Break The Ice:
Improvement of Collaborative Team Performance In Chinese Context
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*Improvement of Collaborative Team Performance*

*In Chinese Context*

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It is only with the heart that one can see rightly. What is essential is invisible to the eye."

——— Antoin de St Exupery
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Preface

As an international student, studying in Dutch context, I got a hard time to study efficient in Dutch context due to cultural differences, way of working and language barrier. For example, when I talk with Dutch classmate, misunderstandings always happen, causing inefficient team performance. After studying one-year in Delft University of Technology, my English is improving and I get used to Dutch culture. However, this experience lead me to wonder whether Western European people have the same cultural shocks as I, when they working in Chinese context. This is one of the reason triggering me to dig more information about cultural differences and team performance. Moreover, personally, I am interested in psychology field. Some articles reveal that cultural differences also cause conflicts, low trust and psychological safety in diverse team. Furthermore, in one-year abroad studying, I have had some cross-cultural experience and knowledge, leading me to think whether cultural intelligence would impact on team performance or not. It is also interesting for me to compare the differences between Asian and Western European cultures.

As a student in real estate and housing department, connecting project team with cross-cultural management is not difficult. And meanwhile, currently there are many internationally architectural projects happening in China. However, many international projects are not satisfied as designers’ desire or public expectation. There are many reasons to explain this phenomenon, however, the most important reason is the existence of cultural differences such as language barriers, tacit norms and lack of cultural intelligence. This causes conflicts which lead to frustration in the diverse team. As a result, failure of the project can be foreseen. Furthermore, Chinese way of working is totally different from Western European way. For instance, architects do not have right to choose supplier of materials from the law in case of corruption. This will lead a foreign architect not to get used to Chinese context. This is one of the example of conflicts. On the other hand, there are many foreign architectural firms start local branches in Chinese competitive market, however, it is hard for them to continue their work or long-term cooperate with local firms and hardly get profits. Thus helping cross-cultural team performance efficiently is an emerging problem to be solved.

The vision of this research is to figure out the main problems in collaborative teams working in Chinese context and help them to boost team performance by generating some recommendations. The final result will be provided to Western European architectural firms to help them understand Chinese context and establish long-term relationship with Chinese market. Personally, I also lack relevant knowledge base of cross-cultural management and psychological part. Studying this research, on one hand can solve this urgent problem. On the other hand, it also can improve my knowledge gap.
1. Setting the scene

1.1 Introduction

With the development of technology, the world becomes closer and integrated, moreover, business companies operate worldwide (Hofstede, Hofstede, & Minkov, 2010). Globalization, as a trend, brings more opportunities in terms of the market, the resource, the information-technology and ecology for different countries while globalization, at the same time, also causes a country to lose its identity and business conflicts because of cultural differences (Barber, 2010). Culture primarily influences on the international business going and the strategies of an international firm. For instance, if an international organization regards cross-cultural context as an opportunity and maximize to leverage the cultural differences, it will help an organization to learn from different culture and improve its innovation and creativity.

Han and Diekmann (2001) in their article point out that rapid developments in telecommunications, travel and other related industries have opened new opportunities to the international construction market. Increasingly international collaborative teams are made up in most developing countries, such as China. Culture is the ongoing product of the evolved psyches of human being in a group (Tooby & Cosmides, 1989). Cultural intelligence, as a new concept, assists people who are in the cross-cultural context to understand and develop their cultural knowledge in host country. It is important for a collaborative team to smooth and fasten the project progress. Furthermore, some tacit norms which are not be noticed can be understood and boost psychological safety and trust in an international team. As a result, team performance can be improved.

Although, most foreign architectural firms are becoming more localized. They allocate their international employees to their original countries, because these employees are more familiar with local culture. However, in China, most developers would like to meet and discuss with foreign representatives with blond hair, blue eyes and white skins, in order to show their power and boost their intangible value of collaboration with foreign architectural firms. Thus, although many Chinese employees who have background of studying overseas, the most architectural firms still need foreign architects working in China.

Effective cross-cultural management can make or break a building project overseas (Pheng & Leong, 2000). Mismanaging cultural differences might lead to an inefficient project and an ineffective organization. Cross-cultural management innovates business practices of international construction project teams towards being faster and supporting better learning within the organization (Hoecklin, 1996). Therefore cross-cultural management of international construction project teams plays an important role in innovation, providing sustainable sources of competitive advantages.

Poor management control will not only extend project scheduling, cause budget overruns and add to low quality, but will also impact on a safe working environment and surroundings of
local residents (Winch, 2010). Furthermore, tacit norms influence on psychological safety and trust in a cross-cultural team. For instance, saving face and keeping harmony environment are two tacit norms in some Asian countries, including China. Most employees do not change their creative information in the meeting, in order to keep from the potential conflicts, such as loosing opportunity of promotion or bad relationship among other employees. As a result, tacit norms impact on team performance by emotion, trust, and psychological safety. When team members feel frustrated and untrusted, they will not put the effort in collaboration and it thus the project may more easy fail.

Team performance influences on organizational performance, the quality of the construction, customer satisfaction, the potential and development of the capability of whole team. In this study, the subject is to investigate whether cultural tacit norms impact on the team performance in collaborative team in terms of trust and psychological safety in Chinese context. Existing researches shows that psychological safety and trust affect team performance (Venselaar, Gruis, & Verhoeven, 2015). Especially, the presence of trust among collaborative partners is an important factor to project performance (Mayer, Davis, & Schoorman, 1995). Thus, as an explorative study, it will mainly focus on psychological safety and trust.

Before going to literature review, in Chapter 1, the main problems in Chinese context will be explained, which are the strongly supportive reasons to do the study. Dutch architectural firms are selected as a representative of Western European countries in this research, the reason will be given afterwards. Later the gap of knowledge will be clarified. Based on the gap of knowledge, the objectives and aim of the study will be showed, and at the same time, research questions will be generated. In Chapter 2, introduction of Chinese building industry will be showed, including background, main players, how foreign firms work in China and their working modes. Chapter 3 mainly introduces what cultural dimension is, cultural differences in cross-cultural team, the influence of team performance in diverse team, cultural intelligence as well as Chinese tacit norms. Team performance in collaborative team and two most important indicators, psychological safety and trust, relating to team performance, are discussed in Chapter 4. Chapter 5 gives the conceptual model and methodology of this study.

1.2 High potential collaboration but many urgent problems in China

In China, building industry is growing dramatically fast. It has been a member of The World Trade Organization (WTO) since the end of 2001 which encourages many foreign investors or firms to work in China, not only in projects but also in using Chinese services. This implies collaboration among employees from different cultures than the Chinese culture. Although it boosts the innovation when a project team working with foreign team members (Ngowl, 1997), it is difficult for foreign firms to understand Chinese context with different values, attitudes and perceptions (Xiao & Boyd, 2010).

The expectation of most foreign architectural firms were quite ambitious and confident before they enter into the Chinese market, however some of companies seemed involving in this market for several years, but not many projects were following up, such as MVRDV and Atelier
Dutch. In addition, there were also firms with just one time entry and there were no more action after, such as Claus en Jaan and Bert Roos (Atelier cnS & YCDA, 2014). Furthermore, foreign architecture practices need always to cooperate with a Local Design Institute (LDI), as they hold the required licenses and permits (de Muynck, 2015). Yet foreign firms always get less than their local partners since foreign firms bear higher overhead costs, such as expatriate management within and outside of China, getting the permits and approvals, et cetera (Utterback & Li, 2007).

It is acceptable for the most foreign firms to establish their branches in Chinese economic and cultural environment. Although most architectural firms are becoming localized in these years, sending Chinese employers who have background of study abroad as well as the knowledge and deeper understanding of Chinese culture and business to China, foreigners with white skin are more attractive to certain Chinese context (Hedley, 2015; Volodzko, 2015). It might be explained by China still bears one of colonial mentality, to some extent (Volodzko, 2015). Thus, there are still many collaboration between Chinese developers and foreign architects. However, most architects still feel some gaps in their cooperation with Chinese project practitioners. These gaps stem from cultural differences and unsynchronized pace of cooperation (Atelier cnS & YCDA, 2014). Since foreign practitioners are not familiar with the Chinese culture, conflicts often happen among team members and consequently, leading project managers fail to properly control the project process (D. K. H. Chua, Wang, & Tan, 2003). Apart from that, because most foreign participants lacks a working knowledge of the basic cultural traits, it increases unpleasant surprises, limits advance insights, and halts companies to interact more successfully with other nationalities (LUMESSE Blog, 2015).

The comparison between Chinese and Dutch culture, as well as the basic information of the Netherlands will be given. Moreover, the reason why the Netherlands will be chosen as a representative in this study will be explained in the next section.
1.3 Dutch Architectural Firms as a representative

In the perspective of cultural study, it is easier figure out the conflicts and problems among countries with largely cultural differences. Hofstede et al. (2010) classified national cultures alongside six dimensions being power distance; individualism versus collectivism; masculinity versus femininity; uncertainty avoidance; long- versus short-term orientation; and indulgence versus restraint. From Table 1.3, it is obvious that there is huge cultural differences between China and the Netherlands.

<table>
<thead>
<tr>
<th>National cultures/Countries</th>
<th>Power Distance</th>
<th>Uncertainty Avoidance</th>
<th>Masculinity (versus Femininity)</th>
<th>Individualism (versus Collectivism)</th>
<th>Long-versus Short Term Orientation</th>
<th>Indulgence (versus Restraint)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>80</td>
<td>30</td>
<td>55</td>
<td>15</td>
<td>87</td>
<td>68</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>38</td>
<td>53</td>
<td>14</td>
<td>80</td>
<td>44</td>
<td>24</td>
</tr>
</tbody>
</table>

*Figure 1.3: National cultural difference between China and the Netherlands (Source: Hofstede, 2010)*

The Netherlands is situated in northwestern Europe and borders on Germany to the east, Belgium to the south, and the North Sea to the west and north. Its cultures are influenced by its neighbor countries and the history. Moreover, it has a highly-advanced free market economy and started trade with international quite early. The data in the international construction market shows that Dutch companies are one of the pioneers for doing business internationally (pwC, 2015) and Minister of State for Economic Affairs of the Netherlands Minister of State for Economic Affairs of the Netherlands (2005) declares that architecture, milk, clogs and tulips are a major export article. Interestingly, although the Dutch architectural firms have been relatively late in entering the Chinese market (Buurman & Kloos, 2005), in the past few years, many of Dutch architectural firms stably have been growing in Chinese market, such as Kuiper Compagnons, KCAP, OMA, UNStudio and NEXT architects. The behind reasons of this circumstance might be highly potential Chinese market as well as quite well-understanding Chinese market for these Dutch architectural firms.

Although Dutch culture is still different from other Western European countries, the Netherlands can be a good example in this study because of its open-minded culture, international identity, and considerably cultural differences with China as it mentioned above. In the next section, gap of knowledge, the aim and the meaning of the study will be introduced.
1.4 Problem statement

According to previous sections 1.2 to 1.3, it can be concluded that exception of high cost in Chinese market, there is the gap between foreign architectural firms and Chinese partners. From the cultural dimension, Western European culture is quite different from Chinese culture. Although cultural differences boost creativity and innovation in the team, it is the most influential factors in the collaborative team. Cultural differences causes the diverse team more complex in terms of psychological safety and trust. When two parties collaborate with each other, trust-building is also crucial for reduction of risks and improvement team performance (Rousseau, Sitkin, Burt, & Camerer, 1998). For instance, most expatriate managers have a very limited local knowledge of Chinese cultural and business practices, and very seldom have the Chinese language skills necessary for dealing with Chinese companies on a day-to-day basis (Hedley, 2015). A. Edmondson and Lei (2014) points out that team leadership and cultural diversity impact on psychological safety for team members as well as the learning process. Therefore, as a result, poor team performance is caused by low psychological safety and trust. It is noticeable that hard values, such as budgets, schedules, tools and software are more focused than soft values like trust, psychological safety, empowerment and team learning in the construction industry. However, researches in manufacturing, transport and healthcare industry have shown that psychological safety and trust have a major influence on team performance (Moreno, 2015). Actually, there are many studies about using cross-cultural management in international business projects to boost project team performance, however empirical cross-cultural encounter between Chinese and Western European, particularly in the context of collaborative team and in terms of trust and psychological safety, remain limited (Ling, Ang, & Lim, 2007; Liu, Shen, Li, & Shen, 2004; Pheng & Leong, 2000; Xiao & Boyd, 2010; Zwikael, Shimizu, & Globerson, 2005). Furthermore, limited research shows conflicts of international construction team caused by a different between foreign and Chinese culture, as reflected in the Chinese tacit norms like “guan xi” (building relationship) and the importance of protecting a clients’ face. Hence researching the influence of culture and tacit norms on improvement of team performance in collaborative team in terms of psychological safety and trust is necessary. This study, therefore, aims to fill these gaps in knowledge.

1.5 Research Questions

When foreign people work in China, they have to communicate with local clients, architects, suppliers, governments and developers. In these cross-cultural context, understanding local culture, including its tacit norms is important. Therefore cross-cultural management plays a critical role in international construction project teams to reduce conflicts. It can both boost their efficiency, effectiveness and productivity, and improve their psychological safety as well as trust in the team. Figure 1.4 gives the picture of the relationship among most important indicators in this study. The completed conceptual model will be showed in Chapter 5.

The main objective of this research is to investigate how tacit norms and cultural intelligence in collaborative team in China influence the development of trust and psychological safety and
team performance. According to the problem statement, the main research question is generated:

*How does cultural diversity in collaborative design team, consisting of Dutch and Chinese, influence the development of trust, psychological safety and team performance in Chinese context?*

More specifically the following research questions will be addressed:

1. What general conflicts are caused in diverse project in terms of team performance?
2. What is the influence of cultural diversity on the development of trust in collaborative teams in construction industry?
3. What is the influence of cultural diversity on psychological safety?
4. To what extent does the degree of cultural intelligence influence the development of trust, psychological safety and team performance?

Based on these research questions, the general conflict in cross-cultural project team will be known first. Afterwards, the barriers of trust-building in culturally diverse team will be established. And then, the influence of cultural diversity on psychological safety will be understood. Last but not least, it is also essential to recognize the influence of cultural intelligence on the development trust, psychological safety and team performance. These research questions this will address in different stages, but there are differences in experience.

### 1.6 Aim of the research

The aim of this research is to understand how cultural factors and tacit norms impact of the development of trust, psychological safety and team performance in collaborative team during design phase. By answering the mentioned questions, the final result of this research would be to gain the knowledge to improve cross-cultural team performance. On one hand, to boost the trust relation in the team with Chinese developers, and meanwhile improve team members’ psychological safety by understanding cultural differences, especially tacit norms. The scientific relevance of this study is to fill in the gap of lacking knowledge and enhance the current status of research on cross-cultural team performance in Chinese context.
The result of the study could be a guideline for Dutch or Western European architectural firms who are going to or are struggling the poor cross-cultural team performance in China and want to improve team performance by better understanding Chinese culture. Recommendations of this study will give insights for Chinese tacit norms and the improvement of trust and psychological safety in order to enhance team performance in the end. The study could be for Dutch/Western architects who want to work or is working in China or want to know how to be integrated into Chinese context. In addition, the research could also be regarded as a source of information that contributes to the current status of researches on the improvement of cross-culturally collaborative team performance in Chinese context.

Chapter 2 will give more information about background of Chinese building industry. As well as the main players in Chinese building industry, how foreign firms join in Chinese project and working modes will be illustrated.
2. Chinese Building Industry

To investigate how foreign firms cooperate with Chinese firms in the building industry, it is essential to know the background of Chinese building industry, how main players cooperate in Chinese context. This description will help to understand Chinese team structure as well as the collaboration parties.

2.1 Background of Chinese building industry

According to Atelier cnS and YCDA (2014), the total number of Chinese construction companies reaches 72,280, in which foreign-invested companies account for 331 (0.42%) in recent years (see figure 1). Of the total value of 32.6031 billion Yuan (about 4.52 billion Euro) for completed contracts. In recent years (2006-2011), the contracts amount has seen steady growth year by year. The total operating revenues of construction-related companies reached 388.8 billion Yuan, around 53.9 billion Euro (2010) following steady annual growth (Atelier cnS & YCDA, 2014). Moreover, as China is a fast developing country, there are many large projects such as airports, national museums, theaters, and library, et cetera. Furthermore, more project construction teams comprise participation from foreign countries. This implies collaboration amongs employees from different cultures than Chinese culture. The culture of a society comprises its shared values, understandings, assumptions and goals adopted from previous generations, and resulting in common attitudes, codes of conduct representing societal norms and values, and expectations that mould the behaviour of the people (Loosemore, 1999).

![Figure 2.1: Output value building industry (blue bars) and growth rate (red lines) 1998-2012 (source: Architecture research group of Global research)](image)

2.2 Main players

Main players, in the Chinese construction industry, are the government, the developer, the architect, the project manager, and the (sub) contractor. The difference between China and Most Western European countries is that the position of architects in China is not as high as their peers in Western European. For instance, in the Netherlands, the contractor should follow the command of the architect, while Chinese laws clearly forbid the architect to get involved in selecting project materials supplier or other issues that may involve corruption (Atelier cnS &
Mostly, the developer or the government (when the government is the developing agency) make the decisions, followed up by the architect.

**Architectural firms**

Large state-owned design institutes, small/medium-sized private design institutes and foreign design firms constitute the Chinese architectural market. In China, if a foreign architectural firm takes part in a design project, it must cooperate with local design institutes (LDI). Normally, the task of these institutes is drawing the construction plans and details (Atelier cnS & YCDA, 2014).

**Government**

In China, the government plays an important role in construction industry. Chinese government organizational structure determines that the decisions for building projects are all made by the "top leader" (Atelier cnS & YCDA, 2014). If the design is satisfactory according to certain leaders, it is easier to get building permit; whereas, it is nearly impossible to obtain building permits if such is not the case.

**Developer**

Chinese developers are the other major force for project development in China. In general, large developers always have highly professional project management team (Atelier cnS & YCDA, 2014), thus they have more experience in cooperating with foreign firms. Although some small/medium-sized local developers have enough capital and can spend more-than-average efforts per project, their project management skills are immature. Therefore, there might be various obstacles when working with international team (Atelier cnS & YCDA, 2014).

**Contractors**

In China, normally contractors are selected by developers in China. Occasionally, the developer will require an architectural firm to find a contractor. “Guan xi”, makes that there are always long-term business relationship between contractors and developers. However, many contractors and sub-contractors are not qualified in China, because there no restricted rules apply to the skills and competences of their employees. This cause projects cannot meet architects’ expectations. In addition, compared with the Netherlands, health and not safety issues are not addressed in the same way. (P. Chen, Partington, & Qiang, 2009).

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Figure 2.2: Role of players between Dutch and Chinese architectural market (Left: the Netherlands, Right: China); (Source: Atelier cnS & YCDA, 2014)
2.3 Foreign firms practicing in China

The previous section described the main players in Chinese building industry. In this section, how foreign firms can cooperate and participate in China will be explained.

In general

Due to policy requirements, a local institute must be involved in the construction project’s permit, approval and preparation of construction drawings for any project in China. Many government projects require that each foreign firm join hands with a class-A LDI from the conceptual phase to ensure a solid groundwork for subsequent cooperation after the contract is awarded (Atelier cnS & YCDA, 2014).

Bid and Competition

Bids and competitions are common ways for a foreign firm to get projects in China. Firstly, the developing organization will publish the information about the competition online. As mentioned before, foreign firms cannot join the most of competition, except alliance with qualified LDI. Secondly, the cooperating team will fill out registration packages including forms, agreements, and information about previous project experience that will be discussed by the Jury. Finally, the cooperating team submits the competition packages before the deadline and the Jury will evaluate the Technical Bid (Design, Function), whereas the developer will assess the Business Bid (overall cost and design fee proposal) (Atelier cnS & YCDA, 2014).

2.4 Main working modes for foreign firms

Working mode is the way that foreign firms participate in the Chinese building industry. There are six possible modes allowing foreign firms to enter the Chinese market (Atelier cnS & YCDA, 2014); (Also see figure 3):

1. A small office in LDI;
2. A branch office in China;
3. Association with a local partner;
4. Working closely or purchasing a small local firm;
5. Association with LDI;
6. A class-A LDI with multinational design group.

1) A small office in LDI
It means that architects rent small offices in an LDI’s building to work closely with LDI and on the site when a project is under construction.

2) A branch office in China
This is a company that is established in China. The main purpose is working on coordination and public relation while most designs are completed by the headquarters.

3) Association with a local partner
In this mode, the firm should hire a person with an in-depth understanding of Chinese market using his connections.

4) Working closely or purchasing a small local firm
It means that a small domestic team is taken over as a branch in China.
5) **Association with LDI**
This mode is a partnership. The LDI takes charge of the construction drawings and other technical tasks upon completion of the conceptual plan stage. However, it requires foreign firms to develop a good relationship with the LDI. Moreover, both parties have to negotiate on the allocation of design fee between creative design which is done by foreign firm and preparation of construction drawings. Furthermore, the foreign firm must put more effort to check the details of the construction drawings provided by the LDI, to keep from any deviations.

6) **A class-A LDI with multinational design group**
This is the way to solve root-and-branch the conflicts between foreign firm and LDIs.

![Figure 2.4: Six Main working modes for foreign architectural firms in China (Source: Atelier cnS & YCDA, 2014)](image)

Mostly the mode that happens in china is association with LDI, thus the organization of foreign firms is defined as Association with LDI.

This chapter gives the whole picture about Chinese construction industry. In this research, the main valuation of team performance will be between Dutch architectural firms and Chinese developers. As it can be seen it is quite difficult for Western European architectural firms to change their way of thinking during the collaboration with Chinese firms, since the business context of the Chinese context has major differences with the Western European’s. Thus understanding basic cultural knowledge is indispensable.

In next chapter, cultural dimensions is the most important study to measure cultural differences, which will be illustrated. Besides, in collaborative team, diverse team, including cultural differences, gender, educational levels cannot be avoided. Furthermore, Popescu, Borca, Fistis, and Draghici (2014) point out that cultural differences impact on members’ behavior. Thus cultural differences and team diversity will be introduced as well. Besides, it will be understood that the importance of cultural intelligence for international team and Chinese tacit norms in Chapter 3.
3. Culture

The narrow sense of culture can be defined as “civilization” or “refinement of the mind” and the results of refinement, such as education, art, and literature. Furthermore, culture is patterns of thinking, feeling, and acting, such as greeting, eating, showing or not showing feelings, keeping certain physical distance from others, making love and maintaining body hygiene, in social anthropology (Hofstede et al., 2010). This chapter will illustrate nine cultural dimensions from Maleki and de Jong (2013), followed by cultural differences, team diversity and cultural intelligence (CQ). The last section will introduce Chinese tacit norms, to understand typically Chinese cultural context.

3.1 Cultural dimensions

Cultural dimensions are the approach to understanding cultural differences through dimensions of national cultural, however many scholars give many overlapping, similar and different dimensions to measure cultural differences. Thus, Maleki and de Jong (2013) combine with the theories of Hofsted, Inglehart, Schwartz, GLOBE, Minkov and other well-known authors to conclude following nine exclusive clusters of dimensions:

- Individualism versus Collectivism
- Power Distance
- Uncertainty Avoidance
- Mastery versus Harmony
- Traditionalism versus Secularism
- Indulgence vs. Restraint
- Assertiveness versus Tenderness
- Gender Egalitarianism
- Collaborativeness

3.1.1 Individualism versus Collectivism

Individualism versus collectivism (IDV) characterizes the interrelatedness of individuals (Maleki & de Jong, 2013). In individualist societies, an individual is expected to look after himself and direct family, while in collectivist societies, an individual has a strong tie with groups. They are required to protect each other in exchange for obedient loyalty (Hofstede et al., 2010). From Hofstede et al. (2010) data, most wealthy countries have high score on IDV and nearly all poor countries score low.

3.1.2 Power Distance

Power distance (PDI) or hierarchy reflect the extent to which hierarchical relations and position-related roles are accepted (Maleki & de Jong, 2013). Moreover, Hofstede et al. (2010) points out that PDI and IDV have significant and strong correlation. High PDI countries have centralized power for decision making in organizations with large differences in positions, rankings and wages while in low PDI countries, it is more decentralized and less differences in positions, rankings and wages (Hofstede et al., 2010).
3.1.3 Uncertainty Avoidance
Uncertainty avoidance (UAI) indicates to what extent people feel uncomfortable with uncertain, unknown or unstructured situations. In uncertainty avoidant cultures, although many rules, prescription and proscriptions are made, people may not follow to (Hofstede, 2001).

3.1.4 Mastery versus Harmony
The fourth cluster of cultural dimensions is those constructs which manifest the cultural attributes of competitiveness, achievement and self-assertion versus consensus, equality and harmony (Maleki & de Jong, 2013).

3.1.5 Traditionalism versus Secularism
This cluster of dimensions can be explained as the cultural traits of religiosity, self-stability, feelings of pride and consistency between emotion felt and their expression versus secular orientation and flexibility (Maleki & de Jong, 2013). In Hofstede theory, it is called Long-term orientation (LTO). In traditional countries, people are educated to be thrift and perseverance toward to future rewards. Its opposite pole, secularism is related to the past and present, in terms of respect for tradition, preservation of “face” as well as fulfilling social obligations (Hofstede et al., 2010).

3.1.6 Indulgence versus Restraint
This dimension reflects the extent to which gratification of desires and feelings is free or restrained (Maleki & de Jong, 2013). People in indulgent societies are happier and positive while in restrained society, citizens are less happy and more pessimism (Hofstede et al., 2010).

3.1.7 Assertiveness versus Tenderness
This is the seventh cluster of dimensions. It refer to the cultural feature of being assertive and aggressive versus kind and tender in social relationship and communication styles (Maleki & de Jong, 2013).

3.1.8 Gender Egalitarianism
This dimension focuses on gender egalitarianism to address discriminatory gender roles (Maleki & de Jong, 2013).

3.1.9 Collaborativeness.
The last cluster of dimensions is the spirit of “team-work”, closely related to this research. It represents the precedence of group loyalty, group interest and group acceptance beyond individual goals. This cultural feature is to measure tendency of people to collaborate with each other in conducting social tasks (Maleki & de Jong, 2013). Maleki and de Jong (2013) concluded that theoretically, an efficient and effective teamwork is strongly related to interpersonal trust since it impact on reduction of uncertainty.

3.2 Cultural differences
The globalization of the world trade has leaded to an increasing incident of cross-cultural encounters. This incidence has brought about a new realization that cultural difference can impact on the conduct of business (Shaughnessy, 1995). International projects dramatically grow in developing countries like China. International projects teams consist of architects,
contractors, lead consultants, engineers from different countries. Cultural differences are expected to contribute to conflicts among project construction team members and increase difficulties in project management (Ling et al., 2007). For successful outcomes of international construction projects, foreign practitioners should understand the culture of the host country. Even if they do not know what the similarities between cultures of home and host countries are, they should at least know the differences (Low & Shi, 2002). This in turn creates a demand for project managers who can work effectively in multinational teams (Shaughnessy, 1995).

However, managing in a cross-cultural environment is a complicated and subtle issue, requiring a lot more than a list of “do’s and don’ts” (Shaughnessy, 1995). For instance, since Chinese values elements are from the philosopher Confucius who live about thousands years ago, Chinese people are educated to be strive for persistence and, thrift. They also order relationships by status and observe this order. Furthermore Chinese have a strong sense of shame, respect tradition, and protect each other’s face. In Chinese personal steadiness and stability is emphasized, and this is achieved for by building relationship (guan-xi), trust and friendship (K. Y. Ang & Ofori, 2001; Hofstede & Bond, 1988).

Traditional cross-cultural differences are represented by manners, language, history, institutions, climate and social customs. These characteristics are important and can quickly help team participants to develop local contacts as well as to prevent elementary social errors. However, they are also more superficial manifestations of national culture (Shaughnessy, 1995). Cultural differences are also associated with individual characteristics such as gender, age, job experience and race (Earley & Mosakowski, 2004b). Other differences includes educational background, beliefs, art, morals, customs and laws (Ling et al., 2007).

Swierczek (1994) points out that cultural difference in language, interaction, perception and mentalities leads to problems in communication, working together, problem solving, and team sense. Cultural differences may cause difficulties and increase risks to a project. It also influences on interpersonal relationships within their physical environment, and concerns the interpersonal trust and people’s attitude toward power and authority. International collaborative teams in China evolve from fundamentally different philosophies, thus trusting culture is crucial for a project (D. K. H. Chua et al., 2003). For example, China, as a less trusting cultures, has its way to boost trust, which is called “guan-xi” (building relationship). In this context, Chinese people would like to look for someone who are their friends or relatives as their partners. In addition, contractors protect clients’ face to keep a long-term cooperating relationship. Furthermore, the bureaucratic sluggishness and corruption cause considerable inefficiency in the market (D. K. H. Chua et al., 2003).

### 3.3 Team diversity

Team diversity means that a team comprises of people with different age, gender, ethnicity and education background, et cetera. This study will mainly focuses on members with diversely cultural background. Popescu et al. (2014) state that cultural differences influence the team members’ behavior in the cross-cultural projects, thus it is necessary to understand the impact
of cultural differences in diverse teams. Cox (1994) defines cultural diversity as the "representation, in one social system, of people with distinctly different group affiliations of cultural significance." A cross-functional team is formed by individuals from all levels within an organization, with different job functions and working to achieve a common goal. Managing cross-functional teams has to generate a friendly and creative environment for all members (Popescu et al., 2014). Culture as different options, benefits team performance, such as generating plans or creative ideas, problems-solving, or decision-making (Bantel & Jackson, 1989; Eisenhardt & Schoonhoven, 1990; Kent & McGrath, 1969; Murnighan & Conlon, 1991; Murray, 1989). For instance, Ochieng and Price (2009), Draghici and Draghici (2008), Günter K. Stahl, Mäkelä, Zander, and Maznevski (2010) demonstrate that cultural differences brings creativity, new ideas in the project collaboration and new approaches to solve problems, as well as boosts team actions and process development. However, cultural differences also diminish team performance (K. Y. Williams & O'Reilly, 1998). Thus Borca, Popescu, and Baesu (2014) point out that it is essential for an organization to provide a favorable environment for the cultural diversity development and management. On the other hand, multi-cultural groups offer a rich opportunity for team members to gain cultural intelligence without necessarily leaving their country and observe the behavior of individuals from different cultures responding to the same situations, such as the assignment of group roles, the establishment of a leader, the imposition of deadlines, and all the other activities and processes of working in a group (Thomas, 2010a).

Van Der Zee and Van Oudenhoven (2000) suggest that when an organization work in another cultural, it is important to be able to change strategies because customary and trusted ways of doing things do not always work in a new cultural environment. Figure 4 shows the impact of diversity on an organization. This model from the research of Cox (1994) proposes that the impact of diversity on an organization is an interaction of the environment and individuals (Golembiewski, 1995). It suggests that the individual and organizational outcomes can impact affective and achievement outcomes. Affective outcomes means that an individual feels valued by the organization, which will motivate them to effectively catch up the goals of the organization. Achievement outcomes can be defined as indexed of the employee’s contribution to the organization including performance ratings and promotion rates (Cox, 1994). From figure 3.3, there are direct effects of diversity on organizations. Processes such as problem solving, creativity and communications will be effected by diversity. These processes are critical to any organization and diversity can either complement these processes or provide on creativity and innovation, problem solving, and workgroup cohesiveness and communication. Besides, age diversity, gender, religions (Ochieng & Price, 2009) and the effective teamwork (Knutson, 2001) also influence on effective cross-cultural project teams to understand the cultural differences. Moreover, effective teamwork is the key to success in a culturally diverse project team (Knutson, 2001). Teamwork Guidelines (2015) identifies following common characteristics in effective teams:

- Membership
- Common goal
- Social organization
- Interdependence between members
- Productive involvement
- Effective communication and interaction
- Mutual interest
- Collective consciousness
- Mutual trust
- Cohesion

All of these elements are important for an effective teamwork but not necessary to achieve them. Based on Cox (1994), Knutson (2001) and 5 dimensions of national cultures from Hofstede et al. (2010), the following elements are the following most influential elements which are generated to boost project effectiveness in cross-cultural project team.

- Creative and innovative decision making
  When members decide common goal, social organization and designs, they need to share aims and goals, as well as develop functional norms, roles and relationships by negotiation. In addition, creativity and innovation can be enhanced by diverse teams. Yet because of power distance and collectivism, not all of team members to be willing to share their creative ideas with the group (Moon, 1997). Therefore understanding cultural differences inspire creativity or innovation, and helps project managers to make better decisions.

- Collective problem solving
  Since team members with different background, values, norms and cultures, it is easier to provide different perspectives, generate more critical analyses of the alternatives and “lower the probability of groupthink” in diverse team (Loden & Rosener, 1991). However understanding the difference of the other members of the group is necessary to avoid conflicts in problem-solving (Moon, 1997).
• Effective communication and interaction

Furthermore, effective communication can reduce misunderstandings and ultimately lower workgroup effectiveness (Loden & Rosener, 1991). However, language is the most obstacle for the diverse team to overcome.

• Cohesive workgroup

Webber and Donahue (2001) and Bowers, Pharmer, and Salas (2000) found that workgroup cohesiveness is rarely affected by other types of diversity, but information sharing which indirectly link to cultural tacit rules mostly impact on diversity relationship, psychological safety and team performance (van Knippenberg, De Dreu, & Homan, 2004).

• Mutual trust

Nurture a team-oriented environment based on trust and respect, without which there will only be limited success. The project managers need the trust of their team, because people follow trust and integrity, not a person. Uncertainty can be balanced by trust which gives the team the ability to work together no matter what reality brings (Skuza, 2013). Team members are willing to openly communicate and cooperate with each other in the trusting atmosphere. The stronger the trust, the less conflicts, the better the team will navigate without the captain on board (Skuza, 2013).

In culturally diverse team, understanding cultural differences is necessary but it also depends on how much motivation cross-cultural team members have to learn about new culture as well as how team members learn more effectively, which is called cultural intelligence (CQ). In next section, this new concept will be introduced.

3.4 Cultural intelligence (CQ)

When two foreign communicate, they rarely talk about precisely the same subject, for effective meaning in flavored by each person’s own cognitive world and cultural conditioning (Hendon, Hendon, & Herbig, 1996). Therefore, for international project teams to become collaborative teams, it is important that project teams should be more open-minded, patient and self-controlled (Chevrier, 2003). Team members recognize and sensibly manipulate cultural differences, which helps them to work effectively in cross-cultural settings to be productive (Community Tool Box, 2015) and profitability of international projects (Chan and Tse, 2003). Earley and Mosakowski (2004a) recommend that a successful project manager needs to have cultural intelligence (CQ) to cope with different national, corporate and vocational cultures (Earley & Mosakowski, 2004a).

CQ, a new concept in cross-cultural research, involves the set of interrelated skills of people to function effectively within culturally diverse situations (Earley, 2002; Kim & Van Dyne, 2012; Thomas, 2010b). It is helpful for various cross-cultural outcome. For instance, it enhances the effectiveness of expatriates to adapt to overseas work assignments (Huff, 2013; Zhang, 2012; Zhao, Deng, & Kemp, 2013), cross-cultural negotiation processes (Imai & Gelfand, 2010), effectiveness in culturally diverse teams (Adair, Hideg, & Spence, 2013) and cross-cultural trust building (R. Y. Chua, Morris, & Mor, 2012; Rockstuhl & Ng, 2008), as well as helps leaders to
performance effectively and boost leadership (Groves & Feyerherm, 2011; Rockstuhl, Seiler, Ang, Van Dyne, & Annen, 2011).

An individual with cultural intelligence possesses the necessary background knowledge of a particular culture, as well as the motivation to learn about new cultures and create new mental frameworks in order to expand the behavioral repertoire (Groves, Feyerherm, & Gu, 2014). Moreover, CQ allows people not only to learn effectively about foreign cultures but also to use their cultural knowledge to adapt behaviors to produce appropriate responses to foreigners (Hansen, Singh, Weilbaker, & Guesalaga, 2011; Lee & Sukoco, 2010). Thomas (2010a) identified the development of cultural intelligence occurs in five stages, which are:

1. **Reactivity to external stimuli**;
2. **Recognition of other cultural norms and motivation to learn more about them**;
3. **Accommodation of other cultural norms and rules in one’s mind**;
4. **Assimilation of diverse cultural norms into alternative behaviors**;
5. **Proactivity in cultural behavior based on recognition of changing cues that others do not perceive**.

Earley and Ang (2003) identified four interrelated CQ capabilities including cognitive CQ, metacognitive CQ, motivational CQ and behavioral CQ, which are discussed below.

- **Cognitive CQ**
  
  Cognitive CQ is “an individual’s cultural knowledge of norms, practices, and conventions in different cultural settings” (S. Ang & Van Dyne, 2015). It represents the level of knowledge that people possess about foreign cultures (Charoensukmongkol, 2015). It not only is closely related to decision making (S. Ang et al., 2007), but also helps individuals to appropriately behave in cross-cultural situations. People with high cognitive CQ are more effective at identifying key similarities and differences among national cultures (Charoensukmongkol, 2015).

- **Metacognitive CQ**
  
  Metacognitive CQ is “an individual’s cultural consciousness and awareness during interactions with those from different cultural backgrounds” (S. Ang, Van Dyne, & Koh, 2006), which represents the higher-order cognitive capability that allows people to control their thought processes (Charoensukmongkol, 2015). It both promotes active cognitive process when one faces a cross-cultural situation and drives the critical thinking behind reasoning, decision making, and judgment regarding the situation (Groves et al., 2014). It links to positive outcomes in intercultural relationships, including affective closeness and creative collaboration (R. Y. Chua et al., 2012). When encountering an unfamiliar foreign culture, people with high metacognitive CQ tend to rely on effective cultural learning, checking and verifying the accuracy of cultural knowledge judge before and during intercultural interactions (Earley, Murnieks, & Mosakowski, 2007; Thomas, 2006).

- **Motivational CQ**
  
  Motivational CQ is defined by S. Ang and Van Dyne (2015) as the ability to “direct(s) attention and energy toward cultural differences.” It represents the level of drive that people
have to socialize with foreigners (Charoensukmongkol, 2015). Salmon et al. (2013) discover that motivational CQ was a significant factor in predicting the effectiveness of manipulative mediation styles in intercultural disputes. Furthermore, it also reflects the level of self-efficacy that prevents people from giving up when they face difficulties in intercultural learning or interactions (X. Chen, Liu, & Portnoy, 2012).

- **Behavioral CQ**
  Behavioral CQ represents people’s capability to adapt their verbal and nonverbal behaviors to replicate what people from other cultures do (S. Ang & Van Dyne, 2015). It is essentially how one can “play a role very convincingly and consistently” in a cross-cultural setting (Earley, Ang, & Tan, 2006). Motivational CQ and behavioral CQ are both positively associated with individual cultural adjustment, well-being, and task performance (S. Ang et al., 2007).

In this section, the definition of CQ is explained and four CQ capabilities are showed. It can be concluded that CQ helps a diverse project team to boost effectiveness and efficiency of team performance, psychological safety, trust and cohesiveness of diverse team, decision-making as well as reduce conflicts in cross-cultural environment.

### 3.5 Chinese tacit norms

Chinese culture has derived from more than 5,000 years ago. It can be divided into three forces: Confucianism, Taoism and Buddhism (K. Y. Ang & Ofori, 2001). They have acted together to produce Chinese culture and make Chinese way of life intensely practical and philosophical (Haley, Tan, & Haley, 1998). In this section, Chinese tacit norms will be mainly introduced.

**Guan-xi**

In Chinese business context, keeping and building relationships are very important. This is called “Guan-xi” in Chinese. It has been accepted as a valid socio-cultural construct in business, management and marketing (X.-P. Chen & Chen, 2004) by building a reliable network. The relation ties can be based on family, clan, shared surname, home village, region, education or other shared experience (Jacobs, 1980). Guan-xi which is related to connections (Lockett, 1988), means that there are dynamic reciprocity between two or more parties (X.-P. Chen & Chen, 2004).

Because of the influence of traditional Chinese moral values, “仁” (benevolence), “义” (righteousness), “礼” (protocol), “智” (wisdom) and “信” (trustworthiness), people build good guan-xi by helps when someone ask for a favor. And when the other needs help, the favor will be given as return. Yum (1988) points out that in Western society, people emphasize short-term and equal reciprocity in relationship exchanges while Chinese tend to maintain personal guan-xi in their whole lifetime. When reciprocity is not achieved, a balance between parties might be destroyed and guan-xi goes to suffer (Q. Huang, Davison, & Gu, 2011).
**Face**

Chinese people would like to seek compromise when they seek a solution of differences (Hsu, 1981). The Chinese written character “脸” (face) represents respectability, reputation, dignity and pride as a consequence of one’s social achievement and the practice if it (Leung & Chan, 2003; Tu, 1984). A famous philosopher from Confucianism, Mencius, advocated that “A man must not be without shame, for the shame of being without shame is shamelessness (Lau, 2003). Thus Chinese people invest extensive effort to maintain their face because of a strong consciousness towards face (King, 1988). In addition, middle ground is another golden rules of Confucius moral ethnics. It aims to gain a harmonious society and a peaceful world by opposing extreme behaviors (Xu & Cheung, 2015).

Face-giving or face-saving, as one of typical Chinese behaviors, includes respect, reputation and pride. The action of face-giving behaviors is a way to preserve harmony (K. Y. Ang & Ofori, 2001). Basically, face will be lost when a person fails his tasks, placed upon him by virtue of his social position (Ho, 1976). Ho (1976) also mentions that Chinese people will protect their face from being damaged when they could not gain face during interactions. In business, Chinese firms spend considerable time on socializing and exchanging pleasantries in order to give face for their clients (Tan, 1990) since socialization is the way to promote harmony and build trust. Thus, face-saving and face-gaining are important social skills in China.

**High-context communication**

In high-context communication, such as China, the message cannot be understood without a great deal of background information. While most Westerners are get used to low-context communication, such as the Netherlands. In parts of the world such as china, which has high-context communication the hosts normally send someone to meet the negotiators in the platform, partly as a gesture of hospitality, but also because they are accustomed to providing information through a social context rather than impersonal signs (Hooker, 2008). It is much less likely to be greeted in a Netherlands airport or a station, not because Dutch people are inhospitable, but because they transmit information in a different way. It may appear that low-context communication is simply an outgrowth of urbanization and international travel, rather than a cultural trait. These are certainly factors, but there is an irreducible cultural element as well (Hooker, 2008). The Netherlands culture shows a low-context culture, while the Chinese culture shows a high-context culture.

Except all aforementioned Chinese tacit norms, high power-distance (hierarchy) also mainly influence on decision-making. In the study, the most important tacit norms is discovered by interviews. Chapter 4 will give the whole picture about collaborative work.
4. Collaborative Work

Last chapter illustrates that when a new team project is built, members bring their personality, cultural backgrounds and previous experiences in the team. Their tendency of actions are impacted by others interactions in different ways at different moments (Mach & Baruch, 2015). Furthermore, diverse team contributes to team dynamics and performance (Horwitz & Horwitz, 2007; Jackson & Joshi, 2011). Meanwhile, interpersonal trust is the basis for cooperation and social exchange in organizations (Blau, 1964; McAllister, 1995). Moreover, cultural intelligence (CQ), as an indirect factor, affects on team performance in terms of psychological safety.

There are many ways for collaborative work, such as team collaboration, individual collaboration or organizational collaboration. This study mainly focuses on organizational level of collaboration, Dutch architectural firms collaborating with Chinese developer firms. R. Y. Chua et al. (2012) state that building trust greatly impact on cross-culturally collaborative teamwork. In this chapter, the relationship of team performance, psychological safety and trust will be explored, to understand how cross-cultural teams work together toward a common goal.

4.1 Team Performance

In a teamwork, each member of a team is allocated specific tasks and their form of dependency is the way to achieve the goal (Humphrey, 2000). Team effectiveness directly reflects on organizational performance. Because along with organizational enhancement, team members have more responsibility, decision-making, autonomy, knowledge and involvement, the purpose of a project is easier to approach (Ilgen, 1999; Ross, Jones, & Adams, 2008). In addition, Margerison (1973) points out that teams and their attitude should be paid more attention than individuals by managers. Effective team management and development practices are the powerful tools to attain effective team performance (DeGroot, Kiker, & Cross, 2000; Dionne, Yammarino, Atwater, & Spangler, 2004).

Hackman (1990) generates team performance could follow to broadly three criteria:

1. The outcome of the team such as the quality of task, the quantity or amount of works and customer satisfaction;
2. The implications a team has for its people in terms of specific team members’ satisfaction with belonging to the group; and
3. The potential and development of the capability of team members to work with each other in upcoming projects.

However, it is not easy to determine the precise characteristics of effective team performance since different attributes of teams may consider effectiveness differently in different situations and meanwhile diverse criteria from companies and organizations are also need to take into account (Tabassi, Ramli, Roufechaei, & Tabasi, 2014). From literature, many researchers have defined that effective teamwork. For instance, Anantaraman (1984) generates that effective team performance should have clear, cooperative goals to which each member is committed; accurate and effective communication of ideas and feelings; distributed participation and leadership; appropriate and effective decision-making procedures; productive controversies; a
high level of trust; constructive management power and conflict; and adequate problem-solving procedures. Furthermore, characteristics such as initiative, trust, openness, helpfulness, flexibility, and supportiveness are also important for team performance (Stevens & Campion, 1994). Other researches also state that acceptance of team members with different personalities, high level of self-awareness, psychological safety, as well as achievement of team direction and cohesiveness play influential role in effective team performance (Culp & Smith, 2001; Moriarty & Buckley, 2003; E. A. Williams, Duray, & Reddy, 2006).

As explorative study, this research mainly focuses on that the development of psychological safety and trust influences on team performance, thus the definition of psychological safety and trust, as well as how they impact on team performance will be offered in following two sections.

4.2 Psychological Safety

In the section 3.5, it is mentioned that cultural intelligence will influence psychological safety and trust, therefore the definition of psychological safety and relationship with team performance will be given. Although culturally diverse project team grow innovation and creativity of ideas, more sophisticated understanding and deeper consideration of issues from the multiple perspective, potential comes with some risk as well (Klein, 2014). As it mentioned in section 3.2, cultural diversity also is harmful for team performance since team members struggle to understand, trust, or related to people with different background or perspectives. Understanding how people collaborate, such as asking question, seeking feedback, reporting a mistake or proposing a new idea, is important to achieve a shared outcome (A. Edmondson, 1999; S. Edmondson, Osborne, & Huck, 2004). Because when individuals engage in a kind of tacit calculus at micro-behavioral decision points, they assess the interpersonal risk associated with a given behavior (A. Edmondson, 1999). In this tacit process, people weigh the potential action against the particular interpersonal climate. If they make sure that the situation will not to be hurt, embarrassed or criticized, they proceed to openly communicate with other team members. Furthermore, C. Huang, Chu, and Jiang (2008) support that the ability to communicate openly through experimentation, discussion, and decision making is a determinant of successful team performance. Thus creating a psychologically safe environment for individuals to feel secure and thus capable of changing their behavior is the first step to initiate an open and supportive communication (Klein, 2014; Schein & Bennis, 1965).

Psychological safety describes as individuals’ perceptions about the consequences of interpersonal risks in their work environment. It is a climate in which the focus can be on productive discussion that enables early prevention of problems and the accomplishment of shared goals because people are less likely to focus on self-protection (A. Edmondson, 2002). However, team psychological safety is distinct from group cohesiveness, since cohesiveness can reduce willingness to disagree and challenge others’ views, such as in the phenomenon of groupthink (Janis, 1982), which lacks interpersonal risk-taking. However, it might be reduced psychological safety in an inter-cultural team by cultural tacit norms. For instance, China, as a high power distance country, people is influenced by value of middle ground when they were young. To avoid conflicts, building harmony environment and preventing one’s face are more
important than problem-solving, therefore Chinese people are more indirect to point out their superiors' faults than Western European people.

Psychological safety promotes team performance and work engagement, with team learning mediating the relationship (A. Edmondson, 1999; C. Huang et al., 2008; May, Gilson, & Harter, 2004). Besides cultural diversity promotes creativity and innovation, a psychologically safe environment also enables divergent thinking, creativity, and risk taking and motivates engagement in exploratory and exploitative learning thereby promoting team performance (Choo, Linderman, & Schroeder, 2004). Furthermore, the higher psychological safety team members have, the greater team performance will be. Because psychological safety mitigates the negative effects of conflict on performance (Mu & Gnyawali, 2003). In addition, Gong, Cheung, Wang, and Huang (2012) propose that information exchange fosters trusting relationships that provide psychological safety for employee creative endeavors. it should be noticed that trust is distinguished to psychological safety. In next section, the definition of trust will be offered.

4.3 Trust

Trust, defined as the expectation that others' future actions will be favorable to one's interests, makes one willing to be vulnerable to those actions (Mayer et al., 1995; Robinson, 1996). It also leads to a set of behavioral expectations among people, allowing them to manage the uncertainty or risk associated with their interactions so that they can jointly optimize the gains that will result from cooperative behavior (Jones & George, 1998). On one hand, trust positively influenced team effort and team monitoring, leading to team effectiveness (De Jong & Elfring, 2010), while Mach and Baruch (2015) argue that members’ heterogeneities causes the complex social exchanges, weakening team trust.

Noticeably, trust can be divided into two different models. Kramer (1999) identifies two approaches of trust, rational and relational models of choice. Although psychological safety also involves an element of a tacit choice, its definition is easily distinguished from definitions of trust within the rational model, in which individuals are presumed to make efficient choices based on risk-evaluation by maximizing expected gains or minimizing expected losses (A. Edmondson, Kramer, & Cook, 2004). People choose to trust when it is rational to do so, since people make rational choices based on an explicit and internally consistent value (Kramer, 1999; Schelling, 1980). While the relational model takes into consideration social aspects toward risk, other people and society as a whole (Kramer, 1999). In this model, choices are more affective and intuitive than calculative, thus the definition of trust is defined as relational model in this research.

In order to understand how psychological safety and trust influence on team performance, the conceptual model will be developed in next chapter.
5. Research Design & Methodology

5.1 Development of Conceptual Model

Based on Mathieu, Maynard, Rapp, and Gilson (2008) psychological safety influence at three levels, namely at the organizational, team and individual level. In the team level, it is related to in-role behavior, the involvement in creative work for members, such as individual creativity, employee proactivity, and information exchange. Meanwhile, extra-role behaviors also relevant to psychological safety. Voice, one of extra-role behaviors, greatly helps organization learn by challenging the status quo and offering ideas to improve process (A. Edmondson & Lei, 2014). However, Siemsen, Roth, Balasubramanian, and Anand (2009) states that confidence reduce the relationship between psychological safety and engagement, voice and knowledge.

Relationships between psychological safety, commitment-based human resources (HR) practices, social capital, high-quality relationships, climate for initiative, and firm performance are at the organizational level. Psychological safety, as a mediator, impacts on organizational performance and learning (A. Edmondson & Lei, 2014).

Psychological safety is essentially a group-level phenomenon and it correlates with performance (A. Edmondson, 1999, 2002, 2003). There are many research about the relationship between psychological safety and team performance. C. Huang et al. (2008) declare that psychological safety leads to team performance through team learning. Besides, psychological safety enables team for learning, experimenting and new practice production (Tucker, Nemhhard, & Edmondson, 2007). Moreover, a psychologically safe environment boosts divergent thinking, creativity, and risk taking and motivates engagement in exploratory and exploitative learning, in the end, promoting team performance (Choo et al., 2004).

Figure 5.1a: The theoretical model of examination psychological safety at team level (Source: A. Edmondson & Lei, 2014).
According to the description of psychological safety at three levels and the aim of the study, only team level will be forced. A. Edmondson and Lei (2014) gives the model (Figure 5.1a) about examination psychological safety at team level, thus the conceptual model will be developed based on this theoretical model with other models in cross-cultural context and Chinese tacit norms.

Figure 5.1b, a conceptual model, generates from all mentioned chapters and this research mainly focuses on whether culture and cultural tacit norms impact on team performance or not. The colored parts are the valuables that will be studied in this research. As aforementioned, diverse group composition impacts on team dynamics and performance (Horwitz & Horwitz, 2007; Jackson & Joshi, 2011). Besides, interpersonal trust is the basis for cooperation and social exchange (Blau, 1964; McAllister, 1995). van Knippenberg et al. (2004) point out that members from different cultural back ground with different values and opinions that induce them to decide whether cooperate team norms, exert themselves as a part of team and help the whole group to achieve the goal, thus building trust is impacted by diverse team as well. Cultural tacit norms are the most important factors in this study and it is not in the theoretical model, thus it be added in the model.

Besides, Bell (2007) provides that the importance of members’ values that can foster effective teamwork, including collective team orientation (Earley & Gibson, 1998; Oyserman, Coon, & Kemmelmeier, 2002; Zhou & Shi, 2011). K. Y. Ang and Ofori (2001) also mentioned that in China, the basis of a cordial relationship in the organization is the upholding of interpersonal harmony and group orientation. Collective team orientation has been studied at the cultural level (Hofstede, 2001), but it also influences on individual differences within-team settings (Alavi & McCormick, 2007; Eby & Dobbins, 1997; Kirkman & Shapiro, 2005). And meanwhile, members’ preference to function as part of a team is culture-based value (Triandis, 1995). Both scholars, Hofstede (2001) and Triandis (1995) state that in collective society, members would like to put asides their self-interest in deference to the interest of their group, while in individual society, people tend to put forth and promote their welfare over the interests of the group. Since cultural differences, team members easily have heterogeneous values which is more prone to experience difficulties in communication. It is negative influence on team performance (Günter K Stahl, Maznevski, Voigt, & Jonsen, 2010). For clear team-orientation groups, members utilize group interactions and boost the pursuit of the group’s interest, contributing to promote team cooperation and performance (Alavi & McCormick, 2007; Eby & Dobbins, 1997). Moreover, collectively oriented members are loyal to the group and pursue the group’s aims instead of theirs (Triandis, 1995). Furthermore, they improve cooperation to be effective (Eby & Dobbins, 1997) as well as develop trust between members. Thus, team orientation is taken into consideration in the conceptual model.

Trust is also related to risks. Basically, if there are no business relations between parties, no risks exists. Trust would not be built because there is completed certainty with no risk (Lewis & Weigert, 1985). However, when parties start to interaction and develop their
relationships, risks appear. The more risks exists, the more trust need to be built. Jin and Yng Ling (2005) point out that controlling risks leads to foster sufficient trust, contributing to smoothly develop a successful relationship. Thus, risks are taken into the conceptual model.

Cultural intelligence, as personal variable, influence personal experience. Reber (1989) suggests that individuals vary in their level of cultural knowledge that is developed implicitly by working and living experience in foreign culture or explicitly through cross-cultural training. These experience is positively associated with cultural adjustment (Black & Mendenhall, 1990). Basically, the norms of behavior in a situation in the cultural environment is different from in same situation in one’s native culture. Thus when members possess knowledge of the norms, their behaviors are easily to be appropriate in a new culture (Molinsky, 2007).

![Figure 5.1b: Conceptual model (Own ill.)](image-url)
5.2 Methodology & Time Frame

Research can be categorized to quantitative and qualitative research. This research will adopt the qualitative method to gain a deeper understanding of the problems of cultural diversity in collaborative teams in China (Kaplan & Maxwell, 2005). The qualitative research method is grounded theory. Grounded theory is an inductive, theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data (Martin & Turner, 1986).

Figure 5.2 gives different stages designed to conduct the research. The university graduation processes (P1 to P5) are also integrated in this scheme to show the planning and the timeframe of this research project.

Phase 1
In the first stage, the idea of the research is created based on personal interests and literature review. According to literature study, the main topic of research is narrowed down as well as main problems are generated in the beginning. Besides, literature study also helps to develop the main and sub-research questions. Summaries of current and previous researches show that the study of improvement of team performance in cross-cultural context is limited and it is urgent problem. This base is created to support for further research. Three main variables, team diversity, cultural differences, cultural intelligence, are explored. Additionally, a rough conceptual model is made.
**Phase 2**

Accordance with the P1 study, literature review continuously develop the idea of the study. More variables, such as team performance, trust, psychological safety and Chinese tacit norms are defined. The conceptual model is made, based on theoretical model. Furthermore, according to literature review, indicators are defined and open questions are made to measure the research. Before going to have formal interview, some informal interviews, as tests, are made in the Netherlands. The assumptions are generated. Moreover, samples and cases are selected to clarify the research.

**Phase 3**

In Phase 3, the interviews with key persons involved in Chinese context from OMA and MVRDV, Dutch architectural firms are conducted. The interview protocol is structured with the problem analysis from theoretical framework. 4 cases will be study to compare with the difference between power from Chinese developers and power from Dutch architects.

**Phase 4**

Data analysis and data synthesis are conducted in this phase in order to understand the whole picture of the research.

**Phase 5**

The final phase is the formulation of all data and data analysis to give discussion of the study. Moreover, the advice or recommendation about improvement of team performance in Chinese context is generate to help Western architectural firms to boost collaborative team performance. The conclusions are made which are related to literature review, interviews and outcome.

### 5.3 Data Collection Methods

Interviews, and analyzing archival information is the way for qualitative research to collect data (Bryman, 2012). This study will conduct the face-to-face interview and will involve probing questions. In-depth answers and particular aspects of the response will be dig in. Table 5.3 shows the variables and indicators, based on conceptual model, to measure whether cultural tacit norms impact on team performance or not.

The interview will be conducted in English and Chinese. The Chinese interview will be translated into proficient English. Emails has been sent to all potential companies to ask for their willingness to participate in the study agreement.

<table>
<thead>
<tr>
<th>Communication (Motivational CQ &amp; Behavioral CQ)</th>
<th>The way of communication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Language barriers</td>
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<td></td>
<td>language advantages</td>
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<tr>
<td></td>
<td>Miscommunication</td>
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<td></td>
<td>Improvement of communication</td>
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<td></td>
<td>Chinese tacit norms</td>
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<td></td>
<td>Negotiation</td>
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<td></td>
<td>Persuasion</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
</tr>
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<td>--------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Manners/ behaviors (Cognitive CQ)</td>
<td>Some specific “do or not do” manners/behaviors only in Chinese context.</td>
</tr>
<tr>
<td></td>
<td>Adjusting of the behaviors</td>
</tr>
<tr>
<td>Conflicts</td>
<td>The conflicts between Chinese developers and architectural firms</td>
</tr>
<tr>
<td></td>
<td>The frequency of conflicts</td>
</tr>
<tr>
<td></td>
<td>Chinese tacit norms</td>
</tr>
<tr>
<td>Decision making (Cognitive CQ)</td>
<td>Chinese tacit norms</td>
</tr>
<tr>
<td></td>
<td>Way of decision-making</td>
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<tr>
<td></td>
<td>The process of decision making</td>
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<tr>
<td></td>
<td>Decision maker</td>
</tr>
<tr>
<td></td>
<td>Adjusting the way of decision making</td>
</tr>
<tr>
<td>Problem-solving</td>
<td>The way of problem-solving impacted by Chinese culture</td>
</tr>
<tr>
<td></td>
<td>Chinese tacit norms</td>
</tr>
<tr>
<td>Psychological safety (Metacognitive CQ)</td>
<td>Personal feelings in the working place in the early phase</td>
</tr>
<tr>
<td></td>
<td>Personal feelings in the working place in the latter phase</td>
</tr>
<tr>
<td></td>
<td>Personal feelings during the meeting place in the early phase</td>
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<tr>
<td></td>
<td>Personal feelings during the meeting place in the latter phase</td>
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<tr>
<td></td>
<td>Personal feelings in social activities place in the early phase</td>
</tr>
<tr>
<td></td>
<td>Personal feelings in social activities place in the latter phase</td>
</tr>
<tr>
<td></td>
<td>Personal feelings of talking to Chinese developer in the early phase</td>
</tr>
<tr>
<td></td>
<td>Personal feelings of talking to Chinese developer in the latter phase</td>
</tr>
<tr>
<td></td>
<td>Personal feelings of talking to the supervisor/boss in the early phase</td>
</tr>
<tr>
<td></td>
<td>Personal feelings of talking to the supervisor/boss in the latter phase</td>
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<tr>
<td></td>
<td>Chinese tacit norms</td>
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<tr>
<td>Cultural knowledge</td>
<td>The way of learning Chinese culture</td>
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<tr>
<td></td>
<td>The influence of working environment</td>
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<tr>
<td>Collaborativeness (efficient team working)</td>
<td>The way of working when architects collaborate with Chinese developer.</td>
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<td></td>
<td>The way of working in the office.</td>
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<td></td>
<td>Chinese tacit norms</td>
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<tr>
<td></td>
<td>Understanding Chinese developer</td>
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<td></td>
<td>Preparation</td>
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<td></td>
<td>Chinese tacit norms</td>
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<tr>
<td>Trust</td>
<td>The way of development of trust from architect</td>
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<tr>
<td></td>
<td>The way of development of trust from architect the boss of the company</td>
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<td></td>
<td>Team orientation: list of requirement, how to get team orientation</td>
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<td></td>
<td>Risks:</td>
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<tr>
<td></td>
<td>• Partner incompetence</td>
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<tr>
<td></td>
<td>• Improper contractual agreement (Unclear contract)</td>
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<tr>
<td></td>
<td>• Unfairness in bidding</td>
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<tr>
<td></td>
<td>• Partner’s project personnel lacking interpersonal skills</td>
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<tr>
<td></td>
<td>• Partner’s distrust and misunderstanding</td>
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<td></td>
<td>• Insufficient communication among partners</td>
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<td></td>
<td>• Partner’s short-term focus</td>
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<tr>
<td></td>
<td>• Partner’s breach of contract (contracts are signed after the bidding</td>
</tr>
</tbody>
</table>
stage and take effect during the design stage)

- Excessive demands and changes from partners
- Poor relationship and dispute with partners (Poor Guan-xi)
- Social and cultural differences

Chinese tacit norms
Untrusted partners/ failed example
The importance of trust building in Chinese context
The (dis) advantage of building trust

<table>
<thead>
<tr>
<th>Information sharing</th>
<th>How to share the information</th>
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<tbody>
<tr>
<td></td>
<td>Problems when sharing information</td>
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<td></td>
<td>Chinese tacit norms</td>
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</tbody>
</table>

**Figure 5.3: The variables and indicators based on conceptual model (Own ill.)**

**5.3.1 Cases**

In this study, the population frame comprised not only Western European architects who had participated in Chinese construction industry but Chinese participates as well. The research will be case study to interview 2 famous Dutch company, OMA and MVRDV in Shanghai. 2 cases for each company will be selected. One will be the case about the developer get the concept from architectural firms but developer as a main leader. The other one will be that the company mainly controls the whole project.

**5.3.2 Sampling**

The samplings will be the architects in the firm, prefer foreign architects who work in China for long time and also those who work or have internship in a short period which relate to CQ. Chinese architects will also be interviewed for comparison.

**5.4 Data Analysis Methods**

The qualitative data collected will be analyzed using content analysis with Atlas. A software program for qualitative data analysis. Content analysis is a research technique for making replicable and valid references from data to their contexts (Krippendorff, 2012). Content analysis allows the qualitative data to be conducted for constant comparative analysis, in order to generate knowledge within interviewees’ experience in cross-cultural team from the text.

**5.5 Assumptions**

Based on literature review and testing interview, 4 assumptions are made.

Assumption 1: In Chinese context, psychological safety is not as important in Western context since harmonious environment which should be kept is the way to improve psychological safety by face-saving and face-gaining.

Assumption 2: Trust is more important than psychological safety in Chinese collaborative team as well as guan-xi considerably promotes degree of trust, thus Chinese team performance model might be different from Western’s.
Assumption 3: Cultural intelligence can be gain from external training, however it still needs take time to understand whole picture for Westerners.
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