Effective project management around the world

On the management of cultural differences in international building projects

Colophon

Student

Name A.E. (Lisa) Verhoeven

Student number 4458850



University

Name Delft University of Technology

Faculty Architecture and the Built Environment

Programme Architecture, Urbanism and Building Sciences

Graduation

Master track Management in the Built Environment (MBE)

Chair Design and Construction Management

Document P5 report

Presentation date January 26th 2021

Title Effective project management around the world

Supervisors

First mentor Dr. ir. L.H.M.J. (Louis) Lousberg

MBE, Design and Construction Management

Second mentor Dr. ir. E.W.T.M. (Erwin) Heurkens

MBE, Urban Development Management

Delegate of the Board

of Examiners

Mr. dr. H.D. (Hendrik) Ploeger

Graduation internship

Company Turner & Townsend

Office Amsterdam Team Real Estate

Supervisor C. (Christo) Müller BSc. (Hons)

Director

Preface

Over the past year, I have dived into the topic of cultural differences in international building projects and how these can be managed as effectively as possible. Before you lies the final product of this endeavour: my graduation thesis. This work was developed within the track Management in the Built Environment, which is positioned in the MSc programme Architecture, Urbanism and Building Sciences at the Delft University of Technology.

There are several people I would like to express my gratitude to. First of all, to my graduation mentors Louis Lousberg and Erwin Heurkens, thank you for the pleasant and inspiring feedback sessions, I could not have gone without your expertise and guidance. Secondly, to my Turner and Townsend mentor Christo Müller, thank you for your trust and encouragement, it was most valuable. Thirdly, to my Turner and Townsend colleagues: thank you for welcoming me into the team and for your great support throughout my graduation internship. Fourthly, to my interviewees and expert panellists: thank you for your input, it was fundamental for this research. Finally, to my family and friends: thank you for your unconditional love and support.

I hope you will enjoy reading this thesis.

Lisa Verhoeven

Delft, January 2021

Abstract

Building internationally is no longer an exception, but a standard for various construction companies. With that, the need to understand foreign norms, values and beliefs becomes crucial to deliver successful projects. Through understanding and managing cultural differences in projects, project advantages and general company success can be obtained. Currently, there is a gap in knowledge on how to manage cultural differences in international building projects most effectively.

The research question that links to this problem is formulated as follows: "How can cultural differences be managed most effectively within the management areas of international building projects?"

A literature review and cross-cultural qualitative exploratory research method have been applied to answer this question. External validation has taken place through an expert panel review. The findings show attention should be paid to culture within different management areas, with a specific focus on communications management. Management elements in which culture should be managed are expatriate personnel / foreign staff and operatives, design approaches, negotiations, codes of conduct and ethical standards and professional standards and construction codes. Specific actions can be taken to manage cultural differences more effectively, such as addressing the subject during project start-up meetings, making one's own general expectations, procedures and guidelines explicit and organising team building activities to help project team members keep an open-mind and gain understanding of their own cultural bias and that of others.

Keywords: project management, cultural differences, international building projects

Glossary

The definitions below are the ones used in this research.

Subject	Definition	Source
Cross-cultural interaction	"Interaction among two or more parties belonging to two different cultures."	Ofori & Toor (2009, p. 219)
Culture	"The collective programming of the mind that distinguishes the members of one human group from another."	Hofstede (1984, p. 21)
Cultural difference	A difference in "the collective programming of the mind that distinguishes the members of one human group from another."	Hofstede (1984, p. 21)
Effective project management	"Project management that is successful in achieving the desired objectives and overcoming obstacles."	Own definition
International project	"A project in which different national cultural backgrounds are represented within the project team and in which the contractor, lead consultant or client is not from the same home country."	Own definition based on Stebblings (1998, as cited in Chan & Tse, 2003, p. 375)
Project	"A temporary endeavour undertaken by a coalition of firms chartered by a client to create a unique product, service or result."	Own definition based on Winch (2010) and the Project Management Institute (2017)
Project management	"Giving direction to temporary, result-oriented cooperation between actors with scarce resources."	Wijnen, Storm & Renes (2004, p. 8)

Graphic index

List of figures

1.01	The gap of knowledge between culture, the management of international projects and the building industry	33
2.01	The relation between research methods and answering of research questions	37
2.02	Type 3 of Design for Case Studies	38
2.03	Cultural Types Model	39
2.04	A fictional example of a cultural profile	40
3.01	Culture as an onion	46
3.02	Three levels of uniqueness in Mental Programming	47
3.03	The "Onion Diagram": Manifestations of Culture at Different Levels of Depth	48
3.04	Power Distance Versus Individualism	49
3.05	Cultural Types Model	54
3.06	Interpretation of Hofstede's cultural dimensions	55
3.07	Project based working	58
3.08	Interrelationship of PMBOK® Guide Key Components in Projects	59
3.09	Tracing potential Sources of a typical Construction Project Culture	65
3.10	The management areas by the Project Management Institute and the management elements by Hall & Jaggar combined	72
3.11	Conceptual framework	73
4.01	Multiple-case study procedure	75
4.02	Overview of regions and countries in which Turner & Townsend is active	76
4.03	Turner & Townsend Service Delivery Model	77
4.04	Data collection steps of the case study	80
4.05	Formulating questions for an interview guide	80
4.06	The Brazilian culture placed on Hofstede's cultural dimensions	82
4.07	Project governance structure case A	83
4.08	The cultural alignment of the case A interviewees	88
4.09	The Dutch culture placed on Hofstede's cultural dimensions	90
4.10	Project governance structure case B	91
4.11	The cultural alignment of the case B interviewees	96
4.12	The Malaysian culture placed on Hofstede's cultural dimensions	98
4.13	Project governance structure case C	99
4.14	The cultural alignment of the case C interviewees	103

4.15	Cross-case institutional cultural contexts	105
4.16	The start and finalisation dates of the cases	106
6.01	The cases displayed on the Cultural Types Model	126
7.01	The management areas by the Project Management Institute and the management elements by Hall & Jaggar combined	131
7.02	Management areas noted related to effective project management and beneficial personal attributes.	133
7.03	The management areas by the Project Management Institute and the management elements by Hall & Jaggar combined	134
7.04	Thesis conclusion summarised	136
7.05	Management advice projected on PMBOK project phasing	139
4.01	f tables Case criteria and motivations	78
4.02	Case criteria per case	79
4.03	Main project milestones and dates case A	83
4.04	The takes of the case A interviewees on their beneficial personal attributes	84
4.05	The takes of the case A interviewees on effective project management	85
4.06	The takes of the case A interviewees on culture	86
4.07	Main project milestones and dates case B	91
4.08	The takes of the case B interviewees on their beneficial personal attributes	92
4.09	The takes of the case B interviewees on effective project management	93
4.10	The takes of the case B interviewees on culture	93
4.11	Main project milestones and dates case C	99
4.12	The takes of the case C interviewees on their beneficial personal attributes	100
4.13	The takes of the case C interviewees on effective project management	100
4.14	The takes of the case C interviewees on culture	101
4.15	Cross-case analysis of management	107
4.16	Cross-case analysis of effectiveness	108
4.17	Cross-case analysis of culture	109
5.01	Summary of cross-case analysis of cultural elements by Hall and Jaggar	115
4.01	Comparison of expected and realised alignment with Lewis's cultural	124

124

6.01

categorisation

Table of contents

Executive summary	10
Managementsamenvatting	20
1 Introduction	31
1.1 Research context	31
1.2 Problem statement	32
1.3 Societal and scientific relevance	34
2 Methodology	36
2.1 Research questions	36
2.2 Research method	37
2.3 Data plan and ethical considerations	42
2.4 Research output	43
3 Theories	45
3.1 Culture	45
3.2 Project management	57
3.3 Management of cultural differences	65
3.4 Conclusions and conceptual framework	73
4 Empirical research	75
4.1 Preparation	75
4.2 Case A – Brazil	82
4.3 Case B – the Netherlands	90
4.4 Case C – Malaysia	98
4.5 Cross-case analysis	105
5 Findings and validation	114
5.1 Findings	114
5.2 Validation	118
6 Discussion and limitations	123
6.1 Discussion	123
6.2 Limitations	126

7 Conclusion and recommendations	129
7.1 Conclusion	129
7.2 Recommendations for practice	137
7.3 Management advice	138
7.4 Recommendations for research	142
8 Reflection	144
8.1 The product	144
8.2 The process and planning	147
8.3 Personal view	149
9 References	151
10 Appendices	160
10.1 Appendix A – Reasoning behind linking management areas and management elements	160
10.2 Appendix B – Information sheet interview	161
10.3 Appendix C – Informed consent form interview	162
10.4 Appendix D – Interview guide	163
10.5 Appendix E – Interviewee survey	165
10.6 Appendix F – List of interviewees	167
10.7 Appendix G – Expert panel	168
10.8 Appendix H – Overview interviews Case A – Brazil	170
10.9 Appendix I – Overview interviews Case B – the Netherlands	171
10.10 Appendix J – Overview interviews Case C – Malaysia	172

Executive summary

1 Introduction

Building internationally is no longer an exception, but a standard for various construction companies (Shore & Cross, 2005). International building projects come with a wide array of challenges, including the cultural context. With that, the need to understand foreign norms, values and beliefs becomes crucial to deliver successful projects abroad (Fisher, 2011; Holtbrügge, Weldon & Rogers, 2012; Chanlat, Davel & Dupuis, 2013). Several authors state that through understanding and successfully managing cultural differences in projects, project advantages and even general company success can be obtained (Kivrak, Ross, Arslan and Tuncan, 2009; Ofori, 2000; Ofori & Toor, 2009; Enshassi & Burgess, 1990).

Inconsistency between deeply rooted beliefs and values in culture on the one hand and management practices on the other hand can lead to employee dissatisfaction, discomfort and lack of commitment (Newman & Nollen, 1996). Other consequences of not managing cultural diversity are increased stress levels among involved workers, confusion, frustration and conflict. These, in return, lead to lower productivity, work of lesser quality and higher accident rates on site (Allen, 1976; Migliorino, Miltenyi & Robbertson, 1994; Deresky, 1997 all as cited in Loosemore & Lee, 2002; Ofori & Toor, 2009). In addition, there is generally little attention to learn from these problems and improve the way of working across countries (Abeysekera, 2002). This ignorance or inability to deal with these subjects has various consequences, ranging from issues with employees to failing to build sustainable working relationships abroad (Hoecklin, 1995 as cited in Abeysekera, 2002).

Currently, there is a gap in knowledge on how to manage cultural differences in international building projects most effectively. To close this gap, the main research question is formulated as follows: "How can cultural differences be managed most effectively within the management areas of international building projects?" Four sub-questions have been formulated to answer this question:

- 1. What does culture in the building industry entail and what are determining factors that characterise culture in the building industry?
- 2. What are the most common methods, guides and standards that are employed to manage international building projects?
- 3. Which management areas are applicable to and important for international building projects?
- 4. Which management areas and elements play the most important role in the effectiveness of managing cultural differences in international building projects?

The goal of this research is to give international building companies and managers insight into cultural differences that occur in international building projects and provide them with advice to manage these projects as effectively as possible.

2 Methodology

The research method that was applied consists of a literature review and an in- and cross-case study. The topics of culture, project management and the management of cultural differences were researched through literature. After that, three cases were analysed.

In each of these cases, the following aspects were assessed: the institutional cultural context, the scope, schedule and structure of the project, as well as the views of the interviewees on the management of the project, the effectiveness and how they experienced culture in the project. The interviewees were also asked to fill out a survey to determine with which cultural category they aligned most. External validation of the findings has taken place through an expert panel review consisting of five Turner & Townsend employees.

To select the cases, several criteria were applied (the criteria multi-active, linear-active and reactive will be explained in the next section):

Criterion	Case A Brazil	Case B the Netherlands	Case C Malaysia
The projects need to be managed by a horizontal, multinational enterprise.	Turner & Townsend		
The projects need to be located in respectively a multi-active, linear-active and reactive country.	multi-active	linear-active	reactive
The projects need to be comparable in terms of type.	office relocation and fit-out	office expansion and fit-out	office refurbishment and fit-out
The projects need to be comparable in terms of size.	2 500 m ²	2 000 m²	9 200 m²
The projects need to be comparable in terms of monetary project value.	USD 5.5 mil	USD 5.8 mil	USD 7.7 mil
The projects need to be executed in the same industry.	commercial real estate		
The projects need to be executed within the last ten years.	2018 – 2019		

Table 0.01. Case criteria per case. Own table.

3 Theories

Three main concepts were researched through literature: culture, project management and management of cultural differences.

Culture

Culture can be assessed from different perspectives, can be studied on different levels, is, in principle, intangible and can be classified in different ways. Two main frameworks that are concerned with the classification of cultures are presented by Hofstede et al. (2010) and by Lewis (2006).

Hofstede originally defined four cultural dimensions on which national cultures can be projected, two dimensions were added to this theory later. Because of the firm basis of Hofstede's four original dimensions and their relevance for this thesis, these have been taken into account for this research:

- 1. Power distance, which is about the behaviour towards people higher or lower in rank and to which extent less powerful members of societies, organisations and institutions accept the unequal distribution of power. In cultures with a large power distance, this unequal distribution is accepted, in small power distance cultures it is not.
- 2. Individualism versus collectivism, which describes the ties between individuals that can either be strong (collectivist) or loose (individualistic).
- 3. Femininity versus masculinity, which assesses the behaviour towards one's gender and the inherent values they uphold. Competitiveness and assertiveness are associated with masculinity, modesty and nurturing with femininity.
- 4. Uncertainty avoidance, which is about the extent to which a person in a particular culture feels comfortable in unstructured (novel or unknown) situations. In uncertainty-avoiding cultures, there are often many strict laws and rules to diminish the occurrence of unstructured situations, in uncertainty-accepting cultures there are not.

Lewis categorises cultures by positioning them on the triangle as shown in figure 0.01. By assessing the most common national behaviours, a country's culture is positioned on or between the three vertices: multi-active, linear-active or reactive. The multi-active culture is characterised by high energy, people in a multi-active country rarely work according to a timetable and are guided by the importance of the activities at hand. The culture of people in linear-active country is centred around planning, organising, pursuing chains of action and doing one thing at a time. The reactive culture gives priority to politeness and respect, as well as listening and general tranquillity. Cautious reactions are the norm in countries with a reactive culture.

Project management

Managing building projects is complex and managing international building projects is even more complicated. There are various institutions with a global reach that aim to provide project managers with knowledge and methods to shape the management of international projects. Two parties that came forward were the Project Management Institute (2017) and Hall and Jaggar (1997).

The Project Management Institute defines twelve management areas: integration management, scope management, schedule management, cost management, quality management, resource management, communications management, risk management, procurement management, stakeholder management, health, safety, security and environment (HSSE) management and financial management.

Hall and Jaggar (1997) found project management elements that are of explicit importance in international building projects: expatriate personnel and foreign staff and operatives, appropriate design approaches, negotiations, codes of conduct and ethical standards and professional standards and construction codes.

Management of cultural differences

Literature showed there are four general (management) approaches to culture in international building projects (Adler, 1983, as cited in Hall & Jaggar, 1997; Mäkilouko, 2004):

- Our way of working is the only way of working (parochial);
- Our way of working is the best way of working (ethnocentric);
- Our ways of working are different and not better than the other (synergistic);
- Everyone works in their own way and the project manager should integrate these different ways of working (polycentric).

The conceptual framework below shows how the theories have been combined to form the basis for the empirical research.

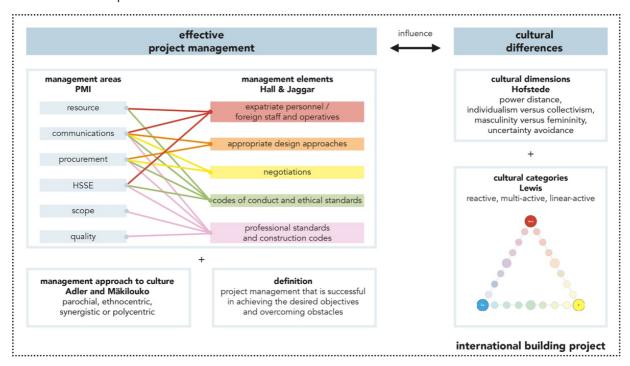


Figure 0.01. Conceptual framework. Own figure.

4 Findings

General findings

The general management of the projects was influenced by the position of the project for the client (case A), the client guidelines and procedures (case B) and the day-to-day operations of the client (case C). The beneficial personal attributes of the project managers were connected to communications management in all cases. The interviewees also mentioned aspects that were not related to a specific management area, such as being diplomatic and flexible. Looking back, the interviewees from case B and C would have included more teambuilding activities.

For effective project management, the importance of aspects related to integration and communications management came forward in all cases. On integration, the structure of the project team and the project method were central, as well as the ability to look ahead to steer and coordinate where necessary. On communication, being clear, documenting both verbal and written communication, managing expectations and establishing relationships came forward. The views on the role of culture in an effective management approach varied per case. In case A, culture on the national level was of importance, in case B the client culture was determining and in case C culture was hardly addressed. In all three cases, the interviewees agreed that having experience in a multicultural environment helps to deal with cultures in international building projects. However, the interviewees also noted the importance of being aware and having the ability to adapt one's way of working depending on the situation at hand.

The interviewees' definitions of culture were less broad than what was found in the literature. The factors related to Hall and Jaggar's management elements (1997) that were noted in each of the cases have been summarised in the table below.

	Case A Brazil	Case B the Netherlands	Case C Malaysia
Design approaches	An open mind and willingness to learn	Client standards leading	Copy-paste of Singapore office
Professional standards and construction codes	Explanations on local electrical, IT and design for disabilities	Challenging client health and safety requirements	Double-checking compatibility of Singaporean and Malaysian standards
Expatriate personnel / foreign staff and operatives	Language barrier	Lack of required local knowledge	Avoiding risks through contracts
Negotiations	Horizontal client organisation, need for local knowledge	E-bidding process, overall collaborative environment	Understanding of choice implications, staying within budget
Codes of conduct and ethical standards	Several guidelines in place, challenge in getting contractors to abide	Strict procurement guidelines by client	Many standards, limited control over site conditions

Table 0.02. Summary of cross-case analysis of cultural elements by Hall and Jaggar (1997). Own table.

In case A, the design approaches of the consultants involved from various countries did not always align. Extensive coordination was required to make sure the client's expectations and standards were met. In case B, the design process suffered from cultural miscommunications and differing expectations, procedures and guidelines. In case C, the limited informal contact between the client and consultants led to a more transactional relationship. In all cases, there were difficulties in managing the supply chain: the behaviour on site was not always conform client standards. The different expectations, procedures and guidelines led to obstacles here.

The general approaches towards culture also differed:

- Case A: the client team and Turner & Townsend team were keen on learning about each other's ways of working; it was an overall synergistic approach.
- Case B: the client had extensive internal guidelines and procedures from which could not be deviated, which led to a predominantly ethnocentric approach.
- Case C: in this case, culture was hardly addressed according to the interviewees; a parochial approach.

The richness of input was noted as the essential advantage of having a multicultural and international project team, different quality requirements and aligning dispersed teams were challenging. In none of the cases, the project managers actively chose an approach regarding culture. Coping with obstacles was done differently across cases. In Brazil by using personal relationships and going above and beyond your role, in the Netherlands by staying in close contact with all parties and being diplomatic and in Malaysia by sticking to your role and escalating the issue to someone higher in power or rank.

Possible explanations

The above findings may be explained by a variety of factors. The need for adequate communication came forward clearly in all cases. Within this management area, interviewees from cases A and B noted the importance of developing relationships. In case C, this was not noted, and this may be explained by the strict division that was made between the client and the consultants: there was no informal interaction. This can be explained by the large power distance in the Malaysian culture (Hofstede et al., 2010).

There is a number of elements on which the cases can be positioned in a similar way. The interviewees from case A were less strict on the rules, more informal, valued going above and beyond one's role and being more open. The interpersonal relationships were flexible. The interviewees in case C on the other hand showed a preference for adhering to the rules, being more formal, sticking to one's role and being more reserved. In this case a vertical hierarchy was described, which was expressed through stern and task-oriented management on site. Case B can be positioned in between these two: equality and relationships with other parties and people in a horizontal way (so without taking one's position or status into consideration) was very important. However, the entirety had more diplomatic characteristics than case A, where interpersonal relationships were further developed. This can be explained well by the cultural categorisation of these countries by Lewis (2006): the findings from Brazil, the Netherlands and Malaysia show large similarities with their respectively multi-active, linear-active and reactive categorisation.

Validation

Four statements were validated in the panel meeting:

- 1. Culture and cultural differences should be an explicit subject during project start-up meetings.
- 2. General expectations, procedures and guidelines of both the client and the local workforces need to be aligned, the process in which this should take place needs to be facilitated by the project management team.
- 3. Framing the project with a clear start-up and finalisation meeting and organising teambuilding activities is beneficial for the effectivity of the project.
- 4. Communications management is the most important element of effective management of culture in international building projects.

The experts agreed unanimously on the statements and made various additional comments. The importance of awareness (of culture and the influence it may have on expectations, procedures and guidelines) and paying continuous attention to the subject came forward clearly. Overall, being careful when addressing culture was also noted due to the possible sensitivity of the subject in certain countries.

5 Discussion

Overall, the theories proved to be a solid basis for the empirical research, and the findings of the empirical study are in line with the literature. The cultural dimension of uncertainty avoidance corresponded the least well with the findings from the empirical research. This discrepancy may be explained by the general risky nature of projects and thus the generally strong uncertainty avoidance in building project management practice. The results of the surveys (based on the cultural categories by Lewis) of the interviewees in case A and B do not match what would be expected based on their nationality. This discrepancy could have several explanations, as the cultural categories are based on the average common behaviour within a country it could be a coincidence.

Throughout the research, all management areas by the Project Management Institute except for project financial management came forward. The management area of communications management proved to be of paramount importance. Within the management element of codes of conduct and ethical standards, there were no explicit examples related to corruption and bribery raised. This difference may be explained by the fact that Hall and Jaggar's theory dates back to 1997 and since then, the building industry has evolved. It may also be explained by the fact that the cases were all managed by Turner & Townsend and commissioned by large international technology companies.

6 Limitations

The following limitations apply to this research:

- 1. The countries in which the cases are located do not match the literature perfectly: two out of three cases are not located in a country that is respectively the most linear-active or reactive. This may impact the transferability of the project results, as the linear-active reactive axis is left unexplored (see figure 0.02).
- 2. A language barrier became apparent during the interviews: English was a second language for most interviewees.
- 3. The limited number of cases analysed in this research, and thus of data means the outcomes of this research can not automatically be applied to other cases.
- 4. There are many more parties involved in the cases that may have different perspectives on the project; these have not been included in this research. Besides, there was an unequal number of project managers and client representatives interviewed and in case B, the client perspective had to be replaced by an interview with the general contractor.
- 5. The panel for the validation consisted of five Turner & Townsend experts. This limits the generalisability of the validation, as experts from other companies or institutions may have different perspectives on the validation statements.

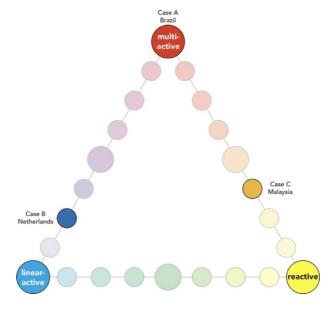


Figure 0.02. The cases displayed on the Cultural Types Model. Adapted from R. D. Lewis (2006, p. 42).

7 Conclusion

Cultural differences can be managed most effectively in international building projects by taking into account the following aspects (categorised by management element):

1. Expatriate personnel / foreign staff and operatives

Embedded in the resource, communications and procurement management areas Framing the project with a clear start-up meeting, finalisation meeting and organising teambuilding activities is beneficial for the effectivity of the project. During the project start-up meeting, all project team members should be made aware of culture and cultural differences, and it should be a continuous topic throughout the project life cycle.

2. Appropriate design approaches

Embedded in the communications and procurement management areas

An open-minded position from both sides is beneficial to come to design solutions that suit the project best. General expectations, procedures and guidelines of both the client and the local workforces need to be aligned, the process in which this should take place needs to be facilitated by the project management team.

3. Negotiations

Embedded in the communications and procurement management areas

The client should make use of local knowledge and procedures. The project management team needs to understand the priorities and focus points of the client.

4. Codes of conduct and ethical standards

Embedded in the resource, communications, procurement and HSSE management areas Getting the supply chain to abide by the expectations, guidelines and procedures that have been agreed upon can be challenging. Therefore, all parties must be aware of the cultural differences regarding this subject.

5. Professional standards and construction codes

Embedded in the resource, communications, procurement, HSSE, scope and quality management areas

General expectations, procedures and guidelines of both the client and the local workforces need to be aligned. In addition, health and safety standards vary enormously across cultures, making the differences explicit and communicating openly about these with the local workforce is vital to overcome obstacles.

Explicit attention should be paid to communications management, as this is the most important element of effective management of culture in international building projects. The project manager should take a leading position in this process of structuring communications and should raise awareness of the importance of the topic.

8 Recommendations

Based on the findings, the following recommendations are made for practice:

- 1. Implement culture into your project management approach to raise awareness and give continuous attention to the subject.
- 2. Assess one's own cultural position to increase the understanding of one's own cultural bias and that of the organisation.
- 3. Develop a training programme for project managers to educate practitioners and focus specifically on:
 - the different approaches to culture and how this often happens unconsciously;
 - the elements that are most important for effective management of culture;
 - the importance of assessing culture and continuously addressing the subject;
 - how cultural differences can be managed through team building activities.

The following recommendations are made for research:

- 1. Include a wider variety of parties involved to determine the roles and requirements of consultants in the effective management of cultural differences.
- 2. Focus more on practitioners' definitions of culture to get a more detailed view of the view project managers have of culture.
- 3. Compare projects of one client in different countries to get a better understanding of client considerations and approaches.
- 4. Focus more on the details of communications management to pinpoint more precisely what practitioners should be paying attention to for effective cross-cultural management in international building projects.

Managementsamenvatting

1 Introductie

Internationaal bouwen is geen uitzondering meer, maar een standaard voor verschillende bouwbedrijven (Shore & Cross, 2005). Internationaal georganiseerde projecten brengen diverse uitdagingen met zich mee, waaronder de culturele context. Daarmee wordt het begrip van buitenlandse normen, waarden en overtuigingen cruciaal om succesvolle projecten in het buitenland te realiseren (Fisher, 2011; Holtbrügge, Weldon & Rogers, 2012; Chanlat, Davel & Dupuis, 2013). Verschillende auteurs stellen dat door het begrijpen en succesvol managen van culturele verschillen in projecten, projectvoordelen en zelfs algemeen bedrijfssucces kunnen worden behaald (Kivrak, Ross, Arslan en Tuncan, 2009; Ofori, 2000; Ofori & Toor, 2009; Enshassi & Burgess, 1990).

Inconsistentie tussen diepgewortelde overtuigingen en waarden in cultuur enerzijds en managementpraktijken anderzijds kan leiden tot ontevredenheid, ongemak en gebrek aan toewijding van medewerkers (Newman & Nollen, 1996). Andere gevolgen van het niet managen van culturele diversiteit zijn verhoogde stressniveaus onder betrokken werknemers, verwarring, frustratie en conflicten. Deze leiden op hun beurt tot lagere productiviteit, werk van mindere kwaliteit en hogere ongevallencijfers op de bouw (Allen, 1976; Migliorino, Miltenyi & Robbertson, 1994; Deresky, 1997, in Loosemore & Lee, 2002; Ofori & Toor, 2009). Over het algemeen is er weinig aandacht om van de hiervoor genoemde problemen te leren en de manier van werken in internationale projecten te verbeteren (Abeysekera, 2002). Deze onwetendheid of het onvermogen om met deze onderwerpen om te gaan, heeft verschillende gevolgen, variërend van problemen met werknemers tot het falen in het opbouwen van duurzame werkrelaties in het buitenland (Hoecklin, 1995 in Abeysekera, 2002).

Op dit moment is er een gebrek aan kennis over hoe culturele verschillen in internationale bouwprojecten het meest effectief kunnen worden gemanaged. Om deze kloof te dichten is de hoofdvraag van het onderzoek als volgt geformuleerd: "Hoe kunnen culturele verschillen het meest effectief worden gemanaged binnen de managementgebieden van internationale bouwprojecten?" Om deze vraag te beantwoorden, zijn vier deelvragen geformuleerd:

- 1. Wat houdt cultuur in de bouwsector in en wat zijn bepalende factoren die cultuur in de bouwsector kenmerken?
- 2. Wat zijn de meest gangbare methoden, richtlijnen en normen die worden gebruikt om internationale bouwprojecten te managen?
- 3. Welke managementgebieden zijn van toepassing op en belangrijk voor internationale bouwprojecten?
- 4. Welke managementgebieden en -elementen spelen de belangrijkste rol bij de effectiviteit van het managen van cultuurverschillen in internationale bouwprojecten?

Het doel van dit onderzoek is om internationale bouwbedrijven en projectmanagers inzicht te geven in cultuurverschillen die optreden bij internationale bouwprojecten en hen te voorzien van advies om deze projecten zo effectief mogelijk te managen.

2 Methodologie

De toegepaste onderzoeksmethode bestaat uit een literatuuronderzoek en een onderzoek binnen en tussen verschillende praktijkcasussen. De onderwerpen cultuur, projectmanagement en het omgaan met cultuurverschillen zijn via literatuur onderzocht. Daarna zijn drie casussen geanalyseerd.

In elk van deze casussen werden de volgende aspecten behandeld: de institutionele culturele context, de scope, planning en structuur van het project, evenals de opvattingen van de geïnterviewden over het management van het project, de effectiviteit en hoe zij cultuur in het project ervaren hebben. De geïnterviewden werden ook gevraagd om een enquête in te vullen om te bepalen met welke culturele categorie (Lewis, 2006) zij de meeste affiniteit hebben. Externe validatie van de bevindingen heeft plaatsgevonden door middel van een expert panel review bestaande uit vijf Turner & Townsend-medewerkers.

Om de casussen te selecteren, zijn verschillende criteria toegepast (de criteria multi-actief, linear-actief en reactief worden na onderstaande tabel toegelicht):

Criterium	Casus A Brazilië	Casus B Nederland	Casus C Maleisië
De projecten moeten worden gemanaged door een horizontale, multinationale onderneming.	Turner & Townsend		
De projecten moeten zich in een respectievelijk multi-actief, lineair-actief en reactief land bevinden.	multi-actief	linear-actief	reactief
De projecten moeten vergelijkbaar zijn qua type.	verhuizing van kantoor en inrichting	uitbreiding van kantoor en inrichting	renovatie van kantoor en inrichting
De projecten moeten vergelijkbaar zijn qua grootte.	2 500 m ²	2 000 m ²	9 200 m²
De projecten moeten vergelijkbaar zijn qua monetaire projectwaarde.	USD 5.5 mil	USD 5.8 mil	USD 7.7 mil
De projecten moeten in dezelfde industrie uitgevoerd zijn.	commercieel vastgoed		
De projecten moeten in de afgelopen tien jaar gerealiseerd zijn.	2018 – 2019		

Tabel 0.01. Casus criteria per casus. Eigen tabel.

3 Theorieën

Via literatuur zijn drie hoofdconcepten onderzocht: cultuur, projectmanagement en management van culturele verschillen.

Cultuur

Cultuur kan vanuit verschillende perspectieven worden bekeken, kan op verschillende niveaus worden bestudeerd, is in principe ongrijpbaar en kan op verschillende manieren worden geclassificeerd. Twee theorieën die betrekking hebben op de classificatie van culturen worden gepresenteerd door Hofstede en anderen (2010) en door Lewis (2006).

Hofstede definieerde oorspronkelijk vier culturele dimensies waarop nationale culturen kunnen worden geprojecteerd, later zijn aan deze theorie twee dimensies toegevoegd. Vanwege de solide basis van Hofstede's vier oorspronkelijke dimensies en hun relevantie voor deze scriptie, zijn deze dimensies toegepast in dit onderzoek:

- 1. Machtsafstand, over het gedrag ten aanzien van mensen met een hogere of lagere rang en in welke mate minder machtige leden van samenlevingen, organisaties en instellingen de ongelijke machtsverdeling accepteren. In culturen met een grote machtsafstand wordt deze ongelijke verdeling geaccepteerd, in culturen met een kleine machtsafstand niet.
- 2. Individualisme versus collectivisme, over de sociale banden tussen individuen die sterk (collectivistisch) of los (individualistisch) kunnen zijn.
- 3. Vrouwelijkheid versus mannelijkheid, over het gedrag ten opzichte van iemands geslacht en de inherente waarden die ze behelzen. Concurrentievermogen en assertiviteit worden geassocieerd met mannelijkheid, bescheidenheid en verzorging met vrouwelijkheid.
- 4. Onzekerheidsvermijding, over de mate waarin een persoon in een bepaalde cultuur zich op zijn of haar gemak voelt in ongestructureerde (nieuwe of onbekende) situaties. In onzekerheidsvermijdende culturen zijn er vaak veel strikte wetten en regels om ongestructureerde situaties zoveel mogelijk te voorkomen, in onzekerheidsaccepterende culturen zijn deze wetten en regels er minder of niet.

Lewis categoriseert culturen door ze op een driehoek te plaatsen, zoals weergegeven in figuur 0.01. Door de meest voorkomende nationale gedragingen te beoordelen, wordt de cultuur van een land gepositioneerd op of tussen de drie hoekpunten: multi-actief, lineair-actief of reactief. De multi-actieve cultuur wordt gekenmerkt door een hoge energie, mensen in een multi-actief land werken zelden volgens een tijdschema en laten zich leiden door het belang van de activiteiten die aan de orde komen. De cultuur van mensen in linear-actief land is gecentreerd rond plannen, organiseren, actieketens nastreven en één ding tegelijk doen. De reactieve cultuur geeft prioriteit aan beleefdheid en respect, maar ook aan luisteren en algemene rust. Voorzichtige reacties zijn de norm in landen met een reactieve cultuur.

Projectmanagement

Het managen van bouwprojecten is complex en het managen van internationale bouwprojecten is nog ingewikkelder. Er zijn verschillende instituten met een mondiaal bereik die als doel hebben projectmanagers kennis en methoden bij te brengen om het management van internationale projecten vorm te geven. Twee partijen die naar voren kwamen waren het Project Management Institute (2017) en Hall en Jaggar (1997).

Het Project Management Institute definieert twaalf managementgebieden: integratiemanagement, scope management, planning management, kostenmanagement, kwaliteitsmanagement, resource management, communicatiemanagement, risicomanagement, inkoopmanagement, stakeholder management, management van gezondheid, veiligheid, beveiliging en milieu (HSSE) en financieel management.

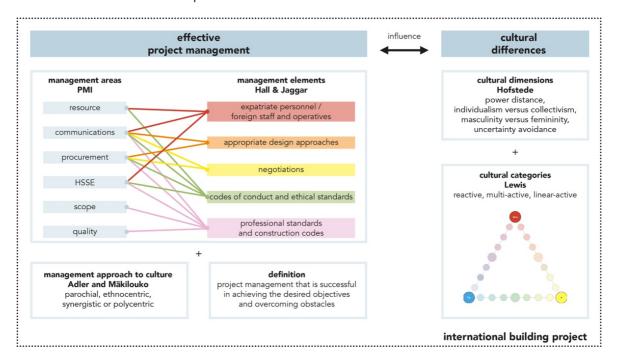
Hall en Jaggar (1997) vonden projectmanagementelementen die expliciet van belang zijn bij internationale bouwprojecten: expats, buitenlandse medewerkers, passende ontwerpbenaderingen, onderhandelingen, gedragscodes en ethische normen en regelgeving en professionele normen.

Management van culturele verschillen

Literatuur toonde aan dat er vier algemene (management) benaderingen zijn van cultuur in internationale bouwprojecten (Adler, 1983, in Hall & Jaggar, 1997; Mäkilouko, 2004):

- Onze manier van werken is de enige manier van werken (parochiaal);
- Onze manier van werken is de beste manier van werken (etnocentrisch);
- Onze manier van werken is anders en niet beter dan andere manieren van werken (synergetisch);
- ledereen werkt op zijn eigen manier en de projectmanager moet deze verschillende manieren van werken integreren (polycentrisch).

Onderstaand conceptueel framework laat zien hoe de theorieën zijn gecombineerd om zo de basis te vormen voor het empirisch onderzoek.



Figur 0.01. Conceptueel framework. Eigen figuur.

4 Bevindingen

Bevindingen op hoofdlijnen

Het algemene management van de casusprojecten werd beïnvloed door de positie van het project voor de opdrachtgever (casus A), de richtlijnen en procedures van de opdrachtgever (casus B) en de dagelijkse gang van zaken van het bedrijf van de opdrachtgever (casus C). De gunstige persoonlijke eigenschappen van de projectmanagers waren in alle casussen verbonden met communicatiemanagement. De geïnterviewden noemden ook aspecten die niet gerelateerd waren aan een specifiek managementgebied, zoals diplomatiek en flexibel zijn. Terugkijkend zouden de geïnterviewden uit casus B en C meer aandacht besteed hebben aan teambuildingactiviteiten.

Voor effectief projectmanagement kwam in alle casussen het belang van aspecten gerelateerd aan integratie- en communicatiemanagement naar voren. Bij de integratie stonden de structuur van het projectteam en de projectmethodiek centraal, evenals het vooruitkijken om te sturen en te coördineren waar nodig. Wat betreft communicatie kwamen duidelijk zijn, zowel mondelinge als schriftelijke communicatie documenteren, verwachtingen managen en het opbouwen van functionele relaties naar voren. De opvattingen over de rol van cultuur in een effectieve managementaanpak verschilden per casus. In casus A was cultuur op landelijk niveau van belang, in casus B was de cultuur van de opdrachtgevende organisatie bepalend en in casus C werd cultuur nauwelijks geadresseerd. In alle drie de casussen waren de geïnterviewden het erover eens dat het hebben van ervaring in een multiculturele omgeving helpt bij het omgaan met culturen in internationale bouwprojecten. De geïnterviewden wezen echter ook op het belang van algemeen bewustzijn omtrent cultuur en het vermogen hebben om de manier van werken aan te passen aan de situatie.

De definities van cultuur van de geïnterviewden waren minder breed dan in de literatuur werd aangetroffen. De factoren met betrekking tot de managementelementen van Hall en Jaggar (1997) die in elk van de casussen werden vermeld, zijn samengevat in de onderstaande tabel.

	Casus A Brazilië	Casus B Nederland	Casus C Maleisië
Ontwerpbenaderingen	Een open houding en bereidheid om te leren	Standaarden van opdrachtgever leidend	Copy-paste van het kantoor in Singapore
Regelgeving en professionele normen	Uitleg over lokale methoden voor elektriciteit, IT en ontwerp voor mindervaliden	Uitdagende gezondheids- en veiligheidseisen van opdrachtgever	Compatibiliteit van Singaporese en Maleisische normen dubbel controleren
Expats / buitenlandse medewerkers	Taalbarrière	Gebrek aan vereiste lokale kennis	Risico's vermijden door contracten
Onderhandelingen	Horizontale opdrachtgevende organisatie, behoefte aan lokale kennis	Online aanbestedingsproces, algemeen collaboratieve sfeer	Inzicht in de implicaties van keuzes, binnen budget blijven
Gedragscodes en ethische normen	Verschillende richtlijnen, uitdaging om aannemers zich eraan te laten houden	Strenge inkooprichtlijnen door opdrachtgever	Veel richtlijnen, beperkte controle over de omstandigheden ter plaatse

Tabel 0.02. Samenvatting van de cross-case analyse van culturele elementen door Hall en Jaggar (1997). Eigen tabel.

In casus A kwamen de ontwerpbenaderingen van de betrokken adviseurs uit verschillende landen niet altijd overeen. Er was uitgebreide coördinatie nodig om ervoor te zorgen dat aan de verwachtingen en normen van de opdrachtgever werd voldaan. In casus B leed het ontwerpproces onder culturele miscommunicatie en verschillende verwachtingen, procedures en richtlijnen. In casus C leidde het beperkte informele contact tussen de opdrachtgever en adviseurs tot een meer transactionele relatie. In alle casussen waren er moeilijkheden bij het managen van de toeleveringsketen: het gedrag op de bouw was niet altijd conform de normen van de opdrachtgever. De verschillende verwachtingen, procedures en richtlijnen leidden hierbij tot belemmeringen. De algemene benaderingen ten opzichte van cultuur verschilden ook:

- Casus A: het opdrachtgeversteam en het Turner & Townsend-team wilden graag leren over elkaars manier van werken; het was een synergetische benadering.
- Casus B: de opdrachtgever beschikte over uitgebreide interne richtlijnen en procedures waarvan niet kon worden afgeweken, wat leidde tot een overwegend etnocentrische benadering.
- Casus C: in deze casus kwam cultuur volgens de geïnterviewden nauwelijks aan bod; een parochiale benadering.

De rijkdom aan input werd opgemerkt als een essentieel voordeel van een multicultureel en internationaal projectteam. Verschillende kwaliteitseisen en het coördineren van teams op verschillende locaties waren uitdagingen. In geen van de casussen kozen de projectmanagers actief voor een bepaalde aanpak omtrent cultuur. In de drie casussen werd verschillend omgegaan met obstakels: in Brazilië door persoonlijke relaties te gebruiken en wanneer nodig extra taken en verantwoordelijkheden op je te nemen, in Nederland door in nauw contact te blijven met alle partijen en diplomatiek te zijn en in Maleisië door vast te houden aan je rol en de kwestie te escaleren naar iemand met meer macht of hoger in rang.

Mogelijke verklaringen

De bovenstaande bevindingen kunnen worden verklaard door verschillende factoren. De behoefte aan adequate communicatie kwam in alle casussen duidelijk naar voren. Binnen dit managementgebied wezen geïnterviewden uit casus A en B op het belang van het ontwikkelen van relaties. In casus C werd dit niet opgemerkt, en dit kan verklaard worden door de strikte scheiding die gemaakt werd tussen de opdrachtgever en de adviseurs: er was geen informele interactie. Dit kan worden verklaard door de grote machtsafstand in de Maleisische cultuur (Hofstede et al., 2010).

Er is een aantal elementen waarop de casussen op een vergelijkbare manier kunnen worden gepositioneerd. De geïnterviewden uit casus A waren minder strikt over de regels, informeler, waardeerden het wanneer projectteamleden extra taken en verantwoordelijkheden op zich namen en waren meer open. De interpersoonlijke relaties waren flexibel en mensen namen soms rollen aan die oorspronkelijk niet van hen waren. De geïnterviewden in casus C toonden daarentegen een voorkeur voor het naleven van de regels, een formelere, gereserveerdere houding en vasthouden aan de eigen rol. In deze casus werd een verticale hiërarchie beschreven, die tot uiting kwam in streng en taakgericht management op de bouw.

Casus B kan tussen deze twee worden geplaatst: gelijkheid en relaties met andere partijen en mensen op een horizontale manier (dus zonder rekening te houden met iemands positie of status) was erg belangrijk. Het geheel had echter meer diplomatieke kenmerken dan casus A, waar de interpersoonlijke relaties sterker ontwikkeld waren. Dit is goed te verklaren door de culturele categorisering van deze landen door Lewis (2006): de bevindingen uit Brazilië, Nederland en Maleisië vertonen grote overeenkomsten met hun respectievelijke multiactieve, lineair-actieve en reactieve cultuur.

Validatie

Vier uitspraken werden gevalideerd door het expert panel:

- 1. Cultuur en culturele verschillen zouden een expliciet onderwerp moeten zijn tijdens de opstartbijeenkomsten van projecten.
- 2. Algemene verwachtingen, procedures en richtlijnen van zowel de opdrachtgever als het lokale personeel moeten op elkaar worden afgestemd, het proces waarin dit moet plaatsvinden moet worden gefaciliteerd door het projectmanagementteam.
- 3. Het project omkaderen met een duidelijke start- en eindbijeenkomst en het organiseren van teambuildingactiviteiten is gunstig voor de effectiviteit van het project.
- 4. Communicatiemanagement is het belangrijkste element van effectief management van cultuur in internationale bouwprojecten.

De experts waren het unaniem eens over de uitspraken en maakten diverse aanvullende opmerkingen. Het belang van bewustwording (van cultuur en de invloed die cultuur kan hebben op verwachtingen, procedures en richtlijnen) en continue aandacht voor het onderwerp kwam duidelijk naar voren. Er werd ook opgemerkt dat men voorzichtig dient te zijn bij het behandelen van cultuur vanwege de mogelijke gevoeligheid van het onderwerp in bepaalde landen.

5 Discussie

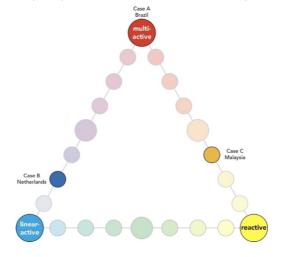
Over het algemeen bleken de theorieën een solide basis te zijn voor het empirisch onderzoek, de bevindingen van de empirische studie zijn in lijn met de literatuur. De culturele dimensie van onzekerheidsvermijding kwam het minst goed overeen met de bevindingen uit het empirisch onderzoek. Deze discrepantie kan worden verklaard door de algemene risicovolle aard van projecten en dus de over het algemeen sterke onzekerheidsvermijding bij het managen van bouwprojecten. De resultaten van de enquêtes (gebaseerd op de culturele categorieën van Lewis, 2006) van de geïnterviewden in casussen A en B komen niet overeen met de verwachtingen op basis van hun nationaliteit. Deze afwijking kan verschillende verklaringen hebben, aangezien de culturele categorieën zijn gebaseerd op het gemiddelde algemene gedrag binnen een land en het aantal respondenten zeer gering is, kan deze uitkomst toeval zijn.

Tijdens het onderzoek kwamen alle managementgebieden van het Project Management Institute naar voren, behalve financieel projectmanagement. Het managementgebied van communicatie bleek van het grootste belang. Binnen het managementelement van gedragscodes en ethische normen werden geen expliciete voorbeelden met betrekking tot corruptie en omkoping aan de orde gesteld. Dit verschil kan worden verklaard door het feit dat de theorie van Hall en Jaggar dateert uit 1997 en sindsdien de bouwsector geëvolueerd is. Het kan ook worden verklaard door het feit dat de onderzochte casussen allemaal werden gemanaged door Turner & Townsend en in opdracht van grote internationale technologiebedrijven uitgevoerd werden: er waren veel regels en richtlijnen om illegale praktijken te voorkomen.

6 Beperkingen

De volgende beperkingen zijn van toepassing op dit onderzoek:

- 1. De landen waarin de casussen zich bevinden, sluiten niet perfect aan op de literatuur: twee van de drie casussen bevinden zich niet in een land dat respectievelijk het meest lineair-actief of reactief is. Dit kan invloed hebben op de overdraagbaarheid van de projectresultaten, aangezien de lineair-actief-reactieve as onbehandeld blijft (zie figuur 0.02).
- 2. Tijdens de interviews werd een taalbarrière duidelijk: Engels was voor de meeste geïnterviewden een tweede taal.
- 3. Door het beperkte aantal casussen dat in dit onderzoek is geanalyseerd, kunnen de uitkomsten van dit onderzoek niet automatisch worden toegepast op andere casussen.
- 4. Er zijn veel meer partijen bij de casussen betrokken die verschillende perspectieven op het project kunnen hebben; deze zijn niet meegenomen in dit onderzoek. Bovendien werd er een onevenwichtig aantal projectmanagers en vertegenwoordigers van de opdrachtgevers geïnterviewd en moest in casus B het perspectief van de opdrachtgever worden vervangen door dat van de hoofdaannemer.
- 5. Het panel voor de validatie bestond uit vijf Turner & Townsend-experts. Dit beperkt de generaliseerbaarheid van de validatie, aangezien experts van andere bedrijven of instellingen verschillende perspectieven kunnen hebben op de validatieverklaringen.



Figuur 0.02. De casussen geprojecteerd op het Cultural Types Model. Aangepast van R. D. Lewis (2006, p. 42).

7 Conclusie

Culturele verschillen kunnen het meest effectief worden gemanaged in internationale bouwprojecten door rekening te houden met de volgende aspecten (gecategoriseerd per managementelement):

1. Expats / buitenlandse medewerkers

Geïntegreerd in de managementgebieden resources, communicatie en inkoop Het project omkaderen met een duidelijke startbijeenkomst, afrondingsbijeenkomst en het organiseren van teambuildingactiviteiten is gunstig voor de effectiviteit van het project. Tijdens de opstartvergadering van het project moeten alle projectteamleden bewust gemaakt worden van cultuur en culturele verschillen, en het moet een continu onderwerp zijn gedurende de hele levenscyclus van het project.

2. Passende ontwerpbenaderingen

Geïntegreerd in de managementgebieden communicatie en inkoop Een open, ruimdenkende houding van opdrachtgever en opdrachtnemer(s) is gunstig om tot ontwerpoplossingen te komen die het beste bij het project passen. Algemene verwachtingen, procedures en richtlijnen van zowel de opdrachtgever als het lokale personeel moeten op elkaar worden afgestemd, het proces waarin dit moet plaatsvinden moet worden gefaciliteerd door het projectmanagementteam.

3. Onderhandelingen

Geïntegreerd in managementgebieden van communicatie en inkoop De opdrachtgever dient gebruik te maken van lokale kennis en procedures. Het projectmanagementteam moet de prioriteiten en aandachtspunten van de opdrachtgever begrijpen.

4. Gedragscodes en ethische normen

Geïntegreerd in de managementgebieden resources, communicatie, inkoop en HSSE Het kan een uitdaging zijn om de toeleveringsketen te laten voldoen aan de verwachtingen, richtlijnen en procedures die zijn overeengekomen. Alle partijen moeten zich daarom bewust zijn van de culturele verschillen op dit gebied.

5. Beroepsnormen en bouwvoorschriften

Geïntegreerd in de managementgebieden resources, communicatie, inkoop, HSSE, scope en kwaliteit

Algemene verwachtingen, procedures en richtlijnen van zowel de opdrachtgever als het lokale personeel moeten afgestemd worden. Gezondheids- en veiligheidsnormen variëren enorm van cultuur tot cultuur, het expliciet maken van de verschillen en het openlijk communiceren hierover met het lokale personeel is essentieel om obstakels te overwinnen.

Er moet expliciet aandacht worden besteed aan communicatiemanagement, aangezien dit het belangrijkste element is van effectief management van cultuur in internationale bouwprojecten. De projectmanager moet een leidende positie innemen in het structureren van de communicatie en moet het belang van bewustzijn omtrent het onderwerp aankaarten.

8 Aanbevelingen

Op basis van de bevindingen worden de volgende aanbevelingen gedaan voor de praktijk:

- 1. Implementeer cultuur in de projectmanagementaanpak om het bewustzijn te vergroten en besteed in het project continu aandacht aan het onderwerp.
- 2. Beoordeel de eigen culturele positie om het begrip van de eigen culturele vooringenomenheid en die van de organisatie te vergroten.
- 3. Ontwikkel een trainingsprogramma voor projectmanagers om praktijkmensen op te leiden en focus specifiek op:
 - de verschillende benaderingen van cultuur en hoe dit vaak onbewust gebeurt;
 - de elementen die het belangrijkst zijn voor het effectief managen van cultuur;
 - het belang van het behandelen van cultuur en de noodzaak voor continue aandacht voor het onderwerp;
 - hoe culturele verschillen kunnen worden gemanaged door team building-activiteiten.

Voor onderzoek worden de volgende aanbevelingen gedaan:

- 1. Betrek een grotere verscheidenheid aan betrokken partijen om de rollen en wensen van adviseurs te bepalen in effectief management van culturele verschillen.
- 2. Concentreer meer op de definities van cultuur van projectmanagers om een gedetailleerder beeld te krijgen van het beeld dat zij hebben van cultuur.
- 3. Vergelijk projecten van dezelfde opdrachtgever in verschillende landen om een beter beeld te krijgen van de overwegingen en benaderingen van de opdrachtgever in het project.
- 4. Concentreer meer op de details van communicatiemanagement om nauwkeuriger aan te geven waar projectmanagers op moeten letten voor effectief management van cultuur bij internationale bouwprojecten.

Introduction

1 Introduction

In this chapter, the context of this research will be covered. This will be followed by the problem statement and the societal and scientific relevance of this research.

1.1 Research context

To be able to interpret the problem statement, the context of this research will first be outlined. Ofori and Toor (2009) state that many investigations have been carried out in the field of cross-cultural aspects in the 1990s and 2000s. Among these researches are ones that connect national culture with management practices, focusing specifically on strategic decision-making (Schneider & de Meyer, 1991), on leadership style (Dorfman & Howell 1988; Puffer 1993) and human resource management (Luthans, Welsh & Rosenkrantz, 1993). In these cases, evidence arguing for different management approaches in different national cultural contexts came forward (Newman & Nollen, 1996).

However, this kind of research in the context of the construction industry remains underexposed. This lack of attention is remarkable, because large construction projects have been confronted with cultural aspects for hundreds of years due to their involvement of both individuals and organisations from multiple countries. Over the last decades, socio-economic and cultural changes have affected the internationalisation of construction activities (Chan & Tse, 2003).

Several authors view culture as an essential aspect that affects the management and perception thereof of international construction projects (Chan & Tse, 2003; Gerstner & Day, 1994; Loosemore & Lee, 2002). Enshassi and Burgess (1990) state that the success of construction projects – both in the home country of the organisation and abroad – is determined by the quality of the management. In addition, several authors claim that cultural differences can lead to misunderstandings, conflict and risk (Elmuti & Kathawala, 2001; Lewis, 2006; Haller, Naegele & Berger 2019; Enshassi & Burgess, 1990; Huang, 2016; Ofori & Toor, 2009). Because of this and the fact that management techniques or philosophies are not without question applicable across cultures (Hofstede, 1984; Newman & Nollen, 1996), the subject of cross-cultural management is deserving of in-depth research.

Ofori & Toor (2009) conclude that culture has increasingly been considered in studies in the construction industry, but mostly at the individual and organisational levels. The methods applied are mainly quantitative; only a few made use of interviews and case studies.

1.2 Problem statement

"Managing cultural diversity must be the issue of the new millennium." (Barthorpe, Duncan & Miller, 2000, p. 346). An increasing amount of businesses perform on a global level and often in multiple countries at once (Fisher, 2011). In the building industry, this is no different. Building internationally is no longer an exception, but a standard for various construction companies (Shore & Cross, 2005). Construction projects are becoming increasingly larger, more complex, and more globally competitive (Project Management Institute, 2016). With that, the need to understand foreign norms, values and beliefs becomes crucial to deliver successful projects abroad (Fisher, 2011; Holtbrügge, Weldon & Rogers, 2012; Chanlat, Davel & Dupuis, 2013).

Several authors state that through understanding and successfully managing cultural differences in projects, project advantages and even general company success can be obtained (Kivrak, Ross, Arslan and Tuncan, 2009; Ofori, 2000; Ofori & Toor, 2009; Enshassi & Burgess, 1990). The internationalisation and the need to understand foreign cultures is not only of importance to the project teams at work but also for the many (often international) stakeholders involved in building projects (Zwikael, Shimizu & Globerson, 2005; Ofori & Toor, 2009; Köster, 2009). Hofstede (1994, p. 1) summarises it as follows: "the business of international business is culture."

Pettersen Buvik & Rolfsen (2015) argue that projects in general make for challenging work situations, because of the – by definition – constrained time. However, working on projects in foreign countries is argued to be even more challenging due to cross-cultural differences (Zuo, Zhao, Nguyen, Ma & Gao, 2018). Haller, Naegele and Berger (2019, p. 247) present that "50% of failures in international projects are mainly due to cross-cultural misunderstandings rooted in prejudices and clichés."

Inconsistency between deeply rooted beliefs and values in culture on the one hand and in management practices on the other hand can lead to employee dissatisfaction, discomfort and lack of commitment (Newman & Nollen, 1996). Other consequences of not managing cultural diversity are increased stress levels among involved workers, confusion, frustration and conflict. These, in turn, lead to lower productivity, work of lesser quality and higher accident rates on site (Allen, 1976; Migliorino, Miltenyi & Robbertson, 1994; Deresky, 1997 all as cited in Loosemore & Lee, 2002; Ofori & Toor, 2009). Abeysekera (2002) states that the problem is twofold. There are many problems such as conflicts and misunderstandings when operating internationally (1) and there is generally little attention to learn from these problems and improve the way of working across countries (2). This ignorance or inability to deal with these elements has various consequences, ranging from issues with employees to failing to build sustainable working relationships abroad (Hoecklin, 1995 as cited in Abeysekera, 2002).

There is a gap of knowledge in research connecting culture (and cultural differences) to the management of international projects in the building industry (see figure 1.01 below). This gap of knowledge influences project success, leading to projects of lesser quality with time and cost overruns (Haller, Naegele and Berger, 2019).



Figure 1.01. The gap of knowledge between culture, the management of international projects and the building industry. Own illustration.

1.3 Societal and scientific relevance

Research into management practices in international building projects has the following societal relevance:

- 1. The goal of this research is to give international building companies and managers insight into cultural differences that occur in international building projects and provide them with advice to manage these projects as effectively as possible. A great deal of literature on the general subject of culture was written in the 1990s when globalisation was upcoming. In later literature, comparative case studies are described, but the broad scope of project management in international building projects has barely been touched upon again. By doing this research, the improvement of project management of international building projects may be incentivised.
- A consequence of gaining knowledge on project management of international projects is that international building projects themselves could be significantly improved. By decreasing (the impact of) miscommunication and cross-cultural misunderstandings, overruns of time and budget may be averted, and the overall quality of the project may be improved.
- 3. Through this research, international building companies and practitioners may be inspired to rethink their strategy and way of working. By incentivising them to move from a parochial approach to a synergetic or polycentric one, the way of working abroad will be likely to change for the better.

Research into management practices in international building projects has the following scientific relevance:

- 1. This research will provide an addition to the body of knowledge on culture and project management. As discussed in the problem statement, there is currently a gap in research and scientific knowledge connecting culture (and cultural differences) to the management of international building projects. Regarding the construction industry, there have not been many pieces of research related to cross-cultural management (Ofori & Toor, 2009). Through this research, this gap is aimed to be closed: more knowledge on how to manage cultural differences in international building projects will be gained. Because of the nature of the construction industry in which a project-based way of working and cross-firm cooperation are standard the influence of culture is significant and gaining attention in the research domain (Ankrah & Langford, 2005).
- 2. By connecting literature on culture and project management, the existing body of knowledge will be extended and brought further up to date. By performing this research now, comparisons between this research and research executed previously can be done.

Methodology

2 Methodology

In this chapter, the research questions, method and output will be described.

2.1 Research questions

The main research question for this thesis is formulated as follows:

"How can cultural differences be managed most effectively within the management areas of international building projects?"

To be able to answer this main question, the following sub-questions are necessary:

Question	Purpose	Method
1. What does culture in the building industry entail and what are determining factors that characterise culture in the building industry?	to get insight into what culture in the building industry entails and determine important factors that characterise culture in the building industry	literature review
2. What are the most common methods, guides and standards that are employed to manage international building projects?	to get insight into the most common methods, guides and standards that are employed to manage international building projects	literature review
3. Which management areas are applicable to and important for international building projects?	to obtain knowledge on the specific management areas that are applicable to and important for international building projects	literature review and case study
4. Which management areas and elements play the most important role in the effectiveness of managing cultural differences in international building projects?	to gain insight in the most important management areas and elements on the effectiveness of managing cultural differences in international building projects	case study

2.2 Research method

To be able to answer the questions posed in the previous paragraph, a cross-cultural qualitative exploratory research design is applied. This approach is taken because of the aim to develop new theories, which requires a qualitative research method (Bryman, 2016). In addition to that, Ofori and Toor (2009) state that the application of qualitative methods in cross-cultural research within construction management is rare, which is why this the outcomes of this research using qualitative methods may provide new insights. In figure 2.01 below, the relation between the research methods and answering the research questions is illustrated.

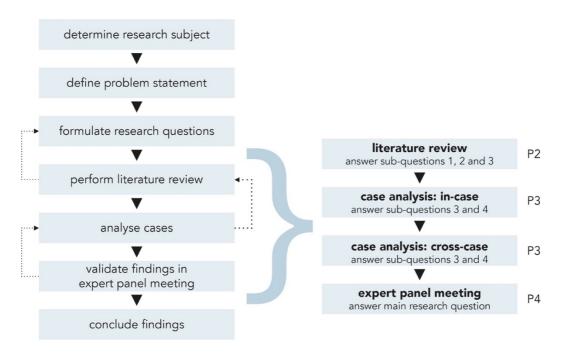


Figure 2.01. The relation between research methods and answering research questions. Own illustration.

When going through the research steps as illustrated above, it is essential to do so as unbiased and objective as possible. Important to take into account too, is the different approach different cultures have concerning time (Almaney & Alwan, 1982 and Deresky, 1994 both as cited in Loosemore, 1999). A certain amount of flexibility and a surplus of time may be necessary to ensure all the data can be collected in time. In the following two paragraphs, the literature review and case study parts of the research will be explained more in-depth.

2.2.1 Literature review

Firstly, a literature review is necessary to explore the present body of knowledge on culture and project management in the international building domain. The literature review covers the following elements: what is already known about the topic, how and by whom the topic has been researched so far and which controversies or disagreements exist (Bryman, 2016). This review forms the theoretical basis from which the cases will be analysed. In chapter three, the literature review on 'culture', 'project management' and 'management of cultural differences' can be found. The first two sub-questions are answered through the literature review.

2.2.2 Case study

The second part of this research consists of the in-case and cross-case analysis of the management of three international building projects. The unit of analysis in all cases how the international project is managed (Bryman, 2016). Yin (2018) categorises this type of case study design as a multiple-case holistic one (see figure 2.02 below). This means that there is a single unit of analysis that is analysed across different cases in different contexts. In the following paragraphs, various theories will be mentioned as part of the methodology, these will be explained further in chapter 3.

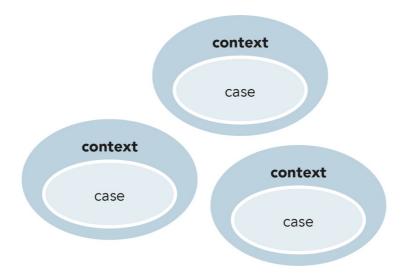


Figure 2.02. Type 3 Type of Design for Case Studies. Adapted from R. K. Yin (2018, p. 48).

The cases are – among other aspects – selected based on their geographical location. The three cases are picked in respectively a linear-active, multi-active and reactive culture to get the full range of cultural differences into view (Lewis, 2006).

For a case study design in general, depth is preferred over scope (Gerring, 2004). Nonetheless, by choosing cases that are situated in the corners of Lewis's Cultural Types Model and validating the findings of the case studies through an expert panel review, the ambition is to be able to touch upon the variety of cultural differences in international building projects across the world. Important to note is that this does not mean that the findings from the three case studies are necessarily generalisable, but that the in-depth findings may contribute to (the development of) a broader overview of how cultural differences in international building projects are managed.

In figure 2.03 below, the corners of the figure show the countries that are considered first to find suitable cases. In the event that no fitting cases can be found in these countries, cases in the other countries (in less saturated colour) are assessed. The goal is to stay as close to the corners of the figure as possible, as Lewis states these countries reflect the multi-active, linear-active and reactive cultures most clearly (2006).

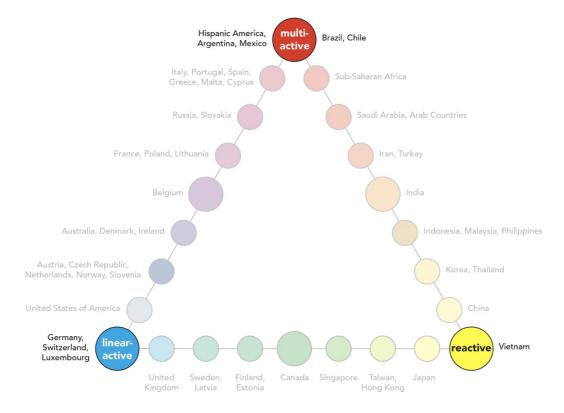


Figure 2.03. Cultural Types Model. Adapted from R. D. Lewis (2006, p. 42).

For the selection of the cases, the following aspects are of importance: the cases need to be similar types of real estate in terms of type, size and project value to exclude these elements as significant variables. Rwelamila and Savile (1994) argue that for projects, the following aspects of the prevalent environment should be taken into account: country, year, location, project type and industry. Also, the projects should be managed by a horizontal, multinational enterprise. This means that the different locations of the company operate in the same industry and provide similar services: they do not disperse the company's operations across different countries for advantages in the supply chain.

A uniform framework needs to be used in the analysis of all cases to make meaningful comparisons between the cases (Yin, 2018). This conceptual framework – in which the key concepts and their relations are indicated – will be presented in section 3.4.

In-case analysis is completed before the cross-case analysis is executed. For this, different methods to collect data are necessary. Firstly, a project analysis is carried out. This analysis gives insight into the project objectives, the location and corresponding cultural characteristics, the project coalition and the planning of the project. Various documents concerning these aspects are collected to be able to carry out this analysis (Bryman, 2016).

Secondly, the project managers of all three cases are interviewed. The aim is to interview two people from the project management firm and two people from the side of the client per case to ensure triangulation and sufficient validity. The interviews serve to gain information on their management approach (towards culture), the cultural differences they may have experienced and the effects on the project that arose due to these differences. The structure of the interview is guided by leads found in literature, the interview guide can be found in appendix D. Three trial interviews are conducted to make sure that the interview questions are accurate and no questions are unnecessary or missing.

Thirdly, to establish the cultural type of the interviewees (Lewis, 2006) and determine the alignment with the geographical project context, the interviewed project team members are asked to fill out a survey. In this survey, a list of common traits of the linear-active, multi-active, and reactive categories is presented. By choosing one characteristic in each row that the respondent finds suits his / her culture best, a cultural 'profile' can be established: the result of the survey is used to create an overview of the alignment of the interviewees with each culture (linear-active, multi-active and reactive). An example of such a profile is shown in figure 2.04 below.

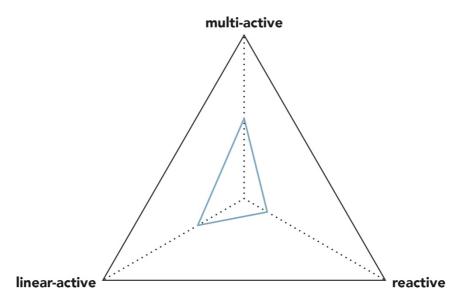


Figure 2.04. A fictional example of a cultural profile. Own illustration.

After the in-case analyses, a cross-case analysis takes place to compare the management of international building projects in different cultural contexts. This analysis encompasses the cultural dimensions of Hofstede to seek the more distinct differences between the cultures in which the case projects were executed. The third and fourth sub-questions are answered through the in- and cross-case study.

After the case study, the external validity of the information found is tested through an external expert panel review. This two-way communication method is essential for cross-cultural research according to Loosemore (1999), mainly because of the general difficulties that arise when communicating across cultures. After this review, answers to the sub-questions may be sharpened or edited, after which the main research question is answered.

2.2.3 Methodological issues in case study research

In this section, methodological issues regarding case study research will be covered. When determining the number of cases that should be researched in social studies, Gerring (2004) describes arguing based on "breadth and boundedness versus depth" (p. 347). In this thesis, the aim is not to draw generalisable conclusions, but to conclude on findings regarding variables in specific (geographical) contexts. To be able to gain this in-depth knowledge, a small number of cases was chosen.

Yin (2018) distinguishes four main aspects that contribute to the quality of exploratory research designs: construct validity, external validity and reliability. Regarding the construct and external validity of case study research, Flyvbjerg (2006) describes common opinions: case study research is not generalisable, and because of the bias of the researcher, validity in case studies is absent.

Regarding the first argument on generalisability (described as 'external validity' by Yin (2018)), Yin argues that one should look at a case study as "the opportunity to shed empirical light on some theoretical concepts or principles" and not treating the cases as a sample (2018, p. 38). Bennett (2010) adds to this that any generalisations or lessons learnt (analytic generalisations) may well be applicable to other situations and beyond the scope of similar cases.

The second point – which argues that case study research cannot be valid because it would allow for more subjectivity and judgement than quantitative methods, is refuted by Flyvbjerg (2006). The case study is different from quantitative methods but no less strict. The subjectivity and judgement are still issues for this research. 'Ethnocentrism' as described in paragraph 3.3.2 is also applicable to research regarding culture (Liu, 2002). Ethnocentrism is almost inevitable because one judges another culture from the fundamental perspective of one's standards and values.

By application of triangulation: using different methods of data collection and different sources to collect data, the validity of this research increases (Liu, 2002). For the case study to be reliable, the use of a case study protocol and maintaining a chain of evidence are suggested by Yin (2018). Systematic analysis of the data that is collected is essential to keep a good overview, which is why a process of collection, analysis and conclusion drawing is applied (Heurkens, 2012).

2.3 Data plan and ethical considerations

The FAIR Data Principles state that scientific data should be findable, accessible, interoperable and reusable (Wilkinson, Dumontier, Aalbersberg, Appleton, Axton, Baak, ... Zhao, 2016). The processing of the data in this thesis will be done in accordance with these principles in the following ways:

- Findability: the final thesis report will be available to view and download for anyone via the TU Delft Education Repository.
- Accessibility: any (raw) data or additional information that is not included in the final report, can be accessed by contacting the author via e-mail. Important is that only data that the author has full ownership of can be shared with third parties. Any (sensitive) personal information gathered through the interviews will not be shared without the explicit consent of the person or people involved. The information will either be censored in the final thesis or wherever possible be left out (such as full transcripts of interviews).
- Interoperability: the thesis will be written in a formal, accessible, shared, and widely applicable language and a list with references will be included.
- Reusability: the data in this thesis will meet domain-relevant community standards and they will be described in depth in their context.

Diener and Crandall (1978, as cited in Bryman, 2016, p. 125) distinguish four primary areas of ethical principles in social research:

- 1. "whether there is harm to participants;
- 2. whether there is a lack of informed consent;
- 3. whether there is an invasion of privacy;
- 4. whether deception is involved."

To avoid compromising the participants' safety, to make sure any consent is informed, there is no invasion of privacy and the participants are not deceived in any way, the following measures will be taken. The interviews will take place in a safe setting. With the coronavirus pandemic, it may be necessary to conduct interviews online. If they can be organised physically, the space in which the interview takes place will have to be in accordance with the RIVM guidelines regarding the virus and the space will have to offer enough privacy for the interviewee to feel at ease to speak freely. Any names or organisations noted in the interview will be censored. Beforehand, it is important to make sure that the interviewees know precisely what they are agreeing to, this will be done by informing them in writing of the goal and process of the research. Before the interview takes place, the interviewee will be asked to sign a consent form. In this form, the participant will confirm he or she has understood the terms and conditions of the research.

2.4 Research output

The goals and objectives of this research are twofold. The first goal is to create value for international building companies and practitioners by providing them with advice to improve the effectiveness of their management regarding cultural differences. Secondly, the objective is to add substantial knowledge to the academic literature on the subject of managing cultural differences in international projects.

The deliverables of this research are as follows:

- 1. A literature review on the subjects of 'culture', 'project management' and 'management of cultural differences';
- 2. An in- and a cross-case analysis of the management of international building projects, focusing on the design, preparation and execution phases of the projects;
- 3. Insight in cultural differences that occur in international building projects and advice on how to manage these differences as effectively as possible to obtain maximum project success.

The output of this research will be relevant to two different groups. Firstly, academics who study the relationship between culture and project management in international building projects will be provided with new insights and incentives for further research. Secondly, international building companies and practitioners will be given insight in and advice on how to improve and optimise their management of cultural differences in international building projects. Through applying this advice, more successful projects will be delivered, and the management of cultural differences in international building projects will become more effective.

Theories

3 Theories

To better understand the variables presented in the problem statement, a literature review on culture, building project management and management of cultural differences follows in this chapter.

3.1 Culture

In his book 'Keywords: A Vocabulary of Culture and Society', Williams (1983, p. 87) states that "Culture is one of the two or three most complicated words in the English language." Culture can be approached from a large variety of perspectives and therefore, there are many different definitions and interpretations of the word and phenomenon (Ankrah & Proverbs, 2004). Thus, to be able to say anything about culture in relation to international building projects, a working definition for culture in this industry is necessary. In this section, the perspectives on culture, the levels of culture, the intangibility of culture and the classifications of culture will be addressed.

3.1.1 Perspectives on culture

The evolution of the term 'culture' has been described by Barthorpe, Duncan & Miller (2000). The term originates from the Latin word 'cultura' and was associated with cultivating land and plants. Until the middle of the 20th century, this was the predominant perspective on culture. This view evolved when the term was defined from an anthropological perspective: "the training, development, and refinement of mind, tastes, and manners." (Barthorpe et al., 2000, p. 336). Over 160 different definitions were collected and published by US anthropologists Kroeber and Kluckhom in 1952 (Barthorpe et al., 2000). Waterbury (1993, p. 64) arranged these definitions into four models:

- 1. "culture as artistic expression;
- 2. culture as all nongenetic human behaviour;
- 3. culture as the customs and values of a particular people;
- 4. culture as the ideational dimension of the socio-cultural system."

Until today, there has been no consensus on the precise definition of the term culture. The differences are significant, and the definition is dependent on the theoretical perspective of whoever offers it (Chan & Tse, 2003). However, a widely accepted cross-disciplinary definition of culture has been given by Hofstede (1984, p. 21), who states that it is "the collective programming of the mind that distinguishes the members of one human group from another." This definition can apply to both levels of national and corporate culture (Hofstede & Bond, 1988). More information on the cultural levels that can be distinguished are found in the next paragraph.

3.1.2 Levels of culture

Secondly, an important aspect to cover when looking for a working definition is the fact that culture can be assessed on different levels. Trompenaars and Hampden-Turner (2000) compare the levels of culture to the layers of an onion: to understand it, the different layers have to be examined (see figure 3.01 below).



Figure 3.01. Culture as an onion. Based on F. Trompenaars & C. Hampden-Turner (2000).

The outer layer represents the national or regional culture. This layer is rooted most deeply, and changes in the national culture occur very gradually over time. Gannon (1994) found that this national cultural layer accounts for 25% to 50% of attitude variations.

The next layer, according to Trompenaars and Hampden-Turner (2000), is the corporate or organisational culture. This organisational culture affects "the way its people think, feel and act in response to opportunities and threats, the ways in which objectives and strategies are set and decisions made" (Thompson & Martin, 2010, p. 258). For an organisation to be effective, its values, resources and the environment need to be aligned (Thompson, 1993; Kotter and Heskett, 1992, both as cited in Akrah, 2007).

Finally, Trompenaars and Hampden-Turner (2000) define the culture of specific functions and roles within organisations. The sharing of professional and ethical orientations come into view here. Hofstede, Hofstede and Minkov (2010) also distinguish culture on levels of gender, generation and social class.

On the 'application' of different levels of culture in different contexts, Ankrah, Proverbs and Debrah (2009) conclude that when sub-groups can be defined within a group, it is likely for these sub-groups to have their own sub-cultures that differ in some degree from the general group culture. This does not exclude the possibility that throughout the whole group or organisation, shared beliefs, behaviours and values exist (Thompson & McHugh, 2003 as cited in Ankrah et al., 2009). The idea of cultural levels and their distinction is not decided upon uniformly by all researchers in the field. In project GLOBE, there was no significant evidence that supported the idea of different levels of national and organisational culture (Earley, 2006).

Important to note is that the levels of culture are highly interrelated. Therefore, it is difficult to decipher when looking at a sub-culture to determine to which degree it is influenced by cultural aspects related to the occupation, the culture of the organisation one works in or the national culture of the physical context in which one works (Schein & Schein, 2016).

Pheng and Leong (2000) explore in their research the differences between national and organisational culture. They state that because the national culture is acquired in a very early stage of life when one is still unaware of the influence of culture, this layer of culture is more deeply rooted in a person and therefore more difficult to change. Organisational culture, on the other hand, is learnt later in life at a conscious level and because of that easier to unlearn. In addition, it is very likely for an organisational culture to strongly reflect values coming from the national culture (Pheng & Leong, 2000; Wijnen & Storm, 2007).

With the ongoing trend of globalisation, culture and the perception of culture undergo constant change. However, Abeysekera (2002) states that throughout globalisation, people adhere to their cultural values, beliefs and practices stronger than before. Wilson (2019) argues that many people around the world identify with (elements of) various cultures, without feeling like these are incompatible. In addition, Javidan & House (2001) state that the increased connection between countries does not result in the disappearance or decrease in cultural differences.) Several authors found that cultural change has occurred, but because the change is more or less comparable between countries, their relative positions remain static (Beugelsdijk, Van Hoorn & Maseland, 2015; Hofstede et al., 2010).

Based on the literature above, the national culture is most deeply rooted in humanity and most stable over time. Hofstede developed a model on 'mental programming', in which culture is positioned in between 'human nature' and 'personality' (see figure 3.02 below). Hofstede et al. (2010) describe human nature as that which all humans have in common: the inherited genetic elements that determine our general bodily and physical functioning. One's personality on the other side is particular and various elements of it can be unique. Culture is described as being specific to a group or category of people and consisting of elements that are learned throughout life.

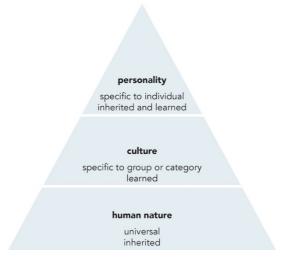


Figure 3.02. Three levels of uniqueness in Mental Programming. Adapted from G. Hofstede, G. J. Hofstede & M. Minkov (2010, p. 6).

3.1.3 The intangibility of culture

The third important aspect of culture is that culture is intangible: it is observable through physical, verbal and behavioural elements of life (Hofstede, 2001). Hofstede (2001) uses the onion as a model to explain this aspect of culture (see figure 3.03 below).

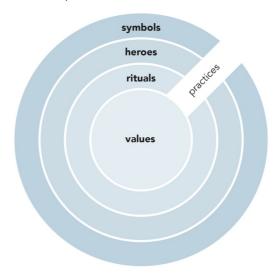


Figure 3.03. The "Onion Diagram": Manifestations of Culture at Different Levels of Depth. Adapted from G. Hofstede (2001, p. 11).

He states that culture is embedded most deeply in the values people hold dear. These values become visible through behaviour. Rituals are the first layer surrounding values: these are "collective activities" (Hofstede, 2001, p. 10) people do without a necessary goal, but that are part of social constructs. Various social and religious ceremonies are categorised under this flag, but also the way people greet each other, for example. The next layer is that of heroes: people who are highly valued for their characteristics and have an example function for people's behaviour in a culture. These people may be alive or dead and could also be fictional. Symbols are the outer layer in the onion created by Hofstede. Symbols are described as "words, gestures, pictures, and objects" (Hofstede, 2001, p. 10) that are explicitly important or meaningful to people sharing the same culture. A diagonal element that crosses all layers of culture and therefore makes them (to some extent) visible to people outside of the culture is 'practices'. However, the meaning of these practices remains only fully understood by the people that share the culture, according to Hofstede (2001).

The idea that culture is a set of beliefs and values is shared by Javidan and House (2001). They add to this that the development of a culture happens over time and is the result of the trial and error process that occurs when aiming to solve internal issues and adapt to external influences. To understand a culture, one needs knowledge of the practices and aspirations of the people that belong to that particular culture (Javidan & House, 2001). Earley (2006) criticises the idea of values as culture: he states that culture is not a value, but the meaning we attach to aspects of our environment. Because values are imperfectly shared across societies, the way people value aspects within the same society is not uniform.

Barthorpe et al. (2000) order culture in a material and non-material part: the material culture includes the objects of importance in a culture, whereas the non-material culture comprises the values, beliefs, norms and language.

3.1.4 Classifications of culture

The fourth important aspect of culture is the different ways in which cultures can be classified. Between 1973 and 1978, Hofstede studied forty nations and found four main dimensions across which they differed (Hofstede, 1984). Over the years, his research evolved, the dimensions were further specified, and more dimensions were added in collaboration with other researchers. The dimensions in their most recent form are described below (Hofstede et al., 2010):

- 1. Power distance: this dimension covers the behaviour towards people higher or lower in rank. The assumption is that in all cultures, inequality is present (to varying degrees). This dimension assesses to which extent less powerful members of societies, organisations and institutions accept this unequal distribution of power. In the workplace, the degree of centralisation, the amount of formal hierarchy and to which extent employees are included in decision-making determines the power distance.
- 2. Individualism versus collectivism: this describes the ties between individuals that can either be strong (collectivist) or loose (individualistic). In an individualistic society, people are expected to look after themselves, whereas in a collectivist society, integration in a cohesive group that offers protection is the norm. In organisations, individualism comes forward through individual responsibility and rewards on an individual level, whereas in a more collectivist organisation, solidarity and rewards on a team level are predominant (Newman & Nollen, 1996).

These first two dimensions need to be viewed as separate units of analysis on an individual level. However, on a society or country level, they can be viewed as opposite poles of the same dimension. Countries in which a large power distance is the norm are often more collectivist, whereas countries with a small power distance tend to be more individualistic. This relation is illustrated in figure 3.04 below, where the light blue areas indicate the placement of most countries.

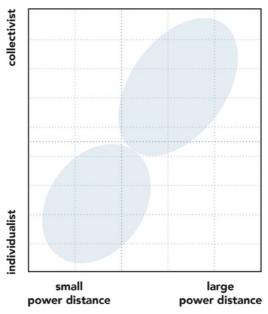


Figure 3.04. Power Distance Versus Individualism. Adapted from G. Hofstede, G. J. Hofstede & M. Minkov (2010, p. 103).

3. Masculinity versus femininity: this dimension assesses the behaviour towards one's gender and the inherent values they uphold. 'Masculine' societies – in which competitiveness and assertiveness are prevalent – are distinguished from 'feminine' societies where modesty and nurturing are central. In organisations, Newman and Nollen (1996) distinguish the difference between a masculine and feminine culture as follows: in a masculine culture, rewards and performance are most important, in a more feminine culture, interpersonal relations play an essential role.

The three dimensions mentioned above apply to both Western and Eastern cultures according to Hofstede and Bond (1988). In Hofstede's research, the fourth dimension was recognised mainly by Western cultures, and the fifth dimension came forward predominantly in research performed in Eastern cultures (Hofstede et al., 2010).

- 4. Uncertainty avoidance: this dimension is about the extent to which a person in a particular culture feels comfortable in unstructured situations. Unstructured is defined as "novel, unknown, surprising, or different from usual" (Hofstede & Bond, 1988, p. 11). In uncertainty-avoiding countries, there are often many strict laws and rules to diminish the occurrence of unstructured situations. In these cultures, people will also believe more commonly in a single and an absolute truth, whereas uncertainty-accepting cultures will adopt a more relativist point of view (Hofstede & Bond, 1988). The search for truth, in general, is not a phenomenon that occurs in Eastern cultures. In organisations, uncertainty avoidance comes forward through "plans, policies, procedures and systems" (Newman & Nollen, 1996, p. 756) to provide a certain degree of certainty to employees.
- 5. Long-term versus short-term orientation (also named Confucian Dynamism): in cultures that uphold a long-term orientation, "perseverance and thrift" (Hofstede et al., 2010, p. 239) are highly valued, and the orientation of activities is focussed on the future. When the short-term orientation is prevalent, the past and present are of importance. Social obligations, respect for traditions and upholding one's appearance ('face') are vital in a short-term oriented culture.

The fifth dimension has not been received well by researchers, as several authors claim there are philosophical flaws and methodological difficulties (Fang, 2003). Some authors do not include the fifth dimension in their research at all (Søndergaard, 1994; Triandis, 1993; Punnett, 1999; all as cited in Fang, 2003). Others note that operationalising the fifth dimension in research is challenging because of the limited familiarity of Western researchers with the subject (Newman & Nollen, 1996), the clarity of and differences between the different ends of the dimension (Redpath & Nielsen, 1997) or because of the limited conceptual and empirical support of the dimension (Kalé, 1996, as cited in Fang, 2003; Newman & Nollen, 1996).

A sixth dimension was added based on Minkov's analysis of data from 93 countries in 2007 (Kim, 2016):

6. Indulgence versus restraint: this dimension has to do with the measurement of happiness. In an indulgent society or country, "basic and natural human desires related to enjoying life and having fun" (Hofstede et al., 2010, p. 281) are fulfilled nearly unconditionally. A society or country in which restraint is the norm, the fulfilment of happiness is tied closely to strict social norms

The sixth dimension is relatively new and – according to Hofstede et al. (2010, p. 281) "deserves more study". Originally, Hofstede based his research on the findings of Inkeles and Levinson (1954, as cited in Hofstede et al., 2010). They found four general, fundamental problems that occurred worldwide: the relation to authority, the relation between individual and society, the individual concept of masculinity and femininity and the ways of dealing with conflicts. These correspond directly to Hofstede's four original dimensions: power distance, individualism versus collectivism, femininity versus masculinity and uncertainty avoidance.

Kirkman, Lowe and Gibson (2006) reviewed 180 studies in which Hofstede's cultural framework was used and discussed the limitations. They encourage researchers to look further than Hofstede's framework only and explore the possibility of complementary cultural values. These may be – like Confucian Dynamism - be specific to a particular region or culture such as 'ubuntu' in African cultures (Rwelamila & Khumalo, 2002) or specific to religions.

Hofstede has not been the only one researching cultures and defining cultural dimensions. Schwartz (2014) has executed another important research into cultural dimensions. He analysed data of 77 national groups in 75 countries in 1994 and found seven cultural value orientations. He grouped them into three dimensions (Schwartz, 2014):

- 1. Autonomy versus embeddedness: Schwartz distinguishes between intellectual autonomy and affective autonomy. In general, in a culture that focusses on autonomy, people will be treated as self-contained individuals. A focus on intellectual autonomy means that people are encouraged to "pursue their own ideas and intellectual directions independently" (p. 551). Creativity and curiosity are leading values in an intellectually autonomous culture. Affective autonomy focusses more on the human aspect and interaction, encouraging pleasure and excitement. On the other side of the dimension lies embeddedness, which aims attention at in-group social relationships, shared goals and solidarity. Values that come with this are "social order, respect for tradition, security, obedience, and wisdom" (p. 551).
- 2. Egalitarianism versus hierarchy: this dimension corresponds largely with Hofstede's dimension of power distance. In an egalitarian culture, equality, responsibility and helping one another are important, whereas in a hierarchical culture, social power and modesty are of high value. In the former, people (are encouraged to) see each other as equals, whereas in the latter the unequal distribution of power and means is accepted and sometimes preferred.

3. Harmony versus mastery: this dimension covers the relation between humans and natural resources. In cultures where harmony is prevalent, appreciation and preservation of the social and natural world are preferred. So-called mastery cultures are keen on the controlling, changing and directing of the natural and social environment. Progress, ambition and competence are more important than maintaining smooth relations.

Trompenaars and Hampden-Turner (2000) studied organisations in fifty different countries and found seven dimensions of culture. The first five are connected to relationships with people, the last two cover attitudes towards time and the environment. The authors state that even though the relationship between people and other people, time and the natural environment may differ across cultures, the relationship is present in all cultures. The dimensions are briefly explained below:

- 1. Universalism versus particularism: this dimension differentiates between 'one good way that always applies', and the view wherein friendship comes with special obligations and therefore the treatment of people differs.
- 2. Individualism versus communitarianism: this dimension assesses how people view themselves within their environment. One can view oneself as primarily individual or primarily as part of a group; this also influences how people position themselves in a community.
- 3. Neutral versus emotional: this dimension covers the degree to which it is socially acceptable to show one's emotions in interactions.
- 4. Specific versus diffuse: this dimension is about how people interact in a (business) relationship. Does someone get involved personally and do boundaries between business and personal diffuse, or does the relationship remain specifically work-related?
- 5. Achievement versus ascription: this dimension goes in-depth on what one is judged upon in a culture. This judgement can take place based on what one has accomplished or on one's status, which can relate to heritage, age, gender and connections.
- 6. Attitudes to time: how people view the concept of time in a culture can have an enormous influence on their behaviour, ways of planning, investing and (business) strategies. On the one hand, some cultures view time as linear: the past, the present and the future in a sequential order. On the other hand, there are cultures in which time is viewed more as being dynamic in the form of a circle in which past and present coexist with future possibilities.
- 7. Attitudes to the environment: this dimension shows great similarity with Schwarz's dimension of harmony versus mastery and covers the way people view their environment. In some cultures, people view themselves as the primary source of motivations and values, whereas in other cultures, 'the world' takes this primary role. In these cultures, the pursuit is to come closer to nature and harmonise with it.

A fourth leading research into cultural dimensions is project GLOBE. Javidan and House (2001) explain their research in project GLOBE: a program that has collected data from middle managers in 62 different countries. The researchers defined nine cultural dimensions, four of which correspond directly to Hofstede's dimensions as defined above: power distance, gender differentiation (Hofstede's masculinity versus femininity), uncertainty avoidance and future orientation (Hofstede's long-term versus short-term orientation). The five others are explained below (Javidan & House, 2001):

- 1. Assertiveness: this dimension concerns the degree to which toughness, assertiveness and a competitive, confronting character are encouraged by a society.
- 2. Performance orientation: a society in which members are stimulated to improve their performance and where excellence is significantly rewarded, will score high on the dimension of performance orientation.
- 3. Humane orientation: in this dimension, characteristics such as kindness, compassion, fairness and generosity in a society are measured.

Dimensions 4 and 5 are both connected to collectivism versus individualism, but from a different perspective than Hofstede's definition of this dimension with a similar name (Abubakari, Wang & Paa-Grant, 2018).

- 4. Institutional emphasis on collectivism versus individualism: this dimension covers the measures that institutions take to encourage individuals to take part in groups. The measures can be concerned with legal, economic, social and political processes. Examples of groups that could be supported are sports clubs, organisations focused on senior citizens and child-care facilities. In societies with a high institutional emphasis on collectivism, group membership and cohesion are very important, also in work environments.
- 5. In-group collectivism: this 'version' of collectivism focuses on the pride people in a society take in being part of their family, group of friends or employing organisation. This dimension corresponds largely to Schwartz's dimension of autonomy versus embeddedness.

The studies above present results that are, to a great extent, confluent and in line with Hofstede's work (Ofori & Toor, 2009; Smith, Bond & Kagitcibasi, 2006). Similar criticism applies to all frameworks: the generalisability across populations and over time is debatable (Taras, Steel and Kirkman, 2012). However, replications of Hofstede's original research show that any occurred changes happened to a similar degree across cultures, leaving their relative positions intact (Beugelsdijk et al., 2015; Hofstede et al., 2010).

More recently, Bond et al. (2004) developed a theory based on social axioms. Social axioms are described as "general beliefs" (p. 552) and because of their general nature, they are likely to relate to a large variety of behaviours in different contexts.

A significant difference between the social axioms and Hofstede's theory is that in the former, behaviours of the individual were analysed within different cultural groups. In contrast, in the latter the combined, average input of individuals in one cultural group was used for analysis. The social axioms may provide a broader context for interpretation of social behaviour. However, because of the determination of these axioms at an individual level, they may not come forward at a culture level (Bond et al., 2004).

Another way of distinguishing between cultures is presented by Lewis (2006), who uses behavioural categories and bases his research on Hofstede's definition of culture. He takes cultures from all over the world and places them in a category based on the main traits they share: the national norm and most common behaviours are prevalent. The categories are as follows:

1. Linear-actives

The cultures of people in this group are centred around planning, organising, pursuing action chains and doing one thing at a time

2. Multi-actives

This group contains cultures where high energy and liveliness are vital. This group rarely works according to a time schedule and is guided by the importance of whatever activity is planned.

3. Reactives

This group prioritises courtesy and respect, as well as listening and general tranquillity. Careful reactions are vital in this cultural group.

Not all national cultures have been placed in one of the three main categories: there are many sub-categories more or less closely related to the linear-active, multi-active and reactive groups (see figure 3.05 below).

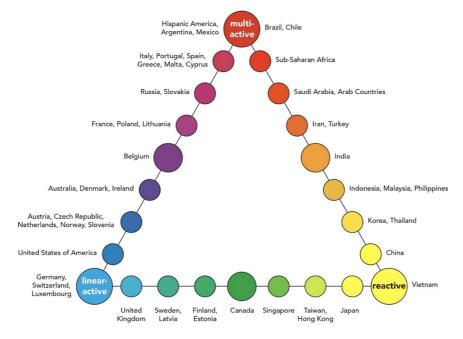


Figure 3.05. Cultural Types Model. Adapted from R. D. Lewis (2006, p. 42).

3.1.5 Conclusions on culture

The goal of this part of the literature review is to gain knowledge on what is already known about the topic, how and by whom the topic has been researched so far and which controversies or disagreements exist (Bryman, 2016). In this section, the conclusions for the subject 'culture' will be drawn.

Many social and mainly quantitative kinds of research have been carried out regarding the subject of culture. The following aspects came forward. Firstly, the concept of culture has evolved dramatically over time, and the word has been viewed from various disciplines. In 1984, Hofstede (p. 21) provided a generally acknowledged definition of culture: "the collective programming of the mind that distinguishes the members of one human group from another."

Secondly, different levels of culture can be established. Important research regarding this has been carried out by Trompenaars and Hampden-Turner (2000). The majority of authors agree on a division between national or regional, organisational and professional or role-specific cultures. There are other levels (individual, project, industry) presented by various authors, but these are often treated as sub-cultures.

Thirdly, the intangibility of culture comes forward in the research of Hofstede (2001). Culture is embedded most deeply in people's values according to Hofstede; this idea is shared among various researchers. Earley (2006) criticises the idea of values as culture: he states that culture is not a value, but the meaning we attach to aspects of our environment. He argues that because of the imperfect sharing of values across societies, the way people value aspects is not uniform.

Fourthly, various authors have aimed to categorise cultures and make them comparable. This has been done mainly in the form of cultural dimensions, which can be described as scales on which cultures can be placed to indicate if they lean towards aspect A or aspect B of the dimension. In figure 3.06 below, this is illustrated for the six dimensions as defined by Hofstede et al. (2010). Please note that the placement of the dots is random and therefore does not correspond to any culture. The combined interpretation of the dimensions will illustrate the elements that define a national culture.

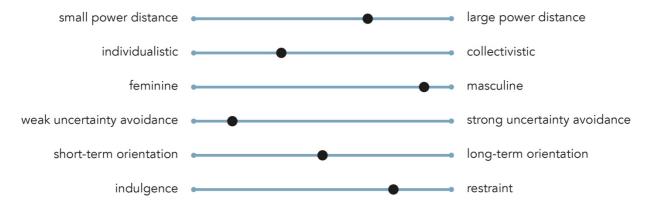


Figure 3.06. Interpretation of Hofstede's cultural dimensions. Own illustration.

The works of Hofstede and Bond (1988), Schwartz (1994), Trompenaars and Hampden-Turner (2000) and Javidan and House (2001) are widely cited and built upon. The dimensions that they have found are similar to a large degree; the convergent results provide support for Hofstede's dimensions. However, Hofstede's works are also criticised. Especially the fifth dimension has not been received well by researchers. Philosophical flaws, methodological difficulties, the limited familiarity of Western researchers with the subject and the limited empirical support of the dimension have been points of reproval. Regarding the sixth dimension, there has been very little research done. Because of the firm basis of Hofstede's four original dimensions (power distance, individualism versus collectivism, femininity versus masculinity and uncertainty avoidance) and their relevance for this thesis, these four dimensions will be taken into account for this research.

More recently, the use of social axioms has been researched (Bond et al., 2004). However, for this thesis, social axioms do not offer much use. This is due to their general, but individual nature. They are analysed on the level of a single person, whereas the cultural dimensions take the average response of many individuals as their basis. There is not necessarily a connection between these axioms derived from an individual level and the dimensions derived from a culture-level (Bond et al., 2004). The axioms can be used to determine causal or correlational connections between cultural dimensions and other variables.

Another important framework is provided by Lewis, who does not use dimensions but categorises cultures based on the predominant behaviour that is shown nationally. The model is designed for clarity and concision, which makes it easy to read but possibly too simplistic to cover the broad and complex nature of culture. On the other hand, the model has proven its worth in practice through the extensive use of the framework by multinational businesses (Lewis, 2006).

For this thesis, the frameworks of Hofstede and Lewis will be used. The former provides indepth knowledge on four specific dimensions that are of importance for project managers. In contrast, the latter provides a broader overview that focusses on the most common behaviour in national cultures.

3.2 Project management

In this section, the terms 'project', 'project management', 'effective project management', 'international project' and 'international project management' within the boundaries of the construction sector will be explored.

3.2.1 Projects and project management

Before assessing international project management, it is crucial to define what a 'project' is. By the Project Management Institute (2017, p. 4), it is defined as "a temporary endeavour undertaken to create a unique product, service or result." Winch (2010, p. 13) adds to this definition that besides being temporary organisations, projects are also "consisting of a coalition of firms chartered by a client." This coalition of firms is important because it stresses the fact that when undertaking a project, many different interests are involved. Köster (2009) describes the three characteristics of a project as follows:

- 1. Projects are unique: their objectives, context and the organisations that are involved differ.
- 2. Projects are risky: projects entail non-routine work, which leads to uncertainty and therefore, risk.
- 3. Projects are limited: the duration of a project is limited, as well as the scope and the available resources.

Wijnen and Storm (2007) differentiate between 'hard projects' and 'soft projects'. They note that construction projects can be categorised as hard projects: the end result is known and can be measured through standardised norms. However, there can also be soft goals included in construction projects, such as the improvement of user friendliness. The end result of this aim is, however, more difficult to define and more challenging to measure. Wijnen and Storm (2007) note that often, projects are a mixture of soft and hard aspects, thus requiring process management to support the project management.

Project management has – like culture – been defined in many different ways by many people and organisations. The term originates from the 1950s when it was introduced in the US aerospace sector (Johnson, 2002). Morris, Pinto and Söderlund (2012) illustrate how the practice and its definition evolved. From the 1950s onward, supply chain management, technology management, quality management, risk management and health, safety and environment management came along and continued to increase in importance. In the 1980s, it became clear through several project success and failure studies that many aspects belonging to the management of projects were not included in the standard project management literature. Sources of difficulty included a poor project definition, inadequate workforce and unclear success criteria. Building upon these findings, Miller and Lessard (2000) made a distinction between project efficiency (time, budget, scope) and effectiveness (achieving the set goals).

Not before long, the control elements of cost, time and quality were predominant in most definitions of project management (Atkinson, 1999). This has since changed. The Project Management Institute (2017, p. 10) defines project management as "the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements." The Association for Project Management (n.d.), which is dominant in the United Kingdom uses a slightly different definition: "Project management is the application of processes, methods, knowledge, skills and experience to achieve the project objectives." The argument by Morris et al. to treat project management not as execution management but as the management of projects comes forward clearer in the latter definition which speaks of 'objectives' (implying effectiveness) instead of 'requirements' (implying efficiency).

Several authors state that a division between hard skills and soft skills in project management can be made (Marando, 2012; Tulgan, 2015; Zuo et al., 2018). Soft skills are mainly intangible and do not have a specific output, whereas hard skills are deployed to create a tangible output, such as a project planning or cost overview (Marando, 2012; Tulgan, 2015). Soft skills include communication, negotiation, leadership and cultural awareness (Zuo et al., 2018). Marando (2012) argues that soft and hard skills are continuously applied together: a task requiring hard skills also involves soft skills and vice versa.

Morris et al. (2012, p. 15) state that "project management is a social construct": it has evolved and continues to do so. The definition of project management that will be used in this thesis is as follows (Wijnen, Renes & Storm, 2004, p. 8): "giving direction to temporary, result-oriented cooperation between actors with scarce resources." Depending on one's view (or management school), the industry in which the project takes place and the location of the project, project management entails different activities and may have different meanings to people.

For the management of building projects, different methods and techniques are employed. PMW (Projectmatig Werken) is a leading conceptual methodology developed in the Netherlands (Twynstra Gudde, n.d.). Wijnen and Storm (2007) describe this way of working as the intermediate between routine and improvisation: a one-off assignment using unique guidelines and limited resources to generate concrete results. The method is based on six phases with documents or deliverables that come with the closing of each phase, and five management aspects that should be controlled throughout the project. This is illustrated in figure 3.07 below.

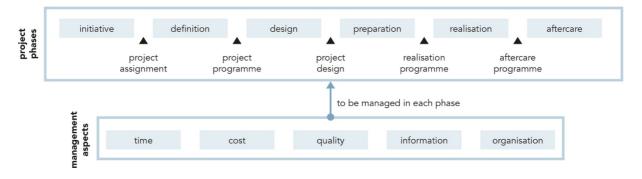


Figure 3.07. Project based working. Based on G. Wijnen & P. Storm (2007).

PRINCE-2 (Projects in Controlled Environments, version 2) and PMBOK (Project Management Body Of Knowledge) are two project management methods that are acknowledged as globally leading in various industries (Chin & Spowage, 2010; Hodgson, 2006; Karaman & Kurt, 2015; Matos & Lopes, 2013; Morris et al., 2012; Reich & Wee, 2006; Santos & Cabral, 2008; Singh & Lano, 2014; Söderlund, 2004; Zwikael, 2009). The method was developed by the British Office of Government Commerce and published in 1996. Where PRINCE was mainly focussed on IT projects, PRINCE-2 was developed to be used on projects in different industries (Matos & Lopes, 2013). The method is based on seven principles, seven themes and seven processes (AXELOS, 2017).

PMBOK was developed by the Project Management Institute and finds its origin in 1983. The PMBOK is not a methodology on its own, but a guide that can be used as a basis to develop a methodology (Project Management Institute, 2017). The guide is based on ten knowledge areas, five process groups and four project phases. Figure 3.08 shows twelve knowledge areas, as the Project Management Institute added two additional knowledge areas that are of explicit importance for building projects; these will be explained below the figure.

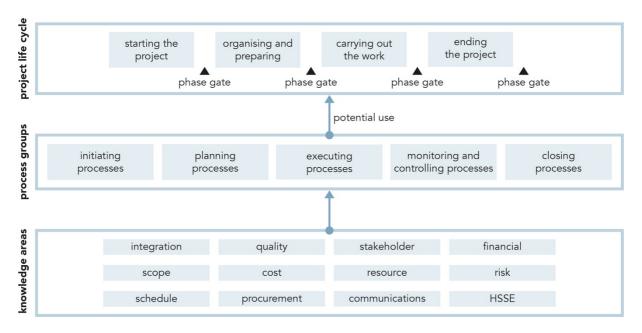


Figure 3.08. Interrelationship of PMBOK® Guide Key Components in Projects. Adapted from the Project Management Institute (2017, p. 18).

PRINCE-2 and PMBOK have been compared by many different authors (Siegelaub, 2004; Rehman & Hussain, 2007; Chin and Spowage, 2012; Singh & Lano, 2014; Waheed, 2014). As PMBOK is overall more comprehensive and covers the subject of interpersonal skills – which is of importance for this thesis – this is the management guide that will be used as a basis for this thesis (Karaman & Kurt, 2015; Matos & Lopes, 2013; Waheed, 2014). The management areas are explained below (Project Management Institute, 2016 and 2017).

1. Project integration management

This area of project management concerns the "processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities" (Project Management Institute, 2017, p. 69) and is specific to the project manager. In contrast, other management areas may be managed by specialists. Integration management is about deciding on resource allocation, the balance between demands (including the interdependencies of other management areas) and customising the processes to meet the set project objectives.

2. Project scope management

Project scope management includes the processes that are necessary to make sure that all the required work – and only the required work – is included in the project. This is done through defining and controlling what is necessary to deliver the project successfully and thus eliminating anything that is unnecessary.

3. Project schedule management

This area concerns all aspects related to the timely completion of products, services and results of the project. Because of the time restrictions in building projects and the integration of this in contracts, this management area is of significant importance for construction projects (Project Management Institute, 2016).

4. Project cost management

The area of project cost management is concerned with the completion of the project (activities) within the set budget. For this, estimating, budgeting, financing, funding and controlling the costs are essential.

5. Project quality management

Project quality management is about the processes that are needed to meet the required quality demands in a project. Quality requirements can be enforced by a local or national authority or by the client (Project Management Institute, 2016). All process improvement activities also belong to this management area.

6. Project resource management

This area concerns the physical (equipment, materials, infrastructure) and human resources of a project. "Geographical locations of team members" and "cultural issues" (p. 309) are mentioned as some of the aspects that may influence the team and that requires the awareness of a project manager. For construction projects in particular, the project location, type and size should be taken into account when dealing with resources (Project Management Institute, 2016).

7. Project communications management

Project communications management concerns the processes to collect, organise, structure and store information flows to make sure all stakeholders have the information they need. This area covers internal, external, official and unofficial communications, both verbal and written. Language is one of the points of attention in project communications management.

In construction, this area is especially challenging due to the large number of people with a wide variety of expertise that come together for a short period of time. By planning the methods and protocols used for communications, the effectiveness of the communications can be increased (Project Management Institute, 2016).

8. Project risk management

Risk management is necessary to increase the likeliness of project success. This area covers processes of "conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk" (Project Management Institute, 2017, p. 395).

9. Project procurement management

Project procurement management covers the processes of acquiring products and services that are not available within the project team. The control of these procurements is also part of this management area and is done usually through contracts. Because of the strong foundation construction projects have in the procurement of contractual agreements, this management area is vital for construction projects (Project Management Institute, 2016).

10. Project stakeholder management

As stated before, international building projects often have many stakeholders with various backgrounds. The management area of project stakeholder management is concerned with identifying the stakeholders, analysing their expectations and developing strategies to engage them in the project decisions and execution effectively.

In their "Construction Extension to the PMBOK Guide", the Project Management Institute (2016) adds two more management areas that are explicitly important for projects in the construction sector:

11. Project health, safety, security, and environment (HSSE) management

Project HSSE management is concerned with the security and safety on the construction site, as well as employee health and environmental aspects. To meet regulatory and project requirements, making an inventory of necessary measures, monitoring and managing the measures is essential.

12. Project financial management

Where the project cost management area is more concerned with day-to-day operations, the project financial management area seeks to have an overview of all the cash flows and the processes to acquire the finances for a project.

3.2.2 Effective project management

De Leeuw (2000) distinguishes two ways of viewing effectiveness. Firstly, management is deemed effective if the objectives are realised. This means that in the context of international building projects, management is effective if the set objectives for the project are realised when the project is delivered.

As objectives may change over time, this is a challenging aspect to measure. Secondly, the effectiveness of management is related to efficacy, meaning that obstacles have to be dealt with effectively. A third term is efficiency, which covers the adequate use of resources and can be seen as a contributing factor to general effectiveness (Jägers & Jansen, 1985).

Heurkens (2012) explains that what is deemed effective, depends on one's perspective and role. The subjective views from different project team members have to be mirrored against the objectives that were formulated and the objectives that were reached to be able to put the individual standpoints into perspective.

Turner and Müller (2005) state that where success factors for projects are concerned, the project manager is not mentioned frequently in literature. However, the leadership style and a project manager's competence have a "direct and measurable impact" (p. 59) on how an organisation or business performs. A few arguments that came forward through researches on the project manager's leadership and competence (Turner and Müller, 2005):

- Each stage of the project life cycle requires a different project leadership style. However, Lousberg (2012) found that paying explicit attention to the relationships between the people involved in the project throughout the project life cycle is vital for project success.
- Specific leadership styles are appropriate for multi-cultural projects (see section 3.3.2).
- The leadership style of a project manager influences their perception of what success entails in various contexts.

Turner (1999, as cited in Turner & Müller, 2005) stated that an effective project manager has the following seven traits: an ability to solve problems, an orientation on results, self-confidence, positive energy and eagerness to take the initiative, proper communication skills, an ability to negotiate and a vision (or perspective). Dickson et al. state that "interpersonal acumen" or "relational competence" (2003, p. 735) has been an upcoming element linked to effective management. Interpersonal acumen refers to one's capacity to understand underlying motives or emotions leading to someone's behaviour (Aditya & House, 2002). In this thesis, when the term "effective project management" is used, the following is meant: project management that is successful in achieving the desired objectives and overcoming obstacles.

3.2.3 International projects and international project management

Next, the definition of what an 'international project' entails will be explored. When is a project an international project? Bondarieva and Sariieva (2020) cite a survey among 85 companies from 2009. Over half of the respondents considered a project international when the project members were being coordinated in different countries. About 25% of participants found cooperation with foreign companies in a project to be crucial for it to be 'international'. Imbert (1987, as cited in Chen, Jefferees & Goh, 2002) defines the concept differently, he states that when organisations contribute to construction projects in foreign countries, that is defined as "international construction" (p. 188).

Stebblings (1998, as cited in Chan & Tse, 2003, p. 375) defines an international project as follows: An international project is a project "in which the contractor, the lead consultant, or the employer is not of the same domicile, and at least one of them is working outside his or her country of origin."

The definitions above show that the term 'international' is multi-interpretable and like – effectiveness – depending on the perspective. Because of the importance of cultural differences in this thesis, the following definition is handled: "An international project is a project in which different national cultural backgrounds are represented within the project team and in which the contractor, lead consultant or client is not from the same home country."

For the management of international building projects, different methods, guidelines and standards can be applied. A wide variety of knowledge (often categorised in areas or themes) is included in project management methods, along with suggested tools and techniques to ensure the project is completed within the set boundaries (Chin & Spowage, 2010; Karaman & Kurt, 2015). As explained in section 3.2.1, PRINCE-2 and PMBOK are globally leading project management methods that are applied to international projects in different industries.

When looking at the management of international projects, Bartlett and Ghoshal (1998) differentiate between global, international and multinational companies. Firstly, a global company is primarily driven by the need for global efficiency and because of that centrally organised in terms of decision-making. The global company views the world market as a united whole. Secondly, an international company has a structure of a parent company and different subsidiaries that transfer and adapt the parent company's knowledge. The subsidiaries adapt the knowledge and expertise to foreign markets, creating worldwide diffusion. Thirdly, the multinational company is characterised by the management of "a portfolio of multiple national entities" (Bartlett & Ghoshal, 1998, p. 16). The gaining of local ground is important and done through sensitivity and responsiveness to national differences.

Zaheer (1995) explains that multinational companies are burdened with 'the liability of foreignness'. This phenomenon is mostly applicable to "a simple, market-seeking, horizontal MNE" (Zaheer, 1995, p. 343). This means that the subunits of the multinational enterprise are very similar in nature and essentially do the same thing, but in different locations. These firms compete with local businesses, whereas more vertical enterprises, that use the different geographical locations of their firm to make use of global economies or whose subunits have different roles within the (production) process are likely to be less influenced by the liability of foreignness. The competition with local companies and the difficulty that coordination from another geographical location brings to the table, makes that these multinational firms face costs local companies do not (Hymer, 1976; Kindleberger, 1969 both as cited in Zaheer, 1995). To overcome this barrier, a firm-specific advantage is needed to increase the likeliness of project success, which occurs often in the form of organisational or managerial capabilities (Buckley & Casson, 1976; Caves, 1982; Dunning, 1977; Hennart, 1982 all as cited in Zaheer, 1995). In the construction industry, many internationally operating companies are multinationals, meaning that the liability of foreignness applies to them (Seymour, 2019).

3.2.4 Conclusions on project management

The goal of this part of the literature review is to gain knowledge on what is already known about the topic, how and by whom the topic has been researched so far and which controversies or disagreements exist (Bryman, 2016). In this section, the conclusions for the subject 'project management' will be drawn.

Starting with what a project is, a general consensus exists: it is a temporary endeavour undertaken by a coalition of firms chartered by a client to create a unique product, service or result. Authors also agree on the significant risks this brings along. Many different authors and institutions have defined project management. The definition that will be used for this thesis is the following: project management is "giving direction to temporary, result-oriented cooperation between actors with scarce resources" (Wijnen, Storm & Renes, 2004, p. 8).

When looking at globally leading project management methods, guides and standards for international building projects, PRINCE-2 and PMBOK come forward (Chin & Spowage, 2010; Hodgson, 2006; Karaman & Kurt, 2015; Matos & Lopes, 2013; Morris et al., 2012; Reich & Wee, 2006; Santos & Cabral, 2008; Singh & Lano, 2014; Söderlund, 2004; Zwikael, 2009). As PMBOK is overall more comprehensive and covers the subject of interpersonal skills – which is of importance for this thesis – this is the management guide that will be used to in this thesis (Karaman & Kurt, 2015; Matos & Lopes, 2013; Waheed, 2014).

According to De Leeuw (2000) effective project management is related to achieving desired objectives and overcoming obstacles (efficacy). Research into this topic connects closely to leadership styles adopted by project managers. Turner (1999, as cited in Turner & Müller, 2005) identified seven traits that effective project managers ought to have to have a positive impact on the project success, but these have not been widely accepted or applied in research. Dickson et al. state that "interpersonal acumen" or "relational competence" (2003, p. 735) has been an upcoming element linked to effective management. Interpersonal acumen refers to one's capacity to understand underlying motives or emotions leading to someone's behaviour (Aditya & House, 2002). For this thesis, 'effective project management' is defined as follows: project management that is successful in achieving the desired objectives and overcoming obstacles.

Differences in perspective can alter the way 'international' is defined. In this thesis, an international project is defined as follows: a project in which different national cultural backgrounds are represented within the project team and in which the contractor, lead consultant or client is not from the same home country. For the approach and execution of international projects, differences exist between global, international and multinational, companies. Zaheer (1995) states that a multinational company – which will be the type of company looked into in this research – is most likely challenged by the liability of foreignness. An important way to overcome this liability is through a firm-specific advantage: often in the form of organisational or managerial capabilities.

3.3 Management of cultural differences

In this section, culture in the construction industry, different approaches to the management of cultural differences and what effective management of cultural differences entails will be addressed.

3.3.1 Culture in the construction industry

Barthorpe (2002) states that the construction industry has a distinctive, own culture that differs from other sectors. Ankrah and Proverbs (2004, p. 554) argue that culture in the construction industry is "what is carried out, how and when it is done, who is involved and why things are done the way they are." Abeysekera (2002, p. 40) uses a more detailed definition: the culture of the industry is about the "characteristics of the industry, approaches to construction, competence of craftsman [sic] and people who work in the industry" and the "goals, values and strategies of organisations they work in".

For the context of construction management, national, industry and organisational culture are all of importance (Loosemore, 1999; Wijnen & Storm, 2007). When taking the project level, the national culture of the country in which the project is executed is relevant. This influences the organisational culture of the different firms involved, as well as the culture of the individuals coming from these organisations. In practice, the behaviour of people is affected by their organisational and personal cultural contexts (Harvey & Allard, 1997, as cited in Loosemore, 1999). Kumaraswamy, Rowlinson and Phua (2001, as cited in Kumaraswamy, Rowlinson, Rahman & Phua, 2002) show similar findings. They state that there are four overlapping sub-cultures that together constitute project culture: organisational, professional, operational and individual sub-cultures. The dynamic relationship between the sub-cultures and the project level of culture is shown in figure 3.09.

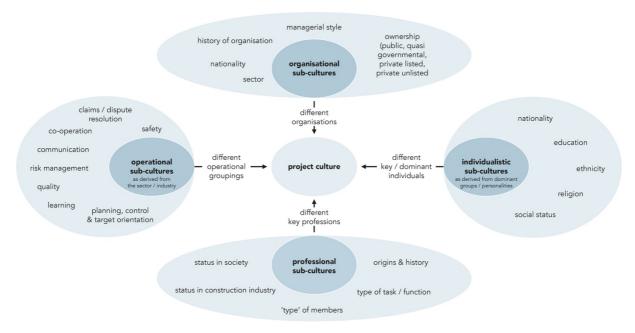


Figure 3.09. Tracing potential Sources of a typical Construction Project Culture. Adapted from M. Kumaraswamy, S. Rowlinson, M. Rahman, & F. T. T. Phua (2002, p. 280).

The project level of culture is not included in the levels defined by Trompenaars and Hampden-Turner (2000) as described in section 3.1.2, but the organisational sub-culture and the professional sub-culture are.

Barthorpe et al. (2000) assess the construction industry in the United Kingdom and describe it as "a fragmented and hierarchical industry" (p. 342). This fragmentation is characterised by many small and medium-sized privately-owned companies and very few large-sized companies, which also determines and upholds the hierarchy: small companies often act as subcontractors to larger companies (Ball, 2014). This fragmentation also comes forward in work of other researchers on the construction industry in various countries (Ankrah, Proverbs, Antwi & Debrah, 2005; Winch, 2010; Dainty, 2007, Robert, Moulet, Lizarralde, Davidson, Nie, & da Sylva, 2006).

The characteristics of the construction industry in general have been described by Ashworth and Harvey (1997). Overall, the following aspects still apply:

- The products produced are physically large and expensive;
- The product is delivered to a client who has a significant influence on the project;
- The industry has several aspects that require extensive specialisation;
- The designs are unique and made to measure;
- The process involves large risks and high uncertainty.

The culture within the construction industry is highly characterised by the above aspects, as well as the way of working, the skills of the people involved in each project and their home organisations (Abeysekera, 2002). When taking the level of organisational culture in the construction industry, sub-cultures are likely to be related to the organisation of one's firm, one's profession and occupation (Kumaraswamy et al., 2002).

In section 3.1.2, the fact that national culture is most deeply rooted in humankind and most unlikely to change came forward. Root (2002) adds to this that because of the conservative nature of the construction industry – which is described in various pieces of research (Barthorpe, 2002; Serpell & Rodriguez, 2002; Hirota, Powel & Formoso, 2002; Grisham, 2006) – the culture within the industry is unlikely to undergo significant changes in a short period.

3.3.2 Approaches to the management of cultural differences

As stated before, projects are temporary endeavours. Hall (1999) describes that for a project to be successful, the formation of "effective working relationships" (p. 317) is vital. These relationships are challenging to form in native environments, but become increasingly more difficult when cultural differences come into play (Hall, 1999). Chan & Tse (2003) argue that in transglobal collaboration, human problems such as language and communication come forward. To overcome these, greater cultural understanding and sensitivity by involved parties is necessary.

Trompenaars and Hampden-Turner discuss the possibility to provide a manager with a tool that reduces the complexity of managing an international project. However, they conclude that there is "no best way of organising" (2000, p. 19). According to Newman and Nollen (1996), the 'no one best way' also applies to project management. They state (p. 753): "Differences in national cultures call for differences in management." Adler (1983, as cited in Hall & Jaggar, 1997) provides insight into three approaches to deal with a culturally diverse domain:

1. Parochial

The first approach is deemed most often used. In this parochial approach, cultural diversity is ignored. The belief in a parochial organisation is that "our way is the only way" (p. 8). This means that the negative effects of cultural diversity cannot be mitigated, and positive effects cannot be exploited. Chevrier (2003) found that – in line with a study by Laurent (1998, as cited in Chevrier, 2003) – managers of cross-cultural teams that adopt this parochial approach often do not address the cultural differences at all.

2. Ethnocentric

The second approach is next in line regarding the frequency of use. The ethnocentric approach treats cultural diversity as a problematic element. An ethnocentric organisation acts from the perspective in which "our way is the best way" (Adler, 1983 as cited in Hall & Jaggar, 1997, p. 8). The native or prevalent culture is the only one acknowledged. The idea of 'one best way of working' would result in the greatest effectiveness. An important downside to the ethnocentric approach is that it misses the opportunities to create value from the cultural differences present. This approach also upholds the stereotyping of other cultures, predominantly in a negative manner. The combination of ethnocentrism and stereotyping are generally viewed as the basis for racism (Loosemore & Lee, 2002).

In a piece of research on Finnish expatriate project managers by Mäkilouko (2004), a link between an ethnocentric leadership style and cultural blindness, parochial attitudes and a task-oriented approach was found. Formal negotiation was focused upon, which led to the disintegration of the project team. This approach is deemed highly unsuitable for a multicultural project environment (Mäkilouko, 2004).

3. Synergistic

The third and least used approach is the synergistic approach. In this approach, the organisation at hand explicitly acknowledges, recognises and seeks to exploit cultural differences. The value system is characterised by "our way and their way differ, but neither is inherently superior to the other" (p. 8). The major advantage this approach brings is the ability for organisations to create competitive advantages and strengthen their (international) position. The competitive advantages can have their basis in creativity, problem solving and the ability to adapt to change (Hall & Jaggar, 1997). This approach correlates closely to the contingency approach as described by Bruil & Heurkens (2012). The synergistic approach is also argued for by Hofstede (2001). Through ethnomethodology, insight can be gained into culture and understanding can be sought.

Mäkilouko (2004) determined a connection between a cultural synergistic leadership style and cultural empathy: willingness to learn from and understand foreign cultures was found. The interactions between team members were mostly informal and direct; the interpersonal relationships were of great importance for communication within the project team. The synergistic leadership style has a significant focus on relationships – in contrast to the ethnocentric approach.

4. Cultural polycentrism

Mäkilouko (2004) found a fourth approach: cultural polycentrism. In this approach, the project manager acted as a connector between two cultural divisions within the project team. The team members continued to work as they would typically do, and the project manager attempted to integrate the project team. A difference between this approach and the ethnocentric and synergistic ones is that the project manager taking on a polycentric cultural approach actively designs the organisation they work in and the processes they work with. The leadership style is focussed both on relationship and tasks. In Mäkilouko's research, "the lowest number of project problems" (2004, p. 395) was reported by project leaders that took on this polycentric approach.

Hall and Jaggar (1997) give six examples of elements in which cultural differences in the construction industry come forward:

1. Expatriate personnel

These people are often confronted with situations in other cultures they do not understand. Craig (1971, as cited in Hall and Jaggar, 1997) describes three possible behavioural responses to a new, perhaps shocking culture:

- 1. the encapsulator who mainly withdraws from local society;
- 2. the absconder who focuses strongly on the local culture and actively participates in it;
- 3. the cosmopolitan who finds a balance between aspects of life in the local and own culture.

2. Foreign staff and operatives

Adapting to other cultural influences is not only of importance to the 'incoming' workforce but also to local staff and operatives. Clear communication regarding expectations, quality standards and the general way of working is vital.

3. Negotiations

Arguably, international managers in the construction industry spend a great deal of their time in negotiations. The process and styles of negotiation vary enormously across cultures (time, emphasis, number of people involved). Various authors support this view in which culture has an impact on business negotiations (Faure & Rubin, 1993; Graham et al., 1994; Leung, 1997; Brett & Okumura, 1998; Bazerman et al., 2000; Adair et al., 2001; Adler, 2002; Wade-Benzoni et al., 2002, all as cited in Ghauri & Usunier, 2003).

4. Professional standards and construction codes

For international construction companies, foreign laws do not always provide enough guidance to work. In addition to this, local laws may be ambiguous, and several standards can be used simultaneously.

5. Codes of conduct and ethical standards

Bribery and corruption are major themes when working across the world; this comes with several moral and ethical dilemmas for the project team.

6. Appropriate design approaches

In the design, elements such as dimensions and materials are culture-bound. Also, the designer ought to be aware of the culture of both the client and end-users (Baden-Powell, 1993 as cited in Hall & Jaggar, 1997).

3.3.3 Effective management of cultural differences

A study by Chevrier (2003) on the dynamics of collaboration in cross-cultural project teams showed that both "the effectiveness and efficiency of projects are affected by their cross-cultural characteristics" (p. 142). Thus, cross-cultural competence of a project manager working on international projects is crucial (Chan & Tse, 2003). Newman and Nollen (1996) state that this competence will also contribute greatly to achieve high-performance outcomes. The Project Management Institute notes that "cultural awareness and cultural sensitivity" are vital to overcome misunderstandings in international projects (2017, p. 376). Even when a product does not differ from culture to culture, management practices do. Many studies have shown that in different cultures, different management beliefs and practices exist (Chen & Partington, 2004). Enshassi and Burgess (1990) describe five primary cross-cultural management schools in their research. They are briefly explained below:

1. Universal school

This school aligns with the parochial approach described in section 3.3.2: managerial behaviour does not differ across cultures. It relies on the functions and organisational differences that are present. If those are the same across cultures, then the manager's behaviour should be too.

2. Economic school

This school takes the economic and industrial developments as dependants for managerial behaviour and insist that those are the key factors that influence a manager's behaviour. Hofstede countered this idea; he found that the economic situation does not influence leadership style (1984).

3. Psychological school

The ideology of this school argues that personality traits impact management styles across countries. Criticism on this school is based mostly on the idea that one's personality varies even within societies, so the impact of psychology is influential on a much smaller scale.

4. Sociological school

This school looks for the difference in management style in one's social, ethnic and educational background. This ideology is very much related to the ideas in the cultural school.

5. Cultural school

This school considers culture "an independent variable which has an effect on managerial behaviour and attitudes" (Enshassi & Burgess, 1990, p. 97). Megginson and Eugene (1965, as cited in Enshassi and Burgess, 1990) concluded in their research that the principles and functions of management are acknowledged all over the world. Still, culture influences the methods and application of these methods per country.

The Project Management Institute pays attention to management of cultural differences in their communications management area (2017). They state that by "developing the team's awareness of cultural and personal differences", misunderstandings can be dealt with and the team's capabilities in terms of communication can be improved (2017, p. 363). Furthermore, multifaceted approaches to communication – by using different means of communication – are said to be more effective for communication across cultures. More effective communication can also aid in bringing team members with different cultural backgrounds together (Project Management Institute, 2017).

When coping with stress that cultural differences can bring along, Selmer (2002) distinguishes two different approaches:

- 1. Symptom-focused: this approach intends to "regulate stressful emotions" (p. 21) and individuals that apply this approach will avoid the problem they are confronted with.
- 2. Problem-focused: this approach is set at facing the problem and changing the problematic context to change the situation.

A problem-focused approach has proved to lead to positive outcomes, whereas a symptom-focused coping strategy leads to negative outcomes (Billings & Moos, 1981; Parasuraman & Cleek, 1984). Personality traits that are related strongly to a problem-focused coping strategy are "agreeableness, conscientiousness, emotional stability, intellect or openness and extroversion" (Selmer, 2002, p. 30).

Even though the methods and application of management practices may differ across cultures, Den Hartog, House, Hanges, Ruiz-Quintanilla and Dorfman (1999) found evidence that certain aspects of leadership are uniform across many different cultures. However, this does not mean that there are no differences in the expression and application of these aspects. This research was carried out in 61 countries as part of project GLOBE (see section 3.1.4). Some of the universally endorsed attributes of a successful leader are for a manager to be encouraging, positive, motivational, effective in team building and decisive. The researchers also found universally negative features: being ruthless, self-centred, noncooperative and dictatorial.

In addition, a list of 35 characteristics of a leader that have either a positive or negative effect depending on the culture in which the manager would enforce them was created. Among these leadership items are being independent, formal, enthusiastic, sincere, cunning, sensitive and ambitious (Den Hartog et al., 1999).

Aditya and House (2002) drew from the findings of project GLOBE and found that across cultures, value-based leader behaviours and team orientation were viewed universally as contributors to "outstanding leadership" (p. 231). Robie, Johnson, Nilsen and Hazucha (2001) performed research on managerial skills across Belgium, Germany, Denmark, France, Italy, Spain, the United Kingdom and the United States. They found that a "drive for results" and the ability to "analyse issues" (p. 646) were universally critical to effective leadership across researched countries. Chevrier (2003) states that for effectiveness, team members of a cross-cultural team need to understand each other's backgrounds very well. Effectiveness is viewed as a team responsibility and team members needed to be open, patient and have self-control for the cross-cultural team to be effective (Chevrier, 2003).

3.3.4 Conclusions on management of cultural differences

The goal of this part of the literature review is to gain knowledge on what is already known about the topic, how and by whom the topic has been researched so far and which controversies or disagreements exist (Bryman, 2016). In this section, the conclusions for the subject 'management of cultural differences' will be drawn.

Starting with culture in the construction industry, the literature pointed out that because of the conservative nature of the sector, the culture is unlikely to undergo any major changes in a limited period of time. Kumaraswamy et al. (2001, as cited in Kumaraswamy et al., 2002) assessed culture on a project level and found that the organisational, professional, operational and individual sub-cultures present in a project determine the project culture. However, this project level of culture has not been widely recognised by other authors, and the exact definition of what project culture entails remains ambiguous.

Secondly, different approaches to the management of cultural differences were addressed. Authors generally agree upon the vision that there is no best way of organising, and different national cultures require differences in project management. Adler (1983, as cited in Hall & Jaggar, 1997) provides insight into three approaches to deal with a culturally diverse domain: parochial, ethnocentric and synergistic. Mäkilouko (2004) adds a fourth approach to the list: cultural polycentrism. Based on the literature, it seems that approaches in which culture is actively addressed and an effort is made to assess the differences and manage them are rarely applied in practice. The different approaches will be used to frame the line of action that the project managers in the case studies took.

Hall and Jaggar (1997) bring forward six elements that are of explicit importance in international building projects: expatriate personnel, foreign staff and operatives, negotiations, professional standards and construction codes, codes of conduct and ethical standards and appropriate design approaches.

A connection between these and the management areas by the Project Management Institute (2016 and 2017) has been sought to create a sound basis and specify the aspects of interest within the management areas for international projects. Figure 3.10 shows that several management elements can be connected to different management areas (see appendix A for the detailed reasoning behind the links). For this thesis, the management areas of scope, quality, resource, communications, procurement and HSSE seem to be of the greatest importance. The main focus will be on these management areas, but that does not mean that – should other areas prove to be of importance throughout the case study research – they will be ignored.

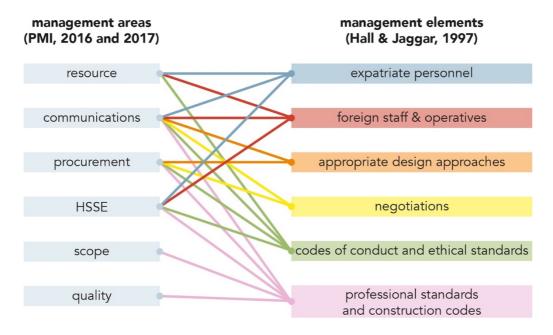


Figure 3.10. The management areas by the Project Management Institute and the management elements by Hall & Jaggar combined. Own illustration.

Thirdly, on the effectiveness of project managers in international building projects, several authors performed research on the influence of personal attributes that may be beneficial in (developing) an effective approach to the management of cultural differences (Chevrier, 2003; Den Hartog et al., 1999; Robie et al., 2001; Selmer, 2002; Turner, 1999, as cited in Turner & Müller, 2005). The balance between a task- and relationship-oriented approach came forward in relation to effectiveness as well: literature shows that a solely task-oriented management approach leads to negative results (Mäkilouko, 2004).

Concluding, based on literature one could say that an effective approach for managing cultural differences in international building projects:

- balances the focus on relationships and tasks (Mäkilouko, 2004);
- assesses problems and aims to actively change a dysfunctional situation (Selmer, 2002);
- focuses attention on the six management elements (Hall & Jaggar, 1997);
- addresses beneficial personal attributes (Chevrier, 2003; Den Hartog et al., 1999; Robie et al., 2001; Selmer, 2002; Turner, 1999, as cited in Turner & Müller, 2005).

3.4 Conclusions and conceptual framework

In this section, general conclusions on the literature review will be drawn, and the conceptual framework for this research will be presented. Firstly, the subject of culture was analysed. Literature showed that many different studies have been carried out. Culture can be assessed from different perspectives, can be studied on different levels, is, in principle, intangible and can be classified in different ways. Two main frameworks that are concerned with the classification of cultures are presented by Hofstede et al. (2010) and by Lewis (2006).

Secondly, the subject of project management came forward. Managing building projects is complex, managing international building projects is even more complicated and doing so effectively can be a challenge. There are various institutions with a global reach that aim to provide project managers with knowledge and methods to shape the management of international projects. Two important parties that came forward were the Project Management Institute (2016 and 2017) – which defined several management areas of importance for a project manager – and Hall and Jaggar (1997) who found project management elements that are especially of value in international building projects.

Thirdly, the subject of management of cultural differences was addressed. It became clear that there are four general (management) approaches to culture in international building projects: parochial, ethnocentric, synergistic and polycentric (Adler,1983, as cited in Hall & Jaggar, 1997; Mäkilouko, 2004). The six management elements by Hall & Jaggar (1997) that are of explicit importance for international building projects, have been linked to the management areas by the Project Management Institute (2016 and 2017) to create a sound basis for the case study. In figure 3.11 below, the above conclusions have been combined into a conceptual framework that will be the basis for this research.

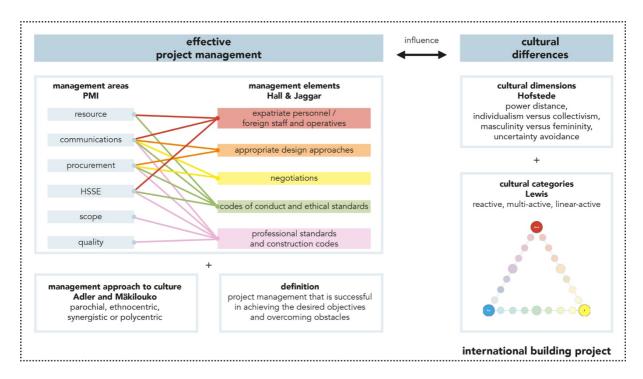


Figure 3.11. Conceptual framework. Own illustration.

Empirical research

4 Empirical research

In this chapter, the preparation and execution of the case study research will be described.

4.1 Preparation

To be able to execute the case study research in a structured and organised manner, preparation is necessary. In this section, the process of the case selection and the executions of the interviews and the survey will be addressed.

In figure 4.01 below, the procedure of a multiple-case study is outlined. Firstly, based on the conceptual framework, cases need to be selected, and a data collection protocol needs to be set in place. Secondly, the individual case studies are executed (see figure 2.01 for data gathering steps) and analysed. In the third phase, in-case conclusions are drawn. After this, the cross-case analysis and conclusion drawing takes place. Finally, based on the concluded case study research, the theory and theoretical models proposed in the conceptual framework will be revised to see if there are additions, modifications or contrasts that need to be addressed.

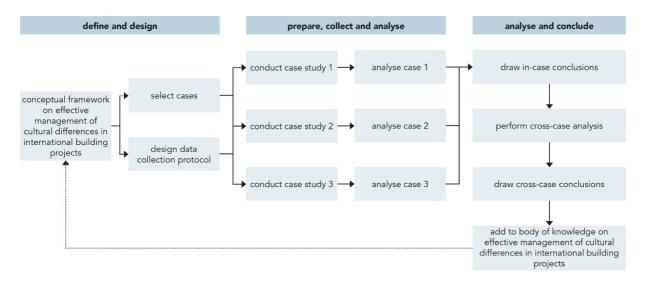


Figure 4.01. Multiple-case study procedure. Adapted from R. K. Yin (2018, p. 58).

4.1.1 Case selection

The case selection took place within the scope of projects executed by Turner & Townsend. Turner & Townsend is an "independent professional services company specialising in programme management, project management, cost management and advisory across the real estate, infrastructure and natural resources sectors" (Turner & Townsend, 2020, p. 0). The company is active in seven different regions, each with their own offices (see figure 4.02 below). Across the world, the three sectors are of varying importance for the business.

However, the works executed in the real estate sector are predominant in all regions. There are 111 offices spread across 45 countries, and the company has over 6 700 employees with 98 nationalities worldwide (Turner & Townsend, 2020).



Figure 4.02. Overview of regions and countries in which Turner & Townsend is active. Own illustration.

When comparing the countries in which Turner & Townsend is equipped with one or more office(s) to the Cultural Types Model by Lewis (2006) from section 3.1.4, the following aspect becomes clear: Turner & Townsend is permanently present across countries that represent all three cultural types.

Turner & Townsend is a company of British origin, which has had a significant influence on the organisational structure and culture of the company. The UK is a separate region within the business, with 16 national offices and over 2 900 employees – almost as much as all the other regions combined. This emphasis is reflected in the executive board and global heads of the sectors: these members are all Anglo-Saxon.

Turner and Townsend has – because of its vast reach and size – a specific way of working. The Service Delivery Model consists of a methodology and a process for the delivery of projects. The methodology consists of three elements:

- 1. assess the requirements, objectives and risks;
- 2. develop an optimised strategy to achieve the objectives;
- 3. deliver the project.

The appropriate controls support these elements throughout the following phases (process): preparation, design, pre-contract, construction and use. These stages align with critical milestones of the project and in each phase, specific actions and documents are addressed. See figure 4.03 below for a detailed overview of Turner & Townsend's service delivery model.

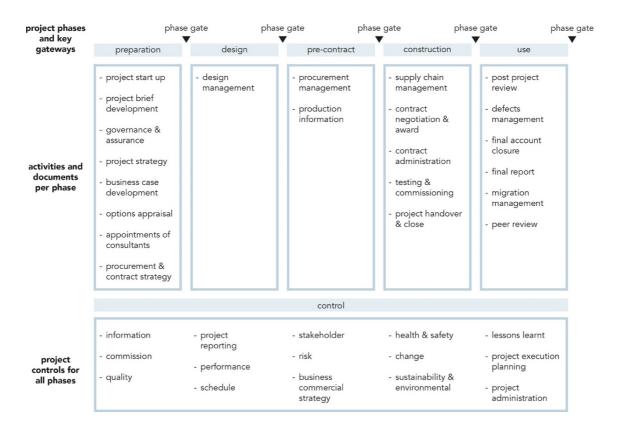


Figure 4.03. Turner & Townsend Service Delivery Model. Adapted from internal Turner & Townsend documentation.

The figure shows a great similarity to the Project Management Institute's PMBOK (2017). The most important differences are as follows:

- The Service Delivery Model distinguishes a design phase and a pre-contract phase, in the PMBOK these phases are combined into the phase for organising and preparing.
- The Service Delivery Model defines activities and documents per phase, in the PMBOK these are categorised under process groups and defined through inputs, tools & techniques and outputs.
- The Service Delivery Model controls align partially with the knowledge areas by the Project Management Institute (2016 and 2017): both have schedule, quality, stakeholder and risk management included. The Project Management Institute includes a health, safety, security and environmental management area, Turner & Townsend uses a health & safety and a sustainability and environmental control. The management areas of integration, scope, cost, procurement, resource, financial and communications are not included as such in Turner & Townsend's Service Delivery Model. However, subjects of these areas are included in the Service Delivery Model, such as change management, project reporting and information management.

The Turner & Townsend approach is also comparable to Projectmatig Werken as described in section 3.2.1. The most important difference here is that the initiative and definition phases as defined by Wijnen and Storm (2007) are combined by T&T in the preparation phase. Furthermore, the Service Delivery Model includes a wider variety of project controls as opposed to the concise management aspects in the Projectmatig Werken approach.

As briefly described in section 2.2.2, the required case criteria and motivations are as follows:

Criterion	Motivation	
The projects need to be managed by a horizontal, multinational enterprise.	A horizontal, multinational enterprise has subunits that are very similar in nature and essentially do the same thing, but in different locations. This means they are likely to be more influenced by the liability of foreignness than more vertical enterprises (Zaheer, 1995).	
The projects need to be located in respectively a multi-active, linear-active and reactive country.	By studying cases that are situated in the corners of Lewis's Cultural Types Model (2006), the ambition is to be able to touch upon the variety of cultural differences in international building projects across the world.	
The projects need to be comparable in terms of type.		
The projects need to be comparable in terms of size.		
The projects need to be comparable in terms of monetary project value.	These factors need to be excluded as significant variables in the analysis (Rwelamila and Savile, 1994).	
The projects need to be executed in the same industry.		
The projects need to be executed within the last ten years.		

Table 4.01. Case criteria and motivations. Own table.

4.1.2 Introduction to the cases

The cases that have been selected will be briefly introduced here. The overview of criteria per case is shown in table 4.02. All clients are multinational technology companies with office locations all over the world and all projects took place between 2018 and 2019. The monetary project value consists of all costs made by the client for the entire project. The industry for all cases is commercial real estate.

Case A is an office relocation and fit-out project located in Brazil. The client was located in a shared office space which did not suffice anymore. The project covered a move into and fit-out of five floors of new office space in a building that was delivered in 2017. The project was executed for client X, a company of Swedish origin.

Case B is located in the Netherlands and covers an office expansion and a fit-out. The client already occupied five floors in the building, but due to an increase in headcount, expansion was necessary. Initially, only one floor was to be added, but through research on the use of existing floors, it became clear that a second floor needed to be added to the scope of works. The project was executed for client Y, a company of North American origin.

Case C is located in Malaysia and concerns an office refurbishment and a fit-out. A new building was realised to link two existing buildings with each other, and the existing office spaces were fully refurbished (including mechanical and engineering, IT, audio-visual elements, acoustics and security systems). The project was executed in two phases: in phase one, the new construction took place, in phase two, the refurbishment works. For this case study, the second phase of the project will be analysed. The project was executed for client Z, a company of British origin.

Criterion	Case A Brazil	Case B the Netherlands	Case C Malaysia
The projects need to be managed by a horizontal, multinational enterprise.	Turner & Townsend		
The projects need to be located in respectively a multi-active, linear-active and reactive country.	multi-active	linear-active	reactive
The projects need to be comparable in terms of type.	office relocation and fit-out	office expansion and fit-out	office refurbishment and fit-out
The projects need to be comparable in terms of size.	2 500 m ²	2 000 m ²	9 200 m²
The projects need to be comparable in terms of monetary project value.	USD 5.5 mil	USD 5.8 mil	USD 7.7 mil
The projects need to be executed in the same industry.	commercial real estate		
The projects need to be executed within the last ten years.	2018 – 2019		

Table 4.02. Case criteria per case. Own table.

4.1.3 Data collection

For the execution of this part of the research, three different ways of collecting data are used. Firstly, the project documentation is analysed; secondly, project managers are interviewed and thirdly, the interviewees are asked to fill out a survey. An overview of the data collection as described in section 2.2.2 is shown in figure 4.04 below.

project document analyses	interviews	surveys
cultural context, scope, schedule, structure	management approach to culture, expatriate personnel, foreign staff & operatives, negotiations, professional standards & construction codes, codes of conduct & ethical standards, appropriate design approaches	linear-active, multi-active, reactive

Figure 4.04. Data collection steps of the case study. Own illustration.

For the project document analysis, as much documentation as possible on the project is collected. The documents need to provide clarity on the scope of the project, the schedule and the structure of the project team. This information gives context and provides an overview of the boundaries of the project. The institutional cultural context is also taken into account in this first phase of data collection; this will be based on the literature review from chapter 3.

The interviews with the project managers (both from Turner and Townsend and the client) are semi-structured. Bryman (2016) describes the semi-structured interview as more allowing for the perspective of the interviewees in comparison to structured interviews. The flexibility and focus on elaborate and detailed answers make this way of interviewing the most suitable strategy for this research. To set (flexible) boundaries and structure the questions to some degree, an interview guide is developed. The steps to creating an interview guide are depicted in figure 4.05 below (Bryman, 2016).

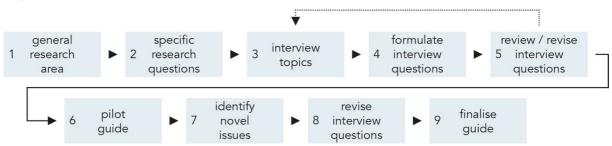


Figure 4.05. Formulating questions for an interview guide. Adapted from A. Bryman (2016, p. 470).

Step 6 consists of the execution of three test interviews. These are conducted to check whether the interview guide is complete and logical. The test interviewees have to have relevant experience working on international building projects and dealing with cultural differences. Based on the results of the test interviews, "novel issues" (Bryman, 2016, p. 470) are identified, and the interview questions are revised where necessary. The finalised guide serves to structure the case study interviews (see appendix D).

In the interview guide, the interviewees are also informed of the context of the research and asked to sign an agreement form (see appendices B and C). The interview itself is divided into three parts: firstly, general information on the interviewee's professional experience and national cultural background is obtained. Secondly, the interviewee's take on what effective project management entails is explored. Thirdly, the interviewee is asked about their experience with (the management of) cultural differences in the particular international building project (one of the three cases).

From the test interviews, it became clear that the management elements of 'expatriate personnel' and 'foreign staff and operatives' could be easily combined (Hall & Jaggar, 1997). The test interviewees gave answers to the two questions that were very much alike and indicated the overlap, and thus from this moment forward, these two management elements will be treated as one. The interviews will be conducted in English and the audio will be recorded. Through summarising the interviewee's reply per question, the data is structured to ensure a transparent analysis (Bryman, 2016).

The interviewees are selected based on their role within the projects: this has to be a strategic role that is concerned with the management of the project. The aim is to interview people from the project management firm and people from the side of the client per case to ensure triangulation and sufficient validity. A list of interviewees (including the test interviewees) can be found in appendix F.

To conclude the data collection process, the interviewees will be asked to fill out a survey (see appendix E). This survey will lead to a cultural profile that gives insight into the interviewee's alignment with respectively the linear-active, multi-active and reactive culture (Lewis, 2006). The main reason to do this is the fact that many project managers within Turner and Townsend have worked all over the world. Their nationality does therefore not necessarily give accurate insight into their cultural profile and alignment.

4.2 Case A – Brazil

The first case is an office relocation and fit-out project located in Brazil. The project was executed for client X, a large technology company of Swedish origin with office locations all over the world.

4.2.1 Institutional cultural context

Brazil is categorised as multi-active, meaning that doing multiple things at one time is very typical, as well as working not based on a set schedule, but on what things are important at that moment. General values in Brazilian culture (among others) are flexibility, optimism, orientation towards the future and a group (Lewis, 2006). Hofstede et al. (2010) researched the position of Brazilian culture on the cultural dimensions (see figure 4.06 below). Brazil has a large power distance, meaning that it is accepted in society that people are organised hierarchically, and inequalities between people exist. Brazil is collectivistic: people are part of strong groups, an important one of which is family. The country is neither feminine nor masculine, meaning there is a balance between competitiveness and interpersonal relations. Finally, Brazil scores high on uncertainty avoidance. The need for laws and boundaries to structure life is paramount, although rules are not necessarily respected and obeyed.

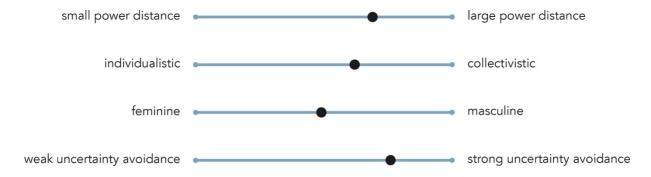


Figure 4.06. The Brazilian culture placed on Hofstede's cultural dimensions. Based on Hofstede Insights (n.d.).

4.2.2 Scope

The scope of this project can be summarised as follows: the relocation of the client's office to a new office within the same city. This new office had to be fitted out: Turner and Townsend provided cost and project management services for this. Procuring a designer and general contractor were vital responsibilities for Turner and Townsend within this project. Managing time, budget and quality and keeping all stakeholders involved were important throughout the project duration. An addition to the original scope of work was change management: the client wished to educate their employees on the ins and outs of the new office. This also had to do with the fact that the building is to be WELL Platinum-certified. This required additional information and different behaviour from the people who were going to be working in the office.

4.2.3 Schedule

The project took place from November 2018 until November 2019. The main milestones or events and corresponding dates are the following:

Date [DD/MM/YYYY]	Milestone / event
02/07/2018	Project start date
12/11/2018	Turner and Townsend appointed for PM and CM services
29/11/2018	Project team kick-off
28/03/2019	Design kick-off meeting
28/03/2019	Start schematic design
05/08/2019	General contractor assigned
14/08/2019	Final design approved and start of construction
28/10/2019	Substantial construction completion and client moving in
19/11/2019	Project fully closed

Table 4.03. Main project milestones and dates case A. Based on internal Turner & Townsend documentation.

4.2.4 Structure

The governance structure of this project is depicted in figure 4.07 below. The lines represent the contractual relationships between the different parties. In practice, Turner and Townsend coordinated and communicated with the parties contracted by the client on behalf of the client. The landlord, condominium and the municipality and fire department are required for several approvals ranging from the lease to the office design and specifications.



Figure 4.07. Project governance structure case A. Based on internal Turner & Townsend documentation.

4.2.5 Management

Two interviewees shared that project management as a profession in Brazil is not generally accepted in projects executed for local clients, so the project managers work almost exclusively for international clients (interviewee A1 & A2, appendix H). The position of Latin-America or Brazil in comparison with projects in other countries came forward during the interviews as well: the region is not often seen as a priority by large, internationally operating clients. During this project, there was a project manager from the client assigned to this project specifically, which helped overcome this obstacle of priority. Also, the Turner & Townsend team and the client team travelled to visit each other and learn about each other's way of working multiple times.

The Turner & Townsend team took on the role of guiding and escorting the client team whenever they were visiting Brazil, making sure to develop relationships. Interviewee A1 said the following about these visits (appendix H):

"I think that the project was improved in quality because of this experience that we had with them."

Precise and continuous project documentation and use of 360-degree photographs were essential to keep the client up-to-date in between visits and make sure there were no surprises. The importance of personal relationships and teamwork was mentioned as vital for the success of this project. Motivating each other and building trust were used to make sure people were willing to work for each other and would help each other out. The international and multicultural backgrounds of project team members were viewed as an advantage for the project by the interviewees, the diversity of behaviours and thinking improved the output. For the execution of a project in another culture, interviewees A1 and A4 agreed on the significant importance of knowledge on the local culture and the background of the people one is working with (appendix H).

Getting the contractors and sub-contractors to understand what the client expected and what their company standards were, was challenging at times, not in the last place because of the language barrier (interviewee A2, appendix H). The open-minded approach of the client was a major contributing factor to solving issues and making sure the best solution for this specific project was found. Interviewee A1 said the following about the project management (appendix H):

"I don't believe in just one way to manage a project."

Overall, the interviewees were very positive on how this project was managed and described it as 'successful' (appendix H). The client relied heavily on the local boots on the ground, and the local team found the Brazilian person on the client team very helpful (interviewees A2 & A3, appendix H). The interviewees described a general willingness to learn from each other and a collaborative environment throughout the project. Interviewee A3 put working on projects as follows (appendix H):

"There's always something to learn."

Regarding beneficial personal attributes for the management of this project, the interviewees mentioned the following things (see also appendix H):

A1	interpersonal communication, flexibility, being client-oriented
A2	making others feel comfortable, building trust, developing relationships
А3	adaptability, developing relationships
A4	tolerance, awareness, emotional intelligence, diplomacy, communication

Table 4.04. The takes of the case A interviewees on their beneficial personal attributes. Own table.

Looking back, the interviewees were positive about their approach and the project results. The greatest challenge that was mentioned regarding working with different cultures for this project was the time zones: getting everyone in a meeting at the same time required flexibility from all parties. In the lessons learnt document, different project team members noted the project team was strong and willing to work for each other. The local team is very satisfied with their new office space (internal Turner & Townsend documentation).

4.2.6 Effectiveness

On what effective project management entails, the opinions of the interviewees differed, there were hardly any overlapping elements in their descriptions (see also appendix H):

A1	delivering a strategic advantage to the project and process, the effectiveness is about mainly about optimisation and guidance
A2	project planning and keeping an overview of the project schedule and budget and prioritising tasks
A3	communications and the structure of the project team
A4	getting people to follow a certain process, the ability to see the whole thing coming together, moving and working together

Table 4.05. The takes of the case A interviewees on effective project management. Own table.

The importance of personal relationships and the limited influence of legal instruments was stressed by interviewee A4 (appendix H). Contracts were used, but the project team was very aware of the fact that developing personal relationships was the most effective way to get work done (interviewee A4, appendix H):

"Brazil is a country where trust and progress is very much dependent on the personal relationships that you have with the people."

In general, there was consensus among the interviewees that for proper project delivery, knowledge of the local culture is essential. Interviewee A1 put it as follows (appendix H):

"A foreign client who brings in a foreign project manager needs to do some magic."

It was stressed that understanding the culture of the country in which the project is executed does not only apply to the management layer of the organisations but also to the supply chain. The need for understanding the background of the people delivering the project is essential. Interviewee A3, from the client side, stated that the cultural implications of the decisions that were made – mostly in terms of design – were brought to them as a client step by step throughout the project.

On the importance of experience in project management, the unanimous opinion among the interviewees was that more experience would very likely lead to more effective management of cultural differences in project teams.

Being able to adapt your expectations based on previous experience and building on a variety of instruments and tools to use in different situations were mentioned. However, the inherent ability to deal with previous experiences and apply them constructively on the next project was also mentioned as being important. Interviewee A4 stated the following about this:

"The extent to which an individual can leverage that experience is also dependent on a natural propensity toward tolerance, diplomacy and emotional intelligence."

4.2.7 Culture

On the question about their definition of culture, the interviewees struggled. Interviewee A3 noted it was difficult to put it into words. Their views on what culture entails differed (see also appendix H):

A1	the experiences and interactions that you have create your culture
A2	the common sense and the common (social) behaviour
А3	the livelihood and vibe of the location and the way people are used to living
A4	behaviours developed or honed through heritage or social or political influence

Table 4.06. The takes of the case A interviewees on culture. Own table.

On the influence of culture on the project and project management, the interviewees brought forward different aspects. The Brazilian construction market is different from the North American market in which the client mainly operates, so the local boots on the ground were invaluable according to interviewee A3 (appendix H).

The need for mutual understanding of culture – which the interviewees mentioned as being important earlier in the interview – came forward as well when the interviewees were asked about how they experienced culture and cultural differences in the project. Interviewee A1 and A4 described they found the visits to the client's office in the U.S.A. and the visits of the client to Brazil beneficial for the overall project success (appendix H). On dealing with obstacles, interviewees A1 and A2 described the major team effort that was present to solve all sorts of obstacles. Working above and beyond your role was described as much more standard for the Brazilian construction industry as opposed to the American sector by interviewee A2 (appendix H).

Several aspects came forward on the different management elements; these will be addressed separately below.

Interviewees A1 and A2 shared the client was open-minded and requested the integration of the Brazilian culture into the design. The client's constructiveness and willingness to learn about local practices and balancing that with their own design guidelines made for a design all interviewees were positive about. An example mentioned by interviewees A2 and A3 was the lunch area: they described it is common to have lunch at your desk in the U.S.A., whereas in Brazil people don't do that.

The decision to make a lunchroom suitable for the same amount of people working in the office was one that the client would not have made, had they not been told about this. Also, the prices of bespoke joinery pieces were much lower, whereas lead times for importing elements were much longer, and the prices much higher. This was something the local team had to educate the client on. Interviewee A3 put it as follows (appendix H):

"Having local representation to really tailor the project to the culture and the people of the country that you're building in is super, super important."

- Professional standards and construction codes

On the professional standards and local construction codes, interviewees A1 and A2 mentioned they had to explain the local rules and regulations to the client. Interviewee A3 shared it took many conversations to be sure the design was compliant with the local standards and codes, but the "sense of consistency between offices" was not lost. Challenges regarding the quality of electrical and IT design and installation and the different approach to disabilities in Brazilian standards and codes comparison to North American ones was mentioned here by interviewee A4.

- Expatriate personnel / foreign staff and operatives

Interviewee A1 shared the client's corporate culture was strong and consistent, which made working with different stakeholders from the client organisation easier as their expectations and ways of working were known. Interviewee A3 stated the client team was made to feel very welcome in the local culture and the similarity in mindsets made for a pleasant and comfortable collaboration. The language was a barrier that obstructed communication between the client and local workforce; this was managed through a clear line of communication which led to English speaking representatives that would communicate with the client. Interviewee A2 mentioned that on site, an effort was made to bring the workforce and client representatives in contact to show which works were being carried out. Interviewee A2 stated the following on the client team interacting with the local Brazilian team:

"Their approach in making the workforce and Brazilian team feel comfortable was very good."

- Negotiations

On negotiations, the importance of knowledge of the local market was stressed by interviewees A1 and A3. External consultants were appointed to ensure the validity of proposals and create security for both T&T and the client. The general repetitiveness of negotiations in Brazil was mentioned by interviewee A4; interviewee A1 noted the horizontal client organisation was challenging to get final decisions. The view of the client on this was different; interviewee A3 found the Brazilian team was moving very quickly, especially during the design phase:

"For this project, everyone was very excited to be working on it, so we were moving so, so quickly. [...] At times, we got a little bit ahead of ourselves."

- Codes of conduct and ethical standards

On codes of conduct and ethical standards, the interviewees mentioned both Turner and Townsend and client guidelines that focused explicitly on this. The client relied on the local team to guide them through the way projects in Brazil are carried out. For the T&T team, the challenge lay mainly in getting the general contractors and subcontractors to abide by the codes and standards required for site works. Interviewee A4 illustrated the need for personal contacts and favours to get things done in the Brazilian construction market:

"Yes, there's protocols, policies and process, but there's always a way around or something that you can do in Brazil to speed things up, slow things down or bypass things."

As part of the case study, the interviewees were asked to fill out a survey developed by Lewis (2006) in which they were asked to choose between two or three options that describe them as a professional working in the building sector. The results of the survey for the interviewees of case A can be seen in figure 4.08 below. Interviewees A1 and A2 are Brazilian, and based on literature, they would align with the multi-active culture most. However, interviewee A1 identifies most strongly with the linear-active culture and interviewee A2 most with the reactive culture. The Japanese family background could explain this for interviewee A2, though the interviewee mentioned this background had been lost a little. Interviewee A3, an American, also shows a relatively strong alignment to the reactive culture. Interviewee A4 scores equally on the linear-active and reactive culture and significantly less high on the multi-active culture. This would suggest that even though one has lived in a country for a decade, this does not mean one aligns with that culture after that time.

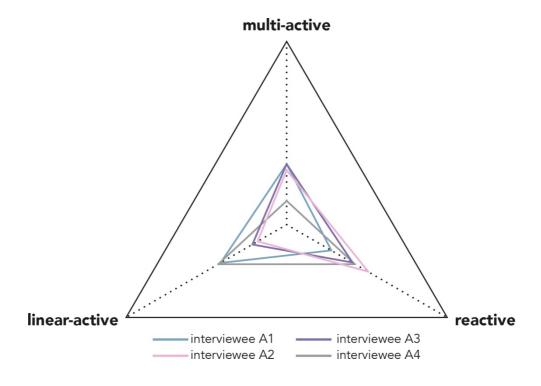


Figure 4.08. The cultural alignment of the case A interviewees. Own illustration.

4.2.8 Summary findings case A

Case A concerned the relocation and fit-out of an office in Brazil. Four people were interviewed: an external project manager (A1), an external assistant project manager (interviewee A2), an internal project manager (A3) and an external project director (A4).

As project management is not an established profession in projects executed for Brazilian clients, the external Turner & Townsend team works almost exclusively for international clients. In that perspective, this case was no exception. The visits of the T&T team to the United States and the visits of the client team to Brazil were mentioned as very helpful for the project. The open-mindedness of the client and the mutual willingness to learn allowed the T&T team to integrate tailor-made solutions for the project. In general, the interviewees were very positive about the management of the project and described it as successful.

The effectiveness of the project management was highly influenced by the importance of personal relationships and the limited influence of contracts and other legal agreements. Collaborating and going above and beyond one's role to ensure a positive project outcome was the way of working that was described. The need for understanding the background of the people delivering the project was noted as essential; there was an effort made to connect the workforce and the client and build relationships. The unanimous opinion among the interviewees was that more experience would very likely lead to more effective management of cultural differences in project teams.

On the management of culture, the following aspects came forward. In the design approach, the open-minded position of the client and their willingness to learn from and rely on the local team led to a design that incorporated the local culture without compromising the sense of consistency between other offices of the client. The professional standards and construction codes were new to the client, so there were many conversations needed to explain them and balance the Brazilian and American standards concerning electrical and IT design and installation, as well as the approach to disabilities. There were communication lines in place with English-speaking local workforce to overcome the language barrier, but the client was also shown on site what the people were working on. The T&T team took on the role of guide and translator for this. On the negotiations, the views of the interviewees differed. The local team found the horizontal client organisation challenging and experienced the negotiations as challenging in terms of getting a decision. The client interviewee shared the negotiations and decision-making during this project felt sometimes rushed, and more time to consider options was available and needed. For the codes of conduct and ethical standards, the client team and T&T team both had several guidelines in place. The challenge lay mainly in getting the contractors to abide by these. The surveys that were filled out by the interviewees show minimal direct explanations or similarities to the interviewees' national cultural backgrounds.

4.3 Case B – the Netherlands

The second case is an office extension and fit-out project located in the Netherlands. The project was executed for client Y, a large technology company of North American origin with office locations all over the world.

4.3.1 Institutional cultural context

The second case is located in the Netherlands: a predominantly linear-active country according to Lewis (2006). Doing one thing at a time in a scheduled timeframe is typical for linear-active cultures. Punctuality is an essential asset within this culture, and for the Netherlands specifically, dogmaticalness, tolerance and frankness are distinctive elements (Lewis, 2006).

Hofstede et al. (2010) position the Netherlands within the cultural dimensions as shown in figure 4.09. Regarding power distance, the figure indicates that inequalities between people are aimed to be minimised in the Netherlands. As far as the second dimension goes, the figure shows that the Netherlands is highly individualistic: being able to do things on your own and taking responsibility for your own life are vital aspects. The Netherlands sports a feminine culture in which keeping a healthy balance between work and life is important. In business, decisions are often made based on involvement and consensus. The final dimension shows that the Netherlands is pretty much in the middle when it comes to uncertainty avoidance: This means there is no clear preference to structure novel situations through rules.

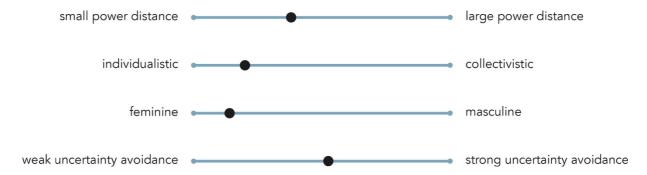


Figure 4.09. The Dutch culture placed on Hofstede's cultural dimensions. Based on Hofstede Insights (n.d.).

4.3.2 Scope

The project scope consisted of different elements. The client already occupied five floors in the building and needed to expand due to the increase of headcount. In the first instance, the plan was to add one new level to the project, but the client's standards indicated the growth of the headcount was moving too fast in comparison to the client. The request to determine the necessary new workplaces followed suit and resulted in an extra floor being added: the project became an office expansion of two floors with the construction of an internal staircase between the floors. For these works, the Turner & Townsend project management team was tasked with the procurement of design and construction parties, as well as general project and cost management throughout the project.

4.3.3 Schedule

The project took place from March 2018 until July 2019. The main milestones or events and corresponding dates are the following:

Date [DD/MM/YYYY]	Milestone / event
19/03/2018	Turner and Townsend appointed for PM and CM services
04/06/2018	Design kick-off meeting
21/02/2019	Strip-out of both levels complete
22/02/2019	General contractor appointed
15/03/2019	Start of construction (original date 11/03/2019)
14/06/2019	New internal staircase finalised
01/07/2019	First day of business level one (original date 17/06/2019)
08/07/2019	First day of business level two (original date 24/06/2019)

Table 4.07. Main project milestones and dates case B. Based on internal Turner & Townsend documentation.

4.3.4 Structure

Figure 4.10 below shows the contractual relationships of the parties involved in this project. The client had four 'client directs', which are parties that have a long-term contractual relationship with the client and thus are appointed to work on several projects. There were also four parties related to the landlord; these contractors were already assigned for the maintenance of the sprinkler, HVAC and electrical installations and the building structure. These parties were – like the client directs – involved in the project outside the standard procurement procedure which applied to the other contractors and consultants. The landlord and the municipality and fire department were needed for several approvals during the project.

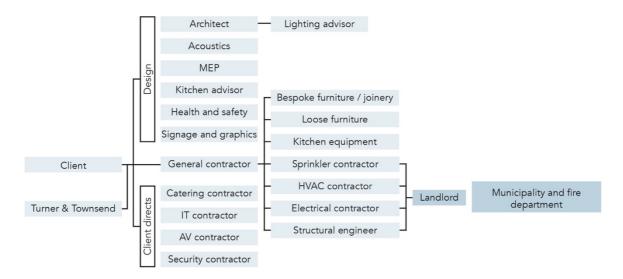


Figure 4.10. Project governance structure case B. Based on internal Turner & Townsend documentation.

4.3.5 Management

On the management of this project, the interviewees pointed out the busy client representatives and the need to adapt way in which information was transferred during meetings. Interviewee B3 (appendix I) explained this as follows:

"Rather than an agenda, we would have a slide deck. It could be four or five different slides with a quick introduction to the project and then each slide after that would be dedicated to these service lines. And on those slides, we would play back exactly the current situation, capturing everything."

The client's internal standards and guidelines also influenced the management of the project. The client was described by interviewee B2 as "mature", they have standardised what certain rooms or areas need to look like, including dimensions, lay-out and furniture. This also translated into health and safety standards and internal client KPI's that affected the fees of the project team.

From the lessons learnt, the project team noted that understanding the client processes and documents would have been beneficial for the project management. Earlier involvement of the landlord contractors was also mentioned as something that would have been advantageous (internal Turner & Townsend documentation). Regarding beneficial personal attributes for the management of this project, the interviewees mentioned the following elements (see also appendix I):

В1	communication and documentation of communication
B2	coping with different people, communicating openly, building a relationship
В3	staying calm and in control, listening and adapting, understanding what's important to others
В4	understanding the client's goal and aligning processes and parties to achieve it

Table 4.08. The takes of the case B interviewees on their beneficial personal attributes. Own table.

Looking back, the interviewees were positive about their approach and the project results. The interviewees did mention elements they would change. Interviewees B1 and B2 noted they feel they learnt much in the meantime and thus would communicate differently now and document communications more precisely. Interviewee B3 mentioned the lack of team building activities or celebrating milestones. The following was said about this (interviewee B3, appendix I):

"We never had celebrations on the project or took time to appreciate what we achieved or milestones that we had ticked off. So I'd probably introduce a couple of celebratory moments, a quick 'borrel' or something like that."

4.3.6 Effectiveness

On effective project management and what it entails, various aspects came forward (see also appendix I).

B1	clear communication and documenting communication
B2	structuring your work and communications, clear communication
В3	establishing correct relationships with project team and stakeholders, facilitate processes, looking ahead to be able to steer the project
B4	creating a good programme, collaborating with the entire project team

Table 4.09. The takes of the case B interviewees on effective project management. Own table.

The interviewees also mentioned the advantage of having an English native speaker on the Turner & Townsend team, which was believed to be appreciated greatly by the client (appendix I).

The interviewees were asked about the importance of being experienced when it comes to dealing with cultural differences in project teams. Interviewee B1 shared that having previous experience in dealing with cultural differences would be beneficial when one is dealing with cultural differences again. Interviewee B2 noted that having experience dealing with different clients and their ways of working would eventually lead to a wide array of options one could apply to a certain situation. Interviewee B3 stated learning how to deal with different cultures would be more important than general experience working in teams with multiple cultures. Interviewee B4 noted that open mindedness and a global orientation would be beneficial in dealing with cultural differences (appendix I):

"I think you have to be open and open minded. [...] And if you're more experienced in that way or a little bit more globally oriented, and have more insights in different people, you can do better in a job."

4.3.7 Culture

The question about their definition of culture seemed to be challenging for the interviewees. Their definitions were as follows (see also appendix I):

B1	how you were raised, your family and religion, the things you value most
B2	your background, how you deal with things, change and different people
В3	your experience and upbringing, it creates your identity and relates to how you do things and your customs
В4	how you were raised, how you do things and how you have been taught things

Table 4.10. The takes of the case B interviewees on culture. Own table.

On the influence of culture on the project and project management, the interviewees brought forward different aspects. Interviewee B1 mentioned it was a hard question to answer, the thing that came to mind was the overall busy schedule of the client representatives. The interviewee mentioned it was not clear whether that was directly related to culture. Interviewee B2 noted that the background of people matters in project management, as well as their expectations. The difference in health and safety measurements was brought forward by interviewee B2 here (see also appendix I). Interviewee B3 described building in terms of techniques to be a linking element between cultures. Differences in methods based on for example the weather would be different, but in Western countries building was described as being very similar, which would have an important effect (interviewee B3, appendix I):

"So if you know you to build, that's your common language between different cultures."

With that basis, interviewee B3 stressed the importance of being flexible and adapting one's way of working based on the people one is working with. Changing one's expectations is also part of that. Becoming effective was described as follows (interviewee B3, appendix I):

"I think to manage cultures and still be effective, you just need to have awareness about how things are done in different cultures and adjust your way. It's not one-way traffic, because they also have to adjust to your style and how you want to do things. So it's kind of a mutual compromise that is not spoken about, if you want to have an effective approach."

On the question to which degree having a multicultural, international project team was an advantage or a disadvantage, interviewee B3 stated the following:

"I think the disadvantage, and this goes for a lot of projects, the client wants something done a certain way or expect things to be done a certain way and they don't appreciate how things are done locally. And equally I think the contractors do things their way and they don't appreciate the client wants things done their way. [...] It's just a mismatch of expectations I guess, and a couple of small things would just make a world of difference at times."

When asked about how these expectations were handled during the project, interviewee B3 shared that contractors and clients generally do not create a relationship in which expectations are discussed openly and explicitly (appendix I):

"For cultural differences, clients and contractors don't have these fluffy conversations, and maybe they should."

The different management elements will be assessed separately below.

- Design approaches
In the design approaches, the client standards came forward very clearly. An example given by interviewee B1 is as follows (appendix I):

"A good example would be the height of the kitchens, everything had to be designed for wheelchair accessibility so the counter tops were I believe 750 or 800 mm high.

And that is quite low because in the Netherlands we are quite tall."

Upon bringing this difference in standards to the attention of the client, it became clear that deviating from the company standards was not an option. Interviewee B2 noted that many offices of the client are similar, although there is an effort to make the employees aware of where they are working: typical Dutch elements, people and landscapes were incorporated in the signage and graphics design. Interviewee B3 noted that because of the client's standards and approach to design, the consultants had to adapt their way of working. Interviewee B3 shared that the consultants asked relatively few questions to get clarifications on certain items from the client.

- Professional standards and construction codes

The client's representative was UK-based, meaning that the health and safety standards of the United Kingdom were expected to be followed on this project. Interviewee B4 described the client wished to add health and safety requirements to the basic requirements, something that is not uncommon among international clients. However, interviewee B1 (appendix I) described it was exceptionally challenging to get the Dutch contractors and sub-contractors to abide by these standards, as they were much stricter than the Dutch ones:

"It was hard, in each weekly construction meeting we raised a point: 'Guys, please wear your helmets.' We even introduced safety caps that were not that heavy. But every time we still saw construction workers on site not wearing their safety helmet or cap."

In their lessons learnt document, the project team noted that it would have been beneficial to use local knowledge which sometimes supersedes internal client standards (internal Turner & Townsend documentation). Interviewee B3 brought forward another aspect: that of building certifications. In the UK, Australia and America, one is required to have the building certified at the end of the project to ensure everything has been done according to building regulations. The absence of this requirement was an aspect the Turner & Townsend team had to educate the client on.

- Expatriate personnel / foreign staff and operatives

Regarding expatriate personnel and foreign staff, interviewee B3 described the client as a machine and the team as having to fit in. This requires understanding the machine, but also understanding the individuals involved, according to interviewee B3 (appendix I). Interviewee B1 shared the signage and graphics party – recommended by the client representative – was based in Ireland. Because the client wished to incorporate typical Dutch elements in this layer of the design, knowing the Dutch culture in and out would have been beneficial. Interviewee B1 described the following regarding this (appendix I):

"They would find things on the internet and present it back to the client and us, but then they weren't really typically Dutch. [...] That was also said by the local Dutch facility manager from the client team."

- Negotiations

When asked about negotiations, interviewee B1 shared insights from the procurement phase in which the general contractor needed to be selected. The client made use of ebidding, a process in which contractors – after handing in their documentation and being interviewed – would put their price in a system. Each contractor sees their ranking and can drop their price to go up in ranking. Interviewee B1 stated the T&T team explained to the contractors that the selection was also largely based on quality as oppose to price, but still three out of eight contractors immediately declined taking part in the procurement. Interviewee B4 noted that this process is highly uncommon within the Dutch market. Interviewee B3 shared that overall, negotiations took place in a collaborative environment.

Codes of conduct and ethical standards On the codes of conduct and ethical standards, the interviewees did not note any remarkable events or moments during the project. Interviewee B3 shared the client had

strict procurement guidelines that were to be followed.

The outcomes of the survey developed by Lewis (2006) – in which the interviewees were asked to choose between two or three options that describe them as a professional working in the building sector – are visible in figure 4.11 below. Interviewees B1, B2 and B4 are Dutch, the profiles of B1 and B2 are somewhat similar in regard to their alignment with the linear-active and reactive culture. Interviewee B3, an Australian, shows a very different profile, with a major preference for the multi-active culture. Interviewee B4 shows a similar pattern. Based on literature, the profiles should be more alike and generally with stronger alignment to the linear-active culture.

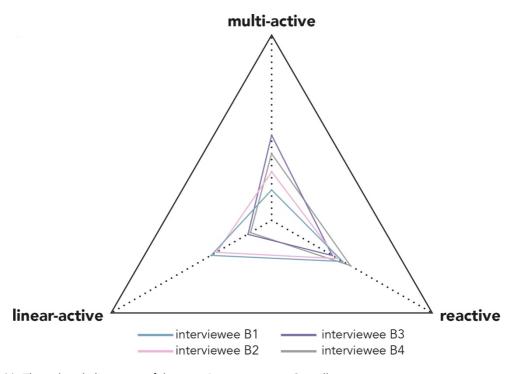


Figure 4.11. The cultural alignment of the case B interviewees. Own illustration.

4.3.8 Summary findings case B

Case B concerned the expansion and fit-out of two office floors in the Netherlands. There were four people interviewed for this case: two external junior project managers (B1 and B2), one external senior project manager (B3) and one external account manager from the contractor (B4).

On the management of this project, the interviewees pointed out the busy client representatives and the client's strict and well-developed internal standards and guidelines that influenced the management of the project. On effectivity, the interviewees agreed that clear communications and documenting the communications was essential. In addition, interviewee B3 shared that looking ahead and developing relationships are also important and interviewee B4 noted the significance of aligning all works executed by different parties.

On the influence of culture on the project and project management, the interviewees brought forward different aspects, ranging from the need to change one's way of working based on the schedule of the client representatives to understanding the background of other team members to find out what they are used to and what they expect. Interviewee B3 described building in terms of techniques to be a linking element across cultures. With that basis, interviewee B3 stressed the importance of being flexible and adapting your way of working based on the people you are working with. Discussing expectations in an open conversation is not something that is common between contractors and clients, according to interviewee B3. Interviewee B4 gave an example of another project in which the client included the 'cultural fit' of consultants, which was indeed uncommon, but beneficial for that project (appendix I).

In the design approaches, the client standards were at the forefront and deviating from them was not an option. Interviewee B3 noted that because of the client's standards and approach to design, the consultants had to adapt their way of working. This relation between standards also applied to professional standards and construction codes: in the areas of health and safety the client requested the project team to work according to high standards. In their lessons learnt document, the project team noted that it would have been beneficial to use local knowledge which sometimes supersedes internal client standards (internal Turner & Townsend documentation). Regarding the expatriate personnel and foreign staff and operatives, interviewee B1 shared the signage and graphics party - recommended by the client representative – was based in Ireland. Because the client wished to incorporate typical Dutch elements in this layer of the design, knowing the Dutch culture in and out would have been favourable. The negotiations during the procurement phase were heavily influenced by the e-bidding process, which is highly uncommon within the Dutch building industry (interviewees B1 and B4, appendix I). On abiding by the codes of conduct and maintaining ethical standards, interviewee B3 noted the strict procurement guidelines of the client that needed to be followed, but other than that there were no noticeable events or moments during the project.

The surveys that the interviewees filled out show similar patterns for Dutch interviewees B1 and B2, the profiles of B3 and B4 deviate strongly from that. This is – based on literature – unexpected.

4.4 Case C – Malaysia

The third case is an office refurbishment and fit-out project located in Malaysia. The project was executed for client Z, a large technology company of British origin with office locations all over the world.

4.4.1 Institutional cultural context

The third case is located in Malaysia: a country categorised by Lewis (2006) as being predominantly reactive. People in reactive cultures are identified by their calm form, their preference for listening first and then determining their own position. Patience and the protection of face and honour are essential in a reactive culture.

Hofstede et al. (2010) place Malaysia's culture on the dimensions as shown in figure 4.12 below. Malaysia scores exceptionally high on power distance: this means that having a distinct role and place within society is deemed normal and wanted. In organisations, this hierarchy is very apparent as well. Malaysian culture is strongly collectivistic, relationships – be it with family, friends or colleagues – are important. In business, this strong group focus also comes forward: one's relations are looked at across many work-related considerations such as promotions. On masculinity, Malaysia is placed right in the middle: there is no clear preference for either masculinity or femininity in this culture. Malaysia shows a low preference for uncertainty avoidance, meaning that rules should have a clear purpose and uncertain or novel situations are often dealt with in a relaxed manner.

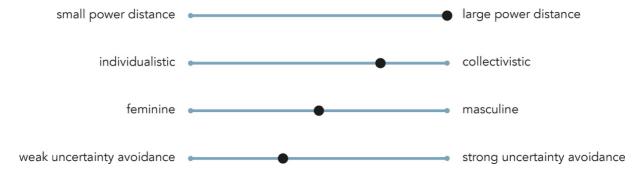


Figure 4.12. The Malaysian culture placed on Hofstede's cultural dimensions. Based on Hofstede Insights (n.d.).

4.4.2 Scope

The project scope and works were divided into two separate phases. The first phase of the project covered the construction of a new building, in the second phase, the office spaces in the three different buildings were refurbished. For this case study, only the second phase of the project will be covered. In the scope of works, design compliance, cost control and time control are mentioned. Turner & Townsend was responsible for the procurement and organisation of the parties involved in the design and execution of the project, as well as financial control of the project. The most important change in the project scope was the addition of a covered bridge to connect the different buildings, which took place in the first phase.

4.4.3 Schedule

Phase two of the project took place from October 2018 until October 2019. The main milestones or events and corresponding dates are the following:

Date [DD/MM/YYYY]	Milestone / event
01/10/2018	General contractor appointed
20/10/2018	Start of construction
27/05/2019	Building 1 levels 1 and 2 and building 2 level 1 completed
06/09/2019	Completion of migration of occupants to finished floors
06/10/2019	Building 3 levels 1 and 2 and building 2 level 2 completed
31/10/2019	Project handover

Table 4.11. Main project milestones and dates case C. Based on internal Turner & Townsend documentation.

4.4.4 Structure

Figure 4.13 shows the contractual relationships and structure of the project. The client had direct contractual relationships with the general contractor, consultants and speciality consultants. Turner and Townsend, however, was responsible for the management of these parties and the works they carried out. External approvals from organisations such as the municipality and fire department are not included in this overview.

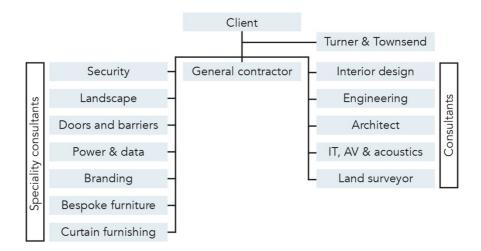


Figure 4.13. Project governance structure case C. Based on internal Turner & Townsend documentation.

4.4.5 Management

On the management of this project, the interviewees repeatedly mentioned the requirements and day-to-day operations of the client as being leading. Being respectful, prepared and straight-forward on what is needed were mentioned as essential aspects of good project management. Project management aspects such as control of time, budget and documentation came forward in the interviews; the interviewees seemed to describe project management as an objective profession. Interviewee C2 (appendix J) stated the following:

"I think whoever is managing it [the project], should be a subject matter expert, plus running it according to a proven project management method.

So not in their own way, not from their experience."

On the importance of culture in a project management approach, the views of the interviewees differed. Two interviewees agreed on the importance of understanding where people are coming from and how they operate. Still, both stressed the balance between focusing on that and on "being respectful" (interviewee C1, appendix J) and on "time and costs" (interviewee C3, appendix J). Interviewee C2 stated culture does not play a large role in an effective project management approach, unless it would be part of the design of a building, such as a mosque or when the culture of a client would require a specific layout. The following was noted regarding the influence of culture (interviewee C3, appendix J):

"If it is a general building, the focus should be on its function and how it can maximise the productivity of the people, and I don't think much cultural influence is there."

Regarding beneficial personal attributes for the management of this project, the interviewees mentioned the following things (see also appendix I):

C1	being organised, keeping a cool head, being consistent, building trust
C2	finding out what the other person is looking for or struggling with, being informal
C3	being tolerant, balancing demands from different parties

Table 4.12. The takes of the case C interviewees on their beneficial personal attributes. Own table.

Interviewees C1 and C2 did not mention specific things they would do differently, looking back at the project. Interviewee C3 said that a team-building exercise could have clarified the common project goal and could have helped in ensuring everyone knows their tasks and responsibilities.

4.4.6 Effectiveness

On what effective project management entails, the views of the interviewees differed, there were no exact matches in their responses. Still, there was a general focus on procedures, requirements and managing stakeholders and their expectations (see also appendix J):

C1	complying to the mandatory requirements, managing stakeholders, managing expectations, understanding the scope and client priorities, staying within schedule and budget	
C2	following a proven and international project management method, being a subject matter expert	
C3 managing people is key, document controls and such are also important		

Table 4.13. The takes of the case C interviewees on effective project management. Own table.

The interviewees were unanimous in their opinion that being more experienced in dealing with people and projects would lead to more ease in managing cultural differences in project teams. It was stressed that being exposed to different countries and working in a multicultural environment would be prerequisites. Interviewee C1 stated that just work experience in general would not matter. Interviewee C3 noted the following about experience:

"Dealing with different people's individual behaviours takes some experience and exposure to different cultures."

4.4.7 Culture

On the question about their definition of culture, two of the interviewees focused heavily on beliefs and how culture is transferred through generations. Their views on what culture entails are summarised in table 4.14 below (see also appendix J):

C1	how you grow up, what you have been taught, what you have been experiencing and what you believe in			
C2	the way of doing things and certain beliefs brought down through generations			
C3	individual behaviour			

Table 4.14. The takes of the case C interviewees on culture. Own table.

On the influence of culture on the project and project management, the interviewees brought forward different views. Interviewee C1 focused on being mindful and considerate of religious festivals: looking into how a possible fasting period would influence the project and making clear agreements on mitigation procedures was the way of dealing with that. Interviewee C2 shared that due to the strict company policies, there was no informal contact outside of the physical work environment with other members of the project team:

"[...] most of the time we are in the meeting room. I would say there was almost zero cultural influence."

Interviewee C3 shared that the strong company values and how the client's employees and their day-to-day work were made a priority influenced the project management. This interviewee also described the decision making as challenging due to the significant influence of the client's workforce.

The interviewees' takes on the different management elements will be addressed below.

- Design approaches

On the design approaches, the interviewees shared that the influence of the benchmark for the design – an office building in Singapore that was previously delivered – was massive. The additions were marginal in the eyes of the interviewees: there was a need for a covered bridge due to the warm weather in Malaysia, there was an amphitheatre setting embedded in the design, and there was a prayer room added to the benchmark scheme. Interviewee C2 (appendix J) shared the following regarding the design:

"The major design considerations were actually done for the Singapore one, for the Malaysian one it was just a copy-paste of the design."

- Professional standards and construction codes

The interviewees shared that regarding professional standards and construction codes, both internal client and internal T&T codes and policies were guiding. Interviewee C2 shared that Singapore and Malaysia uphold very similar regulations and legal compliances. The client's health and safety team and the external consultants were thus primarily tasked with double-checking to ensure the Malaysian requirements were met. Interviewee C3 emphasised the necessity to understand local norms and practices and making sure the infrastructure for additional requests is in place.

- Expatriate personnel / foreign staff and operatives

On the expatriate personnel and foreign staff and operatives, the perspectives of the interviewees differed. Interviewee C1 noted the difficulty of maintaining the high Turner & Townsend standards across all countries due to their different maturity levels, mainly on health and safety. Making the requirements explicit in contracts and procurement documents even before tendering was used to avoid any miscommunication in this area. Interviewee C2 stated that because of the age of the project team members and their experience working in different countries, management of expatriate personnel or foreign staff and operatives was not required. The focus on deliverables according to interviewee C2 (appendix J) was significant:

"Cultural elements were never required to be managed or addressed."

Interviewee C3 noted that the familiarity of the project team members with how things are done in Malaysia contributed to the limited need for management of expatriate personnel and foreign staff and operatives.

Negotiations

On the negotiations, interviewees C2 and C3 shared that the client focused heavily on the costs: the project needed to be executed within budget. Managing this would go in two directions: the project managers would try to convince the contractor to take the costs for any deviations made from the design or the project managers would go back to the client and discuss whether their request truly embodied what they needed. Making sure the client would understand the implications of the choices made was very important according to interviewee C3.

- Codes of conduct and ethical standards

On codes of conduct and ethical standards, the following stood out. Interviewee C2 shared the client has many internal procedures, forms and audits in place to ensure everything is according to internal standards before signing any contracts. However, these processes and guidelines do not offer much control over how the contractor and subcontractors treat their people. The following was shared regarding this (interviewee C2, appendix J):

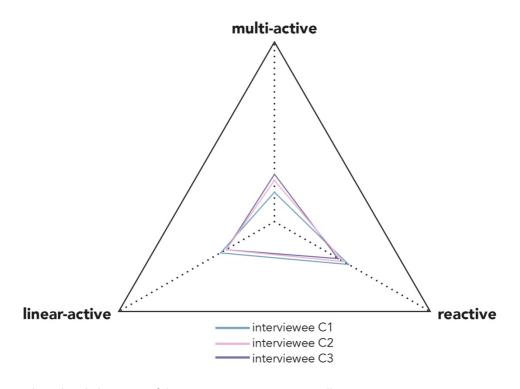
"One of the ways the site manager controls and gets the work done is screaming at his workers. That was his style; he was a very successful manager. [...]

Normally, with our internal standards we don't allow that at that level.

But he does his work, so we don't generally disturb that because that's their internal way of working. That is why maybe he is successful, so we focus more on deliverables but not in detail on how they get their work done."

This difficulty in control also came forward in examples regarding safety on site, where the walkways were not always clear of materials, and workers did not consistently use the appropriate personal protection equipment.

The outcomes of the survey developed by Lewis (2006) – in which interviewees were asked to choose between two or three options that describe them as a professional working in the building sector – can be seen in figure 4.14. All three interviewees are Malaysian and show the greatest affinity with the reactive culture, followed by the linear-active and multi-active culture. Based on the placement of Malaysia in the Lewis Cultural Types Model (2006), this primary alignment with the reactive culture is consistent with the outcomes of this survey. However, one would expect that after the main alignment with the reactive culture, the multi-active culture would follow, as Malaysia is placed on the axis between reactive and multi-active cultures.



 $\textbf{Figure 4.14}. \ \textbf{The cultural alignment of the case C interviewees}. \ \textbf{Own illustration}.$

4.4.8 Summary findings case C

Case C concerned the refurbishment of office spaces located in three buildings. Three people were interviewed for this case: an external senior project manager (C1), an internal client representative (C2) and an external assistant project manager (C3).

Being respectful, prepared and straight-forward on what is needed were mentioned as important aspects of good project management, the interviewees seemed to describe project management as an objective profession. On the importance of culture in a project management approach, the views of the interviewees differed. The balance between focusing on where people come from and on "being respectful" (interviewee C1, appendix J) and on "time and costs" (interviewee C3, appendix J) was mentioned as important. Interviewee C2 stated culture does not play a large role in an effective project management approach unless it would be part of the design of a building. Concerning effectiveness, there was a general focus on procedures, requirements and managing stakeholders and their expectations.

The cultural influence was diminished according to interviewee C2, who shared that due to the strict company policies, there was no informal contact outside of the physical work environment with other members of the project team. The influence of culture in the design approaches was heavily reduced by the fact that for the office, a benchmark of a previously delivered office in Singapore was used. There were only minimal adaptations made to this. This also linked to the professional standards and construction codes: it was more a matter of double-checking the compatibility of the Singaporean and Malaysian standards. The views on expatriate personnel and foreign staff and operatives varied. Making health and safety requirements explicit in contracts and procurement documents even before tendering was used to avoid any miscommunication with expatriate personnel. Interviewee C2 stated cultural elements were never required to be managed or addressed, mainly due to the project team members' previous experiences. During negotiations, the project managers made sure to question the client to determine exactly what the demands were and ensure everyone understood the implications of the choices made. Staying within the budget was a major focus during negotiations with contractors. On codes of conduct and ethical standards, the interviewees shared there are many procedures in place, but the control over how people on site are being treated is limited. This applied to communication within the contractor's organisations and general safety on site.

The interviewees showed very comparable alignment with the linear-active, multi-active and reactive culture. Their predominant alignments were as per expectations based on literature: the interviewees aligned mostly with the reactive culture.

4.5 Cross-case analysis

In this section, the differences and similarities between cases will be assessed.

4.5.1 Institutional cultural contexts

Looking at the institutional cultural contexts of the cases according to Hofstede's dimensions in figure 4.15, the following stands out (Hofstede, Hofstede & Minkov, 2010):

- Malaysia shows the largest power distance, followed by Brazil. This means that in Malaysia, differences in hierarchy and power are accepted and preferred, a little less so in Brazil. In the Netherlands, equality and similar rights are focused upon more.
- A similar order of distribution can be seen regarding collectivism. Malaysia is the most collectivistic, closely followed by Brazil. The Netherlands is much more individualistic than the other two.
- Regarding femininity and masculinity, both Malaysia and Brazil show no clear preference for one or the other: this means there is a general balance between a desire for power and liking what you do in life. The Netherlands shows a strong alignment with femininity: having a healthy work-life balance is essential in the Dutch culture.
- On uncertainty avoidance, the three cultures are the least divided. Malaysia shows a preference for weak uncertainty avoidance: there should not be too many rules, and they should all have an exact function. The Netherlands shows a stronger preference for uncertainty avoidance: structuring novel situations through rules is preferred. Brazil has strong uncertainty avoidance, though the laws and regulations are not necessarily respected or obeyed.

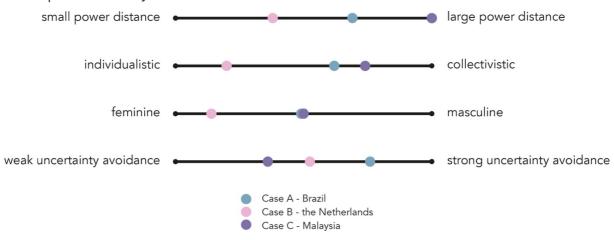


Figure 4.15. Cross-case institutional cultural contexts. Based on Hofstede Insights (n.d.).

4.5.2 Scope

The scopes of the cases were comparable; Turner and Townsend provided cost management and project management services for all. Case A concerned an office relocation and fit-out, and change management was added to the scope during the project. Case B was an office expansion and fit-out; the scope of the project was determined through preliminary research by Turner & Townsend. Case C covered an office refurbishment and fit-out, which were executed in the second of two project phases.

4.5.3 Schedule

All projects were executed in 2018 and 2019, see figure 4.16 below. In none of the projects, significant delays were mentioned.



Figure 4.16. The start and finalisation dates of the cases. Own illustration.

4.5.4 Structure

The project structures of cases A and C are comparable: the client directly contracted a contractor and several consulting parties. Case B was organised differently, as there were consultants from the client that were predetermined, as well as parties provided by the landlord.

4.5.5 Management

On the management of the projects in general, a number of things stood out (see table 4.15 below). For all three cases, there were elements that influenced the management approach in general. For case A (see also appendix H), the position of Latin-America for international clients led to limited time allocation of the client to the project at the beginning of the project. This changed when one client representative was appointed. The mutual visits from the project team to the client and vice versa were also influential: there was a focus on mutual understanding and learning from each others' ways of working.

For case B (see also appendix I), time allocation of client representatives also played a part: the Turner & Townsend team changed their way of working to convey information as quickly and clearly as possible to accommodate the client's need. The well-developed client guidelines and procedures also influenced the management approach for this project. The client had strict requirements regarding health and safety and predetermined conditions for design elements. There was little room to deviate from this.

For case C (see also appendix J), keeping disturbance of the day-to-day operations of the client organisation to a minimum was essential. This was demanding in terms of space and time: the project works needed to be as streamlined as possible.

When looking at the beneficial personal attributes the project managers mentioned, they relate to the Project Management Institute's communications management in all cases. The interviewees also mentioned elements that were not directly related to a specific management area. Looking back, in case A more confidence in the management approach was mentioned as a change that would have been made. In case B, design coordination and clear communication were noted. For cases B and C, elements of teambuilding came forward.

Aspect	Case A	Case B	Case C
Elements that influenced the management approach	Position of the project for the client, mutual visits	Position of the project for the client, client guidelines and procedures	Day-to-day operations of the client
Beneficial personal attributes of the project managers per management area	- Communications: communication, interpersonal communication, awareness, developing relationships, making others feel comfortable, building trust, being client-oriented - Others: flexibility, adaptability, tolerance, emotional intelligence, diplomacy	- Communications: communication, communicating openly, documentation of communication, listening and adapting, building a relationship, coping with different people, understanding what's important to others - Others: staying calm and in control	 Communications: being informal, building trust, finding out what the other person is looking for or struggling with Stakeholder: balancing demands from different parties Others: being organised, being tolerant, being consistent, keeping a cool head
Management changes in retrospect	Being more confident	A more coordinated design and clear communication, more teambuilding activities	Getting to know the other teams better to create a common goal

Table 4.15. Cross-case analysis of management. Own table.

4.5.6 Effectiveness

The interviewees in the different cases shared the following information (see table 4.16 below) on the role of culture in an effective project management approach and what effective project management entails. The aspects that came forward on effective project management have been categorised under the management areas from the Project Management Institute (2016 and 2017). In all three cases, factors related to integration and communications management came forward. In cases A and C, quality, schedule and cost management came along, in cases B and C stakeholder management. In case C, scope management was also noted.

On the role of culture in an effective project management approach, the interviewees in case A found that understanding the national cultures of the project location and the client's home country was vital for the project and management. For case B, the client's organisational culture was more predominant, as their processes and requirements were strict. The case C interviewees noted that overall, there was little need for culture to be addressed in relation to effectiveness.

Aspect	Case A	Case B	Case C
Aspects of	- Integration: the	- Integration:	- Integration:
effective project	ability to see the	structuring your	following a proven,
management per	whole thing coming	work, facilitate	international project
management	together, getting	processes, looking	management
area	people to deliver	ahead to be able to	method, being a
	their responsibility in	steer the project	subject matter
	a coordinated way at		expert,
	the right time,	- Communications:	understanding client
	getting people to	clear	priorities
	follow a certain	communication,	
	process, moving and	documenting	- Communications:
	working together,	communication,	document controls,
	the structure of the	structuring	managing
	project team	communication,	expectations,
		establishing correct	managing people
	- Communications:	relationships with	
	communications	the project team	- Stakeholder:
			managing
	- Quality: delivering a	- Stakeholder:	stakeholders
	strategic advantage	establishing correct	
	to the project and	relationships with	- Quality: complying
	process, providing	stakeholders	to the mandatory
	project optimisation		requirements
	and guidance,		
	prioritising tasks		- Schedule: delivering
			the project on time
	- Schedule: project		
	planning, keeping		- Cost: delivering the
	an overview of the		project within
	project schedule		budget
	- Cost: keeping an		- Scope:
	overview of the		understanding the
	project budget		scope of the project
Role of culture	National culture essential	Client culture essential	Culture not essential

Table 4.16. Cross case analysis of effectiveness. Own table.

4.5.7 Culture

In the table below, aspects related to culture are summarised per case. In general, it stood out that none of the interviewees noted 'norms', 'artefacts' or 'physical elements' in their definitions of culture. This implicates that their understanding of the concept is less broad than the definitions found in literature. The comments on Hall and Jaggar's management elements (1997) are also summarised in table 4.17 below.

The client approaches to culture can be linked to the cultural approaches by Adler (1983, as cited in Hall & Jaggar, 1997). In case A, the client acknowledges, recognises and seeks to exploit cultural differences to create a better project result: a synergistic approach. The client in case B has internal standards and is not willing to deviate from these: an ethnocentric approach. In case C, cultural diversity is generally ignored, making the approach parochial.

Aspect	Case A	Case B	Case C
Definition of culture	Experiences and interactions, the common sense and common (social) behaviour, the livelihood and vibe of a location, the way people are used to living, behaviours developed or honed through heritage or social or political influence.	Upbringing, family and religion, the things you value most, your background, how you deal with things, change and different people, your experience, customs and how you do things.	Upbringing, what you have been taught, what you have been experiencing and what you believe in, the way of doing things and certain beliefs brought down through generations, individual behaviour.
Design approaches	The open-minded approach and mutual willingness to learn led to a tailor-made design that incorporated the local culture and client identity.	Client standards were at the forefront and deviating from them was not an option; the consultants had to adapt their way of working.	Cultural influence in the design heavily reduced by the use of benchmark office in Singapore, only minimal adaptations were made to this.
Professional standards and construction codes	Differences between Brazilian and American standards concerning electrical and IT design and installation, as well as the approach to disabilities had to be explained.	Getting contractors and sub-contractors to abide the high client health and safety requirements was challenging. At times, using local knowledge which may supersede internal client standards would have been beneficial.	Because of the Singaporean design, it was a matter of double- checking the compatibility of the Singaporean and Malaysian standards.

Expatriate personnel / foreign staff and operatives	There were communication lines in place with English-speaking local workforce to overcome the language barrier, but the client was also shown on site what the people were working on. The T&T team took on the role of guide and translator for this.	The client is mature; the team had to fit in. The client wished to incorporate typical Dutch elements in the signage and graphics layer of the design, but the signage and graphics party – recommended by the client representative – was Irish and thus did not have the required knowledge.	Getting health and safety requirements in writing was used to avoid miscommunication with expatriate personnel. Interviewee C2 stated cultural elements were never required to be managed or addressed, mainly due to the project team members' previous experiences.
Negotiations	The local team noted getting a decision from the client could take time because of the horizontal client organisation. The client found negotiations and decision-making were rushed at times, and more time to consider options was available and needed. Overall, knowledge of the local market was deemed essential.	The negotiations during the procurement phase were heavily influenced by the e-bidding process, which is highly uncommon within the Dutch building industry. Overall, negotiations took place in a collaborative environment.	During negotiations, the project managers double-checked the demands and ensured everyone understood the implications of the choices made. Staying within the budget was a major focus during negotiations with contractors.
Codes of conduct and ethical standards	The client team and T&T team both had several guidelines in place. The challenge lay mainly in getting the contractors to abide by these.	The strict procurement guidelines of the client needed to be followed, but other than that, there were no noticeable elements regarding this.	Many procedures were in place, but the control over how people on site are treated was limited. This applied to communication with the contractors and general safety on site.
Client approach	Synergistic	Ethnocentric	Parochial

Advantages (+) and disadvantages (-) of having a multicultural / international project team	+ Richness and diversity of input - Time zones, technical design	+ Connection to the client - Lack of appreciation of local methods	+ Accurate expert knowledge - Expenses, challenging to work on teambuilding
Dealing with obstacles	By using personal relationships and going above and beyond your role	By keeping short lines and being diplomatic	By sticking to your role and escalating the issue to someone with a higher rank
Importance of experience	Experience in a multicultural environment helps, but the extent to which an individual can leverage that experience is also dependent on a natural propensity toward tolerance, diplomacy and emotional intelligence.	Experience in a multicultural environment helps, but awareness and how you react to different cultures is also critical.	Experience in a multicultural environment helps, but awareness is also important.

Table 4.17. Cross-case analysis of culture. Own table.

When looking at the advantages and disadvantages of having a multicultural and international project team, different things came forward. In case A, the richness and diversity of input in the project was mentioned as being beneficial. The alignment of stakeholders was challenging due to the time zones, and the translation of the local technical design to meet the high client standards was noted as a disadvantage. For case B, the connection to the client in terms of language and similarity in the sense of a multicultural and international company orientation was beneficial. The lack of appreciation of local methods was – also because of the strict internal client guidelines and procedures – a disadvantage. For case C, having accurate expert knowledge was mentioned as an advantage: as people often work in different international projects at the same time, they remain up to date on the latest innovations. Getting people from abroad involved in the project was labelled as being more expensive than hiring local people, and team dispersion and the difference in backgrounds would make teambuilding more challenging.

In none of the cases, the interviewees mentioned deliberately using cultural aspects in their management approach when dealing with obstacles. However, there are three distinct ways of dealing with obstacles that were shared by the interviewees. In case A, making use of personal relationships to solve a problem and going above and beyond one's role was the preferred way.

In case B, the interviewees noted direct contact with the people on site and taking on a diplomatic role was a general way of dealing with obstacles. In case C, the interviewees stated that making sure everyone fulfils their own role was essential. Escalating the issue to someone higher in power or rank was also used to overcome obstacles.

In all three cases, the interviewees agreed that having experience in a multicultural environment helps to deal with cultures in international building projects. However, the interviewees also noted the importance of being aware and having the ability to adapt one's ways depending on the situation at hand.

Findings and validation

5 Findings and validation

In this chapter, findings will be drawn from the empirical research and the process of validation will be described.

5.1 Findings

In this section, findings on management, effectiveness and culture will be shared.

5.1.1 Management

Different aspects influenced the general management of the cases. For cases A and B, the position of the project for the client affected client availability and thus, the way of conveying information. For case B, the client guidelines and procedures were the main structuring elements in the management approach. In case C, the day-to-day client operations were not to be disturbed, which required adequate planning and move management. This finding was not initially discovered in literature, but came forward in the empirical research: the client has a major influence and – indirectly – determines the management approach that is taken by the project manager(s).

On their beneficial personal attributes, the interviewees brought forward a wide variety of elements categorised under communications management in all three cases. Other factors that were not directly related to a management area as defined by the Project Management Institute (2016 and 2017) were being organised, flexible, adaptable, tolerant, diplomatic, consistent, having emotional intelligence and staying calm and in control. Looking back on the project, changes in retrospect for cases B and C had to do with team building activities, creating a common goal and getting to know each other. In case A, being more confident about the proposals of the project management team was noted as a change that would have been made in retrospect.

5.1.2 Effectiveness

The views on the role of culture in an effective management approach varied per case. In case A, culture on the national level was of importance, in case B the client culture was determining and in case C culture was hardly addressed.

For effective management, elements related to integration and communication management were noted as essential in all cases. On integration, the structure of the project team and the project method were central, as well as the ability to look ahead to steer and coordinate where necessary. On communication, being clear, documenting both verbal and written communication, managing expectations and establishing relationships came forward. In cases A and C, quality, schedule and cost management came along, in cases B and C stakeholder management. In case C, scope management was also noted.

The management areas of resource, risk, procurement, HSSE and financial project management did not come forward in the elements the interviewees noted as being essential for effective project management. That there are more important and less important management areas related to effective project management was not initially discovered in literature.

In all three cases, the interviewees agreed that having experience in a multicultural environment helps to deal with cultures in international building projects. However, the interviewees also noted the importance of being aware and having the ability to adapt one's ways depending on the situation at hand. This is an additional finding, as it was not found in the literature review and thus not included in the conceptual framework.

5.1.3 Culture

The interviewees mentioned 'experiences' and 'behaviour' as elements of the definition of culture in all cases. In case A, 'the common sense' and 'the livelihood of a location' were noted, in case B, 'customs and values' and 'religion' were raised, in case C 'beliefs'. The factors related to Hall and Jaggar's management elements (1997) that were noted in each of the cases have been summarised in the table below.

	Case A	Case B	Case C
Design approaches	An open mind and willingness to learn	Client standards leading	Copy-paste of Singapore office
Professional standards and construction codes	Explanations on local electrical, IT and design for disabilities	Challenging client health and safety requirements	Double-checking compatibility of Singaporean and Malaysian standards
Expatriate personnel / foreign staff and operatives	Language barrier	Lack of required local knowledge	Avoiding risks through contracts
Negotiations	Horizontal client organisation, need for local knowledge	E-bidding process, overall collaborative environment	Understanding of choice implications, staying within budget
Codes of conduct and ethical standards	Several guidelines in place, challenge in getting contractors to abide	Strict procurement guidelines by client	Many standards, limited control over site conditions

Table 5.01. Summary of cross-case analysis of cultural elements by Hall and Jaggar. Own table.

In case A, the design approaches of the consultants involved from various countries did not always align. More extensive coordination was required to make sure the client's expectations and standards were met. In case B, the design process suffered from cultural miscommunications and differing expectations, procedures and guidelines. In case C, the limited informal contact between the client and consultants led to a more transactional relationship. In all cases, there were difficulties in managing the supply chain: the behaviour on site was not always conform client and Turner & Townsend standards. The different expectations, procedures and guidelines led to obstacles here.

The general approaches towards culture also differed:

- Case A: the client team and Turner & Townsend team were keen on learning about each other's ways of working; it was an overall synergistic approach.
- Case B: the client had extensive internal guidelines and procedures from which could not be deviated, which led to a predominantly ethnocentric approach.
- Case C: in this case, culture was hardly addressed according to the interviewees; a parochial approach.

On the advantages of having a multicultural and international project team, different aspects came forward in each case. In case A, the richness and diversity of input in the project was mentioned as being beneficial. The alignment of stakeholders was challenging due to the time zones, and the translation of the local technical design to meet the high client standards was noted as a disadvantage. For case B, the connection to the client in terms of language and similarity in the sense of both companies being multicultural and international was helpful. The lack of appreciation of local methods was – also because of the strict internal client guidelines and procedures – a disadvantage. For case C, having accurate expert knowledge was mentioned as an advantage: as people often work in different international projects at the same time, they remain up to date on the latest innovations. Getting people from abroad involved in the project was labelled as being more expensive than hiring local people, and the team dispersion and difference in backgrounds would make teambuilding more challenging.

In none of the cases, the interviewees mentioned deliberately using cultural aspects in their management approach when dealing with obstacles. Coping with obstacles was done differently across cases. In Brazil by using personal relationships and going above and beyond your role, in the Netherlands by staying in close contact with all parties and being diplomatic and in Malaysia by sticking to your role and escalating the issue to someone higher in power or rank.

5.1.4 Possible explanations

The above findings may be explained by a variety of factors. The need for adequate communication came forward clearly in all cases. Within this management area, interviewees from cases A and B noted the importance of developing relationships. In case C, this was not noted, and this may be explained by the strict division that was made between the client and the consultants: there was no informal interaction. This can be explained by the large power distance in the Malaysian culture (Hofstede et al., 2010).

There is a number of elements on which the cases can be positioned in a similar way that explains several factors. The interviewees from case A were less strict on the rules, more informal, valued going above and beyond one's role and being more open. The interpersonal relationships were flexible and people at times took on roles that were not originally theirs. The interviewees in case C on the other hand showed a preference for adhering to the rules, being more formal, sticking to one's role and being more reserved. In this case a vertical hierarchy was described, which was expressed through stern and task-oriented management on site. Case B can be positioned in between these two: equality and relationships with other parties and people in a horizontal way (so without taking one's position or status into consideration) was very important. However, the entirety was described in as being more diplomatic than in case A. This can be explained well by the cultural categorisation of these countries by Lewis (2006): the findings from Brazil, the Netherlands and Malaysia show large similarities with their respectively multi-active, linear-active and reactive categorisation.

5.2 Validation

In this section, the organisation and outcomes of the expert panel will be addressed (see also appendix G). The panel consisted of five Turner & Townsend professionals working in the building industry with experience in working on international building projects. The panellists were first given a general introduction into the research through a concise presentation. After this introduction, statements – based on the findings in literature and empirical research—were presented to the panel. Per statement, the panellists first voted, and after that, an open discussion was facilitated. The input of the panel is used to validate the findings and to develop recommendations for practice. The statements and an overview of the discussions can be found below. Note: expert 5 could not attend the debate on the final statement, the view was obtained later through personal communication.

5.2.1 Statement I: Culture and cultural differences should be an explicit subject during project start-up meetings

The experts all agreed with the above statement. They noted that culture and cultural differences occur on many different levels, and one would not need to go to a faraway country to experience cultural differences. Expert 3 noted that growing up in South Africa, cultural elements – differences or the subject in general – were not discussed at all and said the following about this:

"I also think it is very sensitive and you have to really think carefully about how you would act. [...] Because it can be awkward."

Expert 2 shared that addressing cultural differences would be useful, but they should not become an excuse for people to react in a certain way. Expert 5 shared that the approaches to culture as defined by Adler (1983, as cited in Hall & Jaggar, 1997) and Mäkilouko (2004) were very recognisable and could be seen as a journey of maturing when it comes to dealing with culture and cultural differences. Being aware, appreciating people have different backgrounds and making an effort to understand those were generally noted as important aspects. It was also mentioned that paying attention to the subject of culture and cultural differences at the project start would not solve the issue. The panellists agreed that paying continuous attention and setting up a framework to manage culture throughout the project life cycle would be necessary.

5.2.2 Statement II: General expectations, procedures and guidelines of both the client and the local workforces need to be aligned, the process in which this should take place needs to be facilitated by the project management team

All panellists agreed with the statement and noted this is virtually true for all sorts of projects. Expert 4 brought up the aspect of safety, which is an explicit subject that people from different cultures often view differently. Expert 5 raised the topic of general awareness: if you are not aware of the fact that people have different expectations and different ways of working, you cannot possibly understand them. Again, the alignment of general expectations, procedures and guidelines is something that has to happen throughout the project.

Expert 5 made a distinction between procedures and guidelines that may be written down and more formal, and the more implicit expectations when working together:

"There are the hardwired procedures that might be in the project, but there are also the softer, sort of behavioural way of doing business stuff that needs to be tackled as well.

So you need both."

Expert 2 noted that a challenge here would be that clients are not always aware of their standards and guidelines until something is delivered that does not match the implicit expectations they have. Thus, the project team facilitating the discussion would be useful, but the client must be made aware of the impact their internal ways of working may have on the project at hand.

5.2.3 Statement III: Framing the project with a clear start-up and finalisation meeting and organising teambuilding activities is beneficial for the effectivity of the project

Expert 3 noted immediately that the start-up meetings, teambuilding activities and finalisation meetings are wonderful and important parts of working on projects. However, the pandemic plays a significant role in how these events can be organised at the moment. Expert 5 stated that it is unlikely for international project teams to come back together after a project has been completed for a meeting on the lessons learnt or to gather feedback from each other. That would be a challenging aspect to integrate into international team environments. Expert 3 compared the project start-up meeting with a honeymoon and the project finalisation meeting with a divorce:

"So the thing is, it's the bridge between those two that stops it [the finalisation meeting] being the divorce meeting. So yes, I totally back everyone's comments.

Communication is big."

The experts noted that besides having specific meetings and events, the day-to-day contact is vital for good collaboration. In international project teams, and also in local projects, it is essential to make sure everyone tries to connect as properly and accurately as possible, for example by turning on one's camera during online meetings. The shared experiences and taking time to celebrate the work that has been put in is beneficial for the development of the interpersonal relationships, but also for general awareness of other disciplines or aspects of the project. In that way, people know what is going on better and can help each other out wherever necessary. Experts 2 and 5 also noted teambuilding activities help avoid the development of transactional relationships, in which people would overall be more defensive, and trust would be lacking. Relationships becoming transactional is more likely to happen when these team building activities are not built into the project, according to the experts.

Expert 5 stated that to keep the subject on the top of everyone's mind, continuous monitoring and efforts are necessary: culture needs leadership and that may require specific training. Expert 1 added to this that because of the pressure in terms of time – which comes forward in every project – getting to know each other on a personal level is very important:

"If that's not being governed at the highest level to make sure that that it's on the agenda, you will lose it [awareness] fairly quickly."

A specific challenge that comes with working in international teams was noted by expert 2. In local projects, one would ask around to learn about the other parties and people involved in the project before actually working together. In international projects, it is far less likely for people to know each other from previous collaborations already, and the chance of working together in the future is also smaller. That may influence the starting point of the relationship and how people view working on building this relationship throughout the project.

5.2.4 Statement IV: Communications management is the most important element of effective management of culture in international building projects

The experts all agreed with this statement. Expert 4 noted the following on the relationship between communications management and other project aspects:

"Clearly, if you can't communicate effectively on a project between different cultures then the project is always going to be susceptible to failure, whether this is safety, quality, time, whatever, it's all dependent on clear, effective communication."

Expert 3 stated that people should feel free to share whatever information they feel they need to share without thinking about it twice. This sharing would require a safe project environment. Expert 2 noted that the different ways in which project team members communicate – through written documents, drawings or virtual 3D models – can be the cause of misunderstandings. Aligning the different ways of communicating and structuring the process in which various pieces of the design have to be integrated were noted as important. In addition, asking clarification on specific terms that one may not be familiar with is necessary to avoid miscommunication. Expert 5 noted that though communications management is very important, the project team members have to be open-minded enough to truly understand whatever is communicated. To achieve this, it may be necessary to organise workshops or training sessions to show less experienced project team members that things can be done differently and there is no best way of doing things.

5.2.5 Summary validation

In this section, the findings and validation process will be summarised. Overall, the experts agreed with all four statements and gave a wide variety of examples from their experience that supported them. For the first statement – Culture and cultural differences should be an explicit subject during project start-up meetings – the most important note was that this has to be done very carefully as it is not common in all cultures to discuss culture and cultural differences openly. Everyone should be made aware of the subject, and it should be a continuous topic throughout the project life cycle.

On statement II – General expectations, procedures and guidelines of both the client and the local workforces need to be aligned, the process in which this should take place needs to be facilitated by the project management team – the experts noted a difference between procedures and guidelines which may be explicit and general expectations which may be implicit. Also, not all parties being fully aware of their own expectations, procedures and guidelines would pose a risk for the alignment of these between parties.

Around statement III – Framing the project with a clear start-up and finalisation meeting and organising teambuilding activities is beneficial for the effectivity of the project – the broadest discussion came forward. Overall, the massive importance of day-to-day and face-to-face contact was noted by the experts. The dispersity of project team members is challenging, as one does not know who they will be collaborating with – as opposed to when one works in a local project with parties and people they have worked with previously. The dispersity also forms a challenge in the organisation of finalisation meetings, as it is unlikely for an international team to come back together after the project has been finished. Overall, to avoid the 'divorce' feeling during a finalisation meeting, the experts noted the importance of continuous monitoring and efforts to build (personal) relationships and keep them stable.

Statement IV – Communications management is the most important element of effective management of culture in international building projects – was another statement the experts agreed upon quickly. As communication has a direct influence on other project aspects such as safety and quality, it is vital in international projects. Aligning how communication takes place, creating a safe environment in which open communication is possible and making sure people understand whatever is communicated, are boundary conditions for effective communication.

Discussion and limitations

6 Discussion and limitations

In this chapter, the findings of the research will be interpreted and linked to literature, and the limitations of the research will be addressed.

6.1 Discussion

In the conceptual framework, five theories came forward. In the section below, the findings from the empirical research will be assessed per theory.

6.1.1 The cultural dimensions by Hofstede

Overall, the cases aligned with the power distance as illustrated by Hofstede (2010). In case A, the relatively strong power distance mostly came forward through the workforce: they were unsure if they were allowed to speak to the client when client representatives came to site. Also, the Brazilian team found the horizontal client organisation challenging in terms of getting decisions, which may be explained by their own stronger power distance. In cases B and C, the power distance became clear through how obstacles were dealt with. In case B, in a country with a relatively small power distance, staying in close contact with all people connected to the project was the primary way of avoiding and overcoming obstacles. In case C – a country with a large power distance – obstacles were solved by escalating them to someone higher in rank. In case C, the way in which the workers were managed by the site manager further illustrates the strong power distance.

- In case A, the collectivistic nature came forward most clearly through the efforts that were made by all project team members to solve issues: people went above and beyond their role to get the project to be successful. In case B, there were no clear indicators that illustrated the individualistic culture. The collectivism in case C was not necessarily related to the project organisation, but to everyone's home organisations: the client did not 'entertain' the contractor or consultants outside the meeting room.
- In cases A and C, there were no apparent factors that indicated alignment with feminity or masculinity. The strongly feminine culture of case B did not come forward necessarily in the project. Still, the importance of a healthy work-life balance was noted by interviewee B3, who is an Australian working in the Netherlands.
- The uncertainty avoidance corresponds the least well to the empirical findings. In case A, interviewee A4 shared the concept of "o jeito Brasileiro" which supports the statement that the law and regulations are not necessarily respected or obeyed (Hofstede, 2010). In cases B and C, the uncertainty avoidance was very strong: risks were avoided by requesting various documents and certifications from the contractors and further supply chain. This may be explained by the general risky nature of projects (see section 3.2.1) and thus the strong uncertainty avoidance in building project management practice.

6.1.2 The cultural categories by Lewis

The cultural categories by Lewis were used as a criterion in the case selection, and the interviewees were asked to fill out the survey to determine their alignment to each category. In the table below, the results are summarised:

Interviewee	Nationality and corresponding cultural category		Predominant cultural category based on the survey
A1	Brazilian	MA	LA
A2	Brazilian	MA	R
A3	American	LA	R
A4	British	LA	LA & R
B1	Dutch	LA	R
B2	Dutch	LA	R
В3	Australian	LA	R
B4	Dutch	LA	R
C1	Malaysian	R	R
C2	Malaysian	R	R
C3	Malaysian	R	R

Table 6.01. Comparison of expected and realised alignment with Lewis's cultural categorisation. Own table.

The above shows that the results of the surveys of the interviewees in case A and B do not match what would be expected based on their nationality. This discrepancy could have several explanations, as the cultural categories are based on the average common behaviour within a country it could be a coincidence. However, it is interesting that almost all interviewees show a predominant alignment with the reactive culture, even though this is – based on literature – only expected for the interviewees in case C. It could be that the answer options in the survey that correspond to the reactive culture are exceptionally accurate for the building industry in general. The number of interviewees is not nearly enough to draw valid conclusions regarding these possible explanations.

6.1.3 The management areas by the Project Management Institute

In the literature review, the management areas were linked to the management elements by Hall and Jaggar (1997) to determine which areas would be of the greatest importance for international building projects. Based on this linking, the areas of integration, schedule, cost, risk, stakeholder and financial management were not expected to be of the greatest importance. In the empirical research, however, the management areas of resource, risk, procurement, HSSE and financial management did not come forward in the elements the interviewees noted as being important for effective project management in the building industry. This may be explained by the fact that the interview question was open and the management areas were not given as possible answers. It may also be because of the general nature of the question and thus of the answers.

Aspects related to communication management came forward most clearly. It may be that the interviewees see the other management areas as – in various degrees - dependent on communication management as poor or ineffective communication impacts other project areas like integration, schedule, cost, risk and stakeholder management. As noted in section 3.3.3, raising awareness of cultural differences and choosing a multifaceted communication approach is likely to be most effective in international projects. In the cases, communicating face to face, adjusting one's way based on the client's needs and ensuring development of a working relationship through transparency were important factors. Throughout the research, all management areas except for project financial management have been addressed.

6.1.4 The management elements by Hall & Jaggar

The six management elements by Hall and Jaggar (1997) were condensed to five after the test interviews were conducted (see section 4.1.3). Throughout the empirical research, the elements proved to indeed be of importance in international building projects: nearly all interviewees could provide examples from practice or acknowledged they recognised facets of the elements. In cases A and B, some interviewees had not been part of negotiations, which made commenting on this element difficult. In case C, the influence of culture overall was said to be minimal. Still, based on the responses and comments made about how the site manager operated, it seems this was very much related to culture. In the cases, there were no explicit examples of corruption and bribery. This may be explained by the fact that Hall and Jaggar's theory dates back to 1997 and since then, the building industry has evolved. It may also be explained by the fact that the cases were all managed by Turner & Townsend and commissioned by large international technology companies. Turner & Townsend and the client organisations involved had strict procedures are in place to avoid any unlawful practices.

6.1.5 The management approaches to culture by Adler and Mäkilouko

The management approaches were very useful in framing the responses of the interviewees. In case A, the contingency theory as described by Bruil & Heurkens was prevalent (2012). This starting point and the mutual willingness to learn led to an overall synergistic approach to culture. In case B, the client guidelines and procedures were not to be deviated from, which led to an overall ethnocentric approach to culture. In case C, culture in general was not acknowledged as an influential factor for the project management or effectiveness thereof. The parochial approach – in which culture indeed is not addressed at all – was applied here.

It became clear through the interviews that in none of the cases, the project managers actively chose an approach regarding culture. In addition, there was no active application of cultural knowledge in the resolving of issues and overcoming of obstacles. These particular elements seem to support Adler's theory in which the parochial approach is indeed most common in practice.

6.2 Limitations

Several limitations apply to the research and the reliability, validity and transferability of the findings. These will be assessed in this section. Firstly, the countries in which the cases are located do not match the literature perfectly. The aim was to get the full spectrum of cultures into view by researching cases in the most multi-active, linear-active and reactive countries. But in this thesis, two out of three cases are not located in a country that is respectively the most linear-active or reactive in Lewis's model (2006). The transferability of the project results may be impacted by this, as the linear-active – reactive axis is left unexplored (see figure 6.01 below). In addition to this, the design of the Malaysian office was not designed especially for this project, it was a copy-paste from a previously developed design. This leads to a gap in information on the design process which should be taken into account as this aspect of the case may not be as representative of the cultural approach to design in Malaysia.

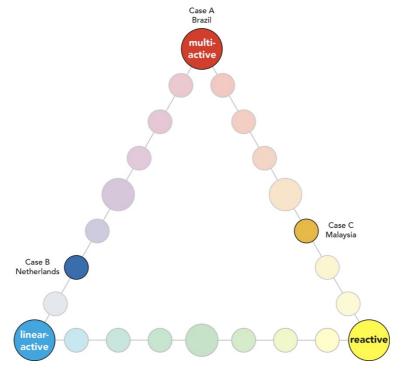


Figure 6.01. The cases displayed on the Cultural Types Model. Adapted from R. D. Lewis (2006, p. 42).

Secondly, a language barrier became apparent during the interviews: English was a second language for most interviewees. This did not necessarily lead to misunderstandings; interviewees were not hesitant in asking for clarifications when the question was unclear. However, there is a risk of the interviewee not grasping the question exactly due to the language.

Thirdly, there is a limited number of cases involved in this research. In general, research concerning culture is usually done quantitatively and on a much larger scale. Due to the many differences between cultures that may seem subtle at first, gaining more data could be beneficial. The limited number of cases, and thus of data means the outcomes of this research can not automatically be applied to other cases. However, the analytic generalisations may well be applicable to other cases.

In addition, the qualitative information gives an in-depth overview of the projects and can be used to make statements on the theoretical concept of managing cultural differences in international building projects.

Fourthly, for this research project managers were interviewed. To ensure sufficient validation, the aim was to interview an equal amount of people from the Turner & Townsend team and the client organisation per case. However, this proved to be a challenge from a practical point of view. In the cases, a team of T&T project managers with different levels of seniority were involved, as opposed to one project manager from the client-side. In case B, it was not possible to interview the client because of legal considerations. To make sure one other view in addition to the perspective of the Turner & Townsend interviewees was included, the account manager from the general contactor was interviewed instead. For all three cases, there were many more parties involved in the projects. These perspectives are missing from the analysis and thus influence the validity.

Finally, the validation process took place through an expert panel meeting. The panel consisted of five Turner & Townsend experts. They were not involved in the cases, but their organisational culture is the same as that of the Turner & Townsend case interviewees. This limits the generalisability of the validation, as experts from other companies or institutions may have different perspectives on the validation statements.

Conclusion and recommendations

7 Conclusion and recommendations

In this chapter, conclusions will be drawn and the research questions will be answered. After that, recommendations for practice (including a management advice) and recommendations for research follow.

7.1 Conclusion

In the previous chapters, the theoretical and empirical parts of the research have been described. In this section, the findings are used to answer the sub-questions and the main research question.

1. What does culture in the building industry entail and what are determining factors that characterise culture in the building industry?

To be able to answer this question, it is first essential to understand how one can view culture in general. Many social and mainly quantitative kinds of research have been carried out regarding this subject. The concept of culture has evolved dramatically over time, and has been viewed from various disciplines. In 1984, Hofstede (p. 21) provided a generally acknowledged definition of culture: "the collective programming of the mind that distinguishes the members of one human group from another." Different levels of culture can be established. The majority of authors agree on a division between national or regional, organisational and professional or role-specific cultures. Culture is intangible and embedded most deeply in people's values. Various authors have aimed to categorise cultures and make them comparable. This categorisation has been done mainly in the form of cultural dimensions, which can be described as scales on which cultures can be placed to indicate if they lean towards aspect A or aspect B of the dimension.

Culture in the building industry entails the way of working, the skills of the people involved in each project and their home organisations (Abeysekera, 2002). When taking the level of organisational culture in the construction industry, sub-cultures are likely to be related to the organisation of one's firm, one's profession and occupation (Kumaraswamy et al., 2002).

The overall fragmentation of the building industry in various countries is expressed through many small and medium-sized privately-owned companies and few large-sized companies. This distinction also determines and upholds the hierarchy: small companies often act as subcontractors to larger companies (Ball, 2014; Ankrah, Proverbs, Antwi & Debrah, 2005; Winch, 2010; Dainty, 2007, Robert, Moulet, Lizarralde, Davidson, Nie, & da Sylva, 2006).

Root (2002) states that because of the conservative nature of the construction industry – which is described in various pieces of research (Barthorpe, 2002; Serpell & Rodriguez, 2002; Hirota, Powel & Formoso, 2002; Grisham, 2006) – the culture within the industry is unlikely to undergo any significant changes in a short period.

The characteristics of the construction industry in general have been described by Ashworth and Harvey (1997). In general, the following factors characterise culture in the building industry:

- The products produced are physically large and expensive;
- The product is delivered to a client who has a significant influence on the project;
- The industry has several aspects that require extensive specialisation;
- The designs are unique and made to measure;
- The process involves large risks and high uncertainty.

2. What are the most common methods, guides and standards that are employed to manage international building projects?

Managing building projects is difficult, managing international building projects is even more complex and doing so effectively can be a significant challenge. There are various institutions with a global reach that aim to provide project managers with knowledge and methods to shape the management of international projects.

PRINCE-2 (Projects in Controlled Environments, version 2) and PMBOK (Project Management Body Of Knowledge) are two project management methods that are acknowledged as globally leading in various industries (Chin & Spowage, 2010; Hodgson, 2006; Karaman & Kurt, 2015; Matos & Lopes, 2013; Morris et al., 2012; Reich & Wee, 2006; Santos & Cabral, 2008; Singh & Lano, 2014; Söderlund, 2004; Zwikael, 2009). The two have been compared by many different authors (Siegelaub, 2004; Rehman & Hussain, 2007; Chin and Spowage, 2012; Singh & Lano, 2014; Waheed, 2014). As PMBOK is overall more comprehensive and covers the subject of interpersonal skills – which is of importance for this thesis – this is the management guide that is used as a basis for this thesis (Karaman & Kurt, 2015; Matos & Lopes, 2013; Waheed, 2014).

The PMBOK is not a methodology on its own, but a guide that can be used as a basis to develop a methodology (Project Management Institute, 2017). The guide is based on ten knowledge areas, five process groups and four project phases. The knowledge areas are topics on which project management knowledge is based: integration management, scope management, schedule management, cost management, quality management, resource management, communications management, risk management, procurement management and stakeholder management. In their "Construction Extension to the PMBOK Guide", the Project Management Institute (2016) adds two more management areas that are explicitly important for projects in the construction sector, namely project health, safety, security, and environment (HSSE) management and project financial management.

Cross-cultural competence of a project manager working on international projects is crucial (Chan & Tse, 2003). Many studies have shown that in different cultures, different management beliefs and practices exist (Chen & Partington, 2004).

Even though the methods and application of management practices may differ across cultures, several authors address personal attributes that may be beneficial across cultures in developing and maintaining an effective approach to manage cultural differences (Chevrier, 2003; Den Hartog et al., 1999; Robie et al., 2001; Selmer, 2002; Turner, 1999, as cited in Turner & Müller, 2005).

3. Which management areas are applicable to and important for international building projects?

Cultural differences in international building projects come forward through several aspects, which can be categorised using Hall and Jaggar's management elements (1997). The management elements are embedded in the management areas by the Project Management Institute as shown in figure 7.01 below (2016 and 2017, see also appendix A). The first two management elements have been merged based on the empirical research (see section 4.1.3).

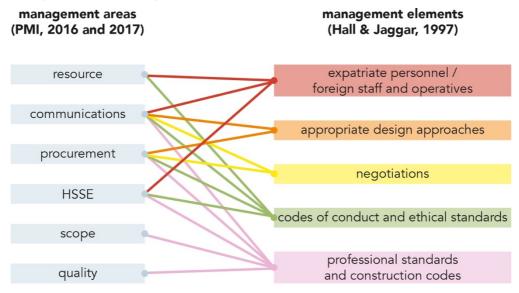


Figure 7.01. The management areas by the Project Management Institute and the management elements by Hall & Jaggar combined. Own illustration.

1. Expatriate personnel / foreign staff and operatives Embedded in the resource, communications and procurement management areas Hall and Jaggar note that expatriate personnel as well as foreign staff and operatives have to adapt to new cultural influences when working together (1997). Clear communication regarding expectations, quality standards and the general way of working is vital. In the empirical research, aspects such as a language barrier between local workforces and the client, a lack of required local knowledge by the expatriate personnel and contractually trying to avoid risks in working with foreign parties came forward.

2. Appropriate design approaches

Embedded in the communications and procurement management areas

Design elements such as dimensions and materials are culture-bound, designers need to be very aware of the cultural differences when proposing a design (Baden-Powell, 1993 as cited in Hall & Jaggar, 1997). In the empirical research, different factors proved to be of influence in the design approaches. Open-mindedness and a willingness to learn from each other proved to be beneficial for the collaboration on this. Internal client standards and regulations turned out to be a massive influential factor for the process and general design approach.

3. Negotiations

Embedded in the communications and procurement management areas
Several authors note that culture has a significant influence on how negotiations are approached and executed. The process in terms of time, emphasis on topics and the number of people involved can vary enormously between cultures. In the cases that were studied, it was noted that having local knowledge on negotiations is very beneficial. The client organisation – in terms of decision-making, procurement processes and focus points throughout the project (such as time and money) – is of vital importance for negotiations.

4. Codes of conduct and ethical standards

Embedded in the resource, communications, procurement and HSSE management areas

Hall and Jaggar state that bribery and corruption are themes that come forward often in international building projects and moral and ethical dilemmas come along with this (1997). In the cases of the empirical research, strict guidelines and standards were applied to avoid such situations. However, it was also noted that staying in control and getting all parties within the supply chain to abide by the rules and regulations in place was challenging.

5. Professional standards and construction codes

Embedded in the resource, communications, procurement, HSSE, scope and quality management areas

On professional standards and construction codes, Hall and Jaggar note that local laws may not provide sufficient guidance to work and may be ambiguous (1997). Therefore, several standards can be used simultaneously. In the case studies, the differences between local laws and regulations and the laws and regulations posed by the client proved to be a challenge. Health and safety requirements, as well as design requirements regarding electrical and IT installations and approaches to disabilities came forward in the empirical research.

It also became clear that there are four general (management) approaches to culture in international building projects: parochial, ethnocentric, synergistic and polycentric (Adler, 1983, as cited in Hall & Jaggar, 1997; Mäkilouko, 2004). Based on the literature, it seems that approaches in which culture is actively addressed and an effort is made to assess the differences and manage them are indeed rarely applied in practice.

4. Which management areas and elements play the most important role on the effectiveness of managing cultural differences in international building projects?

At the beginning of this thesis, the following definition for "effective project management" was posed: project management that is successful in achieving the desired objectives and overcoming obstacles. In literature, the following aspects came forward:

- How someone defines effectiveness depends on one's perspective and role (Heurkens, 2012);
- Several authors researched personal attributes or traits that would make a project manager more or less effective in general and in international building projects (Chevrier, 2003; Den Hartog et al., 1999; Robie et al., 2001; Turner, 1999, as cited in Turner & Müller, 2005).

In the empirical research, the interviewees were asked to define effective project management and were asked to describe which personal attributes or traits had been beneficial for their management of the project. The aspects that were mentioned by the interviewees have been categorised under the Project Management Institute's management areas (2016 and 2017). The results per question and case have been summarised in figure 7.02 below.

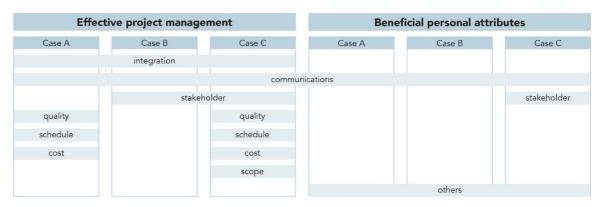


Figure 7.02. Management areas noted related to effective project management and beneficial personal attributes. Own illustration.

What stands out is the communications management area, of which elements were noted in all cases and for both questions. Another interesting aspect is that the interviewees stated that for effective project management, factors related to integration management – such as getting people to deliver their responsibility in a coordinated way at the right time and following a proven, international project management method – are of importance.

In addition to the beneficial personal attributes related to communication, the interviewees also noted multiple factors that were not directly related to any management area as defined by the Project Management Institute. Among these were being flexible, being tolerant and staying in control.

As visualised in the figure below, the communications management area is the only area to which all management elements are connected. Based on this, it can be concluded that for effective management of cultural differences in international building project management, the management area of communications management plays the most critical role. The management elements by Hall and Jaggar can be seen as equally important.

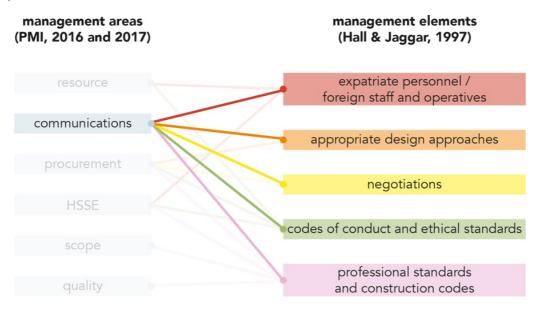


Figure 7.03. The management areas by the Project Management Institute and the management elements by Hall & Jaggar combined. Own illustration.

The main research question for this thesis is formulated as follows: "How can cultural differences be managed most effectively within the management areas of international building projects?" Based on the answers to the sub-questions above, this question can now be answered. Cultural differences can be managed most effectively in international building projects by taking into account the following aspects (categorised by management element):

1. Expatriate personnel / foreign staff and operatives Embedded in the resource, communications and procurement management areas Framing the project with a clear start-up meeting, finalisation meeting and organising teambuilding activities is beneficial for the effectivity of the project management. This is likely to improve the relationships between team members and may decrease the chances of transactional relationships. Ideally, there would be a balance between a focus on relationships and a focus on tasks within the team (Mäkilouko, 2004).

During the project start-up meeting, culture and cultural differences should be an explicit subject. As awareness of cultural differences is the first step to moving towards a more synergistic or polycentric approach to culture, creating a moment to address culture and cultural differences that are present in the project team (both on national and organisational level) is vital. Addressing the subject has to be done very carefully as it is not common in all cultures to discuss culture and cultural differences openly. However, all project team members should be made aware of the subject, and it should be a continuous topic throughout the project life cycle.

2. Appropriate design approaches

Embedded in the communications and procurement management areas

Regarding the design approaches, an open-minded position from the client and consultant(s) is beneficial to come to the most optimal design solutions for the project. General expectations, procedures and guidelines of both the client and the local workforces need to be aligned, the process in which this should take place needs to be facilitated by the project management team. Important here is that before the expectations, procedures and guidelines can be aligned, the organisations that apply them have to be aware of them. Therefore, it would be beneficial to ask each party to express their procedures and guidelines with regards to the project (these are likely to be explicit) and to share their general expectations (which can be implicit).

3. Negotiations

Embedded in the communications and procurement management areas

For negotiations with parties in the local culture, the recommendation is for the client to make use of the project manager's knowledge of common procedures and ways of doing business locally. In addition to this, it is essential for the project management team to understand the priorities and focus points of the client. This also relates to the expectations, guidelines and procedures as mentioned above.

4. Codes of conduct and ethical standards

Embedded in the resource, communications, procurement and HSSE management areas Regarding codes of conduct and ethical standards, the recommendation is to again raise awareness on different expectations, guidelines and procedures of each party. Getting the supply chain to abide by the expectations, guidelines and procedures that have been agreed upon can be challenging. Therefore, it is essential that all parties are aware of the cultural differences regarding this subject, as described for the management element of expatriate personnel / foreign staff and operatives.

5. Professional standards and construction codes

Embedded in the resource, communications, procurement, HSSE, scope and quality management areas

Similar to the design approaches, on professional standards and construction codes, general expectations, procedures and guidelines of both the client and the local workforces need to be aligned, the process in which this should take place needs to be facilitated by the project management team. In addition, health and safety standards vary strongly across cultures, making the differences explicit. Communicating openly about these with the local workforce is vital to overcome obstacles.

Explicit attention should be payed to communications management, as this is the most important area of effective management of culture in international building projects. Aligning the different ways of communicating and structuring the process in which various pieces of the design have to be integrated is crucial. Also, it is of the essence to get acquainted on a more personal level to develop relationships and trust. This is an activity that requires continuous attention and efforts.

The project manager should take a leading position in this process of structuring communications and should raise awareness of the importance of the topic.

The above conclusion of this thesis can summarised as follows: culture should be actively addressed throughout the project and this is best done in the management area of communications management. Specific actions can be taken to manage cultural differences more effectively, such as addressing the subject during project start-up meetings, making one's own general expectations, procedures and guidelines explicit and organising team building activities to help project team members keep an open-mind and gain understanding of their own cultural bias and that of others. In figure 7.04 below, this conclusion is visualised.

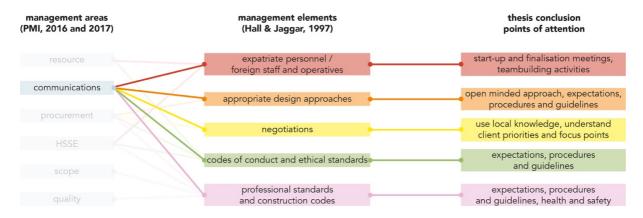


Figure 7.04. Thesis conclusion summarised. Own illustration.

7.2 Recommendations for practice

In this section, recommendations for practice will be given. These recommendations are based on the theoretical and empirical research. They provide a basis and suggestions for implementation of the findings.

1. Implement culture into the project management approach
Raising awareness is the first step to improving the effectiveness of managing cultural
differences. By implementing culture in the general management approach, more overall
attention is given to the subject. Culture has many facets and levels: it is an element that
all project managers deal with on a daily basis. Continuous attention to the subject is
necessary for improvement.

2. Assess one's own cultural position

The research showed the interviewees had not thought about how culture can be defined and what it entails. The recommendation is thus to pay explicit attention to one's own cultural position. By making guidelines, procedures and expectations explicit, one will understand one's own position and that of the organisation better. Generating this knowledge can aid in positioning oneself in relation to other parties or people. By reflecting on what one's culture or cultural profile looks like, over time one can develop a way in which one can adapt to the other person's way of doing business and through that create strong relationships.

3. Develop a training programme for project managers

The research showed that project managers with more experience in managing cultural differences and exposure to different cultures were expected to be more effective. As experience and exposure take time, a training programme may speed up the process of becoming more effective. In the training programme, it would firstly be important to focus specifically on the different ways in which culture can be approached and how this often is done unconsciously. Secondly, by showing different approaches to dealing with design approaches, professional standards and construction codes, expatriate personnel / foreign staff and operatives, negotiations and codes of conduct and ethical standards, project managers will be aided in working towards an ethnocentric approach of managing culture. Thirdly, there should be a focus on taking a leading role in addressing culture and actively paying attention to the subject throughout the project life cycle. Fourthly, the training can illustrate how cultural differences can be overcome through team building activities and the importance of evaluating how culture was managed during the project.

7.3 Management advice

In this section, management advice is given to implement the first two recommendations from section 7.2. Three sequential steps should be taken:

1. Address the subject and make the intangible tangible

Culture is a management aspect that will cause problems if left neglected. Culture is by definition intangible and it is difficult to measure. This directly influences the amount of time and attention that is devoted to it in project management. Factors such as time and money are tangible and measurable, so it is evident that a project manager should manage these subjects. In practice, a similar need for the management of culture is not established yet. However, to ensure the aspect is a beneficial factor that elevates the project, it has to be managed effectively. The first step is thus to explicitly address the subject. This is especially important during a project start up meeting. By putting culture on the agenda and allocating time to discuss it, initial awareness is created.

2. Understand the impact and create a cultural fabric

The next step is to start understanding what culture entails, what it means to the project team members and what the impact of cultural differences can be. Being open minded and transparent here is vital: the notion that there are different ways to manage a project and there is no one best way, should be embraced. Constant attention is necessary for the creation of a cultural fabric within the project team in which these elements are embedded. This can be done by putting the subject on the agenda of gateway or other key meetings, as well as more informal team building activities throughout the project life cycle. This may be challenging as time, money and quality get pressured, but it is important to note that tasks and formalities come naturally, constructive relationships and trust have to be actively worked on.

3. Apply the knowledge and undertake action to ensure success

Thirdly, the application of the gained knowledge to practice needs to take place. It is
important here to embed this knowledge in a sound communication plan. Creating a
separate chapter in this document on culture and cultural differences can help dealing
with them. By noting the possible impact of cultural miscommunication, the risk is made
tangible and it becomes increasingly more integrated in the project management.

For generic application, the above advice has been incorporated in the Project Management Institute's PMBOK project phases as described in section 3.2.1. The figure below shows in which project phases which actions should be undertaken to manage cultural differences as effectively as possible in international building projects. The advice is based on a project team consisting of a client, a project manager (or project managers) and consultants that are selected and appointed by the client (who will be advised by the project manager). It is important to note that the below forms a basis for further development of the implementation of the recommendations: it has not been applied to practice yet.

starting the project

- 1 get the right team together
- 2 address culture in the project start up
- 3 seek consultants with the right cultural fit
- 4 pay attention to culture in the project communications plan

organising and preparing

- **5** align design expectations, guidelines and procedures
- 6 align health and safety expectations, guidelines and procedures
- 7 organise team building activities

carrying out the work

8 allow for informal interaction

ending the project

- evaluate project and define the lessons learnt
- 10 celebrate finalising the project with the team

Figure 7.05. Management advice projected on PMBOK project phasing. Own illustration.

Starting the project

1. Get the right project management team together

First and foremost, it is important to get the right team together for the project at hand. Because this is project- and client-specific, it is difficult to determine the desired profile of project team members exactly. However, it is in any case important for international projects to have a project manager with experience on international projects or someone who has been trained to manage international projects. In addition, project managers on international projects should be exceptionally skilled communicators and need to be able to build trust and a constructive relationship with the project team members. An aspect to be taken into consideration when forming the project management team is the cultural norms and values of the client. These will also be of importance when advising the client on the appointment of consultants.

2. Seek consultants with the right cultural fit

As part of the procurement management: consider the pros and cons of bringing in international parties and take their cultural fit into account.

Key questions

- What are the core norms and values of the organisations that will be involved in this project?
- How do these correspond to the norms and values of the client?

- How would alignment and collaboration take place in the case of a dispersed project team?
- Which plans or procedures are presented by the organisations that will be involved to overcome barriers due to dispersion?
- 3. Address culture in the project start up

In the project start up, pay explicit attention to culture. Before you do that, make sure to get acquainted and learn about each other's background and corresponding values. Key questions

- What is the background of the project team members and which norms and (personal) values are related to this background?
- How can these norms and (personal) values be utilised as an advantage in this project?
- What do the project team members need to work (together) effectively?
- How do the organisations from which people are involved differ?
- How could these differences be utilised as an advantage in this project?
- 4. Pay attention to the influence of culture on the communication strategy and the deployment of communication means in the communications management plan Key questions
 - What are key requirements and/or needs regarding communications for each party within the project team given their cultural background, norms, values and preferences?
 - How can these requirements and/or needs regarding communications of the project team parties be catered to?

Organising and preparing

5. Align expectations, procedures and guidelines regarding design During the preparation phase, pay explicit attention to the design approach. The client, architect and consultants may have very different ideas and expectations regarding this process.

Key questions

- What expectations do the parties have on the design and the design process (also in terms of decision-making)?
- To which degree does the design have to align with the local culture?
- Which design standards and guidelines does the client have in place?
- To which degree can consultants deviate from these standards and guidelines?
- 6. Align expectations, procedures and guidelines regarding health and safety In the management of the supply chain, it is vital to be aware of the different rules and regulations that people are used to. Especially with regards to health and safety, this needs to be raised early on in the project. All parties should have an understanding of the rules and regulations in place and why it is important to abide by them. Key questions
 - What does the client expect regarding health and safety and which procedures and guidelines are in place for this?

- What are the expectations, procedures and guidelines of the contractor and supply chain regarding health and safety?
- Where do the expectations, procedures and guidelines differ and what needs to be done to get all parties aligned?

7. Organise team building activities

Through the organisation of (informal) team building activities, the project team members get to know each other. This is vital to create and maintain a collaborative project team and avoid a transactional relationship. Taking time to get to know each other also contributes to the mutual and general understanding of the different (cultural) backgrounds.

Key questions

- Where have we noticed an alignment of norms and (personal) values?
- How has this alignment of norms and (personal) values been utilised?
- Where did dysfunctional friction occur in terms of norms and (personal) values and what can we do (or how can we approach each other best) to avoid this in the future?
- How are we catering to the needs of the project team members to work (together) effectively?

Carrying out the works

8. Allow for informal interaction

Keeping in touch with the project team members remains important throughout the project life cycle. By taking time in each project team meeting for informal interaction, the chances of developing working relationships are enhanced. The questions posed for the team building activities can provide guidance here as well.

Key questions

- Where have we noticed an alignment of norms and (personal) values?
- How has this alignment of norms and (personal) values been utilised?
- Where did dysfunctional friction occur in terms of norms and (personal) values and what can we do (or how can we approach each other best) to avoid this in the future?
- How are we catering to the needs of the project team members to work (together) effectively?

Ending the project

9. Evaluate project & define lessons learnt

In the post project review, it is important to evaluate how cultural factors may or may not have influenced the project.

Key questions

- How do we characterise the approach to culture that was taken?
- In which situations were our agreements unclear or not sufficient?
- In which situations were we able to predict cultural influences and how did we effectively manage these?

10. Celebrate finalising the project with the team

Like the team building activities and informal interactions, celebrating wins and project success(es) is important to keep the team spirit high and relations strong.

7.4 Recommendations for research

In this section, recommendations for further studies into the subject of cultural differences in international building projects will be given. Based on this research, the following topics and views are recommended:

- 1. Include a wider variety of parties involved In this research, the focus lay on the project managers from Turner & Townsend and the client representatives. For further research and to determine the roles and requirements of consultants in the effective management of cultural differences, including a wider variety of parties involved in the building projects is recommended. This study may lead to new insights or support the existing findings.
- 2. Focus more on practitioners' definitions of culture During the interviews, it became clear that the interviewees did not have a clear definition of what culture entails. This suggests that overall, practitioners may not fully understand the diversity of the concept and in which ways it may come forward in their day-to-day work. Therefore, it is recommended that in further research, a greater focus on practitioners definitions of culture is taken. This may lead to new findings on the culture of the building industry as a whole.
- 3. Compare projects of one client in different countries A fascinating aspect of this research was the wide variety of approaches to culture across the cases, even though the clients operated in the same industry and were all large multinational companies with office locations all over the world. For further research, it would be interesting to see how a specific client approaches building projects in different countries.
- 4. Focus more on the details of communications management Communications management showed to be of great importance in the effective management of cultural differences in international building projects. For further research, this specific management area can be looked into further in relation with the management elements by Hall and Jaggar (1997) to pinpoint more precisely what practitioners should be paying attention to for effective management of culture in international building projects.

Reflection

8 Reflection

In this chapter, I will reflect on the product, process and planning and assess to which degree the research method and argumentation have been accurate.

8.1 The product

An important note that should be made concerning this product is the cultural perspective from which it is written. Because one judges another culture from the fundamental view of one's standards and values, this ethnocentrism is almost inevitable. In this thesis, I have aimed to reduce the impact of my own cultural bias by taking into account literature from all over the world, by asking the opinions of my international Turner & Townsend colleagues on my interview questions and by trying to be as open-minded as possible during the interviews: so not showing clear positive or negative reactions and maintaining a neutral tone when speaking.

After P4, minor adaptations and additions have been made to the literature review. This theoretical part makes for a cohesive overview of the literature concerned with management, effectiveness and culture. These central concepts have been summarised in a conceptual framework. For the literature review, different sources have been used, ranging from books to journal articles and from conference proceedings to website pages. A wide variety of sources were used to ensure sufficient triangulation and validity, and the aim has been to give an objective overview and illustrate the consensus and discrepancies between sources. Looking back on the theories that were brought together in the conceptual framework, they were most useful for the interpretation of my findings. I noticed that the project management theories can be an important guideline for practice, but in reality, they are rarely followed precisely.

The main problem that I found in literature – that cultural differences can lead to all sorts of problems in international building projects when not managed or managed incorrectly – came forward only implicitly in the interviews. The interviewees gave numerous examples of problems that could be explained through cultural differences. However, this link was not made by the interviewees and no conscious approach to culture was taken. I found that in general, the degree of awareness varied greatly: there were interviewees that acknowledged the importance and impact of culture immediately and others that seemed convinced that culture did not have an impact on the project. Personally, I strongly believe that this has to do with the fact that culture is integrated in project management practice too loosely: it's an optional subject to pay attention to. However, culture manifests on many different levels and in many different ways. It is an aspect of project management that should be addressed in all projects. I believe that raising awareness among practitioners and giving examples of cultural impact can help incorporating culture in general project management practice.

The position of culture in project management was also a subject in this thesis. The way I see it, culture is part of project management as a soft skill. There may be process based activities involved (such as teambuilding) in managing culture, but these are part of project management as defined by the Project Management Institute. As noted in the recommendations, it may be necessary to – outside of any particular project – design a process to further integrate culture in general management practices.

I believe the management advice forms a sound basis to take the findings of this research and apply them to practice. During my internship, I have seen that theory and practice often do not align. However, since culture is currently a heavily underestimated aspect within project management, the application of any part of the management advice will be an improvement.

8.1.1 Position within the MSc track

This thesis is part of the track Management in the Built Environment, which is positioned in the programme Architecture, Urbanism and Building Sciences at the TU Delft. The research falls within the domain of the chair Design and Construction Management. In this chair, the focus is on questions concerning the process of building development and realisation. This research takes main elements of the building process (management areas), links these to the future in which multi-cultural and international project teams become increasingly common and aims to share findings on how to manage cultural differences in international building projects as effectively as possible.

Looking at the possibilities to apply the topic of this research to the educational programme of MBE, I would strongly advice to integrate the subject of culture in the Design and Construction Management course. In this course, a wide variety of crucial information on project management is shared: it is a fundamental field within the MSc track. By confronting students in their studies with the fact that culture and cultural differences influence project management and project management approaches, the awareness that has proven to be of importance through this research, is created even before students experience it in practice. This means they may very well be able to identify cultural differences early in their career and develop a stronger ability to adapt their way of working depending on the cultural context. Overall, this would lead to even more rounded and well-prepared students starting their career as project managers.

8.1.2 Relevance

The academic relevance of this study is related to the aim to close the gap of knowledge in research connecting culture (and cultural differences) to the management of international projects in the building industry. The output of this research is relevant to two different groups. Firstly, academics who study the relationship between culture and project management in international building projects are provided with new insights and incentives for further research.

Secondly, international building companies and practitioners are given insight in and recommendations on how to manage cultural differences in international building projects as effectively as possible. The utilisation potential of the results is illustrated most clearly in the recommendations made for practice and research, as well as the management advice. The transferability of the results is closely connected to the generalisability. As described in section 2.2.3, the analytic generalisations may well be applicable to other situations and beyond the scope of similar cases.

8.2 The process and planning

8.2.1 The process and methodology

The process was designed around a cross-case qualitative research approach. This approach consists of the literature review and subsequently, the execution of three case studies (including in-case and cross-case analyses). Finding case studies that aligned with the conceptual framework proved to be a challenge. On paper, things may be crystal clear, but in practice, it is often not that simple. I had to compromise on the case locations: the cases are not all located in a country that is respectively the most linear-active, multi-active or reactive in Lewis's model (2006). In addition to this, for one case, there was a need for an extensive non-disclosure agreement to ensure the anonymity of the client and the people involved. This stage was challenging, but with the help of my graduation company mentor I was able to set up the interviews for this case as planned. For case B, I was not able to interview the client. To ensure sufficient triangulation and thus include another perspective, the main contractor was interviewed. It was a demanding time, but eventually, I was able to find suitable cases with relevant people that were enthusiastic and willing to participate in my research.

Overall, the approach as designed seems to be the right way to get in-depth information. The test interviews I conducted proved to be very helpful in tailoring the questions and making sure everything was clear. I had initially expected that at some point, I would be able to predict which elements or issues would come forward in the interviews, but that was not the case. The interviewees did struggle with the same questions: often, responses included signs that the interviewee had not thought about the topic in-depth before. Schön (1991) states this is a common phenomenon: professionals often have implicit and tacit knowledge that they apply to practice daily. However, making this knowledge explicit and reflecting upon it can be challenging.

The wide variety of responses to the interview questions made for fascinating conversations and the freedom to ask clarifications and divert from the general line of questioning was helpful in this. The recording and transcribing of the interviews was a very comfortable way for me to structure the information and compare responses within and across cases. I believe qualitative semi-structured interviewing is the most valuable way to add information to the existing literature (which – on culture – is predominantly based on quantitative research). The expert panel was also a helpful step in my research process: the experts had many interesting additions to the statements I presented and shared pertinent examples from their experience. This input provided a fresh perspective and allowed me to further develop my recommendations for practice and management advice. The survey was a useful addition and gave more insight into the cultural alignment of the interviewees. The survey results also illustrated that the cultural categorisations are based on average outcomes, and much larger samples are used to draw generalisable conclusions.

The ethical principles in this research as explained in section 2.3, have been dealt with through the provision of information before conducting the interview and through protecting the interviewees' privacy by removing their names from the transcripts.

8.2.3 The planning

The pandemic mostly influenced the graduation process between P2 and P3 when I was searching for a graduation company. Because of the international nature of my research, I had already planned to conduct the majority of my interviews online, the influence of the pandemic there was minor. Scheduling, executing and transcribing the interviews took place in a relatively short amount of time. This was challenging, but also allowed me to deep dive into the cases.

8.3 Personal view

I have experienced the time working on my thesis as very positive. I thoroughly enjoyed learning about my graduation subject and finding relations between literature and empiricism. My organisational skills and high level of self-discipline have proven to be major assets during this process. There were some struggles in finding the right cases and reaching the interviewees which were all over the world, but my graduation company mentor and colleagues have been very supportive and made getting me in touch with the right people a priority. The openness of the people, their willingness to contribute and their curiosity about the results have made Turner & Townsend an enjoyable and a suitable place to work on my thesis and learn about practice.

Looking back on my roles as researcher and intern, I am very glad Turner & Townsend allowed me to conduct my research independently: there were no requirements or demands from the company. The support was – like noted above – exceptional and this combination allowed me to execute my research in a way that worked perfectly for me. In addition, I got the chance to get to know the company in a calm and casual way. The experience I gained from shadowing my colleagues and getting a sense of what their work is like, provided me with a lot of contextual information that helped me interpret the input from the interviews. Also, I found out I very much enjoy the project management activities I have been allowed to do, and I am quite sure I would enjoy what I have seen my colleagues do. It was gratifying to hear that my research has got various colleagues at Turner & Townsend thinking about culture and how it could be managed to improve the projects. I hope my recommendations will form a basis for the implementation of increased cross-cultural management in the business.

The sessions with my TU Delft mentors have been very helpful in providing insights into the steps, standard practices and guidelines of doing research. My mentors sharing their experiences and providing options and directions have broadened my view and allowed me to make well thought out choices. I believe my mentors were just as interested in the outcomes of my research, which made for an overall collaborative atmosphere during feedback sessions.

The past months have been exciting: I transitioned from executing interviews and producing text to analysing the input from interviewees and experts and going back and forth between sections of this research. Finding the balance between detail and conciseness took time. There are many aspects that I aimed to cover and bring together, avoiding repetition and keeping the thesis to the point was not always easy. Overall, I am satisfied with the process and the final product.

References

9 References

Abeysekera, V. (2002). Understanding "Culture" in an International Construction Context. In D. E. Seymour & R. Fellows (Eds.), *Perspectives on Culture in Construction* (pp. 39–51). Rotterdam, Netherlands: CIB.

Abubakari, Z., Wang, M., & Paa-Grant, R. (2018). Hofstede-GLOBE inspired cultural dimensions: a review and application in international business research and cross-cultural strategy. In S. Li (Ed.), *IMMS '18: Proceedings of the 2018 International Conference on Information Management & Management Science 2018* (pp. 83–88). https://doi.org/10.1145/3277139.3277153

Aditya, R., & House, R. J. (2002). Interpersonal acumen and leadership across cultures: Pointers from the GLOBE study. In: R. E. Riggio, S. E. Murphy, & F. J. Pirozzolo (Eds.), *Multiple intelligences and leadership* (pp. 215 – 240). Mahwah, United States of America: Lawrence Erlbaum Associates.

Ankrah, N. A. (2007). An Investigation into the Impact of Culture on Construction Project Performance (Doctorate thesis). Retrieved from https://core.ac.uk/download/pdf/1931942.pdf

Ankrah, N. A., & Langford, D. A. (2005). Architects and contractors: a comparative study of organizational cultures. *Construction Management and Economics*, 23(6), 595–607. https://doi.org/10.1080/01446190500126973

Ankrah, N.A., & Proverbs, D. (2004). Treading the softer areas of construction management: a critical review of culture. In: F. Khosrowshahi. (Red), 20th Annual ARCOM Conference (pp. 551 – 560). Edinburgh, Scotland: https://www.researchgate.net/publication/228961865_Treading_the_softer_areas_of_construction_management _A_critical_review_of_culture

Ankrah, N. A., Proverbs, D., & Debrah, Y. (2009). Factors influencing the culture of a construction project organisation. *Engineering, Construction and Architectural Management*, 16(1), 26–47. https://doi.org/10.1108/09699980910927877

Ankrah, N. A., Proverbs, D., Debrah, Y., & Antwi, A. (2005). Factors influencing organisational culture: a construction project perspective. In C. Egbu & M. K. L. Tong (Eds.), *Proceedings of the 2nd Scottish Conference for Postgraduate Researchers of the Built and Natural Environment (PRoBE)* (pp. 729–742). Retrieved from https://www.irbnet.de/daten/iconda/CIB10679.pdf

Ashworth, A., & Harvey, R. C. (1997). *The Construction Industry of Great Britain* (2nd ed.). Oxford, United Kingdom: Butterworth-Heinemann.

Association for Project Management. (n.d.). The APM Body of Knowledge 6th Edition – Definitions [Online document]. Retrieved March 9, 2020, from https://www.apm.org.uk/media/1605/final-proof-bok-6-definitions.pdf

Atkinson, R. (1999). Project management: cost, time and quality, two best guesses and a phenomenon, it's time to accept other success criteria. *International Journal of Project Management*, 17(6), 337–342.

AXELOS. (2017). PRINCE2 Handbook (1st ed.). Norwich, United Kingdom: TSO.

Ball, M. (2014). Rebuilding Construction (Routledge Revivals) (Reissue ed.). Abingdon, United Kingdom: Taylor & Francis.

Barthorpe, S. (2002). The Origins and Organisational Perspectives of Culture. In D. E. Seymour & R. Fellows (Eds.), *Perspectives on Culture in Construction* (pp. 6–24). Rotterdam, Netherlands: CIB.

Barthorpe, S., Duncan, R., & Miller, C. (2000). The pluralistic facets of culture and its impact on construction. *Property Management*, *18*(5), 335–351.

Bartlett, C. A., & Ghoshal, S. (1998). *Managing Across Borders: The Transnational Solution* (Second Edition). Boston, United States of America: Harvard Business Review Press.

Bennett, A. (2010). Process tracing and causal inference. In H. Brady & D. Collier (Eds.), *Rethinking social inquiry:* Diverse tools, shared standards (2nd ed., pp. 207-219). Lanham, United States of America: Rowman & Littlefield.

Beugelsdijk, S., Maseland, R., & van Hoorn, A. (2015). Are Scores on Hofstede's Dimensions of National Culture Stable over Time? A Cohort Analysis. *Global Strategy Journal*, *5*(3), 223–240. https://doi.org/10.1002/gsj.1098

Billings, A. G., & Moos, R. H. (1981). The Role of Coping Responses and Social Resources in Attenuating the Stress of Life Events. *Journal of Behavioral Medicine*, 4(2), 139–157.

Bond, M. H., Leung, K., Au, A., Tong, K.-K., de Carrasquel, S. R., Murakami, F., ... Lewis, J. R. (2004). Culture-Level Dimensions of Social Axioms and Their Correlates across 41 Cultures. *Journal of Cross-Cultural Psychology*, *35*(5), 548–570. https://doi.org/10.1177/0022022104268388

Bondarieva, T., & Sariieva, A. (2020). Classification Features of International Projects. In M. Nechyporuk, V. Pavlikov, & D. Kritskiy (Eds.), *Integrated Computer Technologies in Mechanical Engineering - Synergetic Engineering* (Vol. Volume 1113, pp. 437–443). New York, United States of America: Springer Publishing.

Bruil, I., & Heurkens, E. (2012). Management Thoughts & Practices (Second edition). Delft, Netherlands: TU Delft.

Bryman, A. (2016). Social Research Methods (5th ed.). Oxford, United Kingdom: Oxford University Press.

Chan, E.H.W. and Tse, R.Y.C. (2003). Cultural considerations in international construction contracts. Journal of Construction Engineering and Management, 129(4), 375–381.

Chanlat, J., Davel, E., & Dupuis, J. (2013). Introduction. In J. Chanlat, E. Davel, & J. Dupuis (Eds.), *Cross-Cultural Management: Culture and Management across the World* (1st ed., pp. 1–8). Abingdon, United Kingdom: Routledge.

Chen, P., & Partington, D. (2004). An interpretive comparison of Chinese and Western conceptions of relationships in construction project management work. International Journal of Project Management, 22(5), 397–406. https://doi.org/10.1016/j.ijproman.2003.09.005

Chen, S.E., Jefferees, M., & Goh, C. (2002). Cultural Awareness as an Element of Competitive Advantage. In D. E. Seymour & R. Fellows (Eds.), *Perspectives on Culture in Construction* (pp. 185–200). Rotterdam, Netherlands: CIB.

Chevrier, S. (2003). Cross-cultural management in multinational project groups. *Journal of World Business*, 38(2), 141–149.

Chin, C. M. M., & Spowage, A. C. (2010). Defining & Classifying Project Management Methodologies. *PM World Today*, 7(5), 1–7.

Chin, C. M. M., & Spowage, A. C. (2012). Project Management Methodologies: A Comparative Analysis. *Journal for the Advancement of Performance Information and Value*, 4(1), 106–118.

Dainty, A. (2007). Achieving Value through Product-Service Integration: Context and Challenges. In M. Saxton, K. Kähkönen, & S. L. Lu (Eds), *Organisation and Management of Construction Perspective. CIB Priority Theme - Revaluing Construction: A W065* (pp. 45-53). Rotterdam, Netherlands: CIB.

De Leeuw, A. C. J. (2000). Bedrijfskundig management. Assen, Netherlands: Koninklijke Van Gorcum.

Den Hartog, D. N., House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., & Dorfman, P. W. (1999). Culture specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? *The Leadership Quarterly*, 10(2), 219–256. https://doi.org/10.1016/s1048-9843(99)00018-1

Dickson, M. W., Den Hartog, D. N., & Mitchelson, J. K. (2003). Research on leadership in a cross-cultural context: Making progress, and raising new questions. *The Leadership Quarterly*, 14(6), 729–768. https://doi.org/10.1016/j.lequa.2003.09.002

Dorfman, P. W., & Howell, J. P. (1988). Dimension of national culture and effective leadership patterns: Hofstede revisited. In R. N. Farmer & E. G. Goun (Eds.), *Advances in international comparative management: a research annual* (1st ed., pp. 127–150). Atlanta, United States of America: JAI.

Earley, P.C. (2006). Leading cultural research in the future: a matter of paradigms and taste. *Journal of International Business Studies*, 37(6), 922–931.

Elmuti, D. and Kathawala, Y. (2001). An overview of strategic alliances. Management Decision, 39(3), 205-217.

Enshassi, A. and Burgess, R. (1990). Training for construction site managers involved with multicultural work teams. *International Journal of Project Management*, 8(2), 95–101.

Fang, T. (2003). A critique of Hofstede's fifth national culture dimension. *International Journal of Cross Cultural Management*, 3(3), 347–368.

Fisher, E. (2011). What practitioners consider to be the skills and behaviours of an effective people project manager. International Journal of Project Management, 29(8), 994–1002.

Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. Qualitative Inquiry, 12(2), 219–245. https://doi.org/10.1177/1077800405284363

Gannon, M. J. (1994). *Understanding Global Cultures: Metaphorical Journeys Through 17 Countries* (2nd ed.). Thousand Oaks, United States of America: SAGE Publications.

Ghauri, P. N., & Usunier, J. C. (2003). International Business Negotiations (2nd ed.). Zaltbommel, Netherlands: Van Haren Publishing.

Gerring, J. (2004). What Is a Case Study and What Is It Good for? The American Political Science Review, 98(2), 341–354.

Gerstner, C.R. and Day, D.V. (1994). Cross-cultural comparison of leadership prototypes. *Leadership Quarterly*, 5(2), 121–134.

Grant, R. M. (1996). Toward a Knowledge-Based Theory of the Firm. *Strategic Management Journal*, 17(Special Issue), 109–122.

Grisham, T. (2006). Cross-cultural leadership in construction. In M. Dulaimi (Ed.), *Proceedings from the Joint International Conference on Construction Culture, Innovation and Management* (pp. 752–761). Retrieved from https://www.irbnet.de/daten/iconda/CIB4377.pdf

Hall, M. A. (1999). *International Construction Management: The Cultural Dimension* (Doctorate thesis). Retrieved from http://researchonline.ljmu.ac.uk/id/eprint/5103/

Hall, M. A., & Jaggar, D.M. (1997). Should construction enterprises, working internationally, take account of cultural differences in culture? In: P. Stephenson, P (Red.), 13th Annual ARCOM Conference (pp. 1 – 10). Cambridge, United Kingdom: http://www.arcom.ac.uk/-docs/proceedings/ar1997-001-010_Hall_and_Jaggar.pdf

Haller, P. M., Naegele, U., & Berger, S. (2019). *Bridging Cultural Barriers: How to Overcome Preconceptions in Cross-Cultural Relationships (Management for Professionals)* (1st ed. 2019 ed.). New York, United States of America: Springer Publishing.

Heurkens, E. (2012). *Private Sector-Led Urban Development Projects*. Zaltbommel, Netherlands: Van Haren Publishing.

Hirota, E. H., Powell, J. A., & Formoso, C. T. (2002). Understanding Learning During the Action Learning Process: Changing Construction Management Practices. In D. E. Seymour & R. Fellows (Eds.), *Perspectives on Culture in Construction* (pp. 131–150). Rotterdam, Netherlands: CIB.

Hofstede, G. (1984). *Culture's consequences: international differences in work related values* (Abridged ed.). Thousand Oaks, United States of America: SAGE Publications.

Hofstede, G. (1994). The Business of International Business is Culture. International Business Review, 3(1), 1-14.

Hofstede, G. (2001). Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. London, United Kingdom: Sage Publications.

Hofstede, G., & Bond, M. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, *16*, 4-21.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organizations* (Rev. ed.). New York, United States of America: McGraw-Hill Companies.

Hofstede Insights. (n.d.). Country Comparison. Retrieved 22 September 2020, from https://www.hofstede-insights.com/country-comparison/brazil,malaysia,the-netherlands/

Hodgson, D. (2006). Are projects real? The PMBOK and legitimation of project management knowledge. In S. Cicmil (Red.), *Making Projects Critical* (pp. 29–50). Palgrave Macmillan.

Holtbrügge, D., Weldon, A., & Rogers, H. (2012). Cultural determinants of email communication styles. *International Journal of Cross Cultural Management*, 13(1), 89–110.

Huang, J. (2016). The challenge of multicultural management in global projects. *Procedia - Social and Behavioral Sciences*, 226, 75–81. https://doi.org/10.1016/j.sbspro.2016.06.164

Jägers, H., & Jansen, W. (1987). De analyse en beoordeling van de organisatiestructuur. *Maandblad Voor Accountancy En Bedrijfseconomie*, 61(3), 116–121.

Javidan, M., & House, R. J. (2001). Cultural acumen for the global manager: Lessons from project GLOBE. *Organizational Dynamics*, *29*(4), 289-305.

Johnson, S. B. (2002). The Secret of Apollo: Systems Management in American and European Space Programs. Baltimore, United States of America: The Johns Hopkins University Press.

Karaman, E., & Kurt, M. (2015). Comparison of project management methodologies: Prince 2 versus PMBOK for IT projects. *International Journal of Applied Sciences and Engineering Research*, 4(4), 572–579.

Kim, S. (2016). National culture and public service motivation: investigating the relationship using Hofstede's five cultural dimensions. *International Review of Administrative Sciences*, *83*(1), 23–40. https://doi.org/10.1177/0020852315596214

Kirkman, B. L., Lowe, K. B. & Gibson, C. (2006). A quarter century of Culture's Consequences: A review of the empirical research incorporating Hofstede's cultural value framework. *Journal of International Business Studies* 36(3), 285-320.

Kivrak, S., Ross, A., Arslan, G., & Tuncan, M. (2009). Impacts of cultural differences on project success in construction. In A.R. J. Dainty, (Ed.), *Procs 25th Annual ARCOM Conference* (pp. 53-61). Nottingham, United Kingdom: Association of Researchers in Construction Management.

Köster, K. (2009). International Project Management (1st ed.). Thousand Oaks, Canada: SAGE Publications.

Kumaraswamy, M., Rowlinson, S., Rahman, M., & Phua, F. T. T. (2002). Strategies for triggering the required 'cultural revolution' in the construction industry. In D. E. Seymour & R. Fellows (Eds.), *Perspectives on Culture in Construction* (pp. 268–285). Rotterdam, Netherlands: CIB.

Lewis, R. D. (2006). When Cultures Collide: Leading Across Cultures (Rev. ed.). Boston, United States of America: Nicholas Brealey International.

Liu, A. M. M. (2002). Keys to Harmony and Harmonic Keys. In D. E. Seymour & R. Fellows (Eds.), *Perspectives on Culture in Construction* (pp. 25–38). Rotterdam, Netherlands: CIB.

Loosemore, M. (1999). International construction management research: cultural sensitivity in methodological design. *Construction Management and Economics*, 17(5), 553–561. https://doi.org/10.1080/014461999371178

Loosemore, M., & Lee, P. (2002). Communication problems with ethnic minorities in the construction industry. *International Journal of Project Management*, 20, 517–524.

Lousberg, L. H. M. J. (2012). Sturen op haalbaarheid en relatie: Interventies om disfunctionele conflicten bij Publiek Private Samenwerking in ruimtelijke ontwikkelingsprojecten te voorkomen. Delft, Netherlands: VSSD.

Luthans, F., Welsh, D. H. B., & Rosenkrantz, S. A. (1993). What Do Russian Managers Really Do? An Observational Study with Comparisons to U.S. Managers. *Journal of International Business Studies*, 24(4), 741–761.

Mäkilouko, M. (2004). Coping with multicultural projects: the leadership styles of Finnish project managers. *International Journal of Project Management*, 22, 387–396.

Marando, A. (2012, February). *Balancing Project Management Hard Skills and Soft Skills*. Brandeis University. Retrieved from https://www.guanaitong.com/uploadfile/2018/0904/201809041536039118.pdf

Matos, S., & Lopes, E. (2013). Prince2 or PMBOK - a question of choice. *Procedia Technology*, 787 - 794.

Miller, R., & Lessard, D. R. (2000). The Strategic Management of Large Engineering Projects. Cambridge, United States of America: The MIT Press.

Morris, P. W. G., Pinto, J. K., & Söderlund, J. (2012). The Oxford Handbook of Project Management. Oxford, United Kingdom: Oxford University Press.

Newman, K. L. & Nollen, S. D. (1996). Cultural and Congruence: The Fit between Management Practices and National Culture. *Journal of International Business Studies* 27(4), 753–779.

Ofori, G. (2000, November). Challenges of construction industries in developing countries: Lessons from various countries. In 2nd International Conference on Construction in Developing Countries: Challenges Facing the Construction Industry in Developing Countries, Gaborone, November (Vol. 5, No. 24, pp. 15-17).

Ofori, G., & Toor, S. (2009). Research on cross-cultural leadership and management in construction: a review and directions for future research. *Construction Management and Economics*, 27(2), 119–133. https://doi.org/10.1080/01446190802616937

Parasuraman, S., & Cleek, M. A. (1984). Coping Behaviors and Managers' Affective Reactions to Role Stressors. *Journal of Vocational Behavior, 24*(2), 179–193. Pettersen Buvik, M., & Rolfsen, M. (2015). Prior ties and trust development in project teams – A case study from the construction industry. *International Journal of Project Management*, 33, 1484–1494.

Pheng, L. S., & Leong, C. H. Y. (2000). Cross-cultural project management for international construction in China. *International Journal of Project Management, 18,* 307–316.

Project Management Institute. (2016). Construction Extension to the PMBOK Guide. Newtown Square, United States of America: Project Management Institute, Inc.

Project Management Institute. (2017). A Guide to the Project Management Body of Knowledge (6th edition). Newtown Square, United States of America: Project Management Institute, Inc.

Puffer, S. (1993). A riddle wrapped in an enigma: Demystifying Russian managerial motivation. *European Management Journal*, 11(4), 473–480. https://doi.org/10.1016/0263-2373(93)90011-6

Redpath, L. & Nielsen, M. O. (1997). A Comparison of Native Culture, Non-native Culture and New Management Ideology. *Canadian Journal of Administrative Sciences*, 14(3), 327–339.

Rehman, A., & Hussain, R. (2007). Software Project Management Methodologies/Frameworks Dynamics "A Comparative Approach". International Conference on Information and Emerging Technologies, Karachi, Pakistan.

Reich, B. H., & Wee, S. Y. (2006). Searching for Knowledge in the Pmbok® Guide. *Project Management Journal*, 37(2), 11–26. https://doi.org/10.1177/875697280603700203

Robert, J., Moulet, L., Lizarralde, G., Davidson, C. H., Nie, J., & da Sylva, L. (2006). Finding out: a system for providing rapid and reliable answers to questions in the construction sector. *Journal of Construction Innovation* 6(4), 250-261.

Robie, C., Johnson, K. M., Nilsen, D., & Hazucha, J. F. (2001). The right stuff: understanding cultural differences in leadership performance. *Journal of Management Development*, *20*(7), 639–650. https://doi.org/10.1108/eum0000000005637

Root, D. (2002). Validating Occupational Imagery in Construction; Applying Hofstede's VSM to Occupations and Roles in the UK Construction Industry. In D. E. Seymour & R. Fellows (Eds.), *Perspectives on Culture in Construction* (pp. 151–171). Rotterdam, Netherlands: CIB.

Rwelamila, P. D., & Khumalo, R. (2002). The Significance of 'Ubuntu' in Meeting Project Goals in Africa. In D. E. Seymour & R. Fellows (Eds.), *Perspectives on Culture in Construction* (pp. 201–220). Rotterdam, Netherlands: CIB.

Rwelamila, P. D., & Savile, P. W. (1994). Hybrid value engineering: the challenge of construction project management in the 1990s. *International Journal of Project Management*, 12(3), 157–164. https://doi.org/10.1016/0263-7863(94)90031-0

Santos, F. R. S., & Cabral, S. (2008). FMEA and PMBOK applied to project risk management. *Journal of Information Systems and Technology Management*, *5*(2), 347–364.

Selmer, J. (2002). Coping strategies applied by western vs. overseas Chinese business expatriates in China. *International Journal of Human Resource Management*, 13(1), 19-34.

Seymour, H. (2019). The Multinational Construction Industry. Abingdon, United Kingdom: Taylor & Francis.

Schein, E. H., & Schein, P. H. (2016). Organizational Culture and Leadership (5th ed.). Hoboken, NJ, United States of America: Wiley.

Schneider, S. C., & de Meyer, A. (1991). Interpreting and responding to strategic issues: The impact of national culture. *Strategic Management Journal*, 12(4), 307–320. https://doi.org/10.1002/smj.4250120406

Schön, D. A. (2009). Reflective Practitioner (New edition). Abingdon, Verenigd Koninkrijk: Taylor & Francis.

Schwartz, S. H. (2014). National Culture as Value Orientations: Consequences of Value Differences and Cultural Distance. In V. A. Ginsburgh & D. Throsby (Eds.), *Handbook of the Economics of Art and Culture* (Vol. 2, pp. 547–586). Amsterdam, Netherlands: Elsevier. https://doi.org/10.1016/B978-0-444-53776-8.00020-9

Serpell, A. F., & Rodriguez, D. (2002). Studying Construction Organisational Culture: Preliminary Findings. In D. E. Seymour & R. Fellows (Eds.), *Perspectives on Culture in Construction* (pp. 76–91). Rotterdam, Netherlands: CIB.

Shore, B., & Cross, B. J. (2005). Exploring the role of national culture in the management of large-scale international science projects. *International Journal of Project Management*, 23, 55–64.

Siegelaub, J. M. (2004). How PRINCE2 can compliment PMBOK® guide and your PMP®. PMI® Global Congress 2004, Anaheim, United States of America.

Singh, R., & Lano, K. (2014). Literature Survey of previous research work in Models and Methodologies in Project Management. *International Journal of Advanced Computer Science and Applications*, *5*(9), 107–122.

Smith, P. B., Bond, M. H., & Kagitcibasi, C. (2006). *Understanding Social Psychology Across Cultures: Living and Working in a Changing World*. Thousand Oaks, Canada: SAGE Publications.

Söderlund, J. (2004). Building theories of project management: past research, questions for the future. *International Journal of Project Management*, 22(3), 183–191.

Taras, V., Steel, P., & Kirkman, B. L. (2012). Improving national cultural indices using a longitudinal meta-analysis of Hofstede's dimensions. *Journal of World Business*, 47(3), 329–341.

Thompson, J. L., & Martin, F. (2010). Strategic Management: Awareness & Change (6th revised ed.). New York, United States of America: McGraw-Hill Education.

Trompenaars, F., & Hampden-Turner, C. (2000). *Riding the Waves of Culture* (Rev. ed.). London, United Kingdom: Nicholas Brealey.

Tulgan, B. (2015). Bridging the Soft Skills Gap. Hoboken, NJ, United States of America: Wiley.

Turner & Townsend. (2020, September). *Annual review 2019 - 2020*. Retrieved from https://www.turnerandtownsend.com/media/5296/annual-review-2019-2020_final.pdf

Turner, R., & Müller, R. (2005). The Project Manager's Leadership Style as a Success Factor on Projects: A Literature Review. *Project Management Journal*, 36(2), 49–61.

Twynstra Gudde. (n.d.). *Methodes vergeleken*. Twynstra Gudde Kennisbank. Retrieved 13 November 2020, from https://www.twynstraguddekennisbank.nl/methodes-vergeleken

Waheed, N. (2014). CMMI, PRINCE-2 and PMBOK: The big three. *International Journal of Advances in Computer Science and Its Applications*, 4(2), 6–9.

Waterbury, R. (1993). Culture, society and the interdisciplinary teaching of world studies: an anthropological perspective. *The Social Studies*, 84(2), 63–66.

Wijnen, G., Renes, W., & Storm, P. (2004). Projectmatig werken. Utrecht, Netherlands: Het Spectrum.

Wijnen, G. & Storm, P. (2007). Projectmatig werken (24th ed.). Utrecht, Netherlands: Het Spectrum.

Wilkinson, M. D., Dumontier, M., Aalbersberg, Ij. J., Appleton, G., Axton, M., Baak, A., ... Zhao, J. (2016). The FAIR Guiding Principles for scientific data management and stewardship. *Scientific Data*, *3*(1). https://doi.org/10.1038/sdata.2016.18

Williams, R. (1983). Keywords: A Vocabulary of Culture and Society (Rev. ed.). London, United Kingdom: Fontana Paperbacks.

Wilson, T. M. (2019). Cultural Change And The New Europe (1st ed.). Abingdon, United Kingdom: Taylor & Francis.

Winch, G. M. (2010). Managing Construction Projects (2nd ed.). Hoboken, United States of America: Wiley-Blackwell.

Yin, R. K. (2018). Case Study Research and Applications (6th ed.). Thousand Oaks, Canada: SAGE Publications.

Zaheer, S. (1995). Overcoming the Liability of Foreignness. *Academy of Management Journal*, 38(2), 341–363. https://doi.org/10.2307/256683

Zuo, J., Zhao, X., Nguyen, Q. B. M., Ma, T., & Gao, S. (2018). Soft skills of construction project management professionals and project success factors. *Engineering, Construction and Architectural Management*, 25(3), 425–442. https://doi.org/10.1108/ecam-01-2016-0016

Zwikael, O. (2009). The Relative Importance of the PMBOK® Guide's Nine Knowledge Areas during Project Planning. *Project Management Journal*, 40(4), 94–103. https://doi.org/10.1002/pmj.20116

Zwikael, O., Shimizu, K., & Globerson, S. (2005). Cultural differences in project management capabilities: A field study. *International Journal of Project Management*, *23*(6), 454–462.

Appendices

10 Appendices

10.1 Appendix A – Reasoning behind linking management areas and management elements

Management area (PMI, 2016 and 2017)	Management element (Hall & Jaggar, 1997)	Reason for linking	
Scope		Professional standards and construction codes can affect the project scope	
Quality	Professional standards & construction codes	What is deemed 'qualitative' depends on one's professional standards and construction codes	
	Expatriate personnel	Expatriate personnel are a resource	
Resource	Foreign staff & operatives	Foreign staff and operatives are resources	
Resource	Codes of conduct & ethical standards	Codes of conduct and ethical standards influence how resources are allocated	
	Appropriate design approaches	Appropriate design approaches include communication of the design	
	Expatriate personnel	Expatriate personnel are a party in communication	
	Foreign staff & operatives	Foreign staff & operatives are a party in communication	
Communications	Codes of conduct & ethical standards	Codes of conduct and ethical standards can affect how communication takes place	
	Professional standards & construction codes	Professional standards and construction codes can affect how communication takes place	
	Negotiations	Negotiations are a particular subject within communications	
	Appropriate design approaches	The design approach can be a condition for procurement of a certain party	
Procurement	Professional standards & construction codes	Professional standards and construction codes affect procurement procedures	
	Codes of conduct & ethical standards	Codes of conduct and ethical standards affect procurement procedures	
	Negotiations	Negotiations are part of procurement	
LICCE	Expatriate personnel	Expatriate personnel can have different views on HSSE	
	Foreign staff & operatives	Foreign staff and operatives can have different views on HSSE	
HSSE	Codes of conduct & ethical standards	Codes of conduct and ethical standards affect HSSE	
	Professional standards & construction codes	Professional standards and construction codes affect HSSE	

10.2 Appendix B - Information sheet interview

Research MSc thesis on effective project management around the world

Institution Delft University of Technology

Researcher Lisa Verhoeven

Date 14/07/2020 [DD/MM/YYYY]

In this information sheet, all aspects of taking part in this research for you as an interviewee are explained. After reading this, you are kindly requested to fill out the informed consent form. If you have any questions or concerns, please let me know.

Taking part in the research

The purpose of this research is to contribute to a graduation thesis. This thesis is written to complete the MSc track Management in the Built Environment at the TU Delft. By participating in this research, you contribute to the data on effective project management around the world, focusing specifically on how to effectively manage cultural differences in international building projects. A literature study and looking into real life cases are major methods for data collection. You have worked on a building project (a case) that I would really like to know more about through an interview with you. During the interview, I will ask you questions related to the following subjects:

- 1. Your professional background, role within the building project and the project team;
- 2. Your view on what effective project management entails;
- 3. Your experiences with (the management of) cultural differences in this international building project.

The interview will be audio recorded. Please note that there are no right or wrong answers, and you are not obliged to answer all questions. If you wish to withdraw from this research at any moment during the interview or after the interview has been conducted, you are able to do so. In this case, please inform me as soon as possible.

Usage of data during the research

After the conduction of the interview, the audio recording will be transcribed. Information regarding your role within the building project and your (national) cultural background will have to remain explicit because these are main variables within the case study research. Any other personal information and the project details will be anonymised: you will not be traceable. Personal information that could identify you, such as your name, will not be shared beyond the research team. The research team consists of myself (Lisa Verhoeven), my two TU Delft mentors and a delegate of the TU Delft Board of Examiners.

Future use and reuse of data by others

After the research has been executed and the thesis has been finalised and handed in, it will be published and archived in the TU Delft education repository so it can be used for future research and learning. Data taken from the interview will be part of this publication. As a participant, you have the right to demand rectification or erasure of personal data. Please contact me through the contact details provided below if you have any questions or concerns regarding this.

Thank you very much for your cooperation and contribution to this research!

A. E. (Lisa) Verhoeven

a.e.verhoeven@student.tudelft.nl

10.3 Appendix C – Informed consent form interview

Delft University of Technology

Research Institution

The below form has been sent to all interviewees and all interviewees have filled out the form ticking the "Yes" boxes.

MSc thesis on effective project management around the world

Interviewer	Lisa Verhoev	/en				
Taking part in the			1. 1.54.4/07/2006	101	Yes	No
1. I have read and or it has been read research and my qu	d to me. I have	been able to ask	questions about t		0	0
2. I consent voluntathat I can refuse to at any time, withou	answer questio	ns and I can withdr			0	0
3. I understand tha interview that will b		the research involve	es an audio-record	ed	0	0
Usage of data dur 4. I understand tha thesis for the MSc	at information I	provide will be use	•	f a	0	0
5. I understand thidentify me, such team.					0	0
6. I agree that my i	information can	be quoted in resea	arch outputs.		0	\circ
Future use and ref 7. I give permission - to be published a can be used for fut	n for this thesis - and archived in	containing the infor the TU Delft educ			0	0
Name of participar	nt	Signature		 Date		

For any questions, research details or further information, please send an e-mail to a.e.verhoeven@student.tudelft.nl

10.4 Appendix D - Interview guide

Research MSc thesis on effective project management around the world

Institution Delft University of Technology

Interviewer Lisa Verhoeven

Introduction

Thank you for taking part in this research on effective project management around the world, focusing specifically on how to effectively manage cultural differences in international building projects. This research is part of my graduation thesis for the MSc track Management in the Built Environment at the TU Delft. The goal of this research is to give international building companies and managers insight in cultural differences that occur in international building projects and provide them with advice to manage these projects as effectively as possible.

Your role within this international building project in particular and your experience in international building projects in general are of great value for this research. I am particularly interested in the following aspects, which correspond to the different sections of this interview:

- 1. Your cultural and professional background, and your role within this project;
- 2. Your view on what effective project management entails;
- 3. Your experience with (the management of) cultural differences in this international building project.

Please note that there are no right or wrong answers, your personal view is what counts. The data you provide will not be used for any other purposes beyond this research. You are not obliged to answer all questions and you may withdraw from this research at any moment. This interview will take approximately sixty minutes.

1. General

- 1.1. What is your work experience in the building industry?
- 1.2. What is your (national) cultural background?
- 1.3. To which degree do you have to deal / have you had to deal with international or multicultural project teams in your work?
- 1.4. What was your role and the scope of your work within this international building project?

2. Effective project management

- 2.1. How would you define "effective project management" in the building industry?
- 2.2. How would you describe the role of culture within an effective project management approach?

- 3. Culture in the management of this international building project
 - 3.1. How would you define "culture"?
 - 3.2. How did you experience culture and cultural differences in this project?
 - 3.3. How have you dealt with obstacles during the project and to which degree have you deliberately used cultural aspects in your management approach to overcome these obstacles?
 - 3.4. How have you managed these aspects with regard to culture?
 - design approaches
 - professional standards and construction codes
 - expatriate personnel and foreign staff and operatives
 - negotiations
 - codes of conduct and ethical standards
 - 3.5. Would you say there is a difference between being very experienced and less experienced when it comes to dealing with cultural differences in project teams?
 - 3.6. Which personal attributes would you say have been beneficial for your management of this particular project?
 - 3.7. In your opinion, to which degree was having a multicultural, international project team an advantage for achieving the project objectives and to which degree was it a disadvantage?
 - 3.8. Would you in retrospect change anything in your management approach in regard to culture and cultural differences?

10.5 Appendix E – Interviewee survey

All interviewees have been requested to fill out the survey below, developed by Lewis (2006). They were asked to choose one option out of two or three on 30 different items. Per row, one point was awarded to the cultural category of the chosen answer. In the case of a row with only two options, one option aligned with two cultural types. In this case, half a point was awarded to each of the two cultural categories. The final scores were projected on the triangle figures to create a profile (see chapter 4). Below, the information concerning the survey and the survey itself can be found.

Research MSc thesis on effective project management around the world

Institution Delft University of Technology

Researcher Lisa Verhoeven

Date 31/08/2020 [DD/MM/YYYY]

Dear participant,

Thank you for taking part in this research on effective project management around the world, focusing specifically on how to effectively manage cultural differences in international building projects. This research is part of my graduation thesis for the MSc track Management in the Built Environment at the TU Delft. The goal of this research is to give international building companies and managers insight in cultural differences that occur in international building projects and provide them with advice to manage these projects as effectively as possible.

You were part of the core project team for an international building project. Different nationalities and cultural backgrounds were present during this project and I am curious to get more information on this from your perspective. In the survey, you will be asked to make a decision between two or three options that describe you as a professional working in the building sector. Please note that there are no right or wrong answers. The survey will take approximately five minutes to complete.

Thank you very much for your cooperation and contribution to this research!

A. E. (Lisa) Verhoeven

a.e.verhoeven@student.tudelft.nl

The following terms have been derived from the Lewis model which categorises national cultures. Which of the following terms is most applicable to you as a professional working in the construction sector? (please tick one on each horizontal row)

Introvert	Extrovert	
Patient	Impatient	
Quiet	Talkative	Silent
Mind my own business	Inquisitive	Respectful
Keen on privacy	Gregarious	Good listener
Unemotional	Emotional	Quietly caring
Work within department	Get around all departments	Consider all departments
Follow correct procedures	Pull strings	Network
Accept favours reluctantly	Seek favours	Protect face of other
Delegate to competent colleagues	Delegate to relations	Delegate to reliable people
Complete action chains	Complete human transactions	React to partner
Like fixed agendas	Interrelate everything	Thoughtful
Brief on telephone	Talk for hours	Summarise well
Use memoranda	Rarely write memos	Plan slowly
Respect officialdom	Seek out (top) key person	Ultra-honest
Dislike losing face	Have ready excuses	Must not lose face
Confront with logic	Confront emotionally	Avoid confrontation
Limited body language	Unrestricted body language	Subtle body language
Interrupt rarely	Interrupt frequently	Interrupt never
Separate social/professional	Interweave social/professional	Connect social/professional
Methodical planner	Outline planning	General principles
One thing at a time	Several things at once	React
Work fixed hours	Work any hours	Flexible hours
Punctual	Not punctual	
Job-oriented	People-oriented	
Compartmentalise projects	Let one project influence another project	See whole picture
Stick to plan	Change plans	Make slight changes
Stick to facts	Juggle facts	Statements are promises
Get information from statistics, reference books, database	Get first-hand (oral) information	Use both first-hand and researched info
Dominated by timetables and schedules	Unpredictable timetable	React to partner's timetable

10.6 Appendix F – List of interviewees

Case	Organisation	Interviewee	Role	Date [DD/MM/YYYY]	Way
Test	Т&Т	1	Director	03/09/2020	Video call
Test	Т&Т	2	Director	04/09/2020	Face-to-face
Test	Т&Т	3	Director	07/09/2020	Video call
А	Т&Т	A1	Project manager	09/09/2020	Video call
А	Т&Т	A2	Assistant project manager	10/09/2020	Video call
А	Client	А3	Project manager	15/09/2020	Video call
А	Т&Т	A4	Director	18/09/2020	Video call
В	Т&Т	B1	Assistant project manager	22/09/2020	Video call
В	Т&Т	B2	Assistant project manager	24/09/2020	Video call
В	Т&Т	В3	Senior project manager	25/09/2020	Phone call
В	Contractor	B4	Account manager	30/11/2020	Video call
С	T&T	C1	Senior project manager	21/09/2020	Phone call
С	Client	C2	Client representative	07/10/2020	Phone call
С	Т&Т	C3	Assistant project manager	08/10/2020	Video call

10.7 Appendix G – Expert panel

The expert panel consisted of five Turner & Townsend employees with experience working in international project teams, see the overview below. They were provided with the information in this appendix as preparation for the panel session. Note: the transcript of the expert panel has not been included in this repository version of the thesis. If you wish to access this information, please contact the author.

Expert	Role	Years of work experience
1	Associate director	20
2	Senior project manager	7
3	Associate director	27
4	Director	33
5	Director	15

Research MSc thesis on effective project management around the world

Institution Delft University of Technology

Researcher Lisa Verhoeven

Date 19/11/2020 [DD/MM/YYYY]

Dear participant,

Thank you for taking part in this research on effective project management around the world, focusing specifically on how to effectively manage cultural differences in international building projects. This research is part of my graduation thesis for the MSc track Management in the Built Environment at the TU Delft. The goal of this research is to give international building companies and managers insight in cultural differences that occur in international building projects and provide them with advice to manage these projects as effectively as possible.

You are a professional in the building industry and have expert knowledge on working in multicultural teams on international projects. During this afternoon, I will share with you the findings of my research and pose them to you in the form of statements. I will explain the statements and then we will openly discuss them. The discussion serves to provide me with practical insights on my findings and to structure my recommendations for practitioners. Please note that there are no right or wrong answers, your view and opinion are important.

If you have any questions before the panel, please reach out.

A. E. (Lisa) Verhoeven

a.e.verhoeven@student.tudelft.nl

Agenda

_	
13:00	welcome and introduction
13:15	introduction and debate statements
14:15	questions and feedback
14:30	closing

Statements

1	Culture and cultural differences should be an explicit subject during project start-up meetings.
II	General expectations, procedures and guidelines of both the client and the local workforces need to be aligned, the process in which this should take place needs to be facilitated by the project management team.
III	Framing the project with a clear start-up meeting, finalisation meeting and organising teambuilding activities is beneficial for the effectivity of the project.

IV Communication management is the most important element of effective management of culture in international building projects.

Summary of the research

Problem

Building internationally is no longer an exception, but a standard for various construction companies. With that, the need to understand foreign norms, values and beliefs becomes crucial to deliver successful projects abroad. Through understanding and managing cultural differences in projects, project advantages and general company success can be obtained. Currently, there is a gap in knowledge on how to manage cultural differences in international building projects most effectively.

Research question and approach

The research question that links to the above problem is formulated as follows: "How can cultural differences be managed most effectively within the management areas of international building projects?" A literature review and empirical research were applied to answer this question.

Three cases were researched: all were commercial real estate office fit-out projects for multinational technology clients: case A in Brazil for a Swedish client, case B in the Netherlands for a North American client and case C in Malaysia for a British client. In total, 10 project managers – both from the T&T team and the client – were interviewed.

Goal of the research

The deliverable of this research will be insight in and advice on the management of cultural differences in international building projects. The eventual goal is to give global building companies and managers insight in cultural differences that occur in international building projects and provide them with advice to manage these projects as effectively as possible to obtain maximum project success.

10.8 Appendix H – Overview interviews Case A – Brazil

Note: the transcripts of the interviews have not been included in this repository version of the thesis. If you wish to access this information, please contact the author.

10.9 Appendix I – Overview interviews Case B – the Netherlands

Note: the transcripts of the interviews have not been included in this repository version of the thesis. If you wish to access this information, please contact the author.

10.10 Appendix J – Overview interviews Case C – Malaysia

Note: the transcripts of the interviews have not been included in this repository version of the thesis. If you wish to access this information, please contact the author.

