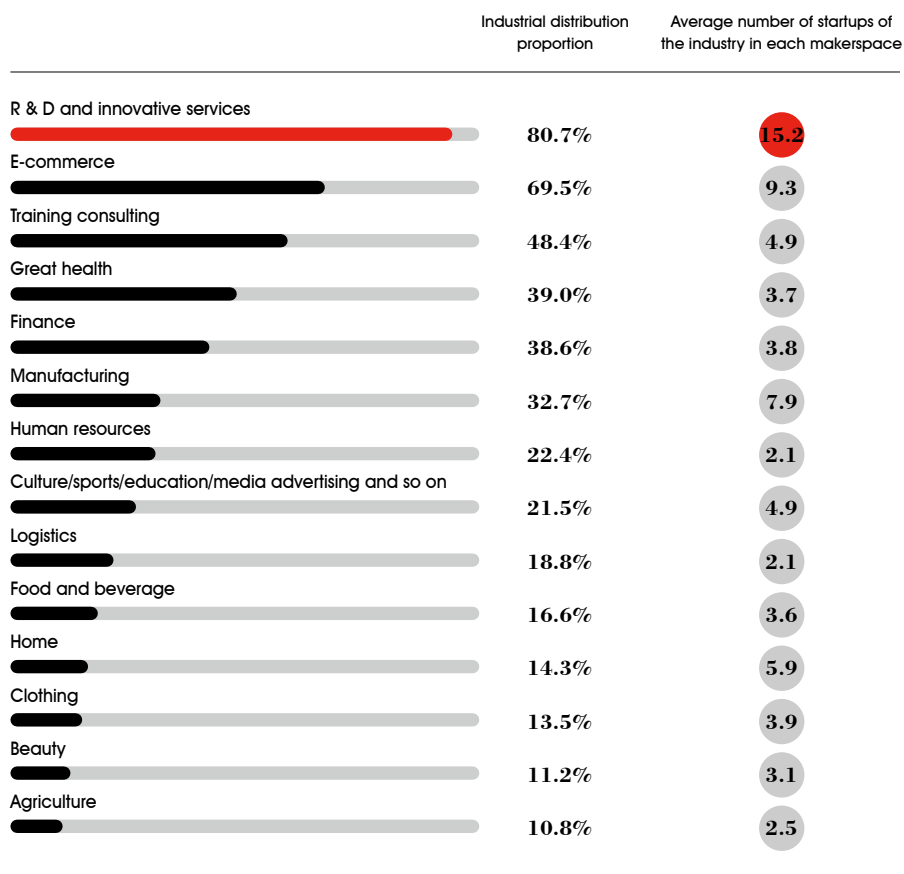
Every month, 84.6 stations were settled in Shanghai makerspace, mainly because some large-scale sci-tech enterprise incubators and accelerators with fair large area (an average operating area of 8,196 m²) can provide large quantity of stations and attracted startups settling in with their own approach, thus increased the average monthly settlement rate, while most makerspaces stationed below average. More than 70% of makerspaces have their stations settled below 30 on monthly basis.

Distribution of Monthly Settled Stations in Makerspace



"R & D and innovative services" startups are most widely distributed in Shanghai, and they settle in more than 80% of makerspaces. In average, there are 15.2 "R & D and Innovative Services" startups or projects in each makerspace, indicating Shanghai's outstanding performance in "R & D and innovative services". The star industry "e-commerce" in recent years ranks second and settles in nearly 70% of makerspaces, with average 9.3 startups in each. The "training consulting" industry takes the third place, accounting for 48.4% with average 4.9 startups. Additionally with people's increasing awareness to health, the "great health" industry is getting increasingly popular. They settled in 40% of makerspaces with average 3.7 startups.

Industrial Distribution of Startups Settled in Makerspace

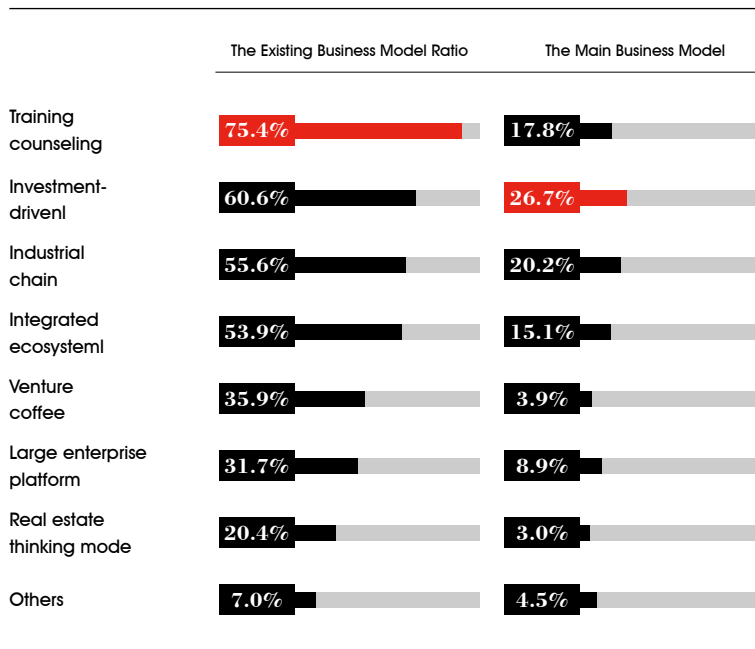


Chapter 2: Analysis on Business Model of Shanghai Makerspace

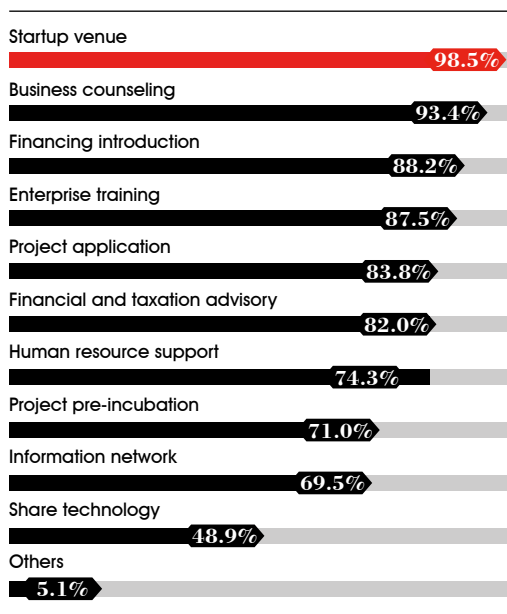
2.1 Business Model of Shanghai Makerspace

There are seven existing business models in makerspace, among them the four most common models are: training counseling, investment-driven, industrial chain and comprehensive ecosystem. Seen from the major business models, the investment-driven model takes the highest proportion, accounting for 26.7%. A field survey shows that most of the makerspace operators think that exploring promising projects and gaining big investment returns are the most important profit approaches. The second is the industrial chain. More than 20% of the makerspaces take it as their core business model. Though training counseling is the most common business model, it ranks third only in makerspace, accounting for 17.8%.

Existing Makerspace Business Models



Types of Facilities and Services Provided by Makerspace

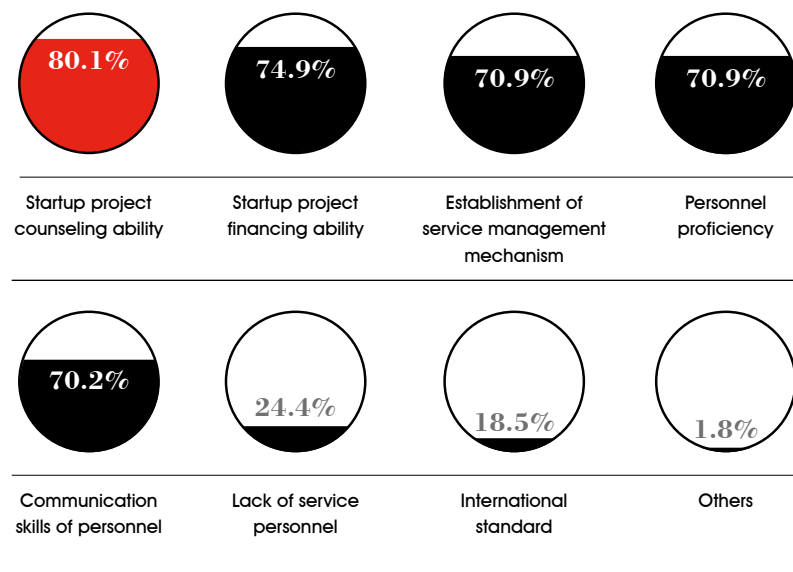


2.2 Types of Entrepreneurial Services Provided by Shanghai Makerspace

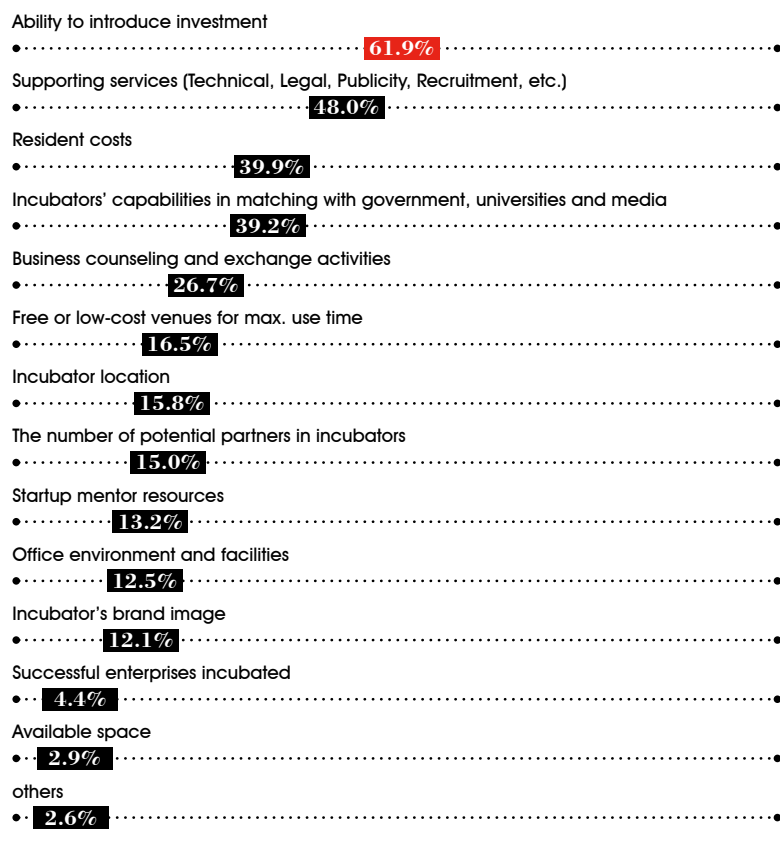
Makerspace is distinguished from ordinary rental offices by its entrepreneurial service, which is also the foundation of its existence and development. With constant development and improvement, makerspace now provides diversified business services, such as startup venue, business counseling, financing introduction, enterprise training, project application and financial and taxation advisory. More than 80% of makerspaces provide the above services. In actual operation, each makerspace may provide different types of services and different point of service penetration according to their available resources and capacities. During our on-site visit with makerspaces, we found that some are aiming at startups at certain stages to provide services like market development, brand promotion and other characteristics services.

The most crucial element for makerspace to enhance its service standard lies in enhancement of innovative and entrepreneurial project counseling capability, which is endorsed by 80% of makerspace operators. As on one hand, the startup project counseling capacity will inevitably be diluted with the constant expansion of makerspace business scope. On the other hand, some startup mentors link with different innovative and entrepreneurship platforms in order to improve their influence, resulting the dilution in disguise. Additionally, 70% of operators believe that the project financing ability, establishment of service management mechanisms, proficiency and

Makerspace Operators' Perspectives on Key Elements to Optimize Entrepreneurial Service



Makerspace Operators' Perspectives on Key Elements for Startups to Choose Makerspace



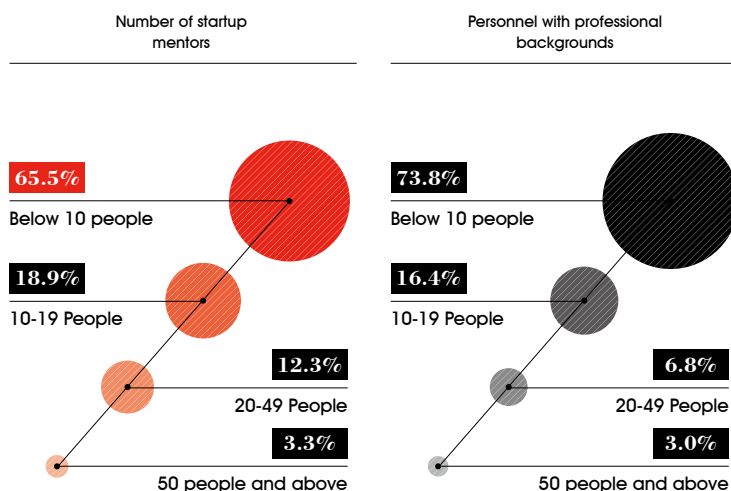
communication skills of service personnel are also major influential factors. Shanghai is basically in the initial stage as most makerspaces were set up lately and have been operating short. Defects in operational team structure, ecosystems and services will impact on makerspace's entrepreneurial service ability, which calls for a certain period of improvement.

From the perspective of makerspace operators, we counted six key factors that startups choose to create their own makerspaces. "Ability to introduce investment (61.9%)" is the mostly focused element by operators choosing makerspace. Next is the correlation of "supporting services (48.0%)". The third is "resident costs (39.9%)". The other three key factors are: "incubators' capabilities in matching with government, universities and media (39.2%)", "business counseling and exchange activities (26.7%)" as well as "free or low-cost venues for max. use time (16.5%)".

2.3 Entrepreneurship Counseling Experts Construction of Shanghai Makerspace

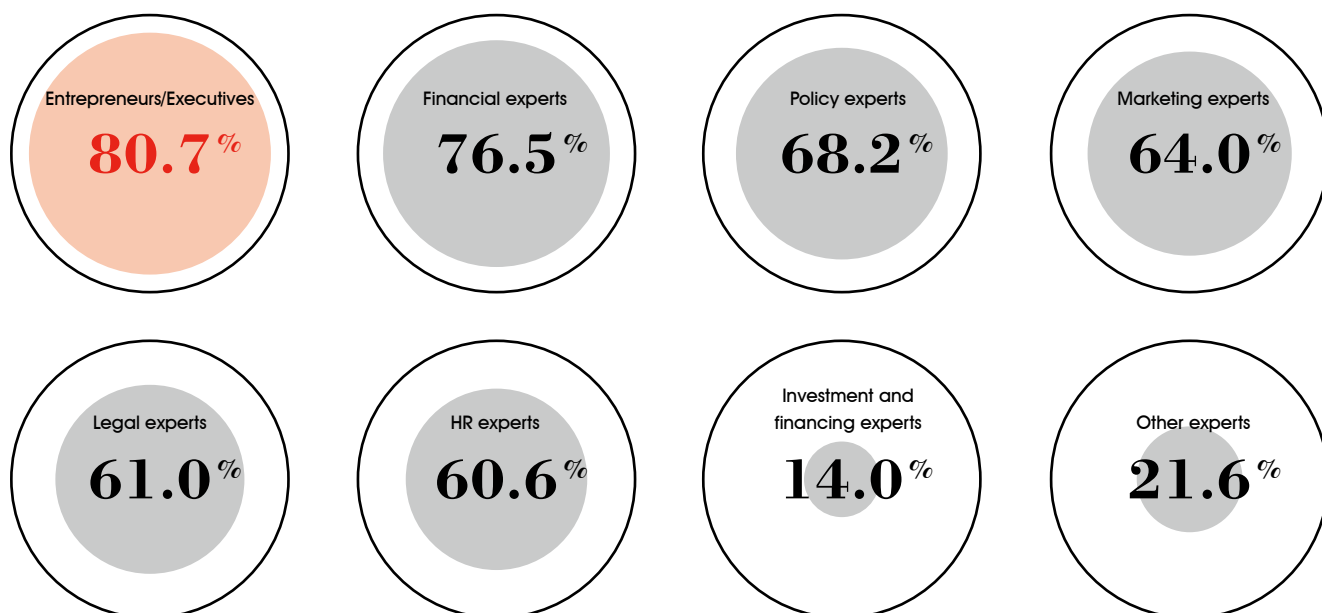
The average number of entrepreneurial mentors held by a single conglomerate is 14.5, with an average background of 11.6 professionals. The number of entrepreneurial instructors and professional background staff below 10 is the largest, accounting for 65.5% and 73.8% respectively. Among them, "entrepreneurs/executives" are the most common experts provided by more than 80% of makerspaces, with an average of 3.3 experts, followed by "financial experts", provided by 76.5% of makerspace, with an average of 1.8 experts; nearly 70% could provide "policy experts" ranking the third with an average of 1.8 experts.

Makerspace Entrepreneurial Experts Team Distribution



Types of Startup Experts Makerspace Provides

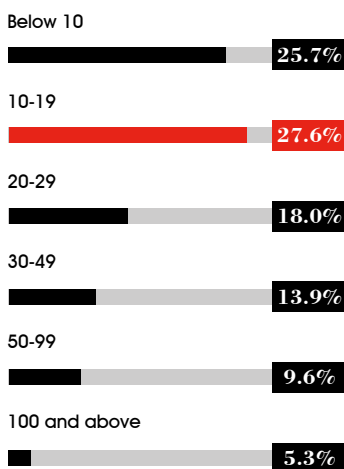
Proportion



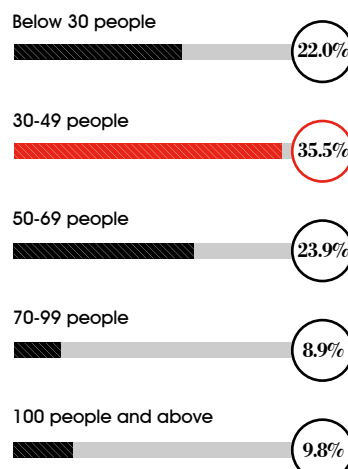
2.4 Overview of Shanghai Makerspace Startup Activities

Startup activities is not only one of the six key factors makerspace operators believe to attract startups settling in but also one of their revenue sources. During our on-site visit with the startups, they think that offline activities are more intuitive, comprehensive and help in-depth understanding of makerspace. Therefore, a lot of makerspaces are vigorously organizing all kinds of referrals, lectures, competitions and other offline startup activities. as a highlight to attract and provide service to startups. According to the survey results, Shanghai makerspace held more than 9,800

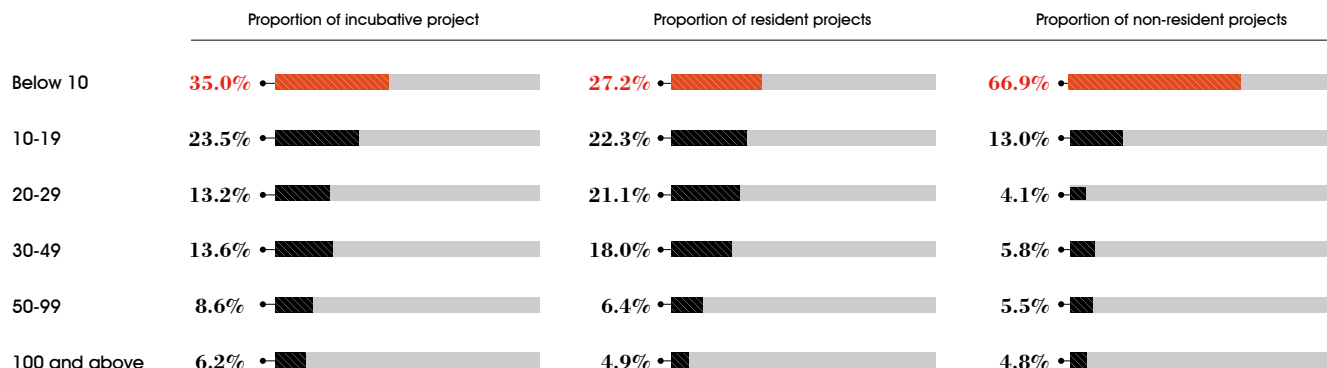
Number of Events Held in 2016



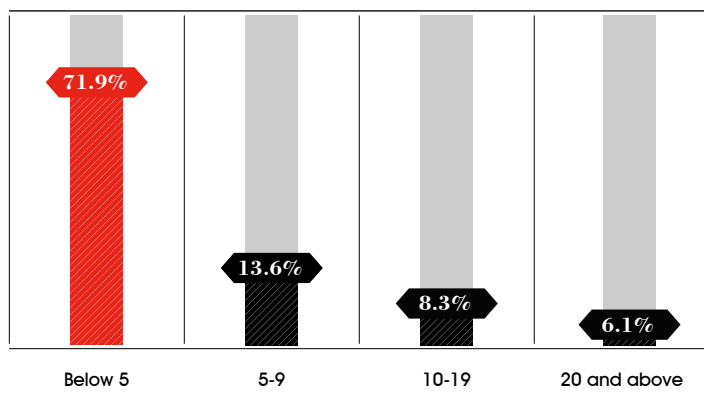
Number of Participants per Event in 2016



Distribution of Makerspace Incubative Projects



Quantify Distribution of Successful Financing Projects



business-related activities in 2016, with a total number of participants exceeding 590,000 and an average of 61.3 participants per event. The largest number of participants in each event was 30-49 (35.5%), followed by 50-69 (23.9%).

2.5 Financing Status Quo of Shanghai Makerspace Project Incubator

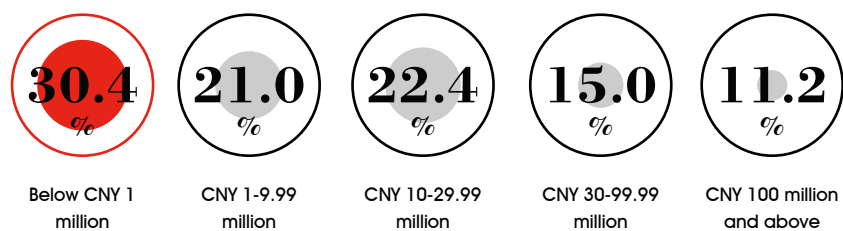
Seen from makerspace project distribution, an average of 35.3 projects are under

incubation in a single makerspace, 39.4 resident projects and 31.2 non-resident in average, projects under 10 account for the largest proportion.

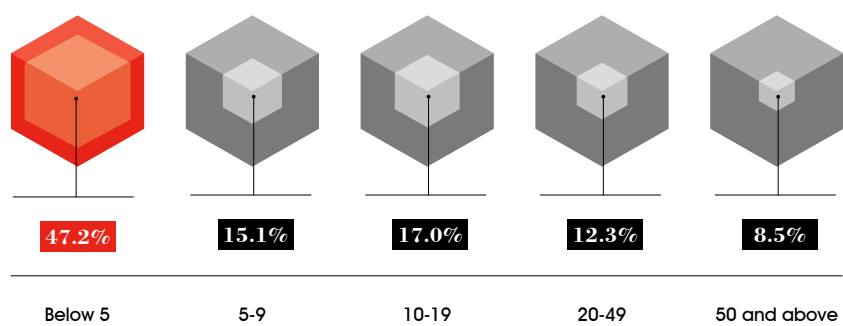
According to the results of this survey, more than 70% of makerspaces successful sought funds for below 5 projects few for 20 projects, accounting 6.1% only. Most of them get a total financing of 10 million or less for incubative projects, accounting for 51.4%; more than 10% of them get financing over 100 million. these makerspaces are mainly based on investment-driven and industrial chain models, successful financing up to 16.6%. Makerspaces of total successful financing value over CNY 100 million is more than 30%.

Nearly 40% of makerspaces

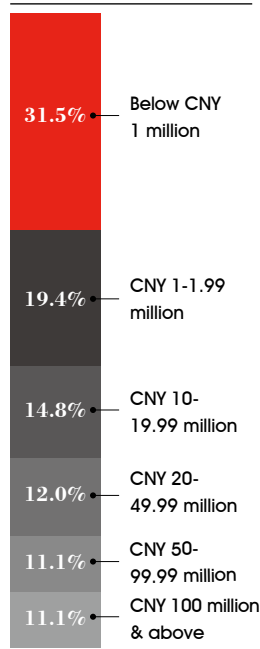
Amount Distribution of Successful Financing Projects



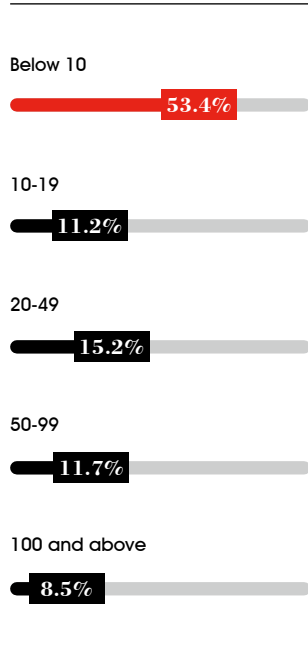
Distribution of Number of Incubative High-Tech Projects



Financing Amount of Incubative High-Tech Project



Distribution of Numbers of IPRs Obtained by Workspace



has high-tech projects under incubation, among which incubative projects below 5 take the largest proportion, accounting for 47.2%, and those of more than 20 high-tech incubative projects accounting for 20%. From the amount of financing, the mainstream is below CNY 10 million in the current market, more than 50% of the high-tech projects within this range. However, most projects financing are below CNY 1 million, accounting for 31.5%. Financing above 100 million accounted for 11.1%, mainly covering mobile internet, artificial intelligence, cloud computing and health care. According to makerspace operators' valuation on high-tech projects in makerspaces, those of overall projects valued at CNY 100 million and above account for 52.2% of the total.

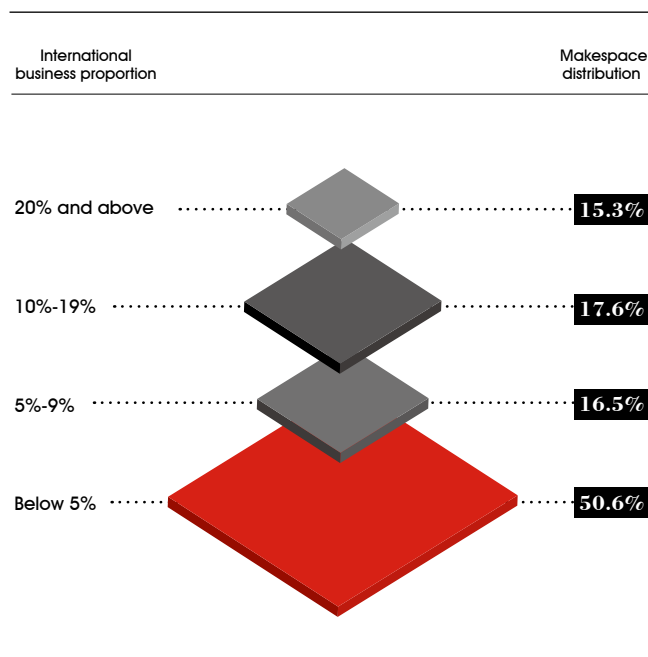
In 2016, the total amount of intellectual property rights (IPRs) obtained by Shanghai makerspace-based startups exceeded 7,100, makerspaces of below 10 IPRs accounted for the highest proportion (53.4%), followed by those of 20-49 IPRs, accounting for 15.2%.

2.6 Shanghai Makerspace International Businesses

Makerspaces founded after 2013 account for 60% of the total, showing that the entire makerspace industry has a relatively short development cycle. Its business model and services are still not perfect and mature enough. Now only 23.2% of makerspaces extend their businesses to other cities, while those opening to international markets are even less, only accounting for 3.6%.

Although few Shanghai makerspaces enter into overseas cities, those of international businesses have reached 31.9%, with international business accounting for 7.8% of their overall business in average. At the same time, in response to Shanghai's policy of "internationalization", "specialization" and "brandization". Those makerspaces remarked that they will gradually increase their international business. In the future, international business is expected to be increased to 25.4%.

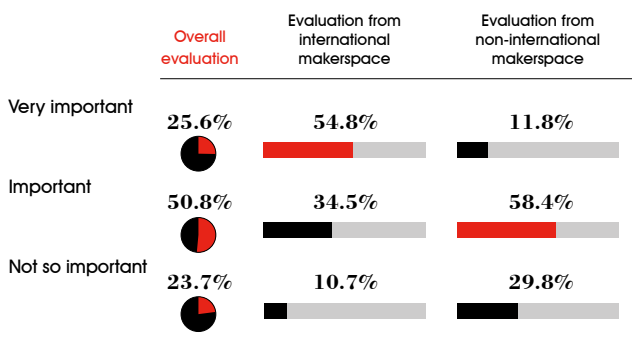
International Business Distribution in Makerspace Business



Countries Involved in Makerspace International Business



Makerspace Operators' Evaluation on Importance of International Platforms and Resources



Overall, the international business of Shanghai makerspace has more than 30 countries involved. Among them, the United States is the largest contributor, accounting for 24.4%; the second is South Korea, accounting for 12.5%; other popular countries are Israel, Germany, Japan, each accounting for more than 8%. International businesses mainly cover overseas excellent project introduction, capital and resources matching, industrial and technical exchanges, bringing local enterprises to international market, technology transfer

Makerspace Operators' Comments on Building International Sci-Tech Resources Network

Realize the carrier sharing and increase the utilization of international entrepreneurial space



Form an international platform to display entrepreneurial achievements



Form an international entrepreneurship training base



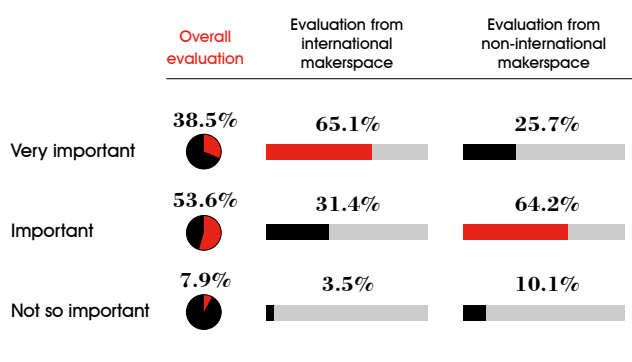
Establish a database to provide first-hand data for Shanghai's international startups



Form a credible public service network platform



Makerspace Operators' Evaluation on Importance of Building International Innovation and Entrepreneurship Network and Database



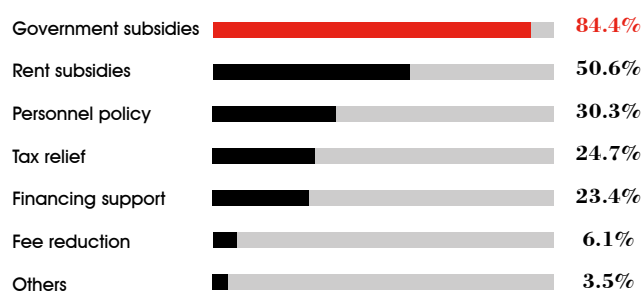
support, cross-border support, international venture exchange activities, entrepreneurship training, legal advice and sci-tech conversion consulting.

With a broader international perspective, Shanghai makerspace enterprises attach great importance to international platforms and resources. Regarding an evaluation on the importance of international platforms and resources to startups, 76.4% of the makerspace operators think it important, among which 90% are makerspace operators who have already developed internationalized business.

Over 90% of makerspace operators believe that building an international network and database of innovation and entrepreneurship resources is of significant value. From Shanghai's environment, the move may stimulate integration of Shanghai's innovation and entrepreneurship into the global network, enhance the international service capability and image of Shanghai's innovative and entrepreneurial enterprises. For makerspace, international entrepreneurship space will be better utilized and startups will be assisted in overcoming international barriers. At the same time, makerspace operators believe that this platform will "share carrier among members and increase the utilization of international entrepreneurship space" as well as "forming an international platform to display of entrepreneurial achievements and personnel training".

Chapter 3: Shanghai Makerspace Related Policies

Relevant Preferential Policies Enjoyed by Shanghai Makerspace in 2016



Source: Shanghai Incubator and Accelerator Report 2017

The Shanghai municipal government has made great efforts to support the industry in makerspace. According to the survey results, more than 80% of makerspaces enjoyed preferential policies. Among them, "government subsidies" has the highest penetration rate by 84.4%; Secondly, more than 50% of this group has enjoyed the "rent subsidies", followed by the "talents policy" at 30.3%.

3.1 Makerspace Fund Subsidies Support

3.1.1 Accreditation + Assessment System

Accreditation + Assessment System means preconditions set by the administrative department that policy support or financial subsidies will be issued according to the results of performance appraisal within a certain cycle after granting the title. Makerspaces within the region can apply voluntarily.

The Shanghai municipal government will take the register system for accreditation assessment and will grant the title of

Shanghai Makerspace Fund Subsidies Related Preferential Policies

| City | Accreditation conditions/ Assessment criteria | Amount of rewards |
|----------|--|--|
| Shanghai | According to the organizations' recommendation makerspaces registered > 6 months will be incorporated in the record Recorded makerspaces will be rewarded according to the annual assessment results | Comprehensive evaluation for excellent, reward CNY 150,000; Comprehensive evaluation for good, reward CNY 100,000; Comprehensive evaluation for qualified, reward CNY 50,000 |

Shanghai Makerspace Accreditation + Assessment System Related Preferential Policies 1

| District | Accreditation conditions / assessment criteria | Amount of rewards |
|----------|--|--|
| Yangpu | 1. Registered capital > CNY 1 million 2. 4 or more full-time staff 3. Venue > 1,000 m ² with lease contract term > 2 years 4. > 15 incubative enterprises 5. Annually secured financing by 10% (or > 5 enterprises) 6. Qualified in the year-end examination | 1. Startup fee support (CNY 500/m ² , max. CNY 5 million) 2. Rent subsidies: CNY 60/m ² /month, for 2 years, max. CNY 3 million 3. Innovation and entrepreneurship contest activities subsidies, max. CNY 500,000 |
| Hangkou | 1. Office area not less than 300 m ² , lease term not less than 3 years 2. Public used area not less than 10% of the total area 3. Seed fund not less than 3 million 4. Technology-based enterprises settled in not less than 50% | 1. Recorded sci-tech incubators: CNY 300,000/CNY 200,000/CNY 100,000 for excellent/good/qualified. 2. 50% subsidy for entrep. trainings, max. CNY 200,000/year 3. 80% subsidy for innovative contests, max. CNY 300,000 4. Incubation services, CNY 0.3-5 million/unit 5. 30% subsidies for ex.&int. reformation, max CNY 3 million/1.2 million 6. Excellent startups in activities, CNY 1-3 million 7. Newly recognized national, municipal, district sci-tech incubators, add. max. CNY 1 million/CNY 600,000/CNY 300,000 8. Newly listed national, municipal, district sci-tech nursery, CNY 500,000/CNY 300,000/CNY 150,000 |

Shanghai Makerspace Accreditation + Assessment System Related Preferential Policies 2

| District | Accreditation conditions / assessment criteria | Amount of rewards |
|----------------|---|---|
| Minhang | <ol style="list-style-type: none"> 1. Established more than 1 year 2. Registered both at the city and district 3. With over 15 incubative enterprises for more than 6 months | <ol style="list-style-type: none"> 1. Qualified makerspace service: pre-incubation CNY 5,000/unit; incubating CNY 10,000/unit; accelerating CNY 15,000/unit 2. Secured investment: for 5% of enterprises annually, CNY 200,000; for 10%, CNY 300,000; for 15%, CNY 500,000; listed in SMEs board and E board, CNY 500,000/unit and 300,000/unit 3. Reformation subsidy CNY 350/m², max. CNY 5 million 4. Public space rent: ≤20% of total area, max. 1,000 m², for 3 years, max. CNY 1 million 5. Startup: CNY 300,000 for area ≤1,000 m² and CNY 500,000 for >1,000 m² 6. 50% subsidies for public welfare activities, max. CNY 1 million 7. 3-year interest subsidy for makerspace investment, max. CNY 1 million; 5% actual for risk relief upon failure |
| Putuo | <ol style="list-style-type: none"> 1. Subsidies to registered makerspaces, basically no threshold 2. Key support to makerspaces awarded the title of "National Makerspace" and "Municipal Makerspace" | <ol style="list-style-type: none"> 1. Max. 50% subsidies for public services and contest events cost, max. CNY 2 million 2. To support the "Putuo District Makerspace Alliance" activities in the form of government purchases and projects by full subsidies 3. Same amount reward as Shanghai's public funds if gained 4. "National Makerspace": reward max. CNY 2 million 5. "Shanghai Makerspace": reward max. CNY 300,000 6. Industry leaders or leading venture capital companies to build makerspace in key areas of support, as assessed by the country and municipality, an additional CNY 1 million reward |

"Shanghai Makerspace" to recorded makerspaces. Annual rewards of different amounts will be issued according to the assessment results in the examination at the end of each natural year.

In terms of districts and counties, the districts of Yangpu, Hongkou, Minhang and Putuo are typical areas where subsidies

Related Preferential Policies on Shanghai Makerspace Application System

| District | Accreditation conditions / Assessment criteria | Amounts of rewards |
|------------------------|--|---|
| Xuhui | <ol style="list-style-type: none"> 1. Rents in principle not higher than the average price of 80% of the market in the same lot 2. Establishment of a venture capital fund of no less than CNY 5 million or at least 5 strategic contracts with angel investors or venture investment organizations 3. Registration, taxation and operation in Xuhui District 4. Office area not less than 500 m² and the lease contract not less than 2 years 5. Provide statistic data according to requests, under normal operation no less than 3 months | <ol style="list-style-type: none"> 1. Max operating subsidy CNY 400, 000/year 2. Max. reward of "Innov&Entrep" CNY 600,000 3. For eligible makerspaces, award according to their contributions to regional economy 4. Offer 30-40% subsidies of business and special line BB package price for Telecom businesses 5. For holding Xuhui District innov&entrep contests, max. subsidy CNY 500, 000 |
| Pudong New Area | <i>Project Application Guideline of Pudong New Area 2016 for "Small and Micro Enterprise Innovation Base City Demonstration" Special Fund</i> | <ol style="list-style-type: none"> 1. Construction&purchase expense, 10% subsidy of the investment fund, max. 200 m², CNY 30 million 2. Rent subsidy 20%, max. 12 months and CNY 1 million 3. Makerspace chain development (>5 in Pudong, 10 in the city or >30 in the country) max. CNY 1 million 4. Incubative overseas project (>CNY500,000, overseas capital 30%, with overseas team), CNY 50,000, max. CNY 2 million |
| Changning | <i>Project Application Guideline of Changning District 2015 for Information Consumption Special Fund</i> <ol style="list-style-type: none"> 1. Focus on new technology applications, investment and financing introducing, legal talent services in the fields of "great wisdom, mobile internet and cloud computing" 2. Since 2014, no less than 5 incubative enterprises get investment accumulatively | <ol style="list-style-type: none"> 1. For promising, innovative, and demonstrative makerspaces, 30% subsidy of the total investment, max. CNY 1.5 million 2. Common, basic and influential makerspaces with good service feedback, max. subsidy CNY 1 million |



are granted through the accreditation and assessment system. Each district has clear assessment requirements and standards to provide further encouragement and support funds apart from the municipal government subsidies.

3.1.2 Project Application Guideline

Project Application Guideline is an public released guideline directing the support provided to makerspace meeting basic requirements, those who meet the requirements may send the application. Specific support scope and amount will be determined by final assessment.

3.2 Human Resources Support

According to the Shanghai Guidelines on Makerspace Development in Promoting Innovation and Entrepreneurship, the follow policies are issued to the industry's service personnel to inspire innovation and entrepreneurship and upgrade its service level.

① Support to researchers. Allow researchers of universities, research institutes and other institutions to start up either staying at or leaving their posts. Eligible researchers will be entitled to basic pay in the universities and research institutes during leave and for those resume their posts in the business incubation period (3 to 5 years), their service will continue in the units.

② Support to undergraduates. The supports are in various aspects: provide startup loan subsidies, rent subsidies, social insurance premium subsidies at initial startup period, entrepreneurship training subsidies and others to encourage entrepreneurship policy measures through undergraduates

startup pilot program; Establish and improve flexible management system to support undergraduates to startup with their names reserved in school; Encourage colleges and universities to develop innovative entrepreneurship education courses, to foster students' innovative and entrepreneurship awareness and abilities; Give full play to Shanghai University Science and Technology Venture Fund and to provide continuous support, thorough guidance and one-stop service to those who startup voluntarily.

③ Support the innovation and entrepreneurship of all kinds of personnel, such as senior managers of large enterprises, serial entrepreneurs, returned overseas students, innovative intermediary service personnel and their core teams. The market-oriented evaluation and market recognition of the entrepreneurial talent and its core team, directly goes to the standard credit card points. For those entrepreneurial talents and core team who are evaluated by the market participants and meet certain conditions, the residence permit can be shortened from 7 years to 3-5 years. Entrepreneurs of a certain amount of venture capital and their core teams can direct settle in. The last support is construction of "initial startup" for overseas students to provide better service to them in Shanghai.

④ Strengthen the "dual self-linkage". Rely on China (Shanghai) Pilot Free Trade Zone and Zhangjiang National Innovation Demonstration Zone to increase overseas talent introduction channels and platform construction, establish a multi-level offshore startup support system and explore ways to replicate, the promotion of offshore business model for overseas talent to create an open and convenient business environment.

⑤ Focus on the development of a number of entrepreneurship colleges. Set up a business education resources sharing platform to support the introduction of a number of outstanding entrepreneurship training materials and courses at home and abroad to develop a number of entrepreneurial courses to conform with the characteristics of Shanghai courses. Support entrepreneurs with entrepreneurial experience and social responsibilities, investors, etc. as entrepreneurship mentors, and help entrepreneurs and startups to carry out various forms of entrepreneurship counseling and business consulting.

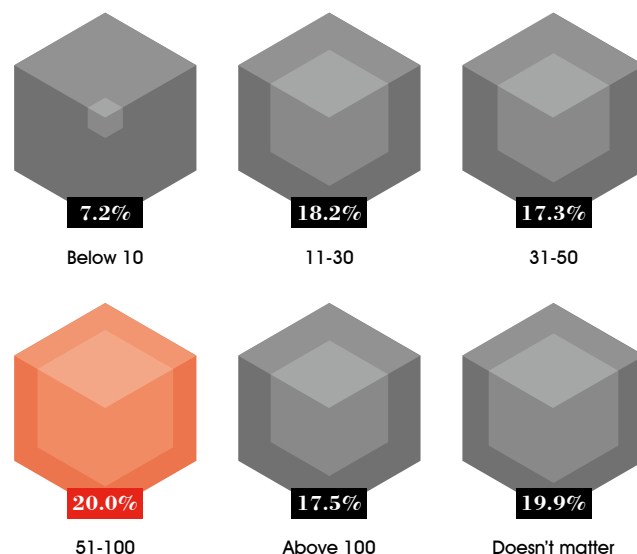
Chapter 4: Demand and Satisfaction Evaluation on Startups in Shanghai

With the deepening of the "Innovation and Entrepreneurship" call and the ever-improving hardware and service development in makerspace, more and more entrepreneurs are inclined to realize the "startup dream" through makerspace. Firstly, supporting services from basic services such as business registration, personnel recruitment to professional services like technical guidance, brand promotion and financing introduction make starting up more convenient, makerspace is equipped with a comprehensive and systematic auxiliary and consulting services to eliminate worries of entrepreneurs who lack of startup experience or fund. Secondly, compared with other startup approaches, makerspace in most cases enable entrepreneurs to acquire a wider range of resources by fully interpreting and applying to preferential government policies at the earliest time possible, gathering and sharing upstream and downstream enterprises in the supply chain and gathering entrepreneurs and forming exchange circles. These rich resources are unique advantageous of makerspace. Thirdly, the complete and flexible hardware facilities not only meet the basic office needs but also reduce startup costs. Additionally, makerspace is a renowned brand itself credit endorsed to entrepreneurs.

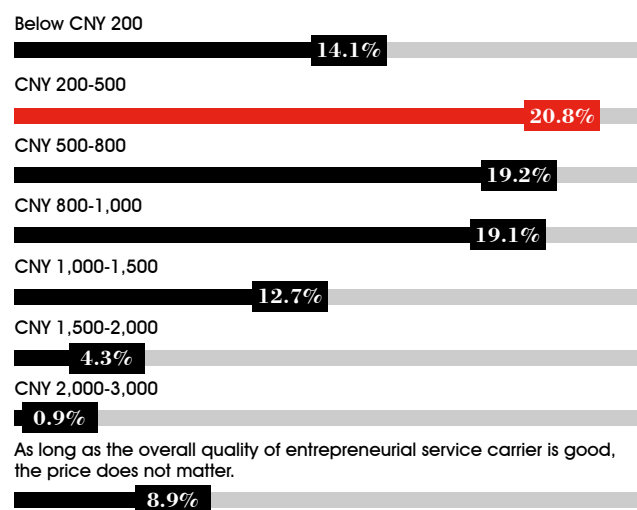
4.1 Basic Requirements for Startups

From the startup businesses for the makerspace station demands, out of different stages of business development personality requirements, their expectations for the number of stations will be different. As a result, the number of stations in

Makerspace Station Demands for Startups



Monthly Unit Station Price Accepted by Startups



each range tends to be average. As for station prices, more than 80% of the startups can accept monthly prices of less than CNY 1,500 with an average acceptable unit price of CNY 723 per month.

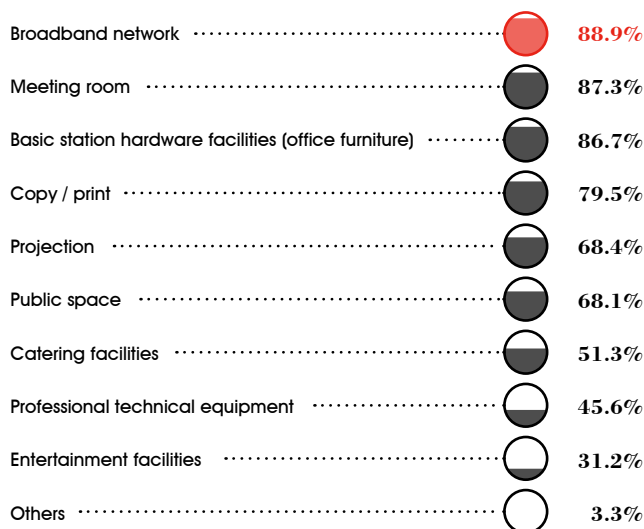
Under the demands of hardware facilities, the "broadband network" for information search and

communication, the "meeting room" for business discussion, and the "basic station hardware facilities (office furniture)" for basic office work are the three most important items of equipment, at the ratio of more than 80%.

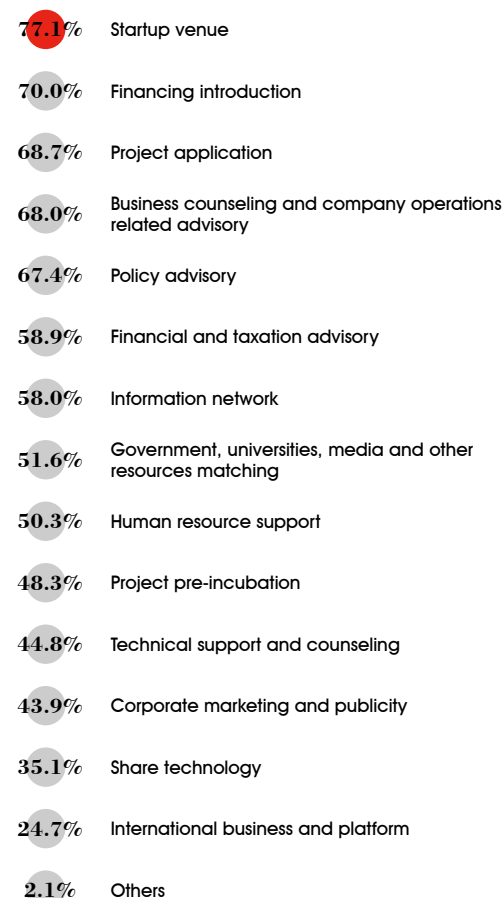
As for software services and facilities, the basic "startup venue" and "financing introduction" services are most demanded by startups with 77.1% and 70% respectively. Followed by services related to basic business support and policy applications, including "project application" (68.7%), "business counseling and company operations related advisory" (68%), "policy advisory" (67.4%).

When it comes to the three services that must be provided, "financing introduction" rise to top at a ratio

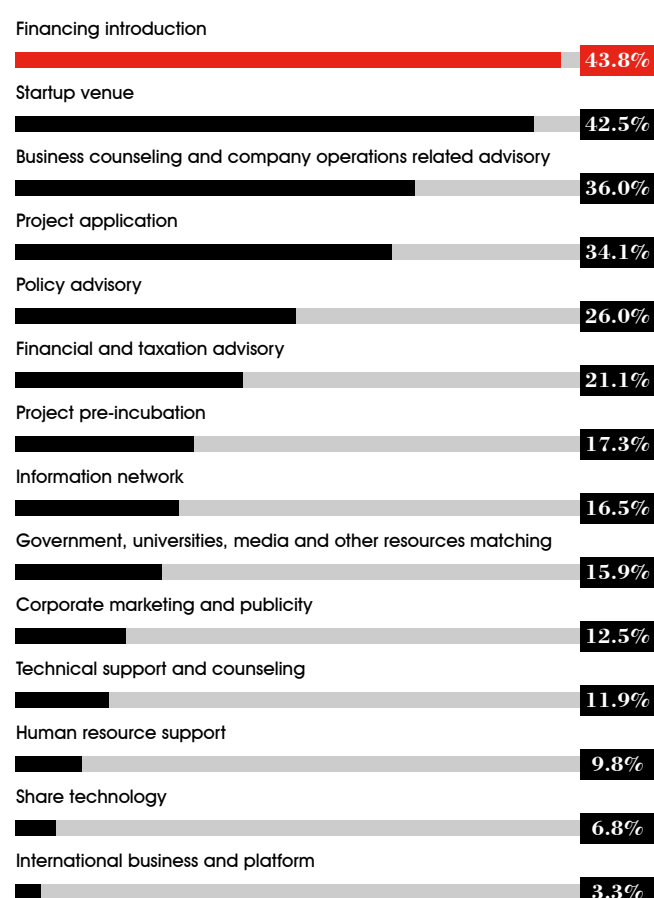
Startups' Demand for Hardware Facilities



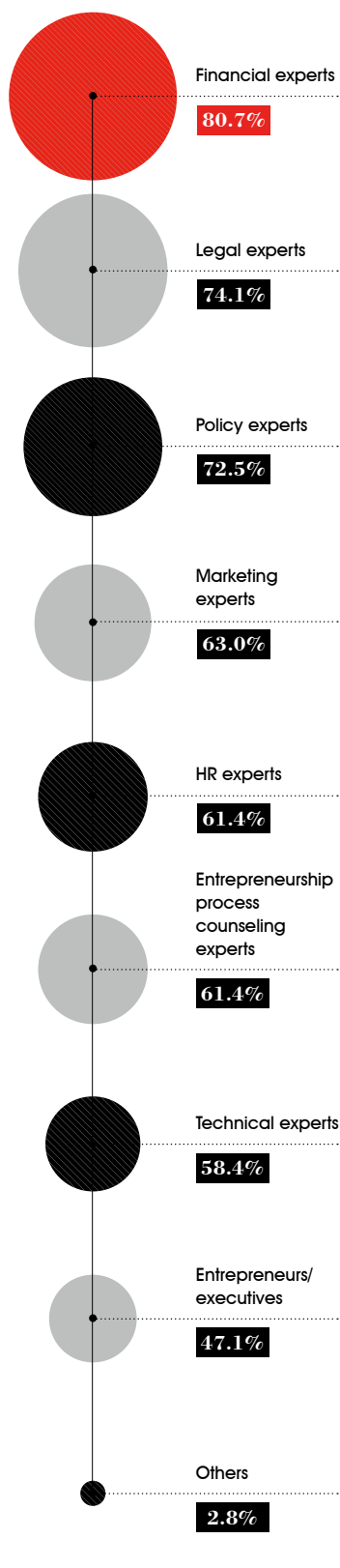
Demand of Software Service for Startups in Makerspace



Three Prerequisite Services that Outstanding Makerspaces Must Have



Demand of Professional Teams for Startups



Annual Activities Desired by Startups



of 43.8%. Followed by "startup venue" (42.5%), and "business counseling and company operations related advisory" (36%).

As for the requirements of makerspace team professionals, the entrepreneurs showed a comprehensive and diversified demand. Except "Entrepreneur/business executive", all kinds of counseling experts expected the ratio to exceed 50%. Among them, "financial experts", "legal experts" and "policy experts" are the three most demanded types, with 80.7%, 74.1% and 72.5% of the choices. Entrepreneurs pay more attention to the actual landing of the help because of the entrepreneurial environment and the scale of different stages, while the entrepreneur/executive requirements will be lower than other types of professionals.

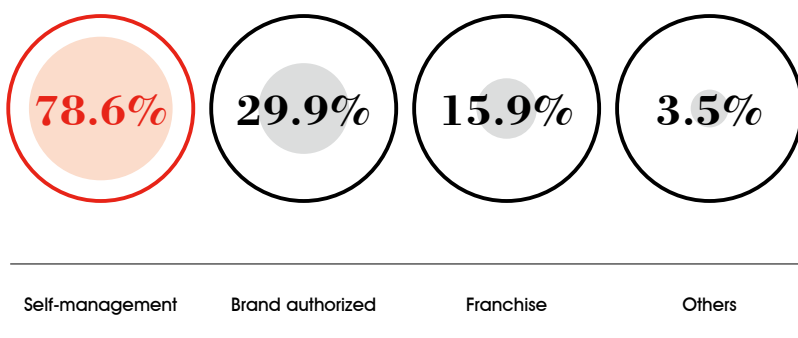
Top 3 Annual Activities Desired by Startups



In terms of activities, 65.5% of entrepreneurs needed "regular exchange salon among startups" in order to create a good entrepreneurial atmosphere and to create a business exchange circle. Demand for "financing seminars for startup projects" and "law and policy lectures" ranked second and third with 64.3% and 63.9% respectively. In addition, 60% of entrepreneurs also choose "business operation and management training seminar" and "successful entrepreneurs talk and share events".

In the three activities most desired by startups, the fund relating "financing seminars for startup projects" (41.7%) seems more important than "regular exchange salon among startups" (35.5%). "Law and policy lectures" (34.2%) rank unchanged in the third position.

Makerspace Management Model Preference for Startups



4.2 Preferences and Considerations in Choosing Makerspace

Presently, Shanghai makerspace mainly focuses on self-management. At the same time, when investigating the startups, we found out that "self-management makerspace" is also the preferred business model for startups because of the consideration for quality control, flexibility and individualized demand, more trustworthiness, with a preference of 78.6%, followed by the brand authorization (29.9%) and franchise (15.9%).

When it comes to specific choice factors, "venue and facilities" is the most basic condition for starting a business, and 98.1% of the startups consider this aspect when evaluating makerspace. Of these, 77.3% of the total number of "venue and facilities" were considered in consideration of the "geographical location and convenient transportation" due to the direct impact on the convenience of office work and the ease of recruitment, followed by "resident cost" (70.1%), good office environment, bright and spacious venue" (60.0%) and "fully equipped hardware facilities" (55.7%).

Secondly, the professional qualifications and efficiency of service teams in makerspace are also the concerns of startups, with 91.6% of entrepreneurs evaluating "experts and entrepreneurial service personnel". "A comprehensive team

of experts" (60.4%), "time efficiency of entrepreneurial service personnel in service delivery, problem solving, feedback, etc." (59.8%) and "high professional skills of service staff or experts" (41.0%) Create a space of professional team the most important three major standards.

Thirdly, 86.7% of entrepreneurs consider "supporting services" as most important in terms of comprehensiveness and cost-effectiveness. "Various consulting and services" and "ability to match with government, universities and media" ranked the top two, accounting for 64.5% and 46.4% respectively. In addition, 34.3% would also consider "reasonable cost of supporting services".

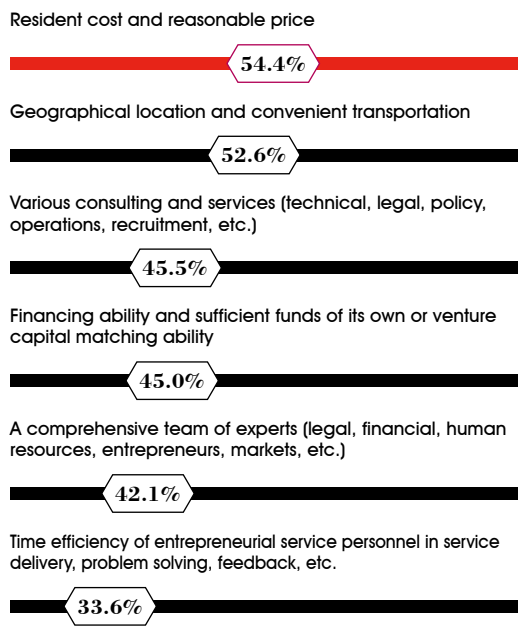
Additionally, the number of people who considered "entrepreneurial atmosphere", "financial support", "activities and lectures" and "brand image" reached more than 60%, accounting for 83.1%, 76.2%, 73.0% and 65.3% respectively.

From a comprehensive perspective, there are six most important considerations for choosing makerspace, in which cost, capital, geographical location and the integrated, professional and efficient services are crucial. However, cost is the priority concern for startups, "resident cost and reasonable price" is selected by 54.4%. The other five major considerations are "geographical location and convenient transportation" (52.6%), "various consulting and services" (45.5%), "financing ability and sufficient funds of its own

or venture capital matching ability" (45.0%), "a comprehensive team of experts" (42.1%), and "time efficiency of entrepreneurial service personnel in service delivery, problem solving, feedback, etc." (33.6%).

According to the qualitative research, startups in different stages show different requirements when choosing makerspace. Initial startups usually lack of capital and talents, so they are more focused on cost-effectiveness and funding support, and the demanded for convenient geographical locations are mainly for "ease of recruitment and team building". Experienced startups are more likely to consider funding and platforms. They emphasize the synergies and all-round exchange, consultation and assistance, especially in the area of technology and financing.

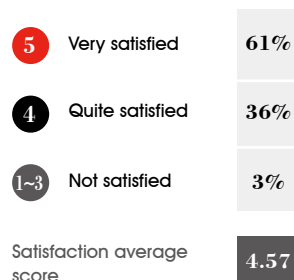
Six Most Important Considerations for Startups Choosing Makerspace



Considerations for Startups Choosing Makerspace

| | |
|--|--------------|
| 1 Venues and facilities | 98.1% |
| Geographical location and convenient transportation | 77.3% |
| Resident cost and reasonable price | 70.1% |
| Good office environment, bright and spacious venue | 60.0% |
| Fully equipped hardware facilities | 55.7% |
| Free or a low cost station for a period of time | 38.5% |
| Hardware facilities equipped with advanced quality | 29.6% |
| 2 Experts and entrepreneurial service personnel | 91.6% |
| A comprehensive team of experts | 60.4% |
| Timely efficiency of service providers in service delivery, problem solving, feedback, etc | 59.8% |
| High professional skills of service personnel or experts | 41.0% |
| Entrepreneurial service personnel good communicative skills | 40.7% |
| Cordial and kind entrepreneurial service personnel | 25.3% |
| Sufficient entrepreneurial service personnel | 17.5% |
| 3 Supporting services | 86.7% |
| Various consulting and services | 64.5% |
| Ability to match with government, universities and media | 46.4% |
| Reasonable cost of supporting services | 34.3% |
| Strict but reasonable service mechanism | 27.3% |
| International platform and services of international standard | 18.6% |
| 4 Entrepreneurial atmosphere | 83.1% |
| Potential partners in the entrepreneurial service carrier | 53.6% |
| Positive entrepreneurial atmosphere | 51.7% |
| Successful incubative enterprise cases in the entrepreneurial service carrier | 41.6% |
| 5 Financial support | 76.2% |
| Financing ability and sufficient funds of its own or venture capital matching ability | 58.3% |
| Sufficient support and advisory services in the financing process | 52.0% |
| 6 Activities and lectures | 73.0% |
| Activities and lectures of high quality | 49.4% |
| Activities and lectures in quantity covering a wide range | 39.7% |
| Ability to organize events based on individual requirements | 31.1% |
| Numerous activities/lectures participants | 14.5% |
| 7 Brand image | 65.3% |
| Entrepreneurship services carrier influence | 43.5% |
| Good reputation of the entrepreneurial service carrier | 38.2% |
| International image and existing international business of the service carrier | 18.0% |
| Others | 2.4% |

Overall Satisfaction of Makerspace for Startups



4.3 Satisfaction Evaluations of Startups

4.3.1 Overall Satisfaction Evaluation of Startups in Shanghai Makerspace

The survey found that the resident companies in Shanghai makerspace presented a highly satisfactory attitude toward the service carrier. In the overall scoring, the overall satisfaction rating is divided into 4.57 points, 61% of entrepreneurs were on the overall performance of makerspace was "very satisfied", 36% were "quite satisfied", only 3% of entrepreneurs show dissatisfaction.

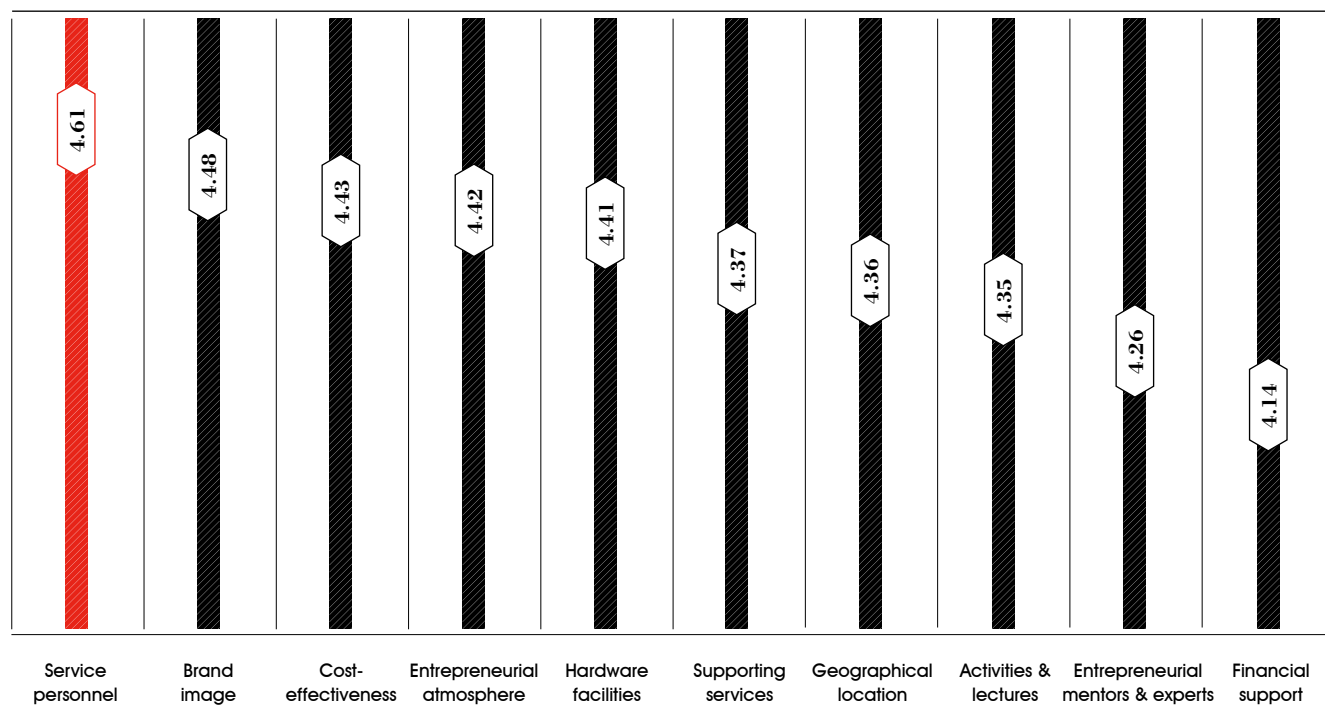
4.3.2 Satisfaction Evaluation on Ten Subdivided Attributes

Based on the subdivided attributes, we set out from the perspectives of "brand image", "financial support", "geographical

location", "hardware facilities", "supporting services", "activities and lectures", "cost-effectiveness", "entrepreneurial mentors and experts", "service personnel" and "entrepreneurial atmosphere" as the top ten dimensions for entrepreneurs' evaluation for makerspace.

For satisfaction of the various attributes at average performance, "service personnel" wins the highest rating by 4.61 points. Followed by makerspace "brand image" and "cost-effectiveness", with an average satisfaction of 4.48 points and 4.43 points. Relatively speaking, "entrepreneurial mentors and experts" and "financial support" get the worst evaluation, with an average satisfaction of only 4.26 points and 4.14 points. It can be seen that Shanghai makerspace needs to further improve and optimize its related resources and auxiliary services in professional guidance

Top 10 Subdivided Attributes for Makerspace





and funding urgently to meet the needs of entrepreneurs.

Service Personnel

Overall, the satisfaction ratings of service personnel ranked the top in the 10 considerations. 97% of the startups were satisfied with the service personnel provided by Shanghai makerspace, among which "very satisfied" reached over 60%. Affirmative entrepreneurs remarked the service team by "fine image, cordial and friendly in service, good communication skills, in-depth understanding of customer demands, offering high-quality and professional service, able to take the initiative to make personalized counseling programs". In terms of dissatisfaction, a few entrepreneurs mentioned insufficient personnel, relatively complicated procedures and not enough diversified service.

Brand Image

On the brand image, 94% of the startups showed satisfactory attitude. The

visibility and influence of makerspace is the most satisfied aspect for the resident startups. The excellent brand effect can bring more resources and funds as well as preferential policies to the entrepreneurs. In addition, the strong background of makerspace itself also enhances credit endorsement capabilities. In the unsatisfactory area, insufficient publicity is the most mentioned point to be improved. Entrepreneurs expect makerspace can get more brand awareness and social attention through more vigorous promotion so as to help establish and promote its own brand.

Cost-effectiveness

In the subdivided attribute evaluation, cost-effectiveness satisfaction ranks third. Ninety-three percent of startups are satisfied with the cost-effectiveness of their makerspace. Fifty percent of entrepreneurs are "very satisfied". They generally think makerspace station and service charges are relatively reasonable, with preferential subsidies and policies, effectively reducing

Satisfaction Evaluation of Service Personnel

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 64% |
| 4 | Quite satisfied | 33% |
| 1~3 | Not satisfied | 3% |
| Satisfaction average score | | 4.61 |

Satisfaction Evaluation of Brand Image

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 55% |
| 4 | Quite satisfied | 39% |
| 1~3 | Not satisfied | 6% |
| Satisfaction average score | | 4.48 |

Satisfaction Evaluation of Cost-effectiveness

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 50% |
| 4 | Quite satisfied | 43% |
| 1~3 | Not satisfied | 7% |
| Satisfaction average score | | 4.43 |

Satisfaction Evaluation of Entrepreneurial Atmosphere

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 49% |
| 4 | Quite satisfied | 44% |
| 1~3 | Not satisfied | 7% |
| Satisfaction average score | | 4.42 |

Satisfaction Evaluation of Hardware Facilities

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 48% |
| 4 | Quite satisfied | 45% |
| 1~3 | Not satisfied | 7% |
| Satisfaction average score | | 4.41 |

Satisfaction Evaluation of Supporting Services

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 46% |
| 4 | Quite satisfied | 46% |
| 1~3 | Not satisfied | 8% |
| Satisfaction average score | | 4.37 |

their entrants and startup costs. However, a few entrepreneurs also said that property cost in makerspace is relatively high, and the costs increase slightly faster, as a result, virtually increased their entrepreneurial pressure. Therefore, they hope to have stronger and longer-term preferential support.

Entrepreneurial Atmosphere

In terms of the entrepreneurial atmosphere, 93% of entrepreneurs chose "very satisfied" (49%) and "quite satisfied" (44%). Satisfactory evaluations mainly focus on experience exchange, resource sharing and active mutual assistance. The spontaneous formation of communication circles by many entrepreneurs helps to exchange experiences and at the same time creates an entrepreneurial atmosphere of mutual encouragement and mutual assistance. Besides, they are able to find business partners form effective resource sharing and industrial cluster through the exchange. However,

the dissatisfied entrepreneurs mainly come from the makerspaces where fewer enterprises are settled. They have not successfully established a positive circle of entrepreneurship and have not formed an effective supply chain system.

Hardware Facilities

48% of entrepreneurs are "very satisfied" with the facilities of makerspace, and 45% think "quite satisfied". Their remarks of satisfaction are mainly complete and diversified facilities, simple and easy to use, comfortable and spacious environment. While 7% of startups were relatively less satisfied, mainly with complaints about obsolete equipment, less private meeting rooms for business discussions, inadequate dining, entertainment and parking facilities.

Supporting Services

On the provision of software services, 92% of startups were basically satisfied and 46% of them "very satisfied" and "quite satisfied". Overall, entrepreneurs

Satisfaction Evaluation of Geographical Locations

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 49% |
| 4 | Quite satisfied | 39% |
| 1~3 | Not satisfied | 12% |
| Satisfaction average score | | 4.36 |



affirmed the diversity and interactivity of supporting services such as providing various trainings, resource matching and policy guidance, as well as efficient and interactive communication in the course of providing services. However, 8% of startups are not satisfied with the supporting services provided by makerspace, mainly due to the lack of professionalism, especially the lack of accuracy during matching the resources still need to be further strengthened.

Geographical Location

In terms of geographical location, 88% of startups were relatively satisfied, among which 49% were "very satisfied" and 39% "quite satisfied". Relatively satisfied startups are mostly located in the downtown area, with convenient transportation, abundant restaurants, car parks and other supporting facilities around. Makerspaces located in the suburbs are of the relatively low satisfaction mainly due to inaccessible and inadequate facilities and less flow of people.

Relatively speaking, the evaluation of the geographical location of entrepreneurs is a comprehensive consideration, not only in consideration of convenient traffic but also measurement of cost and the environment. High peripheral consumption level will add to total cost of entrepreneurship or overcrowdedness and other unfavorable factors will also affect the entrepreneurs' satisfaction in the geographical perspective.

Activities and Lectures

In terms of activities and lectures, 47% of entrepreneurs said they were "very satisfied" and 42% were "quite satisfied". They think the lectures and activities in makerspace are as expected, with plenty of professional and informative information,

which is close to the needs of entrepreneurs. However, 11% of the respondents expressed dissatisfaction for insufficient and monotonous entrepreneurial activities and low popularity of the lecturers.

Entrepreneurial Mentors and Experts

Among the 10 subdivided attributes, entrepreneurial mentors and experts provided by makerspace scores relatively low. Total 83% of startups "satisfied", among which 43% "very satisfied". They think mentors and experts in makerspace are passionate and responsible, with specialized knowledge and entrepreneurial experience, and can provide one-on-one personalized guidance according to the needs of startups. The "not satisfied" account's for 17%, and they think that mentors and experts in short supply, which results in short exchange time, is the most obvious deficiencies.

Financial Support

From the needs of startups, we found that the provision of financial resources is particularly concerned by entrepreneurs, especially for the growing enterprises, capital means greater development. However, in reality, makerspace did not fully meet the expectations of entrepreneurs in terms of financial support. Only 38% said they were "very satisfied" and 40% were "quite satisfied". Satisfied entrepreneurs mainly think that the brand reputation and background of makerspace enable higher possibility of funding and financing support. However, 22% of entrepreneurs also expressed their dissatisfaction with makerspace. They generally believed that makerspace provided insufficient and weak funding support policies, high difficulty of application, lack of sustainable and stable funding.

Satisfaction

Evaluation of

Activities & Lectures

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 47% |
| 4 | Quite satisfied | 42% |
| 1~3 | Not satisfied | 11% |
| Satisfaction average score | | 4.35 |

Satisfaction

Evaluation of

Entrepreneurial Mentors and Experts

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 43% |
| 4 | Quite satisfied | 40% |
| 1~3 | Not satisfied | 17% |
| Satisfaction average score | | 4.26 |

Satisfaction

Evaluation of

Financial Support

| | | |
|----------------------------|-----------------|------|
| 5 | Very satisfied | 38% |
| 4 | Quite satisfied | 40% |
| 1~3 | Not satisfied | 22% |
| Satisfaction average score | | 4.14 |



Chapter 5: Shanghai Makerspace Weak Points and Future Trends

5.1 "Weak Points" of Shanghai Makerspace (1) Lack of a unified industry development benchmark and model guidance

With the deepening of "Innovation and Entrepreneurship" and the gradual improvement of market demand, Shanghai makerspace has ushered in the rapid development phase. However, as a result of the rapid increase in the number of public facilities, the supervision and guidance have lagged behind and the coverage has become somewhat inadequate. Concomitantly, they have run into various problems such as substandard operation, irregular incubation, weak entrepreneurial service capabilities and low occupancy rates. However, due to the lack of unified development benchmark and detailed guidance plan in the industry, it is difficult to find the correct location and planning direction for the startup makerspace. Without sufficient experience, they can not really exert their financial and resource advantages and can not provide the entrepreneurs with real effective incubation help. At the same time, the lack of standardization has also caused the dispersed market and the low cohesion of makerspace.

Photo: Getty Images

(2) Lack of professional service personnel resources, lack of personalized solutions

China's makerspace started late and lacks of entrepreneurial service personnel resources. From the current makerspace in Shanghai, most professional service teams are small-scale, and one staff holds many post simultaneously. However, with the increasing occupancy of startups, the contradictions caused by the shortage of professional counselors have become prominent. Due to insufficiency of service personnel, makerspace neither can reach timely and comprehensive interactive communication with startups nor understand the individual needs, thus affecting the development of personalized programs and incubation quality and unable to achieve the value of makerspace.

(3) Regional development imbalance

Shanghai makerspace development presents a phenomenon of regional imbalance. Pudong New Area and Yangpu District are the two giants makerspaces with absolute superiority in quantity and preferential support. The three districts and counties of Songjiang, Huangpu and Chongming, on the other hand, are relatively backward in the development of makerspace, accounting for less than 3% of the city's total. Insufficient innovative capacity, entrepreneurial atmosphere not concentrated and makerspace regional development slow are the most important issues.

(4) Joint office makerspace: imbalance between current supply and demands of entrepreneurs

From the perspective of the supply market, joint office in Shanghai accounts for a large proportion due to direct and rapid access to income. However, research found that the joint office makerspace is too monotonous to meet the actual entrepreneurial needs. It can neither provide venue concessions nor individualized entrepreneurial counseling, with no access to the ecosystem of resources. This kind of makerspace stays superficial and not able to incubate businesses in a real sense.

In addition, the "entrepreneurs/executives" are the largest and most common type of experts in 80% of these makerspaces. For entrepreneurs, these experts are the least demanded, only at 47.1%.

Therefore, to attract more startups, it is necessary for makerspace operators to better understand entrepreneurs' ideas, selection criteria and demands.

(5) Over-pursuit of performance and indicators

During the actual development of Shanghai makerspace, some makerspaces over-pursue policy-oriented hard targets while neglecting the utilization and shaping of its own special advantages. Some even boast about exaggerating the actual conditions in order to meet the requirements of performance indicators and lead to preferential policies not landing, the actual problems are covered up and so on. These will only lead to a false appearance of bustling, but the substantive innovation and entrepreneurship promotion efforts are not enough.

5.2 Future Development Proposal and Orientation of Shanghai Makerspace

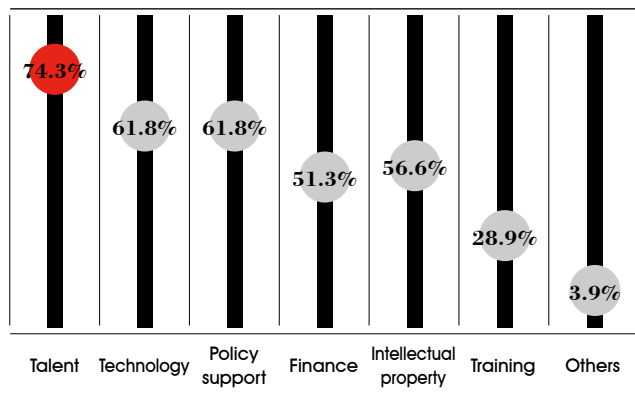
(1) Establish an industry database and develop effective and practical guidance programs

Makerspace industry itself requires standardization and regularized development. Through the accumulation of online and offline business data to form a wealth of big data and case base, it is expected to formulate detailed guidance steps and programs to help the starting makerspaces quickly find the positioning and planning and make full use of existing resources and advantages to complete the standardization of business incubation operations step by step, and promote the realization of the core values of entrepreneurship.

(2) Focus on fostering professional makerspaces

Different from other forms of entrepreneurship, makerspace lies in the sharing of quality resources and the provision of entrepreneurial solutions. The future development of Shanghai makerspace should be led by incubating services, substantially increasing professional standards, the number of mentors, professors and other professionals, and focusing on the actual needs of each resident enterprise and providing effective business counseling for them. Besides, research institutions, universities, large state-owned enterprises should be encouraged to build their own space and cultivate entrepreneurship independently so as to enlarge the vertical

Construction Focus of International Sci-Tech Innovation Supporting Service



areas and increase industrial concentration.

(3) Personalized "one-stop" entrepreneurial incubation

Shanghai makerspace must form an ecosystem integrating venues, funds, policies and services to form a total factor-based shared incubator platform to provide entrepreneurs with more comprehensive, low-cost and efficient growth environment.

The so-called "one-stop" service does not mean makerspace always takes the lead. Instead, it provides key help properly, especially in operations and management, resource integration of upstream and downstream enterprises in the supply chain as well as investment and financing linkage system. It also refers to a thorough industry chain to help enterprises to achieve the sustainable development of startups.

(4) Benchmark the United States TECHSHOP, to establish local hardware store

The hardware store is a commercial mini factory for professional enthusiasts to create what they want. In the geek prototype workshop, entrepreneurs can get inspiration as well as hardware, software and other comprehensive technical supports to effectively put their original ideas into practice. The United States TECHSHOP is one of the outstanding benchmarks, attracting creative teams through the stratification and maker mode. The construction of hardware stores can greatly increase the concentration of

innovative industries in Shanghai and enhance the strength of the scientific research star label.

(5) Provide joint production plant and other supporting services

Currently, the follow-up supporting services for graduating enterprises are still inadequate, including the later research and development, trial production and mass production. In the future, Shanghai should focus on the development of joint plant to provide basic manufacturing functions for scientific research enterprises, and consider to reduce the cost of startups to form a closing industrial ecosystem.

(6) To help the national makerspace transform and keep abreast with times

Shanghai makerspace has entered the shuffling stage. National makerspace, including hi-tech parks and university parks, should change the inherent concept and fully understand the development trend of makerspace, absorb new theories and new technologies to achieve transformation so as to better meet the needs of entrepreneurs and effectively enhance the innovative capacity in Shanghai.

(7) Deepen internationalization for a global brand image and resource sharing

Shanghai, as an international exchange center, has unique advantages in international development of makerspace. In future, government should give strong support in innov.&entrep. services, talents, rent and incubator resources sharing, focus on building an international resource sharing circle and enhance international business gathering, to build Shanghai into a global innovative center. The expansion includes: centralize international innovative resources and encourage international innovative services, stimulate cooperation and exchange among international entrepreneurship incubators, support "bringing in" overseas resources and domestic "go global".

More than 50% of space operators consider that the future of Shanghai internationalized sci-tech innovation supporting service construction should focus on talents development, followed by technology and policy support, and then finance and intellectual property.

Chapter 6: Shanghai Makerspace List

In random sequence

List Specialization

| Makerspace Brand Name | Operating Body Name |
|---|--|
| Hopingspace | Hoping Information Technology Co., Ltd. |
| Zhangjiang Medicine Valley Platform | Shanghai Zhangjiang Medicine Valley Co., Ltd. |
| China Unicom International Business Center | China Unicom Innovation Venture Capital (Shanghai) Co., Ltd. |
| China Telecom Innovation and Entrepreneurship Base | Tianyi Technology Venture Capital Co., Ltd. |
| Wesocool | Shanghai Wesocool Venture Park Co., Ltd. |
| SIMIC Incubator | Shanghai SIMIC Development Co., Ltd. |
| Shanghai Langkawi Venture Capital Co., Ltd. | Shanghai Langkawi Venture Capital Co., Ltd. |
| Sheng Tang Incubator | Shanghai Sheng Tang Venture Capital Management Co., Ltd. |
| SIPAI | Shanghai SIPAI Development Co., Ltd. |
| iLab | Shanghai iLab Chuangxin Enterprise Management Co., Ltd. |
| Auto Innovation Makerspace | Shanghai Anchi Enterprise Management Co., Ltd. |
| Shanghai Graphene New Material Makerspace | Shanghai Super Carbon Graphene Industry Technology Co., Ltd. |
| Brilliance Commercial Internet Makerspace | Shanghai River-Bank Commercial Development Co., Ltd. |
| Shanghai North High-Tech Large Data Specialization Makerspace | Shanghai North High-Tech (Group) Co., Ltd. |
| Biomedical Pharmaceutical Specialization Makerspace | Shanghai Biomedical Science and Technology Industry Promotion Center |

List Brandification

| Makerspace Brand Name | Operating Body Name |
|--|--|
| Zhangjiang Mobile Internet Incubator | Shanghai Xinze Venture Capital Management Co., Ltd. |
| Zhangjiang Hi-Tech 895 Venture Camp | Shanghai Zhangjiang Management Center Development Co., Ltd. |
| COCOSPACE | COCOSPACE Investment (Shanghai) Co., Ltd. |
| Suhehui | Shanghai Suhehui Investment Management Co., Ltd. |
| Zhangjiang Venture Workshop | Shanghai Zhangjiang Business Incubator Management Co., Ltd. |
| SH Caohejing New Technology Developmental Zone Innovation Center | Shanghai Caohejing New Technology Developmental Zone Innovation Center |
| Shanghai Hui Valley High-Tech Startup Center | Shanghai Hui Valley High-Tech Startup Center |
| Tongji Science Park Incubator | Shanghai Tongji Science Park Incubator Co., Ltd. |
| Pegasus Space | Shanghai Oriental Pegasus Investment Management Co., Ltd. |
| Star Workshop | Shanghai Environmental Science and Technology Parks Co., Ltd. |

List Internationalization

| Makerspace Brand Name | Operating Body Name |
|--|--|
| SH Jiading Advanced Technology Innovation and Business Incubator | Shanghai Jiading Advanced Technology Innovation and Business Incubator |
| Ispace | Shanghai Ispace Incubator Management Co., Ltd. |
| Techcode | Techcode (Shanghai) Enterprise Development Co., Ltd. |
| TussStar | Shanghai TussStar Business Incubator Co., Ltd. |
| Shanghai Yangpu Technological Venture Center | Shanghai Yangpu Technological Venture Center Co., Ltd. |
| Sino-Israel Technology Innovation Center | Rayhaven (Shanghai) Makerspace Management Co., Ltd. |
| XNode Makerspace | XNode (Shanghai) Makerspace Management Co., Ltd. |

Chapter 7: Outstanding Cases of Makerspace at Home and Abroad

7.1 Overseas Makerspace Development Status and Classic Case Analysis

Some academic market researches and media reports think that makerspace originates from the makerspace overseas. The earliest makerspace can be traced back to the Chaos Computer Club created in 1981 in Berlin, Germany. After years of development, overseas makerspace has grown mature, and formed various forms of space carriers, such as Fab Lab, Hackspace, TechShop, Makerspace and so on. In recent years, makerspace campaign has become a new wave of globalization, with makerspace distributed in more than 100 countries and regions, among which China and the United States have the largest number and size in the world at present.

The overseas makerspaces, established under different backgrounds with different business models on the whole, have the following three characteristics:







First, various social forces are greatly supported and encouraged by the government. Development of makerspace requires cooperation, participation, guidance and support from various government departments; and the majority of overseas makerspace projects achieved fund-raising through the crowd funding sites, which was not possible without government permission and support. Overseas makerspaces are either profitable business platforms or non-profit organizations built by government departments and social organizations. The non-profit ones mainly provide entrepreneurship opportunities for low-income and marginalized groups.



Second, the public share innovation and entrepreneurship. Most of the overseas makerspaces have lower thresholds basically regardless of entrepreneur's qualifications, background and skills. Anyone with innovative ideas can join makerspace. Moreover, the makerspaces focus on providing opportunities of exchange, shared space, resources and opportunities to entrepreneurs. For instance, startups are accessible to high-value laboratory equipment with only a small amount of membership fees or rent; Entrepreneurs with different experience and skills can better communicate, collide and cooperate with each other through entrepreneurial activities and create an atmosphere from "starting a business" to "starting a business community". All kinds of industries and projects can be found in makerspace. Even for those unpopular and interesting design or creation of an unclear market, they will find a platform in makerspace.

Third, clear and explicit operation model. There are two operation models for overseas makerspace: facilities provider and incubator services provider. The former mainly supports the makers to create and invent a variety of devices or the latest application software, etc. By sharing these costly devices and software at makerspace, it can not only reduce the cost but also improve their skills through training courses. The later is to provide incubation services such as financing, industrialization and commercialization for creative projects, and to help transform creative projects from ideas to commodities by making use of high-quality human and financial resources accumulated by makerspace.

Cases Outstanding Makerspace Cases Overseas

| Makerspace name | Origin | Operating mode | Profit model | Borrowed experience |
|--|--|---|--|---|
|  WE WORK |  United States | Provide entrepreneurs with low-cost office space carriers and opportunities for entrepreneurs to socialize, promote roadshows and seek external cooperation | Through the office "batch retail rent" earn price differences by charging membership fees and ancillary service fees. Second, through the premium of the surrounding land prices, profits from invisible returns from investment in seed companies | 1) Open and relaxed office facilities to create a better communication atmosphere and a sentient entrepreneurial environment 2) Low threshold and flexible rental options to meet individual needs |
|  Regus |  Belgium | Support clients' need for diversified workplace, including business offices, business meeting rooms, business lounges, virtual offices, video communications, business around the world, disaster recovery and other services, which is open to customers of new businesses, SOHO, small and medium enterprises and international enterprises | Rent is charged as per number of personnel on a monthly basis; at the same time, use of office equipment is charged as per the number of times. | 1) Aggregation of resources, to create shared partner networks 2) Personalized: to meet the needs of any size business office and provide more high-end customized makerspace brand |
|  Access Space |  Britain | Provide amateurs in the field of art, design, computers, etc with offices with cycled computers and free open-source software and innovative services such as project exchange, skill guidance and exhibition, half of users are social marginalized groups who are disabled, wanderer, or formerly guilty, etc. | A three-tier membership system in three categories sponsored by UK government social welfare. : "sponsor" (1 pound/month), "supporter" (3 pounds/month) and "fund provider" (1 pound/month), the higher the charge is, the richer is the service | 1) Low cost advantage 2) Deep vertical subdivision 3) Good social public image |



7.2 Outstanding Makerspace Cases in Shanghai

Cases 1 Wesocool

Operating body: Shanghai Wesocool Venture Park Co., Ltd.

Features and technical areas: Wisdom manufacture, Specialization, Open innovation platform, Advanced materials

Introduction

Wesocool makerspace aims at creating a makerspace of technology platform and specialized hard-tech by taking advantage of the Baowu Group's technical and industrial resources, focusing on new materials and smart manufacturing, applying the operation model of "physical space + professional services + investment funds + technology platform". Wesocool gives full play to the resources of the Central Research Institute of Bao Wu Group, the State Key Laboratory of Automotive Steels and the Joint R & D laboratories with the upstream and downstream enterprises in China, especially the new technology platform of advanced materials and advanced manufacturing, to provide one-stop service from experimental research, pilot test to production R & D design, inspection and testing certification, sci-tech advice, technical standards, intellectual property rights and achievements transformation.

Strategic development goals

In the future, we will focus on creating a technological platform focusing on hard science and technology, and make Wesocool Makerspace an important platform of open innovation system for Baowu Group, promoting technological innovation and transformation of sci-tech achievements within the Group, and serving the real economy transformation and development; build a trinity industrial incubation system of "platform layer-incubation layer-the application layer", to provide high end, professional and characteristic integrated services to makers; establish nursery incubator and accelerator and industrialized training incubated more than 100 enterprises and more than 25 graduating enterprises in three years.

Cases 2 SIPAI

Operating body: Shanghai SIPAI Technology Development Co., Ltd.

Features and technical areas: Advanced manufacturing, Innovation, Entrepreneurship, Specialization

Introduction

SIPAI, relying on Shanghai Industrial Automation Instrument Research Institute, undertakes to incubate sci-tech startups, cultivate entrepreneurship talents and foster strategic emerging industries by promoting the integration of industry, academia and research, technology transfer and achievements transformation. The "Intelligent Manufacturing Makerspace" (SIPAI) was launched in 2015. Through "Incubation + Entrepreneurship + Investment + Development", SIPAI endeavors to create a clustered service platform, including preferential policy, financial support, venture capital, personnel training, domestic and foreign exchange, IT equipment support, etc. With the "joint office-capital-consulting" business model, it provides Huizhi, capital and one-stop incubator services for new startups to save their costs. SIPAI locates in "smart manufacturing core technology" and focuses on high-tech industries such as internet plus, industrial automation instrumentation to transform traditional industries with new and high technology and provide all-around services to sci-tech startups.

Strategic development goals

From 2017 onwards, SIPAI will give full play of the abundant resources and strong entrepreneurial atmosphere of Shanghai Institute of Industrial Automation Instrumentation Innovative it relied on, as well as its integration ability in the industry, and strive to create a new innovative and entrepreneurial engine, co-ordinate the industrial chain, innovation Chain, capital chain and policy chain to promote the innovation of innovative and entrepreneurial organization model and service model, and guide the transformation and development of enterprises combined with innovation and entrepreneurship, accelerate the growth of innovative enterprises, vigorously promote technological innovation and institutional innovation, explore to form connection of large, medium and small enterprises, and form a dynamic "smart manufacturing" platform.

Cases 3 Shanghai Yangpu Technological Innovation Center

Operating body: Shanghai Yangpu Technological Venture Center Co., Ltd.

Features and technical areas: Joint incubation, International incubation services, International special activities, Other high-techs

Introduction

Shanghai Yangpu Science and Technology Entrepreneurship Center (YSTEN) is dedicated to develop international incubation services and overseas channels relying on the National Technology Transfer Eastern Center. YSTEN International Incubation Service Platform (YSTEN Incubation) takes Shanghai International Business Incubator (IBI) and Venture Capital Cooperation Base as its operating platforms, with pioneering mentors of overseas background. YSTEN Incubation has established online and offline, international and domestic integrated channels. Following the national strategy of "Belt and Road", 9 sub-centers have been set in North America, Europe and Singapore to lay a network of channels and guide the cross-regional and cross-border circulation and cooperation of technology industries, covering 50 overseas channels, 20 partner agencies, with more than 10,000 pieces of technical information and more than 285 intermediary service agencies to assist in the overseas project landing and the overseas layout of domestic projects.

Strategic development goals

YSTEN Incubation focuses on strategic emerging industries and upgrading of traditional industries. Based in Shanghai, facing the Yangtze River Delta, radiating the country and even the world, with the core objective of building a pilot zone for international technology transfer, transformation and operation, we strive to be the innovate pioneer, importer of international resources and constructor of functional platforms. We functions in technology trading, incubation guide, sci-tech finance, international exchange, etc. Through the massive gathering of top technologies at home and abroad and trading, we are determined to practice financial innovation and promote joint of technology market and capital. We will form a national technology transfer base of abundant science and education resources, high-tech industry cluster and perfect technology transfer mechanism, to become the hub of the global sci-tech innovation system and a technology innovation demonstration of global impact.

Cases 4 Techcode

Operating body: Techcode (Shanghai) Enterprise Development Co., Ltd.

Features and technical areas: Industry incubator, Innovation cluster, Global resource integration, Electronics and information, Advanced manufacturing

Introduction

Techcode is an organization specialized in the incubator operations management and dynamic growth of technology startups and committed to becoming a leading brand in the global entrepreneurial ecosystem. It locates the industrial incubator with innovation and investment as a two-wheel drive, namely, the model of 1 + 1 + 1 (an entity incubator + an industrial fund + an innovative cluster), and its core basis is an entity incubator and an industrial fund. Currently, it has operated 17 incubators in the world and equipped with a Techcode-incubator system. At the same time, it established a global O2O platform and gathered innovative resources such as production, learning, government, gold and research from all over the world to serve the global startups.

Strategic development goals

In early 2017, Techcode presented a new concept of "Industrial Incubator". By integrating global resources, using physical incubators and industrial funds as a carrier, it will create a customized and innovative cluster for the region to achieve "industrial incubation" and lead the promotion of regional industrial upgrading in order to add new energy to regional economy development. In order to build an industrial incubator, Techcode has formulated an internationalized development strategy, to turn Techcode into the benchmark of Shanghai's international incubator and the first stop for overseas talents to start their business in Shanghai in three years. Techcode will take its worldwide strength to complete this strategic goal. At the same time, in order to tie in with the goal of building a global entrepreneurial country, Techcode has set up an efficient and reasonable organizational structure with four core functional departments: the Cooperation Center of Production and Research, the International cooperation center (link overseas), the Incubator Management Center (one of its mission is to integrate global innovation resources), Fund Management Center (one of its mission is to integrate global investment resources), and altogether there are 16 innovation centers (still increasing) active in the global network of Techcode for gathering of industry, universities, research, government and finance resources.

Cases 5 Suhehui

Operating body: Shanghai Suhehui Investment Management Co., Ltd.

Features and technical areas: National makerspace technology business incubator, Electronics and information, With investment function service agencies, SME financing agencies outstanding partners

Introduction

Shanghai Suhehui is a leading domestic makerspace and angel investment institutions as well as the first listed companies in the new board in its field. Suhehui headquarters is located in Shanghai, the current business stretched to Beijing, Chengdu, Hangzhou, Haining, Chongqing and other 11 cities 13 incubator bases, with an cumulative national incubation area of more than 20,000 m². We incubate and promote projects of the regional characteristics, cultivated more than 200 outstanding training enterprises in three years. So far, Suhehui has developed a diversified business section such as Su Xue Tang, Suhe Tou, Family Night and so on, each providing customized services for entrepreneurs in different stages.

Strategic development goals

In 2017, a branch of "Suhehui" will be set up with a service team with high comprehensive quality, efficient service and professional technical skills covering policies and regulations, enterprise management, economic and financial affairs, taxation, law, marketing, finance and other specialized fields. In 2018, it added 2-3 branches across the country to expand the scale of enterprise development and provide "entrepreneurship + investment + incubation" services to more entrepreneurs. In 2019, we will continue to accelerate the construction of branch offices nationwide and make use of advantageous resources to enhance visibility and service capabilities. With three years' accumulation and qualitative change, "Suhehui" makerspace will be a service brand of a new mode and corporate influence to guide all public makerspaces in Shanghai and nationwide.

Cases 6 Zhangjiang Mobile Internet Incubator

Operating body: Shanghai Xinze Venture Capital Management Co., Ltd.

Features and technical areas: Xinze Entrepreneurship, Digital information, Other high-techs

Introduction

Shanghai Xinze Venture Capital Management Co., Ltd. is the first makerspace listed in the new three board and one of the three "Demonstration Unit of Incubator Chain of Sci-Tech Innovation". Moreover, it was granted excellence in the evaluation of Shanghai sci-tech incubators in five consecutive years. Xinze incubator now consists of three areas: mobile internet, smart hardware and intelligent manufacturing in five bases. In the long-term service process, an innovative management mechanism of "one goal, two tracks and three mechanisms" has been formed. Xinze provides 12 categories and nearly a hundred kinds of personal services specifically for entrepreneurs, with implement of the service strategies of "Xinze Park", "Xinze Consulting", "Xinze Investment" and "Xinze College", adherence to the service concept of "service + investment", advocate of "cocktail style" technological and financial services and vigorous practice of "general practitioner-style" to accelerate and support enterprises. In the past seven years, Xinze has nurtured more than 400 business startups and helped start up more than 200 projects, with a successful rate over 50%.

Strategic development goals

The next three years, Xinze makerspace will focus on six major areas of space construction: 1. Expand the scope of clients, nurture 400 businesses or teams, of which technology-based enterprises not less than 95%. 2. Enlarge the base: It is expected to expand at least 4 bases in Shanghai which focus on biomedical health, e-commerce and internet plus respectively. 3. Enhance professional service capabilities: to provide personalized help respectively in the areas of technology, capital, policies, services, etc. 4. Enhance investment and financing services: help enterprises or teams under incubation connect with various types of angel investment and venture capital funds and actively carry out their own investments. Xinze will invest a total of 24 enterprises with total capital up to CYN 70 million in three years. 5. Focus on brand building, to enhance service effectiveness and brand promotion. 6. Form a complete "pre-incubation, incubation and accelerated incubation" service chain and nurture business clusters, to form a demonstration unit with wider and more in-depth services.

Cases 7 COCOSPACE

Operating body: Coco Space Investment (Shanghai) Co., Ltd.

Features and technical areas: Kechuang space, Investment driven, Deep hatch, Branding, Soft science research

Introduction

Coco Space (COCOSPACE) has become a well-known brand in Shanghai and China. With "Dream Origami Station" as the business positioning, COCOSPACE created the investment-driven sci-tech space and has established the service models of "Fund + Base", "Makerspace + Accelerator", "Investment + Incubation" as well as the value added services as "+Venture Capital, +Entrepreneurship Coach, and +Entrepreneurship Community". We are committed to providing one-stop service, including office space, entrepreneurship communities, entrepreneurship coaching, counseling and training, investment and financing for startups. As a pure investor, COCOSPACE promotes and helps innovation to realize young people's entrepreneurial dream and life value through value-added service system of venture capital, entrepreneurial coaches and entrepreneurship communities, seed capital, angel investment and VC investment.

Strategic development goals

COCOSPACE will set up its branches in Beijing, Shanghai, Shenzhen, Hangzhou, Nanjing, Chongqing, Chengdu, Changsha, Wuhan, Suzhou, Changzhou and Xi'an all over the country in the next few years with the dream of "5 countries and 15 cities". It plans to establish international science and technology space in Houston, London, Israel and other places. It is committed to invest and incubate students to start their own business and service transfer of national technological achievements. On the basis of 4 spaces in Shanghai at present, 2-3 new spaces are added each year and the management space covers an area of more than 200,000 m², with management equity funds CNY 1 billion, more than 300 projects incubated and 20 projects invested each year.

Cases 8 Naked Heart Community

Operating body: Shanghai bareheaded Social Enterprise Management Consulting Co., Ltd.

Features and technical areas: Internet, Information Technology

Introduction

Naked Heart Community, which entered the makerspace industry by the end of 2015, has developed 7 communities in 2016 and has successfully attracted 605 settled enterprises and 2,501 online and offline members. Naked Heart Community developed the nHOS system specifically for better centralized management of information sharing of community information, community operations, contracts, community activities, finance, etc. as to also avoid loss and risks caused by fault information. Through this system, a complete management system from guest appointment and visiting, settling in, development, and leaving. In addition, the community also launched a self-developed APP, members can publish work, daily dynamic and business needs anytime and anywhere. Members can also find the right partner by filtering according to their needs, book and open meeting rooms, submit question report to the operator and so on, in such way to quickly and efficiently solve their problems.

Strategic development goals

The Naked Heart Community aims to establish a community network radiating the entire Asia-Pacific based in Shanghai for its members, including Shanghai, Beijing, Shenzhen, Suzhou, Chengdu, Hong Kong, Malaysia, Singapore and Taiwan. The network can provide members with wireless development space, so that members can start from any point towards major cities in Asia Pacific. In the future, Naked Heart Society will take the common development with its members as the focus to further expand its international business and increase its theme exchange and sharing sessions in high-tech, mobile internet and big data areas, and provide all-round human resources, financial and logistical support to startups.



Photo: Getty Images

Appendix: Experts' Interviews

HR: Judging from your professional point of view, what are the evaluation criteria for makerspace?

YSTC: The government has four criteria. The first is certain amount of capital; The second is the carrier area, namely, the number of stations that can be settled in. The third is the settlement rate. Fourth, for incubative projects and enterprises, there are three important rates: project conversion rate, business/project survival rate and investment rate. The first means that each project incubated in makerspace must have the potential to be converted into a new business. The second means that supported projects and enterprises must be able to stand on the market for a long time. The third can usually be divided by indicators of three levels: 1 year, 3 years and 5 years. The investment rate refers to the ratio of venture capitals obtained respectively from the first, second, third and fourth angel investments by supported projects and enterprises.

HR: What kind of "Shanghai Features" or "Shanghai Advantage" do you think Shanghai Makerspaces have?

YSTC: As I have visited makerspaces nationwide, Shanghai makerspace is at a relatively advanced level, no less than Beijing. Shanghai Makerspace does have its own unique features and advantages. First of all, "internationalization", which falls into two aspects. First, most operators are returnees with international vision and experience. Second, most of the projects come from their

own resources and connections, thus with international background. For example, some projects in Yangpu District have resources from Stanford, Massachusetts and Harvard because Shanghai's international environment makes herself more open to the diversified resources. Second, instead of interfering or hindering the development of enterprises, the Shanghai government, as a pair of invisible hands, support and guide the development of makerspace by solving their problems as they need, give effective help, provide capital, office venue, professional teams to instruct setting up procedures and so on, thus creating a virtuous ecosystem.

HR: Then what challenges do you think Shanghai Makerspace will confront in the course of development? What is the future direction of development?

YSTC: As an international metropolis, our future direction of development must be "international innovation" and "branding" by recruiting professionals from around the world and cultivating operators of international horizons to create a higher profile makerspace brand. The current directions of improvement are: weak local brand awareness and lack of publicity. In this part, the globalizing capacity and the international layout is inadequate. In addition, Shanghai needs to strengthen its establishment of business service organizations with a series of supporting services such as psychotherapy, intellectual property and follow-up, so as to create a strong support system.

INTER-VIEWS Government Experts

HR: Hurun Report
YSTC: Yangpu Science and Technology Commission

“

As an international metropolis, our future direction of development must be "international innovation" and "branding"

”

INTER-VIEWS

Government Experts

HR: Hurun Report

XSTC: Xuhui Science and Technology Commission

“

The government has also made great efforts to solve these problems, such as reducing startup costs, providing all kinds of possible complementary services

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HR: According to your understanding, what kind of evolution has Shanghai's entrepreneurial service carrier experienced?

XSTC: As Municipal Science and Technology Commission has mentioned in the report, Shanghai makerspace experienced three stages, namely versions 1.0, 2.0 and 3.0. The initial version was only to provide property services, bringing together some startups to form a relatively cheap rental office. When version 2.0 took presence, it began to provide various basic supporting services, including business counseling, matching with the government departments to help some incapable startups to apply for various preferential policies and fill out the departmental documents. Till version 3.0, it is focused on financing services. Before the version 3.0 was formed, startups could only find suitable investors themselves through the market. However, version 3.0 of the entrepreneurial service carrier filled the gap in startup capital matching services. They could help startups join VCs and even some set up their own funds to invest in these startups, that is, the new incubators later formed.

HR: What is the future direction of Shanghai's entrepreneurial service carrier?

XSTC: Internationalization, specialization and brandization. Internationalization refers to highlighting the status of Shanghai's global sci-tech innovation center and creating an international sense both from the outside and inside. The internationalization of the periphery requires that more foreign incubators or makerspaces to set up their own organization in China. The connotative internationalization means introducing foreign projects and attracting foreigners

to start their own business in Shanghai and thus transform them into domestic productive forces. In addition, it's also about bringing domestic enterprises abroad to explore the international market. Specialization refers to the integration of upstream and downstream industry chain resources in a industry subdivision, providing enterprises with a complete set of in-depth, sophisticated and professional services, rather than providing the seemingly integrated service. Brandification is the concept of open chain, to increase the number of its distribution, build brand effect and enhance visibility for strong entrepreneurial service carriers.

HR: What difficulties has Shanghai encountered in the development of the entrepreneurial service carriers? How will they deal with it?

XSTC: First of all, Shanghai's high commercial costs is a higher threshold for entrepreneurs, thus more financial support is required. Secondly, some cultures in Shanghai are not suitable for starting a business. As some insiders refer, the comprador culture, petit bourgeois culture and the mother-in-law culture, under which people are oriented to work in a comfortable, enjoyable and stable manner instead of starting up a business that is money consuming and risky. The government has also made great efforts to solve these problems, such as reducing startup costs, providing all kinds of possible complementary services and even affordable talent apartments in the relatively central areas, to help entrepreneurs feel at ease by all-around support. However, the culture just mentioned is a deep-rooted pattern that is difficult to change in the short term.

HR: How do you think about current development status of China's entrepreneurial service carriers? What are the challenges?

TSO: I think that China's entrepreneurial service carriers are still in the early stages. With the advent of the entrepreneurial boom, there are more and more types of entrepreneurial fields, and startup teams putting forward more and higher requirements for entrepreneurial service carriers. They no longer need to stay in the venues with only basic services, but those with personalized and more practical help. However at present, most of our startup parks and incubators may still remain in basic services such as registering companies, which can not fully meet the real needs of startups. In addition, China's entrepreneurship service carriers lack professionals in their development. Entrepreneurship service providers need to provide more other than basis services. They also need rich entrepreneurial experience and industry knowledge and must understand how to help entrepreneurs to solve the challenges and difficulties in different periods. They need their own ideas to guide and inspire entrepreneurs. This requires strong overall ability, but such experienced personnel in China are in short supply and poor accumulation. The solution to these problems is to gradually accumulate experience and form a certain scale, so as to formulate industry standards and mature training guidelines, further upgrade China's entrepreneurship services and gradually improve the capacity of innovation and technological development as well as mature venture capital introduction capacity.

HR: Focusing on Shanghai, how do you think about the potential of Shanghai's

entire entrepreneurial service carrier industry?

TSO: I think quite promising. First of all, Shanghai's positioning is to create a science and innovation center with international influence. Such orientation determines various resources and preferential policies. Second, Shanghai has more young professionals than in other cities. Furthermore, Shanghai is in the center of East China, surrounded by satellite cities such as Suzhou, Changzhou, Hangzhou with strong economic strength and high development level. This forms a good linkage mechanism, showing a clear advantage in the talent flow and number entrepreneurial projects. Finally, Shanghai itself is highly internationalized, which has driven entrepreneurship programs and entrepreneurial service organizations to develop in an international orientation. Many overseas startup service agencies want to enter China and seek partners. Most of them take Shanghai as priority.

HR: How do you evaluate the quality of an entrepreneurial service carrier?

TSO: First of all, the carrier must have a clear positioning, as positioning determines the direction of its development, which will direct impact on the type of projects settled and the configuration of service personnel. Second, the overall ability and quality of staff members in entrepreneurship service carriers are also very important. This largely determines the quality of their service. Third, we need to consider whether or not the entrepreneurial service carrier can provide special services instead of acting as a "second-landlord", providing only work stations and office space. Entrepreneurial service carrier must provide practical help to startups according to the needs of startups. These are core elements.

INTER-
VIEWS

Makerspace
Operator

HR: Hurun Report

TSO: Tencent Space Operator

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Shanghai's positioning is to create a science and innovation center with international influence

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Li Ming

Principal of Tencent Makerspace (Yangpu), General Manager of Shanghai Zhonghe Investment Management Co., Ltd.

INTER-VIEWS

Makerspace Operator

HR: Hurun Report

ESO: ET Space Operator

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The industry has less financial support for early startup projects. Shanghai needs to attract more financial support from angel investment institutions

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Ding Jiamin

General Manager of Shanghai Zizhu Venture Incubator Co., Ltd., President of Minhang District Science and Technology Venture Enterprise Confederation, President of Minhang District Youth Innovative Entrepreneurial Talent Club in Shanghai

HR: What types of entrepreneurial service carriers are there in Shanghai now?

ESO: Mainly four types, the first is building incubator, the joint office to provide work stations and office space, this kind of carrier must have excellent geographical location in the CBD; the second is venture capital for incubation services and financing services; The third is training based carrier committed to brand output and establishment. The fourth is the representative carrier of government backgrounds dedicated to establishment of social image and industrial cluster.

HR: What policy support do you expect from Shanghai municipal government?

ESO: At present, the industry has less financial support for early startup projects. Shanghai needs to attract more financial support from angel investment institutions coupled with government subsidies to bring more good projects out of death valley and thrive them through incubation and capital boost. Secondly, many favorable policies have been introduced in recent years. If those policies can really fall into place, such as the linkage mechanism of venture capital and talent mechanism. It will be more helpful to emphasize the feasibility and materialism and to avoid excessive restrictive requirements.

HR: Should the development process of entrepreneurial service carrier be oriented by government or market?

ESO: Combination of the two. On the one hand, to keep up with the policy guidelines and abreast with the times, we should focus on the development and reform led by the government, such as the appeal of brandization, specialization and internationalization. Second, entrepreneurial service carriers should establish clear and

accurate goals based on the government's principle and foster self-motivation and provide individualized service plans for the incubative enterprises according to the characteristics and advantages of the local market.

HR: How entrepreneurs choose makerspace? What are considerations?

ESO: Entrepreneurs in different stages have different considerations. But often in four aspects. First is cost-effectiveness, namely rent. "Rent-free" is very attractive and solves their capital problem. Second, circles. They will see if there are potential business opportunities and joint R&D resources. The third is the policy and venture capital support, they will see how much benefits and subsidies they can enjoy and the possibility to obtain more supportive policies and access to venture capital. Fourth consideration is professional recruitment, if the environment, location, resources of entrepreneurial service carriers are conducive to the formation of their team and recruiting the right people.

HR: What are demands of entrepreneurs desired for makerspace?

ESO: Depending on different stages and incubation process, for startups at nursery stage, what they need is funding and team building due to personnel and project instability, and office space is less important. However, for those under incubation, they begin to demand for cultural atmosphere and corporate image building as well as seeking marketing opportunities and potential customers. For those at the accelerating stage, they hope to acquire more resources, recognize more industry elites and experts, create a circle of syndicate, hope to build barriers for R&D and intellectual property. They need top-class resources and international platforms to quickly occupy market share.

HR: How do you think about the status quo of Shanghai Makerspace development? What are the advantages?

WP: Makerspace in Shanghai is under rapid development. Compared to the whole country, Shanghai is a more potential and challenging market. First of all, Shanghai is an integrated city that includes startups of different levels and fields, with the advantages of diversity and diversification. Secondly, Shanghai has important international labels, including internationalization of economy and finance. Therefore, it plays the leading role to bring the makerspace trend into practice. Moreover, Shanghai has an open-minded city and inclusive of emerging things, right in line with the idea of innovation and entrepreneurship. Besides, Shanghai's abundant information and higher awareness makes Shanghai users more cutting-edge in demand. If Makerspace can succeed in Shanghai, it will be helpful and referential for future nationwide expansion.

HR: What advantages do you think Workingdom has compared to other conglomerates?

WP: Workingdom is a service provider for office scenarios. With a dual background in real estate and finance, Workingdom is our primary business philosophy to provide "startup and expenditure cutting-edge" services to startups, which is also the most important factor for startups. We use the "office scene" as an entrance, to attract more outstanding entrepreneurs settled in, that is, to provide them with "the ultimate office space". The so-called "ultimate" includes convenient location, cost optimization and a comfortable office



environment. At the same time, we will also provide more value-added services for the settled enterprises in the area of shared economy. For example, we will provide the most suitable financial service, personnel service and financial consultation according to the needs of the entrepreneurs. Of course in the future, our most valuable part is to build a service ecosystem based on the office scenarios as a big data platform operator.

HR: In your opinion, what is the future development trend of Shanghai Makerspace?

WP: The rise of makerspace in China began in 2014, it will grow tremendously by 2016. In the future, makerspace will gradually establish brand differentiation. On the basis of survival of the fittest, different service carriers will have differentiated positioning and functions to achieve multi-type professional development such as joint office, incubators and accelerators, and deepen themselves in the vertical field.

INTER-VIEWS Entrepreneurs' Interview

HR: Hurun Report
WP: WORKINGDOM President



Zhou Keli

President/Co-Founder of
WORKINGDOM, Shanghai

INTER- VIEWS

Entrepreneurs' Interview

HR: Hurun Report

HTF: HighGood Tech Founder

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I hope enjoy more policy support from the government regarding the talents recruitment and tax relief especially for new startups

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Cheng Mingzhao

Founder of Shanghai
HighGood New Material
Technology Co., Ltd

HR: Why would you choose to start a business in Shanghai Makerspace?

HTF: First, the reason for choosing Shanghai is because there is a high level of scientific research and resources here, especially in high-tech fields. Our research and development needs laboratories and various types of equipment and equipment support. While those in Shanghai are more professional, comprehensive and convenient than other that of cities. Secondly, the reason why we choose to create a business in makerspace is also due to the convenience of resources. Makerspace can not only provide the basic hardware facilities for R & D and office work, but also have a lot of entrepreneurs and enterprises in the same industry and supply chain. Effective exchange circles, sharing entrepreneurial experience, technology and customer resources. Makerspace will also provide experienced entrepreneurial mentors and industry experts who can help us substantively in entrepreneurship and research.

HR: What channels do you usually learn about makerspace?

HTF: Inconsideration of convenience and timeliness, I would more likely to learn makerspace via online channels, such as Wechat, 36 Kr, Huxiu and so on. Of course, there are also offline channels, such as investment referrals and large-scale competitions and activities. Relatively speaking, I still prefer to communicate offline, because it helps me comprehensively and in-depth understand of makerspace, especially regarding to the relevant preferential policies.

HR: What are the standards for you to choose makerspace? Are you satisfied with the entrepreneurial services they provide?

HTF: First, I will consider the verticals that makerspace excels in and correlation of its resources and the projects settled with my area. Secondly, I will check the convenience of the basic geographical location, it should be close to our research laboratory. Furthermore, we will consider the cost issues, such as providing a certain period of rent-free period so as to reduce our startup costs. Of course, we also value the qualifications and professionalism of makerspace service, like whether mentors and experts can provide substantive help. It has been six months since I settled in makerspace. Overall I am satisfied. I was served with many resource sharing and entrepreneurial counseling services. Entrepreneurs in the supply chain also have in-depth exchanges. If I want to give some suggestions, I hope enjoy more policy support from the government regarding the talents recruitment and tax relief especially for new startups.

HR: In your opinion, what is the direction and trend of the future development of makerspace in China?

HTF: We can learn from foreign experience and practices, such as the French makerspace, they have very professional breakdown in the vertical subdivision of the field, with well-known leading enterprises in the industry as the background to invest and incubate the industry segments and entrepreneurial projects in the supply chain. This approach can provide entrepreneurs with more professional and in-depth resources and assistance. Entrepreneurs in the same field can well form an exchange and sharing platform, and for us, the makerspace with vertical depths will give us more targeted help to speed up the pace of development.

About Hurun Report Inc.

An authoritative source since 1999

Established as a research unit in 1999, Hurun Report Inc. has grown into a leading media group targeted at China and India's high net worth individuals. Its flagship is the Hurun China Rich List and, since 2012, the Hurun Global Rich List. Headquartered in Shanghai, Hurun Report has offices in Beijing, Guangzhou, Chengdu, Sanya, London, Los Angeles, Chicago and Cochin, Kerala in India.

Hurun Research

Hurun Research ('Nobody Knows China's Rich Better') has grown to become the world's leading authority when it comes to understanding the Chinese high net worth individual. Recent reports include partnering with some of China's most important financial institutions, local government, multinationals and luxury brands, including Bank of China, Taikang Life, Minsheng Bank, Minsheng Financial Leasing, Industrial Bank of China and the Changbaishan government.

Hurun Conferences & Training

Hurun Conferences and Training hosts over 100 events across China every year, led by its flagships in Beijing and Shanghai every year. Hurun Conferences and Training brings Chinese entrepreneurs aboard, to the US, London, Singapore, Australia and India.

Hurun Media

Hurun Media ('The Voice of Chinese Entrepreneurship') reaches between one

and two million unique viewers a week through its digital platform and a further 485,000 a month through its print media. Digital media is made up of 7 WeChat social media accounts, an online business talk show called MaShangHu, distributed through iQiyi, CBN and Ningxia Satellite, and Hurun.net. Our flagship WeChat account is Hurun Business, with others including Hurun Education, Hurun Art, Hurun Horse & Sports, Hurun Health, Hurun Property and Hurun English.

Hurun International

Hurun International. Hurun Report Inc established its India business in 2012, which today is best-known for the Hurun India Rich List, Hurun India Philanthropy List and for hosting events with some of India's most respected entrepreneurs.

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Research Methods

The research results of "Shanghai Incubator and Accelerator Report 2017" is under joint effort of Science and Technology Commission of Shanghai Municipality (referred to as: Municipal Science and Technology Commission) and Hurun Report.

As the first report on the development of Shanghai's innovation and entrepreneurship industry, special research were conducted on makerspaces and innovative entrepreneurs in all districts and counties in Shanghai. Based on the full cooperation of Shanghai Science and Technology Commission, and science and technology commissions of all districts and counties and makerspace, the project team conducted a comprehensive survey to makerspaces in Shanghai. By handing out questionnaires and random sampling of startups, we launched a quantitative study on the city's 428 makerspaces and 1242 entrepreneurs who settled in makerspace, covering 16 districts and counties in Shanghai. At the same time, the project team conducted a series of effective and in-depth discussions with 10 relevant persons from principals of the Municipal Science and Technology Commission, makerspace operators and entrepreneurs in makerspace through one-on-one interviews, seeking more extensive and in-depth study on the development status quo of Shanghai makerspace and the entrepreneurs' characteristics and demands.

In addition, to effectively enhance and ensure the accuracy of investigation report conclusions, the project team had fully tapped in Hurun Report of more than ten years of research experience and adopted authoritative and professional research approaches, data analysis and desk research capabilities while preparing this report.

Special thanks go to Science and Technology Commission of Shanghai Municipality, Yangpu Science and Technology Commission, Xuhui Science and Technology Commission and other relevant people in all districts and counties for their support to complete "Shanghai Incubator and Accelerator Report 2017" successfully.

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