Cross-Cultural Collaboration in
Arabic Construction Projects

An exploration in Claims, Conflicts, and Delays

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Master of Science Graduation Thesis   Amir Mahran

Colophon

Name:	Amir Mahran, BSc.
Student no:	1191748
Email:	amir.mahran@gmail.com
Education:	TU Delft – Faculty of Architecture – Delft University of Technology
MSc. Track:	Real Estate & Housing
Department:	Design & Construction Management (Project Management)
Laboratory:	Construction Process Innovation
Main mentor:	Ir. R.P. Geraedts
	R.P.Geraedts@tudelft.nl
Second mentor:	Dr. J.O. Kroesen
	J.O.Kroesen@tudelft.nl
Committed:	Dr.ir. J.C. Hubers
	J.C.Hubers@tudelft.nl
Company:	Darwish Consulting Engineers ltd. Cairo, Egypt
Contact person:	Dr. R. Darwish
	RaoufDarwish@dce-ltd.com
Date:	January 28th, 2009

Preface

This report has been written as the research thesis for the fourth semester of the Master track Real Estate & Housing. This graduation project belongs to the graduation laboratory Construction Process Innovation. This laboratory makes part of the department Design & Construction Management.

In the first chapter of this report some personal aspects were mentioned. These include my motivation for the chosen subject for the thesis (the vision I have for this project) as well as the aimed personal goal for this study has been stated. The second chapter explains the research proposal; it describes the problem and its context. A brief analysis has been made and some questions have been set to support the thesis and its outcomes. Also, the methodology and results were explained. The third chapter describes the values and dimensions of culture; the fourth ,fifth and sixth chapters describe the cross cultural collaboration and managerial effectiveness and cross cultural management in the construction industry. The theoretical frame work is finally set by chapter seven, which describes the Arabic construction industry.

The methodology and instruments used are described in chapter 8, followed by the exploration and its evaluation in chapters nine and ten. Finally the conclusions and recommendations are presented in chapter eleven and twelve.

I wish to thank Professor Rob Geraedts, for he from the very beginning showed sincere interest and good expectation from this thesis. Moreover, he knew how to guide me in order to be a head of the difficulties that this subject brings.

Also I wish to thank Dr. Otto Kroesen; he knew how to help integrate an alien domain into the construction management domain, and helped in shaping this report and project with his expertise. For both, it is essential to say that their feedback helped me get a sharper focus on the thesis, reporting, methodology, and the aimed results.

I would also like to thank Dr. Raouf Darwish, consulting Engineer in Egypt, for welcoming this project and thesis to be executed in his firm in Egypt, which is of essential importance in order to continue this project.

Amir Mahran

Summary

Within cultures, values play an important role in how people behave in daily life. Values also play an important role in organizational behavior. In cross cultural settings, differences in values can be a serious issue in management, turnover, organizational commitment, and conflict. Differences in negotiation and communication styles can cause serious problems and have a significant impact on whether a multinational company, merger, or joint venture succeeds across cultures. If cultural differences are mismanaged, the consequences are potentially disastrous, and previously effective managers and organizations can become ineffective and frustrated with overseas and multinational ventures. On the other hand, the successful management of cultural differences can create a competitive advantage, innovative business practices, and organizational learning.

Main problem

The last decades states the fact that the UAE has the largest construction industry. This also brings the fact that it is a very fragmented industry. Besides the UAE the Egyptian construction sector has been a major contribution to Egyptian economy with an annually growth of 22 percent. The trend to globalization brings positive incentives in to local businesses. To keep up with the competition, businesses develop themselves in an innovative manner, and cooperate strategically with multinationals to gain knowledge and develop their own technology.

Cross-cultural collaboration is a fact for allot of projects, including construction projects. This kind of collaboration calls for additional skills for the project participant, particularly the construction/project manager. The complexity for this type of organization is likely to come from the cultural diversity.

Hence the question:

> **To what extent could cultural diversity be managed in cross-cultural collaborations in Arabic construction projects, in order to avoid conflicts, claims, and delays?**

This question is answered by designing *'a four perspective definition of culture'* Matrix. This is applied during several case studies in Egypt. The Four perspectives are;

1. Time orientation (Sequential and instrumental use)[1]
2. Concept of Negotiation (Disruptive and Integrative) [2]
3. Hierarchies and Protocols (Strict[3] and Clear[4])
4. Conflict Approach (Formality and Consensus)[5]

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[1] See paragraph 3.7.6

[2] See paragraph 4.3

[3] Derived from the dimension of Power Distance (4.1.1) and Universalism vs Particularism (3.7.1)

[4] Derived from the dimension Uncertainty Avoidance (4.1.4) and Specific vs Diffuse (3.7.3)

[5] See paragraph 4.3

Conclusions

Concerning the first perspective **time orientation** the following conclusion is made:

> Arabic engineers are poly-chronic. They are responsive, informal and flexible in resolving problems and planning projects. Arabic Engineers shape time synchronically generally doing numerous things at a time. The planning schedule is just a tool to work with as an idea on how the duration should look like for Arabic engineer

> Dutch Engineers shape time sequentially. They strongly have a preference for planning and maintain to plans once they are made. Time commitment is taken gravely. To stay on schedule is a must in order to guarantee the achievement of a deadline.

Concerning the second perspective **concept of negotiation** the following conclusion is made:

> Arab engineers are more likely to use an appeal on emotion as their persuasion tactic, to use subjective feelings to argue against arguments, and to use concessions frequently as a barging tactic.

> Dutch engineers, base their stance on facts and logic in their attempts to argue and oppose counterparts' arguments, and assemble small concessions prior engagement in order to develop a relationship with the other side in the negotiation.

Concerning the third perspective **hierarchies & protocols** the following conclusion is made:

> In the Arabic hierarchy there is a strong sense of traditional authority present. Managers operate in very hierarchical organizations that have centralized decision-making, have strong leadership, and are considered family-type organizations.

> Rational-legal authority is the natural method of managing and constructing a hierarchy in Dutch organizations. Dutch managers rely more on rational arguments to lead, than relying on authority in the hierarchical structure.

Concerning the fourth perspective **conflict approach** the following conclusion is made:

> Arab engineers may hesitate to openly communicate and exchange information if they believe that the other person holds dissimilar views to them. They also prefer avoiding conflict by compromising.

> The basic assumption made by Dutch engineers is that conflict should be completely solved. Western approach towards conflict and conflict resolution is provocative.

Fig.1-a-b. Matrix (four perspective definition of culture)

These conclusions derive from the matrix which has been filled in during field research in Egypt. See the following figures[6]. Appendix F displays the matrix with a clearer zoom ratio.
The terms used are clarified in the sections which are assigned previous in the above footnotes

Four Perspective Definition of Culture		Arab Engineers	Dutch Engineers	Chance of Clash (++,+,0,-,--)	Possible Midway
Time orientation	*Sequential*	During preparation and paperwork very **synchronical**. During Execution **sequential**	During preparation and paperwork **sequential** During Execution **synchronically**.	**+** High	Both engineers must understand differences in time orientation and not persuade the other to adopt his own. Otherwise much of tension and agitation will arise
	Instrumental use	Polychronic	Monochronic	**+** High	In complex construction projects a monochronic use of time is preferred as the risk of delay and inaccurate scheduling or execution arises extensively when working Polychronic
	Long-Term Orientation	Present-oriented	Future-oriented	**−** Low	These kinds of orientations do not influence current collaboration. It may influence future or repeating collaboration, if one of the two parties dislikes the attitude towards time of another. But this occurs rarely because it is a personal point of view and does not directly influence the quality of work
Concept of Negotiation	*Disruptive*	Mid-High disruptive, establish dominance, willing to take risks, use objective feelings to counter arguments, do not take deadlines seriously, and do use concessions continually as a barging strategy	Low disruptive, though deadlines are very important, rely on logic to counteract opponents' arguments, and make small concessions early	**++** High	Successful negotiations require mutual respect and understanding on the part of both parties. Negotiators enter the process with a subjective view of the other party's values and goals that may or may not be accurate. Different cultures use different negotiating strategies, and it is important that these differences are understood and integrated into the negotiation process by both parties.
	Communication	High Kinesics , High Proxemics, allot of Paralanguage, Object-language is considered	Base their information sharing on facts and figures, straight to the point, down to business	**0** Moderate	Culture of the construction industry in Egypt or Arabic countries in general differs significantly to that of the national culture. However, there is no reason to believe that people's behavior will temporarily change when they participate within a construction project. Mutual respect and understanding on the part of both parties is expected.
	Integrative	Begin low integrative, seek to obtain information about the other party's interests, employing creative problem-solving approaches	High Integrative, problem-solving approach, focus is on exchanging information, identify the underlying issues, find effective trade-offs	**+** High	If culture is the only factor considered, then both groups are equally competitive, collaborative, and accommodating in their negotiation approach. If cultural differences affect negotiations, the impact of the situation and the role of individualism-collectivism on style need to be simultaneously considered

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[6] The terms used are clarified in the sections which are assigned previous in the above footnotes.

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Four Perspective Definition of Culture		Arab Engineers	Dutch Engineers	Chance of Clash (++,+,0,-,--)	Possible Midway
Hierarchies & Protocols	Strict	Wasta can be seen as a network of influence sustained by the practice and expectation of 'individualized consideration', a form of social interaction lying at the heart of modern notions of transformational hierarchy.	Ingratiation and the exchange of favors is a common protocol to work with through the hierarchy. Dutch managers rely more on rational arguments to lead, than relying on authority in the hierarchical structure. Dutch managers will preserve their formal authority and position power, and will not be modest to exploit them when there is a sense of delay or nuisance.	++ High	Whether one sees *wasta* negatively, as mere corruption, or more positively as an Arab version of individualized consideration, there is no escaping that it is integral to Arab social life, business, hierarchies, and protocols. Working in a high power distance country needs allot of patience and understanding coming from a lower power distance country.
	Clear	Arabs are relatively comfortable with hierarchy. Influence and status a person holds by virtue of familial, tribal or personal connections.In the Arabic hierarchy there is a strong sense of traditional authority present.	Dutch managers are not concerned or affected by considerations of race, gender, religion or wealth. The embedded bureaucracy in the Dutch society shows that rational-legal authority is the natural method of managing and constructing a hierarchy.	+ High	Arabs may treat a particular leader with reverence – as a great man who has cleverly managed to balance complex traditional forces – western observers may dismiss the same man as a corrupt leader with no authority to lead anybody. . As in the Arab hierarchies several dimensions within leadership were concluded, several dimensions were noticed in the Dutch hierarchies, protocols, and concepts of leadership. Both parties should understand both dimensions and consider them.
Conflict Approach	Formality	Community legitimizes arbitration/mediation through respect for age, experience, status, and leadership in communal affairs. Efforts are intended to empower individuals in relation to the legal system, gaining control over their problems while achieving greater efficiency	Mediation or arbitration services provided by formally certified professional facilitator. Legal system or individual participants themselves legitimize and guarantee the negotiation and settlement process. Process typically ends with a formal written agreement	+ High	Adaption, accommodation, and flexibility are the keys to the project's survival in such situation. Conflict can lead to change, change can lead to adaption, and adaption can lead to survival and even prosperity. Cross-cultural differences in conflict-management style cannot be based on a single value dimension
	Consensus	Efforts are intended to empower families and the community to participate directly in matters of common concern. Preferred third party as an unbiased insider with ongoing connections to all parties. Third parties promote direct, collaborative, step-by-step problem solving to isolate and confront discrete issues. Emphasizes the need to restore harmony and solidarity and secure cooperative relationships. Intervention to prevent conflict escalation and disruption of communal symbiosis in a context of scarce resources	Conflict resolution used to attain a fair deal in which interests, needs and rights of disputants are not compromised. Emphasis on utilitarian goals and on satisfaction of interests, needs, and/or rights of all individuals involvedProcess reflects a preoccupation with "win-win" scenarios.	0 Moderate	The basic criticisms launched against Western conflict resolution techniques is that they are either too mechanistic or based on therapy oriented formulas that do not correspond with the idiom of daily life. Communal religious and ethnic identity remain strong forces in social life, as do patron-client relationships and patterns of patriarchal authority. A need to adapt these methods to indigenous cultural realities is crucial.

Fig.1-c-d Matrix (four perspective definition of culture)

The terms used are clarified in the sections which are assigned previous in the above footnotes

Recommendations

Examining these cultural themes in the light of key aspects of construction project management work reveals the potential implications of culturally based differences between Arab and Dutch project managers' conceptions of their work.

The recommendations are presented for engineers and project managers working overseas. The essence is based on the context of Arabic construction projects. Consequently, the recommendations address mostly the most common problems in that area using derived managerial tools applied in Western construction projects.

Some of these recommendations themed and based on the cause of claims, conflicts or delays are

Theme	Example cause of claim, conflict, or delay	Example Recommendation
Time orientation	Slow decision making process	Planning decisions with a timetable is an imperative aspect for the decision-making process. Therefore, schedules including decision-making milestones are highly recommended
Concept of Negotiation	Unclear project scope	The project manager should stress that clear documentation of the scope of the project is crucial. Putting pressure on the counterparts or participant to do so has to be done with a quite rational, and most importantly charismatic persuasive manner. Putting pressure could be interpreted as offending.
Hierarchies & Protocols	Assigning wrong person to project	A clear line between favoring (derived for the so called wasta) and recommendation must be made. Assigning has to be done using profiles. Introducing this demand has to be done with rational and charismatic manners, in order to avoid interpretations of personal refusals of favors.
Conflict approach	Delays by government officials	Closely working with officials, involving and including institutions and municipal early, prevents avoidable delays on projects. Giving them a sense of liability eases the collaboration, and may eventually evolve in fewer involvements by the officials.

As well some **practical considerations** are recommended working in Arabic countries, they describe:

- Meetings
- Presentations
- Passive-aggressive behavior

They clearly show that, with the consideration of the cultural values, some core managerial decision or intervention can be made. As a hired expat, engineer or project manager from another country, it implies that the hosting company or organization is in need of specialties which are not at hand in their own country. Thus, one, working overseas, should not hesitate to exploit the professional or managerial tools derived from his specialties, or pushing through his methods in order to successfully accomplish the projects' scope.

With these results a Strength, Weakness, Opportunities, and Threat analysis (SWOT) is made. This matrix below is filled in with the focus on the researchs' results. The SWOT matrix emphasizes on the utilization of the outcomes.

Strength

- Combines project/ construction management with Cross-cultural management
- Explores Arabic Construction industry
- Elucidates Arabic business culture
- Elucidates Dutch business culture
- Applicable managerial tools
- Creates awareness of differences
- Forecasting conflicts to act on

Weakness

- Few case studies
- Generalization of age generations
- No in-depth exploration of diversity with in Arabic cultures

Opportunity

- Stimulates further researches
- Enhances performances overseas engineers
- Enhances performances hosting engineers
- Adding dimensions into project management
- Considers educational curriculums

Threats

- Creating prejudice attitudes
- Blind generalization
- Using results as barrier instead of stimulus
- Exploiting each others' weakness
- Considers educational curriculums

Content

List of Abbreviations

BOT	Build-Operate-Transfer
CM	Construction management
FIDC	Fédération Internationale Des Ingénieurs-Conseils International Federation of Consulting Engineers
IDV	Individualism
JV	Joint Venture
GMP	Guaranteed Maximum Price
KSA	Kingdom of Saudi Arabia
LTO	Long-Term Orientation
MAS	Masculinity
NEC 3	New Engineering Contract Engineering 3rd Edition
PDI	Power Distance
PM	Project management
TWL	Third World Labor
UAE	United Arab Emirates
UAI	Uncertainty Avoidance

1

Personal Aspects

1.1 Motivation

The construction process in general intrigues me. It is seen as one of the most complex processes, with a lot of diverse disciplines and parties. A number of internal and external factors could enhance or deteriorate the process and influence the projects as a whole. Furthermore, the booming construction projects in the Arabic region, especially the United Arabic Emirates (UAE) interests me. Essentially these projects are very ambitious and a lot of international collaborations emerge.

For a project participant to function as good as a domestic participation is not always that easy or predictable. I worked two months on an area development project in Egypt at DCE- ltd. Due to my Egyptian background I would not be noticeable in the project organization. Despite of my background and my ability to communicate well in Arabic, my behavior was quickly noticed as a deviation to the standards there.

Hence, my fascination for the effects of culture in a collaborated process began. So I wanted to combine these three fascinations (construction process, Arabic construction projects, and culture within collaboration) into a graduation project.

1.2 Vision

The vision I have in the construction industry is that a process of internationalization is at play. And over time cross-cultural collaboration is going to be taken for granted in projects organizations. This can be seen particularly in the UAE. Moreover, a lot of projects encounter different types of problems. Several studies have been made that explore these problems and analyze their causes. Merely one can read the effects of culture in cross-cultural collaboration in the construction process; this despite the fact that a lot of studies have been made on cross-cultural collaboration for management developments. Why these studies have not been done on the construction process triggered me to explore it.

The 'complex' culture of the construction industry may ignore the effects of 'soft' aspects like culture and social-ethics. By exploring the effects of these aspects on construction process more attention would be given to the managerial effectiveness due to customized management styles. This has been done for international management development in general. So implementing this in to construction projects could be welcomed in to the 'complex' industry of construction.

1.3 Profile

By researching three different domains, an acquisition of knowledge is going to be made, which in my opinion, is not to be neglected for engineers who may find themselves participating in an international project. As mentioned before, I have experienced a cross-cultural collaboration but this does not make me an expert nor does it make me an experienced engineer in an international project. This research could add additional skills and intelligence for an engineer who intends to work in international projects, and in the context of this report, particularly the Arab region. Furthermore, in order to get a better sense of the touch of culture in an international construction project I will profile myself as a Dutch engineer working overseas with an Arabic background while I am investigating these different domains.

1.4 Study goals

In addition to the study goals stated by the Design & Construction Management graduation laboratory, some personal goals are:
- Gaining knowledge about the Arabic construction industry
- Gaining knowledge about the Arabic construction law
- Gaining knowledge about the social-ethics and business-ethics
- Having the ability to do an inventory into a far reached context
- Gaining knowledge about cross-cultural collaboration
- Gaining knowledge about different management styles
- Having the ability to extract an ignored factor in a complex process

2

Research proposal

2.1 Description of the Problem

Globalized construction market

In an increasingly globalized construction market more complex problems emerge. One of the largest expansions in construction can be seen in the United Arab Emirates. In the construction industry, the Chamber of Commerce of Abu Dhabi predicted (September 2007) investments would reach approximately 158 billion US Dollars. The United Arab Emirates (UAE) alone is said to contain 1/4th of the construction cranes of the world.[8]

Increased cultural-diversity

Managerial challenge

The process of internationalization will increase the cultural diversity of construction project organizations; thereby creating new managerial challenges. The level of conflict on global projects is to a large extent higher compared with domestic projects. This indicates that throughout the early phases of a global construction project, there is a process of cultural negotiation possible of which project partakers from different cultural environments, adapt some features of their cultural behavior.[9]

Conflicts higher than domestic projects

Relation of culture and decision making

Decision makers in construction projects are familiar with different decision-making models. The study of decision-making processes is not recent. Although more than three decades of systematic research on decision science have provided insights on a variety of issues, many areas of the decision making field still remain uncovered.[10] One of the discussed fields is the relationship between culture and decision making.

50% encounter delays

Delay of project completion is a major problem in construction that often leads to costly disputes an acrimonious relationship between the parties involved. Faridi and El-Sayegh *et al.* (2006) revealed that fifty percent of the construction projects in United Arab Emirates encounter delays and do not complete on time. One important cause is the owner's slow decision-making process. From a survey they have done the ten most significant causes of delays in the U.A.E. construction industry are displayed in table 1.

Slow decision making process

Causes of delay	Rank	RII
Preparation and approval of drawings	1	2.495
Inadequate early planning of the project	2	2.429
Slowness of the owner's decision-making process	3	2.398
Shortage of manpower	4	2.348
Poor supervision and poor site management	5	2.337
Productivity of manpower	6	2.297
Skill of manpower	7	2.281
Non-availability of materials on time	8	2.280
Obtaining permit/approval from the municipality/different government authorities	9	2.275
Financing by contractor during construction	10	2.261

Lack of communication is a concern

Ninety-three construction experts from the UAE construction industry joined this survey. Conflict between consultant and the contractors is a great concern from the contractor's point of view. Lack of communication between the parties caught up in construction (contractor-subcontractor-consultant-owner) is a major concern as well.[11]

Table 1. Ten most significant causes of delays in the UAE construction industry (Faridi,A.& El-Sayegh, S. , 2006)

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[8] http://www.evd.nl (01-02-2008)
[9] (Loosemore, M.& Al Muslmani, A.H., 1999)
[10] (Oliveira,A., 2007)
[11] (Faridi,A.& El-Sayegh, S. , 2006)

Explore relation problem and diversity

Fragmented industry

It is as well found[12] that the traditions of approval, supervision, and coordination are required to be revitalized for the UAE construction industry. The study of Faridi and El-Sayegh also compared the delay causes of the UAE with the construction industry of the kingdom of Saudi Arabia and Lebanon. The study outcomes are displayed in Appendix B.
Table 1 displays one of the studies done about the construction industry. Paragraph 3.1.1 states more of the occurring problems in the Arab construction industry. This problem statement aims to explore the relation between the occurring problems (the circles as example) in the construction industry and cultural diversity of project organizations.

The last decades states the fact that the UAE has the largest construction industry. This also brings the fact that it is a very fragmented industry.

Besides the UAE the Egyptian construction sector has been a major contribution to Egyptian economy with an annually growth of 22 percent. The trend to globalization brings positive incentives in to local businesses. To keep up with the competition, businesses develop themselves in an innovative manner, and cooperate strategically with multinationals to gain knowledge and develop their own technology.

Cross-cultural collaboration is a fact for allot of projects, including construction projects. This kind of collaboration calls for additional skills for the project participant, particularly the construction/project manager. The complexity for this type of organization is likely to come from the cultural diversity.

In general the process of decision-making doesn't differ from culture to culture. But the elements that influence the process do. Also is culture shaping the way a manager functions. Neglecting the values of other parties in the process or practice could end up in clashes which easily could be avoided by a consequent and context-adapted style of management.

Cultural diversity can do considerable damage to the collaboration of a global construction project. In global projects cultural diversity is hard to avoid or ignore. An enhanced consideration of influential cultural aspects can help to decrease and manage conflicts in global construction projects. Identifying and prudently controlling cultural dissimilarities, might allow enhancements in the competence and efficiency of these projects.

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[12] (Faridi,A.& El-Sayegh, S. , 2006)

2.2 Main Problem Thesis

> To what extent could cultural diversity be managed in cross-cultural collaborations in Arabic construction projects, in order to avoid conflicts, claims, and delays?

Thesis

This question is answered in chapter 12 by the various paragraphs.

2.4 Research questions

On behalf of answering the main problem other questions need to be explored and answered. The outcomes and answers are supported theories and facts that help define the outcome of the main problem. The research questions proceed as follows:

Culture and Decision making

1. To what extent are culture and decision-making in general interrelated?

Culture & Decision-making

2. To what extent does culture influence the interpretation of information in the decision-making process?

These questions are answered in paragraph 4.1 & 4.2 and chapter 5

Managerial Effectiveness and Cultural Diversity

3. What are the main fields that cause tension and disharmony between project participants in cross cultural collaborations?
   See 4.1 and chapter 6

Managerial Effectiveness & Cultural Diversity

4. To what extent does cross-cultural collaboration influence managerial approaches?
   See chapter 6

5. What are the interpretations of managerial effectiveness?
   See chapter 5

Conflicts, Claims, and Cultures

6. To what extent can management strategies be tuned by cultural diversity to enhance managerial effectiveness?
   See paragraph 12.5

Conflicts, Claims, and Cultures

7. What are the main factors of construction claims in the Arab region?
   See paragraph 7.1.1

8. To what extent does the understanding of claims and conflicts differ between the two cultures?
   See paragraph 10.4

9. To what extent does resolution of disputes differ in the different cultures?
   See paragraph 3.1.4, 10.4.2, and 10.4.3

2.5 Objective of the Study

The objective of this research is to explore and gain knowledge about the problems that occur in the construction industry in the Arab region. Why this region is the focus point of this research comes from the fact that the industry there is rapidly growing. The construction industry and projects have grown larger than the local engineers can handle. This is the reason why a lot of foreign engineers from the east and west participate in these projects.

Another objective is exploring and gaining knowledge about the type of collaboration that mostly occur in that region. Cross-cultural collaboration has become a standard way of combining a project organization there. The way of functioning in this collaboration deviates from functioning in organizations that are combined by members and actors adapted to the same culture. In this context, implementing different management styles are a way of gaining managerial effectiveness. The style adopted hence comes from the comprehending of this kind of collaboration*.*

2.6 Significance of the Study

Social, scientific and applicable relevance

Risks of conflicts, claims and delays throttled

Mainly in these kinds of collaborations and particularly in the Arab region, the significance of the outcome of this research lies in seeking social, scientific and applicable relevance. The theories yet to be explored and the questions that need to be answered could add to the effectiveness in the roles of engineers, construction managers, consultants, and clients in cross-cultural collaboration. In turn, construction projects could be successfully accomplished and the risks of conflicts, claims and delays would be throttled.

2.7 Limitations

Different cultural backgrounds

Projects in Arab region

A number of factors may result in either the deterioration or the enhancement of processes in construction projects. A lot of external influences also add to the way a process goes. This study limits itself by only exploring the collaboration in the process with actors having different cultural backgrounds. Furthermore, the context where this process is to be explored is limited; by only looking into the projects located in the Arab region.

Egyptian construction

Cross-cultural collaboration

Dutch and Egyptian

To be more precise, the implementation and exploration of the research is going to be done in the field of Egyptian construction. The Egyptian construction industry provides the opportunity to explore the process of cross-cultural collaboration. Moreover, it provides the opportunity to explore the collaboration between Dutch and Egyptian project participants. This research proposal is welcomed by DCE-ltd, which is a leading consulting engineering company in Egypt. They consult, supervise, design and manage construction, civil and area development projects in and out of Egypt. They have extensive experiences with domestic and international projects, and international collaboration, particularly with Arcadis B.V. from the Netherlands.

PM/CM

The thesis will be leveled to the extent of managerial divisions and actions. In interest of elaborating on the thesis, the stages of project/construction management interventions will be the aim whilst exploring.

2.8 Result of the Research

Interrelated variables

One of the most important outcomes of this research is the interrelated variables of culture and ethics, and decisions. It would be too optimistic to assume that the variables found in this research are the same in all cross-cultural collaboration. The search for the relationship between decision-making and culture has been the quest for many scientists. The result of this research is restricted by limitations as stated above.
(See paragraph 4.1, 4.2, and Chapter 5)

Inventory of claims

Another result is an inventory of delays and claims in the Arab region. The focus is on the most occurring delays and if they are related to cross cultural collaborations. **(See paragraph 7.1.1 and Appendix A)**

Different managerial styles

The third result is an inventory of the differences of the managerial styles. This also involves how to adopt an appropriate style and how to switch between different management styles to achieve effectiveness in these types of project organizations.
(See chapter 6 and paragraph 12.5 & 12.9)

Handbook

The main aim is to formulate applicable managerial recommendations or guide for overseas and hosting decision makers (e.g. engineers, construction managers, consultants, and clients) in construction projects. The result is ought to be applicable in a process that is characterized with cross-cultural collaboration in an Arabic construction project. **(See chapter 12)**

Finally, it could be said that the focus of this thesis is particular in the interest of Arabic local engineers and overseas Dutch engineers or in particular Dutch project managers. This in the cause of future projects with the element of cross-cultural collaboration which has the characteristics of Arabic hosting and Dutch project management or project assistance.

To give an overview of the methodology of this research and the overlapping findings found in literature and finally implemented into a result, the following figure is displayed.
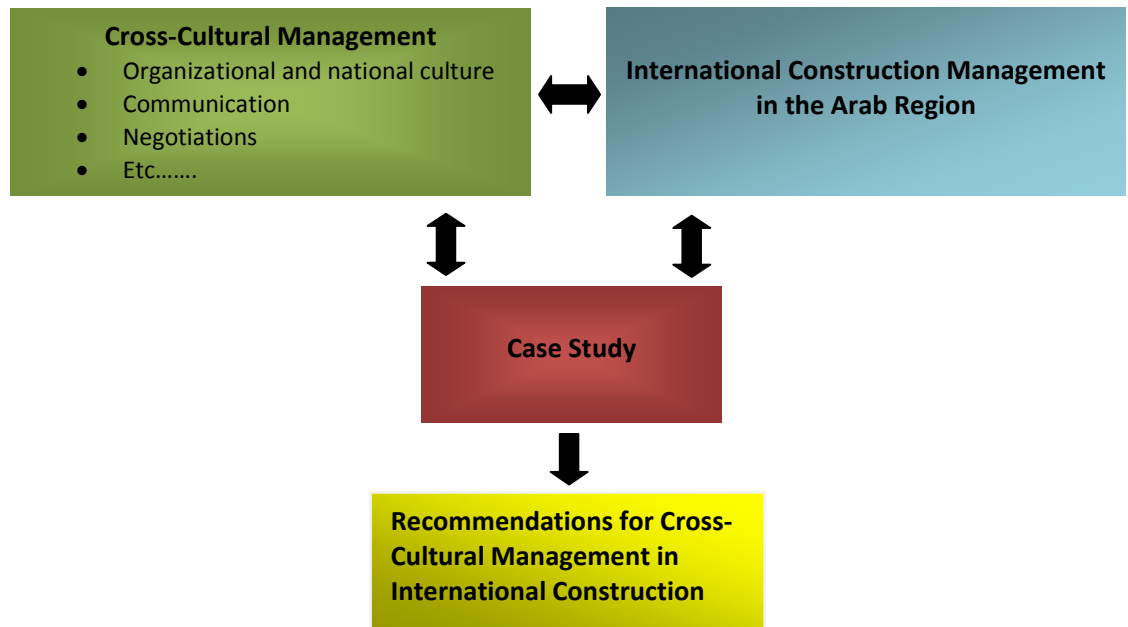
Fig.1. Research's Conceptual Model

2.9 Type of research project

Explorative

The research project is shaped as an explorative study. Different points of <u>view</u> will are explored, combined, and analyzed.

2.10 Methodology

The methods that are used in this graduation project are limited to four stages. The first stage involves the exploration of the situation. This includes literature studies and interviews to gain more knowledge about the described problem and possible solutions.

Four stages

The second stage involves setting up a theoretical framework. From the first stage a better abstract of the problem should emerge to help form a better approach to the problem and help reach the proper solutions. In this stage possible cases will be selected to further analyze the problem. Also the collecting of data will be more efficient. These two stages are to be completed in the first semester of this laboratory.

The second semester includes the stage of research practice by analyzing the collected data, interviews, and case studies. At which point a handbook would take shape. An illustration has been made to display this methodology in figure 1. Chapter 8 further explains how the research is executed and how the analyzing is conducted.

Explorative (literature Study & Interviews)	P1
Inventory & Depth (literature Study, Interviews &Cases)	P2
Analyzing collected data (Case study, Interviews & observation)	P3
Evaluation, Conclusions, & Recommendations	P4 &5
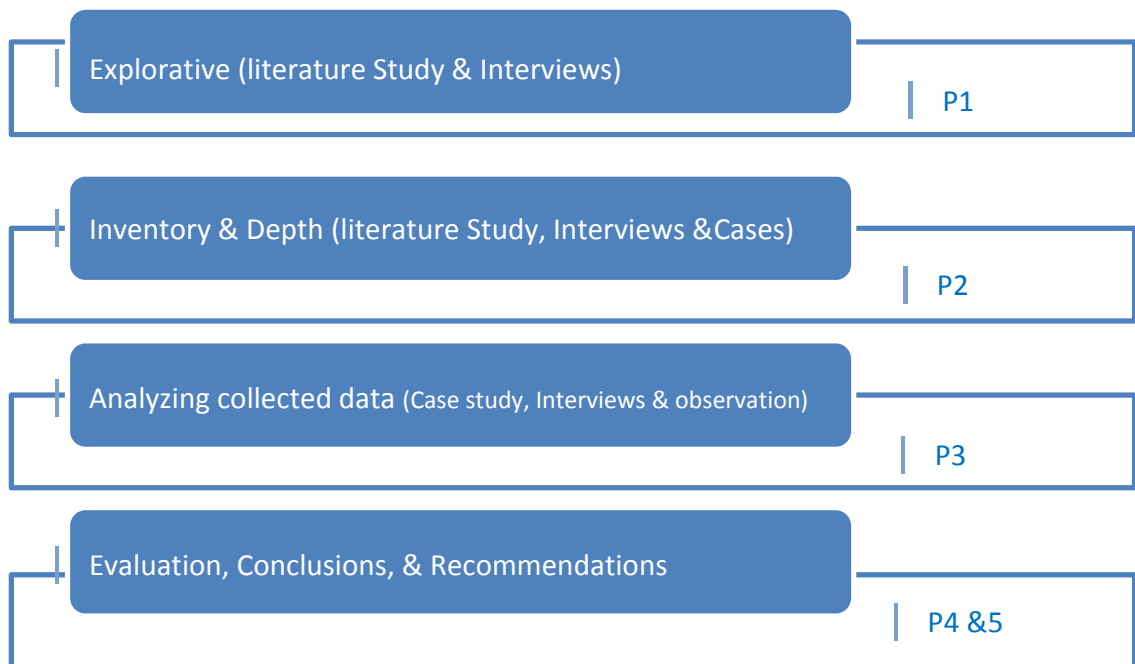
Fig.2. Illustration of methodology

2.11. Scientific domains

This research respects the following scientific domains:

- Construction management
- Social science

2.12. Mentors

Ir. R.P. Geraedts was kindly willing to guide as main mentor for this graduation project. He is an assistant professor in the department of Construction Process Innovation and also one of the two laboratory coordinators of Design & Construction Management a division of the Master track of Real-Estate & Housing at the Delft University of Technology (TU Delft).

As second mentor Dr. O. Kroesen was kindly willing to guide this graduation project. He is a professor assistant at the faculty Technology, Policy and Management at the Delft University of Technology (TU Delft). He's teaching particularly are on Ethics of Technology and Communicative interaction.

2.13. Graduation Company

In order for the graduation project to get a practical shape the student is required to do a part of his research in corporation with a company which makes part of the construction industry. The chosen company is DCE-ltd. Darwish Consulting Engineers is a highly professional, consultancy firm established in Cairo, Egypt.

DCE staff comprises a large number of engineers, planners, architects, economists, environmentalists, agricultural experts, etc.. who join forces and closely associate with many other expertise, such as field surveyors, ecologists, agronomists, financial analysts, and legal advisors - as required, to achieve all targeted objectives.

The challenges of international consulting, called DCE to establish a partnership with a distinguished international consulting firm; namely; ARCADIS of The Netherlands, since the 1995. As such, the client is provided with the benefit of worldwide experience adapted to local conditions. The contact person is Dr. Eng. Raouf A. Darwish, CEO of the company.

3

Culture

Culture is difficult to define

Culture is one of the most discussed definitions. There is no clear overruling definition of culture. Although the meaning of culture is almost understood by every person, formulating a define synonym is still a frontline of discussion for scientist. Exploring the different definitions of culture a summary could be made by bringing two of the clearest definitions together. These two combine the scattered attempts by a lot of researchers and gives an overall overview.

Culture is an integrated pattern of human behavior

According to the scholars of the National Center for Cultural Competence of Georgetown University, culture means:[13]

"An integrated pattern of human behavior that includes thoughts, communications, languages, practices, beliefs, values, customs, courtesies, rituals, manners of interacting and roles, relationships and expected behaviors of a racial, ethnic, religious or social group; and the ability to transmit the above to succeeding generations."

And according to scholars of the National Conference of State Legislatures the definition of culture is:[14]

A specific set of behavior, practices, and values

"A specific set of social, educational, religious and professional behaviors, practices and values that individuals learn and adhere to while participating in or out of groups they usually interact with."

The scientist and scholars of anthropology are the ones who mostly do research in social science through the cultural perspectives. John H. Bodley has looked at culture approaching it by an anthropological perspective. His findings are as follows:[15]

Culture approached by anthropology

Topical: Culture consists of everything on a list of topics, or categories, such as social organization, religion, or economy

Historical: Culture is social heritage, or tradition, that is passed on to future generations

Behavioral: Culture is shared, learned human behavior, a way of life

Normative: Culture is ideals, values, or rules for living

Functional: Culture is the way humans solve problems of adapting to the environment or living together

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[13] http://www.georgetown.edu 04-2008

[14] http://www.diversityrx.org 03-2008

[15] http://www.wsu.edu 04-2008

Mental: Culture is a complex of ideas, or learned habits that inhibit impulses and distinguish people from animals

Structural: Culture consists of patterned and interrelated ideas, symbols, or behaviors

Symbolic: Culture is based on arbitrarily assigned meanings that are shared by a society

Culture in dimension gives understanding in working value

While these are general meanings and definition of cultures, an attempt has been made to implement these different values in dimensions. These dimension would give an understanding by how culture influence the working values of employees, managers, leaders or other participants of organization existing in a specific country.

3.1 Hofstede's Dimensions of culture

Hoftede: Dutch Anthropologist

Determined patterns of similarities and differences

The Dutch cultural anthropologist Geert Hofstede[16] carried out in depth interviews with an extensive number of IBM employees in fifty-three countries. He determined patterns of resemblances and dissimilarities. He formulated his theory that world cultures differ along coherent, elemental dimensions. His final publication was a more manageable theoretical version: *Cultures and Organizations: Software of the Mind*. The focal point was not on giving culture the meaning as alteration of the mind, but merely on highlighting fundamental pattern of reacting. He assigned five dimensions and rated the countries and its individuals on manifestations by matching them to each dimension. He rated them from 0 to 100. These five dimensions are as followed:

Highlighting essential patterns of thinking, feeling, and acting

• Power-distance
• Collectivism vs. individualism
• Femininity vs. masculinity
• Uncertainty avoidance
• Long- vs. short-term orientation

Cultural differences manifest themselves in a culture's choices of symbols, value, etc.

3.1.1 Power Distance

Hofstede indentifies 5 dimensions

Power Distance Index (PDI) is the level where less authoritative members of organizations accept and expect the unequal power distribution. This represents inequality the uprising ladder of hierarchies. Inequality and power are elemental foundations of any civilization.

According to Hofstede, high PDI countries will have tall hierarchies and centralized power of decision-making in organizations with large differences in positions, rankings and wages. The executive is often seen as a benign dictator, and his commands should be followed without questioning.

PDI: extent of acceptation of unequal power distribution

3.1.2. Individualism

High PD countries tend to have centralized political power and tall hierarchies

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[16] Hofstede, G. *Cultures and Organizations: Software for the Mind*

Individualism (IDV) is the opposite of collectivism, which is the extent of individuals integrated in groups. In individualist societies ties between individuals are loose. Each individual is expected to look after him self and direct family. In Collectivist societies individuals are integrated into strong, interconnected groups, protecting each other in exchange for obedient loyalty.

Individualistic cultures value personal time, freedom, and material rewards. In family ties, the value of honesty and maintaining self-respect dominates. Individual social-economic interests and maintaining privacy is often a fundamental issue.

3.1.3. Masculinity

Masculinity (MAS) refers to the allotment between the genders. In masculine cultures, distinctions are made between the genders and these distinctions are also maintained. Cultures with less masculinity overlap the roles of the different sexes. Advancement, recognition, and challenge are often associated with masculinity.

3.1.4. Uncertainty Avoidance

Uncertainty Avoidance Index (UAI) shows the tolerated extent for uncertainty and indistinctness. Cultures avoiding uncertainty reduce the risk of disturbing situations by strict laws and rules emotions and energy created by anxiety also takes great part in UAI cultures. Uncertainty accepting cultures try to have as a small number of rules.

3.1.5 Long-Term Orientation

Long-Term Orientation (LTO). Principles related with Long Term Orientation are prudence and determination. Principles related with Short Term Orientation are commitment to social obligations, conservative, and protecting one's 'face'.

Hofstede summed up the shared beliefs of LTO cultures:[17]

• A steady society necessitate unequal relations.

• The family is the model of every social institute; therefore, elders possess more power than the young

• Honorable attitude to others comes from expecting the same honorable treatments.

• Virtuous manner in work is attempting to attain skills and edification, hard working, careful, enduring, and persistent.

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[17] Hofstede, G. *Cultures and Organizations: Software for the Mind*

Sidebar notes:

PD won't disappear quickly from traditional cultures

IDV: degree of integration into groups

Individualists have loose ties

In exchange of collectivism there is unquestioning loyalty

Individualistic cultures value personal time, freedom, challenge, etc.

Collectivist cultures value training, physical conditions, skills

MAS: distribution of roles between genders

LTO values: thrift and perseverance

STO values: respect for tradition, fulfilling social obligations, and protecting one's 'face'

In contrast with high LTO Asian countries, Hofstede describes Western countries as promoting equal relations, expected the same treatment as one treats the other, and self-dependency.

3.2 Arab World

Hofstede's research for the Arab world, shows that the Islamic faith has a significant role in people's beings.

Large Power Distance eighty and Uncertainty Avoidance of sixty-eight are prevalent for the countries in that region. They are very law-oriented with policies, laws, and regulations in order to lessen the amount of uncertainty. Nevertheless, wealth and power inequalities are grown in these societies.

Individualism is the lowest dimension for the Arab World ranking at 38, in contrast with a world average ranking of 64. The allocated description of Collectivist society manifests it self by these findings in this region.

3.3 The Netherlands

The highest dimension of The Netherlands is Individuality (IDV) with eighty. Individualism in the Netherlands shows a society with more individualistic attitudes and less tight relation amongst each other. Individuals are self-reliant.

Uncertainty Avoidance is the second highest with a grading of fifty-three. The society reduces the risk of uncertainty by endorsinf laws and policies.

Masculinity with 14 point is the lowest dimension. This low MAS Index shows a low level of differentiation between sexes. This value might describe a more nurturing society.
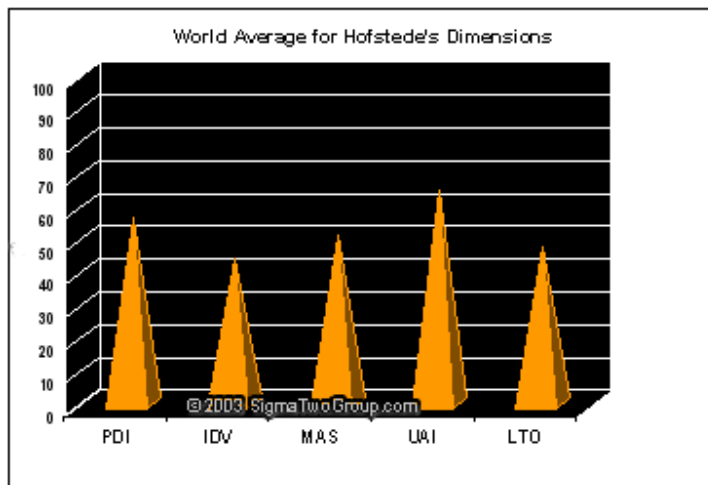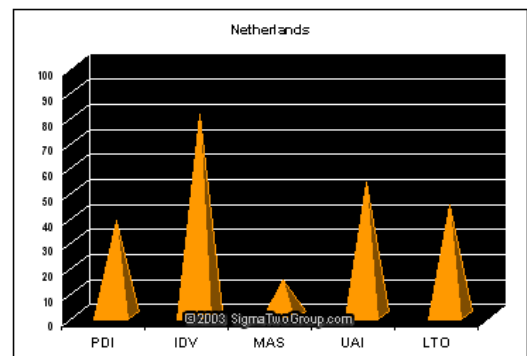
World averages shown above: PDI: 55, IDV: 43, MAS: 50, UAI: 64, LTO: 45

Fig.6. World Average for Hofstede's dimensions

3.4 Trompenaars's Dimensions of Culture

Trompenaars[18] defines culture as a mind-set for problem solving. He describes seven essential dimensions of culture.

3.7.1 Universalism vs. Particularism

In universalistic cultures people belief in the principle that codes, values and rules, take preference over particular needs and assert relations. Rules concern the society without any exceptions. People in particularistic society have perception that the idyllic society in terms of amity, amazing accomplishment. Rules are simply fundaments of interaction between people. Exceptions in rules in particular situation are not excluded. [19]

3.7.2 Individualism vs. Communitarianism

In individualistic societies individuals position the person prior to the community. Individual determine issues mainly by them self and look out for themselves and direct family Particularistic society, the dependence of each other defines the eminence of societies. All the people of the community serve the interest of each other.[20]

3.7.3 Specific vs. Diffuse

Individuals in specific communities analyze elements separately and finally putting them back together. The whole is seen as the sum of its parts. Interaction of individuals are mainly for purposes or well defined. Personal networks of relation are often smaller then their public relation networks. They also base their logics in numbers, contracts, and hard facts.

Individuals in diffuse oriented society begin with the whole and perceive separate elements in the perception of the sum. Every element is related to the other. This relationship is further important compared to each separate element. The total is more than simply the summation of the elements. Their personal network is much larger then their public. They do not alienate newcomers. Interferences in each other personal life's are basics in the interaction between individuals.[21]

3.7.4 Affective vs. Neutral

Showing emotions is well accepted in affective cultures. Hiding feedings and emotion is not considered as necessary. Cultures described as affective have the perception that less overt gestures of a neutral culture are less significant.

Displaying clear emotions in neutral cultures is seen as inappropriate. Being aware of emotion should not be a reason of not controlling it. People form neutral societies often

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[18] Trompenaars, F. *Riding the waves of culture : understanding cultural diversity in business* .

[19] Trompenaars, F. *Riding the waves of culture : understanding cultural diversity in business* .

[20] Trompenaars, F. *Riding the waves of culture : understanding cultural diversity in business* .

[21] Trompenaars, F. *Riding the waves of culture : understanding cultural diversity in business* .

have the perception that individuals of affective cultures are over emotional and often exaggerate. [22]

3.7.5 Achievement vs. Ascription

Achievement culture: status from what accomplished

Achievement refers to the status, which a person has by his accomplishments. Status is assigned on the origin of his actions. Individuals in achievement-oriented societies receive their status from what they have accomplished. They have to prove the worth of their status with repeating manner.

Ascription culture: status from birth, age, gender or wealth

An individual with ascribed status in a community is related to his position in the society or in an organization. Ascriptive societies relate their status with age, gender or birth. Accorded to his base of being, a person does not have, in order to maintain his status, repeatedly prove his achievements. [23]

3.7.6 Time

Structuring time

Sequential vs. Synchronic cultures
Two aspects are crucial in defining time orientation. The comparative consequence cultures have towards history, present, and future and also their method of structuring time. If time is structured in a line with each moment following the other, it is called sequetialism if time is structured in a cyclist manner and moving around time, it is called synchronism. [24]

Sequentialism: straight line

Synchronism: cycles

Past-oriented cultures
If a society is mainly oriented towards the past, outlook of the future is a replication of the past.

Sequentialism prefer planning

Present-oriented cultures
Societies that are defined as present-oriented will not append a great deal of value on past experiences or on future scenarios. The day by day experience directs the life of individuals.

Synchronic do several things at a time

Future-oriented cultures
An outlook of activities towards the future defines a future-oriented culture. Normally, close history is not seen as important as future situation of handling. An important issue in such cultures is planning. [25]

Day-by-day experiences

3.7.7 Internal vs. External

Planning constitutes a major activity

In internalistic cultures nature is seen as a from of mechanism. Nature is complex but it can be controlled. Fate and destiny have no consideration. Internal people see personal resolution as the initial key of every deed.

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[22] Trompenaars, F. *Riding the waves of culture : understanding cultural diversity in business* .
[23] Trompenaars, F. *Riding the waves of culture : understanding cultural diversity in business* .
[24] Trompenaars, F. *Riding the waves of culture : understanding cultural diversity in business* .
[25] Trompenaars, F. *Riding the waves of culture : understanding cultural diversity in business* .

Externalistic cultures see nature as an organic element. Humans should function in harmony with nature. Nature is dominant a people should except the outcomes of nature. Creating own fate is not considered. They are easily adapted to the external environment.[26]

3.5 Summary

It is clear that the definition of culture is a linguistic problem if one could express it in one punch line. Nevertheless, culture seems to be understood by any mature and social experienced person. Although the direct influence, or bounded urges from one's own culture seems to differ between cultures, dimensions as described give a better understanding and can be used as a lay-out for all cultures.

These dimensions defined by Hofstede and Trompenaars, give a better view in the mind-set of people in groups or organizations and in how people would behave in certain circumstances. Note that these dimensions are from a descriptive manner in a general way, and should not allocate individuals to specific behaviors in a prejudiced manner.

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[26] Trompenaars, F. *Riding the waves of culture : understanding cultural diversity in business .*

4

Cross- cultural Collaboration

Linear methods northern and western cultures

Nonlinear methods to southern and eastern cultures

Culturally sensitive approach

Perceptual field influence understanding

Communication and culture inextricably intertwined

Decision-making is highly centralized

Paradox international managers

Flexibility and informality in business relations

Monochromic & Polychromic

Frustrations particularly in negotiations and pressurized situations

While there are useful deliberations to be made in choosing to use linear or nonlinear methods, the problem exists of being presented in international context, disregarding the weight of cultural diversity upon their relevance. "A clear case for cultural sensitivity in methodological design and real dangers in simply transferring research methods from one country to another."[27] A successful international construction management organization needs to be based on a considerate and culturally sensitive approach to methodological design.

4.1 Communication

The current perception of communication is a cyclical process where individuals continuously exchange information, pending the converges of equally satisfactory levels of thoughtfulness. The overlap of perceptual fields influences the level of shared convergence, which can happen amongst people. As the perception of culture is mostly clarified using concepts comparable with perceptual fields, it is obvious that the topic of communication and culture is inextricably intertwined. They clarify the mind-set, ciphers of performance and prospects, which channel attitudes interpretation of messages.

4.2 Influence of Culture and Difficulties

Arab individuals are submissive towards decisions. Decision-making is extremely centralized in Arabic organizations. Communicating with Arabs must be done with the consideration of hierarchical status and titles. Arabic communities have great respect for authority, status, and hierarchies. International manager should be aware of this underlying. Despite respecting power and hierarchy, agility and lack of formality in business relations exists very much. These hierarchical protocols have a high potential in slowing down the decision-making process. For European individuals following hierarchical protocols and ladders, creates a lot of frustrations.[28]

Also time is an aspect. It is demonstrated by Loosmoore and Al Muslamni how mind-sets towards time are ethnically dissimilar, categorizing western societies as monochromic and Arabic societies as polychromic. Lack of formality and flexibility in business relations promotes a very controlled, time-structured loom to life. In polychromic societies it is ordinary for business matters to be delayed in order to create or reiterate good personal relations. Additionally, straightforwardness and alacrity in the pursuit of arguable issues is seen as thoughtless and offensive which must be circumvented when possible. They have observed the disturbances, which can appear between individuals of monochromic and polychromic cultures. It especially happens in discussions and situations under pressure.[29]

Cross-cultural collaboration is a fact for allot of projects, including construction projects. This kind of collaboration calls for additional skills for the project participant, particularly the construction/project manager. The complexity for this type of organization is likely to come from the cultural diversity.

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27 (Loosemore, 1999)
28 (Loosemore, M.& Al Muslmani, A.H., 1999)
29 (Loosemore, M.& Al Muslmani, A.H., 1999)

4.3 Negotiation

Basic Concept of Negotiation

Basic Concept of Negotiation refers to the perception of each counterpart in the negotiating process. Two opposite dimensions are projected, with the course of negotiators bringing the negotiating process on an integrative or a distributive manner. The supposition explaining distributive negotiation strategies is that a counterpart excels on the disbursement of the other. The other way around, the belief explaining integrative negotiation strategies is that both counterparts lay distinctive values on the matters of negotiations with the thought that each counterpart can get valuable bargains by giving a way less significant issues to acquire more important issues. Integrative negotiation implies mutual collaboration to enlarge each other's benefits. [30]

Distributive

The counterpart's objective is to ascertain domination in the negotiation. Negotiators obtain tough approaches, in quest of own aim or objective to increase the profit. Negotiators presume their own objective as a friction with the counterparts' objectives. Resulting in demonstrating negotiators' great self-concern and insignificancy for others. The objective is to cause the counterpart to changes stance and perception. This is accomplished by using guarantees or intimidations or contradictive by staying gracious and unbiased. Their ambitions can be lofty and firm, which makes them resilient of creating compromises. Instead of using their stance to the utmost level, negotiators can endlessly adjust their tactics build on the counterparts' handlings.[31]

Integrative

Integrative negotiators obtain a concessive method, concentrating on trading information aiming on recognizing the essentials for both sides and to create outcomes, which do good to for all counterparts. Negotiators embrace integrative attitudes to comprehend the essentials and significance of all counterparts. The aim is to make the most of the various objectives to create helpful concessions. During the process of swapping intelligence, each counterpart act on the point of view of the other counterpart followed by adopting original position. They accomplish compromises by use of inventive problem-solving methodes in order to create results, which increase the extent of the incentive accessible to all.[32]

Most Significant Type of Issue

Most Significant Type of Issue displays the way of spending time on discussions. Negotiators using an agenda or program concentrate on particular issues of the project stressing out the delegation of information concerning different outcomes. Negotiators with agendas have the perception of subjects being peripheral to the link. The other way around, negotiators **Creative** with a maintained focus on personal relation concentrate on the connection that subsists among the counterparts. A lot of effort is used in order to get acquainted with the counterpart.[33]

Basis of Trust

Spend more time discussing

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[30] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)
[31] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)
[32] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)
[33] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)

Taking feat to respect agreements, which are accomplished, is the soil of trust amongst counterparts. Trust offers the base on which counterparts can cooperate. On the other hand, negotiators differ between various countries, understanding that trust will let counterparts to carry out their commitment since there is a contract and the penalties of jurisprudence enforce it. This, despite the fact that counterparts trust the other to comply its commitment because the relationship that exists.[34]

Form of Agreement
This aspect explains the favored form of agreement among the counterparts. They are either official black and white contracts or spoken agreements. Official signed contracts evidently indicate preferred counterparts deeds. Informal agreements frequently contemplate the social context of relations stimulating commitments as outcomes of common relevance amongst eachother.[35]

Below a combined matrix is shown with the different dimensions of negotiation and communication.[36]

Dimensions negotiation and communication		
1. Basic Concept of Negotiation	Distributive	Integrative
2. Most Significant Type of Issue	Task-based	Relationship-based
3. Selection of Negotiators	Abilities	Status
4. Influence of Individual Aspirations	Individualist	Collectivist
5. Internal Decision-making Process	Independent	Consensus
6. Orientation Toward Time	Monochronic	Polychronic
7. Risk-taking Propensity	Risk-averse	Risk-tolerant
8. Basis of Trust	External to the parties	Internal to the parties
9. Concern with Protocol	Formal	Informal
10. Style of Communication	Low-context	High-context
11. Nature of Persuasion	Factual-inductive	Affective
12. Form of Agreement	Explicit	Implicit

Table. 2. dimensions of negotiation and communication

4.4 Summary

Basic Concept of Negotiation refers to how counterparts experience and conduct the negotiating process. Cross-cultural collaboration calls for additional skills for the project participant, particularly the construction/project manager. The complexity for this type of organization is can be increased by the cultural diversity.

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[34] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)
[35] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)
[36] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)

5

Managerial effectiveness in construction

Management impact on level of productivity

It is generally accepted that the effectiveness of construction managers is a of the essence in the success of construction projects. A number of aspects were mentioned (Enshassi A.& Burgess R., 1991) where managerial effectiveness should include: team building, goal emphasis and help with work. Management has direct and indirect influences on the extent of productivity. First of all, a direct influence which can be used by planning and controlling construction activities. Followed by an indirect influence that can be attained by excellent coherent relations amongst managers and their employees, which can enhance impulse labor services. Enshassi and Burgss revealed the necessary for justified handlings, with consistent delays of projects, usually lines up with the ineffectiveness of managers on construction projects. Some researchers imply that cultural diversity of project organizations in the Middle East has a substantial influence on managers' effectiveness. In addition, managers' understandings of cultural diversity should be consequent in process management.[37] For the purpose of this research, the effectiveness of construction managers can be defined as follows: effectiveness of managers is their complete involvement with the reached level of productivity in construction projects.

Good interrelationship

Ineffective managerial practice: delays

5.1 Process of Decision-making

Indentify

The decision-making process starts with identifying the problem, particularly a divergence between a vacant and a preferred. So managers must make a contrast between their existing shape of affairs and some values. When a manager has recognized the dilemma, which needs consideration, the decision norms, which will be imperative in solving the dilemma, should be identified. [38]

Criteria

Allocate weights

Each criterion is not all equally important. So it is essential to allot weights to the matters listed in the standards to apply their comparative priority in the decision. The decision maker registers the substitutes that might do well in resolving the predicament avoiding appraising these options.[39]

Alternatives

Analyze

When the alternatives are identified, the decision maker must analyze each one of them. The potencies and limitations of each alternative befall clear as they contrast with the criteria and norm customized earlier in the process. Each alternative is evaluated by appraising it to its criteria. Then the vital deed of selecting the paramount option from those lists and assets follows up.[40]

Selection

Implement

Appraise

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[37] (Enshassi A.& Burgess R., 1991)

[38] Robbins, S.P., DeCenzo, D.A. *Fundamentals of Management*

[39] Robbins, S.P., DeCenzo, D.A. *Fundamentals of Management*

[40] Robbins, S.P., DeCenzo, D.A. *Fundamentals of Management*

Although the choice process is completed in the previous phase, the decision might still not succeed if it is not implemented appropriately. Therefore, this step is concerned with putting the decision into action. Decision executions include assigning the decision to those one who it has an impact on and commit to the decision made. The final step in the decision-making process evaluates the consequence of the decision to make out whether it has solved the problem. This figure illustrates the process of decision-making.[41]
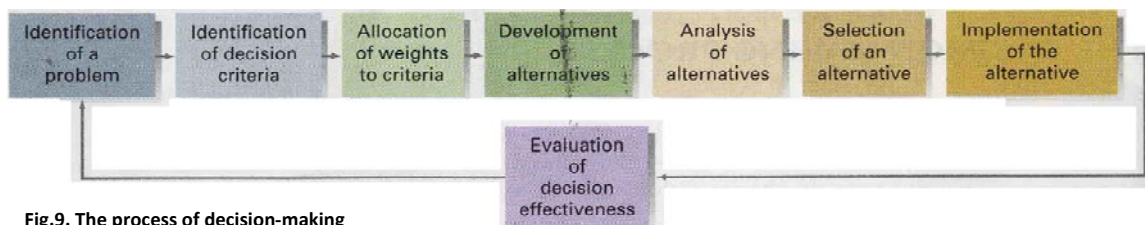

Fig.9. The process of decision-making

5.2 Effects of Culture on Decision-making

Dealing with a cross-cultural group is an incredibly sensitive issue due to its diversity of cultural, education, technology, and politics. These dissimilarities construct a working situation, which needs managers who can alter their fashions and deal with unforeseen problems.

Reacting to external world stimuli

Cultural competence

Understand culture: predict behavior

Determination and reaction could be the central basics of decision-making occurrences, which engage the processes of thoughts and responding to the outside world incentives. Culture edifies fondness and appears in how individuals act, believe, and judge. Nonetheless, to handle cultures and actors' diversities successfully, it is crucial to get hold of cultural proficiency that is a perception, which assists surmount the ordinary obstacles forced by the overt elements cultures to understand its principal fundamental postulations. When cultural proficiency is well read, it is likely to patch up the actors' latent cultural divergences. Still, to comprehend others culture and foresee its actions, it is essential to recognize its deeper matters since they signify the dimensions of cultures and distinguish from other cultures.[42]

D-M possesses strong cultural component

Recognize

Thus, decision-making processes have a strong cultural element that can induce the decision approach, mind-set, and perception of decision makers. Nevertheless, it is vital that the description of standards, morals, and ethics can clinch with the cultural diversity's outlook of every actor caught up in the process of making decisions. So, decision-making process should contain a well-understood model for evaluating ethical problems founded on the actors' cultural orientations. A successful decision maker must identify and comprehend cultural dissimilarities within an organization, contestants or external associates.[43]

Individualism and collectivism have been treated more specifically

In cross-cultural psychology, the mainly the dimensions individualism and collectivism are analyzed. Individualistic societies are distinct by impassiveness with relations and community. The individual views himself as somewhat self-sufficient. In dissimilarity, collectivist societies emphasize the significance of contact, relations and rank inside the community. Individualism-collectivism is an exceptionally wide aspect utilized to distinguish

Three ways of influencing D-M

Perception

Strategies and alternatives

Selection

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41 Robbins, S.P., DeCenzo, D.A. *Fundamentals of Management*
42 (Oliveira,A., 2007)

43 (Enshassi A.& Burgess R., 1991)

cultures. Various features of individualism and collectivism are looked upon more exclusively.[44]

Individualistic principles and collectivist principles induce peoples' decision making in three ways. These standards induce mainly the perception of the problem. Followed by the generation of strategies and alternatives. Finally, a selection is made of one of the alternatives (see Figure 3)[45].
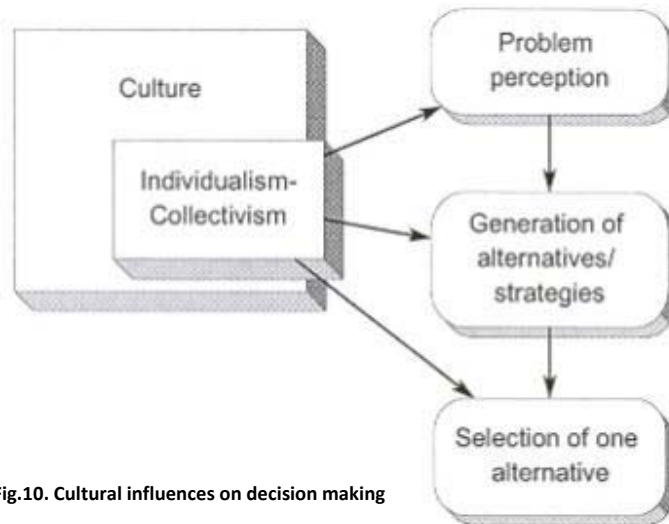
Fig.10. Cultural influences on decision making

Culture as guiding principles

The decision maker and weighs up essential factors of a predicament. Cultural prospects and principles are signified in the person's mind and could take action as a channel for values for the selection of particular vibrant decision-making approaches. Principles indicate various decision-making methods, which can be used.

Missing theoretical models

Theoretical models are absent from which can produce and examine certain. The following model by Guss (Figure 5)[46] is a try to portray such hypothetical beliefs. According to this figure, individuals with individualistic values undertake the prevention of tension by controlling conditioning examination and assembly information. Guss defines them as "achievement-oriented and willing to take risks, resulting in an expansive-decisive strategy."

Cross-cultural comparisons

Cross-cultural comparisons illustrated that individuals in individualistic societies favor effective, forward and challenging approaches for solving conflicts possess more poise in their private decisions and can, and for that reason, they are strong-minded and chancy in comparison with individuals in collectivist cultures.[47] Individuals with collectivist ideals consider more the social facets of problems and.[48]

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44 (Güss, C. D. 2002)

45 Güss, C. D. 2002)

46 (Güss, C. D. 2002)

47 (Strohschneider, S. & Güss, D. 1999)

48 (Strohschneider, S. & Güss, D. 1999)

Collectivists are responsive to communal consequences of their dealings and pursue more protective methods. They value safety, and avoid risks[49].

Fig.11. Relationship between cultural value orientations, abstract and concrete decision making strategies, decision-making success, and other possible influences. (The solid arrows stand for a positive relationship between variables, the broken arrows for a negative relationship, the curvilinear arrows for a unclear relationship.)[51]

The Figure also shows distinction of the individualism-collectivism dimension in horizontal and vertical lines. The vertical and horizontal values increase or decline the approaches derived from individualistic or collectivist dimensions. For instance, an Individual having individualistic values prefers a decisive and expansive.[50]

This figure does not only show that decision-making successes are just reliant on the demands of the context or the valued dimensions, it also shows the diversity of peoples' mind-set, forecasting, or allocating values.

Dimension in vertical and horizontal planes

Demands of decision problem

Cultural value orientations

Individual differences

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49 (Triandis, H. C. 1994)

50 (Güss, C. D. 2002)

5.3 Style of Construction Management in the Arab Region

Seniority, rather than merit

Creating social relationships

Social qualities implemented in organizational development strategies

Islamic religion and the integrated role of family influence life society and interpersonal relationships. Arab managers often concentrate on seniority and family ties, instead of academic qualifications or merit. In addition to that, a lot of managers often concern about conducting social relationships in an organization, instead of the achievements of their tasks. The staff spend a great deal of their working time meeting guests.[51] Ali A. (1996) has done a study about the social qualities and how they are implemented in organizational development strategies (Table 4)[52].

Hi-hi paradigm

High employee and high task orientation

Satisfaction

Performance

Enshassi A. and Burgess R. (1991) have evaluated the effectiveness of Arab managers by implementing a hi-hi paradigm. A high-high leader is one who combines both high employee and high task orientation. According to them there would be a positive association between leaders who are high in both employee and task orientation and subordinates' satisfaction and performance. It resulted in to four clusters as shown in Table 5.

Table 6 displays the important characteristics a construction manager should have to achieve managerial effectiveness according to Arab professionals.

Qualities	Implications for OD strategies
Displays flexibility in incorporating new elements into traditional structures	Highlight the advantages of new methods in facilitating growth and achieving goals
Adapts to an ever-changing environment	Facilitate adaptation of new techniques
Infatuation with idealized forms	Relate intended changes to the experience of idealized Arab leaders to emphasize that these leaders were gifted and were agents of change
Love of normative and philosophical arguments	Discuss the philosophical dimensions of the new approaches/techniques
Politeness and enthusiasm	Encourage participants to be involved in the change process and identify possible avenues for productive conduct
Optimistic outlook	Identify the benefits of changes in the long term and encourage participation in designing programmes after a short period of orientation
Belief in self-development	Encourage participation in the change process after a feeling of trust is established
Consultative tendency	Consult with subordinates and participants on matters that affect them
Tendency to emulate and identify with the hero image	Consultant/practitioner should display the image of protector who has courage in making decisions and is firm and responsible
Deep sense of family and primary group loyalty	Foster social relationships among groups, meet group needs and emphasize that commitment to organizational goals benefits everyone
Self-awareness (social and individual)	Highlight the importance of involvement in organizational analysis by identifying weaknesses and recognizing outstanding performance; place emphasis on the familial aspects of the group and that involvement in the process of change fosters professional growth and development
Respect for personal dignity	Emphasize personal relationships and the value of identifying with others in need of help and assistance
Avoids displays of public conflict	Encourage intensive discussion of the problems to be solved and highlight the importance of an open agreement/disagreement and that the goal is to recognize group cohesiveness

Table 3. Societal qualities and their implications for organizational development strategies

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[51] (Abdul-Khalik, 1998)
[52] (Ali, 1996)

They concluded their study into a model as shown in Figure 3
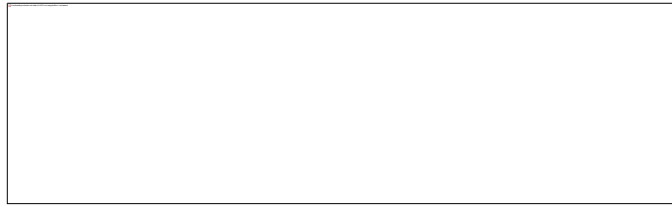
Table 4. Classification of site managers' style

	Mean value	Priority
Ability to plan	1.22	1
High technical ability	2.32	2
Ability to get on well with people	2.75	4
Willingness to listen to others	3.28	8
Ability to be tactful	3.26	7
Enthusiasm for work	2.65	3
Understanding cultural variations	3.33	9
Ability to cope with stress	3.21	6
Understanding work forces' languages	3.00	5

Table 5. Characteristics of managers' effectiveness
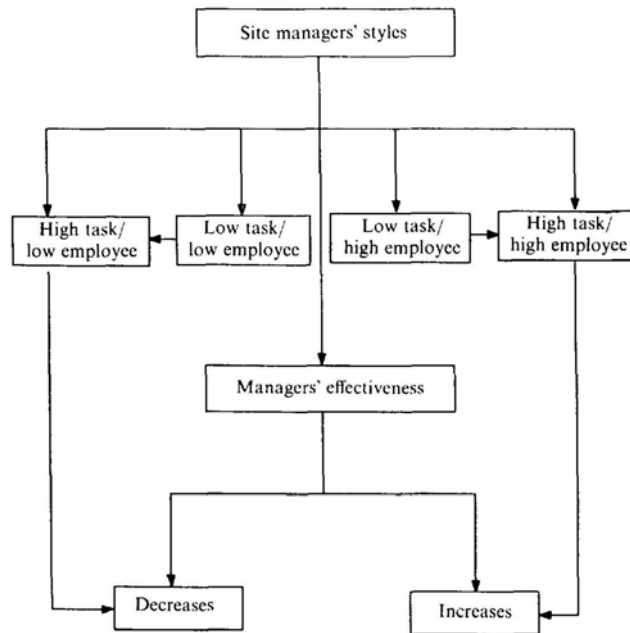
Fig.12. The relationship between managers' styles and their effectiveness

5.4 Summary

In general the process of decision-making does not differ from culture to culture, but the elements that influence the process do; so does culture shaping the way a manager functions. Neglecting the values of other parties in the process or practice could result in clashes, which could easily be avoided by a consequent and context-adapted style of management.

It is generally accepted that the effectiveness of construction managers is a vital component in the success of construction projects. Management has a direct and indirect impact on the level of productivity. Direct by planning and controlling construction activities and indirect by achieving good interrelationship between managers, participants, and subordinates that raises motivation of work forces.

6

Cross-Cultural Management in Construction Industry

Construction industry domestic nature

Despite the fact that the construction industry generally stayed domestic in nature, compared with other industries, it is evidential of growing international traffic in the construction services. This international expansion will amplify the cultural variety of construction project organizations and in so doing generate managerial challenges.

Generic investigation

Because cultural diversity impedes along with the communication process with diverse extents and in various methods through various cultural margins, it is vital to oppose to the lure of generalization in undertaking a basic exploration.

Construction industry becomes more global

The somewhat depleted manner of research pursuit overseas is expected to be an indication of the construction industry's national perspective. Conversely, it is logical to imagine that as the construction industry develops globally, inquiries will too.

Cross-cultural management for international construction

The call to acknowledge and handle different cultures is a critical factor in this age of internationalization. Cross-cultural management calls for the organization and direction of a variety of cultures.[53] The participation of repeatedly considerable organizations in construction overseas is defined as `international construction'.

Experience from projects by 20th colonial governments

Therefore, to thrive in the global competition, construction corporations have to manage accurately and competently with the involved cultural diversity. Global construction is not a completely new concept. It has its origins in the several military settings and public works projects undertaken by colonial governments even before the 20th century. It is mostly true through the two world wars when infrastructural projects were initiated agencies of expatriate engineers, or by engineers who acted as consultants to oversee the works of local labor.[54]

Expatriate engineers

The businesses, initiated by the British Colonial Office in Asia and Africa, are decent historical illustrations of outer-boarder construction works carried out. Post World War 2, international construction activities pursued the similar outline perceived between the two world wars.

Major infrastructural development after World wars

So the grow of demanding skilled designer and constructors arose. The span for internationalized construction in third world countries increased significantly followedby the appearances of international financial institution. Several contractors got involved with projects financed by these institutions.[55]

Emergence of international funding institutions

Project managers skills to react to different cultures

Petrodollar boom

The petroleum boom in the Arab region in the seventies as well shows in international construction activities a patent development. Evidentially by the latter today's' construction companies seek overseas opportunities of conducting projects. As a result, they gradually have to deal with different cultures and people. Project managers working in such circumstances ought to develop proficiencies to interrelate with people influenced by

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[53] Pheng, L. S., & Leong, C. H. (2000)
[54] Pheng, L. S., & Leong, C. H. (2000)
[55] Pheng, L. S., & Leong, C. H. (2000)

Cultural problems

different cultural precedence. Attributes, which are vital for project managers in these competitive projects, are:[56]

- effective communication skills;
- effective leadership skills;
- good interpersonal skills;
- adaptability and flexibility;
- functional/technical strengths

Lacking these attributes, project managers on abroad projects can be deterred by cultural conflicts that can cause to preventable losses and costs. However, even as effective cross-cultural management can enhance participation on projects abroad, it does not stand alone on playing a substantial aspect that creates the success of partnering. Several aspects evenly are important can add in the require intensity for construction services in hosting countries. As an example, the supply of capital, or national and international economic trends, activities of competitors, materials and labor, organizational culture, or laws and regulations.[57]

The figure below illustrates the relation between cross-cultural management and the construction industry.[58]

Fig.13. The relationship between cross-cultural management and the construction industry

Cross-Cultural Management
- Organizational and national culture
- Communication
- Negotiations

⟷

International Construction Management
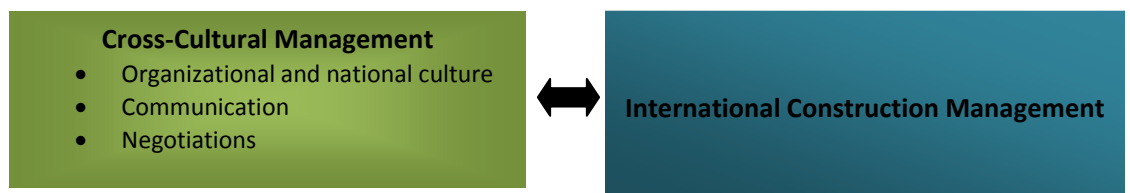
Even though attention focused on cultural issues are conversed extensively in construction, the formal studies are intermittent. Inquiries and studies are essential to reduce the problems in international perspective.

The construction industry is multifaceted and complicated, and to progress, the most important construction projects in emergent countries are regularly conducted in joint ventures with construction firms from these countries. International collaboration can be and assistance for less developed countries. Developments in cross cultural economies brings opportunities to develop products with proficiency and experience in a yielded approach.[59] In result of the globalization of the construction industry, supplementary occasions for contractors exist to participate on these projects. Then again, international projects increase risks compared to domestic projects. Contractors willing to participate find these risks intimidating.[60]

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[56] Pheng, L. S., & Leong, C. H. (2000)
[57] Georgy M., Ibrahim M., and Abdel Gawad M. (2008)
[58] Pheng, L. S., & Leong, C. H. (2000)
[59] Georgy M., Ibrahim M., and Abdel Gawad M. (2008)
[60] Georgy M., Ibrahim M., and Abdel Gawad M. (2008)

Fig.14. International Risk Break Down Structure
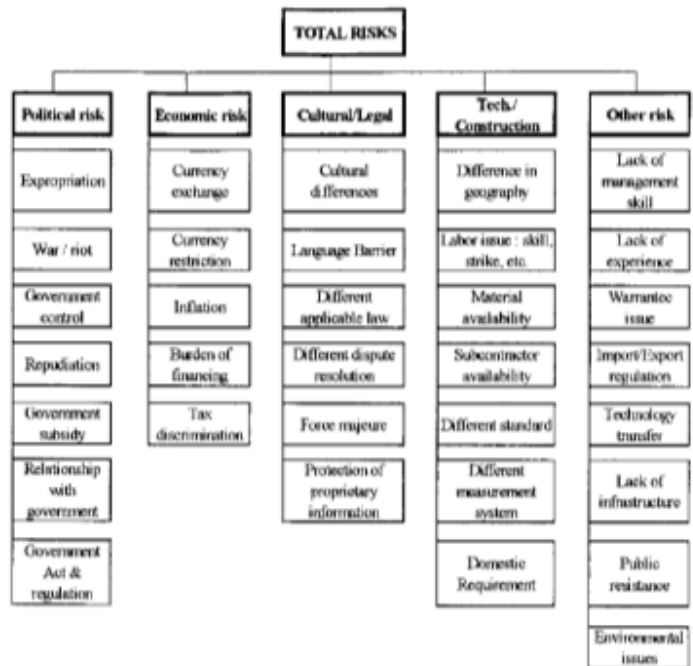
Industry sensitive to regional conditions

For instance, international construction is quite sensitive to local circumstances like currency exchange, restrictions, currency devaluation, cultural differences, or modifications in regulations or policies. Various scholars have identified the risks that have to do with international construction projects. The classification displayed in figure 14 breaks down international construction risks into five categories. [61]

RBS international construction projects

International projects are normally rapid but are in need of additional time, and so is the involvement of various participants more. Collaboration between the participants needs clear project definition and objectives are slanted to alteration while the project develops.[62]

Clear project definition

Greater cultural understanding

Cross-cultural collaboration considers better cultural understanding and sensitivity focused on adoptability and personnel management by participants. Personal clashes are included, like communication and the understanding of cultural dissimilarity. Recognized in the mainstream is the fact that the local environment of a region as well induces the construction industry particular areas.

Must be cross-culturally competent

During international construction projects, participants ought to be skilled cross culturally. Construction professionals participating in international projects ought to identify the expectations and actions of others. Cultural matters are expected to add conflicts international projects and multiply complexities in the project management.[63]

Cultural issues contribute to conflicts

As Broster said: ''Without understanding there can be no friendship. If one wishes to understand a people one must identify oneself with them. One must study their language, customs and culture ... and they will be one's friends''.[64]

Summary

Cultural diversity can do considerable damage to the collaboration of a global construction project. In global projects cultural diversity is hard to avoid or ignore. An enhanced consideration of influential cultural aspects can help to decrease and manage conflicts in global construction projects. Identifying and prudently controlling cultural dissimilarities, might allow enhancements in the competence and efficiency of these projects.

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[61] Georgy M., Ibrahim M., and Abdel Gawad M. (2008)

[62] Georgy M., Ibrahim M., and Abdel Gawad M. (2008)

[63] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)

[64] Pheng, L. S., & Leong, C. H. (2000)

7

Construction in the Arab Region

7.1 Construction in the Arab Region

Developments away from traditional contracts

As lately sum of developments have taken distance from traditional contracts, a joint venture for the $18 billion *Al Raha Beach project* in Dubai, was signed by *Laing O'Rourke* and *Aldar.* The attention it got was based on the design and build contracts' proliferation.[65]

Contractors pursue transparency with developers

Contractors initiated the pursue of conformity that tender joint accountability and better transparency with developers. This change is gradually becoming further remarkable in Dubai, presenting a decrease of costs, faster completion, tenancy and purging of the traditional accountability expenditure, in the course of a direct procurement model. *Dubai Festival City* is conducted using the design-and-build contract by *Al Futtaim Carillion*.[66]

Client's decision on contract form is related to control

The Owners induces this choose, relying on the extent of control they desire to allocate. Traditional contracts give the owner a lot of control over his designers. Like this the owner manages and pays them. With this control he directs them to his desires A mosque, to use an example is more likely to be constructed by such contracts since it offers close control by the owner.

Design & Build popular in UAE

The design and build is becoming more popular as a form of contract in the UAE. Below a summary[67] has been made by C. Sell on the site of www.arabianbussines.com for other construction contracts and forms implemented in the Arab region.

Lump sum: most popular form

Lump sum/Fixed price contract - One of the most popular forms of contract, this sees the work carried out at a specified price. With massive fluctuations in materials prices, this has come into question, as contractors are at a disadvantage and stand to lose sizeable sums over the course of a project.

Re-measured: estimated quantities with unit price

Re-measured contract - This contract is based on re-measurement whereby the consultant estimates the quantities required for the construction and the contractor commits to the unit price, which defines the initial tender price and quantities of materials used by the contractor. This may change, depending on the quantities of material used.

BOT: Integrated partnership by design, construction, operation, and maintenance

BOT - The build-operate-transfer (BOT) model is an integrated partnership that combines the design and construction responsibilities of design-build procurements with operations and maintenance. It is commonly used for plant projects.

Cost-plus contracts- A move away from fixed-price contracts, this takes into account price fluctuations and other added project costs. This is recognized as a far more collaborative approach to construction.

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[65] http://www.arabianbusiness.com (Christopher Sell 22 September 2007)
[66] http://www.arabianbusiness.com (Christopher Sell 22 September 2007)
[67] http://www.arabianbusiness.com (Christopher Sell 22 September 2007)

Cost-plus: collaborative approach

NEC3: Developer and Contractor sharing risks

Design & Build: components are packaged into a single contract

UAE largest construction industry

Fragmented industry

Construction claims disruptive and unpleasant

Claims contribute to delay and increasing costs

NEC3 - A form of contract that says the developer and contractor share the risk. Believed to be an improvement over more traditional forms of construction contracts due to its clarity flexibility, and simplicity. Its center of attention is designed to enhance the partnership among the project manager and the contractor, and endorse them to resolve issues, which might   deter   progress   or   amplify   costs,   as   they   arise.

Design and build - One entity performs both the design and construction under a single contract. Often the design and build contract is awarded by various development other than competitive bidding. Design and build varies from traditional contracts in two customs First, the design and construction works are parceled into a single contract. Second, the particular contract is not inevitably granted to the lowest bidder behind competitive bidding.

7.1.1 Occurring Problems

The construction industry in the United Arab Emirates is considered the biggest on its own standing industry. Thereby it is also extraordinarily complicated and the largest fragmented industry since it includes multidisciplinary participants. Due to its diverse and complex nature, claims seem to obstruct the completion of construction thereby causing delays in realizing projects.

Construction claims are by numerous project participants seen as the most disruptive and unpleasant events of a project.[68] In UAE, construction claims, are immediate outcomes of the enduring enlargement of the construction industry in that country. In general, claims are common in construction projects and can happen as a result of several reasons that can contribute to delaying a project and/or increasing its costs. Finishing a project on schedule is a difficult task to accomplish in the uncertain, complex, multiparty, and dynamic environment of construction projects.

Zaneldin (2006) has done a study of the types of the construction claims in UAE. He has analyzed 124 claims of projects in the Dubai and Abu Dhabi. The outcomes are shown in Table 6.[69]

Also has he analyzed the causes of these claims as shown in Table 7.[70]

Types of claims	Importance index (%)	Rank
Changes claims	60.5	1
Extra-work claims	60.2	2
Delay claims	51.1	3
Different site conditions Claims	40.5	4
Acceleration claims	39.1	5
Contract ambiguity claims	32.7	6

Table 6. Ranking of each type of claims based on their frequencies

Zaneldin analyzed 124 claims of projects (types and causes)

[68] (Ho SP, Liu LY., 2004)
[69] (Zaneldin, 2006)
[70] (Zaneldin, 2006)

Causes of claims	Importance index (%)	Rank
Change or variation orders	55.0	1
Delay caused by owner	52.5	2
Oral change orders by owner	51.4	3
Delay in payments by owner	48.9	4
Low price of contract due to high competition	48.6	5
Changes in material and labor costs	46.1	6
Owner personality	45.1	7
Variations in quantities	44.7	8
Subcontracting problems	44.0	9
Delay caused by contractor	43.7	10
Contractor is not well organized	43.7	10
Contractor financial problems	43.7	10
Bad quality of contractor's work	42.6	13
Government regulations	40.1	14
Estimating errors	39.1	15
Scheduling errors	39.1	15
Design errors or omissions	38.4	17
Execution errors	37.7	18
Bad communication between parties	37.7	18
Subsurface problems	37.0	20
Specifications and drawings inconsistencies	35.6	21
Termination of work	35.6	21
Poorly written contracts	33.8	23
Suspension of work	33.8	23
Accidents	33.1	25
Planning errors	32.7	26

Table 7. Ranking of each cause of claims based on their frequencies

Another study has been done concerning the construction management in Kuwait. They concluded a sum of dissatisfaction pointed out by the owners towards the performance of the project management.[71] They are as follows:

Kuwait study shows:

-Limited experience in PM

-High cost in international joint venture

-Poor performance

- Lack of experience in value engineering, claim prevention, etc.

- Poor qualifications and limited experience of local PM/CM firms in Kuwait;
- High cost of such firms especially in joint venture arrangements between local and international firms;
- Limited quantitative benefits gained from such companies in previous projects;
- Poor performance of previous and current projects in terms of increased total project cost and completion time;
- Lack of experience in specialty areas beyond project planning and control such as value engineering, claim prevention, contract and risk management, etc.

7.2 Construction Law

FIDIC Fourth Edition contract of choice

The FIDIC Fourth Edition is the contract form of choice in the UAE. The flexibility, which offers valuing scope changes and consequential re-scheduling, are seen as major advantages. A less attractive side is its obsolete and difficult to understand language, which can make the consequence of difficult to clarify. This is mainly the case with forerunners to claims for extra money and time.[72]

Increased GMP awarded contracts

In the UAE construction industry growing numbers of contracts signed on the basis of a guaranteed maximum price (GMP). GMP offers an early launch on site not giving up realistic

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71 (Kartam, Al-Daihani, & Al-Bahar, 2000)
72 http://www.dentonwildesapte.com (01-02-2008)

GMP incentivizes Contractor to be efficient

price guarantees. It stimulates the Contractor to be economical. It also makes sure that the Developers' design team stays to the design development stages.

FIDIC Fourth Edition difficult to adapt GMP

Some professionals worried about idea that any construction contract ought to be based on the FIDIC Red Book (4th Edition) in the UAE. Despite the acknowledgement of the FIDIC does not swiftly adapt to a GMP, cost reimbursable or target cost contract.[73]

Tricky procedures for claim notification

Engineer entitled to reject the claim outright

7.3 Construction in Egypt

UAE Civil Code: neither party should act in bad faith

The construction sector contributes largely to the Egyptian economy and is the most rapid growing sector. An estimation of this growth is at an average of twenty percent per annum since the eighties. The unending demands for housing and infrastructure projects contribute to that. One of those projects is the Greater Cairo Wastewater Project, one of the biggest sewerage developments in the world. Also the 88.5 billion US dollar South Valley Development project is considered to be the largest project in Egypt. This projects objective is to develop an alternative delta along the Nile. The scope is to shuffle metropolitan communities to reduce the heavy congestion in the big cities.

Egyptian construction sector major contribution to economy

Annually growth of 22%

Material mostly needed for the construction industry is manufactured locally. Local cement production consisting of twenty million tons yearly and adhering above seventy percent of national demand is estimated to amplify over the upcoming ten years fitting government investment in the industry. Private companies are allowed to contend in the manufacturing of cement, which mainly was in the hand of the public sector. The construction industry is likely to prolong its development in the years to come as an outcome of prolonged private and government finance, estimated to be twenty billion Egyptian pounds yearly[74]

Heavy government investment

Upward trend privatization

Globalization accommodates a lot of local companies to compete internationally. To stay competitive, innovative forms of business development and cooperation become more ordinary in practice. An inventory of these innovative forms would characteristically contain local maturity, assets and purchases, and joint ventures (JV. Joint venturing mainly developed to be an appealing alternative of collaboration among local and foreign companies[75]. Essentially, a joint venture is a business formation by different companies to realize a particular objective[76]. A repeated assumption is that the principle of a joint venture is to layout balancing assets of already presented companies.

Globalization allow competiveness internationally

Innovative business development

As of for multinational companies (MNC) standpoint, a joint venture assists decreasing the big economic and political risks usually connected with overseas projects. Unsteady local authorities, and unpredictable currencies mainly cause these risks. Joint ventures with local companies might be a method in which MNC can please host authorities' requirements for local partaking and tenure in the management of ventures inside their restrictions. The local partner generally joins a joint venture with different or may be opposite scopes. For instance, this undertaking can be appealing due to its providing access to technology. Furthermore, transfer of technology most likely add up to the mainly vital motive for which companies in developing countries want joint ventures with companies in technologically superior and developed countries.[77]

Joint venture increased in international cooperation

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[73] http://www.dentonwildesapte.com(01-02-2008)

[74] http://www.nationsencyclopedia.com, (01-02-2008

[75] (Nasser and Kashishian, 1997)

[76] (Gillespie, 1990)

[77] Georgy M., Ibrahim M., and Abdel Gawad M. (2008)

Comparable with other industries, various joint ventures have been set up to accomplish various considerable construction projects, overseas and in Egypt. Conversely, these projects did not consistently succeed. Preceding inquiries pointed out that a great sum of construction joint ventures not succeed to reach the aims and goals that were initially established. In developing countries, the percentage of construction joint ventures that did not succeed is considerably high. One inquiry showed that 50% and more failed.[78]

The main cause of these failures is that practically all participants in joint ventures base their risk management on personal instinct, view, and experience obtained by prior projects. To reduce the likelihood of failure or deficit of a joint venture, an improved comprehension of the risks of joint venture ought to be established early. Risk management techniques ought to be professionally introduced into project scopes for joint venture.[79].

7.4 Role of Client, Consultant, and Contractor

In general the role of Clients, Consultants, and Contractors are self defined in every country. Yet the influence on the process differs from place to place as also in time to time. On the whole, the Client in the UAE particularly is very ambitious. Some times their ambition influences the process too much in a negative way in sense of pressure. In a lot of projects the time schedule made by the Client is very tight, sometimes in an unrealistic manner.[80]

The Consultant's role is respected as he is hired for his expertise. Nevertheless, his role is limited to the design stage and changes by the Contractor aren't always informed to the Consultant. His influence mostly is translated by the demands of the Client. Sometimes the Consultant has the mind-set for a good deal in sometimes an unfair bargain.[81] This occurs if he is a direct consulting engineer for the Client in the stage of the tendering process and order deviations.

Nonetheless, if the Consultant does not make part of the Client's team his position is in a weak shape. A lot of design and engineering quality gets lost as when the contractor persuades the Client to order adjustments. Then the role of the Contractor dominates the role of the Consultant in the process. This occurs constantly when the Client and Contractors are partners in business or one party or even associates in other contexts.[82]

7.5 Summary

Lastly, it could be said that the Arabic construction Industry is quite mature. In spite of the problems and delays that occur there, they do not really differ from construction industries over the world. The overruling difference is the rapidness of initiated projects and the cultural diversity in project organization, beginning from the client till the third world labor (TWL).

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[78] Georgy M., Ibrahim M., and Abdel Gawad M. (2008)
[79] Georgy M., Ibrahim M., and Abdel Gawad M. (2008)
80 Interview Ir. E. Kruit, Director of Middle East Projects of INTERBETON. B.V.
[81] Interview Ir. E. Kruit, Director of Middle East Projects of INTERBETON. B.V.
82 S. Khoury MSc, Project manager for Jerde (USA) in Dubai

Sidebar notes (left margin):

Joint venture reduces political and economic risks

Local partner choose JV for new technology

Some surveys shows 50% of JV in development countries failed in the past

Reason of failure is risk management by individual intuition

Risk management techniques should be introduced

Role definition similar although influence differs

Client's ambition pressures the process negatively

Innovative business development

Consultants on Client's side set on a good deal

Consultants not on Client's side have a weak position

A lot of quality gets lost by Client orders.

The developments in construction and contract forms are observed as moving away from the traditional contracts. The last decades clearly display the fact that the UAE has the largest construction industry. This also brings the fact that it is a very fragmented industry.

Besides the UAE, the Egyptian construction sector has been a major contribution to Egyptian economy with an annually growth of 22 percent. The trend to globalization brings positive incentives into local businesses. To keep up with the competition, businesses develop themselves in an innovative manner, and cooperate strategically with multinationals to gain knowledge and develop their own technology.[83]

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[83] www.edv.nl

8

Four Perspective Definition of Culture

Theoretical & Empirical confusion

Unfortunately, cultural studies often define culture one way and operationalize the concept in another. This incites the theoretical and empirical confusion that characterizes this domain of research.

Manifestations

Usually, a cultural study describes a manifestation in context, giving interpretations of its meaning in that context. Because any given manifestation can be viewed and interpreted in a variety of ways, by different cultural members and by different researchers.

In this case manifestations are taken out of their cultural context because manifestations are usually studied to interpret them. However, some examples of interpretations are needed; four types of cultural manifestation will be described. Namely;

Time

Concept of negotiation

Hierarchies & Protocols

Conflict Approach

5. Time orientation (Sequential and instrumental use)[84]
6. Concept of Negotiation (Disruptive and Integrative) [85]
7. Hierarchies and Protocols (Strict[86] and Clear[87])
8. Conflict Approach (Formality and Consensus)[88]

From literature study[89] a perception could be made, by saying that these four manifestations differ a lot between cultures. Not only do they just differ, but it is evident that frustration and sometimes difficulties emerge by these differences and lack of understanding of the different manifestation. Also personal experience and professional engagement provides an empirical emphasis on these four different, though integral variables in project processes. The underlying understandings of these four types are described later on in this report.

Ad-hoc designed Matrix

8.1 The Matrix approach

Cultural Puzzle

Construction context

The definition of culture is often decoupled from how it is operationalized. In order to limit the different interpretations of culture, it is necessary to ignore some of the definitions that are not needed to understand culture in a project organization. The definitions needed for understanding will be summarized in some results of a cultural study in the ad-hoc designed Matrix as shown in figure 15.

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[84] See paragraph 3.7.6
85 See paragraph 4.3
86 Derived from the dimension of Power Distance (4.1.1) and Universalism vs Particularism (3.7.1)
[87] Derived from the dimension Uncertainty Avoidance (4.1.4) and Specific vs Diffuse (3.7.3)
[88] See paragraph 4.3
[89] Chapter 3 to 7

When time orientation and conflict approach are combined and concepts of negotiation and protocols are combined, then so on the pieces of cultural puzzles can be put together in the context of construction management. Now an exploration can be made in how interpretations of these cultural manifestations relate to each other by summarizing the results of a cultural study (the pieces of a cultural puzzle) in one or more matrices.

Rows in the matrix are types of cultural manifestation and columns linking interpretations of these manifestations, which are allocated or context specific themes. In that way the matrix shows how culture has been operationalized. This matrix is designed to fit in the context of construction management with cross-cultural collaboration. The values used are precisely documented in the chapters to come, which are the foundations of the theoretical framework.

Four Perspective Definition of Culture		Arab Engineers	Dutch Engineers	Chance of Clash (++,+,0,-,--)	Occurred Clash	Possible Midway
Time orientation	Sequential					
	Instrumental use					
	Long-Term Orientation					
Concept of Negotiation	Disruptive					
	Communication					
	Integrative					
	Nature of Persuasion					
Hierarchies & Protocols	Strict					
	Clear					
Conflict Approach	Formality					
	Consensus					

Fig.15. Matrix (four perspective definition of culture)

8.2 Execute

The way to collect data and execute the matrix is described as follows:

Descriptive analysis of each case

Interview

Theme

Triangulate

Monograph

Validation

1. Participation of the cases
2. Theme observation into the values of the Matrix
3. Triangulation of information
4. Validating by evaluation of observation with previous studies and literature

Data collection techniques
1. Formal interviews with Dutch and Egyptian engineers
2. Meeting attendance separately and between Dutch and Egyptian engineers
3. Daily presence among the project team
4. Informal discussions (lunch and pauses)

Sample questionnaire

Improvise questions Due to sensitivity and interpretation

A sample questionnaire has been setup and it could be read in Appendix C. The questions are grouped according to the cultural dimensions. These questions will most likely be asked in informal interviews because of the sensitivity and the extensive interpretive measures and the linguistic play that needs to be dealt with in an improvising manner. For this reason a sample questionnaire has been setup. By interviewing different individuals from different cultures with a formal questionnaire about perceptions, risks of acquiring normative instead of empirical answers emerge. This would give more guarantees for the research validity of the questions and outcomes.

The people who are interviewed are listed in the literature section. They consist of Egyptian, Dutch, and British engineers. Due to the somewhat sensitive matters, which are discussed, a diplomatic and tact attitude was adapted by these individuals. To urge some reliability by some individuals, the pledge was not to directly link their quotes with their names. They took into account that some observation might be interpreted as offending, and wanted to avoid the possibility of damaged ties.

In chapter nine an exploration has been made of two cases. One case as described in Appendix E, consisted of a great development project in the South Valley of Egypt. The participants on this project vary in cultures, as Egyptian, Dutch, British Emirati, and several other nationalities were involved. The student participated on this project as part of the project management supervised by DCE-ltd in Cairo. Participation granted a great deal of knowledge by observing, and engaging with the different work forces. The second case study was a moderate private project in Cairo. The main theme of this project was the renovation of a resident building. The introduction of chapter nine gives an overview of the project's scope. Also here participation of the student was the conducted research method. Participation

consisted of assisting the project manager in his tasks and supervising the labor force.

By introducing these cases in chapter nine, effort has been made in allocating the different occurrences and observations in the four cultural themes. This chapter has made an attempt on objectively describing these manifestations in their context. Chapter 10 however, is the attempt on supporting these manifestations in their themes with literature and other empirical researches. The objective is to validate and evaluate this research findings and observations, as described in chapter nine, with existing theories. It can occur that some observations are similar and some other observations argue these theories.

The interviews, mostly informal, were conducted in English, Dutch, and Arabic, each language compatible for the interviewee. Since the variety of languages, the reluctance of recording, moment calling improvisation of questioning, and sporadic discussions, regularly existed, transcriptions were not feasible and implausibly relevant for this explorative research. Nevertheless, some contextual quotes are listed in Appendix D with the corresponding question and nationality of the quoted.

By exploring the claims, conflicts, and delays of these case studies and after trying to determine what happened and why it happened, an additional task is to suggest methods for preventing similar incidence.

The recommendations are presented for engineers and project managers working overseas. The essence is based on the context of Arabic construction projects. Consequently, the recommendations address generally the most common problems in that area using the prevailing managerial tools applied in Western construction projects.

The recommendations are presented based on the inventory concerning claims, conflicts, and delays in the Arabic construction industry, as shown in table 1 in paragraph 2.1, table 6 and 7 in 7.1.1 and the overview in appendix A. The different issues and solutions are presented through the four different cultural perspectives. The objective is to allocate specific causes to specific cultural themes, which diversities are presented in chapter 10 and 11, finally followed by applicable managerial solutions.

9

Exploring the Cases

The matrix has been designed to explore four different cultural perspectives. The four perspectives are time orientation, concept of negotiations, hierarchies and protocols, and conflict approaches. In order to find relevant differences between Egyptian engineers and Dutch engineers, these items were taken as accents on the profession methods and causes of conflicts or potential conflict.

For this research several case-studies were conducted. The case-study mostly relied on, as anthropologist define, participated research. This means that cases were studied by actually being a part of the project organization. This granted more insight about the organization, not recorded conflicts, and questions that recall sensitivity. One case is a development project with a budget of 15 million dollars. It is called *'The Establishment of an Experimental Farm and Research Centre for the South Valley Development Project'.* The project management was done by *DCE* formed by Egyptian engineers partnering with Euro consultant Mott Mac Donald formed by Dutch and British engineers. This project organization gave an ideal opportunity for an exploration in the methods used by Egyptian and Dutch engineers. The project was formed as a BOT project. See appendix E.

Another case which has been studied, by also participation, is a renovation project. This project exists of a resident building with 16 apartments, each having an average floor plan area of 120 m2. The building is called *the Forqan building*; it is located in Heliopolis in Cairo, which was constructed in 1975. It is a private project with a single project manager and several independent sub-contractors. This case was studied by assisting the project manager Eng. Medhat El Guindy. . This gave a real time insight on how the project manager communicates with the Owner Hag Atteia Mohamed and his contractors. This project was based on a traditional formed contract with the project manager as main contractor. The budget for this project is unknown other than for the Owner and project manager. The given time for this project was two to three month. The date of execution was on the 17th of August and ended on the 2nd of October. The activities consisted of replacing the hidden electricity wires in the walls and ceilings in order to install for instance more sophisticated Air conditioning machines. This particular activity called for wall replacements, stucco, paintings, façade cleaning, window frame renewals, and floor reparations. Plumbing was also an integral part of the renovation, which also called for rerouting the gas pipes.

Except these two cases studied, occasionally some informal interviews were conducted with Egyptian engineers and Dutch engineers staying in Egypt. They provided some insight about some cultural dimensions which were intricate to ask while participating on a project, as some question could indicate suggestive motives as being seen as a colleague on the project board. So addressing these questions to individuals outside work relation could convey more information.

9.1 Exploring Time Orientation

One particular case in the various case studies pointed out the orientation towards time. The case consist the renovation of a building in the urban neighborhood of Heliopolis, Cairo. The owner of this project assigned a project manager who has overseas experience. While studying this case some personal assistance was required form the project manager. The time frame for this project was two months. This was considered a highly pressurized time frame.

The most noticeable aspect was how time pressure was ignored. This disregarding attitude is not emerged from arrogance or lack of insight, but merely the flexible thinking towards time. The project manager was asked about this time pressure, he simply replied:

"We are not tied up in a 9 to 5pm mentality, the owner gave us two months, and there are hundred ways to bring a 4 months project down to a two month project."

This sentence refers the most to an optimistic attitude towards project planning. The project planning begins often with a bunch of critical paths. These are designed, not as a product of highly sophisticated time schemes and by thorough forecasting. They are simply designed with underestimated predictions of external factors which can cause delays.

Time management

Time management has a high priority in the Islamic teachings, as rituals are linked with particular moments and seasons. But because of the polycronic time management by Egyptian engineers, efficient use of time quickly reduces. A Dutch project manager was asked in the case-study of the *South Valley Development Project* about the difference that he noticed concerning keeping up with the time schedule between Egyptian engineers and Dutch engineers. He referred in his answer that Dutch engineers are very depended on time tables, while Egyptian engineers see their time table more as a reference to work with. Egyptian engineers do not feel obligated to precisely follow specific tasks on specific moments. Their worry merely is simply to get the job down by deadline, and the schedule is just a tool to work with as an idea on how the duration should look like, unlike Dutch engineers relying of milestones to guarantee deadlines.

Difference

So the difference is the sense of the term 'time management' itself. The Dutch project manager on this development project had to coordinate the task to the specific engineers and contractors. His goal was to make sure that each task started on its specified date and end on its specified day. He stated that in general such goals are easily accomplished, but several times he was caught up with the surprise that a specific task was started to early. As the reputation of Arabs exist indicating that they are mostly late, he was taken by surprise that they started to early and

unannounced. He stated to have a quarrel with the sub-contractor by starting to early and not complying to the schedule's critical paths. The sub-contractor on the other hand made the point that there should be no problem about when the tasks start, and would have understood his dissatisfaction if the task exceeds the deadline. Furthermore, it was more convenient for the sub-contractor to start earlier, because he had other business engagements elsewhere.

Another conspicuous difference between the Arab and Dutch engineers that appeared while participating on these projects was how tasks were organized and prioritized. Both parties had comments on how the others organize their time and tasks. As for the Egyptian engineers, the Dutch noted that Egyptians are chaotic in their task which leads to delays and tardiness in meetings. The Dutch see Egyptians as chaotic because Egyptians are synchronically with their time structuring. For an individual from a sequential time structuring culture synchronically can be seen as unorganized. As for the Dutch, Egyptians remark that Dutch accomplish their tasks with overprotection. They see it as frustrating when an engineer does not abide multiple tasks. A specific situation can illustrate this comparison.

On the South Valley project a local engineer requested a Dutch engineer to look into a technical specification he needed. The Egyptian stated that his request was postponed until the Dutch would finish his own assignment. The fact his request was not taken immediately disturbed him very much. He stated that this has happened several time while working with North- European Engineers. Egyptians see this as a lack of coordination of their task's scheme. Working synchronically and multiple task coordination are seen as a proficiency engineers should have, and which is the gap between an ambitious and an unmotivated engineer.

Contact & Communication effecting time

The differences of time structuring between the two cultures also emerges from the concept of contacts and communications. While the Dutch are used of emailing, Egyptians see emailing as impersonal and appreciate face to face communication. Especially if giving or deviating orders and asking for favors are involved. A lot of hours are invested in personal meets. This is obvious in the room of executives. Constantly employees and business contact enter asking or giving information, which can be sent by email. An executive was asked why he does not close his door, and urges the staff to email. He states that the organizational culture would suffer by this type of communication, and that staff or business relations appreciate personal contacts as the whole functions as one big family. He acknowledged the fact that communicating this way is not always efficient, but impersonal communication is not appreciated. Later on more insight is given concerning the aspect of communication.

Outlook

Day-by-day experiences in the Arabic culture tend to direct people's life. This is in general a personal attitude. In the construction industry such outlooks are not

dominantly present. Though Egyptian engineers tend to have a postponing behavior in conflict situations, in their business mind-set they are future orientated. It is evident while interviewing Egyptian engineers, particularly if they are in their mid-thirties, that they have very visionary mind-sets. This mind-set manifests itself by investing a bunch of energy in networking with other people. The phrase *'You never know what tomorrow brings'* is one that is used in various occasions when asking why they are focused on keeping in touch with several outsiders of the project. Nevertheless, this future orientated outlook presents itself when there is high level of aspiration present. The average stance is that tomorrow is just another day and not a follow-up of yesterday, while the Dutch cluster their time. If a Dutch engineer was sent to the South Valley of Egypt to be present on the construction site on that particular project, his time-mode was clustered for that particular stay, and would plan his schedule and tasks from day one till the end of his accommodation. While Egyptian engineers went with their task list, and would let the single days manage and organize the tasks.

9.2 Exploring Concept of Negotiation

During the case studies there was little opportunity to attend business negotiations. Nevertheless, the opportunity existed to explore the concepts of negotiations. The process of negotiation in Arabic cultures starts informal. An executive architect was asked how he urges his vision to be implemented in the project. He responded that an architect can change his position within an organization or with the Client. He stated that his vision would matter if the decision makers feel at ease with him:

 "It is easier to pull with a rope than to push with a rope."

Behavior

Evidently, the behavior throughout the negotiations resides with an accommodating matter. Although distinguished can be made in the difference of the negotiation parties. If the other side is a partner on the project, or a long term relationship is lucid, then a compromising behavior emerges. However, if the other side of the negotiation table is a temporarily negotiation party, a more competing behavior appears. This was overt in the Forqan project. The project manager was consistent to have a good relation with the Electrical engineers because they formed the core of the building's renovation. The project manager was careful not to fall in discussions that eventually flourish into a 'table like' negotiation. These types of negotiations cease with business reconciliation that enhances the position of starring parties of the execution stage, in this case the electrical engineers. So the project manager's strategy was to keep them at ease so they would adopt a humble attitude which would bring the business relationship into a friendly and compromising matter.

Strategy

Dutch engineers or project managers prefer to start off with a formal relation. They perceive binding with the negotiation parties as a more or less corruptive strategy.

Although having this perception, is does not resist them of trying to bind after the negotiation if the decision has not been made yet. Attending some meetings, which had a lower decision making level, showed that some Western-European engineers would postpone some decisions, or had some avoiding behaviors during the first round of the negotiations. Their strategy looked like they used the first round to study each other's attitude, and then adopt an attitude which would favor them by the core decision makers.

Perceptual fields

The overlap of both `perceptual fields', influences the degree of mutual understanding which can occur between the two. The Dutch were seen by Egyptians as quite direct, sometimes the Egyptians experienced their directness as rude.

"There is a difference between telling the truth and being rude" one said.

Egyptian project participants try to charm up their objections, especially when the comments are upwards on the hierarchical ladder. During the case study of the South Valley an Egyptian engineer wanted to make clear that there are various ways of saying yes and no, or to object. According to him, Dutch engineers are quickly aggravated if they do not hear a clear yes or no. On the other hand Dutch engineers feel that unclear messages are a source of rouge communication.

 "It is better to confront with an aching truth rather to circle around the truth."

Negotiation style

Another noticeable manifest is the negotiation style. While Dutch engineers rely on facts and logic in their attempts to persuade and counteract opponents' arguments, Egyptians are more likely to use an appeal to emotion as their persuasion strategy, to use objective feelings to counter arguments. An Egyptian department manager acknowledges that Dutch or Western Engineers or project participants stay better focused on the subject during negotiations. He despairs the way Egyptians deviate easily from the subject to make their point clear and on how quickly they involve their emotions. Even though he despairs it, he wanted to make clear that it is unchangeable, so a foreign engineer must take this in account. According to him only the experienced expatriate engineer can survive the 'spiced-up' discussions, and does not take the attitude of the other party personal. Inexperienced Dutchmen or Westerners are not likely to notice these understated messages and get frustrated with the relatively great levels of stillness and the cognitive circles which characterize Arabic conversations.

Relations

As noted earlier Egyptian engineers like to informalize their relation with their contacts. The forms of agreements are based on trust and each others' words, and the relationship will ensure the follow through of actions. In the Forqan project the method of contracting was quite irregular compared with the Dutch form of

agreements. The project manager contracted his contractors with a handshake. Later on, to get their project administration straight, he would ask the contractors to make a quote for his work. Also understanding the involvement of money in relationships or negotiations is a sensitive matter. A remarkable phrase is repeated several times while witnessing down-payments;

"Do not bother, we are brothers", referring to the fact he is not eager to receive money.

One should not make the mistake that this sentence is meant. Merely, it is said out of politeness.

9.3 Exploring Hierarchies and Protocols

During the case-studies and exploring the hierarchies and protocols, some simple encounters were at play. The Dutch have systemized hierarchies inside their organizations. Hierarchies are not for respective matter, but for decisive and justifying matter. Strict protocols seldom exist. The sense of their existence emerges when important decision-making is at play or when there is a need for accountability. Like a Dutch engineer during the case-study said:

"The moments we felt that our superiors (in the Netherlands) were our superiors, was when we did not had the authority of acting on our personal instinct".

The existing hierarchy in the Egyptian organization was very much present and clear. The first indication to support that fact is the way project-participants called each other. Colleagues of the same level called each other on first name bases. If there was a level difference in the hierarchical level, titles were used like Dr, engineer, etc. Also when a superior entered a room, the employees would rise and would not sit until he premised it.

Method of communication

Another evident appearance is the method of communication and using phones or email. During a personal meeting with CEO of the company to ways of communication was noticeable concerning the CEO. Whenever the CEO needed information, he picked up the phone and called the room or department he needed information from. Meanwhile, constantly interruption was at play when employees entered his room delivering something or asking for something. This appearance makes clear that a protocol of communication goes two ways. An executive is free to use the phone to call an employee for information or to give an order, while the other way around personal attendance is the protocol. When an employee needs information from his executive, he is expected personally to go to his superior and not to use the phone or email. This would be sensed as a form of arrogance and impoliteness.

Age difference

Age difference also has its place when mentioning protocols. Even though the possibility exists of finding a younger person higher in the organization's hierarchy then an older person, the protocol does not give preference to the position. Older people, generally spoken of a generation difference or a part of it, are willing or unwilling treated with lofty respect. A paradox can exist when a younger engineer gives an order to his department with an older engineer.

Moreover, during the project participation of the South Valley a similar occasion occurred. An executive structural engineer in the end of his thirties was not pleasant with the product of his department. In his department several engineers around their fifties were present. The executive wanted to make clear he was not

pleased with their work and wanted it to be corrected. In order to respect the age differences but also fulfilling his role of executive, he personal went to one of the oldest engineers. He stated that he sat down next to him and chit-chatted with him for approximately 10 minutes. Then he talked about the department and about the rookies in it. His tactic was to highlight the errors of the department's product, with the sense he was encouraging the older engineer to talk with his younger colleagues. He gave him the sense, that he trusted that engineer to steer the department and to correct the errors under his supervision.

Wasta/external connection

Outside the organizational hierarchy there are external influences which can change the hierarchy or protocol. For instance, employment usually goes through human resources. A fresh graduate starts of as a junior engineer, and grows his way up. Some of the employees seemed young for particular positions. Their education and qualification were unknown during the case study, but it appeared that they got their position by as they call it *'wasta'*. It means that this person entered the organization through strong connections. Some Western-European project managers were quite perturbed by this type of employment. They rather saw employment going through the formal line of hiring protocol. During the case a candidate refusal came into hand rejecting him because of his weak English. This could upset the external connection or wasta. Personal rejection could be sensed, which is not in the benefit of personal relation.

Bureaucracy

External connections or waste also have their role in dealing with construction permits in Egypt[90]. To smoothen up the journey of getting permits or licenses of particular projects, much bureaucracy comes at play. Bureaucracy in Egypt is not made easily; a lot of frustration can emerge. Some officials indeed, while being on some projects can be thresholds.

On the Forqan project municipal inspectors came by. Their position, looking at it from an economical perspective, is not to be admired. Their salary is average or below and their previous education is not of high standards. As long as they do not interfere with ones business, nobody would consider them. Nevertheless, they came by on the site, and the project manager sensed they came by to be an ache on the project. Quickly another perspective was set toward these officials, they were treated like aristocrats. The project manager mentioned a name, inside the municipal, and the stakes were turned. It appeared that the person the project manager knew was a high official. So that person became a 'wasta' for getting out of bureaucratic 'trouble'. The inspectors respectfully left the site, and everybody returned to their business.

Authority

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[90] See the permits in Appendix I

Considering authority in organizations, the present Dutch and Western-European managers lead their team as the Egyptian call it *'a cold manner'*. It is not meant as assault, but in their perspective the leader must express fatherly authority. This kind of authority is mentioned as the traditional leader, who gives orders, and does not expect any back talking. Next to the traditional leadership also character comes at play. Egyptian engineers preferred an attitude of a leader to be passionate. They want their leader to get upset, to grieve, to be enthusiastic, and to be persuasive.

Equally, Egyptian managers have been found to stress the autocratic style of leadership more and the consensus style of leadership less than Dutch managers. Meanwhile, being concerned with the personal problems of employees is a characteristic of effective leader by Egyptians.

9.4 Exploring Conflict Approach

During the Forqan project some conflicts occurred between the project manager and the contractors. It is important to state that the use of the word conflicts differs between Dutch and Egyptian engineers. When a Dutch engineer was asked of his definition of conflict, he responded that a conflict is the cause of a potential delay or claim. While an Egyptian engineer answered that a conflict is when the differences of opinions which can roughen up the collaboration.

In a particular case of the Forqan project the project manager differed a lot with the façade contractor. Their consideration towards the work of previous contractor for instance the HVAC contractor was of a very low level. Whenever the project manager wanted to point out their clumsiness and lack of respect towards other people's work, they would avoid taking accountability of their mistakes. Sometimes even denial was at play. After a lot of warnings were gained, the façade firm tried to avoid the project manager personal. The project manager was very disturbed by this behavior.

"Instead of just being careful with their operation, they seek their refuge by avoiding me!"

Problem-solving

On the South Valley project a Dutch engineer mentioned a frustrating moment between him and an Egyptian colleague. He did not want to mention the problem itself, but the way how it was solved. Both colleagues were displeased with each other. But for the sake of the project, reconciliation was needed to continue their work. The Dutch engineer stated that he was quite direct with pointing out the problems. His idea was to identify the stress points and to find solutions, while the Egyptian engineer would prefer to ignore the differences and merely continue with their work. Egyptian engineers may hesitate to openly communicate and exchange information if they believe that the other person holds dissimilar views to them. If this is the case, their frames of references for interpreting, understanding, and communicating are presumed to be different. When the two parties work together but view each other as dissimilar, the perception that they do not share common values leads to a higher degree of behavioral uncertainty as the Egyptian engineer made clear. The more important the relation between the two is, the more likely it is that a lengthy problem-solving process can be avoided, especially during the formative stage of a relationship, and the more likely it is for the partners to avoid conflict by compromising.

Down payment

Another difference is the way how eventually a conflict is resolved. For instance, during the Forqan project, a conflict occurred about the down payment. It was even escalated to the point of stopping the construction activity. The Client, when considering payments, was very much involved of the project control i.e. budget. He

refused a down payment because he was not pleased with the quality. The contractor, which was the other conflicting party, insisted from the Client not to judge the process but only the product. The Client refused to put a money installment until the contractor would improve the quality. Equally the contractor refused to continue the process if not completing the down payments. The project manager was called for as mediator. The reconciliation was very simple; the contractor would continue his work while the Client would put a partial deposit into account. If the Client felt redundant of his comments about the contractor, the contractor would finish his work and a reduction of the fee would be calculated. When the project manager was asked if this agreement and reconciliation was written down or recorded, he made clear that is just a load of paperwork which no one will read afterwards. Both, the Client and contractor, do not have any benefit in repeating the same conflict. The contractor will comply with the quality because he does not want to lose a dime. On the other hand the Client also does not want to repeat to conflict because he does not want to risk any delay on the project by searching for a new contractor.

"The conflict was a stand to make clear that one is not weak, and will not accept any minifying behavior."

A handshake in resolving a conflict is much more preferred than recording it into documents.

"*Who is interested in reading back about backfire in the project?*"

 Corporation reduces the probability of opportunistic behavior and, consequently, lowers the need for legal safeguards. However, if unbalanced power relationship exists, less integrative behavior is used to resolve conflicts.

Power imbalances

In general, power imbalances lead the more powerful party to engage in more demanding behavior. To support the latter, a situation occurred where a subcontractor on the South Valley project wanted to get contracted on this particular project. It was know that for the figures of the year and the account balances of his firm he had to join this project. The project management team knew that fact, and used it as a bargaining position. Although this is more likely to be a negotiation style, they rather used that position as a buffer for any potential conflict. A reminder of the favor would wrap up a situation or 'gave' the project management the right to be more demanding considering the price-quality ratio.

10

Evaluating the Cases

10.1 Evaluating Time Orientation

In order to compare the durations of events, the intervals in between and to compute the motions of objects, a time element is required, which belongs to a measuring system, utilized to chain events. As an element appropriate for several domains, such as being a major theme of religion, philosophy, and science, it could be nevertheless customized non-controversially, whereby it may well be feasible to every study domain.[91] Consequently, a coherent evasion of the greatest scholars occurred.

10.1.1 Time management

Time and other closely related resources are sufficiently being taken advantage of from every scale. This is due to its general character of being utilized instrumentally. Matters about the prudent appliance of time exist longer. This can be proved by the large quantities of proverbs about time and its utilization. Hence, it would be impossible for the label "time management" to occur prior to the general use of the word "management", approximately at the beginning of the 20th century.[92]

Time can be contractedly characterized, by its reference to fundamentals and systems instrumentally used for a mindful decision-making about the activities that inhabit time. Its use, which is implemented in all of the practices to optimize their use of time, but such a characterization could vary over such dissimilar fields as the assortment and use of own electronic tools, time and motion study, self-awareness, and certainly a to a great extent of self-help.[93]

Setting recorded goals possibly shattered over a simple duty list, a project, or an action plan, is a crucial factor when generating time management strategies. The process of establishing an importance ratings, setting of deadlines, and assigning of priorities may be realized for individual duties or for goals, resulted in a plan with a duty list, schedule or calendar of activities. If routine and recurring tasks are included into this plan, the inclusion can be achieved in various ways. Dissimilar planning periods may be joined with diverse planning or review ranges.

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[91] Hall, E. T. and Hall, M. R. (1994) *Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*
[92] Hall, E. T. and Hall, M. R. (1994) *Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*
[93] Covey S, A. R. Merrill, R. R. Merrill (1994), *First Things First: To Live, to Love, to Learn, to Leave a Legacy.* ,Simon and Schuster

10.1.2 Time and Culture

Attitudes concerning time are culturally dissimilar, defining western cultures to be 'monochronic' and Arabic cultures to be 'polychronic'. Monochronic cultures give confidence to a very structured, time-ordered advance to life. Polychronic cultures give a more supple, roundabout advance bases more upon personal relationships than planned commitments.[94] In polychronic[95] cultures it is ordinary for business matters to be postponed to set up or reiterate sound personal relationships. Additionally, straightforwardness and rapidity in the undertaking of controversial matters is defined as thoughtless and provoking and to be evaded at any time possible. The nuisances that can occur between people of the two cultures, mainly in discussions and hassled circumstances are detected in these specific case studies.

> Completed case studies, interviews, and pertained meetings illustrate that Arabs are polychronic and non-linear. They are open, casual and supple in determining problems and arranging projects. In particular, they take a defeatist advance to problem solving, because in the end they are 'surrender to their belief' as quoted. They significantly charge communications in which the confront each other, and handle numerous tasks. Moreover, they are likely to take no notice of schedules and favor impulsiveness and casualness in gatherings. This is associated with their focus on setting personal relationships earlier than making business relationships official. Consequently they see time obligations as advantageous and not required. It would appear that there is a healthy level of cultural compassion involving issues of time and an consciousness that the firm obligation of schedules may not be beneficial in Arab areas.[96]

A main dissuasion to the means of these kinds of techniques are the time stress which regularly typify research or development projects. A study disagrees that where rapidity is of the fundament one-way communication will be likely to substitute two-way communication, which is intrinsically slower.[97] This is regardless of two-way communication being faster to commence, as discussed in the preceding part. As a result, if time is limited or large numbers of data are needed then two-way communication possibly will not be reasonable. Certainly, in addition to these realistic reasons for not using two way techniques there are cultural variables which might as well make them impracticable within the time framework. In these circumstances the different approaches towards long term and short term business relationships between Dutch and Arab cultures. In Dutch or western cultures time is

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[94] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007) Cultural *Influences in Negotiations: A Four Country Comparative Analysis*,

[95] See paragraph 4.2

[96] Eickelman, D.(1997), *The Middle East and Central Asia: An Anthropological Approach*,

97 Leavitt, H.J. and Bahrami, H. (1988) *Managerial Psychology Managing Behaviour in Organisations*, 5th Edn., University of Chicago Press.

seen as something to be constructed into time windows. Relationships are more short term than permanent. Hereby, the longer term permanent relationships created as an outcome of using two-way study techniques might be tolerable in lower degrees in some cultures than others.[98]

10.1.3 Instrumental use and Structuring of time

The Arabic culture might also be characterized as a current oriented. A principle culture with such an orientation, will not connect a high rate to general precedent experiences nor to predictions. Experiences which are gained step by step are inclined to guide people's life. The Dutch culture is more prospectively oriented. In such an oriented culture most human activities are guided in the direction of prospective predictions. Commonly, precedents are not crucially considerable to a prospective condition of relationships. Planning comprises a main activity in prospective oriented cultures.[99]

Arabic Engineers arrange time synchronically[100] generally doing numerous things at once. To them, time is a large ribbon, permitting a lot to happen at the same time. Time is supple and insubstantial. Time obligations are more advantageous than supreme. Plans are simply changed. Synchronic people in particular charge the acceptable achievement of interactions with other people, rapidity lays on the kind of relationship. [101]

Dutch Engineers arrange time consecutively. They are likely to do one thing at a time. They see time as a scarcely divergent line, with repeated sections. Chronological people see time as substantial and isolatable. They greatly favor planning and maintaining plans once prepared. Time obligations are taken acutely. Keeping the plan is an obligation.[102]

10.1.4 Time issues and Workweek differences

Military time is set as the standard time arranged by the International Organization for Standardization (ISO). The time makes use of a 24-hour clock; therefore, after 12 o clock at noon, hours are listed 13, 14, 15, and so on till midnight, which is 24 hours. Global dates are year, month, day of the month (ISO, 2006). In Arab and other Islamic countries, the weekends are set on Friday and Saturday, and the workweek starts on Sunday, so emigrants only have Monday, Tuesdays, Wednesdays, and Thursdays to get in touch with their home office when weekends are on Saturdays and Sundays in their home countries.[103]

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98 Triandis, H. C. (1994). Theoretical and methodological approaches to the study of collectivism and individualism.

[99] Hall, E. T. and Hall, M. R. (1994*) Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*

[100] See paragraph 3.7.6

[101] Trompenaars, F. & Hampden-Turner, C.(1997) *Riding the waves of culture : understanding cultural diversity in business*

[102] See paragraph 3.7.6

[103] Hughes ,W., P. Hillebrandt, D. Greenwood, W. Kwawu (2006). *Procurement in theConstruction Industry*

A matter that unfavorably influence project schedules is the perception of 'rubber time', which is insecurely interpreted, as 'it will get done when it gets done'. Implementing deadline is demanding in cultures that work on rubber time. People arrive at reunion dates tardy even when they are only in a different part of a building. When employees are late, it could be causes by matters like rubber time or it could be a matter of giving workers written deadline as an alternative to verbal deadline. In ethnic cultures and countries with big government's civil services, the family members of employees, their society and their handling with government civil services all take priority over work activities.[104] Permitting employees time off to handle matters connected to these regions helps to keep employees from being sidetracked at work.

To meet deadline dates on global projects, repayments might be attached to precise deadlines if that is what local employees are used to in their culture. If employees do not in person take advantage from finishing tasks on program, they do not compel the importance of deadlines. In modern Arabic cultures, questions are not supposed to be asked in a way that need a straight yes or no respond since employees at all times answer questions with a yes to satisfy the chief. As an alternative for asking yes or no questions, wide and theoretical questions should be asked.[105]

Stephen R. Covey et al presents a classification system for numerous time management achievements that they appraise[106]. They have accomplished their hypothesis in four different phases moving upwards throughout time management generations:

- First generation: reminders (set on clocks and watches, but with computer realization probable) could be utilized to make aware of the time when there is a duty that should be done.

- Second generation: preparation and planning (supported by calendar and scheduled time charts) with setting goals taken in.

- Third generation: planning, prioritizing, controlling (with a personal organizer, other paper-based objects, or computer) activities each day. This approach involves spending little time in illuminating principles and main concerns.

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[104] Hughes ,W., P. Hillebrandt, D. Greenwood, W. Kwawu (2006). *Procurement in theConstruction Industry*

[105] Dew P. & Shoult A.(2000). *Doing Business with the United Arab Emirates*

[106] Stephen Covey, A. Roger Merrill, Rebecca R. Merrill, First Things First: To Live, to Love, to Learn, to Leave a Legacy

- Fourth generation: being competent and practical (using any instruments above) places goals and roles as the directing aspect of the system and prefers importance before urgency.

This outline provides a good overall classification that improves to identify diverse techniques into identified clusters throughout case studies. Arab engineers or building employees are very familiar in the first two generations depending more on paper work than digital calculating of meetings. Multifaceted planning and scheduling of projects moves them to the third generation, but they leave there own time management behind in the first two generations, that consequently causes a short of matched appointments and planning.

The fourth generation is familiar in the way the Dutch or western engineers or construction personally deal with their time. Not only advanced planning and project scheduling are calculated digitally or included with others planning systems. They use and incorporate these advanced techniques as well into their personal time management, enforcing identical engagements and being considerate to closing dates.

10.1.5 Scheduling

Relying on the schooling degree of the engineering and construction employees, computer generated 'critical-path methods' (CPM) production schedules perhaps have to be decoded manually into hand-drawn bar charts since not every engineer or construction employees are well-known with CPM scheduling techniques[107]. Critical path techniques schedules until now can be utilized on projects, but computer printouts ought to be transformed into hand-drawn bar charts previous to their distribution for updating employees. It will not be confessed that they do not comprehend the scheduling techniques utilized on projects. Thus, mistaken information turns out integrated in schedules. The capability to maintain projects on schedule is demanding on international projects because of the affects beyond the control of project-team participants. Affects of this kind may comprise the following:[108]

- Bureaucratic limitations
- Unions and strikes
- Government regulations
- Weather conditions
- Technology failures
- Languages barriers
- Rationing of personnel
- Material substitutions

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[107] Flapper, H.A.J. (1995), *Bouwplanning*

[108] Kangari ,R., C.L. Lucas(1997), *Managing International Operations: A Guide for Engineers, Architects, and Construction Managers*

- Philosophical differences
- Religious restrictions
- Tribal interference
- Festivals
- Owner interference
- Material delays
- Inadequate support staff
- Slow decision making process
- Labor slowdowns
- Design modifications
- Cultural misunderstandings

A few concerns where considered in the Ramadan. The month of Ramadan acquires also some attention while scheduling. During the Arabic month Ramadan Muslims are required not to eat or to drink during daylight hours, which affect construction projects. Workers may be in weakened condition from the lack of food and water. Working hours mostly are reduced to 6 or 4 hours a day during that particular month.

10.1.6 Filling in the Matrix

Concluding this section into a summative interview, the designed matrix is filled in. It also shows the possible midway to minimize the chance of clashes due to these differences. Later on more specific recommendations are made for the project organization, engineers and project managers. Appendix F displays the matrix with a clearer zoom ratio.

Four Perspective Definition of Culture		Arab Engineers	Dutch Engineers	Chance of Clash (++,+,0,- ,--)	Possible Midway
Time orientation	Sequential	During preparation and paperwork very **synchronical.** During Execution **sequential**	During preparation and paperwork **sequential** During Execution **synchronically.**	+ High	Both engineers must understand differences in time orientation and not persuade the other to adopt his own. Otherwise much of tension and agitation will arise
	Instrumental use	Polychronic	Monochronic	+ High	In complex construction projects a monochronic use of time is preferred as the risk of delay and inaccurate scheduling or execution arises extensively when working Polychronic
	Long-Term Orientation	Present-oriented	Future-oriented	− Low	These kinds of orientations do not influence current collaboration. It may influence future or repeating collaboration, if one of the two parties dislikes the attitude towards time of another. But this occurs rarely because it is a personal point of view and does not directly influence the quality of work

Fig.16. Matrix (four perspective definition of culture)

10.2 Evaluating Concept of Negotiation

Negotiation is a conversation intended for conformity upon courses of action, to generate agreements, to bargain for individual or collective benefit, or to produce results to please various interests.

Negotiation engages three fundamental basics, which are process, behavior and substance. The process indicates the method of negotiations. It indicates the environment of the negotiations, the counterparts to the negotiations, the methods used by the counterparts, and the order and steps in which it is conducted. Behavior defines the bond between the counterparts, the communication between them and the tactics they embrace. The substance indicates the subject of negotiation. For example, the program, the problems, the alternatives, and the outcomes.[109]

The effects of cross cultural diversity in international negotiation are generally known. Cultural factors can cause difficulties, lengthen, and frustrate negotiations. Whereas there is extensive pragmatic signs that negotiating methods varies by culture, a lot of existing data describes the increasing organization of international negotiators and their behaviors across boarders.[110]

Individuals can frequently have firm outlooks towards various tactics of negotiating. The tactics used throughout a negotiation relies on the situation and the benefits of the counterparts. Moreover, tactics can alter over time. R. G. Shell identified five responses to negotiation: [111]

1. Accommodating: People that take pleasure in resolving counterparts' issues and obtain personal ties. Accommodating people are insightful to the poignant states, verbal hints, and body language, of counterparts. They might feel taken advantage of in circumstances where counterparts show less interest on the relationship.

2. Avoiding: People who dislikes to negotiate and will not negotiate unless necessary. When avoiding negotiators quickly postpone and avoid the confrontational aspects of the process. Nevertheless, they display diplomacy and tactfulness.

3. Collaborating: People that take pleasure in negotiations to solve very complex issues with creative methods. Collaborating people excel in using negotiations to comprehend the distresses and benefits of counterparts. Nevertheless, they create problems by converting moderate issues into more complex issues.

4. Competing: People that take pleasure in negotiations for the reason of the occasion to triumph in something. Competitive negotiators are strategists. Since

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[109] Fenn ,P., E.Davies, M.l O'Shea, (1998), *Dispute Resolution and Conflict Management in Construction: An International Review*

[110] Gudykunst, W.B., B.Mody(2002), Handbook *of International and Intercultural Communication*

[111] Shell, R.G. (2006). *Bargaining for advantage*

their tactic can overshadow the bargaining process, competitors frequently neglect the value of good contacts.

5. Compromising: People that are keen to seal the deal with fair propositions. Compromising people are helpful if there is not much time to seal the deal. Nevertheless, compromisers frequently needlessly hurry the process and jump to concessions hastily.

10.2.1 Cross-Cultural negotiations

In this age of amplified global collaboration, it is urgent that negotiators be prepared for an enhanced understanding of the behaviors they can be predicted at the negotiating table. Negotiators require information concerning the negotiating propensities they are probable to face in a particular country and, since a mounting amount of negotiators carry out business in numerous poles apart countries, they also require insight to an efficient assessments of negotiating behavior throughout various countries.[112]

Negotiations amid by cultures are played on numerous levels. Cultural groups extend several negotiation styles to be coherent with their mutual values.[113] Successful negotiations need understanding and respect of the counterparts' stances. In cross-cultural negotiations, it is furthermore essential to be aware of, accept, and values the cultural beliefs, values and principals. Globalization of construction activities has amplified the significance of cross-cultural diversities in managing construction and development projects. Being comprehensive of the cultures will facilitate the negotiations to result much better.[114]

Nationality is an imperative determinant of most negotiators' attitudes. As Egyptian or Arabic negotiators have a tendency to be more trusting amongst each other or more willing to take risks without documenting decisions or deals, compared with the Dutch or west European.

Liability in negotiations is affected by cultural prospects, in particular of the individualism-collectivism dimension. The Dutch, who are labeled as an individualist society, accentuate on self-determination and related traits, which is likely to decrease the outcome of liability in negotiations. On the other hand, Egyptians or Arabs, who are labeled as collectivist societies, accents on belongingness, compliance, and related traits are likely to amplify liability by eventually taking a play on being the leading person. Negotiations are more likely to produce different outcomes depending on the negotiators' level of collectivism and of course on the situation.

10.2.2 Cross cultural communication

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[112] Gudykunst, W.B., B.Mody(2002), Handbook *of International and Intercultural Communication*

[113] Fenn ,P., E.Davies, M.l O'Shea, (1998), *Dispute Resolution and Conflict Management in Construction: An International Review*

[114] Gudykunst, W.B., B.Mody(2002), Handbook *of International and Intercultural Communication*

Communication plays a very important role in negotiations. Negotiation is a reciprocal communication exchange and involves equally verbal and non-verbal communication. Problems in communication ought to have direct influences on vital organizational matters like on the decision-making, planning, productivity, quality, conflict, and power. Effectual communication is incredibly critical to negotiations and a project's success. Especially, if the communication is attained by different project participants of different cultures. Communication influences the eminence of the exchange of information. It consequently, will have an affect on work relationships and performance.[115]

The perception of communication is that it is a cyclic procedure whereby individuals constantly share information over periods, in anticipation of assembled equally satisfactory degree of understandings. Coincide of individuals `perceptual fields', has an impact on the level of shared understanding, which can occur between two individuals. While the idea of culture is regularly clarified via concepts parallel to that of a perceptual field, it is obvious that the matter of communication and culture are inextricably entangled. In this case culture embodies the mutual values, understandings, postulations and objectives, which ends up a in common mind-set. These decide the behavior, principals of perform and prospects, which channels individuals' attitude and the way that they interpret messages.[116]

A culture has an impact on the communication process by shaping peoples' mind-sets; its most evident and concrete impacts are in the appearance of language.[117] By language, is meant, not just the verbal style, which are related with a variety of dialects, but as well the non- verbal (silent) signs which are linked with the way individuals display themselves in an performance of communication. Both categories of language are presented below. The latter is given more consideration due to its `high-context', character of Arabic communication. In high context cultures it is usual for a considerable amount of signs to be left undetermined and within reach by only non-verbal signals.[118]

Verbal language

There are good reasons for international managers to attain certain thorough knowledge of Arabic because language has a intensely vital role in giving a sense of conceit and pride to Arabic nationals.[119] Even as spoken Arabic differs in dialect between countries, the language rules and morphology of written Arabic are principally alike in every Arabic country. Regardless of some dilution of Arabic with western technical terms, the written and spoken word is very dissimilar to the English language. Thus, communication problems with the inexperienced are not quite unavoidable. Although, mainly in business situations, espousal of English as

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[115] Gudykunst, W.B., B.Mody(2002), Handbook *of International and Intercultural Communication*

[116] Gudykunst, W.B., B.Mody(2002), Handbook *of International and Intercultural Communication*

[117] Gudykunst, W.B., B.Mody(2002), Handbook *of International and Intercultural Communication*

[118] See paragraph 4.2

[119] Sharabi, H. (1988), *Neopatriarchy: A Theory of Distorted Change in Arab Society*

the second language of most Arab countries, ought to lighten this issue. Despite that, degrees of fluency differ a lot.

The cases studied suggest the common consensus that language is not seen as a considerable barricade to communication in international construction projects. This finding opposes the overall conclusions in literature, which states that it is vital to speak Arabic to operate successfully in Arabic countries. It is most likely that English is the international language of construction contracts and is general utilized throughout the Arab region. However, the case studies also revealed a paradox that is found in a coherent that speaking Arabic enhances the opportunity to amplify degree of trust in business relationships in Arabic countries. This is an opposition, which requires to be addressed by construction firms. In view of the fact that it signifies a linguistic contentment that establishes the possibility for confusion and conflict. It positions Dutch or other non-Arabic business in general at a commercial disadvantage and generates needless partition inside international project organizational structures. These are astonishing outcomes as language difficulties are mainly evident source of impending communication problems in the Arab region. Indeed, gratitude will be generated by effort to learn and use Arabic.[120]

Non-verbal (silent) language

The aspect of communication delivers a vital method that can be accountable for a considerable amount of messages transferred, for the most part in high-context cultures.[121] Deresky[122] refers to semantics as the tacit part of communication and explains the transfer by four extensive channels, namely;
   1. Kinesics
   2. Proxemic
   3. Paralanguage
   4. Object- language.

Kinesics means gestures, postures, eye contact and, facial expressions, physical movements. They are culturally defined and a possible cause of misinterpretation.[123] Eye contact, for instance is regularly avoided in Arabic cultures for the reason that modesty is a great aspect in Arabic cultures. The other way, a avoidance of eye contact in Western societies is apt to be read as a indication of surrender and fault.

Proxemics means the territorial aspect, allied with individuals nearness during communication.

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[120] Sharabi, H. (1988), *Neopatriarchy: A Theory of Distorted Change in Arab Society*

[121] Hall, E. T. and Hall, M. R. (1994*) Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*

122 Deresky, H. (1994) *International management: Managing across borders and cultures*

123 Rouen, S, (1986) *Comparative and multinational management*

Paralanguage indicates in which sense a message is said instead of the content itself as examples tone, speed of talking, and intonation of the voice. Opposite to the Dutch, preferring directness, Arabs skirt around a matter before addressing. Inexperienced Dutchmen or Westerners are not likely to sense these understated messages and get frustrated with the somewhat cognitive circles and great level of stillness, which typifies Arabic conversations.

Object-languages are signs revealed by physical manifestations or dress. Appearances and how others judge them are intertwined. In Arabic cultures appearances are predominantly non-verbal raconteurs.

> Throughout the case studies, the overall degree of consistency, by observation and questions about silent language, could indicate that the culture of construction in Egypt or Arabic countries in general varies considerably in contrast with national culture. Nonetheless, there is no motive to suppose that people's behavior will temporarily change when they participate within a construction project. In this case, it is probable to point out a potentially perilous insensitivity by expats to the Arabic culture. [124]

These conclusions can derivative from cultural values. For instance, if the cultural values are individualism and egalitarianism, then the negotiators are more likely to use interest strategy, which focus on resolving the underlying concerns that generated the conflict in order to ensure that there is more benefit gained when there is a successful resolution. On the other hand, negotiators are more likely to use regulation strategy if the cultural values are contracts and regulations. If the cultural values are collectivism and hierarchy, and few regulations, negotiators are more likely to use power strategies. Thus, the Egyptians or are Arabs in general use more power strategies than the Dutch, since they are a more collectivism society. And the Dutch use more interest and regulation strategies than Arabs, because of the individualism values. [125]

> Another finding is that if culture is the single issue or upfront aspect considered, different counterparts are in the same way competitive, collaborative, and accommodating in their negotiation approach.

> The Dutch seek cooperative solutions at early steps and are unyielding when they take their positions, which is an integrative concept of negotiation[126]. On the other hand, Egyptians have a win-win attitude, which is a distributive concept of negotiation. Another difference is that the Dutch have a task orientated style, while Egyptians or Arabs in general have a relationship oriented style.[127] They even will establish a good relationship before entering into negotiations. Moreover, Dutchmen prefer to quickly establish a rapport and to get down to business. They

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[124] Dew P. & Shoult A.(2000). *Doing Business with the United Arab Emirates*
[125] Hall, E. T. and Hall, M. R. (1994*) Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*
[126] See paragraph 4.3
[127] See paragraph 5.3

also rely heavily on the legal system and even may involve legal councils form the very beginning. Emphasizing the contract and the fine points of agreement will not be postponed. As in Arabs prefer to start with establishing a good trust based relationship, although they have a win-win attitude. So the forms of agreements are based on trust and each other's words, and the relationship will ensure the follow through of actions.[128]

10.2.3 Filling in the Matrix

Concluding this section into a summative interview, the designed matrix is filled in. It also shows the possible midway to minimize the chance of clashes due to these differences. Later on more specific recommendations are made for the project organization, engineers and project managers. Appendix F displays the matrix with a clearer zoom ratio.

Four Perspective Definition of Culture		Arab Engineers	Dutch Engineers	Chance of Clash (++,+,0,-,--)	Possible Midway
Concept of Negotiation	Disruptive	Mid-High disruptive, establish dominance, willing to take risks, use objective feelings to counter arguments, do not take deadlines seriously, and do use concessions continually as a barging strategy	Low disruptive, though deadlines are very important, rely on logic to counteract opponents' arguments, and make small concessions early	++ High	Successful negotiations require mutual respect and understanding on the part of both parties. Negotiators enter the process with a subjective view of the other party's values and goals that may or may not be accurate. Different cultures use different negotiating strategies, and it is important that these differences are understood and integrated into the negotiation process by both parties.
	Communication	High Kinesics , High Proxemics, allot of Paralanguage, Object-language is considered	Base their information sharing on facts and figures, straight to the point, down to business	0 Moderate	Culture of the construction industry in Egypt or Arabic countries in general differs significantly to that of the national culture. However, there is no reason to believe that people's behavior will temporarily change when they participate within a construction project. Mutual respect and understanding on the part of both parties is expected.
	Integrative	Begin low integrative, seek to obtain information about the other party's interests, employing creative problem-solving approaches	High Integrative, problem-solving approach, focus is on exchanging information, identify the underlying issues, find effective trade-offs	+ High	If culture is the only factor considered, then both groups are equally competitive, collaborative, and accommodating in their negotiation approach. If cultural differences affect negotiations, the impact of the situation and the role of individualism-collectivism on style need to be simultaneously considered

Fig.17. Matrix (four perspective definition of culture)

[128] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)

10.3 Evaluating Hierarchies and Protocols

In order to comprehend people's perceptions about hierarchies, protocols, and leadership, one must recognize the value of these perceptions and how they are embedded in local socio-cultural systems. In evaluating the particular matter of hierarchies and protocols in the Arab world one should know the influence of societal and familial structures on local perceptions of leadership. A significant classic secular chief all over the Arab world always was the 'sheik' or '`omda', the clan chief at the midpoint of Arab civil life. An understanding of the customary position and part of the sheik in these societies can grant insights into modern Arab hierarchy mattes.[129]

Sheikocracy

To draw a distinction of western impressions of Arab ruling, the sheik is not just a simple absolute ruler, although he regularly has almost absolute power over the general community. Nevertheless, the relationship with the clan is better explained as 'paternalistic'. The sheik takes care of the needs of clan or tribe individuals, without transferring responsibilities and rights to them.[130] The relationship does not just exist of 'top-down' communication, but is typified by great level of embedded contact and discussions. An example, the tribe, regardless to their humbleness, are permitted to protected a personal consultation, and can look forward to their requests to be handled seriously. These interactions form the soul of *sheikocracy*.[131]. In this structure, key political power is personified in the sheik. While tribe members' influence and pressure are determined by their status in the family, acquaintance.[132]

An essential aspect of this structure is a local form of preferential treatment known as *wasta*. It refers to the status and pressure an individual can put by high merit of ancestral or personal connections. Frequently in the Arab region, individual say they will 'use their *wasta*', or he has a 'big *wasta*'. This persistent aspect of Arab societies can be seen as plain corruption. Even though negative terms in western perception, *wasta* is in fact embedded in modern management philosophy on networking, organizing and hierarchies.[133] Whether individuals perceive *wasta* with a refusal, as plain corruption, or as positive personal consideration by Arabs, it cannot be avoided as an integral aspect of Arabic society, hierarchies, protocols, and business.[134]

10.3.1 Authority

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[129] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)

[130] Abdalla, I.A. and Al-Homoud, M.A. (2001)

[131] Abdalla, I.A. and Al-Homoud, M.A. (2001)

[132] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)

[133] Abdalla, I.A. and Al-Homoud, M.A. (2001)

[134] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)

One of main distinguishes between Western and Arab perceptions of Hierarchies and Protocols concerns the matter of authority. While Arabic individuals possibly will treat a head with awe like a grand man that cunningly managed to maintain equilibrium in complicated traditional forces. Western individuals may label the same person as a fraudulent person in charge with no right to lead any person. This awe can somewhat be reviewed in the terminology of a high degree of power distance. Hofstede [135], and the GLOBE studies[136] establish the finding of high power distance the Arab region. Signifying that Arab people are somewhat contented with hierarchy.

To array and frame differentiations in cultural perceptions of authority, 'ideal types' of authority by Weber is utilized as an attempt to operationalize the manifestations. He categorized rational-legal, charismatic and traditional.[137] These types are utilized for the reason that they have a significant part in various analyses of hierarchies and leadership. They are broadly recognized, and are generally adhered as theoretically strong and methodically mighty. These types were consequently used in the case studies to evaluate the Arabic and Dutch conception on hierarchies, protocols and authority:[138]

• *Traditional authority* is prolonged by tradition, and is classically rooted in social structures. In these structures, devout or clannish leaders have paternalistic influence due to the traditional respect of their position, members' prospect of impartial or beneficial care.

• *Rational-legal authority* is prolonged by the unbiased quest of openly distinct objectives by reasonably defined resources. Possibly the foremost distinctive feature of this form of deed is the impersonality. Dissimilar to other forms of societal interaction, this type is not influenced by contemplations of sex, creed, religion or prosperity. Weber derives modern bureaucracy from this type of authority.

• *Charismatic authority* is embedded in a leader's characteristic attributes and features. It is the 'haul' an individual has over his companions, not by high merit of practical or traditional authority. Charisma is a fickle type of authority that ought to pilot eminent benefits or perils for subordinates. This type doesn't essentially rely on interactive.

• *Interactive authority* is embedded mainly in societal contacts. Leaders are part of the group. They participate actively, discuss and answer to the groups' requests and thoughts. In this type of hierarchy, authority depends profoundly on the correlation with team members. Leaders are more accommodating, and flexible.

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[135] Hofstede, G. (2005). *Cultures and Organizations: Software for the Mind*

[136] Abdalla, I.A. and Al-Homoud, M.A. (2001)

[137] Hall, E. T. and Hall, M. R. (1994) *Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*,

[138] Metcalf L., Bird A., Peterson M., Shankarmahesh M., and Lituchy T.(2007)

In the Arabic hierarchy there is a strong sense of traditional authority present. Charismatic authority is also very much present, but it is not utilized as a form of managing. Charismatic authority exploits itself as mortar when the manager needs the project organization to function like a family.

The embedded bureaucracy in the Dutch society shows that rational-legal authority is the natural method of managing and constructing a hierarchy. Dutch managers are not affected by contemplation of sex, creed or prosperity. This gives allot of clearness in the hierarchies and simplifies allot of protocols within the project organization.

10.3.2 Management and Leadership

Studies of Arabic cultures are generally sorted in three ways: Arabized, Islamicized Westernized. Several inquiries examine Western philosophies, whereas others try to comprehend the culture with an overall Arabic perception or stances that are embedded in Islam. Numerous countries in the Arab region have embraced a more agreed perception of Arabic culture by amalgamating elements of Islam into daily activities, along with activities in organizations. For instance, M. Badawy (1980)[139] examined a Western conception and identified various organizational and individual aspects that have an impact on leadership and hierarchies. Whereas A. Ali[140] has explored managerial behaviors and perceptions in Arab culture, I. Sharfuddin (1987)[141] analyzed by means of Islamic ethics as the basis for management manifestations and values.

In Arabic countries, management is subjective by tribal customs, and a manager is likely to operate as a father character, presenting his task in a abundantly personal modified way typified by giving and concerned of staff and preferring persons by relatives and clan over aliens of these shared values. Arabic countries support shared values and actions such as inner-corporation and relationships. The required feature that is certified inherent in the Arab culturally hierarchy perceptions are charismatic-value oriented, self-preservation, and contemplation. Even though preferred leaders are viewed as future oriented and visionaries, present leaders are described as not likely to have or embrace traits.[142]

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[139] Abdalla, I.A. and Al-Homoud, M.A. (2001)
[140] Ali, A. (1988). *A cross-national perspective on managerial work value systems*
[141] Abdalla, I.A. and Al-Homoud, M.A. (2001)
[142] Ali, A. (1988). *A cross-national perspective on managerial work value systems*

The case studies show that construction managers apply the perception of empowerment, which has a significant emotional influence on staff and establishes a loyal working force in project organizations. It is very clear that construction managers and project managers mainly detach five values of leadership that assemble the hierarchies and sets allot of protocols within these hierarchies[143]. The five dimensions are:

1. Supportive
2. Dictatorial
3. Familial
4. Faithful
5. Receptive

These findings suggest creating two structures for leadership characteristics. One is based on chronological and cultural factors and includes faithful and familial values. The dictatorial and supportive features signify the second structure, which leans more in the direction of avowing a more common perception of leadership that could be considered to be as non-cultural, i.e. independent of national culture.

Other findings of these case studies are that Egyptian managers play a paternalistic role, treating staff members like family, and use a team approach to make staff members experience belongings to the team. Managers maneuver in strong hierarchical structures, which is centralized in decision-making, have firm headship, and lean family-type organizations.[144] Similarly, Egyptian managers emphasize autocratic method of direction and less in consentient approach of leadership like than Dutch managers.

Hierarchy manifestations in the Netherlands are also culturally certified. As in the Arab hierarchies other types of leadership were channeled, other values were remarked in the Dutch hierarchies, protocols, and perception of leadership. These values are[145]:

1. Interpersonal directness
2. Proximity
3. Autonomy
4. Modesty

Dutch managers base them self on rational arguments to direct, instead of operating in authority in the hierarchical structure. Ingratiation and the exchange of favors is a common protocol to work with through the hierarchy. Although relying on rational arguments, Dutch managers preserve their formal authority and position power, and will not be modest to exploit them when there is a sense of delay or nuisance.

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[143] Eickelman, D.(1997), *The Middle East and Central Asia: An Anthropological Approach*
[144] Abdul-Khalik, N. (1998)
[145] Deresky, H. (1994*) International management: Managing across borders and cultures*

10.3.3 Filling in the Matrix

Concluding this section into a summative interview, the designed matrix is filled in. It also shows the possible midway to minimize the chance of clashes due to these differences. Later on more specific recommendations are made for the project organization, engineers and project managers. Appendix F displays the matrix with a clearer zoom ratio.

Four Perspective Definition of Culture		Arab Engineers	Dutch Engineers	Chance of Clash (++,+,0,-,--)	Possible Midway
Hierarchies & Protocols	Strict	Wasta can be seen as a network of influence sustained by the practice and expectation of 'individualized consideration', a form of social interaction lying at the heart of modern notions of transformational hierarchy.	Ingratiation and the exchange of favors is a common protocol to work with through the hierarchy. Dutch managers rely more on rational arguments to lead, than relying on authority in the hierarchical structure. Dutch managers will preserve their formal authority and position power, and will not be modest to exploit them when there is a sense of delay or nuisance.	++ High	Whether one sees *wasta* negatively, as mere corruption, or more positively as an Arab version of individualized consideration, there is no escaping that it is integral to Arab social life, business, hierarchies, and protocols. Working in a high power distance country needs allot of patience and understanding coming from a lower power distance country.
	Clear	Arabs are relatively comfortable with hierarchy. Influence and status a person holds by virtue of familial, tribal or personal connections.In the Arabic hierarchy there is a strong sense of traditional authority present.	Dutch managers are not concerned or affected by considerations of race, gender, religion or wealth. The embedded bureaucracy in the Dutch society shows that rational-legal authority is the natural method of managing and constructing a hierarchy.	+ High	Arabs may treat a particular leader with reverence – as a great man who has cleverly managed to balance complex traditional forces – western observers may dismiss the same man as a corrupt leader with no authority to lead anybody. . As in the Arab hierarchies several dimensions within leadership were concluded, several dimensions were noticed in the Dutch hierarchies, protocols, and concepts of leadership. Both parties should understand both dimensions and consider them.

Fig.18. Matrix (four perspective definition of culture)

10.4 Evaluating Conflict Approach

Collapses in communication are primary reasons of conflicts, and good communication expertise's are obligatory to efficient conflict resolutions and discussions. Whether conflicts within a project association are sighted as wanted or not, truly, conflicts are present and widespread. As people work together in associations, conflicting values and circumstances create pressure. When a conflict is seen, approved, and handled properly, personal and organizational advantages will be an outcome. A thoughtful, efficient manager uses conflict as an chance for growth both parts of the organization and for the persons concerned. Efficient managers use conflicts productively to reproduce personal expansion, to take in hand obvious problems, to boost serious caution and self-appraisal, and to inspect disagreeing values for decision- making.[146]

Conflict is defined as the existence of dissimilarity in opinions, and so substitutes ought to be taken in and opposing opinions studied. If the organization build up the skills required enduring in its environment, it will alter and succeed. Adjustment, accommodation, and suppleness are the keys to organizational endurance in such circumstances. Conflicts can cause changes, changes can cause adjustments, and adjustments can cause endurance and even success.[147]

10.4.1 Conflict and Culture

Cultural similarity

There are more than one common variables of culture that influence conflict-resolution approaches. One of them is cultural similarity. When other individual's or group's attitude and perceptual pattern are seen as comparable to others, one also notices them as culturally similar. As cultural similarity and nationality are different perceptions, different countries may recognize each other to be comparable in their behavior and attitude when a general or transitional set of values and norms are present between them. Speaking of conflict-resolution approaches, similarity pushes members to assume a more supportive, incorporated approach[148]. Similarity also eases a problem solving and approach, as people will presume they share similar approaches to how problems have to be solved and be more broadminded of similar approaches to conflict management.[149]

On the other hand, it may be hesitated to explicitly communicate and share information if it is considered that different views are held. In this case, their border of references for taking to mean, comprehending, and communicating are supposed

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[146] Hall, E. T. and Hall, M. R. (1994*) Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*

[147] Fenn ,P., E.Davies, M.l O'Shea, (1998), *Dispute Resolution and Conflict Management in Construction: An International Review*

[148] Hall, E. T. and Hall, M. R. (1994*) Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*

[149] Fenn ,P., E.Davies, M.l O'Shea, (1998), *Dispute Resolution and Conflict Management in Construction: An International Review*

to be dissimilar. If cultural similarity is considered to be present, a problem solving approach, before a authorized strategy, is more probable. Moreover, the shortage of apparent cultural similarity is a important issue in amplifying why legalistic strategies are being relied on in social interactions. This increased dependence on formal institutions causes confidence tending to collapse. When different organizations work together and at the same time see each other as culturally different, the insight that they do not have similar values causes a higher level of attitude doubt. As a result, greater confidence in authorized and written files and the utilization of authorized instruments for solving conflicts.[150]

Relative power

An additional common variable of cultural dissimilarities is relative power, or the degree of capability to affect another decisions. Relative power is resulting from the resources that everyone brings to the circumstance. They compromise capital (i.e. justice share) and labor (e.g. management, technical knowledge). Qualified power can be beneficial as an efficient instrument to manage and incorporate the activities of business partners. Nevertheless, if uneven power relationship is present, integrative behavior is utilized in a smaller amount to resolve conflicts. In most cases, power imbalances cause the stronger partner to connect in more challenging and compelling attitude, that is forcing, and in less up-front communication. The stronger a partner is, the more capable he is that a long problem-solving procedure can be evaded, particularly throughout the determining phase of a relationship, and the more capable it is for the partners to evade cooperation. With the powerful position of the stronger partner control results, which can be taken advantage of efficiently due to the belief that his or her objectives will be received.[151]

Relationship age

An added element that takes part in the common influence on conflict approach is relationship age. In most cases, how longer, the bigger the chance for both sides to interrelate and gain common comprehension. Relationship age connects with communication occurrence and information exchange between business partners, which consecutively eases a wide problem-solving approach to resolving conflicts. Cooperation is more probable in continuing relationships, because long-term partners regularly comprehend better that temporary differences in agreement results are probable to equalize eventually.[152] In a long-term relationship, partners are more probable to be worried about the other party's interests and less probable to force a specific decree of a conflict. Doubts concerning the other party's capabilities, confidence, and other skills are likely to reduce after a while, and confidence is likely to boost. Longer relationships are less probable to rely in

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[150] Hall, E. T. and Hall, M. R. (1994*) Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*

[151] Fenn ,P., E.Davies, M.l O'Shea, (1998), *Dispute Resolution and Conflict Management in Construction: An International Review*

[152] Fenn ,P., E.Davies, M.l O'Shea, (1998), *Dispute Resolution and Conflict Management in Construction: An International Review*

authorized instruments. Association lessens the likelihood of opportunistic attitude and, as a result, lessens the require for authorized defend.[153]

The majority researchers believe that that international distinctions in communication manners can be explained in terms of the individualism-collectivism aspect. Particularly, collectivism goes along with roundabout communication, like the evaded manner of dealing with conflict, while individualism is goes with direct manners of expression, like the opposing manner of dealing with conflicts. The following predictions result from an individualism-collectivism structure. First, determinations of enduring and opposing attitudes ought to be radically dissimilar Dutch and Arab project managers. The common prediction of resemblance across all highly collectivist cultures has been disestablished by cautious relative studies of conflict manners, with a the conclusion as an outcome, that predicting the conflict approaches favored or used in dissimilar cultures might be unlikely based exclusively on the degree of individualism or collectivism.[154]

An additional conflict is that dissimilarities in favored conflict manners between countries will be influenced by individual dissimilarities on measures of individualism-collectivism. The difficulty could be that the individualism-collectivism creation comprises an amount of different values and behaviors, therefore relationships between particular values and social attitudes are difficult to discover. The dependability of individualism-collectivism level is fairly low. Likewise, cross-cultural dissimilarities in conflict-management manners cannot be based on only one value aspect running only from individualism.[155]

10.4.2 Dutch Assumptions and Techniques

Even though conflict is a common aspect, the nature of conflicts and the techniques of resolving conflict vary from one socio-cultural background to another. For example, in modern Western European backgrounds, conflict is generally supposed to inhere between two or more acting as individuals i.e., as liberated agents following their own concerns in different fields of life. Conflict is acknowledged as a natural attendant of self-interest and contest which, when topic to an optimal quantity of instruction by cautiously designed institutions, maintains societies dynamic, active, and powerful.[156]

The fundamental supposition made by Western conflict resolution theorists is that conflict can and have to be completely determined. This philosophy in which almost every conflict can be handled or resolved collides with other cultural approaches to conflict. Not only Arabic cultures take the less optimistic sight that many conflicts, despite of their nature, may be inflexible. They can develop through stages of growth and disagreement as well as stages of serene and a come back to the status

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[153] Hall, E. T. and Hall, M. R. (1994) *Conformities and conflict: Readings in cultural anthropology, In The sounds of silence*

[154] Rouen, S, (1986) *Comparative and multinational management*

[155] Gudykunst, W.B., B.Mody(2002), Handbook *of International and Intercultural Communication*

[156] Amado, G., Faucheaux, C., & Laurent, A. (1991)

quo ante. Far from simple obedience in the face of conflict, these sights are frequently related to hard work to manage initial conflict gently and not directly, to organize social networks to manage and lessen brutality, and even to attempt understanding settlement when situations seem to be promising.[157]

Coming from a psychoanalytic point of view, conflict management and resolution efforts have to help people involved in conflict to admit each other's psychological interests and wishes so that they will be capable of overcoming their historic sense of persecution. Advocates of this position disagree about the phenomenon that behaviors of individual as well as violence within a group present out of unfixed injuries and deep feelings of harassment.[158]

The non-achievement of requirements for security, identity, development, and meaning, intensified by sharp feelings of persecution, unavoidably causes conflicts. A first step in the procedure of curing, then, is the shared admission by both parties of their emotions, perspectives and requirements. Therefore, the first and most essential skill which conflicting parties must build up is that of enthusiastically listening to each other. Within conflict resolutions, communication skills are essential. In a lot of, if not the majority of conflicts, the talent of listening is masked out by disagreements and the infinite struggle to get one's own point dominant above the first. The misunderstanding is that ignoring is the opposite of listening, on the contrary, it is one preparing to answer. Active listening is a way guarantying that the entire meaning of what was spoken about is comprehended. As trained to mediators, cautious listening comprises listening to all of the parties in a disagreement and push them to create their own communication skills. Hereby they face up to two essential tasks: First, they must push people to communicate in a clear way and discuss in such a way that there is an even ending. Second, they must not be prejudice and "neutral," putting the skill and power of decision-making in hands of groups or individuals conflicting. Conflict resolution experts sometimes confirm "interest-based" cooperation as the ultimate approach for parties to conflict, encouraged to concentrate on long-term concerns before concentrating on planned positions or temporary achievements, and to connect in negotiating problem solving before negotiating hardly or softly.[159] Even though people from non-Western cultures frequently take Western statements about conflict and conflict resolution challenging into account, they might find them hard to acknowledge and put in their own conditions as well.[160]

10.4.3 Arab conflict approaches

In spite of the fast social and cultural adjustments due to modernization, the appearance of nationalism, and state structures in the Arab area, the cultural outline of Arabic civilizations until now vary intensely from those of Western

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[157] Oliveira,A. (2007)

[158] Oliveira,A. (2007

[159] Fisher, R. ,Ury, W. (1991), *Getting to Yes: Negotiating Agreement Without Giving In*

[160] Vitell, S. J., Nwachukwu, S. L., & Barnes, ,. J. (1993).

civilizations. Even though pastoral vagrancy has went down fast concerning village- and city- based manners of social life, vagrancy peoples and their civilization have nevertheless left a deep impression on Arabic society, culture, and politics.[161] Metropolitan expert classes have certainly appeared, so far people of the Arab area have not, up till now, inclined of reliable attachment to families and unique rituals of generosity and conflict arbitration. They also have not distrubuted with their supple and efficient kin-based collectivities, like the line and the clan, which in recent times ago carried out most of the social, economic, and political roles of communities in the nonattendance of central state governments. Until now as well, the institutions of the state do not always filtrate deeply into society, and "private" justice is frequently administered through casual networks in which local political and/or tribe leaders verify the result of disputes between tribes or conflicts between people. Shared religious and cultural identity stay powerful forces in social life, as do supporter-client relationships and patterns of authority pertaining to male leadership.[162] Group unity, traditional religious rules, and norms about honor and shame maintain their position next to refrains of service to the nation and the more recent values of scholars aim on reflective social adjustments.[163]

In Arabic societies, Western models of conflict management and resolution are taught and implemented by urban professional groups like businessmen or businesswomen, bankers, and engineers. For the majority people, nevertheless, conflict control and decrease are managed by state-controlled courts or by traditional resources. [164]

In this framework, one of the essential critiques about Western conflict resolution techniques is that they pertain too much on mechanism or on psychoanalysis oriented formulas that do not connect to the idiom of everyday life.[165] However a few professionals see Western techniques and skills as pertinent and useful within the framework of their own pursuits and activities, they are also acquainted with the need to adjust these techniques to original cultural realities. Below, in table 8 the dissimilarities between the Dutch and Arabic conflict-resolution approaches are displayed by summed up comparisons.[166]

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[161] Eickelman, D.(1997), *The Middle East and Central Asia: An Anthropological Approach*

[162] Sharabi, H. (1988), *Neopatriarchy: A Theory of Distorted Change in Arab Society*

[163] Fenn ,P., E.Davies, M.l O'Shea, (1998), *Dispute Resolution and Conflict Management in Construction: An International Review*

[164] Dresch P. & James P.(2005) *Monarchies And Nations: Globalisation And Identity in the Arab States of the Gul*f

[165] Sharabi, H. (1988), *Neopatriarchy: A Theory of Distorted Change in Arab Society*

[166] Sharabi, H. (1988), *Neopatriarchy: A Theory of Distorted Change in Arab Society*

Dutch approaches to conflict resolution

- primacy of individual choice in the process; individuals are free agents
- mediation or arbitration services provided by formally certified professional facilitator
- ideal third party as a neutral, unaffiliated outsider
- legal system or individual participants themselves legitimize and guarantee the negotiation and settlement process
- third party relies on a secular idiom, with reference to personal anecdotes and experiences
- guidelines derived from a specialized field of study and practice
- process reflects a preoccupation with "win-win" scenarios
- process is future-oriented: history is a problem to overcome efforts are intended to empower individuals in relation to the legal system, gaining control over their problems while achieving greater efficiency
- emphasis on utilitarian goals and on satisfaction of interests, needs, and/or rights of all individuals involved
- conflict resolution used to attain a fair deal in which interests, needs and rights of disputants are not compromised
- process typically ends with a formal written agreement

Arabic approaches to conflict resolution

- communally oriented process; individuals are enmeshed in webs of relationships
- community legitimizes arbitration/mediation through respect for age, experience, status, and leadership in communal affairs
- preferred third party as an unbiased insider with ongoing connections to all parties
- community and village elders the legitimize and guarantee the process of acknowledgment, apology, compensation, forgiveness, and reconciliation
- language and ritual of reconciliation draws freely on explicit religious ideals, texts, stories and examples
- precedence of local history and custom, encompassing relationships between kinship groups, and shared norms and values
- process manifests concern with cultivating the established "wisdom" gained through collective experience
- process is continuity-oriented: history is a source of stability and guidance that presents lessons for shaping a common future
- efforts are intended to empower individuals in relation to the legal system, gaining control over their problems while achieving greater efficiency
- efforts are intended to empower families and the community to participate directly in matters of common concern
- third parties promote direct, collaborative, step-by-step problem solving to isolate and confront discrete issues
- third parties emphasize the need to restore harmony and solidarity and secure cooperative relationships
- emphasis on honor, face, dignity, prestige, just compensation, and respect for individuals and groups
- intervention to prevent conflict escalation and disruption of communal symbiosis in a context of scarce resources

Tab 8: Comparison between Dutch and Arabic conflict resolutions

10.4.4 Filling in the Matrix

Concluding this section into a summative interview, the designed matrix is filled in. It also shows the possible midway to minimize the chance of clashes due to these differences. Later on more specific recommendations are made for the project organization, engineers and project managers. Appendix F displays the matrix with a clearer zoom ratio.

Four Perspective Definition of Culture		Arab Engineers	Dutch Engineers	Chance of Clash (++,+,0,-,--)	Possible Midway
Conflict Approach	Formality	Community legitimizes arbitration/mediation through respect for age, experience, status, and leadership in communal affairs. Efforts are intended to empower individuals in relation to the legal system, gaining control over their problems while achieving greater efficiency	Mediation or arbitration services provided by formally certified professional facilitator. Legal system or individual participants themselves legitimize and guarantee the negotiation and settlement process. Process typically ends with a formal written agreement	**+** High	Adaption, accommodation, and flexibility are the keys to the project's survival in such situation. Conflict can lead to change, change can lead to adaption, and adaption can lead to survival and even prosperity. Cross-cultural differences in conflict-management style cannot be based on a single value dimension
	Consensus	Efforts are intended to empower families and the community to participate directly in matters of common concern. Preferred third party as an unbiased insider with ongoing connections to all parties. Third parties promote direct, collaborative, step-by-step problem solving to isolate and confront discrete issues. Emphasizes the need to restore harmony and solidarity and secure cooperative relationships. Intervention to prevent conflict escalation and disruption of communal symbiosis in a context of scarce resources	Conflict resolution used to attain a fair deal in which interests, needs and rights of disputants are not compromised. Emphasis on utilitarian goals and on satisfaction of interests, needs, and/or rights of all individuals involvedProcess reflects a preoccupation with "win-win" scenarios.	**0** Moderate	The basic criticisms launched against Western conflict resolution techniques is that they are either too mechanistic or based on therapy oriented formulas that do not correspond with the idiom of daily life. Communal religious and ethnic identity remain strong forces in social life, as do patron-client relationships and patterns of patriarchal authority. A need to adapt these methods to indigenous cultural realities is crucial.

Fig.19. Matrix (four perspective definition of culture)

11

Conclusions

It is expected that cross-cultural collaborations have an effect on projects in numerous positive ways. As people from various countries and various cultures cooperate, the discussion is that the diverse points of view brought to the project caused to more effectual and created creative solutions.[167] This became apparent from these case studies and interviews; however, the benefits are not necessarily automatic generated. They must be managed. Becoming aware of the cultural dimensions, like power distance, uncertainty avoidance, individualism, and long-term orientation, offers managers with a glossary for generating another level of consideration once problems must be tackled.

A very realistic illustration is the difficulties, which might be expected with Arabic countries. With Arabic countries scoring high in power distance, project participants are likely to have a preference for a management composition through a lucid chain of command, one that is further centralized than delegated. Being low in individualism, or high in collectivism, these partaker have preferences for human resource policies that provide their personal requirements.[168] Recognizing these differences make managers able to comprehend the benefits and detriments that the cross-cultural collaborations are likely to cause to a project, and through this consideration more efficient compromises can be attained.

11.1 Conclusions on the matrix's outcomes

- **1. Time orientation**

> Arabic engineers are poly-chronic. They are responsive, informal and flexible in resolving problems and planning projects. Arabic Engineers shape time synchronically generally doing numerous things at a time. The planning schedule is just a tool to work with as an idea on how the duration should look like for Arabic engineer

> Dutch Engineers shape time sequentially. They strongly have a preference for planning and maintain to plans once they are made. Time commitment is taken gravely. To stay on schedule is a must in order to guarantee the achievement of a deadline.

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[167] Ho SP, Liu LY. (2004)

[168] Mawhinney, M. (2001), *International Construction*

- **2. Concept of negotiation**

Arab engineers are more likely to use an appeal on emotion as their persuasion tactic, to use subjective feelings to argue against arguments, and to use concessions frequently as a barging tactic.

Dutch engineers, base their stance on facts and logic in their attempts to argue and oppose counterparts' arguments, and assemble small concessions prior engagement in order to develop a relationship with the other side in the negotiation.

- **3. Hierarchies and Protocols**

In the Arabic hierarchy there is a strong sense of traditional authority present. Managers operate in very hierarchical organizations that have centralized decision-making, have strong leadership, and are considered family-type organizations.

Rational-legal authority is the natural method of managing and constructing a hierarchy in Dutch organizations. Dutch managers rely more on rational arguments to lead, than relying on authority in the hierarchical structure.

- **4. Conflict approach**

Arab engineers may hesitate to openly communicate and exchange information if they believe that the other person holds dissimilar views to them. They also prefer avoiding conflict by compromising.

The basic assumption made by Dutch engineers is that conflict should be completely solved. Western approach towards conflict and conflict resolution is provocative.

Most managers operating in international projects may be in agreement that culture has an impact on project management.[169] A very equitable question is, is this realization helpful for project managers? A response could be that it can assist due to providing nature of a framework to explore the intricacies of the management course of action, and by this framework one extent a more pragmatic method of indulgent and managing the diversity, which is certain in international projects.

A summary of important cultural differences between the two cultures is shown in Table 9.

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[169] Gillespie, I. (1990)

Arabic culture	Dutch culture
Collectivism	Individualism
Large power distance	Small power distance
Strong uncertainty avoidance	Weak uncertainty avoidance
Short-term orientation	Long-term orientation
Outer-directed	Inner-directed
Relationship	Contractual
Conservatism, tension between hierarchy and harmony	Autonomy, tension between mastery and egalitarian commitment/ harmony

Tab 9. Cultural differences

In Arabic countries, staff's personal interests and objectives are secondary to the benefits and objectives of the organization. The company's achievement is seen as a reflection of their own image. Hence, when the company is successful the staff associate themselves whit that. On the other hand, in the Netherlanders a clear separation is made between personal and collective sets of aim and. This may have relevance to project managers' relationship with their company in such a way that:

Conclusion No. 5.

Arabic project managers will mainly correlate their identity with the company. Dutch project managers will mostly relate their identity with their aspiration and personal achievements.

In the Arab region group shared aims and obligations are promoted. The affiliation between staff and directors is more founded on moral. In the Dutch culture, individuals are seen as separates. Individual freedom and preferences are important features. The affiliation between staff and managers is more contractually based. Western project management acumen model is orientated on task-achievement. The project organization is a momentary organization for realizing a particular task. While Arabic project managers only achieve a task if tight and moral relationships inside the team is established. Hence:

Conclusion No. 6.

Arabic project managers will take greater consideration than Dutch project managers in establishing and preserving personal relationships inside the project team, in contrast with the task.

Uncertainty Avoidance might influence project managers' approach to risk and methods to the management of it. Arabs, with a greater Uncertainty Avoidance

culture, worry about unknown and uncertain or indefinite situations. For them, what is out of the ordinary is unsafe. In contrast, Dutch less Uncertainty Avoidance background makes Dutchmen relaxed with legal safeguards and regulations. Nevertheless they do resist to experiment. For them, difference stimulates curiosity. Hence:

Conclusion No. 8.

Arabic project managers will sense more pressure compared to Dutch project managers when dealing with uncertainties.

The Egyptian and Dutch project managers in the case studies and interviews considered both their main duty supervising the management and deliverance of a project surrounded by budget, time, and scope. By their descriptions of their method of managing activities, the similarities and dissimilarities of their perception of the work became clear. The essential conclusions related to the above findings are described below, supported by distinctive paradigms of statements, and summarized in Table 10.

Relationship with Organization	Arabic conceptions	Dutch conceptions
Team	Employee of the company	Manager of the project
	Working for own career achievements and the company 's benefits	Working for own career achievements and job satisfaction (doing their job right)
	Family-like, mutual-care	Friend-like, respect and trust
	Existing long-term team	New team, new people
Client	'Boss' of the project	Provider of project funds
	Make the client happy	Keep the client informed
	Working and personal relations	Working relations
Subcontractors	Brothers/sisters of the family	A member of the team
	Long-term cooperation	Cooperation for this project
Conflict resolution	Negotiation first and last	Negotiation first
	No claims	-Claims when necessary
	Need good relationships	Need good contract
Organizational structure preference	Disliking Western-style matrix structures	Accepting and being used to the matrix structures
	Preferring to use own stable, existing team	Liking to know new people through new project
Attitude to uncertainty	Too many uncertainties and responsibilities	Enjoying experiencing new things
	Enjoying final achievement, but feeling pressured throughout	Enjoying both final achievement and day-to- day challenge

The management of collaborative international projects is in the main stream not much different to the management of standard construction projects. Time must be controlled, set up for finance, managing resources, and activities directed. Nevertheless, these projects are more complicated due to the required cooperation

between organizations from various countries where management processes and decision-making methods are not always similar

The design of the project organization is acknowledged as a key success feature in project management. Especially, if the collaboration is cross cultural, emphasis of diversity should be acknowledged, in order to be prepared for different methods of complying with the project's scope.[170] During the interviews these differences became apparent. Managers with dissimilar cultural backgrounds do not constantly have the same preferences for management systems. The partiality can be associated to national culture and suggests that culture might be an important aspect in the project management or construction process.

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[170] Ali, A. (1988)

11.1

Conclusion on Project-Based Method & Project Management Body of Knowledge

In the different countries project managers manage projects with comparable methods, but they differ in conduct. Dissimilarities might come from cultural difference. Project managers and their clients do not allocate the same weight to the assorted success measures of the project. In view of the fact that many existing projects have international participants, it seems incredibly vital to detect cultural dissimilarities, which might be overlapped when performing such projects.[171] The management method adopted by many managers in Egypt or in the Arab region in general is that of extemporization.

Following the above, it is probable to recognize variation in management capabilities and styles between the Netherlands and Egypt. Five from the nine project management awareness sections involved in the *Project Management Body of Knowledge*, known as *PMBOK[172]*, were used for a brief study on the subject. These five areas correspond with the Dutch '*Projectmatig werken'*, translated in '*Project-based Method'*. The following paragraphs sum up preceding conclusuins on the contrast of the two countries assembled by to the five knowledge areas.

11.1.1 Time

Reduction of projects' intervals is abundantly vital for the allocated success of projects in both countries. They are incessantly searching for innovative methods to lessen the projects' duration.[173] For instance, combining activities throughout the development stage is a significant success factor for Dutch organizations. The ambition is to accelerate product development. Arab project managers on the other hand devote most of their efforts in schedule planning and less in delegating activities to combine activities.

11.1.2 Cost

The Egyptian method of predicting and controlling costs is in general dissimilar from that of Western project organizations. Egyptian project organizations want to be certain that staff members empathize how their activities influence the organizations' accomplishment. Staff members in charge of measuring and foretelling costs are not only just qualified accountants, as usual in the west, except that they revolved with various disciplines prior to compelling on a cost-planning job. While a Egyptian engineer is abundantly mixed up in finance and takes in account the influence of the design on costs, Dutch engineers are primary focused

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[171] Amado, G., Faucheaux, C., & Laurent, A. (1991)
[172] Project Management Institute (2004) *Guide to the Project Management Body of Knowledge (PMBOK® Guide) Third Edition*
[173] Abdul-Khalik, N. (1998

on technological details. They later on delegate to a specialist in 'leaning in' the cost versus the technical specifics, as every specialization has its professionals.

11.1.3 Quality

The Netherlands is acknowledged for its lofty quality management. In the Netherlands, directors and managers consider responsibility of quality in high manner. Dutch companies invest more time than Arabs do in planning and lessen lost time in restoring completed products. One of the central reasons for the conclusions is that Dutch companies view the being of defects as a material of shame, shimmering on the organizations' good name.

11.1.4 Human resources/Organization

In the two cultures this part is taken very seriously. Nevertheless, managed differently. In Egypt, a self-maintaining and caring project team is seen as a significant success factor. In contrast, the Dutch, value individual work more, and the operational implication of teamwork is not the same.

11.1.5 Communication/Information

Communication methods differ between low-context countries, like the Netherlands, and high-context countries, like Arabic countries. In low-context communication methods, a lot of information is enclosed in clear codes, like verbal or written texts. In contrast, high-context communication methods, distribution and receipting information is mostly reliant to the situation and context, without excluding the non-verbal communication.[174] Information exchange is a important success factor in Dutch construction projects. Arabic construction projects generally encounter performance loss. This is a result of a lack of defined objectives and communication.

11.2 Consequences of Culture for Project Organizations

Measuring the influence, which culture has on project results is difficult. One interviewee described a reason of conflict the different cultures in which individuals had previously worked in. It was a conflict that ultimately caused managerial adoptions, however this conflict is hard to connect in a straight line to project delays. The actual reason of relating culture directly to project results is thorny due to the fact that so many other factors are involved. Nevertheless, how culture influences project organizations can be derived by the consequences of the organization has[175].

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[174] Hall, E. T. and Hall, M. R. (1994)

[175] Ali, A. (1996)

Arab region

Consequences of Hierarchies & protocols

- Greater centralization
- Tall organization pyramids
- Large proportion of supervisory personnel
- Large wage differential
- Low qualification of lower levels
- White-collar jobs valued more than blue color-jobs

Consequences of uncertainty avoidance

- Managers more involved in strategy
- Managers more interpersonal oriented and flexible in their style
- Managers more willing to make individual and risky decisions
- More internally ambitious employees
- Lower satisfaction
- Less power though control of uncertainty

Consequences of conflict approach & individualism

- Involvement of individuals with organizations primarily moral
- Employees expect organization to look after them like a family, and become very alienated if organization dissatisfies them
- Organization has great influence on member's well-being
- Employees expect organization to defend their interests
- Policies and practices based on loyalty and sense of duty
- Promotion form inside
- Promotion on seniority
- Less concern with fashion in managerial ideas
- Policies and practices vary according to relations

The Netherlands

- Less centralization
- Flatter organization pyramids
- Smaller proportion of supervisory personnel
- High qualification of lower levels
- Manual work same as status as office work

- Managers less involved in strategy
- Managers more task-orientated and consistent in their style
- Managers less willing to take individual and risky decisions
- Less internally ambitious employees
- Higher satisfaction
- More power though control of uncertainty

- Involvement of individual with organization primarily calculative
- Organizations are not expected to look after employees outside contractual agreement
- Organization has moderate influence on member's well-being
- Employees are expected to defend their own interests
- Policies and practices should allow individual initiative
- Promotion form inside and outside
- Promotion on market value
- Managers try to be up to date end endorse modern management ideas
- Policies and practices apply to all

The consequences of national differences for project organizations are summarized in table 11. This, displays the differences between the organization forms in the Arab region and the Netherlands, and provides a guide for managers to analyze cross-cultural influences within the context of construction projects in the Arab region. Managers should take these differences into consideration when managing construction projects in the Arabic countries.

12 Recommendations answering Main Problem

The following paragraphs are formed as an answer on the main thesis question in paragraph 2.2;

> **To what extent could cultural diversity be managed in cross-cultural collaborations in Arabic construction projects, in order to avoid conflicts, claims, and delays?**

By exploring the claims, conflicts, and delays of these case studies and after trying to determine what happened and why it happened, an additional task is to suggest methods for preventing similar incidence. It is almost impossible to totally eliminate construction claims, conflicts, or delays, but the international construction industry, particular in Arabic countries, can be improved by reducing the overall numbers of project failures.

The recommendations are presented for engineers and project managers working overseas. The essence is based on the context of Arabic construction projects. Consequently, the recommendations address generally the most common problems in that area using the prevailing managerial tools applied in Western construction projects. These methods derive from the various propositions mentioned in the following books:

o   Project Management Institute (2004) *Guide to the Project Management Body of Knowledge (PMBOK® Guide) Third Edition*

o   Neal,e R. H.,(1995) *Managing International Construction Projects: An Overview*

o   Mawhinney, M. (2001), *International Construction*

o   Kangari ,R., C.L. Lucas(1997), *Managing International Operations: A Guide for Engineers, Architects, and Construction Managers*

o   Gudykunst, W.B., B.Mody(2002), Handbook *of International and Intercultural Communication*

o   Flapper, H.A.J. (1995), *Bouwplanning*

o   Deresky, H. (1994*) International management: Managing across borders and cultures*

o   Rouen, S, (1986) *Comparative and multinational management*

However, methods which are mentioned in the above literature concern international management or construction management in general. These methods

are modified and alternated to be applicable for the addressed problems of this research in particular.

Nevertheless, these practical recommendations and considerations also address the international project management in general for some issues, so they can be used by Arabic engineers working in the West as well.

The recommendations are presented based on the inventory concerning claims, conflicts, and delays in the Arabic construction industry, as shown in table 1 in paragraph 2.1, table 6 and 7 in 7.1.1 and the overview in appendix A. The different issues and solutions are presented through the four different cultural perspectives. The objective is to allocate specific causes to specific cultural themes, which diversities are presented in chapter 10 and 11, finally followed by applicable managerial solutions.

12.1 Recommendations based on Time Orientation

Slow decision-making processes

Delays are frequently caused by slow decision making processes. This is caused by the decision makers themselves. For that reason, planning decisions with a time table is an imperative aspect for the decision-making process. Therefore, schedules including decision-making milestones are highly recommended.

Delays of project at the planning stage

Frequent delays in the Arab region are encountered in the planning stages, mainly due to the postponed taken accountability of a temporary institutional ownership. If ownership of a project is not claimed by any one at the planning stage, delays cannot be avoided. Therefore establishing an institutional ownership or party, which takes the responsibility of an owner, mitigates these kinds of delays.

Limited resources

Due to a laconic attitude towards time, some forthcoming shortages of resources occur in the process. Not having adequate resources to recognize project needs can be lessened by acquiring additional personnel in the planning process. With expended personal a better delegation through the process is assured, resulting in swifter identification of needed resources or expected complications in the planning.

Changes in project requirements

Owners in the Arabic region frequently change their scopes or project requirements during the planning stages. They often do not see the complexity of project planning. This can result in massive delays. However, engineers can assist owners to sharply define their scopes by providing useful information and documentation to owners in the initial stages. By doing this, early documentation of project requirements can be established, which can channel the process and lessen future interference of the owner.

12.2 Recommendations based on Concept of Negotiation

Unclear project scope

Due to the high-context type of communication in the Arab region, sometimes unclear project scopes are inevitable. This may result in delays, if not conflicts or claims in later stages. The project manager should stress that clear documentation of the scope of the project is crucial. Putting pressure on the counterparts or participant to do so has to be done with a quite rational, and most importantly charismatic persuasive manner. Putting pressure could be interpreted as offending.

Site operation parties commencing new demands

One of the most frequent causes of delays is caused by the attitude of the parties operating on the construction site itself. These delays can be reduced if internal and external site staffs are drawn in early in the planning stages. Accurate documentation of their suggestions and consequential impacts on the project should be calculated.

Incomplete project requirements

Akin to the cause of an unclear scope as discussed above, written project requirements are in some cases are not coherent whit the owner's desires. Detailed in black and white explanations and elucidations are crucial as lessening cures recommended for these types of delays, if not potential conflicts or delays.

Deficiency in communication between various parties

Due to the cross-cultural and cross-boundary nature of this project organization, communications can detach. If this occurs during the designing and planning it can source multiple delays during the process. A project manager with a global

perspective knowing how to accurately document processes and exchanging them between the various parties facilitates in avoiding preventable delays. Assigning the project manager as a single point of communication and empowering him to operate as an agent for communication, are practical recommendations.

12.3 Recommendations based on Hierarchies & Protocols

Bribery policy

Occasionally bribes will be offered in aggravation by project participant to accelerate processes. It raises expectations lays down a bad precedent. This should be avoided. Bribes are not talked about openly, so one person must be appointed to handle bribery matters. Working with local business agents is the best way to prevent repercussions due to bribery.

If a bribery policy is not equivalently put into practice, delays possibly will be caused by subcontractors, government officials, or supplier. A policy on bribery ought to be established in the initial phase of a project. This will let that the staff, suppliers, and government officials know to what extent bribery is accepted and tolerated.

Assigning the wrong persons to projects

A frequent cause of project delays is assigning wrong persons to supervise a project. In early stages a strict profile must be designed concerning supervising personnel. A clear line between favoring (derived for the so called wasta) and recommendation must be made. Assigning has to be done using profiles. Introducing this demand has to be done with rational and charismatic manners, in order to avoid interpretations of personal refusals of favors.

Political pressures and requirements

Methods of managing political pressures and requirements are to manager the communications and involvements with notice and daintiness. Requesting owners to take the initiative to ease delays or conflicts of interest is also an important method. Assisting the owner in finding resolutions is vital in such situations.

Multiple approval levels

Due to the tall hierarchies in Arabic organizations, a lot of approval levels are mandatory ahead of any work or research being initiated. Delegating authority for

approvals along with approval time tables and reducing the several approval levels, are methods for avoiding unnecessary delays or conflicts.

12.4 Recommendations based on Conflict Approach

Avoiding identifying projects requirements

Due to the great responsibility of properly and professionally identifying project requirements, some avoiding behavior is evident. This is considered is some situation a source for future conflicts or claims. If such behavior is recognized in the early stages, future damage can be avoided by assigning a person or party responsible for identifying the requirements, or if the complexity of the project is high, a separate project team can be set up. It is recommended not to start the actual construction activities without establish the latter.

Delays by government officials

For public projects the dictating involvement of officials in project analysis, and the allotment of particular boards cause frequent delays. Closely working with officials, involving and including municipal early, prevents avoidable delays on public projects. Giving them a sense of liability eases the collaboration, and may eventually evolve in fewer involvements by the officials.

Imprecise economic analysis

Weak economic analysis is a frequent cause of conflicts or claims in fragile economies. In order to work within unclear parameter a revise or a competent and skilled project management team, specifically experienced in these economies, must be assigned. Depending and proximate collaboration with owners, contractors, and sub-contractors in these situations, gives room for confidence to assign proper accountability for each party.

Social impact studies

Early and proper anticipation of social impact with accurate planning, documents and studies can assure endurance while having clashes due to social or public interferences. This approach to public conflict can prevent delays, which would encounter by poor preparation.

12.5 Recommendations & Attributes of the Project Manager

Encouraging people from different cultures is difficult for the reason that they are not all motivated by the same thing. For instances in Arabic countries it is difficult to instill a sense of urgency if people are not used to moving quickly when there is complex bureaucracy systems or high temperature and moisture. Working with incentives in the Arab cultures prevails over working with penalties.[176]

Project managers have to line more with officials of government agencies in Arabic countries if there are strict regulations and government requirements. Also, understanding hidden systems for completing works in the Arab region sometimes can accelerate the process. Engaging with local business agents is very much recommended when hidden systems in these processes are involved.

There are quite a few qualities and attributes that are vital for international project management entrants. Setting up a profile for these attributes is important to know which attributes needs to be acquired or enforced. Some of these attributes are

- Communication and language skills: it is impossible to communicate effectively with people with different languages if one is not capable of effectively communication in own language
- An apparent intelligence of priorities
- The talent to decide independently and quickly
- Using authority and accountability effectively
- The aptitude to resolve conflicts both cultural and interpersonal
- Value for other cultures

To value different cultures is indispensable for cross-cultural project managers and members. A significant reason why expatriate staff is released in the early hours form projects across borders is their incapacity to function within different cultures.[177]

Variables which can assist preventing incidence from occurring include good communication and organization in the construction industry with the parties involved verbal and documented. Also proper selection of architects and engineers fitted for a cross-cultural collaboration is very important.

These are methods that are suggestible considering delays and construction failures caused by the complexity of international construction projects and the intricacy of a cross-cultural project organization.

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[176] Eickelman, D.(1997), *The Middle East and Central Asia: An Anthropological Approach*
[177] Mawhinney, M. (2001), *International Construction*

12.6 Recommendations for companies / Cross Cultural Training

To operate more competently in foreign environments companies should design programs involving cross-cultural trainings. Topics could be:

- Significance of socializing with overseas business associates

- Comprehend different company systems structures and management styles

- Utilization of appropriate technology

- Dealing with bribery

- Governmental forms

- Political matters that have an effect on construction project staff

- The effect of a incapacity of engineers working overseas

- Setting and achieving project scopes and running projects across borders

- The magnitude of establishing and maintaining international coalitions on the project and its organization

- Payments of suppliers and local subcontractors

- Types and causes of delays encountered most frequently on global projects

12.7 Recommendations for educational institutes / Educational programs

Conventional engineering educational programs give attention to technically proficient engineers, constructors and project managers, except hardly any educational programs accentuate the significance of indulgent in cultural issues. Initiating significance in dexterity and management practices always increases the likelihood of importing new principles and behaviors, which might be completely strange to and incoherent with the standards of a country.

Therefore, cultural training must be part of the technical education to guarantee the endurance of local social principles and the potency of a country. Global subject that are practical for engineers and project managers to study contain courses in global finance, management, and economics world cultures, global business stratagem, political science, and world history. Cultural anthropology and archaeology are also constructive when working across borders. They present a chronological and historical perception on the development of different nations and their cultures.

12.8 Some final Practical Considerations

12.8.1 Meetings

Meetings are performed in a different ways in various countries. They differ between domineering lectures to brainstorming discussions. To detect what is suitable, examine local meetings prior to participate meeting. Observing meetings offers knowledge about interrupting, pending and waiting until a one is refined. It also give an understanding on how to address individuals, or head of a meeting.

12.8.2 Presentations

While engineers present presentations, owners are umpiring them on their technical proficiency. Including also the relation to local culture principles. Foremost variations between Arabic and Western cultures appear during tender presentations. In some Western cultures, such as the Dutch, engineers use flipcharts, graphs and charts. They write on them throughout the presentations.[178] In Arabic cultures, this is read as an indication that one is not prepared to conduct their presentation, as they had to adjoin things throughout the presentation. Well-practiced, refined presentations ought to be the solitary form of presentations hold in Arabic countries.

12.8.3 Passive-aggressive behavior

Passive-aggressive behavior appears when personnel receive dire evaluation or are sensing lack of control. In construction, passive-aggressive behavior appears through carrying out work imperfectly on purpose, slowing down work of staff, missing deadline, and pretending not to know how accomplish tasks. [179]Passive-aggressive behavior also occurs when there is a great deal of inequality in rewards between management and staff. Knowing the source of passive-aggressive behavior assists managers to stature how to manage it. When people have no channel to express their frustrations it will be more intricate to manage one's staff.

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[178] Gudykunst, W.B., B.Mody(2002), Handbook *of International and Intercultural Communication*

[179] Kangari ,R., C.L. Lucas(1997), *Managing International Operations: A Guide for Engineers, Architects, and Construction Managers*

12.9 Summarizing: How to manage cultural diversity in order to avoid claims, conflicts, and delays

Within cultures, values play an important role in how people behave in daily life. Values also play an important role in organizational behavior. In cross cultural settings, differences in values can be a serious issue in management, organizational commitment, and conflict. Differences in negotiation and communication styles can cause serious problems and have a significant impact on whether a multinational company, fusion, or joint venture does well across cultures. If cultural differences are mismanaged, the consequences are potentially grievous, and previously effective managers and organizations can become ineffective and frustrated with overseas and multinational ventures. On the other hand, the successful management of cultural differences can create a competitive advantage, innovative business practices, and organizational learning.

The above paragraphs present some managerial recommendation describing what to do if a manger sees potential delays or uncertainties about the project management due to the different cultural sceneries. It clearly shows that, with the consideration of the cultural values, some core managerial decision or intervention can be made. As a hired expat, engineer or project manager from another country, it implies that the hosting company or organization is in need of specialties which are not at hand in their own country.

Thus, one, working overseas, should not hesitate to exploit the professional or managerial tools derived from his specialties, or pushing through his methods in order to successfully accomplish the projects' scope.

Nevertheless, particular attention needs to be paid to the fact that while people may say the same thing and use the same words to describe something, their conceptualization of an idea and how they transfer it into action may be quite different. Today's managers are living in a rapidly changing environment, and as companies expend across national borders, these managers will need to think globally in order to be successful. There will clearly be some converge in the ways that organizations conduct business, but it also seems that a country's societal and cultural values will continue to play an important role, so managers need to act in line with local cultural needs and expectations. In other words, they need to think globally professional but act locally.

12.10 Recommendations for further studies

There is sufficient evidence to indicate that, while current theories provide a useful frame work, their application across cultures should be undertaken very carefully. Interest in research and analysis may never come to an end, as the interest shifts to what country and regional differences and similarities exist and, more prominently why they exists.

Most research has focused on highlighting differences, but even where differences exist; it is often a difference of relative emphasis rather than the presence or absence of a specific approach.

For instance, questions arise like;

- Is it possible to generalize the conclusion derived from the case studies over various projects in that particular country, region, culture, or religious beliefs?

- Why do Northern- Western European engineers or business conductions differ   from   southern   European?

- Which designers, architects, or the project management or consultancy, based on foreign nationalities, do Arabic hosting Clients or Owners prefer and why?

- How can we use the information available to us to prepare managers to be effective in many cultures?

- How can we use cultural differences effectively to enhance the organization's competitive advantage in the global arena?

13   Personal Evaluation

Looking back to the entire process of setting up this graduation thesis, remarkable experiences have added up to the line of my education. From the beginning of starting with the Master program I worried about the subject of my graduation thesis. I surely did not want to spend two semesters doing a research on a subject which does not really integers me.

I started to look at a broader perspective of the construction industry. A lot of attention is driven to the direction of the Arabic Gulf region, and their massive construction projects. These projects consist of many engineers from various cultural backgrounds and countries. The question occurred to me, concerning collaboration or cooperation, what the impact is of cultural diversity and the different values and styles of communication. So I knew in general what the subject of my thesis was going to be.

A major hesitation arose considering the complexity of this subject. Merely, little attention of the Arabic construction industry or the fundamentals of international project management was present in the educational curriculum of this faculty. This also was addressed by the professors of this laboratory, despite their upmost interest in this subject. I took their warning seriously about the difficulty of this particular subject and scientific area which not truly has been explored yet by previous students or guided by professors at this faculty. Looking forward to the consequents and difficulties, I either had the choice of considering a more guaranteed safe subject or intensively exploring the existing information about or around this subject. To maximize the results of finding interesting sources and extensively setting up a knowledge base for this thesis, I started to brainstorm about separate subjects and themes to enlarge the field of my exploration. The outcome has created the theoretical frame work for this thesis. With the encouragement of the professors, I realized that I was on the right track, which had a multiplying effect on the knowledge base I was creating.

The second phase of the graduation project consists of research in practice. Based on the fact that this research is exploring the construction industry of the Arabic region, it was evident that I had to choose an Arabic country to further implement this research. Taking into account that I had to stay there for several months and setting up a broad network of engineers willing to answer some question or showing me some construction sites it was practical to go to Egypt. Egypt was chosen due to my Egyptian heritage background and because of all Arabic countries, Egypt was the most familiar and so the values and protocols are too. Thus, the evaluation of the exploration would be less difficult, and tracing the conclusion the theoretical framework would be more consistent.

I participated on some projects. Getting relevant information took some time in the beginning due to the responsibility I got on participating on the projects. After a month picking up relevant information caught up in a cataract, processing this information was a heavy task. Fortunately the mentors attended me in designing an instrument which can be used for excelling the processing of the relevant information.

Concluding this evaluation I want to highlight the fact that some critical choices were made and some critical guidance was provided. These were:

1. Choosing a subject that fully integers for the proper endurance
2. Promptly creating a base of information and sources to rely on
3. Setting up a frame work consisting of themes and theories
4. Creating the proper relevant instruments for processing the load of information
5. Consequentially assigning a operational field for implementing case studies
6. Forecasting difficulties to be prepared for alternate scenarios

To conclude this work a Strength, Weakness, Opportunities, and Threat analysis (SWOT) is made. This matrix below is filled in with the focus on the researches' results. The SWOT matrix emphasizes on the utilization of the outcomes.

Strength

- **Combines project/ construction management with Cross-cultural management**
- **Explores Arabic Construction industry**
- **Elucidates Arabic business culture**
- **Elucidates Dutch business culture**
- **Applicable managerial tools**
- **Creates awareness of differences**
- **Forecasting conflicts to act on**

Weakness

- Few case studies
- **Generalization of age generations**
- **No in-depth exploration of diversity with in Arabic cultures**

Opportunity

- Stimulates further researches
- **Enhances performances overseas engineers**
- **Enhances performances hosting engineers**
- **Adding dimensions into project management**
- **Considers educational curriculums**

Threats

- Creating prejudice attitudes
- **Blind generalization**
- **Using results as barrier instead of stimulus**
- **Exploiting each others' weakness**
- **Considers educational curriculums**

Finally, the statement can be made of saying that this process was in general a high dose of experience, added knowledge and may be a stimulus for researchers to further explore this particular subject or field. I also sincerely acknowledge the fact, that the entire process would not be as successful, if I was not encouraged and professionally guided by my mentors Rob Geraedts and Otto Kroesen.

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APPENDIX

Appendix A

Source: (Faridi,A.& El-Sayegh, S. , 2006)

Causes of delays	Rank as per contractors' perspecive		
	UAE	KSA	Lebanon
Inadequate early planning of the project	1	16	11
Preparation and approval of drawings	2	1	3
Poor supervision and poor site management	3	16	11
Slowness of the owner's decision-making process	4	5	1
Shortage of materials on site	5	10	19
Conflict between contractor and the consultant	6	13	11
Obtaining permit/approval from the municipality/different government authorities	7	49	4
Lack of communication and coordination between the parties involved in construction (contractor–subcontractor–consultant–owner)	7	23	11
Productivity of manpower	8	55	27
Shortage of manpower	8	28	59
Incomplete drawings/specifications/documents	9	18	
Unsuitable leadership style of construction/project manager	9	36	17
Non-availability of materials on time	10	7	20

Contractors' perspective: ranking of 10 most significant causes of delays in UAE and their corresponding ranking in KSA and Lebanon

Causes of delays	Rank as per consultants' perspecive		
	UAE	KSA	Lebanon
Preparation and approval of drawings	1	11	1
Slowness of the owner's decision-making process	2	2	9
Financing by contractor during construction	3	2	26
Shortage of manpower	4	27	54
Inadequate early planning of the project	4	16	9
Skill of manpower	5	27	9
Non-availability of materials on time	6	16	6
Productivity of manpower	7	49	32
Poor supervision and poor site management	8	11	20
Obtaining permit/approval from the municipality/different government authorities	9	21	47
Unsuitable leadership style of construction/project manager	10	24	2
Delays in contractor's progress payment (of completed work) by owner	10	5	20

Consultants' perspective: ranking of 10 most significant causes of delays in UAE and their corresponding ranking in KSA and Lebanon
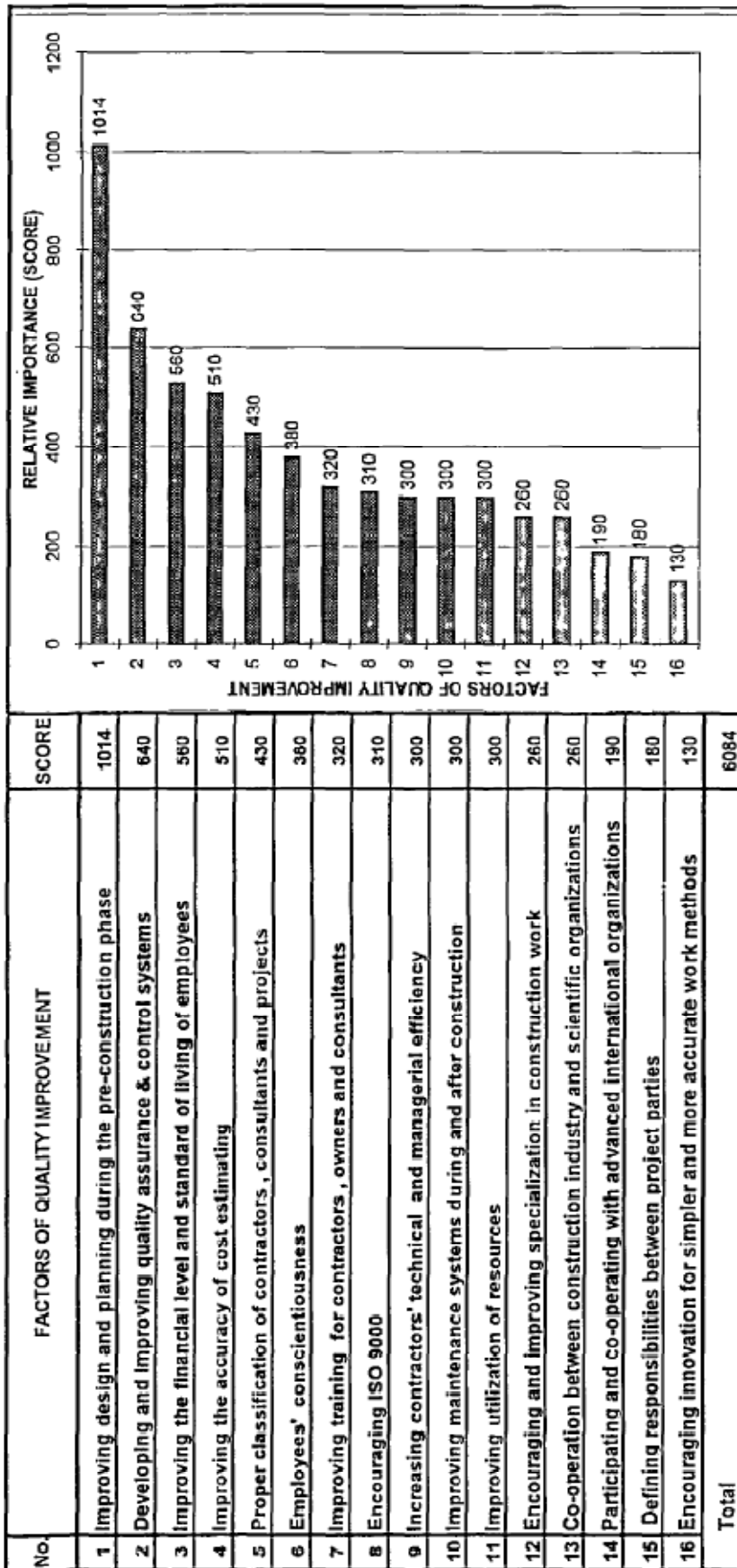
Risk Element	
Financial	Low credibility of shareholders
	Cash flow problems of client
	Fluctuation of exchange rate
	Bankruptcy of partner
	Currency restrictions
Legal/Cultural	Incomplete contract terms
	Breach of contract by partner
Management	Change of organization
	Improper feasibility study
	Improper planning and budgeting
	Incompetence of management teams
	Poor relationship with partner
Market	Increase of material price
Policy / Political	Cost increase due to change of policies
	Loss incurred because of corruption & bribery
	Loose due to bureaucracy for late approval
Technical	Design changes
	Equipment failure
	Error in design drawings and specifications
	Material shortage
	Poor quality of procured materials
	Subcontractors low credibility
	Tendering mistakes
	Unknown site conditions
	Shortage of skilled labour
	Little coordination between activities during project execution
	Delay because of bureaucracy for late approval by consultant
	Subletting work to incompetent subcontractors who are part of the partner group

Major risk element in construction joint venture in Egpyt Source: Georgy M., Ibrahim M., and Abdel Gawad M. (2008),

Source : Abdel Razek, R.H. (1998)

Improving quality in construction: voting and scoring results.

No.	FACTORS OF QUALITY IMPROVEMENT	SCORE
1	Improving design and planning during the pre-construction phase	1014
2	Developing and improving quality assurance & control systems	640
3	Improving the financial level and standard of living of employees	560
4	Improving the accuracy of cost estimating	510
5	Proper classification of contractors , consultants and projects	430
6	Employees' conscientiousness	360
7	Improving training for contractors , owners and consultants	320
8	Encouraging ISO 9000	310
9	Increasing contractors' technical and managerial efficiency	300
10	Improving maintenance systems during and after construction	300
11	Improving utilization of resources	300
12	Encouraging and improving specialization in construction work	260
13	Co-operation between construction industry and scientific organizations	260
14	Participating and co-operating with advanced international organizations	190
15	Defining responsibilities between project parties	180
16	Encouraging innovation for simpler and more accurate work methods	130
	Total	6084

Appendix B

Dimension & Question

(Based on Hofstede's and Trompenaars's questionnaires)

Power Distance
I would rather avoid disagreement with my manager.
Managers tend to take their decisions on an autocratic way.
I prefer managers to take decision with a democratic manner.
I feel consulted by my direct superior in his decisions?

Uncertainty Avoidance
Company rules should not be broken even when the employee thinks it is in the company's best interest.
Employees intend to continue with the company for two years at most or from two to five years
How often do you feel nervous or tense at work?

Individualism
Do you have sufficient time left for personal or family time?
Do you have good physical working conditions?
Do you live in an area desirable to you and your family?
How strongly do you take the opportunity to help others?
To what extent you feel contributed to the success of your organization?

Masculinity
Do you have challenging tasks to do, from which you can get a personal sense of accomplishment?
Do you have a good working relationship with your direct superior?
Do you have security of employment?
Do you have considerable freedom to adopt your own approach to the job?

Universalism vs Particularism
The "spirit of the law" is deemed more important than the "letter of the law".
Truthful witness in a court of law is more important than particular ties of friendship or family.

Specific vs Diffuse
My public sphere is much larger than my private sphere.
All elements are related to each other.
Each element in perspective of the total.

Affective vs Neutral
Showing too much emotion may erode your power to interest people.
It isn't considered necessary to hide feelings and to keep them inside.

Achievement vs Ascription
Status derives from what is accomplished.
Status is derived from age or wealth.

Time

I strongly prefer planning and keep planning once they have been made.

I do several things at a time.

Day-by-day experiences tend to direct people's life.

I have a strong respect for ancestors and collective historical experiences.

Internal vs External

I do not believe in luck or predestination.

Nature is a complex machine and machines can be controlled if you have the right expertise.

Nature moves in mysterious ways', and therefore you never know what will happen to you.

Four dimension of trompenaars

In your organization, criticism:
   a.   Is aimed at the task, not the person **(guided missile)**
   b.   Is only given when asked for **(family)**
   c.   Is mostly negative and usually takes the form of blame **(incubator)**
   d.   Is avoided because people are afraid of hurting each other **(Eiffel tower)**

In your organization, conflict:
   a.   Is controlled by the intervention of higher authority, and often fostered by it to maintain power **(family)**
   b.   Is suppressed by reference to rules, procedures and definitions of responsibility **(Eiffel tower)**
   c.   Is resolved through full discussion of the merits of the work issued involved **(guided missile)**
   d.   Is resolved by open and deep discussion of personal needs and the values involved **(incubator**)

In your organization, hierarchies:
   a.   Are redundant because each person is working for their own professional development **(incubator)**
   b.   Are necessary because people have to know who has authority over whim **(family)**
   c.   Are determined by the power and authority of the people involved **(Eiffel tower)**
   d.   Are relevant only if they are useful for getting the task done **(guided missile)**

Appendix C

Source:http://www.doingbusiness.org/ExploreTopics/DEalingLicenses/Details.aspx?economyid=61

No:	Procedure	Time to complete:	Cost to complete:
1	Obtain cadastral documents from the Survey Department	1 day	EGP 110
2	Obtain technical approvals from independent syndicate engineer	9 days	EGP 1,750
3	Submit building permit application to municipal authority	1 day	no charge
4	Receive inspection and obtain project clearance from Civil Defense	60 days	no charge
5*	Obtain project clearance from water authority	30 days	no charge
6*	Obtain project clearance from electricity authority	30 days	no charge
7*	Receive inspection prior to permit issuance from the municipality	1 day	no charge
8*	Pay real estate tax at the tax authority	1 day	EGP 30
9	Obtain building permit	30 days	EGP 2,000
10	Receive on-site inspection from the municipality - I	1 day	no charge
11	Receive on-site inspection from the municipality - II	1 day	no charge
12	Receive on-site inspection from the municipality - III	1 day	no charge
13	Receive on-site inspection from the municipality - IV	1 day	no charge
14	Receive on-site inspection from the municipality - V	1 day	no charge
15	Receive on-site inspection from the municipality - VI	1 day	no charge
16	Receive on-site inspection from the municipality - VII	1 day	no charge
17	Receive on-site inspection from the municipality - VIII	1 day	no charge
18	Receive on-site inspection from the municipality - IX\	1 day	no charge
19	Receive on-site inspection from the municipality - X	1 day	no charge
20	Receive final inspection from by a committee from the municipality	1 day	no charge
21	Obtain letters from municipality about water and sewage connection and about electricity cables installation	1 day	no charge
22	Obtain certificate of natural disaster	1 day	EGP 102
23	Obtain water and sewerage connection	60 days	EGP 15,000
24*	Apply for electricity connection	1 day	no charge
25*	Receive electricity inspection	1 day	no charge
26*	Obtain electricity connection	19 days	EGP 15,000
27*	Obtain phone connection	18 days	EGP 850
28	Register the building with the real estate registry	75 days	EGP 2,000

Appendix D

Some Contextual quotes

How do you experience the pressurized time frame set by the owner?

(Egyptian Project Manager)

"We are not tied up in a 9 to 5pm mentality, the owner gave us two months, and there are hundred ways to bring a 4 months project down to a two month project."

What motivates you to maintain close relations with ex-project participants?

(Egyptian Engineer)

'You never know what tomorrow brings'

How do you urge others to implement your vision in the project?

(Egyptian Architect)

"My vision would matter if the decision makers feel at ease with me."

(Egyptian Architect)

"It is easier to pull with a rope than to push with a rope."

How do you experience Dutch's directness?

(Egyptian Senior Engineer)

"There is a difference between telling the truth and being rude"

How do you bring up a matter, you would think Egyptians don't like to discuss with directness?

(Both British and Dutch engineer)

"It is better to confront with an aching truth rather to circle around the truth."

The following quote is witness in various occasions where one receives a payment.

(Egyptian contractor)

"Do not bother, we are brothers"

Do you experience differences in the executed roles of supervisors between Egypt and the Netherlands?

(Dutch Engineer)

"The moments we felt that our superiors were our superiors (in the Netherlands), was when we did not had the authority of acting on our personal instinct".

What disturbs you about the avoiding behavior of the sub-contractor?

(Egyptian project manager)

"Instead of just being careful with their operation, they seek their refuge by avoiding me!"

What was the reason of this extended conflict was it really about the down payments?

(Egyptian project manager – as temporary mediator)

"The conflict was a stand to make clear that one is not weak, and will not accept any minifying behavior."

Why don't you document or record every resolve issue or granted claim?

(Egyptian project manager – as temporary mediator)

"Who is interested in reading back about backfire in the project?"

Appendix E

Source: DCE-Ltd & Mott MacDonald's project administration

Establishment of an Experimental Farm and Research Centre for the South Valley Development Project, Egypt

Assignment
Identification of an area of 500 ha of desert land, followed by design and supervision of the implementation of a Build-Operate-Own contract for the establishment and development of a self-financing 450 ha fruits and vegetables exporting Pioneer Farm and a 50 ha Applied Research and Training Centre for modern land and water use in the rainless desert of Southern Egypt.

Client
Abu Dhabi Fund for Development

Partners
Darwish Consulting Engineers (DCE), Cairo, Egypt

Composition of Team
Euroconsult Mott MacDonald: Project leader/land & water development expert; agricultural product marketing and commercialization specialist; vegetables production expert; fruit production expert; farm planning and technical management specialist. *Partners:* Irrigation and drainage expert; Groundwater expert; Soils Scientist; Agronomist/Livestock expert; Civil engineer (infrastructure, buildings); Electrical engineer; Mechanical engineer (equipment, pumps).

Period of Assignment
October 2007– April 2009 Staff-months: Euroconsult Mott MacDonald: 11; partners: 24

Contract Value
Euroconsult Mott MacDonald:€ 220,000 (consulting services component) Partners: € 80,000 (consulting services component) Total project: € 15 million (construct. and deliveries value)

Background
The completion of the construction of a 300 m³/s pumping station, the Sheikh Zayed Main Canal and other infrastructure on the western shore of Lake Nasser near Abu Simbel would enable the socio-economic development of a first area of 200,000 hectare of rainless desert land within the boundary of the South Valley Development Project on the basis of irrigated agriculture. As a first step in this development process, ADF intended to finance the establishment and initial agricultural development of a self-financing 450 ha Pioneer Farm for horticultural export production, as well as the construction of a 50 ha Research Centre including a Training Centre and a 40 ha Experimental Plot. On the latter, applied research programmes with farmers' participation were to be implemented, concentrating on testing and development of new agricultural land and water use methods for the rainless hot desert climate of Egypt's South Valley.

Description of Project
On the basis of a technical study of the existing and future land and water resources at the location of the Pioneer Farm and Research Centre, a tender document was to be prepared for construction of the Farm and Centre's residential houses, research and training compound, farm management and machinery buildings, irrigation and drainage networks, service roads and

main windbreaks. In addition, the tender document would include the construction of a basic set of modern agricultural production facilities (greenhouses, plastic shades, post harvest and packing facilities), as well as provisions for administrative and social infrastructure, power and drinking water supply, sanitary services and communication systems.

After a few pioneering years of co-financed plantation and groundwater-based irrigation of windbreaks, young fruit trees and grapes, and soil improvement activities covering about half of the Farm area, surface water from the Sheikh Zayed Main Canal would become available, enabling irrigation of the full area of both the Pioneer Farm and the Research Centre.

The implementation of the Pioneer Farm and Research Centre by means of a process of pre-qualification and preparation of tender documents, leading to the award of a Build-Operate-Own contract, made the Project an innovative development in irrigated reclamation and sustained land and water use of rainless hot desert areas.

Services Provided The services provided by the consultants included:

- Study of land and water resources;
- Topographic mapping;
- Export market studies for horticultural crops;
- Study of water requirements and husbandry practices of crops and fruit trees growing in hot desert climates;
- Preparation of pre-qualification and tender documents, including shortlisting, bid evaluation and implementation supervision, for a Build-Operate-Own contract for the construction and agricultural development of a market-oriented Pioneer Farm and for the establishment of a region-specific Applied Research and Training Centre for sustained land and water use in rainless hot desert areas.

Appendix F

Four Perspective Definition of Culture		Arab Engineers	Dutch Engineers	Chance of Clash (++,+,0,-,--)	Possible Midway
Time orientation	*Sequential*	During preparation and paperwork very synchronical. During Execution sequential	During preparation and paperwork sequential During Execution synchronically.	**+ High**	Both engineers must understand differences in time orientation and not persuade the other to adopt his own. Otherwise much of tension and agitation will arise
	Instrumental use	Polychronic	Monochronic	**+ High**	In complex construction projects a monochronic use of time is preferred as the risk of delay and inaccurate scheduling or execution arises extensively when working Polychronic
	Long-Term Orientation	Present-oriented	Future-oriented	**- Low**	These kinds of orientations do not influence current collaboration. It may influence future or repeating collaboration, if one of the two parties dislikes the attitude towards time of another. But this occurs rarely because it is a personal point of view and does not directly influence the quality of work

Concept of Negotiation					
	Disruptive	Mid-High disruptive, establish dominance, willing to take risks, use objective feelings to counter arguments, do not take deadlines seriously, and do use concessions continually as a barging strategy	Low disruptive, though deadlines are very important, rely on logic to counteract opponents' arguments, and make small concessions early	++ High	Successful negotiations require mutual respect and understanding on the part of both parties. Negotiators enter the process with a subjective view of the other party's values and goals that may or may not be accurate. Different cultures use different negotiating strategies, and it is important that these differences are understood and integrated into the negotiation process by both parties.
	Communication	High Kinesics , High Proxemics, allot of Paralanguage, Object-language is considered	Base their information sharing on facts and figures, straight to the point, down to business	0 Moderate	Culture of the construction industry in Egypt or Arabic countries in general differs significantly to that of the national culture. However, there is no reason to believe that people's behavior will temporarily change when they participate within a construction project. Mutual respect and understanding on the part of both parties is expected.
	Integrative	Begin low integrative, seek to obtain information about the other party's interests, employing creative problem-solving approaches	High Integrative, problem-solving approach, focus is on exchanging information, identify the underlying issues, find effective trade-offs	+ High	If culture is the only factor considered, then both groups are equally competitive, collaborative, and accommodating in their negotiation approach. If cultural differences affect negotiations, the impact of the situation and the role of individualism-collectivism on style need to be simultaneously considered
	Nature of Persuasion	Accommodating Emotional, Collaborating, Competing	Compromising, Avoiding, Statistically	- Low	The overlap of people's `perceptual fields', influences the degree of mutual understanding (convergence) which can occur between two individuals

Hierarchies & Protocols				
Strict	Wasta can be seen as a network of influence sustained by the practice and expectation of 'individualized consideration', a form of social interaction lying at the heart of modern notions of transformational hierarchy.	Ingratiation and the exchange of favors is a common protocol to work with through the hierarchy. Dutch managers rely more on rational arguments to lead, than relying on authority in the hierarchical structure. Dutch managers will preserve their formal authority and position power, and will not be modest to exploit them when there is a sense of delay or nuisance.	++ High	Whether one sees *wasta* negatively, as mere corruption, or more positively as an Arab version of individualized consideration, there is no escaping that it is integral to Arab social life, business, hierarchies, and protocols. Working in a high power distance country needs allot of patience and understanding coming from a lower power distance country.
Clear	Arabs are relatively comfortable with hierarchy. Influence and status a person holds by virtue of familial, tribal or personal connections. In the Arabic hierarchy there is a strong sense of traditional authority present.	Dutch managers are not concerned or affected by considerations of race, gender, religion or wealth. The embedded bureaucracy in the Dutch society shows that rational-legal authority is the natural method of managing and constructing a hierarchy.	+ High	Arabs may treat a particular leader with reverence – as a great man who has cleverly managed to balance complex traditional forces – western observers may dismiss the same man as a corrupt leader with no authority to lead anybody.. As in the Arab hierarchies several dimensions within leadership were concluded, several dimensions were noticed in the Dutch hierarchies, protocols, and concepts of leadership. Both parties should understand both dimensions and consider them.

Conflict Approach				
	Formality	Community legitimizes arbitration/mediation through respect for age, experience, status, and leadership in communal affairs. Efforts are intended to empower individuals in relation to the legal system, gaining control over their problems while achieving greater efficiency	Mediation or arbitration services provided by formally certified professional facilitator. Legal system or individual participants themselves legitimize and guarantee the negotiation and settlement process. Process typically ends with a formal written agreement	**+ High** Adaption, accommodation, and flexibility are the keys to the project's survival in such situation. Conflict can lead to change, change can lead to adaption, and adaption can lead to survival and even prosperity. Cross-cultural differences in conflict-management style cannot be based on a single value dimension
	Consensus	Efforts are intended to empower families and the community to participate directly in matters of common concern. Preferred third party as an unbiased insider with ongoing connections to all parties. Third parties promote direct, collaborative, step-by-step problem solving to isolate and confront discrete issues. Emphasizes the need to restore harmony and solidarity and secure cooperative relationships. Intervention to prevent conflict escalation and disruption of communal symbiosis in a context of scarce resources	Conflict resolution used to attain a fair deal in which interests, needs and rights of disputants are not compromised. Emphasis on utilitarian goals and on satisfaction of interests, needs, and/or rights of all individuals involvedProcess reflects a preoccupation with "win-win" scenarios.	**0 Moderate** The basic criticisms launched against Western conflict resolution techniques is that they are either too mechanistic or based on therapy oriented formulas that do not correspond with the idiom of daily life. Communal religious and ethnic identity remain strong forces in social life, as do patron-client relationships and patterns of patriarchal authority. A need to adapt these methods to indigenous cultural realities is crucial.