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# Does Culture Influence Decision Making in Project Teams?

A Multi Case Study in Sweden

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Abstract

**Purpose:** In the contemporary society in which companies operate there is increasing interest in understanding the effects and changes of culture on projects in connection to decision making. This is evident of the fact that most companies are using groups or teams composed of mixed culture to perform their tasks and develop their activities into different geographical regions by adopting project management as a “way of working” other than a tool or technique. The objective of this study is to explore the cultural influence decision making in project teams through a multi case study of applying Hofstede’s dimensions of culture model to selected Swedish firms.

**Research Questions:** (a) How does culture influence decision making in project teams?  
(b) What are the correlations and disparities in decision making in project teams between Sweden and China?

**Methodology:** The research outline for this study includes literature review and qualitative approach. The primary data was collected using semi-structured interviews with eight project managers in Sweden while in China two previous studies of culture and decision making in project teams were used as primary data. The secondary data included articles, journals, books and pamphlets. The data collected during the interview was analyzed using axial coding.

**Findings and Results:** It was found that culture influences decision making in project teams. In Sweden, less value is shown to hierarchy, relationship is based more on work than friendship, conflict is resolved through open discussion, priority is given to team consensus, discussions in meetings are open minded and informal, team harmony, team work is encourage since the team is considered as a family, equality at work, takes longer time in decision making process but less time in implementing the decision as well as all team members being involved in the decision making process. Contrarily, Chinese teams respect and fear hierarchy because the culture encourages respect for senior, relationship is based on friendship other than work as a means to keep ‘face’, discussion is logical and formal, encourages team harmony because the team is seen as a family as well as using less time in decision making process but more longer time in the implementation phase since not everyone is involved which leads to rescheduling of meetings.

**Recommendations:** The outcomes of this study have provided meaningful knowledge on the issue of cultural influence in decision making to future project managers of mixed culture teams. Project managers of mixed Swedish-Chinese teams will find this study valuable in the management of team decision tasks. Therefore, all team members comprising of mixed culture should be involved in the decision-making process as well as the flexibility tendency at work. Although this study was centered on a critical discipline (project management), the authors recommend future research on this same topic using large samples and diversified industries.

**Keywords:** *Culture, Cultural influence, project management, decision making, project teams, industrial engineering, Sweden and China*

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## **CHAPTER 1: INTRODUCTION**

*This chapter describes the background of the study, problems discussions as well as the purpose and research questions.*

## 1.1 Background

In the contemporary environment in which organisations operate, there is increasing interest in understanding the impact and evolution of culture on projects in relation to decision making (Müller et al., 2009). As a result of the world becoming interconnected, some products can be created in one country, produced and sold in another through the use of sophisticated transportation and communication systems (Müller et al., 2009).

Culture is a complicated and multidimensional frame which has been examined on different levels (Shachaf, 2008). Culture plays a critical role in the realisation of projects. Although there is no simple definition which embodies the term “Culture” entirely but some researchers have made efforts in presenting a definition of culture (Pheng and Leong, 2000). Schwartz and Davis (1981, p.33) suggest that culture is “*a pattern of beliefs and expectations shared by the organisation’s members and these beliefs and expectations create norms that shape the behaviour of individuals and groups in the organisation*”. Contrarily, Greckhamer (2011) propose that culture is the ways of thinking, affections and attitude in a society that indicate long-established ideas and values exhibited in symbols, artefacts and other behaviour transferred through socialisation. It was concluded that culture is a mental program constructed from people’s history, geographical location, climate and resources through Hofstede’s seminal work (Greckhamer, 2011). “*It is the collective programming of the mind which distinguishes the members of one group or category of people from another*” (Hofstede et al., 2010).

That notwithstanding, cultural differences have been examined basically through the combination of assertive value adjustment into cultural models, apprehending values that make the cultural cognitive design of individuals as well as the society and organizations (Greckhamer, 2011). On this note, Hofstede’s (1980, 1991 and 2001) seminal work on culture has been used extensively as groundwork in mix-cultural studies as well as decision making in project teams (Greckhamer, 2011). Hofstede (2001) suggests five (initially and extensively used four) work associated dimensions that categorised national cultures: Individualism vs. Collectivism, Uncertainty Avoidance, Masculinity vs. Femininity, Power Distance as well as Long-term vs. Short-term orientations.

Globalisation is not just a business but also becoming a societal, cultural, political as well as economic issue (Gabrielsson et al., 2008). It has become evident that most organisations are using group of people from different cultural backgrounds in expanding their activities in varying geographical markets and the most successful and efficient organisation is that which adopts project management (PM) as a “way of working” rather than a tool or technique (Gabrielsson et al., 2008). Therefore, there is a motive of understanding the role of culture in mixed project teams in relation to decision making (Müller et al., 2009). Furthermore, individuals from distinct cultural backgrounds communicate and make decision distinctly (Shachaf, 2008).

In the past decades, the concept of project management has been institutionalised most especially in the field of constructions, engineering, social works, health services, research and development, business marketing as well as education (Platje et al., 1994). Project management shows an efficient foundation for combining various management methods such as statistics, operations research, six-sigma, computer simulation (Badiru et al., 2008). According to Badiru (2008), every organisation needs more outcomes with a click of the mouse with limited resources and this can only be achieved through the application of project management. Therefore, project management is “*the process of managing, allocating and timing resources to achieve a given goal in an efficient and expeditious*

*manner*” (Badiru et al., 2008 p.1). On the other hand, PMBOK defines project management as “*the application of knowledge, skills, tools and techniques to project activities to meet project requirements*” (PMBOK, 2000 p.6). It is accomplished in processes such as initiation, planning, execution, controlling and closing and it is managed by a group of people (project teams) for scope, time, cost, risk and quality as well as stakeholders with diverse demands and expectations (PMBOK, 2000 p.7).

Coupled with today’s fast growing and peaked competitive markets, disintegration and globalisation in project processes; a growing number of organisations are attempting to expand by projects or using project teams (Todorovic et al., 2015; Badiru et al., 2008). The use of these project teams is to ensure an effective running of the organisation’s operations and continuity (Drouin et al., 2010; PMBOK, 2000). Therefore, studies on teams consisting of people of more than one culture are exposed to problems such as miscomprehension, inefficient performance and less degree of trust than teams comprising people from the same culture (Zhang et al., 2007).

Globalisation has had considerable effects on the means and manner organisations accomplish their activities with more emphasis on the use of project management in this fast growing world, this has really laid foundation for an interesting area of research on: The comprehension of the cultural disparity in decision making styles in project teams.

## **1.2 Purpose**

The purpose of this study is to explore how culture influences decision making in project teams through a multi-case study in Sweden using Hofstede’s cultural dimensions framework. Based on a previous study (MBA thesis) by Etchu Oben Agborsangaya and Maryam Taheri (2013) on the cultural influence of decision making in project teams focusing on a single case study in the telecommunication industry between Sweden and Nigeria, the results from the findings could not be generalised.

Furthermore, previous studies (Chen and Partington, 2004; Chen et al., 2009) on the cross- cultural influence of decision making in project teams focused on the comparison of the Chinese culture and Western cultures, it is important to note that there is disparity in some cultural aspects of one western country’s culture from another. Since Sweden is considered as one those countries that falls under the Western culture according to Hofstede’s cultural dimensions, there is difference in the decision-making style among Western countries such as UK and USA. The authors are motivated to investigate on the cultural influence of decision making in project teams through a multi-case study of three multinational companies including Swedish/Chinese teams.

In spite of other factors, one of the most vital determinants in project management is decision making and culture is considered nowadays as the most ambiguous (Anantmula, 2010). The benefits of this study would add knowledge to project managers on the cultural impact of decision making in project teams of these three giant Swedish companies operating in Sweden and other countries worldwide. The correlations and disparity in the decision-making styles of these countries support a comprehension for the teams and the rationale for the behaviour of people in varying situations. In sum, the results from the findings would be beneficial to other companies interested in

merging people of different culture in a project teams as well as doing business in other parts of the globe. The results of the study were summarised as in table 1.1 shown below:

**Table 1.1 Results from previous study between Sweden and Nigeria (Agborsangaya and Taheri, 2013)**

Nigeria	Sweden
Large power distance - respect for superior	Egalitarian working atmosphere
Discussion is more perceptive and relaxed	Participative and consultative during meeting through consensus
Hierarchical decision making style and team work is encouraged	Team work is common as result of lack of confidence
Decision making is based on consensus but most often the project managers decide for the team and harmony for team	Consensus and receptive decision making styles
All team members are expected to be active during discussions but hierarchical decision making process	Although most hierarchies make major decisions and subordinates make minor decisions, there is always a process known as SCRUM - an agile and lean way of managing projects
Decision making criteria is based on participation of teams, logical reasoning, timing, cost and quality	Criteria in Sweden is based on SMART tool - Specific, Measurable, Attainable, Relevant and Time bound

### 1.3 Research Questions

As Badiru et al., (2008) mention, most organisations manage their activities in the form of projects, therefore it would be interesting to examine an area of study with little empirical contributions on the cultural impact of decision making in project management. On this note, culture as well as its effects on decision making in project teams is the predominant subject of interest. Previous studies on project management focused on the tools and techniques while less studies have been done on the cultural aspects (Henrie and Sousa-Poza, 2005; Shore and Cross, 2005) but a research on the cultural dissimilarities of decision making in a diverse culture project teams between Sweden and Germany indicates the preference among choice of lead management behaviours and decision making in project team (Müller et al., 2007). Since there is little previous empirical research on the cultural impact on decision making in project teams of one culture in connection to another, this study would enrich future project managers with knowledge of the cultural aspects that influence project management in relation to culture.

Previous studies put forward arguments on the cultural differences in such as intercultural communication (Müller et al., 2007); managing teams, problems solving and conflict resolutions in the workplace with more than one culture (Trompenaars, 2004). Furthermore, the outcome of globalisation is reflected on organisational performance and project management as well as the

commitment in comprehending cultural influence on project decision making styles in for instance when the project teams consist of Swedish and Chinese.

In sum, the research questions for this study are:

- a) How does culture affect decision making in project teams?

What are the correlations and disparities of decision making in project teams between Sweden and China?

## 1.4 Disposition of the study

**Chapter 1:** A general overview, background, research problems, aims as well as objectives of the study.

**Chapter 2:** Covers the research methodology, research approach, data collection and analysis as well as validity and reliability of the study.

**Chapter 3:** Presents discussion of previous studies on the cultural disparities as well as decision making within and without project management.

**Chapter 4:** Presents the findings from interviews and their experience working in project teams.

**Chapter 5:** Analyses data from empirical finding per case company as well as the comparison of the differences or correlations. **Chapter 6:** Introduces the discussion section, conclusion of the results, problems, limitations, managerial implication as well as future research.

# CHAPTER 2: RESEARCH METHODOLOGY

*This chapter describes the different methods employed for the study as well as the reason for choosing the methods. The aim of this chapter is to support the study with a detailed interpretation of the processes and research procedures. In addition, a description of the research approach, the chosen type of research, data collection and analysis as well as the worth of the research and the criteria for choosing our samples and case companies.*

## 2.1 Research Paradigm

According to Iliev et al., (2014) research paradigms presents the direction to researchers in designing the research and provides the perception of the findings as well as the practical context for using the findings. Furthermore, Bryman & Bell (2011) and Götürk (2009) define paradigm as “a cluster of beliefs and dictates for which scientists in a particular discipline influence what should be studied, how the research should be done, how the results should be interpreted as well. Restricting ourselves to the meaning of the word paradigm as a model or not, it is linked to two subjects – Epistemology and Ontology.

Ontology is the theory that examines objects and their relationships and if the object element is eliminated, it is a specification of the conceptualisation (Götürk, 2009). Ontology serves as an answer to questions such as what is out there (Phenomenological happening)? While epistemology is

a branch in the philosophy research that studies knowledge which tries to answer the question of what differentiates adequate knowledge from inadequate knowledge (Götürk, 2009).

### **2.1.1 Ontological Examination**

Throughout this study the authors search for knowledge on the influence of national culture on decision making in project teams. The two basic assumptions based on the case companies and the purpose of the study includes:

- a. The impact of a culture on decision making is a social occurrence through social intercommunication as well as being consistent.
- b. The appropriate research methods will be to examine models discussing people's behaviour and decision making styles.

The aforementioned assumptions are based on the ontological considerations that the influence of culture is reflected by human actions.

### **2.1.2 Epistemological Examination**

Comparatively, as ontological examination takes into account the identification and acceptance as a phenomenon while epistemological examination decides what adequate knowledge can be applied to examine and illustrate the phenomenon. Since this study is concerned with social methodological discipline as cited in the aforementioned assumptions, it should be noted that study cannot be considered as a basis and process of natural science. The focus of attention for this study is based on human beings working in project teams as well as whose attitudes cannot be identical. For that reason, an interpretative perspective is taken into consideration against the expectation in constructing the research processes.

Furthermore, another pertinent paradigm for this study is the interpretative perspective which according to Burrell and Morgan (1979) describes behaviour from the human context through observational process of the happening. Considering the fact that an organisation is a socially design product and the subjective social experience of individuals and; inconsequential adjustments could lead to organisational process development.

## **2.2 Research Strategy**

### **2.2.1 Qualitative Exploration**

Based on the assumptions that the social experience of individuals is instinctive –it is immeasurable through quantitative research tools, the collection of data and analysis will be based on words than numbers. Therefore, a qualitative approach based on inductive than deductive context will be employed as a research strategy. Furthermore, this study is depended on the fact that theories do not

direct the research but achieved as end result of the research. Appropriately, more attention is directed on the credibility of the findings and conclusions to apply some implications in project management.

### ***Principal steps in Qualitative Research***

The principal steps for this study are adapted from a qualitative research model developed and applied (Bryman and Bell 2003). Below is a simple layout of the research processes used for this thesis.

#### ***(1) General research and why the uses of case study.***

To answer the research questions, a multiple case-study will be carried out within this study. The following reasons motivate the authors in using this approach. Firstly, case studies allow the use of different data collection methods such as direct observation, document analysis and in-depth interviews (Yin, 2009). Case studies provide an insight that might be obtained with other approaches. Furthermore, Yin (2009) explains that case studies are appropriate means for initial, preparatory phase of a research as a foundation for the expansion of the tools necessary for surveys and experiments. Since most of the projects we investigated are completed projects, direct observation was not selected. According to Yin (2009), there are some rationales that might motivate the use of case studies in research. These are outlined below: case studies represent critical cases in examining a well-formulated theory, they are representatives of typical projects among different projects, they are also revelatory in that the investigator observes and analyses a phenomenon formerly unattainable to scientific research and the fact that case studies are longitudinal meaning they change over time and require time to be selected. Four ways were identified in testing case studies which include: Construct validity, Internal Validity, External Validity and Reliability (Yin, 2009; p.34).

Secondly the case study research is essentially appropriate in illustrating a particular context explicitly to generate knowledge as its results encompass empirical valid findings (Eisenhardt, 1989; Flyvbjerg, 2006). Lastly, the multiple case study takes advantage over single-case studies because they focus more on comparisons or similarities between the cases which can generate more generalizable and strong results against single case studies (Eisenhardt and Graebner, 2007; Rowley, 2002).

The research background is built on the link between the effects of globalisation and the contemporary environment in which organisation operate owing to the increasing demand in understanding different national cultures in relation to decision making in project teams. A comprehension of this will assist most dynamic organisations to manage combined cultural project teams. The research purpose is landmark to guide the authors in answering the research questions. Therefore, the research aims are not suggested as inquiries to examine specifically the basic results in accomplishing the research objectives:

#### ***(2) Choosing the appropriate entities***

This study uses ‘*Theoretical Sampling*’ – an indication of the grounded theory methodology is the process of collecting data guided by emerging theory other than by predetermined population dimensions by Strauss (1987). According to Glaser (1978 p.36), theoretical sampling occurs when “analyst jointly collects codes and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges”. The chosen entities for this study are three multinational companies operating in Sweden, have their subsidiaries in China and are engaged in industrial engineering activities. Some of the samples have overseas experience either on special assignments or have studied overseas and therefore have been working with different cultures. Apparently, these individuals are influenced by their national cultures, work experience as well as contribute considerably on the effects of their cultures on decision making in the teams they are involved.

### ***(3) Appropriate data collection***

Eight project managers from three companies were interviewed from Sweden as well as secondary data from other studies made in China. It should be noted that most of the interviewees have multiple mind-sets of the influence of culture on decision making in project teams. A semi-structured interview is used as a data collection mechanism to apprehend distinct perspectives. The feedbacks from the interviews will be coded as well as compared to identify the disparities in the responses of the interviewees. A third interview of similar company was conducted as a means to eliminate the differences and the responses will be analysed to underline the differences.

### ***(4) Appropriate data analysis***

Three types of coding will be used in interpreting the collected data as suggested by Strauss and Corbin (1990). Furthermore, the three types of coding to be used include; open, axial and selective (Strauss 1987; Draucker et al., 2007). Open coding is the word-by-word description of the data directed towards developing provisional concepts, axial coding focuses on emerging categories of data and selective coding is the exploration of the data for unearthing the main categories and accomplishing the integration of the theoretical framework (Draucker et al., 2007). Furthermore, due to privacy and security reasons, some of the interviewees mentioned that their identities should not be disclosed and this motivated us to use the coding method in analysing the data.

Furthermore, the data is analysed thematically as a tool to use across different methods (Braun and Clarke, 2006). In addition, thematic analysis is well-known for its flexibility as it identifies; analyses and reports patterns within data (Braun and Clarke, 2006). According to Ritchie and Spencer (2002), once the selected material has been examined, the analyst goes back to the research notes and tries to point out the key issues, concepts and patterns according to which the data can be reviewed and referenced.

### ***(5) Presenting the findings and conclusions***

The conclusion is presented in different decision making procedures related to the specific cultures of Sweden and China. The information collected from the data is classified accordingly in line with the correlation of group decision making approaches of a specific country as well as the disparities in the decision-making styles in both countries.

## **2.3 Data Collection**

### **2.3.1 Primary Data**

A face to face interview was used rather than survey questionnaires to gather meaningful information and diversified analysis of the data collected from various interviewees. As a result of time constraints and extent, the authors could not participate in comprehensive observation for collecting the data. Most of the data were collected using interviews because of the insightful questions used, the interviewees were expected to provide detailed answers and impressive aspects of the responses can be used in future research.

The primary data used in Sweden were composed of project managers and project team members while the primary data in China was based on articles of previous studies on the impact of culture of working with project teams comparing the Chinese culture and Western cultures. The necessary schedules for interviews in the different companies were made through telephone, e-mails, Skype and interview guidelines were emailed to the various interviewees to allow them have a pre-knowledge of the content of the interview. This was to avoid insufficiency in collecting data. During the interviews, the responses were noted and also recorded using the authors' mobile phones. The recorded information was later transcribed word-for-word into the interview guideline. The interviewees will be coded according to their various companies and they were two interviewees per case company.

Semi-structured interviews were conducted to provide an in-depth and meaningful understanding than structured interviews (Yin, 2009; Eisenhardt and Graebner, 2007). Each interview took between 35 minutes to 1hour: 30 minutes, was done in a semi-structured approach and was recorded to ensure reliability (Rowley, 2002). The participants provided a concise introduction about their projects; the essential questions were asked and later additional questions. The table 2.1 shows the characteristics of the various interviewees. The interview guideline can be found in Appendix 1.

#### **Table 2.1: Characteristics of Interviewees.**

SANDVIK COROMANT						
Name	Country	Position	Gender	Working duration	Number of projects	Number of project teams
SC-1	Swede	Project	M	11	7	7
SC-2	Swede	Project	M	2 years	10LP/15OSP	5
SC-3	Swede	Project Manager/Global	F	8 years	7 in LP and 6SP	04
	n	Trainee		Months		
ATLAS COPCO						
AT-1	Swede	Project	M	3	2	4
AT-2	Swede	Project	M	20 years	5 to	1
AT-3	Swede	Project	M	1 years	104	04
	n	Manager		Months		
TYRENS						
T-1	Swede	Project	F	6	8 to	8
T-2	Swede	Manager/Leader	F	4 years	10 to	6 to
	n	Manager		years	7	7

*large projects while SP – small projects*

Furthermore, five of the eight project managers interviewed were of different genders, age group, and educational background; have experience working with Chinese in their project teams.

### 2.3.2 Secondary Data

The secondary data used for this study was to examine research on the influence of culture and decision making area in finding the gap in research as well as the aim of the literature review or theoretical framework. The secondary data was collected using extensive studies from a large-scale of sources such as books, academic journals, articles, conference reports, newspapers, and websites. Journals and articles were accessed using the university home page, logging to the library as well as using some reliable articles publishers such as Science direct. In search for the articles, keywords were used in these sites as the authors could access large-scales of articles discussing culture as well as decision making. Furthermore, the authors used information from books to discuss issues about Hofstede's dimensions of culture, decision making as well as the methodology as a means to provide extensive contributions to the field of business regarding globalisation.

### 2.4 Data Analysis

After information was collected from the interviews, the authors used coding as a technique for describing the patterns and correlations for the data analysis. To eliminate the effects of making mistakes as Collin and Hussey (2000) mention that most qualitative studies pay more attention on a wide range of irrelevant information, the authors used coding to organise, manage and restore the relevant information collected.

Three basic stages are involved in data coding such as open coding, axial coding and selective coding. Initially, open coding is used to explore the effects of different cultural features on decision making from the secondary data. In addition, open coding helped the authors in differentiating the correlations and disparities among the respondents according to the countries. In analysing the data, the authors try to distinguish the correlations and disparities in the information. Axial coding comprises of identifying the relationship among the open codes. After using the two coding types that is axial and open coding, the authors group the information and try to make a comparison between both countries using selective coding. A cross-analysis from both the primary and secondary

data discussing the impact of culture on decision making in project teams was done. Employing all the three coding stages, it is evident for the answers of the research questions to be retrieved.

## **2.5 Reliability and Validity of the study**

Research procedure and results of the research determine the reliability and validity of qualitative studies. According to LeCompte and Goetz (1982), reliability is the stability of findings while validity is the accuracy of the findings. LeCompte and Goetz (1982) argue that the techniques for building validity and reliability should be different in ethnography compared to an experiment. Therefore, LeCompte and Goetz (1982) developed a qualitative parallel to Campbell and Stanley (1966) research on validity and reliability in inventing two new concepts such as *internal* and *external* reliability.

### **2.5.1 Reliability**

- ***External Reliability***

External reliability addresses issues of whether autonomous researchers would reveal the same happenings or generate the same constructs in the same settings (LeCompte and Goetz, 1982). This study is replicative by investigating the same research of culture's influence and decision making in different countries on a diverse scale. This study is proved to be externally reliable since the same study can be examined by carefully observing different aspects of project management rather than decision making.

- ***Internal Reliability***

According to LeCompte and Goetz (1982), internal reliability is the extent in which other researchers, given a set of past generated results would correlate with data in the same way as the original research did. To ensure suitable internal reliability, the authors intend to interview two to three persons from each case company. In addition, the findings from the responses will be classified according to the cultural and decision making aspects. A third interview was conducted to avoid a poor correlation in the responses.

### **2.5.2 Validity**

- ***External Validity***

Since the external validity is the degree to which the results from the findings can be generalized from sample to population, the responses of two to three interviewees from each case company was sufficient to fulfill the purpose of the study. Therefore, this study is externally valid since the interviewees chosen were in different age groups and positions in the companies. Responses from two to three interviewees satisfied the purpose of the study, which depicts the definite divergence in responses of the sample. The findings exhibit that the outcomes obtained from the sample can be generalised over a larger population to a certain degree.

- ***Internal Validity***

It is the extent to observations and measurements are truthful representations of some reality. To obtaining a high degree of conformity, the questions for the interviews were related to theories of culture especially Hofstede's five cultural dimensions and group decision making models. To attain a certain level of agreement, the interview questions were framed based on an understanding of the theories on culture and decision making. The main concepts among these were Hofstede's five dimensions of culture and decision making theories.

## **CHAPTER 3: LITERATURE REVIEW**

*The literature review is directed by the research questions of our study "Does culture influence decision making in project teams? The main aim of the literature review is to critically examine the theoretical and empirical literature on cultural diversity and decision making to an extent that they interrelate to fulfil the aim of the research question.*

### **3.1 Cultural Discrepancy**

Culture is broad, complicated and there is no simple definition that entirely covers the term "culture" (Pheng and Leong, 2000; Müller & Turner, 2004). Culture is "*a collective programming of the mind which distinguishes the members of one group or category of people from another*" (Shachaf, 2008; Bredillet et al., 2010). The PMBOK Guide defined culture as "*the totality of socially transmitted behaviours patterns, arts, beliefs, institutions and all other products in human work and thought*" (PMI, 2000, p.27). Therefore, culture is "shared values, expectations and norms found within countries, regions, social groups, business firms and even departments and work group within a firm" (Pheng and Leong, 2000). Ghemawat and Reiche (2011, p.1) suggest that culture is "*a set of shared values, assumptions and beliefs that are learnt through membership in a group and that influence the attitudes and behaviours of group members*". Furthermore, they mention that culture differentiates people of one belonging from another which exist at various levels as well as the fact that culture is gained by birth but through the process of socialisation (Ghemawat and Reiche, 2011).

### 3.1.1 Hofstede's Cultural Framework and its Application

Several studies focusing on the cultural aspects over the few past decades have been influenced by Hofstede's seminal work. The most recognised framework for describing national cultures is that developed by Hofstede with data from IBM employees' surveys of more than 50 countries (Ghemawat and Reiche 2011; Hofstede, 2001). Hofstede's framework from the analysis of more than 116 000 IBM employees' responses about their job and work setting for describing and comparing cultural disparities have been classified in four main dimensions such as Individualism versus Collectivism, Uncertainty avoidance, Power Distance and Masculinity versus Femininity (Ghemawat and Reiche, 2011; Hofstede et al., 2010).

*Individualism vs. Collectivism (IDV)* is cultural element around which distinct social and psychological processes are formulated (Triandis, 1995; Hamamura, 2012). Individualism-collectivism has been acknowledged in most research than other dimensions (Hamamura, 2012). It is also the extent to which people are unified into groups (Wei et al., 2008). Furthermore, Greckhamer (2011) mentions that it is degree to which members of a community give preference to independence and group membership. *Individualism* is a social pattern composed of loosely related individuals who are independent, driven by their own preferences, needs, rights and personal goals as well as give priority to rational analysis of the advantages and disadvantages to connecting with other others (Hamamura, 2012; Wei et al., 2008). Individualism more than the other dimensions has been linked to attitudes, values, norms, behaviours, team processes and results (Dekker et al., 2008). According to Dekker et al., (2008) and Staples and Zhao (2006), individualism has an impact on the communication and coordination structure within team members and their expectations. In high Individualist cultures, there is predominance of individual performance and responsibility, people keep the organisation's interest and goals because they expect personal reward and recognition for their personal decisions as well as the use of words to convey meaning (Staples and Zhao, 2006; Dekker et al., 2008; Ghemawat and Reiche; 2011;).

On the other hand, *Collectivism* is a social pattern composed of intimately related individuals seeing themselves as one or more collective who are mainly motivated by norms, duties and give preference to the goals of the group than their personal goals as well as the general direction toward team objectives and motivation to coordinate and collaborate with team members (Liu et al., 2015; Hamamura, 2012; Staples and Zhao 2006; Ghemawat and Reiche, 2011; Wei et al., 2008). In high collective/low Individualist cultures, there is always the tendency of people helping one another in the team, make personal sacrifices, cooperate, high collaboration, cohesiveness as well as communication which leads to teamwork spirits and this dimension is closely related to active participation (Dekker et al., 2008; Liu et al., 2015;).

*Uncertainty Avoidance (UA)* deals with the extent to which people feel threatened by and strive to avoid uncertainty and instability, dislike for ambiguity (Greckhamer, 2011; Staples and Zhao, 2006; Ghemawat and Reiche, 2011; Bredillet et al., 2010). Furthermore, uncertainty avoidance is how people feel either uncomfortable or comfortable in strange and awesome situations (Qu and Yang, 2015; Dimitrov, 2014). It is also considered as man's search for truth (Wei et al., 2008; Dimitrov, 2014). In high level uncertainty avoidance countries, people try to underestimate all kinds of ambiguity by legislating strict laws and rules as well as implementing security measures (Qu and

Yang, 2015; Dimitrov, 2014; Wei et al., 2008;). Contrarily, in countries with low uncertainty avoidance there is the possibility of people feeling relax and comfortable with uncertain situations as well as indulging different assumptions and attitudes (Qu and Yang, 2015; Dimitrov, 2014; Wei et al., 2008;).

*Power Distance (PDI)* is the extent to which people in a community readily accept uneven distribution of power and authority (McSweeney, 2002; Leong and Ward, 2006). In other disciplines, PDI is associated to hierarchy and countries with low PD values there is predominance of equality in subordinate and superiors as well as rights (Hofstede, 1984;; Dekker et al., 2008); subordinates are consulted before by their superiors before any decision are made and team harmony is seen to be very important while in high PD such as China view status, respect and differentiation to superiors which might as well exist in the organisations based on aged, social class or family functions; the subordinates are instructed what to do (Wei et al., 2008; Ghemawat and Reiche, 2011; Hofstede et al., 2010).

*Masculinity vs. Femininity (MAS)* is the distribution of roles between genders and it is a societal issue (Hofstede et al., 2010). In masculinity societies (China) there is predominance of tough values such as achievement, assertiveness, performance, competition and material success related to male role while in feminist countries (Sweden), there is more emphasis on soft values such as personal relationship, care for others, service, solidarity and quality of life as well as equal gender functions (Hofstede, 1984; Wei et al., 2008; Ghemawat and Reiche, 2011).

Therefore, organisations operating in the feminine culture value the well-being of the employees than performance. This dimension deals with the way a society distributes social roles to the sexes (Hofstede, 1984). Furthermore, Arrindell et al., (2003) mention that masculine cultures aim for maximal distinction between how men and women should behave and fulfil their lives as well as strong respect while feminine cultures describes the coinciding social roles of sexes, men not to be ambitious or competitive but enhance quality of life than material success. That notwithstanding, masculine cultures are task oriented, earning power, career advancement, efficiency as well as the predominance of performance over welfare when making decisions while a feminine culture is linked to relationship oriented, interpersonal issues, quality of life, service and decision making is associated towards welfare than performance (Kankanhalli et al., 2004).

*Long-term (LTO) vs. Short-term Orientations (STO) - (Confucian dynamism)* is a national culture dimension which is characterized with individuals within the culture that focus on short-term and immediate consequences versus take a long-term focus (Hofstede et al., 2010). This national culture dimension compared dynamic, future oriented items on its positive pole to static, past and present oriented ones on the negative pole (Hofstede and Minkov, 2010). It is the fifth dimension that was proposed by Hofstede (2001). This dimension is known as the Confucian Work Dynamic after a study of 22 countries involving university students using the Chinese value survey (Wu, 2006). It was later adopted by Hofstede and named it Long-Term Orientation versus Short-Term Orientation. LTO focuses on the future by practicing persistence and thriftiness while Short-term orientation focuses on the past and present through respect for tradition and encourage spending even if it entails borrowing (Wei et al., 2008; Dekker et al., 2008). According to Hofstede (1984), three among the four factors were found to be related; Thrift and perseverance were considered as LTO while those of STO were respect for tradition, fulfilment of social responsibilities and protecting one's face.

Therefore, it was concluded that these values were related to the teaching of Confucius (Hofstede, 1984).

### 3.1.2 Other Cultural Researchers' Contributions

Edward Hall (1976) as an anthropologist considers culture to be divided into different ways of communicating that is the *high-context* (implicit information) and *low-context* (information being almost explicit) and there is an overlying between traditional versus modern differentiation.

Another Anthropologists Kluckhohn and Strodtbeck (1961) in their studies of five geographically close, small clusters in the South-western United States differentiated these communities into value orientation such as *human nature* (evil – mixed - good), *natural environment* (subjugation – harmony - mastery), *orientation in time* (past – present – future), *activity* (being – being in becoming – doing) and *relationship among people* (Linearity; hierarchically ordered positions – collaterally – individualism).

Furthermore, Schwartz (1994) considers the inner layer of culture onion after Hofstede's seminal framework based on human values – “fascinating goals”. Schwartz's study was based on an empirical investigation of some teachers and students in more than 49 countries in testing the importance of 56 values in the lives of the samples (Ng Lee and Soutar, 2007). The results show that Schwartz framework added values to Hofstede's seminal cultural dimensions in relation to trade. In addition, Schwartz (2003) identifies seven interrelated cultural-level value dimensions which include mastery, hierarchy, embeddedness, harmony, egalitarianism, intellectual autonomy and affective autonomy. Hierarchy is related to the acceptance of appropriate differences in legitimate status, power and inequality in resource distribution. Harmony emphasizes on the world at peace, unity with nature and protection of the environment; egalitarianism deals with voluntary social commitment, welfare of other people and equal relational status (Leong and Ward, 2006; Schwartz, 2006). Mastery enhances self-assertion in order to master, direct and change the natural and social atmosphere to fulfil group or personal objectives while embeddedness view people as collective body based on social relationship, strive for shared goals and solidarity (Schwartz, 2006). Lastly Autonomy (Intellectual) encourages people to fulfil their personal goals singly while affective autonomy deals with pleasure, exciting life and different life (Leong and Ward, 2006; Schwartz, 2006).

Trompenaars and Hampden-Turner (1997) develop a new framework based on the ways culture expands to handle problems and ambiguous situations. He suggests seven dimensions based on empirical data collected from more than 15 000 employees in almost more than 50 countries (Müller and Turner, 2004). Five of the seven dimensions deal with the way people related with one another such as universalism vs. particularism, affective vs. neutral, individualism vs. communitarianism, achieved status vs. ascribed status, specific vs. diffuse); the sixth dimension was related to time (as a sequence or synchronization) and the last dimension was related to internal or external control (Trompenaars, 1994). The table 3.1 below presents a summary of some cultural researchers and their contributions.

**Table 3.1: Summary of Different Cultural Models.**

<b>Authors</b>	<b>Sample</b>	<b>Objectives</b>	<b>Cultural Framework</b>
Hofstede (2001)	A survey of more than 100 000 IBM employees from over 50 countries	National culture's influence on the values in the workplace	5 dimensions: Power distance  Individualism vs. Collectivism  Masculinity vs. Femininity  Uncertainty Avoidance  Long-term vs. Short-term Orientation
Hall (1976)	A university based studies in different countries	Culture and Communication Interaction	Comparison of High context and Low context way of communication
Schwartz (1994; 2003)	A survey based on teachers and students from over 49 countries	Culture's influences on individual values	Identified 2 individual and 3 cultural levels dimensions: Openness to change  Mastery  Hierarchy  Harmony  Embeddedness  Autonomy  Egalitarianism
Trompenaars and Hampden-Turner (1997)	A survey on 15 000 employees from more than 50 countries	National culture's influence on problem solving approach at micro/individual levels	7 dimensions: Internal control vs. External control

			Specific vs. Diffuse Achieved Status vs. Ascribed Status Individualism vs. Communitarianism Affective vs. Neutral Time as sequence vs. Time as a synchronisation
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### 3.1.3 Critiques of Cultural Theory

Hofstede (2001) model on the dimensions of culture has been used in different research areas and studies because of its accuracy, parsimony and reverberation by researchers and managers but its application also has been subjected to enormous criticisms (McGrath and O’Toole, 2014; Liu et al., 2015). This model which was considered as the “dominant explanation of behavioural differences among countries” has been considered limited by some researchers in different aspects (Cronje, 2011).

According to Cronje (2011), the significance of quantitative results, normative nature of the research and suggested that “... we compare culture A and culture B on some attributes, the mean scores might indicate nothing of the variability with the countries, nor will it inform us about the individual samples as being typical or atypical of that culture”. Furthermore, Hofstede proposed an ideographic interpretation of his research and stated that his research was based on an entire population and not individuals (Cronje, 2011).

Another prominent and profound critic was McSweeney (2002), he suggests that the methodological perspectives of the findings were doubtful especially the validity of attitude-survey questionnaires. Furthermore, Myers and Tan (2003) criticise Hofstede’s work based on national culture by pointing out their opinions against the appropriateness of “nation-state” as a unit of analysis and probability of briefly illustrating national culture with the use of cultural dimensions.

Hofstede’s model has significantly been criticised by the following researchers based on the following standpoints: nations are considered as inappropriate units/systems for examining culture, the numeric figures dimension is inadequate to determine the value of cultures and the fact that culture is dynamic meaning it changes over time (Trompenaars and Hampden-Turner, 1997; Signorini et al., 2014). Therefore, regarding the application of Hofstede’s model in international business, project management as well as decision making, the criticisms could be summarised below:

- a) Relating “culture” to “nation” is imprecise

- b) The model did not take into consideration the adaptable and dynamic nature of culture and therefore it is unable to indicate culture changes in the global circumstances
- c) The empirical data used were collected in IBM offices in the 19<sup>th</sup> century.

Taking these criticisms into account, the table 3.2 below illustrates the major criticisms, emphasising the need to examine culture in a dynamic, understandable and multi-phase context.

**Table 3.2: Summarised Critiques to Hofstede’s Model by the Authors.**

Critics	On the comprehensive use of the model	The model itself
	Authors	
Empirical weaknesses	Bhimani et al., (2005) – only familiar cultural context are examined “Ethnocentrism”	McSweeney (2002); Baskerville (2003) – IBM is not considered as a typical example for the world. Only nations are examined
Theoretical weaknesses	Harrison & McKinnon (1999) – amplitude and precision of culture are not understood	McSweeney (2002) – considering cultural homogeneity across borders most especially subcultures. Schwartz (2006) – stable culture over time but dynamic aspect of culture in their behaviours and attitudes.
Methodological weaknesses	Kirkman et al., (2006) – the indices did not consider the dynamics of culture over time and contradicting results. Bhimani et al., (2005) Triandis (1982) – inappropriate methods in understanding cultural context	McSweeney (2002) – figures do not instruct on the contents of culture and the effects on application Baskerville (2003) – inappropriate questionnaires in comprehending culture
Contribution to knowledge	Harrison & McKinnon (1999); Bhimani et al., (2005) - comparable and predictable conclusions	McSweeney (2002) - unreliable and robust conclusions Kaasa, Vadi and Varbane (2013) - Variation in effective leadership especially between two close Chinese cities

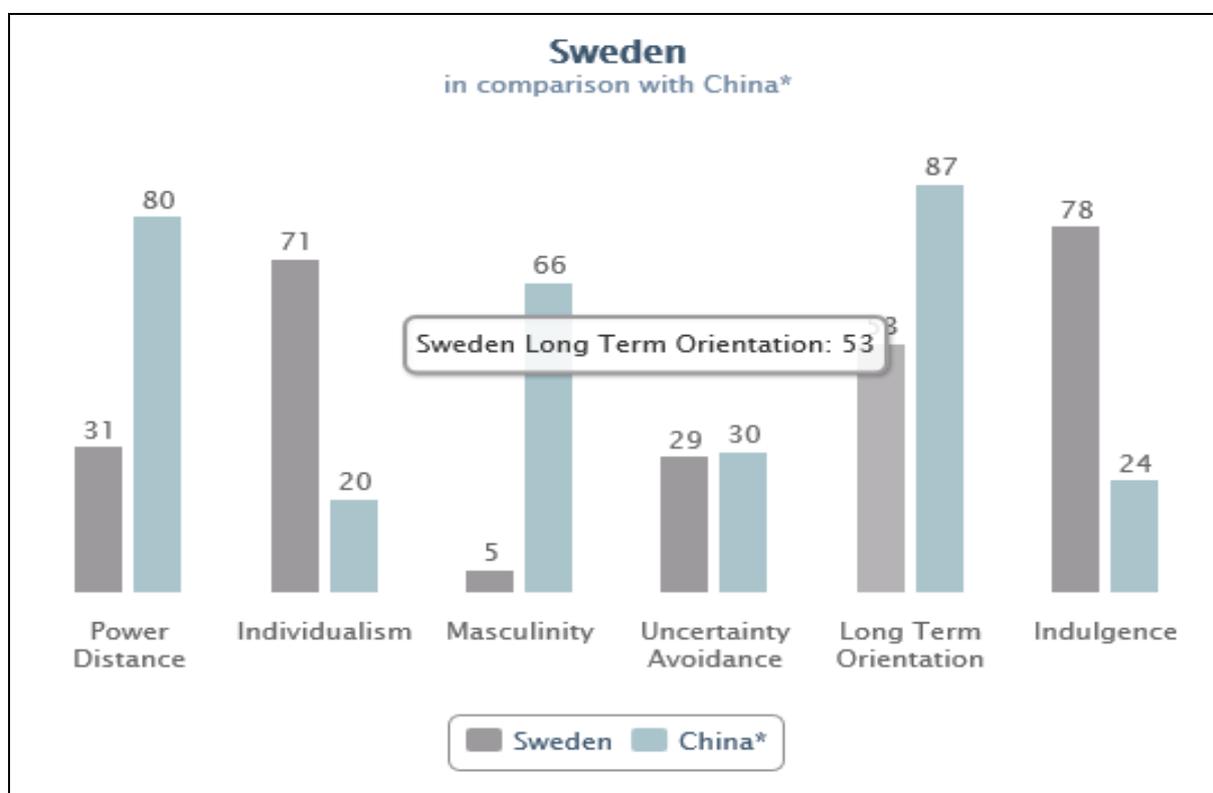
In spite the numerous criticisms on Hofstede’s model of culture, the model is widely accepted because of its clarity, parsimony and resonance by researchers and managers (Fregidou-Malama and Hyder, 2015; Liu et al., 2015) as well as Hofstede’s seminal work has confirmed useful and important in showing concise classification of valuable cultural dimensions for describing the

behaviour of people and it is considered as the milestone of cross-cultural research (McGrath and O’Toole, 2014). Furthermore, Hofstede et al., (2010) mention that their theory could be employed in examining organisational culture as well as national culture, therefore we are motivated to use Hofstede’s paradigm in investigating how culture influence decision making in project teams considering two countries around the globe (Sweden and China).

### 3.1.4 Hofstede’s Cultural dimensional indices for Sweden and China

Related to Hofstede (1980) seminal work involving 50 different countries identifying five dimensions ranking for comparing the cultural differences between Sweden and China are presented in fig 3.1 below.

**Fig 3.1: Comparison of Hofstede’s Five Dimensions Ranking for Sweden and China.**



Source: Hofstede’s Official Website (2015) <<http://geert-hofstede.com/>>

**Sweden:** According to Hofstede’s (1980) dimensions of culture, Sweden ranks low (31) in Power Distance (PDI) indicating that the culture of Sweden is depended on independence, equal rights, hierarchy is for convenience purpose, power is decentralised, team members are consulted based on their experience, control is not enjoyed by any and informal address of managers by their first name. There is direct and participative communication in team discussion. Sweden – a feminine country gives equal treatment for life and work and ensures everyone is involved. Decision making is realised based on involvement and top management aim for consensus, people value equality,

solidarity and quality in their working lives. Furthermore, conflict is resolved by compromise and negotiation and the country is well known for its long discussions for consensus reasons.

**China:** Scoring high in the PDI indicates that the culture of China is based on inequalities among people and people are influenced by formal authority and sanctions as well as people being restricted to their functions. Personal relationship is dominant over assignment and company. According to Hofstede et al., (2010), China masculinity dominance is geared to success orientation and driven and ranking is one of the criteria to succeed.

Furthermore, China in the past decades has been considered as one of the most favourite arena for western companies (Ghauri and Fang, 1999). In the late 1970s, the People Republic of China opened up its economy to foreign investors. With its economy being the world's largest emerging market, western investors have been enthusiastic about it (Ghauri and Fang, 1999). Although there has been a decline in enthusiasm for china as a result of the Tiananmen Square in 1989, this enthusiasm has been rebounded considerably in the 90s and as a result of this China has been ranked 9<sup>th</sup> position with a total number of 258 000 foreign investors (Ghauri and Fang, 1999).

### 3.2 Decision Making

Decision making is an area of interest to philosophers, economists, psychologists and among other management researchers as well as it remains an important subject of discussion in both academia and present-day business world (Nutt, 2011; Swami, 2013; Xu and Liao, 2015). A definition of the term decision making is relevant to provide a meaningful understanding of the concept.

Decision making is a mental process of choosing one alternative out of many but a generally accepted definition for decision making is that "it is a cognitive process of selecting a logical choice from more available alternatives (Duque et al., 2013; Swami, 2013; Behret, 2014). Recent studies on decision making are based on disciplinary models concerned with combining the framework in which decision making occurs which does not only involve psychological features of the behaviour of the decision maker but also the socio-cultural elements of the situation (; Weber and Hsee, 2000Gore et al., 2006). Therefore, it is interesting to examine previous and recent behavioural decision theories as well as the cultural influence on human decision making processes. Having the research objective in mind, the decision-making review section is divided into three parts behavioural decision making theories, team or group decision making processes and; culture and decision making.

Parkin (1996) categorise decision making literature into three main streams:

- Body of knowledge that explains axiomatically decision making theories such as operation research, welfare economics, decision analysis and different types of multi-attitude utility theory
- Models of human judgement and decision behaviour derived from psychological research based on the judgement aspects of decision making, the limitations of the human mind, the stressfulness of the decision process, the heuristics and biases
- Description of decision making in organisations based on sociological researchers

That notwithstanding, the focal point of the literature of decision making is centred on human judgement and decision behaviour and decision making processes in organisation respectively.

### **3.2.1 Behavioural Decision Making**

Previous decision making theories were based on economic theories and models with the determinants of a distinct choice among various courses of action other than a series of choices (Edwards, 1961). Edwards in 1954 developed in the behavioural decision theories discipline five concepts such as theory of riskless choices, the application of the theory of riskless choices to welfare economics, the theory of risky choices, transitivity in decision making and the theory of games and statistical decision functions. Furthermore, number of research works pointed out decision making as a scope of psychology (Kahneman, 1991; Oliveira, 2007). Therefore, decision making in the psychological discipline is characterised by the following (Kahneman, 1991).

- Theories of rational belief and choice
- Prominence on risky choice and decision conflict disregard
- Disregard of emotional and social factors

Furthermore, Kahneman and other researchers focusing on the “heuristics and biases” approach handle the examination of heuristics and assessment of biases characterised by:

- Based on cognitive processes
- Experiments based on subjects’ life experiences.

As mention by Simon (1959), the introductory phases in the economic theories of rationality and decision ambiguity were associated to the concept of adaptive and satisfying behaviour. The past years have realised development in interest from psychological researchers deviated in the processes concerning judgement and choice as well as the relevance of cognitive processes of learning (Kenning and Plassmann, 2005). There are two main streams of examining decision making: structural and process approaches (the main disparity between these two is that the process approach deals with psychological features and the behaviour model in decision making by collecting process ascertaining standards such as search for information (Svenson, 1996). These standards change over time as a resolution to overwhelm the shortcomings of the human mind. Contingent decision rules were combined alongside at the various levels of decision making that vary from fast and extensive decisions demanding problem solving methods. The most renowned models for cognitive dissonance theory has been that of Festinger (1964); the differentiation and consolidation theory (Svenson, 1996).

In addition to the above mentioned, another type recognised in psychology research of decision making has been the “heuristics and biases” concept. This concept involves psychological processes to describe the paradox of judgment and choice which originated from the rational model. According to Over (2004), in the judgement theories, decision making and choice are categorised into two – normative theories of cognition and descriptive theories of cognition. According to Swami (2013),

the heuristic was introduced by Tverskys in 1972 and also known as the *elimination* by aspects - which asserts that one selects the most relevant aspect, look which alternatives are best on that and turn down the rest. The process can be repetitive until the best option is chosen. Another question was answered by Kahneman and Tversky in 1979 in the shape of prospect theory – which deals with the principle of diminishing returns as wealth increases and which differs from the classical treatment of utility (Swami, 2013). Furthermore, naturalistic decision making has taken another phase different from what was discussed by Kahneman and Tversky (1979), which identified a variety of heuristic and biases (Gore et al., 2006). Therefore, the work led to more suggestions for developing decision thinking, handling heuristic and techniques to evade decision pitfall which has become renowned in recent research (Gore et al., 2006). Sterman (1989) mention that, exploratory studies in economics and psychology of individual choice have recognised the diverse cognitive, informational, temporal and other limitations which make up human rationality, leading to behaviour that differ from the explanation of the rational model of Simon (1979), Kahneman, Slovic and Tversky (1982).

Culture is considered a determinant of human behaviour and there is a repercussion relationship between both (Hofstede, 2001; Weber and Hsee, 2000). Therefore, this same relationship can apply to culture and decision making behaviour. The table 3.3 below encapsulates some relevant psychological theories and their possible behavioural options.

**Table 3.3: Process and Heuristics & Biases Approach Theories.**

<b>Relevant Process Theories</b>			
<b>Year</b>	<b>Authors</b>	<b>Theories</b>	<b>Suggestions</b>
1964	Leon Festinger	Cognitive Dissonance Theory	Dissonance is decreased or eliminated by substituting belief, attitudes and behavior consistently
1996	Ola Svenson	Image Theory	The decision process entails differentiation using different decision options than a single option leading to consolidation outcomes.
1954	Ward Edwards	Economic Theory	Predicting decision on preference choices, riskless choice, risky choices and games
<b>Heuristics and biases approach</b>			
1979	Kahneman & Tversky	Prospect theory	Deals with the principle of diminishing returns as wealth increases
1988	Tversky, Sattah & Slovic	Riskless theory	Describes the loss dissatisfaction in decision making

### 3.2.2 Group Decision Making

Group decision making is a process of drawing mixed knowledge and experience of experts from different areas of expertise to rank a fixed number of possible choices (Xu et al., 2015; Zhou and Chen, 2015). Despite the fact that individuals make decisions in public and private organisation under a dynamic and complex socio-economic environment, groups are most often delegated to make pertinent decisions (Tindale et al., 2003; Cabrerizo et al., 2010; Jiang et al., 2015) and most especially in the practice of management science, operational research and industrial engineering (Bouzarour-Amokrane et al., 2015). This is because of two reasons – groups can show a best effective and more distinct set of mind-set and precinct; and groups are considered to be “better than” individuals at pertinent decision based on empirical findings (Cabrerizo et al., 2014). Nevertheless, when a group is composed of more than one culture there is the likeness of the occurrence of conflicts, misconception and inefficiency (Zhang et al., 2007) and reduced trust (Gelfand et al., 2007 and Zhang et al., 2007).

Group decision making studies in the 60s and 70s asserted the procedures involved in moving from a distinct group of individuals or options to concurrence on a consensus preference for the group (Kerr and Tindale, 2004; Mercier and Sperber, 2011). Originating from previous studies by social choice theorists such as (Arrow 1963; Black 1958), psychologists solicited to develop precise models to explain the impact purpose that led to consensus. One of the most prominent works has been that of Davis (1973) – he developed the Social Decision Scheme (SDS) theory that considered small group cooperation as a “combinatorial process” which is made up group preferences for decision options in a way that consensus is arrived based on a single group choice. The SDS theory presented a framework to combined assorted members’ preferences into a group choice. Since group decision making has been of significant relevance to most recent research, the main focus has been on the consistency and consensus building (Srdjevic et al., 2013; Cabrerizo et al., 2014; Chen et al., 2014). Consensus is defined as a dynamic and repetitive group discussion processes, harmonized by a moderator assisting experts come up with their opinions together (Cabrerizo et al., 2010; Escobar et al., 2015;).

Furthermore, most contemporary research on the group decision making discipline considers groups as information processing systems (Kerr and Tindale 2004). Therefore, Kerr and Tindale (2004) acknowledge that group decision making research is based on combining preferences for continuous feedback disposal and group information processing. Two of the current models on preference combinations show the influence of ‘social sharedness’. When information is socially shared among group members, there is a tendency of an inordinate effect of the group’s response (Kerr and Tindale, 2004). The Social Judgement Scheme (SJS) model which was a continuation of Davis previous studies on discrete alternative consensus processes – Social Decision Schemes or SDS theory by Davis 1973 is based a weighted linear combination of members’ preferences whereby the weight is an exponent of the distances between a particular member’s preference and the other members’ preferences (Kerr and Tindale, 2004). Another model developed based on Black (1958) work with single peak preference curve to present group decision making data showing the median position among group members prevails. Therefore, it was found that the median model gave a suitable outfit to group decision data outside of three distinct decision tasks (Kerr and Tindale, 2004).

Other researchers examine group decision making processes through consensus with basic or no contribution among members. In such a situation (decision processes) most people may contribute advice to the decision maker (moderator) who has the final say (Kerr and Tindale, 2004).

In addition, Kameda et al., (1997) developed the concept of knowledge sharing by examining the influence members have within a group as a function of the amount of information shared within the group members. Based a social network framework, they constructed a model to represent the extent to which any particular member was ‘cognitively central’ within the group. Therefore, the greater the degree of overlap between the information held by a particular member and that of the other members on average, the greater the degree of centrality for that member (Kerr and Tindale, 2004). On this note, groups were recognised to be exceptional problem solvers than individuals because groups share a visionary system of opinions known as “shared task representation” (Tindale et al., 1996; Kerr and Tindale, 2004).

The aforementioned studies on group decision making centres on some theoretical context in the discipline and it is worthwhile to examine a tentative study on group decision making in the cultural perspective. With the aim of the study being to examine the how national culture and other factors that affect majority influence in group decision making, Zhang et al., (2007) developed a model of different teams and found out that impact of majority influence on decision making can be decreased through computer mediated techniques for communication rather than face to face environment. There is high tendency of majority influence in homogeneous collectivistic group relative to heterogeneous individualistic or collectivistic group.

The table 3.4 below presents a concise detail of the evolution in the group decision making studies.

**Table 3.4: Evolution in Group Decision Making Research.**

Period	Authors	Evolution perspective	Contributions
1960s & 1970s	Davis (1973)	Models based on how consensus are arrived at.	Social Decision Scheme and models that merge member preferences based on Jury decision making, group polarisation
1996 & ...	Davis (1996), Tindale and Kameda (2000).	Combination of preferences for information sharing	Models explaining consensus processes with discrete decision options based on social sharedness.
1980s & 1990s	Tindale et al., (1996)	Shared Task Representation	Groups share visionary system of opinions viewing them as excellent individual decision makers with shared task representation being selected.
1997 - 1999	Kameda et al., (1997),	Group members as cognitively centrality	The extent of information overlap determines the cognitive centrality of the group members.

### 3.2.3 Culture and Decision Making

Culture has been described using an implied comparison of cultural intelligence as a lens that shades people’s understanding of objects and messages in the society (McCracken, 1986). Therefore, culture plays a symbolic role in group decision making as it precisely affects people’s behaviours (; Gelfand

et al., 2007;) and the products and technological applications (; Van Biljon and Kotze, 2008; Frandsen-Thorlacius and Hornbaek, 2009). The possible disparities in the decision settings between the Western and non-Western cultures are associated to the cultural dimensions of individualistic and collectivistic orientations (Tse et al., 1988).

Previous research based on how culture influences decision making in North America, Japan, Australia and China in examining the impact on decision making among different classes of subjects involving consumers, students and marketing experts, the findings and outcomes have been summarised below (Gentina et al., 2014; Silhouette-Dercourt et al., 2014;).

- Communication and consultation decision making patterns proved to be efficient in some cultures than other especially in terms of quick decision making.
- Some cultures most especially Sweden give preference to harmony and consensus of all group members while other cultures such as China expect the subordinates in group to listen attentively and obey.
- Different cultures reward and punish differently
- Intuition, feeling and emotions play a significant role in decision making some cultures than others
- In a mixed business relationship, culture influences decision making in the prophase but is gradually eliminated in the long-run.
- Face saving facilitates or slow down voice differences in opinions is considered a factor influencing decision making in different cultures

On this note, the aforementioned exploratory studies selected were based on the comparison of two or more cultures such as Western and non-Western cultures. Hofstede's (1980) model of culture dimensions indicates that these cultures are divergent in all five aspects which has motivated the authors to examine the predominant cultural elements that are considered disparate in the different countries and which can most likely influence decision making patterns in those cultures (Triandis, 1989). It has become highly crucial in comprehending the cultural factors involving multinational teams as a result of the changes of cultural influence on decision making. The elements of Hofstede's cultural model indicate the value of people's cultural identity using their nationality which is later influence the decision-making process.

### **3.2.4 Synopsis of Decision Making in Project Management**

In project management, decision making has been seen as a relevant and unavoidable process which has to be initiated at any time. Most researchers have developed interest in the behavioural aspects of decision making in the past few decades. Some researchers developed theories that support essential part of psychology in decision making and recent studies. The group decision making part showed pertinent project management features of information sharing and communication within the group. Furthermore, this part takes into account the group decision making along with majority influence,

power and methods of sharing knowledge as well as contributing information for the decision-making data collection part. The last part discusses the effects of culture on decision making in project management as well as the findings from other studies that would help the authors in structuring the interview guideline used for the study.

### **3.3 Summary**

Liu et al., (2015) mention that previous cross-cultural studies discussed management issues as well as the problems associated to cultural differences by focusing on the risk management issues. Differences in culture advocate for differences in project management as well. Furthermore, Shore and Cross (2005) mention that culture has been of huge interest in the general management researchers as well as there has been immense studies that discuss the role played by culture in management but there is little empirical studies discussing culture's role in project management (Shore and Cross, 2005). Bredillet et al., (2010) add that studies comprising culture and project management deployment are limited but there are numerous cross-cultural researches that discuss management, business and international business, globalisation, organisations, team behaviour, leadership, communication, other disciplines obliquely linked to project management.

Henrie and Sousa-Posa (2005) and Hanisch and Wald (2011) suggest that most published research on project management focused on the tools and techniques while the cultural aspects were overlooked as well as research with a cultural focus is scarce. Culture plays a vital role in creating both beneficial and adverse effects (Hanisch and Wald, 2011; Henrie and Sousa-Poza, 2005) as well as in project teams since these members in the project teams transfer their culture in the team and influence the main decision making processes in the team (Shore and Cross, 2005). Shore and Cross (2005) and Müller et al (2007) present findings from their studies showing that the cultural dimensions can be relevant in demonstrating the behavior and decision making preferences of management. Conducting a research on cultural disparity in decision making in combined-culture project teams of Sweden and Germany by Müller et al., (2007), there is clear evidence that studies focusing on a single culture's influence in relation to another on decision making in project teams is still scarce.

It is obviously relevant for project managers to comprehend national cultural factors that influence project management generally since culture can be vital in presenting groundwork in examining the broadness of management processes. Accordingly, providing groundwork can support project managers in developing realistic approach of understanding and handling the cultural disparities in expected international projects (Shore and Cross, 2005).

That notwithstanding, as the divergence of cultures rises, the inconsistency in knowledge of the other culture broadens as well as increasing the capacity of running project teams with mixed culture. The bridge of inconsistency in knowledge, this study focuses on identifying the cultural factors that influence decision making in project teams of two countries in the same line of activities. In addition, the findings present the possible correlations as well as the disparities of cultural influence in decision making procedures between the two countries. The study would therefore try to fill in the

gap in knowledge on the influence of culture on project management and the uninvestigated scope of cultural influence on decision making project teams.

## **CHAPTER 4: EMPIRICAL FINDINGS**

*This chapter covers the data collected from interviews with the purpose of exploring the impact of culture on decision making and to pinpoint the correlations and disparities in the decision-making styles among project teams in Sweden and China based on primary and secondary data.*

The three companies investigated in Sweden are large industrial engineering companies globally and within Sweden as well as companies' information will be presented below.

### **4.1 Company Information**

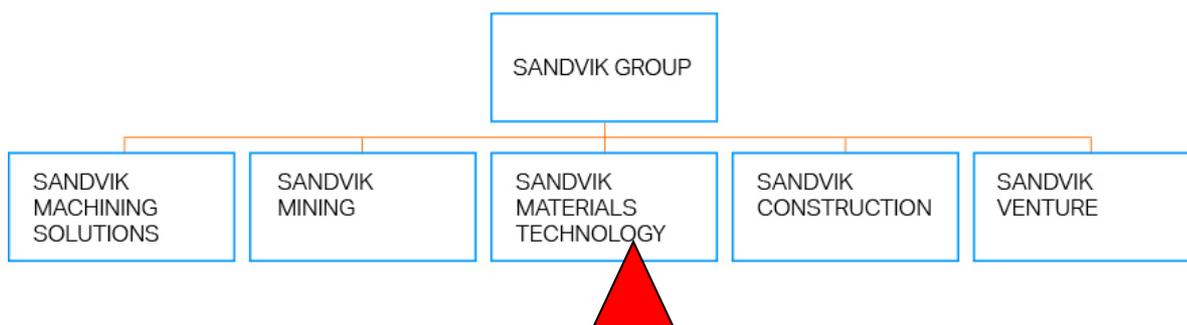
The interviews were conducted in three large companies in Sweden. The chosen companies deal with project management within industrial engineering most especially in machine technology, construction and consulting. These companies operate both domestically and internationally.

**Company SC** – Sandvik was established in 1862 when Fredrik Göransson successfully launched the Bessemer method for industrial scale steel production. With the co-founder’s vision based on innovative solutions and close collaboration with his customer, the company still maintains the vision of a cost-efficient steel production for high-performing cutting tools for aerospace production and advanced materials for demanding environments. Sandvik is a global industrial group with advanced products and world-leading positions in five divisions such as tools for metal cutting, equipment and tools for the mining and construction industries, stainless materials, special alloys, metallic and ceramic resistance materials as well as process systems.

Being represented in 130 countries with 47 000 employees and more 200 expatriates as well as an annual sale of approximately 87 300MSEK, the company’s strategy is based on the following principles such as: growth oriented, flexible and agile, truly global, technology leader and exceptional as well. The company’s core values are centred on exceeding their customer’s expectations for them to excel in business, transforming powerful ideas into purposeful solutions, acting sustainably and responsibly in business as well as be the number company

**Figure 4.1: Sandvik’s Five Business Divisions.**

(Source: <http://www.sandvik.com/en/careers/sandvik-in-brief/our-core-values/>)

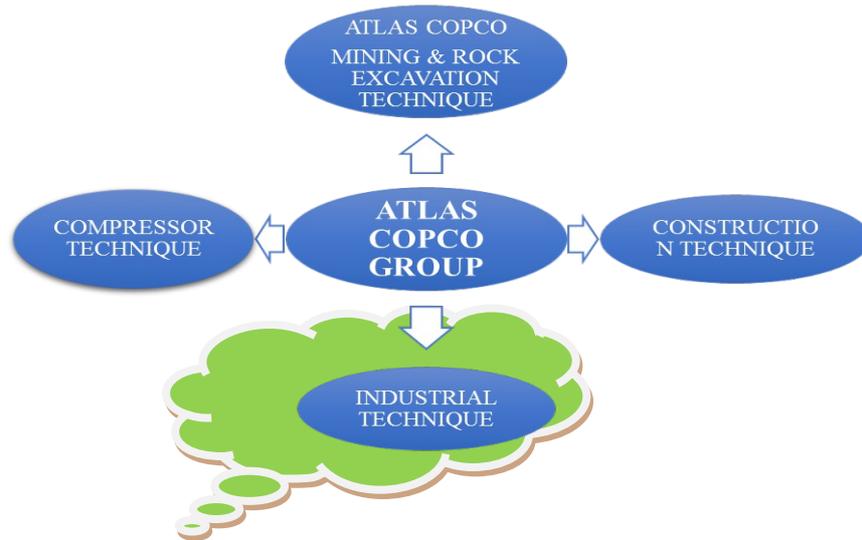


**Company AT** – Atlas Copco is a Swedish industrial company established in 1873 by Edward Fränckel that manufactures industrial tools and equipment. With its headquarters in Nacka Sweden, the company has a global revenue of 94BSEK and 44 056 employees globally. Atlas Copco manufactures products in more than 100 production sites in 20 countries and it is listed in the OMX Stockholm exchange market. It develops and manufactures industrial tool, air compressors (world leading producer), construction and mining equipment such as rock drills, assembly systems and equipment rental.

The company operates in four business divisions such as: Compressor technique, Mining and Rock excavation technique, Construction technique and Industrial technique. These products are marketed and rented under different brand through their global sales and service network in more than 180 countries. The company’s vision is to become and remain First in Mind – First in Choice of its customers as well as stakeholders. Its core values are interaction, commitment and innovation formed or past created our present and will guide the future

**Figure 4.2: Atlas Copco Four Business Divisions.**

(Source: [www.atlascopco.se/sesv/atlascopcogroup/](http://www.atlascopco.se/sesv/atlascopcogroup/))



**Company T** – Tyréns is one of Sweden’s leading multi-functional consultancies specialised in urban planning and infrastructure solutions for sustainable development. Founded in 1942, the company has a total of more than 1 300 employees in in thirty offices domestically and has partner in London (AKT II) as well as subsidiaries in London, Denmark, Estonia. It is leading company in research and development and has partnership with universities and research institutes. Being a member of the group Swedish Technology and Design, the company provides highly qualified consulting services in urban and rural development sectors. Furthermore, the company’s values are based on trust, professionalism, curiosity as well as skills. It has six business divisions such as: Urban and Rural Planning, Buildings, Industry, Infrastructure, Climate and Environment and Water

Figure 4.3: Tyréns Six Business Divisions. (Source: <http://tyrens.se/en/About-Tyrens/>)



## 4.2 Classification of Findings

All the types of coding as mentioned in the methodology chapter (2.2.1) are important in illustrating the correlations and disparities among the project teams in Sweden and China. For this reason, the authors have accepted to codify and analyse the data to answer their research questions. The same

patterns as reflected in the literature review such as cultural discrepancies and difference in decision making processes will followed.

### **Section A: Cultural Divergence**

#### 1. Organisation

- Hierarchy/Power distance
- Relationship
- Conflict Resolution

#### 1. Consensus in group/Team

#### 2. Communication

- Discussion forum
- Harmony

#### 1. Individualism/Collectivism

### **Section B: Decision Process Variations**

#### 1. Decision making

- Decision making pattern
- Authority in the decision-making process

#### 1. Implementation process

- Time
- Commitment

## **4.3 Findings from Interviews**

The primary research was carried through nine semi-structured interviews in industrial engineering and construction companies comprising of eight project managers from three companies in Sweden as well as previous studies that discussed Chinese culture in comparison with the Western cultures. The interviews were based on the cultural divergence that impact decision making in project teams. Therefore, part of the study is to discuss the results of the cultural influence on decision making in project teams between Sweden and China.

### **Section A: Cultural Divergence**

#### **4.3.1: Organisation**

**Hierarchy/Power distance** – For the reason that Sweden’s culture shows less value to hierarchy or superiority (see fig. 3.1), most project managers interviewed in Sweden mentioned that hierarchy does not play pertinent role in Swedish organisational culture. This can be as a result of low power distance as depicted in Hofstede’s five dimensions of culture. Power is equally distributed in the society. Although there are new functions and responsibilities assigned in the project organisation, there are less hierarchical effects in the project teams as compared to the company itself. All the eight interviewees in Sweden agreed there is less significance of power distribution in the project

team in spite the expertise of the members. Therefore, there is clear tendency of decentralising decision making. The interviewees mention all the team members are involved in the decision-making process most especially in huge projects but some situations most especially smaller projects, the project managers make the decision (T-1, T-2 SC-1, AT-3). Furthermore, most of the interviewees mention that everyone is consulted in the project team before taking any decision and there is no hierarchy or seniority when it comes to decision making and everyone has a contribution as well as can reject a point with suggestion until an agreement is arrived (T-1, T-2, AT-1, AT-2, SC-1, and SC-2).

Chinese have a different point of view when it comes to hierarchy in the organisations. According to Chinese related studies focusing on cross-cultural understanding of Chinese and Western practicing managers' conception of their work, it was revealed that Chinese managers and members in the project team give priority to hierarchy (Chen et al., 2009; Chen and Partington, 2004). This may be because of the relatively high power distance index (see fig. 3.1) that power is uneven distributed in the society. In the project organisation, new duties and power are assigned, seniority in project teams will emerge to influence decision making in the team. Furthermore, Peterson (1993) mentions that the power of decision making is densely on a single dominant person or project manager. The decision-making process is not participative because an open controversy about the manager's leadership style is considered a threat as well as the subordinates believe that leaders know everything thereby leading to the centralisation of power in the decision-making process. The decision maker (project managers tend to act arbitrarily rather than coordinating, the leader in the project teams tends to control and supervise. In addition, respondent SC-3 who have worked in Ericsson in Japan and studied in China, mentions that Chinese give priority to hierarchy as a result of the high-power distance as cited in Hofstede's seminal work. The members in the project teams only execute the duties dispatch to them by the project managers and leaders and they seldom have right to oppose or disagree with the project managers. Therefore, power is unequally distributed in the project team as only the managers or leaders make important decisions and their subordinates only execute the work task assigned to them by their various project managers and leaders.

**Relationship (Swedish Fika vs. friendship)** – Almost all Swedish interviewees (SC-1, SC-2, AT-1, AT-2, AT3, T-1, and T-2) mentioned that there is a less impact of project team members' relationship on decision making in project teams except of interviewee (SC-3) who stated that in the company in which she works, people live in a small community where they know one another, meet at work, their kids school together so most of their decisions is based on friendship than results. Contrarily to interviewee (SC-3), all Swedish interviewees agreed that most decisions are made in relation to results orientations than friendship interviewees (SC-1, SC-2, AT-1, AT-2, AT3, T-1, and T-2). Furthermore, some Swedish interviewees mention that during Swedish Fika, they are often going out to discuss friendship or personal issues but they end up discussing work related issues. According to interviewee (SC-3), the *Swedish Fika* is to assist members in the project teams discuss ways on how to improve on the results of the project at hand (work related issues). Therefore, interviewees SC-1, SC-3, AT-2, AT3, T-1, and T-2 stated that the relationship of members in the project teams has less effect on decision making based on personality or friendship with one another. This is to avoid hurting members in the team which could lead to conflicts in the project team. On the other hand, interviewees SC-2, and AT-1 mentioned that relationship of project team members do have to an extent impact but not so extreme based on the personality of each one of them. Although members in the team can carry along with them their friendship viewpoints, the decision-making process is analytic and realistic in choice. All the interviews from Swedish project managers show

that Swedish project teams work as a family more smoothly and courteous which leads to increase in flexibility at work and reduce conflicts.

Generally, Chinese employees give less priority to their personal interest and goals than to the company's interest and goals. This is to say the members' interests and goals in the project teams are subsets of the organisation's interests and goals. In collectivist China, group solidarity, sharing and responsibilities are advocated and the members in the project teams are bound to be affective and loyal to each other. Furthermore, exclusion from the group is avoided than any punishment; respect and admiration are compatible with power and status in the group. The impact of project team members' relationship on decision making is relatively high because of the high Individualism/Collectivism score for China as shown in (fig. 3.1). Furthermore, interviewee SC-3 mentioned that relationship is kept by "face" or reputation which is considered as a credit. It is uncomfortable to tell a member in the project teams that she is wrong or oppose these ideas in front of people but instead it can be done behind the group (SC-3). Therefore, relationship between members in the project teams and project managers is ethically/morally based considering the fact that they also take into consideration the relationship orientation output than result orientation output.

**Conflict Resolution** – Generally Swedish project team members will as much as possible try to avoid creating conflicts (SC-1, SC-3, AT-1, AT-2, AT-3, T-1 and T-2) with any member in the project teams. If such a situation arises as mentioned by the interviewees, the Swedish people resolve conflict through an "open discussion". Therefore, Swedish project teams encourage open and interpersonal discussion on disagreements and conflicts based on relevant organisational laws guiding the employees (rules and regulations) to get the problems solved faster. As interviewee, AT-2 mentioned from his experience having conflict with another member in his project team, the conflict was resolved by open and interpersonal discussions between them but after a series of discussions, the other party was transferred to another department where the same incident occurred and the person in question was dismissed from the company. Therefore, to keep all parties satisfied and promote team belonging, open and interpersonal discussion is encouraged. Referred to fig. 3.1, Sweden gives equal treatment for life and work and ensures everyone is involved.

Contrarily the Chinese project managers apply "negotiation" as the only means of conflict resolution. Furthermore, everyone who can help is involved from the site team, organisation's managers as well as friends. This is because the Chinese consider this as something that can lead to losing of 'face' and reputation as well. According to interviewee SC-1, SC-2, SC-2, AT-2 and AT-3 with their experience working in China and Chinese project, the 'face' is considered a valuable asset in Chinese culture which Chinese would never want to jeopardise with as it might affect their relationship and reputation as well. In addition, the Chinese collective, relationship, harmony and outer-directed culture encourage Chinese project teams to give high value to group harmony, maintaining face and relationship with everybody committed to the resolution of conflicts as well as avoids direct discussion or confrontation.

### **4.3.2: Consensus in Group/Team.**

When asked about team consensus, all of Swedish interviewees mentioned of the team spirit then preceded with the consensus features (SC-1, SC-2, SC-3, AT-1, AT-2, AT-3, T-1 and T-2). Therefore, it is certain that Swedish project team members give high prominence to team orientation likewise considering the consensus of the team. Some of the interviewees mention that there is effort for team enhancement and to bring about the essence of belonging in the organisation (SC-3, AT-1, AT-3, T-1 and T-2). In a situation where there is no team consensus, the team will pass through gate process phase which is a tool used in the organisations. There is confidentiality when it comes to issues discussed in the team and team discussion is considered a valuable asset for the company (SC-3, AT-1, AT-2, AT-3, T-1 and T-2). As interviewees SC-1, SC-3, AT-1, AT-2, AT-3, T-1 and T-2 mentioned concerning team consensus that if the group or team cannot come to a compromise in decision there is always voting where the majority rule will be taken into consideration. On the hand, some interviewees stated that in some situations the project manager can decide if the team cannot come to a decision by using brainstorming (SC-1, SC-2, AT-1, AT-2 and T-2). It is relevant for members in the project teams to show value to team spirit with each member being committed if there is non-consensus in decision (SC-1 and T-2). All Swedish interviewees stated the number of sittings to discuss and plan as a team as well as decision making through team involvement (SC-1).

In addition, interviewees (SC-3 and AT-2) stated that project managers in China plan and control every aspect for the project teams and due to the Chinese relationship and hierarchy culture. Group consensus prevails because the members in the Chinese project team consider the team as a close family with everyone involved and being guided by the father (project managers).

### **4.3.3: Communication.**

**Discussion** – According to all Swedish interviewees team discussion in meetings imply to be open-minded and informal. Everyone in the team tries to be creative in their ideas and suggestions where a member in the team can oppose the project manager's ideas and the best possible alternatives are being selected (SC-1, SC-2, SC-3, AT-1, AT-2, AT-3, T-1, T-2). Since each and every member's ideas and contributions are consulted, team involvement is encouraged to generate the best possible solution of decision for the group. Even though senior managers or superiors are involved during the decision phase, the discussion atmosphere tends to be more impartial and informal where the members can oppose the project managers' contributions with suggestions as stated by SC-1, SC-2, SC-3, AT-2, AT-3, T-1, and T-2. As a result of the informality in the Swedish project teams, the members in the project teams tend to be creative and contributing. The members can oppose one another's idea with a suggestion, after a long discussion if no decision is arrived at then project manager will choose from the alternatives which one to follow.

In the Chinese project teams, team discussion is an open-forum where each and every member in the team makes a contribution or suggestion on problematic issues (SC-1, SC-3 and AT-2). The discussion takes place in an analytical and logical way even before the work is being apportioned among the members. The Chinese collective, relationship, harmony and hierarchy culture encourage members in the team to discussion or make suggestion but on other hand the members are afraid to oppose one another as a result of the 'face' relationship they have with one another in the team (SC-1, SC-3 and AT-2). Furthermore, the formal and hierarchy style of the Chinese project teams make it

difficult for the members to oppose or object the project managers who are seen as the father and head of the family. In addition, interviewees SC-3 and AT-2 stated that members in the Chinese project teams would want to keep good 'face' with their leaders by avoiding opposing them during meetings. In addition, in Chinese project team's communication is influenced by the Confucian norms of hierarchical alliance and interpersonal harmony.

**Harmony** – According to all Swedish interviewees, members in the project teams give preference to team harmony by considering the team as a family with every one committed to the tasks (SC-1, SC-2, SC-3, AT-1, AT-2, AT-3, T-1 and T-2). As interviewee SC-1 stated that the organisation in which he works give great importance to team harmony since they consider working in a family with each person a specialised role to play. Furthermore, interviewee SC-3 mentioned also that since most of the people working in the organisation know one another outside the workplace because they live a small town and their kids attend the same school, team harmony exist both inside and outside the company. On the hand, some of the interviewees stated that team harmony only exists within the organisation and outside the organisation people acting individually and do not give preference to the team (SC-1, SC-2, AT-1, AT-3, T-1, and T-3).

The Chinese project teams give importance to team harmony as the team is considered as a closed family and every member is involved in the team (SC-2, SC-3 and AT-2). Furthermore, Chinese give greater attention to group harmony, keeping face and relationships (SC-2, SC-3 and AT-2). In addition, Chinese project teams show greater importance to team harmony since the members in the teams see the project managers as the father who has the duty to care for the members in the family (SC-3).

#### **4.3.4: Individualism/Collectivism**

From the nine interviews conducted from Swedish project managers, it is ascertained that Swedish more often than not do things as a team or group. Each subject in question will have to be deliberated in the meeting and worked out in team by considering the project manager as a coordinator for the discussion (SC-1, T-1 and T-2). Since every member's voice in the team has to be heard, they seek consultation from all the members of the project team to bring forth the best solution for the project holding to the fact that working as a team is better off than working individually. Hofstede's score for Sweden on individualism/collectivism as shown in fig. 3.1 supports that people belonging to this culture do things more collectively, priority is always given to the group's goals or objectives as well as the performance of the project team (SC-1, SC-3, AT-2 and T-2). Furthermore, Swedish interviewees feel that in decision making the viewpoint and the significance of the team members are taken into consideration.

According to interviewees SC-2, SC-3 and AT-2 Chinese project managers articulate greater importance for their collective group and they have extreme feeling of being part of the organisation's employee with their career evolution determined by organisation's collective growth. In addition, the Chinese collectivist profile show that employee's personal enthusiasm and objectives are supplementary to the goals and objectives of the organisation's collective profile (SC-3).

## **Section B: Decision Process Variations**

#### 4.3.5: Decision making

**Decision making pattern** – Most of the Swedish project managers stated that there is no critical variation in decision making patterns in the Swedish project teams. The project team has full control in any issues concerning the project as well as decision making (SC-1, SC-2, SC-3, AT-1, AT-2, T-1 and T-2) and some situations especially smaller projects the project managers make the decision for team (AT-3 and T-2). As interviewee SC-1 and T-2 mentioned that project teams play a vital role in providing important information and suggestions, it is not an obligation to contact experts such as the senior project managers but if such a situation arises they can do that (T-1, AT-1). Furthermore, the Swedish project managers stated that there is consultation of each and every member in the team before any decisions are made (SC-1, SC-2, SC-3, AT-1, AT-2, AT-3, T-1 and T-2). This is because of the Swedish team harmony style where all members are involved in the decision-making process to generate the best solution for the project as well as for the team (SC-1). In addition, all Swedish project managers accepted they use the same decision making pattern in all the projects except SC-3 and T-1 who mentioned the pattern making patterns vary depending on the type of projects.

In the Chinese collective, relationship, harmony and hierarchy culture, group consensus prevails where all members are considered to belong in a closed family with the father being the project manager; most of the decisions if not all are made by the project managers most especially large projects (SC-3). This is because in some situations of the team may comprise of 100 or more persons where the voice of all members cannot be heard since it might entail much time in making decision. There are various ways of getting the team involved through votes in which each vote has equal power and the project manager (father) presiding over the discussion as well as the decision is made through group consensus (SC-3).

**Authority in the decision-making process** – According to the interviews from the nine Swedish project managers, the project teams in Sweden prove to have total power or control (SC-1 and T-2) to make decisions as a team without approval or consultations of external bodies such as experts. Although defined roles together with level of power or control of the project teams is well stated and disclosed through the project charter (T-2), work division structure (T-1) before the actual kick-off of the project (SC-1), the project teams still have complete authority in the project as the teams are made up of different experts. The project managers alongside with the team members are involved in the project running as well as decision making phases (SC-1, T-2). According to interviewees SC-1, AT-2, AT-3 and T-2, even though the project team has the full authority in the project, its powers are limited because when it comes to administrative aspects of the project, it is directed to the steering group or the sponsor of the project. The team only discusses the technical aspect of the project while the administrative and financial aspects are left in the hands of the senior project managers, steering group as well as project sponsor.

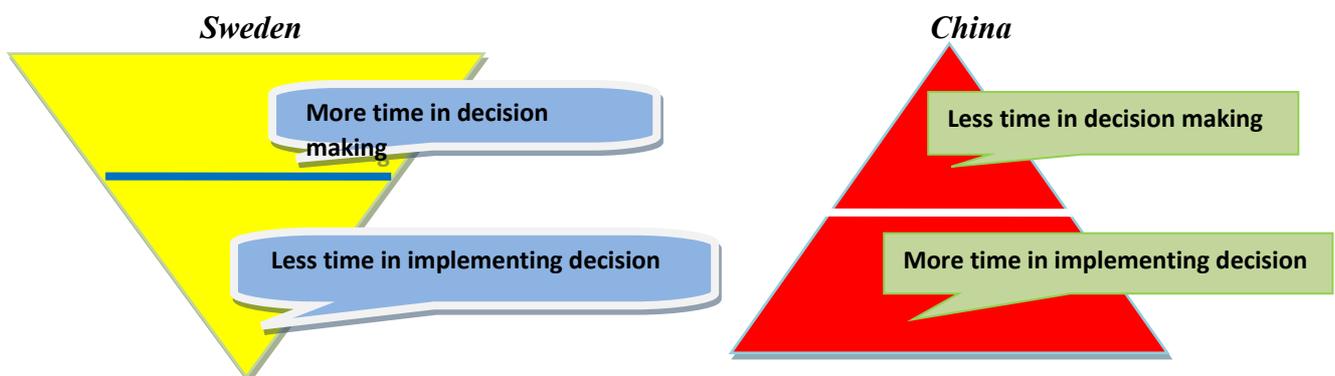
Contrarily, decision making in the Chinese project teams is authoritative and directive, where the project managers are expected to make the decisions on behalf of the team (SC-3 and AT-2). The decision-making process is based more on respect, avoidance, hierarchy and discipline. According to interviewees (SC-3 and AT-2), the decisions are made by top management or project managers without consulting the project team members because of the high authoritative nature of the Chinese management style, the Chinese project managers consider the project sponsor as being the boss and open conflict is averted by all costs when if the project managers make wrong decisions. The project managers only delegate the various tasks to the team for execution (SC-3).

#### 4.3.6: Implementation

**Time** – Time is one of the assets of project management considered to be more valuable than gold in the running of projects as well as making decisions. According to the interviews from the project managers in Sweden, it is obvious that time is a valuable asset for the management of projects (SC-3). The nine Swedish project managers mentioned that it takes more time in decision making since according to the Swedish consensus culture every member in the project team has to be consulted before making any final decision. This takes a lot of time before coming to a consensus (SC-1, SC-2, SC-3, T-1, T-2, AT-1, AT-2 and AT-3). Furthermore, the Swedish project managers stated although it takes more time in decision making on the other hand it takes less time in implementing these decisions which to better quality. As interviewee (SC-1) mentioned “*although it takes the Swedes more time in decision making, once the consensus is reached the team never comes back it instead it less us less time to implement this decision in the team as each person in the teams knows actually its role and so this facilitates less use of time in implementing this decision*”. The quality of finished projects is depended on the time used in decision making because of the best possible alternatives in the decision-making phase (SC-2 and SC-3).

On the other hand, the Chinese project managers have another perspective when it comes to time. According to some interviewed project managers in Sweden who have working experience in China and Chinese project teams, they mentioned that it takes less time for decision making in China but more time in the implementation phase (SC-3 and AT-2). As they mentioned, *it is the project managers that make certain decisions when it comes to projects in China. This takes apparently lesser time since not everyone in the project team is consulted before making such decisions as well as more time in implementing this decision since there is always a point to come back to at the decision-making phase leading to almost poor quality of work in the finished projects* (SC-3). The members in the project teams can not reject the project managers’ decisions even if it is a wrong decision because the project managers are considered as a father who is the head of the family. The figure 4.4 below gives an illustration of the time structure in the decision making and implementation phases respectively.

**Figure 4.4: Time vs. decision making and implementation structure between Sweden and China.**



**Commitment in the implementation of decision** – Swedish team members show high commitment in the implementation of decisions. According to the responses from the Swedish project managers, it is mentioned that once the decision is made in the meeting, every member of the team will work in accordance to the plan in which certain roles are assigned to each and everyone in the team (SC-1,

SC-2, SC-3, AT-1, AT-2, AT-3, T-1 and T-2). Most decisions are implemented through “meeting, consensus using a questionnaire form and sometimes conference calls (AT-2, AT-3, SC-1 and SC-3). Furthermore, every member in the team works according to their various functions to produce the best possible output for the project (AT-1, AT-2, SC-1, SC-3 and T-2). “No member will interfere for the project to be dispatched although they are not satisfied with the decision made (SC-1 and T-2). According to interviewees (SC-3 and AT-2), mentioned that once the decision is made at the meeting, the most important tasks such as managing, facilitating and controlling the work to guarantee a timely delivery to the scope of the project.

Contrarily, because of the high-power distance in China the subordinates rely upon the superiors or project managers thereby limiting the degree of commitment in decision implementation in project teams. The project team members only pursue the project manager’s decision. Furthermore, as interviewee SC-3 mentioned from her experience working in China and Japan that as a result of the Chinese culture of considering the project team as a close family and the project manager is considered the father who has the responsibility of taking care of the group. The members only take instructions from the project managers and execute their various assigned tasks (SC-3).

### 3.4 Comparison of Decision Making Approach in China and Sweden

The findings of data analysis demonstrate some major similarities and differences in the manner decisions are made in project teams in China and Sweden as shown on the table 4.1 below:

**Table 4.1: Comparison of Decision making Approaches in China and Sweden**

China Approach	Sweden Approach
<b>Similarities</b>	
Group/team Consensus since the team is considered as a close family	Team consensus is considered in the project team
Team harmony is encouraged as the team is considered as a close family	Team harmony is encourage and all the members are seen as belonging to a family
<b>Differences</b>	
High power distance (respect for hierarchy)	Low power distance (equality at work)
Relationship at work (based on friendship)	Relationship is based on results and sometimes friendship (fika)
Decision making meeting is based on friendship in order to keep 'Face'	Decision making in meeting is result orientation
Conflict among members in the group is resolved through negotiation so as to keep 'face'/ reputation	Conflict resolution is done through open discussion
Team discussion in meeting is open-forum, analytic and logical because they to keep face	Team discussion in meeting is open-minded and informal
Collectivism	Individualistic
Decision making pattern: Individually by project managers and secondly the entire teams	The entire team is involved based on a consensus in the team
Authority in the decision-making process: Only the project managers, senior managers & Sponsor	The entire team is engaged

Time: Less time in decision making phase but more time in the implementation phase

More time in the decision-making phase because of consensus and less time in implementing this decision

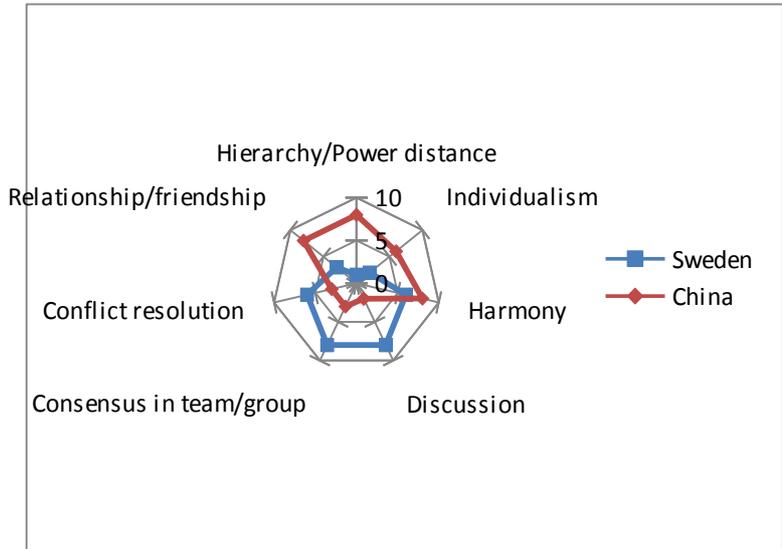
## CHAPTER 5: DISCUSSIONS

The subsequent discussion is disclosed in the form of two cultural figures in shown in (fig 5.1 and 5.2) and seven dimensions of team situation for decision making as depicted from the examination of the empirical data. The examination of the data in the preceding chapter illustrates two relevant findings of the study: cultural disparities between Sweden and China together with seven influential aspects of working in teams and seven dimensions of decision making as highlighted by the companies examined. Therefore, both Swedish and Chinese cultures possess different aspects on each of the decision-making elements. Furthermore, these aspects will be examined using axial coding to determine the connection between cultural and decision making aspects between Sweden and China.

### 5.1 Cultural characterization

The results of section A of chapter 4.2 in the examination of the data show some gaps of the cultural disparities among Swedish and Chinese teams working environment disclosed below as cultural characterization. Each element of the heptagon demonstrates an aspect of the team atmosphere. The degree to which each element influences team work is determined from the interviewees' responses, the effect is high in accordance with all eight or seven respondents acknowledging the importance of the element; medium if six or four interviewees cited the element and low if it is three or zero. The first cultural aspect which is Hierarchy/power distance indicates for Sweden 1 which means there is a low indication from respondents to influence decision making among project teams while an 8 score for hierarchy/power distance signifies a high influence of the aspect in decision making among teams

**Figure 5.1: The cultural characterisation heptagon between Sweden and China.**



Cultural Aspects	Sweden	China
Hierarchy/Power distance	1	8
Relationship/friendship	3	8
Conflict resolution	6	3
Consensus in team/group	8	3
Discussion	8	2
Harmony	6	8
Individualism	2	6

## 5.2 Decision Making Measurements

The examination of section B of the results discloses relevant disparities in decision making processes of both Sweden and China together with the seven elements.

### 1) *Team Organisation towards Decision Making*

The Chinese project teams are made up of three hierarchical ranks: The project managers at the apex, technical and design professionals in the middle and software, mechanical and electronic engineers at the low level. Most of the projects are split into units and a team comprising of software engineers is assigned to one of the units. The Swedish teams customarily have an easy design with the project managers and the other team members committed.

Furthermore, the segmentation of projects into units and running each unit subordinately with infrequently collaboration with the entire team reflects the Chinese collective style of work. Contrarily, the Swedish teams like to work in a group as a family; the Swedish team members are more inclined to informality in communication and discussions in meetings as well as a low hierarchy level (equality at work). According to Pheng and Leong (2000); Chen et al., 2014 and Cabrerizo et al., 2014, the Chinese culture encourages team work and decision making through consensus. Furthermore, the Chinese Culture highlights on social status among things such as seating arrangements and other protocols based on status (Pheng and Leong, 2000 and Hofstede, 2001).

### 2) *Decision Making Procedures*

In China, the project managers make the decisions and the other team members contribute effective information while in Sweden, group discussions are guided by the project managers but contributions or suggestions are provided by all the members in the team and decisions are made based on team consensus. In addition, the disparities in the decision-making methods can be ascribed to the divergence in the magnitude of respect shown to seniority in the companies. Chinese people give value and approve the senior's decisions as a result to keep 'face', while Swedish people display equality at work whether low class or senior managers (Ghemawat & Reiche, 2011).

Accordingly, the Chinese project managers make important decisions for the project teams even though Chinese consider everyone in the team as a family but the decisions in the team are made solely by the project leaders/managers (Kerr & Tindale, 2004; Chen et al., 2009; Mercier & Sperber, 2011). In addition, interviewee (SC-3) stated that project managers in China plan and control every aspect for the project teams and due to the Chinese relationship and hierarchy culture (Chen and Partington and Chen et al., 2009). Group consensus prevails because the members in the Chinese project team consider the team as a close family with everyone involved and being guided by the father - project managers (Chen and Partington, 2004).

### ***3) Team Discussion***

Despite the fact team discussions for decision making for Sweden and China depict an analytical and coherent form; the Swedish discussions are exceptionally informal and comparatively adaptable. Furthermore, this informality helps in reducing the aptitude of the discussions progress within the group.

The spontaneity is associated to team discussions by the Swedish culture. Since the team members work as a family in most cases, the communication and processes are organised in a flexible approach. This flexibility in discussions and decision climate scale down stress levels among members in the team and therefore assists in evading conflicts among members (Liu et al., 2015; Dekker et al., 2008). According to Chen et al., (2009), the Chinese project teams, team discussion is an open-forum where each and every member in the team makes a contribution or suggestion on problematic issues. The discussion takes place in an analytical and logical way even before the work is being apportioned among the members. The Chinese collective, relationship, harmony and hierarchy culture encourage members in the team to discussion or make suggestion but on other hand the members are afraid to oppose one another as a result of the 'face' relationship they have with one another in the team (Chen and Partington, 2004). Furthermore, the formal and hierarchy style of the Chinese project teams make it difficult for the members to oppose or object the project managers who are seen as the father and head of the family (Chen and Partington, 2004). In addition, interviewee SC-3 stated that members in the Chinese project teams would want to keep good 'face' with their leaders by avoiding opposing them during meetings. In addition, in Chinese project teams communication is influenced by the Confucian norms of hierarchical alliance and interpersonal harmony as cited by Kluckholm and Stödtbeck (1961).

### ***4) Authority in Decision Making***

The fact both Swedish and Chinese teams to an extent may have complete authority to make decisions as concerns specialized project aspects, the Swedish team members are most often than not authorised to make important decisions without seeking help from experts. Since the Swedish culture is more individualistic than the Chinese culture, it is evident that the team members have the full

authority in decisions making when it comes to team tasks. According to Chinese related studies focusing on cross-cultural understanding of Chinese and Western practicing managers' conception of their work, it was revealed that Chinese managers and members in the project team give priority to hierarchy (Chen et al., 2009; Chen and Partington, 2004). This may be because of the relatively high power distance index (see fig. 2.1) that power is uneven distributed in the society. In the project organisation, new duties and power are assigned, seniority in project teams will emerge to influence decision making in the team. Furthermore, Hofstede et al., (2010) mentioned that the power of decision making is densely on a single dominant person or project manager. The decision-making process is not participative because an open controversy about the manager's leadership style is considered a threat as well as the subordinates believe that leaders know everything thereby leading to the centralisation of power in the decision-making process. The decision maker - project managers tend to act arbitrarily rather than coordinating, the leader in the project teams tends to control and supervise (Hofstede et al., 2010).

### **5) *Recommended Best Method***

The Swedish people give preference to all parties' commitment such as project sponsors/stakeholders, suppliers, customers, senior managers, project managers, technical and specialised engineers in the decision-making process. The fact that the parties involved are encouraged to partake in the decision-making process, the final decision is left in the hands of the project team members. The main target should be placed on the international project management guideline such as time, cost and quality (Kerr and Tindale, 2004).

On the other hand, the Chinese propose that the decision-making process focuses at fulfilling the customers' expectations and the project team members as a means to encourage the team members to provide useful information during project meetings. Group consensus prevails because the members in the Chinese project team consider the team as a close family with everyone involved and being guided by the father (project managers) as mention in Chen and Partington (2004). Furthermore, Pheng and Leong (2000) stated that since the Chinese culture encourages team work and group consensus, the recommended best method in decision making will be team consensus involving each member in the project team as cited by interviewee (SC-3).

### **6) *Decision Acceptance***

Although both Swedish and Chinese teams take less time in accepting decisions supported by the majority, some of the Chinese team members take much time in approving complicated decisions that involves their normal project activities as two project managers in Sweden mentioned (SC-3 and AT-2). However, Swedish team members may use longer time in accepting decisions when their proposals are not taken into considerations since the entire team must come to a consensus before approving the decision (Kerr and Tindale, 2004; Mercier and Sperber 2011).

By virtue of uncertainty avoidance attribute of the Chinese people, it is hard to comprehend complex decisions. Therefore, they do not oppose decisions approved based on the fact that their opinions might not be taken into consideration. This is as a result of respect and fear for hierarchies. According to Chen et al., (2009) and Chen & Partington (2004), Chinese project managers use two types of decision making patterns; first individually by the project managers while second pattern is the involvement of the entire team in the process (Kerr and Tindale, 2004). In the Chinese collective, relationship, harmony and hierarchy culture, group consensus prevails where all members

are considered to belong in a closed family with the father being the project manager; most of the decisions if not all are made by the project managers most especially large projects (Chen and Partington, 2004). This is because in some situations of the team may comprise of 100 or more persons where the voice of all members cannot be heard since it might entail much time in making decision (Cabrerizo et al., 2010; Escobar et al., 2015). There are various ways of getting the team involved through votes in which each vote has equal power and the project manager (father) presiding over the discussion as well as the decision is made through group consensus (Chen and Partington, 2004).

### **7) Time**

Despite the fact that both Chinese and Swedish team value time as an important factor in project management, the Swedish project teams take longer in deliberating on decisions since every member in the project team has be consulted and a consensus is arrived as a team before implementing the decision but they also take less time in the implementation phase since everyone's opinion has been taken into account which leads to better quality of work and on-time delivery of the project.

Furthermore, the Chinese team uses less time in the decision-making phase because most of the decisions are made by the project managers and less consultation of the team members but it takes them longer time in implementing these decisions since not every member was consulted during the decision-making process and as a result there is always reschedule of meetings to discuss on the project at hand which might lead to good quality of work but late on-time delivery of projects. According to Pheng and Leong (2000), time aspect varies in different cultures. In countries, such as Sweden characterised by monochronic time aspect, projects are treated in an orderly manner where projects are done independently, time is insulated, organised and controlled while in a Chinese polychronic culture, there is plenty of time and it is endless. Many things can take place at the same time (Pheng and Leong, 2000). This explains why it takes more time in the Chinese project team in implementing decision as shown in fig 4.4. There is always the tendency of going back to the beginning and calling emergency meetings in projects as cited by interviewee SC-3.

### **8) Relationship (Friendship and Fika)**

Both Swedish and Chinese teams value relationship as a relevant manner of working in the team since both countries most often than not consider the project team as a family. In Sweden, the project team is considered as a family whereby all the members in the team must work together to achieve a common goal. During the '*Swedish Fika*' although the members are expected to discuss friends related issues, the members in the project team discuss instead work related issues which leads to better working ideas and styles as well as building good relationship with one another.

Although the Chinese people consider the project team as a family with the father (project manager) being the head of the family (using a social network framework); with the other team members as members of the family (followers) who will listen to the father who makes all the necessary decisions (Kerr and Tindale, 2004). During meetings, the Chinese people would put relationship first as a means to keep 'face' because they do not want to hurt one another. Generally, Chinese employees give less priority to their personal interest and goals than to the company's interest and goals as mentioned by Chen and Partington (2004). This is to say the members' interests and goals in the project teams are subsets of the organisation's interests and goals. In collectivist China as suggested by Chen and Partington (2004) and Chen et al., (2009), group solidarity, sharing and

responsibilities are advocated and the members in the project teams are bound to be affective and loyal to each other. Furthermore, exclusion from the group is avoided than any punishment; respect and admiration are compatible with power and status in the group. The impact of project team members' relationship on decision making is relatively high because of the high Individualism/Collectivism score for China as shown in (fig. 2.1). Therefore, relationship between members in the project teams and project managers is ethically/morally based considering the fact that they also take into consideration the relationship orientation output than result orientation output as cited in Chen and Partington (2004). Therefore, project managers in china consider a good relationship with the team meaning project team is a close family in which all the members care for one another not only in a supportive and cooperative way but also in an affectionate way outside the team as well as the project managers are the fathers who care for every member in the family (Chen and Partington, 2004).

## **CHAPTER 6: CONCLUSION**

### **6.1 Summary**

The growing business relations between China and most western countries especially Sweden has encouraged the introduction of hybrid-cultural project management. In spite of this, most project management studies have shown insufficient significance on cultural elements as mentioned in (Henrie & Souza, 2005 and Shore & Cross, 2005). The inadequacy of satisfactory practical data most especially in this area of interest prompted our study to examine the cultural facets arousing decision making in project teams in Sweden and China. The theoretical framework stated the divergence in exploration on the performance of national culture in project management. Therefore, contemporary academicians in the project management field have confirmed the impact of cultural immensity on project management as cited in Shore and Cross (2005) and human behaviours on decision making in projects (Muller et al., 2007). The authors have solicited to examine the impact of Swedish and Chinese cultures on decision making in project teams through a multi case study in Sweden using semi-structured interviews in three Swedish companies operating in China. The findings were interpreted using coding of the systematic generation of theory containing both inductive and deductive thoughts with the aim of fulfilling our research questions, "Does culture influence decision making in project teams? And how?"

The examination of the findings and data affirm critical disparities in the decision-making approach between Swedish and Chinese project teams. These disparities can strongly be associated to cultural facets. The effect of these cultural facets on decision making of both Swedish and Chinese project teams is discussed below so as to fulfil our research question.

- a) The Swedish teams are more basic in their organisation compared to Chinese teams. There is infrequent focus on the codes of conduct and flexibility is given to team work. The Chinese are generally to a greater extent mechanised as they give priority to expertness of tasks, respect for hierarchy and formality as well as inflexibility in team work. This demonstrates Sweden's low and Chinese high score on masculinity.
- b) Decision making in Swedish teams is a team issue which means that most of than not the final decision lies in the hands of the entire team as they have to reach a consensus before making the

final decision but in some situations the project managers can decide from the opinions of the team members. The Chinese on the other hand are deficient making decisions as a team but they believe seniors are more competent in making decisions. Therefore, the Chinese are diffident in decision making as a result of the respect for senior and to keep 'face' while the Swedes pursue decision making authority to a greater extent.

- c) Even though both Sweden and China show average propensity for uncertainty avoidance when making decisions, the Chinese prefer decisions with that have obvious results. The Swedish do not take longer time in approving complicated decisions or adjust to situations. Furthermore, Swedish do not ponder to debate or argue the senior's decisions.
- d) Generally, the Chinese are directed by the respect for seniors and friendship and it is as well shown in their decision-making processes. The Swedish on the contrary display preference for individualism and acknowledge skills and knowledge instead of seniority. Lately, with more alternatives available in the industrial sector and most companies in China the effect of development through expressing viewpoints has declined considerably. Therefore, the tendency of indisputable certainty in seniors' decisions has been on a decline in the past few years.
- e) Even though both Sweden and China show to a greater extent value time in making decisions, the Chinese take less time in making decisions while the Swedish take more longer time deliberating over decision making issues since the team must reach a consensus before making the decision. Furthermore, in the implementation phase of decisions, the Swedish take less time in implementing the decision approved by team since every member in the team was consulted which leads to better quality of work and on-time delivery of projects while the Chinese take more time in the implementation process because they have to go back over the decisions over and over and sometimes reschedules new meetings which leads to good quality work but late delivery time.
- f) Notably, there are a number of correlations in the decision-making patterns or approach of Sweden and China. These include team consensus since they most often consider the project team as a family, team harmony with the members seen as belonging to a family, the high level of engagement by all the team members during implementation of decisions as well as the quality of work to be delivered to the project sponsor or customer.

The comprehension of the cultural disparities and correlations will simplify a more excellent running of mixed Swedish-Chinese project teams. Accordingly, bearing in mind the significance as well as the effects of diverse national cultures and educating members in the team with the social management understanding of companion amidst a team of combined culture, controversy and conflicts can be lessen which might rise as a result of misconceptions. For that reason, the efficiency and effectiveness of the working mechanism and climate in the project teams will increase.

## **6.2 Hypothetical Implications**

Throughout this academic study, the authors have recognised six cultural aspects that influence working in Swedish and Chinese teams. Therefore, these aspects alongside with individualism as cited in Hofstede (1980) build the seven aspects of the cultural characterization of Swedish and

Chinese project teams as shown in figure (5.1) which demonstrates the disparities and correlations between Swedish and Chinese working teams.

This study has disclosed seven aspects in examining the decision-making mechanism for Sweden and China. The aspects as specified on chapter 5 of this study are extracted from the responses of the interviewees and can as well be applied as basis for new theory on group decision making procedures in Sweden and China.

### **6.3 Managerial Implications**

The following suggested managerial implications would serve as a basis for prospect managers of combined Swedish and Chinese teams for setting the decision-making process.

- All the members in a combined Swedish and Chinese teams should be engaged in the decision-making process and members should not play the role of suggestions providers but effective participant.
- The degree of formality and flexibility in group discussions should be persistent before engaging in any project work.
- The recommended best practices as stated by the Swedish interviewees such as involvement of all parties in the project, time saving and quality of work should be taken into consideration as a means to produce best outcomes.
- To better enhance an efficient decision making process combined to the bottom line team, all the parties such as finance department, senior management, external experts and customers should be included and consulted in the decision-making process which might lead to the project managers fulfilling the team member's expectation as well.
- As the Chinese teams, would individually give preference to the project managers to make decisions, all decisions in small and medium sized projects should be taken as a group which will engage team spirit and assurance while in large projects some members in the team who are experts in certain aspects should as well be consulted.
- It is very important to examine the pattern for decision making in consultation of all the members since the need for individualism is distinct in Sweden and China.

In sum, the role of the project manager managing a combined team of mixed cultures should be to guarantee that the compatibility between the team members is satisfactory to prevent the forming of two groups.

### **6.4 Limitations**

- The fact that authors used second hand data based on two previous studies in China (Chen and Partington, 2004; Chen et al., 2009) as could be considered as a limitation. This is because things must have changed over the previous years.

- Due to time insufficiency, the samples used were made up of only interviewees in Sweden which otherwise should have included first-hand information from interviewees in China. Furthermore, the fact only eight project managers were interviewed could be considered as a limitation since a large sample size would mean more relevant information which may yield more successful conclusions.
- The research methodology is centred on assumptions based on epistemological analysis, such assumptions and any results arrived at might be deficient by errors in the authors' understanding of fundamental concepts.

During the writing of this entire thesis, there were some drawbacks due to the fact it was hard to come in contact with the right persons to carry out the interviews. After series of telephone calls and emails contacts with the various companies the authors could not easily come in contact with the rightful persons since some of the concern for one reason or the other could not be contacted directed. Some of the project managers scheduled meeting time but could not meet up instead appointed another person to represent them.

The authors had some challenges when writing this thesis as both authors were living in two different cities in Sweden. Despite the research overview, problem identification and literature review were done together by both authors; the critical part of the study such as research methodology, data analysis, discussions and conclusions was done from distance part. More often than not the authors had telephone communications, face-face contact as well as email discussions with their supervisor. Therefore, the communication process was time consuming which led to scope of research constraints.

## **6.5 Future Research Proposal**

A recommendation for future academicians on this similar topic using qualitative approach with a larger scale samples with more interviews from companies in both Sweden and China. By analysing these companies the data collected will provide a more excellent examination of the mean culture effects on decision making of a particular company in a specified industry. Therefore, an explicit feedback to what national culture effects on decision making may not be apparent or understandable which differs from country to country and industry to industry. The decision-making pattern in project teams in distinct industries may be correlated as well as boost the hypothesis which may lead to efficient validity and reliability of this study.

Subsequently, upon completion of the qualitative research the authors can once more collect data on why and how decisions are arrived at in various countries based on national culture. Furthermore, quantitative study would be carried to calibrate the responses, enhance the recommendations and finally pinpoint the flow of decision making in valid extent of prospect research.

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### **APPENDIX I - Interview Guideline:**

#### ***Cultural Influence on Decision Making in Project Teams: A Multi case studies in Sweden***

## **Part 1: Participant Demography**

- 1) Please give us a general overview of the company and types of project you were involved in
- 2) What was your role in the projects?
- 3) How long have you been working in this position?
- 4) How many projects have you participated in?
- 5) How many members are there in the project team?
- 6) How many different project teams have you worked with?
- 7) Have you studied or worked overseas? How long?

## **Part 2: Cultural Aspects on Decision Making**

- 1) Please explain how cultural aspects ease decision making in your current projects.
- 2) What do you consider as differences in working with international team?
- 3) According to hierarchy in your organization, what is your opinion about the degree of influence on decision making in project team? How does position affect decision making?
- 4) According to relationships among the members in project team, how can you see degree of influence on decision making?
- 5) Imagine a situation when you feel the decision made is not an optimal one, do you oppose the decisions or not?
- 6) Do you hesitate to express your opinion which could result in better outcomes?
- 7) Do you think that the teams you worked in give importance to team harmony or agreement?
- 8) How would you describe discussion atmosphere or communication among members of the team which will lead to the decision making?
- 9) According to projects which you were involved in, how do you see the effects of different decision making styles?
- 10) What criteria were used in making decisions?
- 11) According to your experience about working in different project team, were the same criteria applied in all of projects?
- 12) Have you applied any consistent pattern in making decision in project teams in your company?
- 13) How were the decisions implemented in the project team?
- 14) How do you see implementation of the decisions in the project teams?

15) In your opinion, what is the best element in practice for decision making process in your company?

