

Student name: Yuanyao Wang

BI Norwegian Business School

Master Thesis

-IT start-up cluster in Hangzhou-

How can Hangzhou become a star city for IT start-ups in China?

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**Supervisor:
Torger Reve**

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1.0 Introduction

Along with the successful IPO of Alibaba, it has been a huge hot topic among Chinese province governments and city governments that how to cultivate a second Alibaba Group under their governance.

Facing the global economic transformation, most areas in China are suffering serious pressures both the domestic side and the international side. From the internal angle, the manufacturing cost is constantly increasing with higher labor cost, energy cost, rent cost and raw material cost, which could be contributed to economic development and the following inflation as well as the over public of currency by the government. Nowadays the general energy cost of industrial use electricity, gas and oil is even higher than the average energy cost in USA. The labor cost of China is obviously higher than that of Southeast Asian countries. Meanwhile the international market is not demanding Chinese goods as much as the days before financial crisis in year 2008. Since the exporting prices from Southeast Asian countries are cheaper than Chinese price, the exporting price from China could not increase as the same speed as the manufacturing cost here. And a lot of manufacturing industries are facing excess capacity crisis. In short, China is loosing exporting trade increase as its main economic rocket engine in the last two fast developing decades. Thus, the employment rate is not in a good trend and the whole society needs to find new internal economic engine. Under such circumstance, the central government proposed the concept of “being self-employed and joining the national start-up trend” in year 2016.

Since the real estate industry has gather huge bubble after more than 10 years’ crazy rocketing progress, and traditional industries are struggling for the overcapacity. Venture capitals are also stimulated to invest into high-tech start-up companies under this macroeconomic environment. All the cities want to catch up a change to build itself as a new high tech cluster and knowledge hub, however only limited clusters are

appearing in China. At this moment, people could identify Suzhou as a medical tech start-up cluster, Beijing as media and entertainment industry start-up cluster, Shanghai as new financial start-up cluster, and definitely Hangzhou as an IT start-up cluster.

I choose Hangzhou to study the emerging progress of its IT start-up cluster in this thesis, due to its significant realistic meaning and value. This study could in one way inspire other cities which want to learn or copy the experience of Hangzhou to think deep and review all-round about their own characteristics to breed a cluster; in the other way, this study could help the Hangzhou local government to review its own policies, political systems and relevant support to help the cluster to develop fast and steadily in the future.

1.1 Acknowledgements

I choose the topic of IT start-up cluster in Hangzhou as my master thesis because it is interesting phenomenon to dig into as well as it is my hometown where I am quite familiar with. To find out the relationships or interaction effect between the IT leading company Alibaba Group and the IT start-up cluster in Hangzhou also have significant practical meaning for industry and city development and plans.

During the progress of writing this thesis, I have been talking and interviewing different people from different positions in start-up companies, Alibaba Co. and government offices and given different points from different angles.

I would like to thank all the interviewees who arranged time to discuss this topic and share inside view from the industry with me. I also would like to thank my friends who helped me to get connection to these interviewees.

Most importantly, I would like to express my greatest appreciation and gratitude to my

supervisor Professor Torger Reve for his kind guidance. Professor Torger is a leading scholar in cluster theory, as well as an expert of Chinese economic issues. He is so familiar with Chinese economic history, background, present situation and updates. Every time when I came up to him with my confusion and ideas about this thesis, he pointed out the key and shortage of my analysis sharply. And no matter face-to-face discussion or email communication, he always responded to me very soon. His suggestions and help are priceless to this thesis.

2.0 Literature review

2.1 Introduction

As the consequence of fast develop of information technology, advanced transportation net, comparative advantage become more and more important for each area to find out its own position in this economic globalization trend. Industry clusters are not only forming based on natural resources but also a bunch of other factors.

To analyze my research question, there are several theories could be applied. However the cluster theory is finally chosen as the main theory I am going to focus on, at the same time the knowledge transfer theory would be synthesized into the general analyze at the necessary part. In the following pages, I am going to go through the cluster theory throughout the theory development history, which is short and new, but abundant. Porter's Diamond Theory, Torger Reve and Amir Sasson's Emerald Model and the Global Knowledge Hub concept from Torger Reve are all direct theoretical foundations to my research question and would help to analyze this specific cluster case.

2.2 Definition of cluster

2.2.1 Porter's definition

First we need to define cluster itself. Porter defined it as “geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g., universities, standard agencies, trade associations) in a particular field that compete but also cooperate (Porter 2000, 16)”.

According to his concept (Porter 2008, 215), a cluster is an array of linked industries, in different sizes, and institutions and relevant public assets that are in the community horizontally or vertically related and supporting to a central industry. He attributed the success of a firm not only to the firm itself but also the surrounding infrastructure and related companies (Porter 2008, 214). These firms in the same cluster are co-located and co-dependent, which forms the external economics, for example skin care industry benefits from the achievement of pharmaceutical research and development. And these firms at the same time have strong commonalities and complementarities in the perspective of networking, talents and recourses. The institutions in the cluster such as universities, training entities, industry-standard-associations usually provide the interconnections between the supporting industry and central industries as well as other entities inside the cluster (Porter 2008, 216).

So the cluster concept in geographically speaking could be a city, a state, a country or even a group of countries (Porter E. M., 2000).

2.2.2 Other's definitions

Alfred Marshall has written that “when an industry has thus chosen a locality for itself, it is likely to stay there long: so great are the advents which people following the same

skilled trade get from near neighborhood to one another (Alfred Marshall 2009,225)". He pointed out that those physical conditions, for example natural resources, geographic locations with harbor, hereditary skills concentrate market, are the reasons for "localized industry". Further he wrote, "different industries in the same neighborhood mitigate each other's depression". This statement could be considered as similar to the supporting industries concept in the cluster theory. So even if he did not use the word "cluster" directly, but the term of "localized industry" definition actually shares some similarities with Porter's cluster definition (Martin and Sunley 2003).

Crouch and Farrell gave out a more general definition that cluster is "a tendency for firms in similar types of business to locate close together, through without having a particularly important presence in an area" (Crouch and Farrell 2011,163).

While in Rosenfeld's article, he trends to emphasis the proximity. He believed that "close proximity allows them to transact business more cheaply and easily, resolve their problems more quickly and efficiently, and learn earlier and more directly about new and innovative technologies and practices (Rosenfeld 1997,3). Enright agrees on the importance of the proximity in the definition of cluster. He wrote "an industrial cluster in which member firms are in close proximity to each other." (Enright 1996,191).

There are also economists emphasize on the network aspect while defining cluster. For example, Roelandt and Hertag proposed the definition as "networks of producers of strongly interdependent firms (including specialized suppliers) linked each other in a value-adding production chain. In some cases, clusters also encompass strategic alliances with universities, research institutes, knowledge-intensive business services, bridging institutions (brokers, consultants) and customers (Roelandt and Hertag 1999,9)".

There are also some non-mainstream definitions, such as Rosenfel's "active channels".

He claims that “active channels” for collaboration such as business transition and information sharing are the key to cluster synergy. In other words, a mass without collaboration should not be defined as cluster (Rosenfel 1997).

2.3 Cluster research before Porter

Although the most famous and widely used cluster academic research tool is Porter’s theories, early in one central ago, Alfred Marshall has proposed three types of localization economics in his book of “Principle of Economics” (1890). These three are technology spillovers, centralized market for specialized workers, and availability of special inputs and services. Marshall wrote a changer of “ the concentration of specialized industries in particular locations” in which he pointed out the concentration of industries is because of the location’s resources, supporting industry, trade and accumulation of knowledge (Marshall, 1890). This is the first clear study of cluster economy.

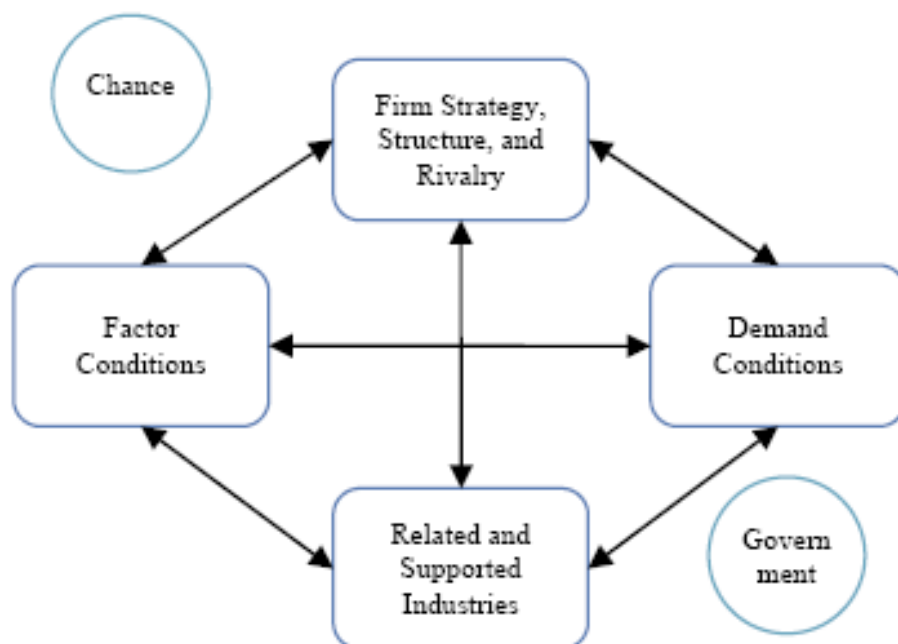
The predecessor research of cluster theory probably could be contributed to the agglomerate economies, including the well-know economic scale concept and the network effects idea. The popular agglomerate economy concept with location theory was dominating the academic research field through the first half of 1900s. Since 1950s, sectorial and regional polarization theories came out, further elaborating the mechanisms of spatial concentration and giving guidance to local political policies (Koschatzky Knut 2012). In 1985 Evans elaborated the cumulative externalities that the spillovers appears when nearby firms decrease the cost of increase the efficiency due to their close location (Evans, 1985).

2.4 Porter’s theory

Michael Porter has contributed significant amount and high quality of articles and

books in the cluster research. Thus, he is considered as the father of modern cluster theory. And his theories are later expanded by other researchers and widely spread over the world. Nowadays, his diamond model is still the firmly foundation and most frequently used strategic tool for academic research and application in analyzing the competitiveness of clusters.

In his book of *Competitive Advantage*, he tried to reveal how firms manage to create competitive advantage and how the competitive advantage could be diagnosed through the value chain (Porter 1985). In 1990 he wrote his famous work “The Competitive Advantage of Nations” where he developed a microeconomic-base theory of regional competitiveness in the global economy. He analyzed the relationship of cluster and innovation, cluster and government roles, cluster and supporting industries etc. and proposed the diamond model as below (Porter, 1990).



In this Diamond Model, there are six broad factors to be analyzed.

(1) Factor condition. This includes natural resource, human resource, capital resource, knowledge resource and infrastructure. Specific resources that are important for a specific industry's competitiveness can compensate for factor disadvantage.

- (2) Demand condition. A demand home market with sophisticated customers always pressure firms to innovate and create advanced products, thus helping companies to cultivate their competitive advantage.
- (3) Related and supporting Industries. These supporting industries usually in the same chain as the core companies in the cluster. They could offer important input for innovation, cost-effective inputs, or even participate in the upgrading procedure.
- (4) Firm strategy, structure and rivalry. This factor means how the companies are set up, organized, operated and aiming their goals are important. And the rivalry gives motivation and pressure to the companies to be creative and innovative.
- (5) Government. Government actually influences all of the above factors. And government interventions can happen at different regional level.
- (6) Chance. Chance events are outside of control of a firm. (Porter, 1990)

Porter also summarized three main aspects that cluster enhance the competitive advantage (Porter 1998).

- (1) Cluster increase the productivity of the companies within the cluster by more efficient sourcing input and scale, easier information and technology access, wider network, stronger coordination with relevant industries and organizations.
- (2) Cluster guides and inspires the companies to be more creative and innovative than the companies outside the cluster. Since a cluster include sophisticated customers who have high demand on the market, the market demand usually gives pressure and direction to the innovation.
- (3) Cluster stimulates new business formations and expands the cluster itself. Companies within clusters usually catch up with the gaps more easily and improve

faster with lower entry barriers. In other words, a cluster would benefit its members of being connected or corporate with others without sacrificing its flexibility. (Porter, 1998)

2.5 General introduction of theory development after Porter

Since Porter published his famous cluster theory, clusters have not only been a hot research topic in the scholar field but also in some way guided the public policies and industrial incentives over different countries (European Commission, 2008). To keep a healthy and dynamic cluster could help companies within a cluster enjoy faster growth and innovation than companies outside (Menzel et al 2009). To achieve such kind of cluster, it requires having a good strategy, as well as following-up performance or implementation to be stick to the goal and be competent to realize the goal (Sølvell et al 2003). In the last decades, the cluster theories have been expended into its effects to entrepreneurship (Delgado *et al*, 2010a; Sorenson and Audia, 2000) and even job creation (Delgado et al, 2010b).

Kenneth Arrow and Paul Romer have added their contribution of the Marshall-Arrow-Romer insights on inter-industrial knowledge spillovers (Glaeser et al. 1992). There is also abundant research about cluster and location choices (Zaheer *et al.*, 2009), clusters' effect on innovation (Bell, 2005) and knowledge creation and transfer (Reve and Sasson, 2012). The companies in the cluster supply and support each other, compete against each other, or share information and resources to gain scale; all of these effects to the co-located firms are considered to be cluster effect (Hill and Brennan, 2000). And another interpretation of origin of these cluster effect is focused on four flows, manpower, technology, capital and market flows (Lin, Tung, and Huang, 2006). Lin et al (2006) also contribute the cluster's competitive advantage to these cluster effects.

There is also research about how the cluster rewards the society and helps the city to

grow to be a knowledge driven economy (Torger 2011)(Wilson, T.L. *et al.* 2014)(Kitson Michael *et al.* 2004). This actually is what the local government expects to realize and to find out what more the government could do to push this transformation happen will be the final result of this project.

2.6 Knowledge

2.6.1 Cluster Knowledge

Generally speaking, knowledge could be classified as explicit and tacit two categories (Nonaka and Takeuchi, 1994). Explicit knowledge is defined as “be articulated, codified and stored” in some media; while tacit knowledge is “practical knowledge, that can not be expressed or declared openly, but is implied or simply understood, and is often associated with intuition (Wagner & Sternberg, 1985). The tacit knowledge is usually a competitive advantage. The more difficult for competitors to imitate the knowledge, the greater the competitive advantage is (Lippman and Rumelt, 1982). So the tacit knowledge is usually well protected and maintained within the company, entity or the cluster.

Cluster knowledge means the knowledge generated, developed and shared among the cluster members. Cluster knowledge is considered to be one of the most significant factors in a cluster by Porter (Porter, 2000). And Grant even put the knowledge at the first ranking position in the hierarchy of strategic resources (Grant, 1996). Bathelt (2004) attributes the cluster knowledge to be a nature achievement of interactive processes of the cooperation among the various cluster members.

2.6.2 Knowledge externalities and sharing

More than one economist has defined the knowledge externality. Alfred Marshall (1980) thought knowledge externalities exist when the general benefit is higher than it

is to the investor. Jane Jacobs contributed the existence of knowledge externality to the diversity of the companies in agglomeration (Jane Jacobs, 1969).

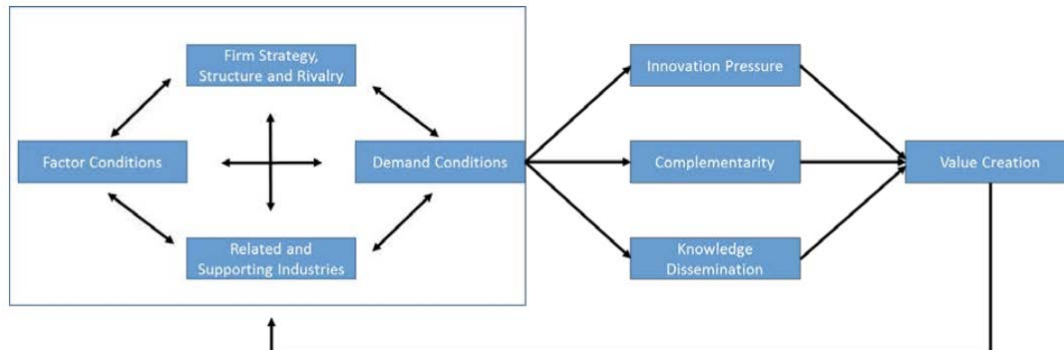
Knowledge sharing in many economists view is a kind of knowledge exchange. Tallman et al (2004) mentioned that the technology spillovers consist of information exchange and movement of people (Tallman, Jenkins, Henry, Pinch, 2004). Bathelt pointed out that the sharing knowledge action makes entities in the cluster able to combine and re-combine similar and non-similar resources, further more to inspire new ideas and generate innovations. He even analyzed from the horizontal and vertical dimensions of a cluster to elaborate the advantages a firm could enjoy with in a cluster compared to not locate in the cluster. (Bathelt, 2004). His point of view on horizontal firms in some way has similarity to Porter's view (1990; 1998) that the competing firms in a cluster plays an important role, and that the fierce competition between them act as an incentive for innovation.

2.6.3 Knowledge Hubs and Emerald Model

Torger Reve has made research in global knowledge hubs. In his study of Norwegian maritime industry, he pointed out that the knowledge hubs are not simply geographic concentration of creative firms, but also include the close inter-firm linkages and strong network for knowledge (Torger Reve 2009). Although the research topic of this thesis Hangzhou is still far away from global knowledge hub, it can still be considered as a knowledge hub in China. So such kind of theory is applicable to this thesis.

In Reve's other research article and papers, he proposed the Emerald Model to elaborate the competitiveness of clusters that includes six dimensions. These six dimensions are "cluster attractiveness, education attractiveness, talent attractiveness, R&D and innovation attractiveness, ownership attractiveness and environment attractiveness". Three of these six are about knowledge (Torger Reve, and Sasson 2012). He also proposed the following mechanism to combine the Porter's theory with

knowledge importance that could help to understand the spillover of knowledge from Alibaba.



Amended from Reve and Jokobsen (2001: 29)

3.0 Research question and background

3.1 Research question

After decade years of fast development in GDP, China is facing more and more serious challenges in economics. Low margin manufacture is transferring to other Asian countries, while western countries still domain high tech manufactures. Exporting is no long a reliable factor to boost the economic development, while the Demographic dividend is going to die out once the population peak arrive around year 2020. China is eager as well as pressured to find a new blueprint for its future. And now the government put expectations on creation and start-ups. With all the best wishes from the central government to local government at each level, not all the political intension could be achieved.

As one of the 34 province-level capital cities, Hangzhou is only a second-level city after the first level cities such as Hong Kong, Beijing, Shanghai, Guangzhou and Shenzhen. However Hangzhou is a most promising city for IT start-up clusters nowadays in China.

My research question is: *how can Hangzhou become a star city for IT start-ups in China?*

To break this big problem down, I would like to first catch the main clue about how Hangzhou distinguish itself from other similar cities in the IT industry. And the surface reason is that it has Alibaba Group.

3.2 Research background

3.2.1 Under the shadow of Shanghai

Hangzhou is 200 km far away from Shanghai, two hours' driving distance or less than one hour by train. Due to its beautiful nature view, this city has been considered as a tourist city all the time, as well as a backyard garden to Shanghai. So how and why could Hangzhou could finally get rid of the shadow from Shanghai and develop its own supporting industry?

Shanghai is the earliest city open to the world as the central government's free-market experiment. Shanghai is the most favorite city by foreign capitals. And it is expected to overtake Hang Kong's financial center position in great-China region or even Asia area in the coming years. Shanghai is the open window where foreign venture capital landed in China first. It is where local capital gets inspired to enter the VC area at the first place. It is also the first choice where oversee Chinese students, scholars or high-level talents choose to come back to China. Shanghai enjoys 360 degrees advantages in political supporting from central government, its efficient and transparent local government, its open and fair environment, rich talent pool, abundant capital, and huge potential local market.

Due to the above reasons, it is difficult to attract attentions of startup enterprisers and ventral capitals for nearby cities such as Hangzhou. Because investors always consider Shanghai as the best basement, and within two hours' travel distance there is not need to set a new office or subsidiary for them. This is also the reason why it took the Big Four accounting firms so many years to add their offices in other cities after they already have a huge Shanghai office with more than one thousand employees. All other similar second-tier cities near Shanghai, such as Nanjing, Suzhou, Changzhou, Ningbo, Nantong, neither of them managed to get rid of the attachment position or dependent position to Shanghai, but Hangzhou is walking a new way out.

After listing out the biggest difference among these cities, owning Alibaba is probably on the top of the list.

So this gives me a reason to set my first proposition about Alibaba Group, however I will carefully use the cluster Diamond Model to analyze Hangzhou's condition before I propose a detailed proposition.

3.2.2 Hangzhou's difference from other BAT cities

The born of Alibaba Group should not be a pure luck, there must have deep reasons why this middle-sized city in China could own one of the largest and richest company in the world and why its head office is never changed.

There are three biggest IT companies in China, Baidu, Tencent and Alibaba Group, in short BAT as known for every Chinese. BAT is considered to be the engine of Chinese IT industry. A lot of start up companies' aim is to be merged by BAT one day. Baidu is a search engine company. This is a Chinese "Google". And its head office is located in Beijing. Tencent's main products are on-line chatting social platform, including QQ that is based on computer web and Wechat that is based on smartphone web. Tencent's

market position is as Chinese “Facebook” and “Whatsupp”. Alibaba Group started from Alibaba.com, which is an on-line trading plat for wholesales. Later it opened Taobao.com that is an on-line trading plat for B2C or C2C business, giving it the Chinese “Amazon” position in the market. And meanwhile it developed a trading financial system for safe trading, which is Chinese “PayPal”.

Baidu chose Beijing to settle its head office. Considering Google is its main competitor and the Chinese government has forbidden Google in Chinese market for years, its decision about head office location seems quite natural. And Beijing as the capital city of China as well as Chinese political and culture center, it is always among the first choices group when companies set their head office, no matter it is state owed company or foreign invested company. Tencent is located in Shenzhen, one of the four first level cities in China. Shenzhen is the first city to open to do free business with western world in 1980s. It is also a very young city built by immigrants from other provinces. There is a board line between Shenzhen and Hong Kong. So this is a window for China to connect to the western world. The founder of Tencent was born and studies in local areas. And its first successful product QQ that still is its supporting profit source is actually an imitation to ICQ that was even more popular than MSN in Hong Kong.

Compared to these first-tier and second-tier cities, Alibaba just came out from a second-tier touring city Hangzhou. What is special about Hangzhou? Why among all the 10 second-tier-cities, only Hangzhou cultivated a huge leading IT company? Are these special factors not only generating Alibaba but also continue to nourish IT start-ups?

From this angel, I am going to generate my second proposition to discuss about the original soil that cultivate Alibaba in Hangzhou which I believe still have strong effect on present cluster.

3.2.3 Standing out from Beijing and Shenzhen

As the leaders and flags of Chinese IT industry, BAT means money and future for start-up companies. A large proportion of start-ups' dream is to be buy-out by BAT. In other words, where is BAT, where is the hope of start-ups. Yet, when start-up companies first choose their foundations, a lot of other factors will be considered, such as local government support, environment, talents pool and so on. Obviously Beijing and Shenzhen as the first level city enjoys more resources and attraction to start-ups. However we can still observe the local characteristics of Hangzhou's IT start-up cluster differing from Beijing and Shenzhen. Beijing's start-up clusters are more focused on cultural and movie business because they want to get closer to the culture center authorization. And Shenzhen's IT related start-ups are more eager to copy foreign successful IT start-up cases due to its location and political advantages and the leading model of Tencent.

However Hangzhou is located in a traditional manufacturing province with long history of business culture. The universities in Hangzhou are more emphasized on nature science and technology. So the start-ups in Hangzhou are either related with e-business or are more innovative. To look for the answer how to make Hangzhou standing out from Beijing and Shenzhen in the IT start up clusters, is a big question to the local government as well as one of the project's main purpose.

3.3 Proposition

From the research question background analysis and the comparison of Hangzhou and other cities, it is observe that a significant contributing factor in Hangzhou is Alibaba Group. In fact, all the three BAT companies make important spillover effect to the IT industries and their local cities. To further verify and explain this phenomenon that how can Hangzhou develop to be a new IT start-up clusters in China, I am going to

make propositions, and then verify the propositions through analysis supported by data and interview opinions from different fields.

P1: Alibaba Group was the key factor to direct Hangzhou to be an IT start-up cluster, and its spillover effect will reach at a peak after the untradeable shares unlocked.

The analysis will be expended in several layers. First of all, in order to verify this proposition, I am going to company Hangzhou to the first-tire cities in cluster mapping in order to show that Hangzhou does not have special natural advantage in generating this cluster, in fact it is in a disadvantage position in several aspects. Second, I am going to analyze the contributions of Alibaba Group to the different factors in the Cluster Diamond model in order to show that existing of Alibaba Group enhanced the crucial elements to the cluster's generation and competitiveness different. Third, I am going to analyze real development of the IT start-up cluster in Hangzhou after the IPO of Alibaba Group in order to show that the spillover effect reached at the peak after the IPO.

P2: The supporting conditions that cultivated Alibaba Group in this city are still influent advantage effects for the IT start-up cluster to form in Hangzhou.

Hangzhou is not the only second-tier city in China that has been developing a start-up cluster nowadays. For example Suzhou is generating a high-tech medical and pharmaceutical start-up cluster, and Shenzhen is generating an IT-equipment start-up cluster. How do these second-tier cities prepare the cultivating soil for the start-up companies is also a key question which would help us to understand that how did Alibaba come up at the first beginning in Hangzhou. If I can find some crucial factors for cluster competitiveness in a favored position in Hangzhou compared to other cities, I could deduct that these factors will continue to push up the bloom of start-up cluster in Hangzhou in the future.

P3: The size of Alibaba is the main reason why Alibaba could build a dynamic IT cluster around it. And its growing size expands the ways it can influence the IT cluster.

As everyone could easily observe an IT cluster around the top three Chinese IT companies (i.e. BAT). These three companies have their own focus and technical strength in the IT field and totally different company culture. Nevertheless, each succeeded in breeding an IT cluster in their head office city. I suspect that this result is probably attributed to the huge size of the BAT themselves. Of course this phenomenon is now just a straightforward observation. I would like to discuss further about why and how Alibaba could build a dynamic IT cluster around itself.

4.0 Research Design and Methodology

4.1 Research design-model analysis

Up till now the area of Chinese start-up clusters study is almost blank. This thesis is aimed at explain the emerge of the IT cluster in Hangzhou and discuss its relationship to the Alibaba Group which is the biggest IT company in China as well as the largest IPO company in the world. This decides that the research of this cluster case is based on an inductive and descriptive methodology.

In Baxter and Jack's opinion (2008, 544), a case study that "facilitates exploration of a phenomenon within its context using a variety of data sources" is preferred when the research is try to find out the explanations of "how" or "why" style of questions. And such case study naturally leads to a focus on contemporary set of events relating to the research question (Yin 2014,11).

In order to make a comprehensive analysis and avoid missing any key factors to the

research question, I am going to mapping the realistic factors to the cluster model dimensions one by one. I am also going to identify the specific key dimensions of Hangzhou compared to other Chinese cities. Based on these fundamental analyses I am going to propose three propositions and analyze them with supporting interviews from interviewees at different fields and angles and data from difference sources.

The analysis will be expended in several layers. First of all, I am going to company Hangzhou to other similar second level cities in various angles in order to show that there is no natural resource difference between Hangzhou and others to help it form cluster. And compared to the first level cities, it is in a disadvantage position to form an IT startup cluster. Second, I am going to analyze the contributions of Alibaba Group in local city's culture, talents cultivation, capital attraction and injection and other potential effects behind this phenomenon and make recommendations for the future development. Third, I am going to analyze the local environment that offered soil to cultivate Alibaba, and further more I am going to prove these factors and conditions are supporting factors to start-ups as well.

I am going to propose three propositions based on data collection and observations, and then use these three propositions to direct the research and interviews in order to verify them. At the end of the thesis, I am going to make conclusions and make further recommendations to the local government.

I am going to use qualitative research design with a semi-structured interview guide. I will also utilize a through analysis by referring to a broad selection of secondary data source in order to reveal all the main forces and reasons that help this city to develop as a future Silicon Valley in China.

4.2 Data collection

In the following qualitative case study, I am going to use both the secondary data and the primary data collection methods. Various data sources to be used as supporting materials could enhance the credibility of analysis and further make the conclusion more persuasive (Yin 2014, 57). Secondary data sources could be a powerful complementary source and as a part to triangulate the primary sources (Yin 2014, 120). And from Bryman and Bell's point of view, the combination of primary and secondary data sources will help to build an in-depth and firm foundation for the case research (Bryman and Bell, 2011).

4.2.1 Secondary data sources

Due to the weak statistic authorizations in China and lack of professional and independent data resource suppliers, it is always very difficult to get abundant and trustable data, thus to spend enough time to dig out the secondary data sources are especially important for any research related to the Chinese market. During my project period, I have been assigning and devoting a lot of time to screen different types of secondary data sources.

Secondary data sources range from public research institutions such as Statistics Bureau of China of both central and city level, and Chinese Academy of Social Sciences, to private research institutions/consultancies such as McKinsey, B&G, as well as publications from Chinese universities such as Zhejiang University. The public research institutions will offer the most comprehensive data of population, industrial percentage of GDP for all the main Chinese cities. And the private research consultancies will have more information about economic segments and they give opinion on their own database that will help me to avoid biasedness. Although most of secondary materials are not suitable to be used or quoted directly in the thesis as

supporting materials, such as common news report involving relevant interviews, or PowerPoint slides from the relevant industrial seminars. However, the time and energy devoted to screening secondary data can never be in vain or as a waste. Because by doing so, I have accumulated necessary knowledge about the industries and other dimensions relevant to this case study. It actually also help the primary data collection, both pre- and post period, to help me better prepare my interview structure as well as help better understand and interpret the discussions from the interviews. I also read through business reviews and comments from journals and magazines to cross check whether the opinions I propose in the paper has discrepancies or biasedness.

4.2.2 Primary data sources

I have conducted first hand and semi-structured interviews through phone call, video-call and paper questionnaires through four groups of persons. To different interviewees, considering their individual career background, position and experience, I designed different focuses of the interview structures so then they could give out their opinion and data at their expert areas.

First, government officers responsible for macroeconomic policies and city development plan. In Chinese political system, there is a department called National Development and Reform Commission. It is responsible for the general plan for the country as well as for each province or even city level. It leads research by itself and makes decisions for development. Its power is over other government department including Department of the Treasury. And its decision will affect the local tax rates and financial subsidiary to companies from the government. So it is the strongest wind flag to show the government expectation and support. I am going to interview government officers from this department who is responsible for Zhejiang Province to get opinions about the last five-year plan in the past and the closest future five-year plan. I am also going to interview officers who are responsible for Hangzhou High

level talents innovation parks. Local governments sponsor these innovation parks in order to attract high quality start-ups to locate in Hangzhou and they were set up at different time offering different support. One of them is also one of the only four country level innovation parks in China. Companies that apply to enter the park need to pass several rounds of valuations. And the interviews' intention is to get to know the valuation system, the supporting policy for the start-up companies and the development status quo. After the interviews, I will try to abstract the timeline of the change of local government's requirement and support to start-ups that also reflect how the local government made up its mind to build Hangzhou as an innovation city step by step.

Second, I interviewed high level managers of different department in Alibaba, such as HR department, Financial department and technical departments, to get their opinions about the specialty of Alibaba in culture, the companies influence in the job market and talents cultivation. It is also a good chance to get the first hand information about the spinoff from Alibaba.

Third, I interviewed some enterprisers of IT start-up companies in Hangzhou to collect their opinion about why they choose this city and how they consider about this location decision now. I will choose enterprisers both who has and has not worked for Alibaba before they started their own companies. In one way, I will try to compare the difference of their mind set about why to start-up and how they deal with difficulties, the difference at their network resources, their companies' culture and the investment attitude and expectation from venture capital.

Forth, I interviewed senior managers or partners in VC and PE funds. Since VC and PE is the most direct mirror to check the number and quality of start-up companies, they are always sensitive to the trends and changes in the start-up and consumers' preference. By observing the office numbers of venture capital in different cities is one index, however the professional managers in venture capital could share their

experience in interviewing or performing due diligence investigation on potential investment engagements, from where we could observe how the start-ups form core founders and how they are influenced by the environment or their previous work experience. I am also going to interview senior managers and partners in PWC and Deloitte as a supplementary to the opinions from VC and PE. Because such accounting firms have an independent view and broad vision in the business areas, they probably look at phenomenon from different angles.

During the interviews, the interviewees sometimes quote internal non-public data orally. These data could not be formally used in the thesis since there is no written data source open to chase back as reference. However these are still great valuable information which support the interviewees' personal opinion; and they are critical for me to consider when the interviewees' opinion is making strong sense and should be adopted in my thesis.

In the progress of this primary data collection, I usually wrote an interview memo immediately after the interviews, in order to record every detail without any missing. I also carefully evaluate each interview memo to think twice about whether my questions are well designed to dig out as much valuable information as possible. Some interviewees are very talkative and could bring up a divergent series by themselves, in this case, I need to pull back the string of interview and cut off too far away discussions. While some interviewees are quite prudent about speaking out their opinion, in order to dig out their real thoughts, the semi-structured interview need to be carefully designed step by step, questions need to be continuous conducting and some backup questions are necessary too.

In short, I collected data through personal-tailored interviews. Later I use equal standards to interpret the discussions in the interview. In other words, not every piece of information would be summarized into the interview memos; neither every piece of

opinion and view in the interview memos would be adopted into this thesis. The measurement and interpretation is based on my comprehensive digest of second data source and theoretical literature readings.

4.3 Ethical considerations

During the study progress of this project, I have always used the Code of Ethics of Academy of Management (Academy of Management Feb. 2006) to frame and check the implementation of the research. The research is performed under consistent valuation of no harm to participant principle. In order to respect individual and organizational privacy and business confidential information, I always inform the interview structure to the interviewee in advance, as well as afterwards by offering them my interview memo to double check whether there are some points and data they want to keep confidential and only between the discussion with me. In this research thesis, I did not intentionally engage in misrepresentation of information about neither secondary data source nor primary data source. The purposes to let interviewees review my interview memo also include giving them the right to check whether they disagree my summary or interpretation. So I always respect the original facts and opinions. The environmental perspective is also fully considered when conducting interviews, as digital connection helped the research to keep carbon footprint to minimum.

Above all, the four ethical principles proposed by Diener and Crandall that are nowadays widely used as guidance in social science research are also fully considered throughout the writing of this thesis (Diener and Crandall, 1978).

4.4 Research contribution

Alibaba is a hot academic research topic as well an important topic for government

policy. Now with the trend of new start-up companies blooming, cluster becomes a new and hot topic. This thesis is trying to fill in the blank of the study of IT start-up cluster in Hangzhou. The analysis is trying to reveal the boosting effect from Alibaba to the emerge of this new cluster, as well as other influential affects, further more give inspiration and recommendation to Chinese governments.

I am aware of that this is a specific case study and the research might have limited reference value to all other start-up clusters in China. However, I hope the analysis and comparison of the strength and background of different cities could inspire each city to think about its future path from its own characteristics. And the analysis Hangzhou could help people to clearly see both the lucky part and the effort-able part of the city rise.

5.0 Analysis

With the guidance of Porter's theory mentioned in the Literature Review part, it is easy to identify the new forming cluster in IT start-up field in Hangzhou nowadays. This judgment is based on the number of IT start-up companies, the number of venture capital funds in Hangzhou, the number of high-tech-company-zones supported by the government and the relevant research institutions and activities in Hangzhou.

5.1 Cluster factors mapping

In part, I am going to mapping Hangzhou's resources factors to the Diamond Model to check out its strength, weakness and specialty in order to generate proposition for further discussion.

5.1.1 Factor conditions

Factor conditions have most contents among the four factors. It includes hard conditions-physical resource, as well as soft conditions, human and talent, capital and

wealth, and infrastructure.

5.1.1.1 Physical resource

5.1.1.1.1 Location, weather and traffic

Hangzhou is located in the east coast of China. In the latitude scale, it is in the middle of China, 181 kilometers south of Shanghai. It lies on the Hangjia Lake Plain where most areas are flat with some small hills.

It has the Subtropical monsoon climate, enjoy mild temperature, clear four seasons, and plenty of rain. This weather makes this area perfect for agriculture planting. Plus the plenty pools, lacks and river inside the city and nearby, it also enjoys rich fish. This Hangjia Lake Plain is also the origin of silkworm and silk technics. Thus it has been one the richest cities during the agriculture culture period.

In order to transport the abundant food from the Hangjia Lake Plain to the north China, Hangzhou became a water-traffic hub since ancient China for hundreds of years. It is the beginning point of Beijing-Hangzhou Grand Canal, which is the biggest and longest, canal in China from south to north across 4 provinces and 2 municipalities. The canal has 7 phases connecting continuously among which the oldest phase was built 484 BC. And it is 1794 kilometers long, connecting 5 main east-to-west water systems (i.e. Hai river, Yellow river, Huai river, Yangtze River and Qiantang river). The Qiantang River is also flowing through the city. Hangzhou is also close to the sea. The nearest harbor is Ningbo city, which is one of the largest harbors in China, 135-kilometer distance through high way.¹

The geography situation guarantees that the road traffic and transportation in Hangzhou has always been easy and efficient no matter in which age of the history.

¹ <https://zh.wikipedia.org/wiki/%E4%BA%AC%E6%9D%AD%E5%A4%A7%E8%BF%90%E6%B2%B3>
wikipedia on the item of "Beijing-Zhang Grand Canal" in Chinese

5.1.1.1.2 Nature resource

Neither Hangzhou city nor Zhejiang province has any mines or metal resources. It is actually normal condition for the south part of China. When the Chinese government made its strategic plan for modern industry development at the beginning of the People's republic of China, the northeast provinces and west provinces got huge finance and political leaning support due to the rich nature resource distribution. Zhejiang province was totally neglected. Lacking of nature resource makes a ceiling to local economics as well as pressure to find a new way out.

5.1.1.1.3 Historical and political position in China

Hangzhou has been the capital city of Zhejiang province all the time, except the period that it was the capital city of the whole country for six dynasties in the history. In fact, since the Nansong Dynasty, it has been one of the trading centers in China.

It is located in the north of Zhejiang province. It is the politic, financial, economic and culture center of Zhejiang province. Together with Shanghai and Nanjing, Hangzhou is one of the core cities in the Yangtze Delta Area. It includes 9 region, 2 county-level cities, and 2 counties, covering 16596 square kilometer, 4876 in downtown and left in suburbs.²

5.1.1.2 Population and talent resource

5.1.1.2.1 Population

The living population in Hangzhou is 9.02 million in year 2015. The compounded annual increase in the last 5 years is 0.7% on average. ³

² <https://zh.wikipedia.org/wiki/%E6%9D%AD%E5%B7%9E%E5%B8%82> wikipedia on the item of "Hangzhou" in Chinese

³ http://www.hangzhou.gov.cn/art/2016/3/24/art_805865_663727.html Hangzhou Government website in Chinese

I have searched the data from Chinese population organization website in order to have a clear overview about the size of Hangzhou among all the big cities in China. The translated information is as below.

Ranking	City	Population in thousand '000	GDP in billion	GDP per person in RMB	GDP per person in USD
1	Chongqing	28,846	789	27,367	4,043
2	Shanghai	23,019	1,687	73,297	10,828
3	Beijing	19,612	1,378	70,251	10,378
4	Chengdu	14,048	555	39,518	5,838
5	Tianjin	12,938	911	70,402	10,400
6	Guangzhou	12,701	1,060	83,495	12,334
7	Baoding	11,194	205	18,315	2,706
8	Herbing	10,636	367	34,467	5,092
9	Suzhou	10,466	900	85,993	12,703
10	Shenzhen	10,358	951	91,822	13,564
11	Nanyang	10,263	196	19,057	2,815
12	Shijiazhuang	10,164	340	33,462	4,943
13	Linqi	10,039	240	23,906	3,531
14	Wuhan	9,785	552	56,367	8,327
15	Handan	9,175	234	25,529	3,771
16	Wenzhou	9,122	293	32,071	4,738
17	Weifang	9,086	309	34,018	5,025
18	Zhoukou	8,953	123	13,715	2,026
19	Qingdao	8,715	567	65,016	9,604
20	Hangzhou	8,700	595	68,340	10,095

Data source: <http://www.renkou.org.cn/china/>

5.1.1.2.2 Education resource and talent pool

Zhejiang province has 33 universities, among which 13 universities have PHD granting qualification, 20 universities holding master degree granting qualification. Hangzhou city has 15 universities, covering every major and research direction in China. ⁴

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<https://zh.wikipedia.org/wiki/%E6%B5%99%E6%B1%9F%E7%9C%81%E9%AB%98%E7%AD%89%E5>

The Zhejiang University is the largest comprehensive in China. It has 36 colleges covering all science and social science majors in China. It has 7 campuses in Zhejiang, among which 5 are in Hangzhou. Till January 2016, it owns 18 majors in the top 1% ranking of international research institution ranking, which is the second place among all the Chinese universities. It owns 7 majors in the top 100 in the world, 4 in the top 50 in the world, both of which are at the first place among Chinese universities.⁵ Till January 2016, it owns 47339 students, among which 14289 master, 9153 PHD and 23897 bachelor students. In year 2015, there were 5208 bachelor degree students, 4333 master students and 1339 PHD graduating from the university. And this number is stable every year. Among these 10880 graduates, except those who went abroad and continue to study, 7016 students entered labor market and 58.72% stayed in Zhejiang province to begin their career life.⁶ In other words, Zhejiang University guaranteed sufficient high quality talent in the Zhejiang province.

The China Academic of Art is the top hall of art education in China. It has several campuses in Zhejiang, and the main and core campus is in Hangzhou. Zhejiang University of Technology, Hangzhou Electronic University, and Zhejiang Science-Technology University are all big and famous science and technology universities in the east China. Zhejiang University of Media and Communications is a specific media related university. Zhejiang University of Finance & Economics and Zhejiang Gongshang University are both comprehensive universities, especially strong in business, economics and law field.

To sum up, Hangzhou is a university city. It has rich education resources to cultivate high quality talents at different levels and with various majors and directions.

[%AD%A6%E6%A0%A1%E5%88%97%E8%A1%A8](#) wikipedia on the item of "List of Zhejiang Universities" in Chinese

⁵ <http://zdzsc.zju.edu.cn/index.php?c=Index&a=about&catid=9> website of the official Zhejiang University

⁶ <http://m.v4.cc/News-1527964.html> Media report on Zhejiang University, source originally from the *2015 Annual Report of Zhejiang University Graduates Employment Quality*

5.1.1.3 Capital resource

5.1.1.3.1 Capital amount

Hangzhou is the capital city of Zhejiang province. It can easily enjoy easy access to the whole province's capital resources. However it is not the hottest city for foreign capital like Shanghai, nor the favored city by central government to invest money and give lean policy like Beijing and Shenzhen.

In this aspect, I would conclude that Hangzhou absolutely have capital resource and capital advantage compared to most cities in China, but it is still not competing to the first tire cities, Beijing, Shanghai, Guangzhou and Shenzhen.

5.1.1.3.2 Capital nature

Although Hangzhou's capital resource is not top in the amount, it is winning because of its nature. The main capital in Zhejiang province is private capital. The private economics are the supporting economics in Zhejiang. It always takes up to more than 60% of the total economics. This is considered to the unique phenomenon among all the provinces in China.⁷ According to *Public Statistic Report of Hangzhou Economics and Social Development in year 2015* from the Statistic Bureau of local government, the general GDP of the whole city is 1005.358 billion RMB (approximate to 1340 billion kroner), 10.2% increase compared to year 2014. So the total quantity of private economics in Zhejiang is significant and dominant.

As a typical city in Zhejiang, Hangzhou shares the similar economic structure. According to the Statistic Bureau's figure, in year 2015, the private trading and sales takes 76.8% of totally trading and sales in Hangzhou; the private investment in fixed assets takes up to 53.6% of total investment in Hangzhou; and the tax income from

⁷ <http://www.reformdata.org/index.do?m=wap&a=show&catid=342&typeid=&id=9875>

private economics takes 40.8% of Hangzhou government total annual income.⁸ The private economics accumulated huge amount of private capital.

Unlike the foreign capital and state capital, private capital is the most flexible and capital. It is sensitive to new trend; and it can learn fast and adjust its direction to catch up the market wind fast.

In fact, since the start-up companies appear more and more, the local private capital first set up various venture capital funds and private equity funds to make investments. Even if now some foreign capital also entered Zhejiang market, the private funds are still the main stream in this market. It is difficult to calculate how much money has been invested from private economy, since some capital enter this field through funds, some directly through M&A by private company, while some enter as individual's personal investment to a start-up directly.

5.1.1.4 Infrastructure

To find out the present state of infrastructure in Hangzhou, we could refer to the Forbes Best Mainland China Business City Ranking. Forbes had list Hangzhou top1 on this ranking for continuous 5 year from 2004 till 2008.⁹ Although it was passed by Shanghai and Guangzhou in last years, it is still on a leading position on the ranking. Because this Forbes list is based on each city's climate for business start-ups and private capital, the fact that Hangzhou could compete other first-tire and second tire cities and holding the top placing for such long time, could already prove its competitive infrastructure.

The reasons that Hangzhou has dropped a little bit in this ranking are in several aspects. One reason is that Guangzhou's government has been pushing a lot of attractive and

⁸ <http://www.askci.com/news/finance/2016/02/03/14213200gl.shtml>

⁹ http://www.chinadaily.com.cn/business/2008-09/03/content_6994208.htm

powerful policies to support start-up companies and encourage innovation. And the other reason is the increase cost (such as rent, salary, etc.) for start-up companies in Hangzhou when the city becomes hotter and hotter for the start-up companies.

In fact, as one of the richest cities in China, Hangzhou always has enough financial income to spend on any area the government pays attention to. And the local government has always put emphasis on infrastructure. In year 2015, the city has devoted 135.5 billion RMB (around 180.6 billion Norwegian Kroner) in to the infrastructure, 34.8% increase compared to year 2014. The main infrastructure projects are the enhancement of electricity network and enhancement of traffic system that includes subway net construction, new highways, new tunnels, and extending projects for crowded roads. The city also invests money on environment monitor and improvement, to decrease the PM 2.5 in the air, to improve the dirty water purification, to increase green land, and to close down heavy pollution factories.¹⁰

5.1.2 Demand conditions

The demand conditions require sophisticated local market buyers who would give pressure to the firms and companies in the cluster to innovate faster and be more competitive in products than companies outside the cluster. This could be measure from two angles. First the customers have strong purchasing ability, in other words, they have plenty of disposable income. Second, they are well informed, knowledgeable or fashion to know the trend and be picky about products.

5.1.2.1 Purchasing ability in the local market

If we refer back to the table in 5.1.1.2.1 Population, it is easy to find out that the average GDP per person in Hangzhou is listed 7th in China. In year 2014, the average disposable income per person of Zhejiang province is 40393 RMB, and 44632 for

¹⁰ http://www.hangzhou.gov.cn/art/2016/3/24/art_805865_663727.html Hangzhou Government website in Chinese

Hangzhou. The level of Hangzhou was only behind Shanghai in China, listing No.2, in front of Beijing.¹¹ Not mention the strong purchase demand of Hangzhou itself, as the economic, culture and fashion center of Zhejiang province; Hangzhou is also a market center for Zhejiang province. So the local market is strongly demanding.

5.1.2.2 Sophisticated customers

Citizens in this city and this province are sophisticated and picky. There are several reasons. First the east coast of China has been the edge or the door to connect with the world since the People's Republic of China set up and Hangzhou is one of the leading cities on the coast. Second, Hangzhou is 1.5 hour driving distance to Shanghai that is the financial center of China or even Asia, as well as the most western style Chinese city. Being a close neighbor to such a fast-speed-growing city, a world modern and fashion city Shanghai, of course Hangzhou would be influenced and would be easier to access to new ideas and trend. This affection is similar to the influence on Shenzhen and Guangzhou from their close neighbor Hong Kong. The matured customer service atmosphere and the professional spirit to purchase best quality and design in the business field in Shanghai would easily pass to Hangzhou.

Thus, the local customers have satisfied both conditions in economic level and in taste level to be sophisticated customers required by the cluster conditions.

5.1.3 Related and supporting industries

Zhejiang has several manufacturing clusters in different cities. Haining is the leather city in China. It produces up to a third of the total leather and fur productions in China and has the largest leather wholesale market. ¹²Jinhua is the city of small metal joints and tools in China. It produces more than 60% of metal kitchen equipment in China,

¹¹ <http://zj.sina.com.cn/news/m/2015-03-01/detail-iawzuney0351689.shtml>

¹² <http://www.huishangbao.com/news/nanzhuang/194544.html>

more than 40% of electronica metal tools, and so on.¹³ Wenzhou is the city of shoes, lighter, motor parts, etc. Xiaoshan produces a third of down products in China.¹⁴ And Yiwu has the largest small comedies wholesale market in China.

Of course after the successful expansion of Alibaba, there are more related and supporting industries popping up. I am going to discuss this part in the influence of Alibaba later.

5.1.4 Firm strategy, structure and rivalry constitute

As Zhejiang province is quite dependent on the private economics and most private companies are competing in open and sufficient competing industries. This situation leads to several results. First of all, most private companies are flat management structure, which help the companies to make decision and implement decisions faster and efficiently. This is an advantage to small and media size companies when they are facing fast changing market and improve the profit-ability of their capital. Second the private capital is from private companies originally, so the enterprises themselves already have experience of managing a start-up company. And this give them better instinct when they choose start-up companies to invest and later provide suggestions and advise as a shareholder of start-up companies. Third, the private capital is usually more prudent about risks, meanwhile more open to new concept and more sensitive to new trend. All these characteristics are critical for start-up companies. Forth, since the general economics environment is competing, the companies survive in such an open and development market naturally feel rivalry all the time which give them motivation and pressure to think fast and being creative.

¹³ baike.baidu.com/view/4290370.htm

¹⁴ <https://books.google.no/books?isbn=9620763459>

5.1.5 Government

Government could affect all the above four factors. The openness, efficiency and transparency of the government could make the market competition fair and active. Necessary and well-designed financial support and policy protection could help small companies during their surviving period at the beginning start up phase.

Compared to the rest part of China, the Yangtze River Delta region and Pearl River Delta region are considered to have the most efficient and clean government. The Yangtze River Delta region covers Shanghai, Hangzhou and Nanjing as its core cities. And Pearl River Delta region covers Guangzhou and Shenzhen.

The most superficial measurements to a government could be easily observed. For example, how easy and how soon it is for start-ups to pass all the political procedures to be registered, how complicated and heavy burdened are tax and other government fee collection, etc.

Of course for start-up companies, there are much more direct things a government could do. For example to set up special policy to attract high level talent to this city in order to loose the tight constrains and limits from the Chinese Hukou (residence registration) system that aims at fix labor flow on the land. And tax reduction and relief, office-rent assistance and subsidiary, start-up cluster industry part are all popular and useful political tools to help start-up companies.

Now Hangzhou has 8 start-up hatching parks. Local government encourages start up companies to apply to move into such kind of park. So then the companies could be centered geographically. These eight parks are spread in different places in the city, either close to universities, Alibaba office building, and Tencent Co. office building, or in a previous start-up cluster area. One of these parks is the first national level high tech and innovation park for hatching start-up companies in China. ¹⁵

¹⁵ <http://tech.163.com/15/0331/17/AM278820000948V8.html>

The initial motivation for the government to build and organize such kind of innovation parks is to gather the start-up companies together in order to give support, offer service and help connecting to capital in a more efficient way. Of course these aims are easily achieved. More over, there are other positive effects brought by such kind of innovation parks. First a concentrated location makes the cluster even more closely connected. Thus it helps the knowledge and information to exchange between the entities more convenient and fast. It also makes the talents flow within the cluster with lower cost. Second an innovation park with some kind of scale would have agglomerative effect and attract new start-up companies to choose Hangzhou to set up their first office. According to the interviews with venture capital investors, a lot of start-up companies did not consider Hangzhou to set their office until they come the innovation parks to attend some inter-industrial seminars or competitions and get information of the parks' environment and policies. To be neighbor with other excellent start-up companies and inspire each other is also a consideration in the enterprisers' mind.

Hangzhou's government has been adding more and more supporting and subsidy to start-up companies, not only to the company level, but also to the individual level. The innovation parks offer office with rent lower than market level. Meanwhile high-level talents employed in the start-up companies and the start-up founders could also enjoy residence apartment with lower rent. The government offers endorsement to banks for the start-up companies. It is important for those in short of money at the beginning phase and for those newly graduates who has no assets or savings yet.

5.1.6 Chance

Chances could be considered at different levels. No matter what kind of chance, it should be a spontaneous and non-continuous opportunity for a cluster to emerge and

develop. Here I identify two chances that are key to the emerge of the Hangzhou IT start-up cluster. They are timing and Alibaba.

5.1.6.1 Timing

The timing of forming or cultivating start-up company cluster could be interpreted in two ways. One is the actual and urgent need for the market entities for find a new profitable field to invest money after the financial crisis. The other is the push from the various level of the Chinese government.

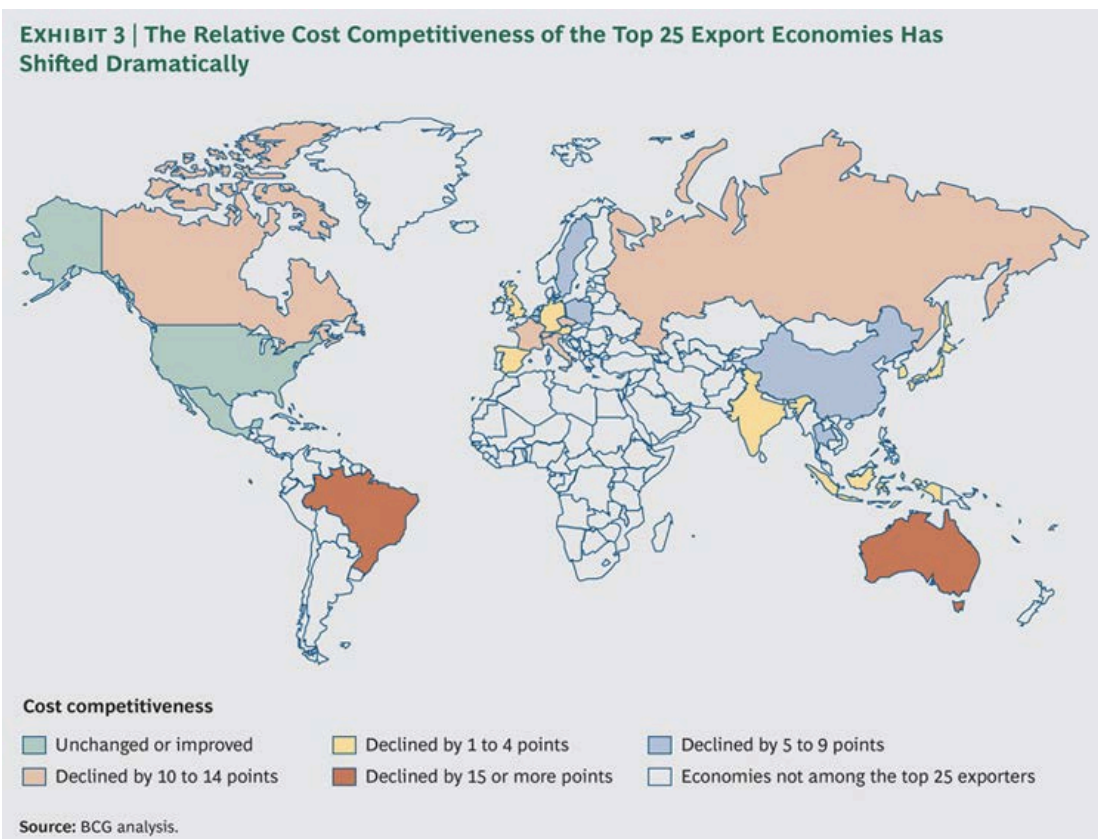
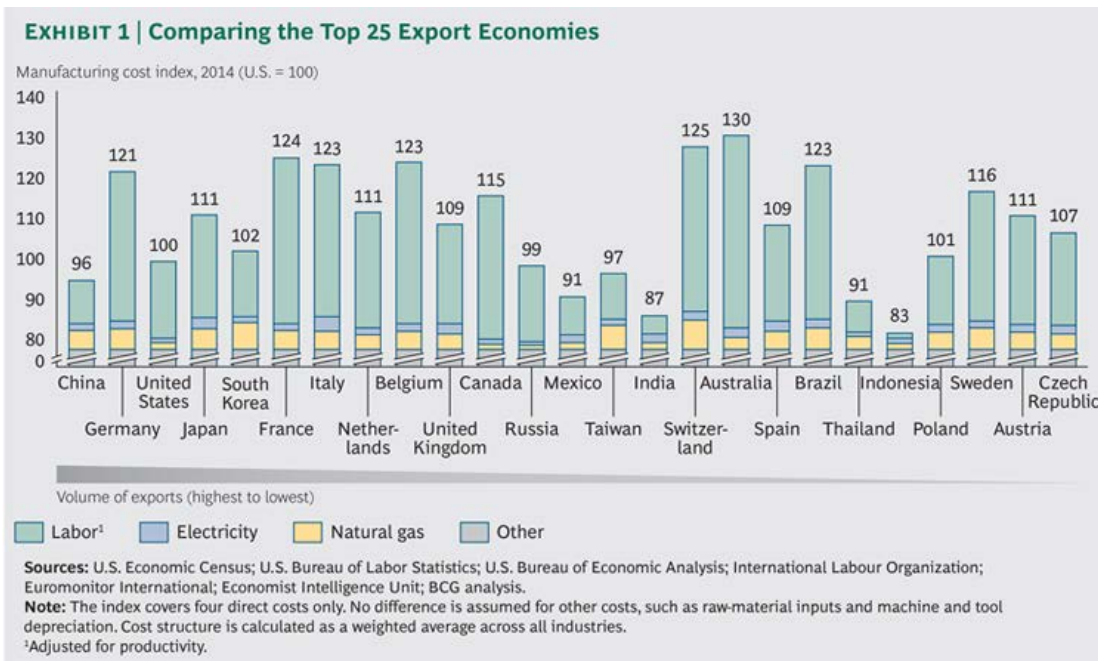
5.1.6.1.1 Pressure to adjust economic structure

In the last decades, China has enjoyed fast economic growth averagely above 8% increase in GDP annually. However this situation is changing. Factories and capitals have to stop being heavily relying their profit on the traditional manufacture and export due to the weak global market after financial crisis and the loosing competitiveness of Chinese manufacture cost.

According the world famous consulting firm BCG, China is losing its cheap manufacturing cost advantage in the global economics. BCG use the manufacturing cost index to measure the general cost level. BCG collected the data from year 2004 to 2014, and analyzed that the productive adjusted manufacturing wages in China has increased 187%, the industrial electricity costs increased 66% and the industrial natural-gas cost increased 138%. Besides these, the Chinese currency has appreciated by 35% compared to US dollar. As we can see from the following picture, compared to the base level 100 which represents the American's cost level, Chinese cost index is as high as 96 in year 2014.¹⁶

¹⁶

https://www.bcgperspectives.com/content/articles/lean_manufacturing_globalization_shifting_economics_global_manufacturing/?chapter=3



Source: The Shifting Economics of Global Manufacturing, published by BCG¹⁷

From BCG’s map above, we can observe that Chinese manufacture competitiveness is

17

https://www.bcgperspectives.com/content/articles/lean_manufacturing_globalization_shifting_economics_global_manufacturing/#div_exhibit_3

shifted to India, Indonesia, Holland and England from year 2004 to 2014 gradually.¹⁸

Thus China is facing a more and more serious pressure to adjust its economic structure when losing its global manufacture factor position.

5.1.6.2 Policy wind for start-up cluster

Chinese economics are strongly influenced by the government policy and attitude. China had experienced long time planned economy from 1950s to 1980s. Even though the Chinese market is learning to be free market since 1980s, there are still strong political guidance and influence on the market all the time, which is quite different from west capital economics. And due to the dominant strength of state-owned economy, absolute control on the finance field and plenty of taxation income, the government does have the power to manipulate market if it wants. A lot of industry's flourish and falling are closely dependent on the government policy. We could find proof from the real estate industry, solar products industry, wind-electricity industry, and so on. In year 2008, the central government made a 4000 billion RMB (approximate to 586 billion US dollar) complex policy to subsidize and stimulate various industries.¹⁹ In year 2014, the central government together with different levels of local government proposed a 10000 billion RMB stimulation policy.²⁰ I have no intention to comment the correctness or the failure of these policies. To quote these is in order to show how strong the government could influence the social economy.

In September 2015, the central government leaders proposed a slogan of "Mass entrepreneurship and innovation" in several important speeches. Meanwhile State Council published a formal guidance that "under the globalization background and the

¹⁸

https://www.bcgperspectives.com/content/articles/lean_manufacturing_globalization_shifting_economics_global_manufacturing/?chapter=3

¹⁹

<https://zh.wikipedia.org/wiki/%E5%9B%9B%E4%B8%87%E4%BA%BF%E6%8A%95%E8%B5%84%E8%AE%A1%E5%88%92> Wikipedia on the item of "4000 billion policy" in Chinese

²⁰ <http://www.epochtimes.com/gb/14/7/2/n4191353.htm>

bloom of Internet technology, China is going to implement a whole set of systematic policies to help and push start-up companies.²¹

This main trend of the policy might wrongly add bubbles to the cities that are not suitable to develop start-up clusters, however it is good news and strong promoting effect on the naturally existing cluster to grow healthy and big.

5.1.6.2 The success of Alibaba

The cluster in Hangzhou is IT start-up cluster. If we observe in a more detailed level, we would find various IT start-up cluster, such as companies offering daily life service app, social app, online financial service, etc. However among these large amount of start up companies, the earliest, most successful and largest number of start-up companies are in the online business field. This phenomenon could not be neglected or disconnect with the fact that Alibaba is located in the same city. And there is close relationship between the cluster growth and expansion and the development and extension of Alibaba.

Although there is no public open data to show the influence or deep connection between Alibaba and the start-up cluster in Hangzhou, during the interviews with present-Alibaba-employees and ex-employees, I still get estimated figures to show the powerful influence from Alibaba. These will be further discussed in the proposition part of this thesis. And readers could also read the appendix as supporting materials.

6.0 Discussion

Based on the analysis at previous part of this thesis, it is easy to conclude that

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<https://zh.wikipedia.org/wiki/%E5%A4%A7%E4%BC%97%E5%88%9B%E4%B8%9A%E3%80%81%E4%B8%87%E4%BC%97%E5%88%9B%E6%96%B0> (wikipedia on the time of "Mass entrepreneurship and innovation policies" in Chinese)

Hangzhou enjoys some advantages in forming a cluster compared, but not overwhelming over other second-tier cities, and compared to the first tier cities, it even has disadvantage in some aspect, such as capital force, education recourse etc. The only special and unique factor it owns is Aliaba. Thus, I propose the following proposition.

6.1 Discussion about Proposition 1

P1: Alibaba Group was the key factor to direct Hangzhou to be an IT start-up cluster, and its spillover effect will reach at a peak after the untradeable shares unlocked.

The success of Alibaba Group has important pushing effect to the IT start-up cluster in several aspects. And I am going to analysis the IPO influence when I am going through these aspects.

6.1.1 The Leading Model effects

First, it shows to private capital a model of achieving huge profit by investing in IT field. IT field needs relevant knowledge to understand. However capital is always crazy for high return projects even the risk is high. Not so many private companies' enterprises know IT technology, but they are all interested in this industry with abnormal profit rate. The IPO of Alibaba gives them a shining picture of increasing their assets ten times or even more just over night, by investing an IT company instead of running a company by themselves. The private capital is attracted and motivated to enter into this field and inject the money to fresh start-up companies.

Second, it shows to IT talents a dream of being significant successful from nobody. Jack Ma was graduated with the major of English. When he founded Alibaba.com, he knew nothing about IT technology, but only had limited experience of surfing in Internet and knowing that Internet could let foreigners to see the Chinese products

introduction. Carrying a dream, he led 18 persons as team to begin his online business. Now his online business kingdom is dominating B2B B2C and C2C business not only in China, but also in the world. He has a famous sentence “man should have a dream in case it becomes true.”

6.1.2 Spillover in Talent

The spillover from Alibaba in talent condition in cluster is obvious in several aspects. As the interviewee explained, half of the founders and CEO in the IT start-up cluster in Hangzhou are ex-employees from Alibaba. This is very direct and powerful data. (Please refer to Appendix 2).

Alibaba is huge enough to cultivate special talents and support a well circle of technics and information by itself. Every year Alibaba recruits hundreds of fresh graduates. Just after one or two years, they would get calls from job hunters.

The existence of Qiancheng Club is another a powerful proof for the strength of the spillover function. Qiancheng Club is an alumni nature organization for the ex-employees from Alibaba. Within its special firm culture, every employee names himself or herself a nickname from a novel or a movie from Jack Ma to the basic level employee. Jack Ma managed to make the firm in a university-style atmosphere. And the colleagues have friendship. Such kind of colleague-ship and the value of network naturally created an organization called Qiancheng Club. Ex-employees set up this organization from Alibaba. And it focus on helping alumni to start-up their own companies and connect with venture capital.²²

Besides, according to the interview, there are much more informal connections

²² www.qianchenghui.com/

between the start-up company founders from Alibaba.

6.1.3 spillover in supporting industry

Along with the growth of Alibaba group, it strength the existing relevant industries as well as develop new demands and new markets to support it, service it or to specially detail its products to the customers.

First, Alibaba has positive interaction with the supporting manufacturing industries. Alibaba Group includes several companies. It offers B2B business platform on Alibaba.com, B2C and C2C platform on Taobao.com and Tianmao.com. Alibaba offers the manufacturing clusters in surrounding cities a new platform of sales. And these manufacture clusters later become strong supporting industries to the online trading platform. This does not only benefit Alibaba, but also the start-up companies in Hangzhou that are focusing on detailed product markets.

Second, Alibaba also hatched the post business as its supporting industry. Thanks to the good infrastructure in Yangtze River Delta, the traffic condition is best here among China. So rise of Alibaba not only pushes the manufactures, but also pushes the post and delivery industry. Till year 2015, among the top 8 post companies in China, there are 4 located in Shanghai and 2 located in Hangzhou. The post cost within the Yangtze River Delta for each package within half a kilo could be lower than 5 RMB (less than 0.8 dollar). This cheap cost strongly stimulated the trading online within this area.

Third, Alibaba hatches the data-dig and data analysis industry for the cluster. I have interviewed a vice general manager Nara Yao of a Taobao partner company. She told me that there is a new work “TP” standing for Taobao partner companies nowadays. These companies have regular communication with Taobao.com (subsidiary in Alibaba) and serve various sellers on Taobao and other online sales platform. They sign contract

with a brand or a private company, offering webpage design, advertisement or even the whole online sales procedure for one or several sales platform. According to her, these companies are professional in data dig and analysis to help the brand to catch and maintain target customers. And these companies are so many that it is already a small cluster.

6.1.4 spillover in capital resources

The spillover effects in the capital resources are mainly in three aspects.

First, Alibaba could offer capital directly through its online bank. Alibaba created Zhifubao system that is similar to PayPal but with much more advanced functions such as saving accounting and guarantee function for trading. This helps the websites tremendously absorb cash and savings. And due to this significant result in cash collection, Alibaba got the first online bank license from the Chinese government. And Alibaba is putting its present business focus on the finance field in offering loans to start-up companies and suppliers on line as well as investing directly.

Second, the profitable business and the IPO both offer Alibaba plenty of cash and pressure to use the cash. In year 2014, Alibaba initialed public offerings in New York stock market, financing 25 billion US dollar and becoming the world largest IPO engagement. Calculated by the opening price on its first day, Alibaba became the world second largest IT company, only after Google. Suddenly gaining so much cash at hand, the management needs to find quality and promising business field to invest.²³ To invest or buy-out start-up companies is its common strategy. To get invest from Alibaba also means to get its network and human resource supporting for the start-up companies. So the start-ups always want to attract attention from Alibaba, gain its capital and enjoy its resource. In fact, according to the interviews with professional experts in venture capital and accounting firms, I have been told that when they get to know a start-up company or perform Due Diligence investigation, it is common to

²³ <http://tech.sina.com.cn/z/alibabaipo/>

meet people from Alibaba to investigate the engagement at the same time.

Third, the IPO created large amount of millionaires who might want to pursue their dream of founding a start-up company after being financial free. Since 1999, Alibaba has been given shares and options to motivate its employees. Till the first unlocking day on the stock market, there were 26.7% of total shares held by Alibaba's common employees and ex-employees. That was about 4.1 billion US dollar on 20 thousand common persons' hand.²⁴ To prevent the resignation flood in a short period, the HR department in Alibaba has shown their worries and pressures in media interview several times. Thus, when these fast rich employees resign and set up their own companies, they would put their own money from stock market, and inject capital to the start-up clusters.

6.2 Discussion about Proposition 2

P2: The supporting conditions that cultivated Alibaba Group in this city are still influential advantage conditions for the IT start-up cluster to form in Hangzhou.

Some people might consider the appearance of Alibaba to be an accident or good luck. However according to the previous part 5.0 Analysis, it is easy to identify the physical conditions that help the Alibaba to get born and grow up in Hangzhou.

Let's quickly review the analysis in previous part and list out the main advantages in Hangzhou's conditions to hatch Alibaba, and further discuss their function to present cluster.

²⁴ <http://tech.qq.com/a/20140605/043076.htm>

6.2.1 Factor conditions

I have analyzed the factor conditions in several aspects previously, including physical resource, human resource, capital resource, and infrastructure. In my point of view, all these factors happen to satisfy the requirement of the born and growth of Alibaba. Some factor conditions are not overwhelmingly strong in Hangzhou compared to other cities, but they are good enough for Alibaba. For example, Hangzhou only has one university among the top 10 universities, while Beijing and Shanghai both have more than 3. But Hangzhou has several excellent science and technology university. It also has top education resource in media and art aspects. All these equip this city with well-round talent pool.

6.2.2 Demand condition

As discussed in previous part, the local demand condition in Zhejiang province is favorable to Alibaba. The favorable demand condition means the competitively rich customers and sophisticated consuming attitude. Considering the convenient transportation system and similar demanding market, actually the whole Yangtze River Delta could be considered as the demand market for Alibaba. This is definitely a competitive advantage for Alibaba.

Referring to IT start-up cluster, sophisticated customers in local market would help the new IT products easier to spread and advertise. Shanghai is the most international city in China, and the Yangtze River Delta citizens are much more eager to experience new products in China. Thinking about this is the first batch of customers who learnt and got used to shopping on line and pay on line, of course they would be the first batch of curious customers to try new APPs and other new stuff. They are pickier about the details. They know what they want, need, and expect. This demand condition will continue to be good soil for the IT start-up cluster.

6.2.3 Related and supporting industry

The initial intention for Jack Ma to found Alibaba.com is to serve the related and supporting industries in Zhejiang province. He wanted to help the local companies to sell products easier and open a whole world market to the manufacturing companies. And the first batch of Alibaba's users and clients are from local entities and individuals in Zhejiang province. So this is the direct reason that brought Alibaba to this world.

The soil is also important for the later start-up companies. Vipshop is an online platform to sell first-tire brand products with high discount. Mushroom Street is an online platform focusing on female makeup and clothes. Both have been a large company size from a start-up company in two years' development. I could give out more than ten examples of such kind of detail area online business companies in Hangzhou. Of course these start-up companies are doing similar business as Alibaba, but more focusing on a specific area. Surely such business is tightly connecting with the local manufacturing cluster.

6.2.4 Firm strategy, structure, and rivalry

The firm strategy and structure tie with the local culture. The local culture has huge enthusiasm at doing business and running start-up companies. This could be traced back 800 hundred years since Hangzhou was the capital city and economic center of China in Nansong dynasty. Later Hangzhou lost its national political position, but has always been trading center. People here believe their own ability and diligence to earn a decent life. Such kind of culture and mindset help the firms to be more self-motivated, self-pressured, ambitious and positive about new market.

People have compared Alibaba with the second largest IT company Tencent in China. And their firm culture and strategy are totally different. Alibaba motivates every

employee to be ambitious, fast, special, while Tencent is more calm and patient at improving details.

That is why Alibaba dare to be the first online business platform when the Internet is only known by limited amount of people in China. And that is why so many start-ups dare to try new things and new fields even if the founders themselves have very limited amount of capital. The business enthusiasm is in the blood of Hangzhou.

6.3 Discussion about Proposition 3

P3: The size of Alibaba is the main reason why Alibaba could build a dynamic IT cluster around it. And its growing size expands the ways it can influence the IT cluster.

How can Alibaba build a dynamic IT cluster around the company? Just as the most elementary elements for every start-up company, capital and people are the first two things to open and maintain the company. It is the same to build up a cluster. Capital and talents are the first key points to run a dynamic cluster. According to my direct observation of the BAT companies and their IT cluster around themselves, I think the size of Alibaba is the reason why as well as the path how it builds up its IT cluster. Because there are too many difference among BAT companies, from their main business, HR systems, local city's conditions to their histories, firm cultures and values. But one same characteristic is that they are all huge at size. Thus I propose the size of Alibaba to be the reason and dynamic for the cluster. And the further analysis will be expanded in two aspects, talent spillover and capital spillover.

6.3.1 The size and talent spillover

According to the interview (refer to Appendix 8 and 9), Alibaba has a matured system

to evaluate every employee's ability and performance every year. So staff is always working under pressure. After the yearly evaluation, some are washed out of the company. Meanwhile a lot of employees resign from Alibaba at their own willing. According to the interview, there has been more than 120 thousands employees working for Alibaba at its different phase since its first day; and now there are only around 30 thousands employees working at its largest size phase. These figures not only show high turn over rate but also the amazing amount of experienced staff out to the job market from Alibaba. We can not find a second Chinese IT company that trains and offers the society so much human resource in IT area.

When people change their job to a new company (including a new job in a start up company) or when they begin to start up their own company, they would first consider the cities they are familiar with. And the present working city is usually at priority.

Because the Alibaba is at a size of its own IT empire, there are abundant talents flowing out of Alibaba every year to hatch the dynamic IT cluster around it.

6.3.2 The size and capital spillover

The capital spillover effect is growing with the expansion of Alibaba. Two aspects could easily prove this. First, the appearance of Zhifubao Alibaba was in year 2005 many years later after Alibaba's set up day. When the trading amount on the platform was large enough, Alibaba developed this payment system to protect both sellers and buyers. Further more, along with its size growth, Zhifubao owns more and more users and added more and more functions. Nowadays it is widely used as e-payment method, not only for online trading, but also for daily bills and purchase payments. Because Zhifubao holds huge amount of cash during the transaction period, it actually helped Alibaba to gain the capability to perform the business of commercial banks. And Alibaba did get the first e-bank license from the Chinese government. However

Alibaba's huge financial power was obtained step by step when its main business reached at different breakthrough levels.

The other proof is Alibaba's IPO. Out of question, every company needs to reach at a certain level of size in order to go to stock market. And as I have already analyzed in 6.1.4 spillover in capital resources, the capital spillover reached at peak in three aspects after Alibaba went IPO. We shall always bear it in our mind that all these capital spillover rooted from the size of Alibaba.

To sum up, the growing size of Alibaba pushes it to assemble more and more capital. As capital chase the profitable project, it automatically has the spillover effect and hatches a dynamic cluster around Alibaba.

7.0 Conclusions and recommendations

7.1 Conclusion

Based on the previous analysis and discussion, now I could draw the conclusion that the three propositions are convincing, supported by facts and proved.

Hangzhou has storage in the nature source, but it has open and business-driven atmosphere for hundreds of years. According to Porter's Diamond Model, it is easy to identify the advantages and disadvantages for Hangzhou to generate and develop a huge online business kingdom Alibaba Group companies. In other words, the success of Alibaba is a combination of the physical and cultural conditions in Hangzhou and some chance. However all these favorable conditions for Alibaba nowadays are also soil to the emerge of the IT start-up cluster in Hangzhou. So we could consider Alibaba as the first bud of this cluster.

And since Alibaba develops fast, this start-up company becomes a leading IT company in China, and further deeply influenced the forming of the cluster. It offers the IT cluster in Hangzhou much favored conditions in talent resource, capital, supporting industries and so on. And the spillover effect continues to increase with the IPO progress.

To sum up, Alibaba is the first bud of the IT start-up cluster in Hangzhou thanks to this city's cluster favored conditions, and it is also a strong driving force to the cluster along with its own development. No matter it is intentionally making effort or not, its size decides that it will naturally build the dynamic IT cluster around itself.

7.2 Recommendation

Because the local government is expecting to be a start city in start-up cluster, it already releases a lot of policies to support start-up companies and their founders and employees from finance to networking every aspect. There are limited things I could offer recommendations. Still there is something I would suggest the government to pay attention.

First, to heat up the start-up trend too rapidly could harmful to the general economics and invest money in unworthy companies. Some government officers might loose the requirements due to their political pressure when they invite companies to enter a newly open innovation park. However it is important to be picky since the quality of the companies in the cluster will affect the interaction and inter-influence in the cluster. If the government has no sufficient professional officer to choose and audit the quality of the start-up companies that would enter the innovation park and enjoy the government financial support, then it will be a smart idea to cooperate with venture capitals and follow their investment choices.

Second, instead of competing with neighbor cities in Zhejiang, it will be more efficient and co-win strategy to find a way to cooperate and developing supporting industries for the cluster in neighbor cities. As this thesis mentioned in the previous part, at present the whole country is crazy about encouraging start-up companies and many cities are expecting themselves to cultivate a second Alibaba in the future. So are the situations in other rich cities in Zhejiang province. However these cities, such as Tongxiang, Shaoxing etc., used to play a supportive actor the online-business value chain. Of course, they are not as attractive as Hangzhou when a start-up company chooses a city to locate. So they spend much more money to attract start-up founders. This is actually unnecessary and unhealthy strategy from the province level angle. So how Hangzhou could persuade them to find a better position in this value chain and develop supporting entities would be an important and meaning task for the government to think about.

8.0 Limitations and future research

8.1 Limitations

This thesis faces challenges and limitations naturally. First of all, China lacks public statistic data. Third party statistic data servicers are not well development in China and the official statistic bureau in China does not have habit to public all the information they gather neither has it gather data in specific areas or based on single economic entity or cluster level, since the main purpose of it is to offer macro data for other government departments to make future policy plans in the political level. So the industrial data collection will be the largest obstacle to this project. I can get Alibaba's financial reports since it went to IPO in USA. However the financial result of non-public companies will not be released, not mention the star-up companies. I

probably need to collect the investment figures one by one from each fund from their own reports or interviews, so the statistic might be not totally covering the facts.

Zero2IPO Group is a group company that owns several VC funds, PE funds, media companies and an independent data resource company. Its data reports in investment and start-up field is considered to be most authorized reports in Chinese market. However its report is not in BI's library resource. Thus I could not refer and cross-verify with the data I collect from other channels.

Second, the access to interviewees could also be a problem. In China, interviews for such kind of research paper could only be arranged based on personal networking. I will try my best with my previous working experience to get relevant interviews from high level managers in different IT companies and investment funds, yet there still will be difficulties.

Another limitation is that the interviews definitely will involve personal preference or bias no matter how hard the interviewees are trying to be objective.

Third, Chinese economics are heavily influenced by its government, both the central and local government. Due to the democracy deficient, a local governor's personal preference could be determinant factor to a city's development direction during his or her term of office. So the practical value of the advise in this paper would be quite limited.

Another important aspect to consider is that this paper is trying to develop or extend new theory based on different theories about industries or city development. It is a paper trying to use theories as a foundation and supportive argument to explain how did Hangzhou achieve at nowadays' situation and to anticipate its near future.

8.2 Future study

Considering the more and more popular of the cluster phenomenon and trend at present global economy, to better analyze the local economic strength and cultivate a local cluster would be an important part of local government's mission, as well as the premise to make a reasonable and helpful political policy for the governments. Koschatzky even claimed that "anticipated "that cluster support will still be a central innovation policy approach in the coming years." (Koschatzky, 2012)

In one aspect, Koschatezky was so confident about the cluster future research and cluster funding. Meanwhile, he pointed out that "cluster funding will however in future have to be more specific (and selective) than previously and have to network with other funding levels and funding approaches (e.g. European excellence clusters; promotion of excellence in universities in clusters; collaborative research and network promotion; new (heterogeneous) cooperation models). All empirical evidence shows that successfully operating clusters are characterized by a great diversity of actors and activities." (Koschatzky, 2012)

In China, the cluster research is still at the beginning level. People and governments only have basic cluster concepts of traditional manufacturing industries, such as shoe-making industry in Wenzhou. However when a lot of cities and towns in China are seeking for economic transformation, this is a great chance for the government to make specific cluster study of the regional economics.

This article is just a beginning to study Hangzhou's regional economics, analyze the new IT start-up cluster and propose political suggestion. I would expect to see more research focusing on specific city cluster level in China with more informative and accurate data.

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10.0 Appendices

Interview memo 1

Interviewee: Ms. Liu Yi

Interviewer: Yuanyao Wang

Time: May 5, 6:00 pm-7:02 pm Norwegian time, 2016

Interview way: Phone interview

Interviewee's background

Ms. Liu is the partner of BDO accounting firm, in Shanghai office. She has engagements in USA and east China. She usually lives a couple of months in America every year.

Interview content

1 How do you look at the IT start-up cluster in Hangzhou?

This is a good time for IT start-up companies. Since Jack Ma opened the age of online business, to connect the traditional industries with Internet is a hot trend nowadays. So first the online sales business field is heated, then all various APP are popping up. And the publics are very used to new APPs. A lot of my clients in manufacturing industries have added the online sales department and even coding APP for their business. So the IT start-up clusters have open and matured market at present. Beside, the local government gives a lot of strong supporting policy.

2 How do you comment advantages of Hangzhou in cultivating IT start-up cluster compared to other cities?

Hangzhou has absolute advantages in competition with other cities in the IT start-up cluster hatching. This could be largely contributed to Alibaba. Alibaba's main business is online trading. So till now, the strongest start-up field of Hangzhou is on the same

area at online trading. The hottest start-up companies are in the field of specific category trading platform and overseas trading platform. Although Hangzhou has other IT start-up companies, those are not leading the specific markets. So I think Hangzhou is dominating the online trading area of IT companies, but referring to a larger scale and other areas, Shenzhen, Beijing and Shanghai are similarly competitive.

3 How do you think the influence of Alibaba IPO on the start-up cluster?

This is a big thing, not only to Alibaba but also to the whole business circle. After IPO, Alibaba has a huge amount of cash and broader financing paths to get cash in the future. And that is the foundation for its fast movement in buy-out and M&A as well as direct business expansion in various fields in IT, media and entertainment industries. And to be bought out by such a large company is one of the primary successful ways for start-up companies.

4 How do you comment the start-up environment in Hangzhou compared with the environment in Silicon Valley? What shall the government do?

Well, the Hangzhou government already did a lot. Actually because Alibaba is located in Hangzhou, Hangzhou's government intentionally encourages start-up companies much earlier than other cities. It gives out money directly to a wide range of applicants, rent-deduction, tax deduction, etc. There is still something it can improve.

In Silicon Valley, according to my observation, the hatching/innovation parks help the start-up companies to transfer their idea or product to the business level. Most start-up companies are struggling in getting the first revenue. The phase of how to realize the business sense of the company is the most difficult part. And in Silicon, funds and innovation parks interfere into the start-up companies in much early time and in a deep level to help them get connected with related companies and get the income. Well, in Hangzhou, or even in a larger scale in China, such kind of help has not been real to the start-up companies. It is more like a concept or slogan. The start-up companies need to grow up by themselves and to be large enough to get attention from big IT companies.

And so many of them are dying on this way. If the government could help in the business practical field, it will be much more useful than giving out money. It is easy and fast to burn up the money no matter how much venture capitals are injected.

Interview memo 2

Interviewee: Mr. Tian Yang

Interviewer: Yuanyao Wang

Time: July 6, 7:12 pm-8:20 pm Norwegian time, 2016

Interview way: Phone interview

Interviewee's background

Ms. Zhou had been working in Alibaba from 2007 to 2014. He was one of those “old management levels” in Alibaba, as well as an IT engineer. Now he is a co-founder of an IT start-up company Youling Co. for two years till now. His company is trying to build up a connecting neighborhood by Internet application. This is not his first start-up company. His first try was before he entered Alibaba.

Interview content

1. We have been hearing that a lot of Alibaba employees jump out to run or to join a start-up company. But in the VC field, there is almost no cases talking about Alibaba ex-employees. What is the real situation?

We do have a lot of employees who come to found companies by themselves. We have groups in the social APP. There are several hundreds people in the group. For those “Old Ali people” (referring to the employee who entered Alibaba very early and got a lot of shares), their start-up companies are usually self-funded. A couple of million to start up a company is affordable to us. We do not need money from VC to initiate the engagement. In other words, we do not do the angel round financing. Usually when an

engagement looks for money in capital market, it already has a product ready to promote. So the base line for a pre-manager in Alibaba to get investment money is 3 million US dollar.

2. How strong influence do you think does Alibaba have on the IT start-up cluster in Hangzhou?

I dare to say that half of the founders and co-founders in IT start-up cluster in Hangzhou are people from Alibaba, same as the CEO.

There are two peak periods of Alibaba employees setting start up companies. One is around the IPO time, from the middle to the end of 2014 when the “Old Ali” collected their shares. The other is the first half of year 2016 since the stock market has passed the locking period for shareholders. This is a proof how strong the IPO of Alibaba influence the start-up cluster.

3. What is the usual format of the start up teams from Alibaba? Will the founders take their team out of Alibaba to their new companies?

No. We do not do that. One third of the situation is solo, two thirds are co-found with colleagues at the same level. Besides, when people resign from Alibaba, we are required to sign a promise that we will never initiately dig employees from Alibaba. So we keep our promise.

4. How do you comment the local government’s policy?

It is very supportive. For every company that could enter the new innovation park, it will receive from several million to dozens million of RMB (1 Yuan RMB=1.3 Kroner) capital support from the government. The supports are in two ways, direct subsidy and capital injection. If the company will be successful, the company can choose to purchase back the shares from the government at a bargain price. So that is very good support to the founders. We also get cheap office and tax free for 6 years.

5. Why do you want to found a start-up company? When you resign from Alibaba, what is your consideration for your career? And will you have pressure?

This is not my first start-up company. Before I entered Alibaba, I was running a company focusing on data search on the online trading area. We screened data from various trading platform. Alibaba developed so fast. In year 2005, it took 50% of the online B2C and C2C market shares. In year 2006, this figure rises to 70%. Since Alibaba dominated the whole market, our engagement lost the meaning. So we stopped it. And I decided to enter Alibaba to find out what made it so successful and what did it do. Then I stayed inside for 7 years.

Well, it is quite nature for me to jump out and start a company again. For our IT engineers, our minds are simple. We have a dream, and we do it. And a couple of million of starting funds are reasonable and affordable for us to try a dream. We do not feel so much pressure. In one aspect, we all know that in worst case, we loose the money and go back to big IT company and earn a desert life. We won't be bankrupt. In the other aspect, Alibaba has planted a very strong idea in our mind that as far as we are doing the meaningful and useful things for the society, we will get payback some day, sooner or later. This is actually what I consider the most different part from other founders from Baidu and Tencent.

6. What do you think you and other founders benefit from Alibaba?

First, money. We are the richest and largest rich management level in BAT companies. This situation offers us the freedom to chase our dream.

Second, the firm culture. Alibaba has the wolf spirit. We are motivated and determined, and also patient. Jack Ma always tells us to be confident and patient. As far as we are doing the good thing that will benefit the society, we will be paid back. Baidu is the main search engine in China. Tencent earns on the games and social applicant. Both of them earned money at the beginning of their business. But it took Alibaba many years until it managed the break-even. So people from Alibaba are used to be patience about

success. We can wait.

Third, professional sales and promotion skills. Alibaba is not be the best in IT R&D, but it is definitely strongest in sales strategy. There is almost a rule for IT start-up companies. There are two types of APP; one is functional and tool-style, and the other is platform style. If this is a platform style company that requires good sales and promotion implement, then the more staff from Alibaba working for its sales, the more successful it will be.

7. Where is your company located? What is your consideration?

Our company is located in Hangzhou. We considered and compared Beijing, Shenzhen, Shanghai and Hangzhou. Besides the attractive policies and close to Alibaba, another important factor is that Hangzhou is relatively small, and the traffic time cost in Hangzhou is much less than other big cities. And time is important for the company as well as for individual employees.

8. Does Alibaba only have influence on the online trading area? Or the employees from Alibaba set various IT start-up companies?

It is quite averagely spread in various areas. Generally speaking, the IT start-ups are three categories. One is online business, second IT-hardware, third APP, including O2O service, social APP, and video etc.

Interview memo 3

Interviewee: Mr. Guo Xin

Interviewer: Yuanyao Wang

Time: July 2, 5:05 pm-6:00 pm Norwegian time, 2016

Interview way: Phone interview

Interviewee's background

Mr. Guo is an algorithmic engineer in Alibaba. He studied computer science as his bachelor degree in Zhejiang University, and then got his master degree in Switzerland. He used to work in a Swiss start-up company and also an English start-up company in London.

Interview content

1. You have worked in Swiss and English IT start-up companies. Could you talk about the difference between them and Chinese IT start-up companies?

The Swiss IT start-up company that I worked for actually has been existing for a couple of year. It has stable clients and revenue, as well as subsidy from the government. But it seems that the team has no ambition to expansion. And they do not work over time at all. The university gives very supportive policy, as well as the supporting funds from EU.

The English start-up company was trying to write a program for insurance company to help them identify and evaluate the insurance amount based on pictures. So it longs to AI area. The office is located in London. Since 2010, London's government has been working hard to build the east London as an innovation area for IT industry. It allows the start-up companies to rent office very cheap. Meanwhile the government makes cooperation with big IT companies from Silicon Valley and invites them to invest the start-ups. I feel that the connection with big successful companies is better in UK than in China.

2. How long have been working for Alibaba? What makes you move back to China and join Alibaba? Did you get some training? What did you learn from Alibaba?

I have only worked for Alibaba for four months. I came back for family reason. And Alibaba is the top IT company in China. I want to experience the excellent part of it in

order to prepare for my own start-up companies in the future.

Yes, there are some training, but not focusing on technical aspect. The training is more like brainwash about the firm culture and firm value. Among these four months, I did not learn technical stuff from Alibaba, but soft skills are improved. I think as such a big and successful company, Alibaba does not need many creative minds, and it just need common engineer to write out the code in the technical aspect.

3. You have been studying and co-working with graduates from different universities. How will you comment the education resource and education quality in Zhejiang?

I will say Qinghua's students have absolute advantage compared to the second and third university in IT area. Zhejiang University and Shanghai Jiaotong University are almost the same level at the second and third places.

Most IT engineers from Zhejiang University are either continue study abroad or join BAT these three top companies. It is still rare to found a start-up company directly after graduation.

Interview memo 4

Interviewer: Yuanyao Wang

Interviewee: Yiheng Mao, Director of Huarui Venture Capital

Interview time: April 1, 2016, Friday. 11:45am-12:30pm Norwegian time

Interview way: Phone interview

Interviewee's background

Zhejiang Huarui VC Management Limited Co. was founded in year 2002, located in

Hangzhou. It is the oldest Chinese private economic entering the VC field, as well as the largest Chinese private VC management company in Zhejiang province at present. It manages more than 60 funds, amounting to 10 billion RMB (about 13.2 billion Krone) in year 2015. The strength of its funds are investing in the IT related area, culture and entertainment area. It has more than 200 LP, the number of IPO companies in its investment is listed No.1 in Zhejiang of the same occupation.

Mr. Mao has been engaging in VC for more than 5 years. He is a director of Huarui Co., in charge of culture and entertainment area. He is honored as one of the Top 20 most influential investor in Zhejiang province in year 2015.

Interview content

1 How do you think about the Hangzhou's importance for start-up companies in China?

Hangzhou is definitely an important start-up cluster in China. The atmosphere for start-ups is even better than Shanghai. Alibaba, one of the three IT giants BAT companies, is starting from Hangzhou. And another one NetEase actually has moved its main head management functions and innovation center to Hangzhou in 2012. Alibaba is dominating the on-line B to B and B to C business. And all other influential online business companies in a detailed consumption area are located in Zhejiang Province. In other words, Hangzhou represents the on-line business companies. NetEase has strength in computer games and online network (Chinese version of Facebook and Instagram). Actually it is splitting these two markets with Tencent, the third BAT Company. In year 2015, 70% of the total revenue from computer/mobile games in China is flowing into NetEase and Tencent, 30% and 40% respectively. The difference is that NetEase's main income are from its own developed two series of games, while Tencent represents a large quantity of games either developed by itself or bought from other companies. So from this angle, we could interpret that NetEase based in Hangzhou is more self-generated-creative than Tencent based in Guangzhou, while Tencent is faster in learning and absorbing creative thoughts and products from

outside world.

2 How do you comment the difference in start-up clusters in China? In other words, as a start-up, how will it consider where to base itself?

As we have mentioned earlier, Hangzhou is definitely a good base. There are also two other start-up clusters, one is Beijing and the other is Shenzhen.

Beijing is the politic center of China. And China is a government strongly controlling country. So first of all, all the resources are concentrated in Beijing. The unbalanced education recourses spread guaranteed Beijing the largest talent pool in China. Most of the state-owned companies set their head office in Beijing, including all the Chinese banks. So there is enough capital and various business resources in Beijing. Second, since China has very strict and complicated supervision rules over different industries, all the government authorizations in charge of supervision are locating their head office in Beijing. And to better communicate with the government in order to smoothly enter the Chinese market, companies would like to choose Beijing to be closer to their supervisor. But the largest disadvantage of Beijing now is that the cost of starting up a company there is the highest in China.

Shanghai actually is not a start-up cluster city. In the history, it has always been an important harbor of China. So its business is mainly trading. And it is the opening gate to western companies. Most of international companies that do business in China have office in Shanghai. Because the local culture is to encourage people to work for a big company, earn a decent salary without any risk. Of course there are still some start-ups, mainly related with advertisement industry since the dominating 4A companies are in Shanghai, so the spillover is obvious. Big-data digging and analysis are in the same business chain as the advertisement industry. And this chain is largest start-up company group in Shanghai.

Shenzhen and Guangzhou are considered as sister cities as well as in the same circle of

economics. Since Shenzhen is connecting to Hong Kong with subway, it is heavily influenced by Hong Kong. It is the financial center of south China and has strong business atmosphere. Huawei, which is the world leading Internet device and service supplier, is located in Shenzhen. So the start-ups in Shenzhen are mainly in the across area of finance and IT, such as online financial products selling and IT service for financial institutions.

3 What do you think is the most important factor for Hangzhou to cultivate the start-up cluster?

I believe the culture is the crucial factor. It is actually also the reason why Alibaba got born in Hangzhou.

In Chinese history, there are five famous business/commerce clusters, and Zhejiang Business cluster is one of them. Since the Tang dynasty (618-907A.D.), Zhejiang became one of the main economic centers of China; commerce economy has been very active. In fact the sprout of capitalism in China was in Zhejiang in 19th century. So deep in the soul, Zhejiang people have the spirit to take the chance and to run their own business. To work for big company and earn a stable salary is considered as not ambitious in Zhejiang's culture. So the parents not only encourage but also financially support their son or daughter to start their own business by themselves no matter how small it is at the beginning. And families or even a whole village could be quite united in investing in a business together. And they are more risk-preferred and more tolerant to business failures.

That is the reason why Zhejiang has several manufacturing and trading center for China or even for the whole world. And according to the National Bureau of Statistics of China, in the last five year, the private economy contribute more than 60% to Zhejiang's GDP every year. Now Yong Kang is the world center of mental components. Hai Ning produces and trade about a quarter of leather and fur products to the whole world market. Wenzhou has 800 years' history of producing shoes and now is taking

25% of the Chinese shoe-market. Xiao Shan is taking 50.6% of the Chinese duvet product market. Such kind of examples could continue to be listed.

4 How is Alibaba's influence in start-up companies?

Of course there are huge influence from Alibaba.

First, due to Alibaba's dominating state in online business, a lot of detailed separated online business companies are also based in Hangzhou, considering they need cooperation with Alibaba to get the initial visit to their new websites. So 90% of online business start-ups are located in Hangzhou.

Second, the spit-off effect is quite obvious, and reaches at peak since the Alibaba's listed shares are released from locked state. From year 2015, there has been a huge wave of quitting among management and technical professionals for starting up their own companies. Once a man make himself free from financial pressure, he would seek for opportunities to achieve new goal and self-achievements, and a start-up is his first choice.

In this sense, Alibaba offered huge motivation and financial condition to a large quantity of talents.

Interview memo 5

Interviewee: Mr. Liguang Wang

Interviewer: Yuanyao Wang

Time: April 7, 2016, 6:30-7:15pm Norwegian time

Interview way: Phone interview

Interviewee's background

Mr. Wang is CFO of Shenzhen Union Finance Club Group Company, which is a young yet leading P2P financing company in China. He used to be auditing manager in E&Y accounting firm for 5 years internally transferring between Guangzhou office, Shanghai office and Shenzhen office. And he has taken the senior investment manager position of Hangzhou Wenguang Private Equity Fund for 2 years. Due to his abundant experiences in Shanghai, Hangzhou, Shenzhen and Guangzhou, in a start-up company, a PE fund, and an independent accounting firm, he has his unique point of view about Chinese Economics, especially in the finance field.

Interview content

1 The Chinese government is strongly encouraging start-up companies since last year. How do you look at this?

Chinese economy is experiencing sever difficulties at present, and the government is trying to find a way out. The traditional manufacturing industry is transferring from China to other cheaper countries for the international market. And real estate induction, which was a supporting industry for the Chinese economic growth, now is kind of a drug to the economics. Meanwhile the IPO of Alibaba pictured a wealth miracle to the public. So the government expect IT start-ups to be a new saver to the social economy.

However a fast boom of start-up in all-round industries are not always good. For example, the extreme hot P2P finance in the last three years is now experiencing bubbles.

2 How do you comment the difference between the start-up clusters in Hangzhou, Shenzhen, Beijing and Shanghai?

I have the highest expectation of the start-up cluster in Shenzhen. As the youngest city in China, the citizens in Shenzhen are all immigrates from all over the country. They are more brave, creative, and less limited or confined. They believe in fairness and hard working. The start-up companies in Shenzhen always have somewhat

break-through point, and they spread in different high-technology industries, from the robots to gene technics etc.

The start-up cluster in Hangzhou is quite specialized. It is a typical IT+ model, usually a traditional industry to combine some IT function. This is probably influenced by the powerful private economic in Zhejiang and the leading model of Alibaba that is started from to sell products on line. So you can observe a lot of on-line business companies, B2B, B2C, C2C, from products to service. Thanks to Alibaba, Hangzhou has significant talents in on-line marketing, once these people enter a traditional industry, they can easily add the IT factor to promote the traditional industry.

Shanghai has quite bad start-up cluster atmosphere. Same as Beijing. But both of these cities have abundant money. So they are actually capital driven, not having the creative gene in the cities' culture.

3 How do you think about the trend of IT start-up clusters? And any comment to Hangzhou?

Nowadays, the BAT companies are dominating the IT markets and all of them are trying to make a complete chain in their own group. The trend is that most IT start-up companies or the main start-up clusters are circling BAT. They need the talents to start their company, and they need investment during development, and they look for the rich resources from BAT. So the most welcome investment for them is from BAT rather than any VC or PE. And BAT are eager to invest in small companies to grow themselves.

Alibaba group did not earn money when it only has the B2B platform until it mimic PayPal and created Zhifubao to enjoy the on-line payment industry. And Tencent is doing the same thing. It has Caifutong, which is not as widely used as Zhifubao, but has almost as long history as Zhifubao, and the ambition to compete Alibaba in on-line payment market pushed Tencent to create Wechat payment that now is as successful as

Zhifubao. In year 2015, the Chinese government authorized 5 on-line bank licenses, among which one is to Alibaba and another is to Tencent. This is just one example. In fact these years, BAT all made investment in on-line trading platform, on-line social network, video and film production, computer and start-phone games, various APP, etc.

So the trend of circling BAT is both the need from BAT and the need from start-up companies.

Hangzhou's start-up cluster is quite dependent on Alibaba. The development is mainly contributed to Alibaba, however its main confines are also from Alibaba. Compared to the Tencent in Shenzhen, although Alibaba also invest various start-up companies, it has totally different culture from Tencent. Tencent is trying to be a silent shareholder, offering its rich big data resources and net working to start-up companies, but not interfering the business too much. However Alibaba is so eager to rename every invested company to follow its surname. In other words, once a start-up company accepts the investment from Alibaba, it probably would loss its independent strategy on business. This is not so good for the start-up's founders.

Interview memo 6

Interviewee: Ms. Nara Yao

Interviewer: Yuanyao Wang

Time: April 23, 2016

Interview way: List questions on paper and get the answer on paper

Interviewee's background

Ms. Yao is vice general manager of Shanghai HappyDo Internet Technology Co., Ltd. This company is one of the big Taobao Partners that are professional in offering all kinds of on-line service to companies and brands that want to sell on Taobao (The

biggest B2C online platform in China under Alibaba Group). This company is a start-up company with around 5 years' history. Ms. Yao herself has more than 10 years experience in online trading business.

Interview content

1 What is your company's main business? How is your company's business in the last years? And changes? Does your company get any support from the local government?

Our company has several different business models. The simplest one is to design the online shops, update and maintain them for the brands/producers directly. Second business model is to run the online shops for them, and split the revenue. So we will use big-data analysis and design the best-sale production display, managing packing and delivery, monitoring collecting money, etc. And the third is to buy out the on-line sales license from the companies/brands and sell it on our own on-line shops, and in this case, we even make guide the producers about the styles of the popular products. Well, you can also consider the producer is producing for us, since we are response for all the point on the chain from design to ship and sale, expect the produce.

We are confronted with bottleneck in the last year. So we are trying to change. In one way we are trying to approach the supply origin closer, i.e. enhancing our competitive strength in the supply chain. All the competition finally is located at the supply chain. In another way we are trying to broaden our channels, such as the sales platform on Wechat (which is the product of Tencent Company), as well as preparing the cross-board online business.

At present, the support from Shanghai government is not strong. So we set-up a sub company in Changzhou in order to get political subsidiary on renting large warehouse.

2 Which online sales platforms are cooperating with your company?

The biggest is the B2C platfroms under Alibaba, which are Taobao and Tianmao. Other main cooperators are Dangdang, No.1 Shop, Vipshop. And in the last two years, there

appear some popular APP online channels such as Beibei.

3 Do you think Shanghai has advantages in attracting IT start-up companies compared to other cities, especially at the online trading aspect?

Since the on-line business is quite matured and on-line shopping is popular nowadays, the relevant technology and services are easily to get. I do not think Shanghai has any advantage, although our company's head office is in Shanghai. The disadvantage is obvious. Rent is rising fast. And the average salary level is much higher than other cities. Once we well train an employee and make him familiar with the business, it is really hard to keep him if we do not offer a significant salary rise.

I think the cities/areas that have better manufacturing clusters foundations will have better development and potential powers for on-line trading companies.

4 How competitive is the on-line trading service market? And where are your competitors mainly located?

This business has passed the perfect competition phrase. Small and weak competitors are already faded away from the market. The left ones are all quite strong. So the competition is quite concentrated. Our main competitors are mainly in Hangzhou and Shanghai.

5 How do you comment Hangzhou's environment for IT start-up companies? Is it better than Shanghai?

Yes, generally speaking Hangzhou has much better environment than Shanghai. Because its industry chain is more completed.

No.1 shop online platform is in Shanghai. I can't think of any other famous on-line business company in Shanghai. So the main IT start-up companies in Shanghai are focusing on big-data, media, and such kind of attaching service business to the on-line sales. Because nowadays the on-line sales channel is already a must-be channel for all traditional product brands and companies.

6 For start-up companies, what do you think the most important and crucial? And what kind of supporting policy do start-up companies want most from the government?

Money is the most important. And cash flow is crucial. So besides the direct financial support, the subsidiary in rent, earth, warehouse, tax-relieve are all supporting the companies' first need.

7 How do you comment the influence of Alibaba?

Now the IT field is monopolized by BAT (Baidu, Alibaba, Tencent). I think Alibaba has the largest influence to the whole China. Besides its own business, it is buying out so many small start-up companies. It brought a revolution to the business and set up a new business culture.

Of course the private economy in Zhejiang is pioneer in this revolution due to the location. And the IT start-up cluster in Hangzhou is at least partly attributed to Alibaba.

Interview memo 7

Interviewee: Ms. Yulan Zhou

Interviewer: Yuanyao Wang

Time: April 16, 6:34 pm-7:20 pm Norwegian time,2016

Interview way: Phone interview

Interviewee's background

Ms. Zhou is vice president at Rich Fields Investment and has more than 8 years working experience in the financial field, first at M&A department of a corporate company, later in a corporate bank and then in PE and VC. Her office is located in

Beijing.

Interview content

1 Your hometown is Hangzhou. Why you finally go to Beijing to do investment?

Do you think there is more career chance in Beijing for you?

I finished my master degree and gained my first two years working experience in USA. So when I was back to China, I was single and quite flexible about the location. Of course Hangzhou would be my first choice if there was suitable position for me. I was quite determined to enter investment fields. However Hangzhou's PE and VC are mainly local funds while Beijing has many more funds with foreign background or foreign LP. Considering my background, I prefer companies with international internal culture. And generally speaking, the total number of PE and VC in Beijing is definitely top one in China. This is the heart of money.

2 How is your investing portfolio spread in location? And why?

We mainly invest in Beijing, Shanghai, Zhejiang. No further. Shenzhen has a lot of good engagements, but it is too far away. Our network/relationship could not help us to compete to get the best engagement with the local funds. The main start-up clusters are in these regions.

3 Do you think Beijing has advantages in attracting IT start-up companies compared to other cities?

Sure. Beijing has the largest talent pool in China. Besides the top universities' contribution, Zhongguancun was in Beijing. Zhongguancun is located in the University Area of Beijing. It became the electronic street since 1980s. And gradually this area became the high-technology center and IT center of China. It is the first Creative Industry Lab Area in China. Alibaba's success anyway was much later. So Beijing's talent storage has long history and its richness could not be catch up by other cities in short run.

I have helped IT start-up companies to recruit. So I am quite familiar about how they dig out talents. Usually a high level technical engineer will be hunted through his own network (including previous colleague, previous boss, previous classmates, PE and VC, job-hunters) to a new start-up company. And he will be charge of the whole IT technical department. Then he probably will pick up some familiar colleague and convince them to jump to the new company with him to forma new team. So for IT engineers, where there are more people in the same occupation, where there is more chance for their career development. Thus, although the living expense in Beijing is much higher than other cities, the IT engineers and fresh IT graduates in Beijing have very little willing to change a city considering their networking is in Beijing.

4 How do you comment the IT start-up cluster in Hangzhou?

Hangzhou's IT start-up cluster is quite strong now. However it is strongly influenced by Alibaba. The main business of this cluster is on-line trading platform targeting at different levels of consumers.

In another aspect, this cluster is also quite strong in culture related business. Hangzhou's government has been trying to set up this city an image of traveling city, leisure city and culture city. Its annual International Cartoon Festive has been held for 11 years till now. The government's support is always playing a key effect to the industry. So now Hangzhou has a complete service chain for Cartoon and movies, including the computer effects etc.

Interview memo 8

Interviewee: Ms. Wang Shen

Interviewer: Yuanyao Wang

Time: June 16, 10 am-10:30 pm Norwegian time,2016

Interview way: Phone interview

Interviewee's background

Ms. Shen has 9 years experience in HR field and now is Staffing Manager in HR department in Alibaba.

Interview content

1 What is the turnover rate in Alibaba?

We do not have official statistic figure for that. Approximate 30%-40% per year including internal rejection. Alibaba has a whole system of evaluating staff and every year it rejects some under-performing staff and recruit new ones.

Usually our staff would consider changing a job or start-up their own company after 4-5 years working experience here. Well, still most enterprisers in start-up companies are old employees in Alibaba, approximately with 10 years working experience.

2 What kind of training does Alibaba offers to its staff?

It is hard to say. First, every employee will get 5 days concentrate training in the company's culture, history, and values. After that, everyone would at least get three days in professional area. Besides that, the leaders in business unit will organize their own training which dose not need to report to HR.

3 How do you comment on the influence from Alibaba to the IT start-up cluster in Hangzhou?

Well, I do not have any statistic figures about this topic. But personally speaking, I think the influence is huge. And that is why the largest Innovation Park as well as the

first national level innovation park in Hangzhou is just across the street of Alibaba's head office. And it gives a lot of attractive policy support to start-up companies. We can always run into previous a colleague who is an enterpriser in startup company in the street.

Interview memo 9

Interviewee: Mr. Cui Yupeng

Interviewer: Yuanyao Wang

Time: June 16, 12 am-12:45 pm Norwegian time,2016

Interview way: Phone interview

Interviewee's background

Mr. Cui is now a senior marketing expert in a joint company invested by Alibaba. He worked in traditional iron business for 10 years before he joined this new on-line iron-trading platform made by Alibaba and China Five Mines.

Interview content

1. Could you introduce your company?

This is a new company focusing on the online iron trading. Nowadays, the specific area on-line platforms are quite hot, from personal consumes to big consumptions. So Alibaba united the largest Chinese iron company in off-line trading to invest this new company.

2. How does such kind of new platform attract users at beginning?

Alibaba has a first-class marketing team in China. It was the original team that set up its original business and opened the Chinese and international markets for Alibaba.

3. How do you comment the influence of Alibaba on the IT start-up company in Hangzhou?

It definitely has huge influence. For example, there are a lot of servicing companies that help the sellers on those trading platforms in Alibaba group. And most of them are run by the previous employees from Alibaba. Because previous employees are more familiar with the game rule related with Alibaba.

Second, a lot of the market team members from Alibaba now have joined the start-up companies. Since 1999 the year Alibaba set up, the marketing team had grown up to be near 20000 people, and now it is several thousand size because Alibaba's customer groups are already matured. Large part of these previous marketing professional staff is working for the start up company.

Third, the VC prefers enterprisers with working experience in Alibaba. With this background, professional stuff is easy to get start up fund.

4. Could you estimate the talent spillover effect from Alibaba?

I do not know the turnover rate. But there is one figure you could refer to. Alibaba gives each employee a working number that will never be changed or canceled no matter this person resign or being resigned from Alibaba or even join Alibaba second time. So this is a sequential number that could tell you how many people have been working for Alibaba. Till now this number is over 120 thousand, while the present employee number is just around 30 thousand. And Alibaba was set up in year 1999.