The Influence of Cultural Differences on the Business Analysis Process in Globally Distributed IT Companies

A case study of Turkey and Poland branches of an IT Corporation

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Abstract

Today, globally distributed software development is an unstoppable trend in Information Technology (IT) all over the world due to the benefits it provides such as cost benefits, time saving, accessing the large labor pool and available resources. However, globally distributed software companies face some issues in this regard. Cultural differences are introduced and discussed as one of the fundamental issues in globally distributed IT companies. Further, it is evident from the literature that business analysis process is the fundamental phase of software development process that affects the entire process of software development, and requires effective communication and collaboration among teams and between team members. Globally distributed software development makes the business analysis process and its related sub-phases even much more complicated than it is. Therefore, in this study, the influence of cultural differences on globally distributed business analysis process is analyzed. In order to do that, I conduct a qualitative study in which employees of the Turkey and Poland branches of the GTECH IT Company are interviewed. Hence, in this study remote project team member are asked about varying cultural differences that I extract from several existing cultural models and unify them into an integrated model. There are many studies exist about cultural differences in literature and these studies has similarity and differences which are creating complexity for readers and researchers. Hence, in this research Hofstede’s, Hall’s and Trompenaars’ cultural frameworks are unified and then I develop a new cultural model. By applying this new framework or model I investigated the influence of varying cultural differences on business analysis process that is conducted in a globally distributed IT company.

Keywords: Cultural Differences, Business Analysis process, Requirement Engineering Process, Cultural Models, Globally Distributed Company
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1. Introduction

This chapter provides an introduction to the topic of this study. Initially, the background and the problem area is presented, it is followed by the topic justification and the contribution of the study. Later, the purpose of conducting this study and the research question that guides the study is provided. The chapter is finalized by explaining the scope and limitations as well as the Company description and the project contents.

1.1. Background and Problem Area

These days, globalization is an unstoppable trend in many types of industries all over the world (Jackson, 2008). Consequently, globally distributed software development process and globally distributed teams have become popular and this trend is continuously increasing among many types of industries. Software development industries are one of the particular industry that work usually in a globally distributed work environment (Carmel, 1999; Herbsleb and Moitra, 2001; Patel et al., 2009; Despande et al, 2010; Alnuem, Ahmad and Khan, 2012). According to Horasis’s report (2005), US software companies moved 50% of their job market to low-cost countries and Europe widely reduces its local software developments. There are several important reasons behind globally distributed software development trend. Firstly, globally distributed development helps industries saving effort costs due to accessing a large labor pool with highly skilled workers with low salary. Secondly, it allows industries to save development cost due to decreasing development time. And thirdly, it is decreasing the time to market software applications (Carmel, 1999; Chau and Pan, 2008 cited in Nidhra et al, 2013; Gladstone et al, 2012.). For example there are big software corporations such as Microsoft, International Business Machines (IBM), Google and others that have moved part of their development activities to low-cost countries in Asia such as India, China and Singapore, Malasia, Russia and so on (Patel et al., 2009) in order to reduce cost, access capable developer, decreasing development time and enter into new markets (Carmel 1999; Gladstone, 2012, Kotlarsky and Oshri, 2005). Besides, Global Software Development (GSD) comes with some issues, such as geographic distribution, time zones, coordination, communication, technical, strategic, cultural and organizational, knowledge management, project and process management issues etc. (Carmel, 1999; Herbsleb and Moitra, 2001; Despande et al., 2010). However in practice many software developed projects ended with failure or disappointing results (Patel et al., 2009). According to the Meyer’s report (2006 cited in Patel et al., 2009), at least 40% of software development projects are resulted in failure due to some soft issues, such as cultural differences that create problem in software development. Besides, many other studies (e.g. Carmel, 1999; Shachaf, 2008; Patel et al., 2009; Despande et al., 2010; Browaeys and Price, 2009) pointed out that the failure of the global software development projects is rooted in coordination, communication and management problems.

In the light of these points, many studies have been conducted so as to determine the problems and opportunities in order to run successful globally distributed software projects. In those studies, geographical distance, communication, coordination, cultural and organizational differences are stressed (Carmel, 1999; Herbsleb and Moitra, 2001). Varying researchers also advocate that one of the important factor for GSD projects is the cultural differences since it can affect work ethics, work hours, communication style, attitude to hierarchy, sense of time and other critical items (Carmel, 1999; Herbsleb and Moitra, 2001; Edwards and Sridhar, 2002 cited in Patel et al., 2009; Patel et al., 2009). Besides it is emphasized that cultural differences can lead distributed software development teams to serious misunderstandings, misinterpretation and lack of communication and coordination which are important in every stage of a globally distributed software development process particularly in the early stages
such as business analysis, requirement gathering, requirement analysis phases and so on (Carmel, 1999; Herbsleb and Moitra, 2001; Hsieh, 2006; Alnuem et al. 2012). Many distributed software development projects ended with disappointing results because of poor requirements gathering and analysis during the business analysis process (El Emam et al., 1995; Damian and Zowghi, 2003; Damian and Zowghi, 2010). Pandey et al. (2010) stated that requirements engineering is a fundamental step of GSD projects. Therefore, this stage leads future problems (Damian and Zowghi, 2003; Damian and Zowghi, 2010; Pandey et al., 2010). It is estimated that detecting and repairing errors in requirements during the maintenance stage may become 200 times more expensive than conducting an appropriate and accurate requirement gathering process (Bohemn et al., 1994). Additionally, several studies (e.g. El Emam et al., 1995; Damian and Zowghi, 2003; Niazi and Shastry, 2003; Damian and Zowghi, 2003; Alnuem, Ahmad and Khan, 2012;) have been conducted to show problems of globally software development projects with regard to poor gathering and managing requirements in the early stages of development.

Global Software Development (GSD) as a work method has become widely-used and well-known. However, it brings its own challenges. Complexity of knowledge sharing, issues of power and control and cross-cultural communication and coordination, time zone difference are counted as some of the challenges in globally distributed software development. Cultural differences among individuals are the focus of this study.

1.2. Topic Justification

The globally software development process is a set of human focused, social and technical activities done by multinational or distributed development teams that leads to the development of software products (Mockus and Herbsleb, 2001; Lumbreras et al., 2011). These processes are heavily relying on the human interaction at every stage of software development process, particularly in the early stages including business analysis process in general and requirement engineering in particular (Mockus and Herbsleb, 2001). For that reason, distributed software development projects can face with several challenges such as coordination, communication and misunderstanding, misinterpretation and management due to cultural differences Carmel, 1999; Herbsleb and Moitra, 2001; Damian and Zowghi, 2003; Hsieh; 2006, Patel et al., 2009). In literature, cultural differences are referred as one of the important critical factors that impact the success of globally distributed software projects since it can influence on the relationship of globally distributed software teams. Cultural differences can shape individual’s perceptions, attitudes and behaviors (Herbsleb and Moitra, 2001). Varying researchers also discussed that due to cultural differences, individuals’ attitude, behavior and perception can be differ when it comes to communication style, working hours, work style, organizational hierarchies and so on which are fundamental concerns for globally distributed projects and teams. Accordingly, these issues directly influence on the coordination of team members’ relationships and communications with each other during a software development process (Carmel, 1999; Herbsleb and Moitra, 2001; Patel et al., 2009; Edwards and Sridhar, 2002 cited in Patel et al., 2009). Giddens (1984) stated that contradiction among different groups include a variety of cultures among these groups. According to Sahay, Krishna and Walsham et al., (2004) culture issues can make or break an offshore project. Cultural differences can create problems such as misunderstandings or misinterpretations during a software development process, for example as Walsham (2002) stated there can be variations in individuals’ perspective about upcoming events and decisions. In a distributed business analysis and requirement engineering process, different cultural backgrounds might be involved. In other words, stakeholders are dispersed geographically. That means stakeholders have different perception about varying phenomena, style of communication and so on. (Herbsleb and Moitra, 2001).
Software Requirement (SR) or Requirements Engineering (RE) is the process of understanding and defining what services are required for a system and identifying the restrictions on the system’s operation and development (Sommerville, 2007). In other words, this process is a key challenge for GSD and its activities construct whole entire software development life-cycle. Errors at this stage cause different problems in other phases of software development (Damian and Zowghi, 2003; Kauppinen et al., 2004). As this phase is complicated by itself, including individuals with different cultural backgrounds to it can increase the complexity and diverse (Alnuem, Ahmad and Khan, 2012). Due to complexity and constant changes in software requirements, a good communication and coordination between distributed requirement engineering teams and business analysts play a key role in avoiding misunderstandings and misinterpretations and also decision making (Mockus and Herbsleb, 2001; Sommerville, 2007; Pandey et al., 2010). In the light of these issues, varying studies have been conducted (Cherry and Robillard, 2008). However, there is still a lack of research and discussion about the influence of cultural differences particularly in the requirements engineering process since it is a critical phase of software development process which affects the entire software development life-cycle. This study aims to work in this area. In order to meet this aim, among varying cultural models that are investigated influence of cultural differences on different contexts, I have chosen three models and by comparing them, I come up with a modified/new model that is going to be applied to this research. Current study can give a different perspective on the matter of cultural differences to the researchers and practitioners who work in the area of globally distributed business analysis in general and requirement engineering process in particular.

1.3. Contribution of the Study

I expect that this research makes an academic and practical contribution. As it is mentioned in the background of this study, cultural differences are one of the important factors in conducting a fruitful globally distributed software development process, however not many studies are paying attention to cultural differences and their influence on the requirement engineering process in particular and business analysis process in general. By focusing on this matter, the current study is expected to contribute to the information about the needs, challenges and relationship of the globally distributed teams with different cultures. This study suggests a complementary perspective to project managers and business analysts who are in charge of the business analysis process and handling successful requirement engineering. Moreover, applying available theoretical cultural models to this study contributes to using of those models and their applications to the IS-related subjects. Furthermore, for conducting this research, a unified cultural framework based on the existing cultural models is formulated. This unified cultural model is constructed based on the similarities and differences of the existing cultural models. In addition, this study examines empirical findings about the influence of cultural differences on globally distributed software development teams which are collected from the Polish and Turkish branches of an American IT company. Therefore, the results of this study can support the researchers and managers in both Polish and Turkish branches in their prospect collaboration and can advocate the company in its future distributed projects. It is also expected to be practical for those companies which decide to conduct globally distributed IT/IS projects.

1.4. Purpose of the Study

In this research, I am going to investigate the influence of cultural differences on distributed IT teams by studying their activities, attitudes, and efforts during a requirement engineering process. Moreover, I am going to identify and study the issues in an IT project that are caused
by cultural differences and particularly analyze the influence of those issues on the business analysis process in general and requirement engineering in particular.

1.5. Research Question
Considering the purpose of this study, the research question is:
How can cultural differences influence on business analysis process in a globally distributed IT company?

1.6. Scope and Limitations
I expect that cultural differences create some challenges among globally distributed teams with different cultures during conducting a software development project. Therefore, this study mainly focuses on examining the possible effects of cultural differences among distributed teams during the business analysis process in general and requirement engineering process in specific. Business analysis is the fundamental process of software development and contains different phases (see chapter 2). However, its requirement engineering phase plays an important role in a software development project since it affects the entire software development cycle. In this phase, any mistake, ambiguity and misunderstandings might lead the project to unexpected distorted results (Damian and Zowghi, 2003; Pandey et al., 2010; BABOK 2nd version cited in IIBA 2009). For that reason, I only concentrate on the requirement engineering phase of the business analysis process in this study.

This thesis is limited to investigating Turkey and Poland branches of an American Global IT Company. Therefore, this investigation will not include company’s headquarter or branches in other countries. The main focus is limited to the requirement engineering process of the distributed software development process. Cultural differences, as it is discussed earlier in this chapter, can have both benefits and drawbacks during conducting the requirement engineering process. However, this study is limited to only examining drawbacks of cultural differences in distributed software development teams. On the other hand, although there are varying methods for discussing cultural differences, I limit my study to a unified framework that is extracted from three other cultural models by Hofstede, Trompenaars, and Hall. Lastly, This thesis has a methodological limitation as well. Since the data collection method of this study is an email-based interviews and also because of the company’s confidentiality matter, interviewees did not answer all the interview questions.

1.7. Company Description
The company that I select for this study is GTECH (http://www.GTECH.com/) which is a leading global IT organization. GTECH was established in 1980 and has been providing software, networks, and professional services that power high performance transaction processing solutions. GTECH’s core market is the lottery industry, with a growing presence in commercial gaming technology and financial services transaction processing. Through its worldwide network of operations, GTECH has 52 external branches. However, GTECH’s headquarter is in Rhode Islands in USA and provides marketing, game plans and management. GTECH’s branch of Eastern Europe provides software applications and GTECH’ Western Europe provides hardware appliances.

I have conducted this case study in Turkey and Poland branches of GTECH, which are part of the global GTECH Company. Turkey branch of GTECH is the leading supplier of online transaction processing software, hardware, operations and consumables for only Turkish National Lottery Association (it is called Milli Piyango) which is a governmental organization works in the area of providing and regulating gaming, betting, gambling and
lottery related products throughout Turkey, since 1939. GTECH of Turkey supports Milli Piyango with solutions and services including central system and terminal maintenance and also supports Milli Piyango in overall enhancement of its products and game portfolio. GTECH Turkey enables Milli piyango (governmental organization) to process lottery transactions over two different models: First; Product Sales: Customer owns the product and operates the lottery via its own Resources. The effort is spent in project phase and then the customer supported if need. Second; Facility Management: customer permits the company to handle lottery operation according to the contract terms and the effort is so big in this model since GTECH Turkey is responsible of providing a reliable, secure, and error-free operations.

Briefly, GTECH Turkey holds a leading position in the gaming sector via network and terminals connected to the main transaction processing. Poland branch of GTECH provides lottery and gambling software services and solution to countries around the world. GTECH Poland cooperates with several branches of GTECH Global. It provides services and solutions to several global branches of GTECH. GTECH Turkey is one of the branches that GTECH Poland is cooperating with in order to implement IT solutions to GTECH Turkey’ external stakeholder which is Milli Piyango.

Briefly, GTECH Turkey cooperates with GTECH Poland for providing software services to their external Turkey stakeholder (which is Milli piyango). In their cooperation GTECH Turkey makes a contract with their customer and do the requirements gathering part of the business analysis process and the GTECH Poland conduct the rest of the steps of software development processes.

1.8. Research Contents
The chapters of this research are organized as the following:

- **Introduction**: This chapter includes the background and problem area, the purpose of the study and the research question. It is followed by the topic justification and the contribution of the study. It also presents the scope and the limitation of the study as well as the company description.

- **Literature Review**: This chapter contains fundamental information about the concepts used in this research and also previous studies in the area of cultural differences in globally distributed IT organizations.

- **Theory Framework**: This chapter provides the background of the theories that are related to the topic of this study. Additionally, it presents a united framework that is going to be applied to the empirical findings.

- **Methodology**: This chapter comprises data collection and data analysis methods for doing this research. Also, it presents the research approach, validity and reliability of the study and also ethical considerations.

- **Findings and Analysis**: The empirical data together with its analysis is given in this chapter.
• **Results:** This chapter provides the results of the analysis which answer the research question of this research. Also some suggestions regarding the outcomes are proposed in this chapter.

• **Discussion:** The results of study are discussed and compared to the same studies in the field.

• **Conclusion and Contribution:** This chapter includes the conclusion of the study. Also the contribution of this research is explained in this chapter.

• **Future Works:** Some possible future studies are suggested in this section.
2. Literature Review

This chapter provides basic concepts and general studies from literature of this study. To be able to understand basic concepts; what requirement engineering process, culture and cultural differences mean in the global field, firstly we have described of requirement engineering process and culture and cultural differences in the details which is followed by section general studies that describes reader the challenges faced due to cultural differences in DSD projects. Briefly, firstly, we aimed the start with basic concepts so that we can ensure the reader the field more deeply. Secondly, many general studies are conducted from literature about the issues cultural differences can cause in distributed software development projects. This provides to reader significant perspective to understand what type of issues related to culture differences lie behind of distributed software development projects.

2.1. Basic concepts

2.1.1. Business Analysis

Business analysis process can define as a set of tasks, knowledge and techniques required to identify a software project need of clients and stakeholders to understand the structure, policies and operations to determine solutions to software project problems to achieve successfully their goals (Johri, 2010; BABOK 2nd version cited in IIBA 2009). Specially, this process is responsible of requirements development and management. In other words, Business analysis is as a link among stakeholders in order to analyze, communicate and validate requirements of software development projects (Johri, 2010; Blais, 2011). Business analysis contains an understanding of organizations function in order to achieve their goals, determining the capabilities of an organization and its products and services, definition of organizational goals and their connection with specific objectives, definition of activities, business needs and actions in order to achieve goals and definition of organizational units and stakeholders within and outside of the organization (BABOK 2nd version cited in IIBA 2009.). The goal of Business analysis is to define the activities, business needs and validate solutions that meet software project needs, goals and objectives in order to get expected result from project work. Johri, 2010). Briefly, business analyzer helps organizations to define the proper solution for their needs under the several constraints such as time, budget, regulations, and others. Those who are performing the business analysis today known by a number of titles such as business analyst, business system analyst, systems analyst and requirement engineer, data analyst, Product development manager, functional architect, Business process analyst, Business system analyst, process analyst, management consultant, enterprise analyst, product owners, product managers and others (Johri, 2010; Steve, 2011). A Business Analyst works as a liaison among stakeholders such as customer, IT professionals and executives in order to elicit the needs of stakeholders, analyses, communicate and validate requirements of the project. Business analyst performs the business analysis activities no matter their job title and role in the organization (BABOK 2nd version cited in IIBA 2009). Depends on the organization, business analyzer may perform financial analysis, project management, software development, quality assurance, testing, training, organizational development and documentation development functions (Johri, 2010; BABOK 2nd version cited in IIBA 2009). Basically, Business analyzer is the key facilitator within an organization, acting like a bridge between the client stakeholders and the solution team (Johri, 2010)

Responsibilities of business analyst

1. Identify business problem and opportunities.
2. Eliciting, analyzing, communicating and validating requirements
3. Recommending solution to help achieve business goals.

The role of business analysis and project manager may seem similar. There are some overlapping areas such as identifying goals and requirements, risk analysis and finding strategies for business success. However, the project manager is responsible for the timely completion of the project within budget. The business analyst ensures that the project is completed correctly with the defined requirements.

Johri (2010) stated that the requirements of software projects serve as the foundation of systems and system component. Business analysis process covers different type of gathered requirements in software development project such user requirements, Functional requirements, and Quality and Service requirements, assumptions and constraints, implementation requirements. These types of requirements are gathered and described in details in Business analysis process related concepts. Requirements provide a road map the whole software project. Any mistakes in this business analysis will affect the entire project (Johri, 2010). Therefore, Business analysis is the key of the project success that is aiming to ensure that requirements are visible and understood by all stakeholders in software development projects (BABOK 2nd version cited in IIBA 2009). Requirements can be described as a condition or capability a customer needs to solve a problem or achieve an objective (BABOK 2nd version cited in IIBA 2009). And they may describe the current or the future state of the organization that is solution to existing or past business needs. For clarification purposes, a business analyst should always lead requirements (BABOK 2nd version cited in IIBA 2009.; Johri, 2010).

The business analysis process consists of several core concepts which are enterprise analysis, Requirement planning and management, Requirement elicitation Requirement analysis and documentation, Requirement communication, solution assessment and validation.

Below I gave a quick review of each.

**Enterprise analysis:** This process covers pre-project activities for capturing the necessary view of the business to provide context to requirements and functional design for a given initiative and/ or for long term planning.

**Requirement planning and management:** This process defines the resources and tasks associated with the planning and management of requirements gathering activities throughout the requirement process (Johri, 2010). This process covers identification of stakeholders, selection of business analysis techniques, the process that will be used to manage requirements and how to assess the progress of the work.

**Requirement elicitation:** This process describes how stakeholder needs are identified. The goal of this process is to ensure the stakeholder’s actual needs are understood. In this process business analyzer identify and understand stakeholder needs and concern and understand their work environment (BABOK 2nd version cited in IIBA 2009).

**Requirement analysis and documentation:** This process describes how stakeholder needs are analyzed, structured and specified for use in the design and implementation of a solution to a business problem, so that the project team has a clear understanding of how to design and implement it (Johri, 2010). Requirements analysis and documentation defines the methods, tools and techniques used to structure the raw data collected during Requirements elicitation, identify gaps in the information and define the capabilities of the solution, which must be documented.
**Requirement communication:** collection of activities and considerations for expressing the output of the requirements analysis and documentation to a broad and diverse audience. It includes presenting, communication, verifying and gaining approval of the requirements for stakeholder and implementations of the project.

**Solution assessment and validation:** This process describes how is assessed proposed solution in order to determine the proper one regarding to business needs, identification of gaps and shortcomings in solutions. Beside determination of necessary workarounds, changes in solution is done in this phase (Johri, 2010). This phase ensures that the solution meets the stakeholder objectives, is thoroughly tested, and is implemented smoothly (BABOK 2nd version cited in IIBA 2009).

In Business analysis process proper communication and coordination play an important role in project success. Therefore, the business analysis process should be prevented from inadequate communication and coordination, misunderstandings, conflicts, lack of requirements, inconsistent and incomplete requirement and so on. Having a full range of identified requirements in single document can ensure less confusing and misunderstanding during the development process (Johri, 2010). Through the study of system and software requirement engineering practices, it is clear the use of effective requirements definition and management practices lead to successful projects, satisfied customers and increased professionalism in the industries.

Briefly, as it explained above Requirement engineering is a part of Business analysis process in software development projects since Business analysis is dealing with all activities of Requirement engineering. These areas are Requirement elicitation, communication, analysis and documentation and validation. For further information about requirement engineering process processes see section 2.1.2). Regarding to this information we can say Requirement engineering activities overlapping with business analysis activities since Business analysis cover all its activities.

### 2.1.2. Requirement Engineering Process

Software Requirements describe needs and requirements from both the perspective of customers and software solutions. The requirements are usually captured as text statements about capabilities and functionalities of software systems. Since software requirements are usually textual descriptions of customer needs, they can be created in various ways (Leffingwell et al. 1999). The discovery of software system’s requirements is long and complex process that must be considered enormously important in order to develop a successful software solution (Larman, 2002). The process of identifying, documenting and modeling, analyzing, validating, maintaining, communication requirements know as requirement engineering which is a very effective process of software development projects (Pandey et al., 2010). Requirements engineering is a detailed and complex activity that involves users’ requests which root in varying perspectives, objectives, goals, roles and duties, for that reason requirement engineering affects the entire activity of software development (Ibid). In this process, requirement engineers take the part which is usually known as a business analyst in software development projects (Johri, 2010). Beside business analyst, a project manager take a significant role in the requirement discovery phase and even sometimes these two roles seem as one during this process. The reason can be, there are some overlapping areas such as identifying requirements, risk analysis and finding strategies for project success. Therefore, these two roles sometimes are known as one. Actually mostly an organization decides if an individual business analyst may perform the project manager’s responsibilities (Ibid). The main goal of the requirement engineering process is to meet end
users’ satisfaction, desirable cost and time (Asghar and Umar, 2010). The requirement engineering process consists of several core activities: Elicitation, Analysis and Documentation and Validation, and management (Paetsch et al., 2003; Maciaszek, 2005; Sommerville, 2007; Johri, 2010; Pandey et al. 2010). Below I gave a quick review of each.

**Requirement Elicitation:** Requirements need to be obtained from users and system owners (i.e. Customer). This step is called requirement elicitation which usually is conducted by a business analyst. The most common requirement elicitation way is traditional interviews with the customers and/or end users which is followed by the next step in the requirement election procedure that covers eliminations of contradictions and duplications of requirements. During requirement elicitation procedure, gathered requirements are defined, classified, numbered and prioritized after reviewing and renegotiating with customers and end users (Maciaszek, 2005). Meanwhile, as Maciaszek (2005) points out requirement elicitation is about social, communication and managerial skills. The costs of not capturing, omitting or misinterpreting of customers’ requirements may cause unexpected problems during the software development process. The purpose of requirements elicitation is to provide a narrative definition of requirements about how should work and what its characteristics are with regard to stakeholders’ expectations. In this phase, the task of the business analyst is to collect and translate requirements into a business model(s). The main Techniques for Requirement elicitation include interviews, questionnaires, observations, brainstorming, prototyping, Use cases/scenarios, focus Group (Paetsch et al., 2003).

**Requirement Analysis:**
This step covers how requirements are analyzed, structured and specified in order to be used in the design and implementation phase. The aim of this phase is to define and describe the characteristics of an acceptable software solution, so that the project team will have a clear understanding of how to design and implement the final software system (Johri, 2010). Requirement analysis step identifies gaps and limitations in gathered requirements (Johri, 2010). Besides, checks the need, contradictory of requirement and it checks missing constraints of requirement, and it checks requirement feasibility in the context of budget and schedule available for the system. The main techniques are used for requirement analysis are JAD sessions, Pritorizations and Modelling (Paetsch et al, 2003).

**Requirement Documentation:**
Requirement documentation is a formal record that holds a comprehensive explanation of the features of the software system (Pandey et al, 2010). And the purpose of this document is to communicate requirements between stakeholder and developers. A proper requirement documentation is complete, clear, and accurate, understandable, feasible and consistent (Paetsch et al, 2003). Therefore, this document will be used by the project team(s) to estimate required budget, time, and other resources for implementing the final software solution with regard to collected requirements. Documentation of requirements helps refining stakeholders’ interpretation and supports the business, needs, goals and objectives. (Johri, 2010).

**Requirement Validation:**
As it is discussed in the previous step, all gathered requirements are described, specified and documented after different stakeholders agree upon its validity. The aim of this phase is to validation of system requirement and verification of requirement documentation, so that the stakeholder will have correct, certain, consistent and clear system requirement documentation for software development (Pandey et al., 2010). As an output of requirement validation contains the reported problems with the requirement document and the action to cope with the problems (Paetsch et al, 2003). And In each of these quality checks of requirement the
business analyst should be in a position to highlight problems (Pandey et al. 2010). The techniques used for requirement validation are requirement reviews and requirement testing (Paetsch et al., 2003).

**Requirement Management:**
Requirement management is a continuous activity of identification, change and control requirements and development process. The aim of requirement management is to capture, store and manage information. This phase includes any activities concerned with change, control, requirement tracing and requirement status tracing (Paetsch et al., 2003). Moreover, this phase is considered as the most complex phase of the requirement engineering process (Gotel, 1995 cited in Pandey et al. 2010). Because any change on requirements has a significant and inestimable impact on the development process. Therefore, before approving any change, new costs and redevelopment work amount must be re-figured (Pandey et al. 2010).

2.1.3. Culture and Cultural Differences
Culture can be understood as the system of socially created and learned norms and how to perceive and act regarding shared norms by members of an identity group (Porter, 1972). As Porter (1972, p.3) indicates “culture involves the cumulative deposit of knowledge, experience, meanings, beliefs, values, attitudes, religions, concepts of self, the universe and self-universe relationships, hierarchies of status, role expectations, spatial relations, and time concepts acquired by a large group of people in the course of generations through individual and group striving”. Trompenaars and Hampden (1998) point out that culture is a shared system of meanings. It dictates what we pay attention to, how we act and what we value. Hofstede (1980, p. 21) defined the culture as "Collective programming of the mind which distinguishes members of one human group from another". A simplified generalization of how to define culture can be “the way in which a group of people solves problems and reconciles dilemma" (Trompenaars and Hampden, 1998, p.13). Culture can be conceptualized as shared symbols, norms and values in a social collectivity such as country throughout the nation such as languages, different understanding in individual level, ethics, different religions etc. (Walsham, 2002). Culture is a complex concept and has lots of visible and invisible properties, for example visible properties cover clothing, religious, rituals and so on while the invisible properties cover understanding of value orientation of environment, time, space, communication, thinking, competitiveness and so on. However, fundamental differences arise on these properties due to individuals from different culture (Hanvanich et al, 2006) stated that cultural differences refer the dissimilarity of individuals from different cultures. (Hanvanich et al., 2006) and can define as dissimilarities on culture’s visible and invisible properties (MacGregor et al. 2005). The national cultural differences influence individual’s preferences and, create various perspectives and outlook on social interaction norms and patterns of social interactions (Lanubile et al., 2003; Watson et al., 1994 cited in Paul and He et al., 2012). Cultural differences are difficult to observe and measure, and are very important issues to work out. These differences can lead to embarrassing blunders, strain relationships of individuals, and the impact of cultural differences persists even in life and death situations (Ghemawat and Reiche, 2012). As a result, several cultural studies have been conducted and proposed varying cultural models in order to identify, discuss and categorize cultural differences (e.g. Hofstede, Trompenaars, Hall and so on etc.). I will give details about some of these models in the chapter 4.
2.2. General studies about issues of cultural differences cause

Culture is a common and complex matter to handle for globally distributed software projects (Carmel, 1999; Prìkladnicki, Prikladnicki, Audy and Evaristo, 2003; MacGregor et al. 2005; Despande, 2010) and cultural differences are often indicated as obstacles within globally distributed teams and has negative impacts on the level of understanding and appreciation of the activities and efforts of distant team members (Despande et al., 2010). According Meyer (2002 cited in Despande et al., 2010) at least 40 percent of software development projects are failed in delivering benefits because of the issues mainly caused by cultural differences. Therefore lots of scholars in organizational studies have argued cultural differences and its causes and influence.

Despande et al. (2010) has conducted a qualitative study in a global software development company and discussed various cultural issues that arise within culturally different and distributed teams. His result reveals several findings such as cultural differences has a major effect on outlook towards gender (for example female team members may be perceived differently due to the cultural differences); linguistic, ethnic and religion background of distributed team members representing cultural differences; also unforeseen problems such as scheduling, meeting and coordination problems arise due to cultural differences, for example because different cultures have different festive and holiday calendar. Therefore, effective communication is necessary to solve these problems. Lastly, cultural differences can cause misinterpreting and misunderstanding between members of distributed teams and increase frustration, anxiety and concern between them (Despande et al., 2010).

Brockmann and Thaumüller (2009) conducted a case study to analyze how cultural differences present challenges in the agile requirement engineering process in global software development projects. Their results indicate that large cultural differences increase difficulty of coordinating different styles of communication, conflicts in management, ambiguity and criticism of individuals in feedback of unit test. Therefore, lose of face among globally distributed software team members is unavoidable.

Prikladnicki et al (2003) investigated problems in global software development projects by a case study. His study resulted in particularly exposing that cultural difference is a risk factor in distributed software development projects and it has enormous influences on team members’ attitudes and behaviors. Additionally, he noted that cultural differences create obstacles in communications, feedback, language understandings, sharing information and defining well software development process, team integration, trust acquisition between distributed software team members. Therefore, in all project requirement identification, stability and involving activities such as meetings became challenges mainly due to cultural differences influence in compromising understanding and agreement of distributed software development team members.

Gladstone et al. (2012) introduces communication as a problem area that is highly affected by cultural differences in globally distributed software projects. In their research, Gladstone et al, 2012 t al, highlighted that because of cultural issues remote team members of a global software project can have different interpretations about a certain situation. Therefore, Gladstone et al. (2012) stressed that large cultural differences between remote team members can create misunderstanding and conflict in their teamwork. On the other hand, Gladstone (2012) strongly stated that language-based misunderstandings and conflicts are not about the words or grammar; it is about the interpretation which differs from culture to culture.
Paul and He (2012) conducted a laboratory experiment to quantify and measure whether cultural differences influence psychological factors (i.e. Motivation, distraction and trust) in virtual teams. Their results expose that cultural differences do not affect the psychological issues such as motivation, and trust in virtual software teams in short duration of time. However, they underlined that they may reach this result because of virtual software team members short duration of time only focused on the task and did not have enough time to understand the exact nature of the differences in communication styles that arising from cultural differences. Moreover, their laboratory experiment result exposes that cultural differences have a negative influence on information sharing in short duration virtual software teams (Paul and He, 2012).

Patel et al. (2009) investigated the cultural issues concerning offshore software development. They conducted a survey research by which they gathered information from several known software development companies (e.g. IBM, Sun, Intel and so on.). The result of their study shows that cultural differences have negative impacts on quality, cost and time of offshore software development, and it also affects the negatively team cohesion and collaboration in which they may lead to the failure of software development projects. Moreover, the influence of cultural differences causes several issues such as misperception, misinterpretation, disagreement, poor communication, increased delivery time and cost, reduced team morale, and decrease trust in relationships. Briefly, cultural differences decrease the quality and increase total cost and time of software development and mostly end with unexpected result or failure in offshore software development.

Edward and Shridhar (2002 cited in Patel et al., 2009) proposed that cultural differences affect work ethics, work hours, and communication styles, respecting hierarchy and some other factors which might have negative impacts on the team experience of team members. Therefore Edward and Shridhar (2002 cited in Patel et al., 2009) stressed that lack of awareness of cultural differences may impede the success of global software development projects.

Walsham (2002) investigated a qualitative cultural study in order to investigate cultural differences causes in a global software development company. His result exposes that cultural differences cause global software development projects to fail, because cultural differences create several problems in power relationships, time and deadline preferences, work style, goal orientation and collaboration of team members. Therefore, Walsham (2002) noted that the importance of cultural differences influences on cross cultural software development projects.

Damian and Zowghi (2003) investigated a study to emphasize the challenges of requirement engineering in a geographically distributed multi-site organization. The result of their study shows that cultural differences have negative impacts on requirement gathering, negotiation and specification process of requirement engineering. Besides, the analysis of their empirical findings proved that cultural diversity reduces level of understanding and negotiating about requirements among stakeholders, trust level, ability of sharing work artifacts and effective collaboration between distributed software team members.

Huang and Trauth (2007) worked on an interpretive case study in order to examine the influence of cultural temporal separation (it consists of both time zone differences and the time based behaviors of global virtual team members,) and on coordination of globally distributed software development. The result of their study primarily expose that cultural temporal separation is a culturally bounded concept. It also exposes that the cultural
differences in time perception, hierarchy, structure, relationship orientation and social obligation have an influence on timing behavior of team members. According to their findings, they proposed that the influence of cultural differences in virtual team members regarding time-based behavior can be manifested in four ways: use of language, time estimation and commitment, adherence to a schedule and availability / unavailability for synchronous communication. First, due to cultural differences in using of language will result in misinterpretation of time and schedule. Second, due to cultural differences in failure of fulfilling of commitment will cause schedule delays, generate tension and mistrust among distributed team members. Third, due to cultural differences in holiday times, social obligations, dissimilarity in time understanding will create restrictions on regular working hours in software development project. Forth, due to cultural differences in adherence to a schedule will lead to punctuality and being on schedule problems on distributed team members.

Carmel (1999) discussed cultural differences in global software development projects as an important barrier in building trust, sharing and transferring knowledge, effective team performance, and influential team communication and coordination. Therefore, Carmel highlighted cultural differences as an important issue to handle in cross cultural work practices. He agreed on cultural differences increase communication problems. He noted communication consist of mostly contextual information as well as non-verbal cues. The non-verbal communication is mostly the reason of ambiguity and misunderstandings issues because it relies very much on the culture. Moreover, non-verbal communication becomes much more complicated when remote team members use electronic communication tools.

MacGregor et al. (2005) examines the concept of culture, and the potential impact of cultural differences on software development projects. The outcome of their study reveals that cultural differences affect the working relationship of software engineers in global software development projects. Besides, according to the result of their study, cultural differences reduce trust in relationship and effective team functions.

Hanisch et al. (2001) investigated a case study and emphasized that virtual team members include members from different cultural and social backgrounds. According to theirs study hierarchy reverse and nature of collectivism are two powerful cultural issues for virtual requirement engineering process. In their practical work, trust and communication are considered as important factors for the success of a software project. However, the result of their finding shows cultural differences can cause problems in achieving trust and communication.

Winkler and Bouncken (2009) deployed a qualitative field study to examine the effects of cultural differences on global team and innovation performance. According to their findings, cultural differences in context, time and power distance play influential role on the performance of global teams. Besides, their study result particularly reveals the feasibility stage is most strongly affected by cultural differences.

Shachaf (2008) conducted an exploratory study to understand how cultural differences in virtual team influence team effectiveness. Their result exposes several major findings which are cultural differences have a high influence on verbal and non-verbal communication style and language differences issues. Therefore, differences in verbal, nonverbal communication style and language variation create miscommunication and reduce team effectiveness.
3. Theoretical Framework

This chapter provides the background of the theories that are related to the topic of this study. Additionally, it presents the united framework that is going to be applied to this research.

3.1. Introduction

The theory of culture is quite complex for defining a general theoretical framework. And it is almost impossible to translate the behavior, attitude and activities of individuals from one culture to another culture (Hall and Hall, 1990). Therefore, in general there is no unified theoretical framework to explain culture completely (Trompenaars, 1998; Hall and Hall, 1990). Accordingly, during the years many researchers (sociologist, anthropologist, psychologist and historians etc.) have come up with different cultural concepts that suit their purposes and perspectives (Hall and Hall, 1990; MacGregor et al., 2005; Broweeyes and Price, 2009). Most of these studies present social, economic and political considerations (e.g. Leach and Lem, 2002; Towsle, 2011; Spector, 2012 etc.). Others provide the readers with cultural models through which they integrated and presented their observations and experiences (e.g. Hall, 1959; Hofstede, 1980; Trompenaars, 1993; etc.). Moreover, these models offer different concepts which can help to analyze management processes and business strategies in cross-cultural settings (Nardon and Steers, 2009). For example, Hofstede (1980, 2001) established a cultural model that explores the impacts of national cultures on business and supports managers to identify individual and group’s behaviors in a cross-cultural context (see section 3.2.1. for further information about Hofstede’s cultural model). Hall (1959, 1981) investigated and presented the role of communication in management as a cultural study model. Some concepts of his cultural model are similar to Hofstede’s, except he discussed time and space as two of the dimensions of his cultural model (see section 3.2.3. for further information about Hall’s cultural model). Trompenaars and Hamden Turner (1993, 1998) same as Hofstede has established cultural dimensions to analyze cultural impacts on management. Yet, in their cultural model, culture is looked into as process and it is proposed that culture is a way by which people can solve varying problems and reconcile dilemmas (See section 3.2.2. for further information about Trompenaars’s cultural model).

Many other researchers attempted to introduce novel cultural models. For example House et al. (2004) presented a globe cultural model that is a replication of Hofstede’s model (1980). Globe cultural model expanded Hofstede’s five dimensions. It maintained and split up some of the Hofstede’s cultural dimensions and came up with eight cultural dimensions which are power distance, uncertainty avoidance, group collectivism, assertiveness, future orientation, performance orientation and applied in sixty two counties (Globe’s cultural model analyses human values such as Power distance, Uncertainty Avoidance, Human orientation, Intusftional collectivism, in group Collectivism, Assertiveness, Gener Eqalitarianism, Future Orientation, Performance Orientation). The globe research has been done in a sixty two countries in order to see different cultural dimensions on leadership behavior effectivness across two cultures (House et al., 2004). Schwartz’s cultural model analyzes human values such as power, self-direction, hedonism, stimulation tradition etc. (Schwartz, 1994). His model has been applied to some basic areas of social life, for example; on teacher and students in 44 countries. Besides, it is limitedly applied to organizational studies (Bond, 2001 cited in Nardon and Steers, 2009).

As I mentioned earlier, there are various researchers who suggested different cultural models that present scholars’ perspectives towards culture. Moreover, even though these concepts are distinct in some of their definitions or structure, in many parts they are similar (Carmel,
Therefore, for the aim of conducting this study, I have chosen Hofstede’s, Hall’s and Trompenaars’ cultural models. So through the rest of this chapter first each of these three models will be elucidated and then regarding their similarities and differences, I introduce a unified cultural model which I apply to this study.

3.2. Cultural Models

3.2.1. Hofstede’s Cultural Model

The Dutch researcher, Geert Hofstede, conducted a study (1980-2001) about cultural differences in organizations. Hofstede used numerical indicators for analyzing cultural differences among employees from various countries who are working for a Global Distributed Company. He identified a set of fundamental cultural differences – in this study I refer them as cultural dimensions - including: Masculinity vs femininity, Power distance, Individualism vs collectivism, uncertainty of avoidance and Long Term versus Short Term Oriented. The result of his research shows that culture could be distinguished via those five cultural dimensions. Those five cultural dimensions are explained in details below.

3.2.1.1. Dimensions

3.2.1.1.1. Individualism versus Collectivism

Hofstede (2010) described “Individualism is the tendency of everyone to look after him or herself and his or her immediate family. In contrast, collectivism is the tendency of everyone to integrated in to groups or collectives over the interest of the individual” (p.92).

In individuals’ culture, the individuals are connected each other with loose ties and everyone is expected look after her or himself. On the contrary, collectivist culture, people are connected and integrated strongly and look after each other in exchange for loyalty (Hofstede, 1980).

Degrees of individualism and collectivism obviously vary within countries as well as among them according to Hofstede’s IBM survey score (2001). The individualism and collectivism index is measured based on the set of 14 work items in 40 countries (Hofstede, 2010). There is a strong relationship between a country's national wealth and the degree of individualism in its culture. According to Hofstede’s IBM score confirms that nearly wealthy countries score high on individualism while nearly all poor countries score low. Hofstede (2010) stated that individual countries tend to be rich, while collectivist countries tend to be poor.

Collectivism culture oriented people need to work for the group’s benefits while individualism culture oriented persons obtain status from individual achievement. This means that organizations with high individualistic cultures are manifested with individual responsibility, achievement, independence, greater creativeness for results (Hofstede, 1980). While, high collectivism culture is usually busy with the fear of conflicts and fights, fear of falling into disgrace and keeping relationships. In contrast, people from individual oriented culture are honest and have no fear of fights and conflicts, and pay attention to the problems (Ibid).

Hofstede (2010) emphasized that struggles can arise when Masculine companies cooperate with feminine companies. As a short outline of masculine and feminine cultures are shown in Table 3.2.1.1.1.
### Table 3.2.1.1: Differences between low and high individualist cultures (Hofstede, Hofstede, 1984, p.235 ; 2010, p.144)

<table>
<thead>
<tr>
<th>Low Individualism</th>
<th>High Individualism</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The relationship between employee and employer is moral, like a family connection</em></td>
<td>The relationship between employee and employer is a business transaction in a labor market.</td>
</tr>
<tr>
<td>* Rely on group decisions</td>
<td>Rely on individual decisions</td>
</tr>
<tr>
<td>Hiring process is always taken in group into account</td>
<td></td>
</tr>
<tr>
<td>Management is considered as a management of groups</td>
<td>Management considered as management of individuals</td>
</tr>
<tr>
<td>Treating a friend’s group better than other is normal and ethical</td>
<td>Treating everyone same is normal and ethical</td>
</tr>
<tr>
<td>“Task prevails over personal relationships”</td>
<td>“Personal relationship prevails over the task”</td>
</tr>
<tr>
<td>Social mobility (internet, email) is not often used.</td>
<td>Social mobility (internet, email) is used often in order to link individuals.</td>
</tr>
</tbody>
</table>

#### 3.2.1.1.2. Power Distance

Power distance is “the extent to which the less powerful members are distributed and organization within the country expect and accept that power is distributed unequally” (Hofstede, 1980, p.70). Formulated in another way power distance known as the measure of the interpersonal power between powerful member and less powerful members of the institution as accepted by the less powerful members (Hofstede and Minkov, 1984, p.83). The term of power distance is derived from the Dutch experimental social scientist Mauk Mulder power theory that separate the emotional distance between boss and their subordinates In this study the institution means is school, community, organizations and the places people work.

The Power distance index (PDI) score is calculated based on IBM data set of three structured questions in 57 countries or regions (Hofstede, 2001). The first questions were examining whether employers are afraid of expressing their disagreements or not. The second one was examining subordinates’ perception in boss decision making style whether they prefer autocratic style or paternalic style or none of them. The third one was examining preferences of subordinates on boss decision making style related the previous one whether they prefer autocratic style or paternalistic style or democratic style or none of them (Hofstede, 2010).

In low power distance cultures superior and subordinates consider each other as unequal and organizations centralize power in few peoples’ hands. On the other hand, in high power distance culture subordinates thoughtlessly respect and follow the all orders of their superiors. Therefore a high power distance oriented organizations are very centralized. That means a subordinate does not act without permission of their supervisors in such cultures, and they expected to do what they are told. Besides, status symbols and privileges of superiors are important in high power distance cultures. The relationship between subordinates and superior show paternalist behavior and prefer a superior who makes the rules and decisions. Moreover, superior personal is structured as tall pyramids and salary system has wide gaps between superior to subordinate (Ibid).

In contrast, organizations in low-power-distance cultures superior and subordinates consider each other as equal and flexible hierarchy is considered for roles. Therefore, roles maybe change so that a subordinate of today, tomorrow it can be superior. In other words, low
power distance oriented organizations are decentralized. The superior personal is structured as flat pyramids and salary system is narrow between superior to subordinate. The interactions between supervisors and subordinates can be labeled as a reciprocal and involvement in decision-making is valued. The ideal superior should be democratized, fair and accessible. However, subordinates expected to be consulted if there is an important issue related to work and accept that the superiors are the ones who make final decisions. (Hofstede, 2010)

According to Hofstede (2010) there are important key differences between high and low power distance culture which can be so important for companies which are doing business with high and low power distance contexts. A summary of the key differences in the workplace between low and high power distance oriented countries are presented in table 3.2.1.1.2.

<table>
<thead>
<tr>
<th>Low Power distance</th>
<th>High Power distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subordinates and superiors consider each other equal. Hierarchical system just exists for the inequality of roles</td>
<td>Hierarchical systems based on “existential inequality” between superiors and subordinates.</td>
</tr>
<tr>
<td>Organizations are decentralized.</td>
<td>Organizations are centralized.</td>
</tr>
<tr>
<td>The salary range is quite narrow between the superiors and subordinates</td>
<td>The salary range is quite wide between the superiors and subordinates</td>
</tr>
<tr>
<td>Bosses trust in their own knowledge and on subordinates as well.</td>
<td>Bosses trust on superior knowledge and on formal rules.</td>
</tr>
<tr>
<td>Subordinate requires to get consulted on important issues which affects their work.</td>
<td>Subordinate needs to do what they are told.</td>
</tr>
<tr>
<td>Participative subordinates are preferred.</td>
<td>Directive or cogent subordinates are preferred.</td>
</tr>
<tr>
<td>The ideal superior is “democratized, fair and accessible”.</td>
<td>The ideal superior is “the kind autocrat”,</td>
</tr>
<tr>
<td>Symbols of status and privileges are undesirable.</td>
<td>Symbols of status and privileges are important and common.</td>
</tr>
<tr>
<td>Few administrative personnel work.</td>
<td>Many administrative personnel work.</td>
</tr>
<tr>
<td>The relation between superiors and subordinate is pragmatic.</td>
<td>The relation between superior and subordinate loaded with emotion.</td>
</tr>
</tbody>
</table>

Table 3.2.1.1.2: Differences between low and high power distance (Hofstede, 1984, p.102; 2010, p.76)

3.2.1.3. Masculinity versus Femininity
The third dimension of Hofstede’s model is a masculinity versus femininity that measures “the desirability of assertive behavior against the desirability of modest behavior” (Hofstede, 2010, p.136). In society, the social roles of men and women determined by biological constraints and labeled as male and female. Hofstede (2010) emphasized that male gender supposed to have rough, competitive and assertive skills, and its opposite pole female gender supposed to pay attention to kids, home, kids and people etc. In other words, every society recognizes dissimilar behaviors suitable for male gender or female gender and this gets even more different from one society to another. However, biological differences are not directly related to female and male’s social roles or their behaviors in society. Besides, Hofstede (2010) stated that a man gender can behave in a feminine way or a woman's gender can behave in masculine ways which means they deviate from their biological strains in their
personal or social life. Therefore, Hofstede (2010) used masculinity and femininity terms for social roles regardless of a person’s gender and male and female terms for gender roles.

Masculine cultures are defined by Hofstede as “the cultures in which the dominant values in society are success, money and assets” (Hofstede, 1991, p. 151). Organizations from high masculinity oriented culture focus on earning, challenge advancement and recognition. (Hofstede, 1980). Feminine oriented cultures are, in contrast, focus on good cooperation, the importance of relationships, caring for people, employment security, living area and the quality of (Hofstede, 1991). Moreover, in high feminine index cultures, the masculine and feminine roles are also less separated and more unclear as compared with the cultures with high masculine index (Hofstede, 1980).

According to Hofstede there are key differences between masculine or feminine culture that can be so important for companies which are doing business with either masculine or feminine contexts. Therefore, table 3.2.1.3 displays a summary that Hofstede provided regarding those differences in the workplace between masculine versus feminine cultures.

<table>
<thead>
<tr>
<th>Low Masculinity</th>
<th>High Masculinity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management is similar to ménage (household), intuition, feelings and consensus behavior appear.</td>
<td>Management similar to manège (horse trainer); quite decisive, assertive, firm, competitive and aggressive behaviors appear.</td>
</tr>
<tr>
<td>Rely on consensus decisions.</td>
<td>Rely on individual decisions.</td>
</tr>
<tr>
<td>Conflicts should be solved by “compromise, problem solving and negotiation”.</td>
<td>Conflicts should be solved by fighting until “the strongest man win”</td>
</tr>
<tr>
<td>Rewards are given to people in regard to equality.</td>
<td>Rewards are given to people in regard to equity.</td>
</tr>
<tr>
<td>Work in a smaller organization is strongly preferred.</td>
<td>Work in a larger organization is strongly preferred.</td>
</tr>
<tr>
<td>Belief in more “Work in order to live”</td>
<td>Belief in more “Live in order to work”</td>
</tr>
<tr>
<td>Reducing the number of hours worked is preferred over increasing salaries.</td>
<td>Increasing salaries are preferred over the number of hours worked.</td>
</tr>
<tr>
<td>Both man and woman may or may not want a career; it is discretionary for both genders.</td>
<td>It is only expected from man to desire career advancement; Carrier is essential for man, but discretionary for woman.</td>
</tr>
<tr>
<td>More women in high level and professional jobs.</td>
<td>Fewer women in high level professional jobs.</td>
</tr>
<tr>
<td>Focus on social contact and mutual help for “humanization of work”</td>
<td>Focus on Task challenge, recognition and advancement for “humanization of work”</td>
</tr>
<tr>
<td>Competitive advantage in service industries (e.g. Consulting and transportation) and agriculture and biochemistry.</td>
<td>Competitive advantage in manufacturing, big and heavy products and bulk chemistry.</td>
</tr>
</tbody>
</table>

Table 3.2.1.3: Differences between low and high masculine cultures (Hofstede, 1984, p.310 ; 2010, p.170)

3.2.1.1.4. Avoidance of Uncertainty

Uncertainty avoidance is “the extent to which people feel threatened by uncertain, unknown or ambiguous situations” (Hofstede, 1991, p.206). Formulated in another way, avoidance of uncertainty indicates to what extent members of a same culture feel either uncomfortable or comfortable in unstructured situations. The term uncertainty is derived from an American Organization Socialist, James G March and his colleagues’ particular work in American
organization. Hofstede (2010) stated that the future is uncertain everyone should accept it and live with it. However, extreme ambiguity creates anxiety. Therefore, every society developed a different way through technology, religion, law, rules, and regulations and so on to prevent uncertainties in the behavior of people.

Organizations with a high degree of avoidance of uncertainties have more formal laws, informal rules controlling the rights of employers and they also have internal regulations controlling the work process. Moreover, contexts with a high degree of avoidance of uncertainties involve with the clarity of plans, policies, procedures and systems (Hofstede, 1991). Societies with low degree of avoidance of uncertainties are more tolerant with opinions against what they are used to (Ibid). People from this type of culture think that rules have only been established in the case of the absolute necessity. They believe that problems can be solved without having any formal rules. In high uncertainty avoiding contexts individuals do work hard or are always busy. In such cultures, life runs on a fast track and time equals money, while in low uncertainty avoiding cultures, people work harder if it’s necessary but they prefer to be relaxed and they are not up to an inner urge constant activity (Hofstede, 2010).

Hofstede (1980, p. 212) emphasized this dimension quite clearly by saying” individuals or organizations with high uncertainty avoidance cultures are trying to shape the environment to compile with them”. In its opposite pole, organizations from low uncertainty avoidance culture try to form themselves to compile with their environment.

In the light of giving fundamental descriptions of avoidance of uncertainty dimension, it is important to present some key characteristics of this dimension in order to understand how it can influence on people’s behaviors. Table 3.2.1.1.4 presents these characteristics briefly.

<table>
<thead>
<tr>
<th>Low Uncertainty Avoidance</th>
<th>High Uncertainty Avoidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent changes of employer; short duration of service to employer.</td>
<td>Rare changes of employer; high duration of service to employer.</td>
</tr>
<tr>
<td>An emotional horror of formal rules. There should be no rules or only really necessary ones should be exist.</td>
<td>A high emotional need for laws, rules and regulations. There are more formal laws, informal rules and internal regulations.</td>
</tr>
<tr>
<td>People can work hard if it is needed and without any inner voice. They like to relax.</td>
<td>People like to be always busy and need to work hard with inner urge.</td>
</tr>
<tr>
<td>Time is considered as a framework for orienting oneself.</td>
<td>Time is considered as high payment; money.</td>
</tr>
<tr>
<td>“Ambiguity and chaos” are tolerated in structure and procedure.</td>
<td>“Ambiguity” is not acceptable precision and formalization are necessary.</td>
</tr>
<tr>
<td>Belief in good sense and sophisticated people.</td>
<td>Belief in technical truth and professionals</td>
</tr>
<tr>
<td>Top managers have an interest in strategy.</td>
<td>Top managers have an interest in operations.</td>
</tr>
<tr>
<td>There are “many new trademarks”.</td>
<td>There are “few new trademarks”.</td>
</tr>
<tr>
<td>Focus on the quality decision process</td>
<td>Focus on the legitimacy of decision process.</td>
</tr>
<tr>
<td>Entrepreneurs “feel free of existing rules”.</td>
<td>Entrepreneurs are “constrained by rules”.</td>
</tr>
<tr>
<td>Relation orientation appears.</td>
<td>Task orientation appears.</td>
</tr>
<tr>
<td>Good at innovation and bad at development</td>
<td>Bad at innovation and good at development</td>
</tr>
<tr>
<td>Lack of precision and punctuality</td>
<td>Precision and punctuality naturally exist</td>
</tr>
</tbody>
</table>
3.2.1. Long Term versus Short Term Oriented

This dimension deals with time orientations. The term of this dimension was known as Confucian dynamism in the beginning. In 1991, Hofstede labelled it as long-term versus short-term orientation while his research. According to Hofstede (1994) the long-term orientated cultures stand for “the fostering of virtues oriented towards future rewards” – in particular perseverance and thrift and the short term orientation stand for “the fostering of virtues related to the past and present – particularly, respect for tradition and fulfilling social obligations” (239).

Long-term culture oriented employer interested in future oriented goal. Its opposite pole, short-term oriented cultures are more interested in past and present more than future. (Hofstede, 1991). Hofstede (2010) emphasized that problems might occur when long term oriented companies cooperate with short term oriented companies.

3.2.2. Trompenaars’s Cultural Model

The Dutch business consultant, Fons Trompenaars (1993, 1998) and the British academician, Hamden Turner (1998) presented a new brand of cultural model. Their model which is known as Trompenaars’s cultural model focuses on variations in both values and relationships across cultures. It consists of seven dimensions including: Universalism vs Particularism, Individualism vs Collectivism, Affective vs Neutral, Specific vs Neutral, Achievement vs ascription, synchronic vs sequential and internal vs External. The first five dimensions focus on the relationships among people, while the last two dimensions focus on the time orientation and relationship with the surroundings. Below, I provide more detailed information about each dimension.

3.2.2.1. Dimensions

3.2.2.1.1. Universalism versus Particularism

Universalism and Particularism cultures express to criticize people’s behaviors by other people through applying rules or relationships. The universalism cultures always focus on rules and procedures rather than personal relationships such as friendship, relatives and family and etc. That means people from universalist culture adhere to pre-defined rules, values and standards more than needs and relationships. The universalist culture people apply rules and procedures to guarantee the equity and stability of everyone with any relationship and under any circumstances. Therefore, there is one truth and reality exists which has been agreed to all participants. So, people from universalism culture consider rules as high-priority factor which comes first. People in this culture believe that exceptions might weaken the rules; therefore they usually do not make any exceptions about the rules. Particularism culture is based on the logic of the heart and the level of connectivity between human beings that means people from particularism culture agree that human relationships are more important than rules and codes. In particularism culture, there are multiple views about truth and reality in connection with each individual. Thus, people’s judgement is unique and depends on human’s relationships such as family, relatives and friends. In other words, no matter what the rules state, as a particularist, people must support, protect and tolerate each other. Universalist thinks of particularist as “they cannot be trusted because they will always help their friends” (Trompenaars and Hampden-Turner, 1998, p.31). In opposite, a Particularist, conversely,
consider a Universalists as “cannot trust them; they would not even help a friend” (Trompenaars and Hampden-Turner, 1998, p.31).

Trompenaars and Hampden-Turner (1998) highlighted that when universalism and particularism culture co-operate, then collisions and struggles are unavoidably happening between them.

Viewpoints of each of universalists and particularists are briefly stated in the table 3.2.2.1.1.

<table>
<thead>
<tr>
<th>Universalist</th>
<th>Particularist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules are considered more than a relationship.</td>
<td>Relationships are considered more than on rules.</td>
</tr>
<tr>
<td>Legal contracts are perceived as definite.</td>
<td>Legal contracts are perceived as a rough guide and approximation.</td>
</tr>
<tr>
<td>An honest person relies on their words and contract terms.</td>
<td>An honest person relies on altering mutualities.</td>
</tr>
<tr>
<td>Deal considered as a deal.</td>
<td>Good working relationships evolve.</td>
</tr>
<tr>
<td>There is only reality on the basis of consensus.</td>
<td>There are a few perceptions on reality which is connected to the each participant.</td>
</tr>
</tbody>
</table>

Table 3.2.2.1.1: Universalist and Particularist Cultures (Trompenaars and Hamden – Turner, 1998, p.48)

3.2.2.1.2. Affective versus Neutral Cultures (Feelings and Relationships)

Trompenaars’ affective and neutral dimensions are related to demonstration of feelings. Affective and neutral cultural can be distinguished based on the level of participants’ emotions. Neutral culture can be described as unwillingness to reveal of feelings and thoughts and controlling them carefully. Neutral culture usually admires cool and self-possessed behavior and it often taboos strong facial expressions. However, if a joy or tension happens by accidentally, then it will explode at a high volume. In contrast Affective culture can be described as willingness to reveal emotions by verbal or nonverbal (laughing, smiling, scowling, touching, and gesturing and so on) reactions. People locate themselves within affective culture try to find the best way to outlet their feelings immediately. Affective culture admires heated, crucial, dynamic expressions (Trompenaars and Hampden, 1998).

An employee from a neutral culture usually does not express his or her feelings during work. S/he keeps the feelings under control. Conversely, an employee from affective culture expresses his or her feelings verbally or nonverbally without any restriction at work. If an employee has affective culture, s/he will seek a direct emotional response from his colleague, such as I feel the same way as you about this matter. An employee with a neutral culture seeks indirect response from his/her colleague such as “I agree with your suggestion and give you my support” (Trompenaars and Hampden, 1998, p.69).

Affective and neutral cultures can significantly influence intercultural communication and the variety of problems might arise from the conflicts between them. Communication is only possible between people when they share a system of meaning. (Trompenaars and Hampden, 1998). Trompenaars and Hamden-Turner (2008) emphasized that misunderstandings and conflicts can arise when during the project employees with affective culture communicate with those from neutral culture. For that reason when those cultures want to work together firstly they need to identify the differences. After that they should avoid creating any judgments on the basis of emotions. Also the documentation is suggested as a way to reduce
the communication problems between affective and neutral cultures. (Trompenaars and Hampden, 1998).

Table 3.2.2.1.2 briefly shows a collection of characteristics of neutral and affective cultures.

<table>
<thead>
<tr>
<th>Neutral</th>
<th>Affective</th>
</tr>
</thead>
<tbody>
<tr>
<td>People do not show their thoughts or feelings, but keep them carefully controlled and subdued.</td>
<td>People shows thinking and feelings plainly by verbally and non-verbally.</td>
</tr>
<tr>
<td>People may (accidentally) expose tension and stress in their face and posture.</td>
<td>People expose tension and stress with their transparency and expressive expressions.</td>
</tr>
<tr>
<td>Repressed emotions can rarely explode.</td>
<td>Emotions are expressed effusively, simply and vehemently without control.</td>
</tr>
<tr>
<td>Calm, Cool and confident behaviors are preferred.</td>
<td>Warm, enthusiastic, effusive, vital expressions are preferred.</td>
</tr>
<tr>
<td>“Physical contact, facial expressions and gesture” often unthinkable.</td>
<td>“Physical contact, facial expressions and gesture” are common.</td>
</tr>
<tr>
<td>Conversations are usually done in “monotone” way.</td>
<td>Conversations are usually done “loudly and dramatically”.</td>
</tr>
</tbody>
</table>

Table 3.2.2.1.2: Neutral and Affective Cultures (Trompenaars and Hamden – Turner, 1998, p.79)

3.2.2.1.3. Achievement versus Ascription

Achievement and Ascription oriented cultures differentiate the status of participants regarding age, education, gender and professional qualifications. The achievement based culture is characterized by the personal achievement and experience. Titles are also used when it is relevant to the competence to have a particular task. On the other side, ascription oriented culture is characterized by age, gender, social connections, and education and so on. Moreover, titles are used intensively to clarify the status in the organization (Trompenaars and Hampden, 1998). While achieved status refers to doing “what you do”, ascribed status refers to being “who you are” (Trompenaars and Hampden, 1998, p.102).

In achievement oriented cultures employees´ status are characterized by their achievement and accomplishment at work. Employees in achievement oriented culture companies need to always improve themselves in order to keep their status at work. In ascribed cultures employees´ status are characterized by their birth, age, gender, education, class, families´ reputation and so on. Employees in ascribed oriented culture companies do not need to improve themselves in order to keep their status (Trompenaars and Hamden-Turner, 2008). While employees in an achievement culture have a high degree of independence from their managers to make decisions in their areas of specialization, employees from ascription cultures cannot take important decision independently before consulting with their manager. Concisely, employees from achievement culture usually respect their managers based on their previous achievements and demonstration of knowledge, while in ascription culture, employees usually respect their managers based on their organization hierarchy (Binder, 2007).
Companies with achievement oriented culture, defend their hierarchies by indicating “higher achievements” of senior persons” of the company. Their authority is defended by their skills and knowledge and benefits to the organization. However, ascription oriented companies defend their hierarchies by power to get things done. This may consist of power over people and be coercive or of power through people (Trompenaars ,1998).

Trompenaars and Hamden-Turner (2008) emphasized that struggles can arise when achievement-oriented companies cooperate with ascription-oriented companies. A short outline of achievement and ascription cultures is shown in the table 3.2.2.1.3.

<table>
<thead>
<tr>
<th>Achievement oriented Culture</th>
<th>Ascription Oriented Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titles are only used when it is relevant to competence and task.</td>
<td>Titles are extensively used in order to highlight status in the organization.</td>
</tr>
<tr>
<td>The respect superior depends upon the effectiveness of his/her job performance.</td>
<td>The respect of superior perceived as the commitment of subordinates to the organization.</td>
</tr>
</tbody>
</table>
| Senior managers are mostly” varying in gender and age and have displayed expertise in particular jobs” | Senior managers are “mostly male, middle-aged and capable by their background”.

Table 3.2.2.1. 3: Achievement and Ascription Cultures (Trompenaars and Hamden – Turner, 1998, p.118)

### 3.2.2.1.4. Individualism versus Communitarianism

Basically, Trompenaars´ individualism versus communitarianism dimension determines if people rather see themselves as individuals or as part of a group. These two cultures deal with conflicts which are rising on the interest of considering people as an individual or in a group.

The individualist culture is rather to see people as an individual. In individualist culture, faults and achievements return to people as an individual penalty or reward. A member of individualism culture prefers a stand-alone decision making and taking stand alone responsibilities. As a result, an individualist culture represents mostly the use of “I” form. Conversely, the communitarianism culture is rather to see people as groups. In communitarian culture, an individual’s fault and achievements influence the whole group. A member of a communitarianism oriented culture prefers group-based decision making and responsibilities. In a communitarianism culture, the frequent use of ”We“ form is observable (Trompenaars and Hampden, 1998).

Individualist and communitarist preferences seriously affect the globally distributed projects. In such projects, decision making, negations and motivations are the most critical areas. Individualism and communitarianism oriented culture playing a big part in motivating employees at work. The reward system has a role in motivating employee at work as well. In communitarianism culture, sharing a reward between all involved employees is common, while in individualism cultures, a reward goes to an individual employee (Trompenaars and Hampden -Turner, 1998).

In individualism oriented culture employees are expected to make their decisions individually and take responsibility of their actions at work. In communitarianism culture this is different. The individualist employees usually make decisions in a much shorter time than
communitarist employees, because individualist employees do not need to seek for the approval of others at work (Trompenaars and Hampden -Turner, 1998).

The individualism is often regarded as the characteristic of a modernizing society while the communities remind us a traditional society. These two dimensions are more complementary than opposing. Therefore, each of them can be effectively reconciled by an integrative process. Table 3.2.2.1.4 demonstrates an outline of individualism and communitarianism.

<table>
<thead>
<tr>
<th>Individualism</th>
<th>Communitarianism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly the “use of “I” form”</td>
<td>Mostly the “use of “We” form”</td>
</tr>
<tr>
<td>Representatives made decisions instantly.</td>
<td>Delegates refer to decisions to the organization.</td>
</tr>
<tr>
<td>Focus on individual achievement and responsibility</td>
<td>Focus on group achievement and responsibility.</td>
</tr>
<tr>
<td>Holidays taken in duos, even single.</td>
<td>Holidays taken in groups or even with a whole family.</td>
</tr>
</tbody>
</table>

Table 3.2.2.1.4: Individualism and Communitarianism Cultures (Trompenaars and Hamden – Turner, 1998, p. 67)

3.2.2.1.5. Specific versus Diffuse

Basically, specific and diffuse oriented cultures express how people let other people link to their private and public life. In specific oriented culture, people link to the specific areas of other people’s life and single level of their private life. A member of specific oriented culture sharply keeps private and work life separate from each other. In diffusely culture, people link to other people’s life, personal space and every level of personality at the same time. A participant of diffuse culture keeps private and work life closely linked (Trompenaars and Hampden –Turner, 1998).

Trompenaars and Hampden–Turner (1998) emphasized that in specific cultures people welcome new people and create friendships with them directly. And new employees can enter a specific public area as their bosses can which means their bosses do not have any authority outside of the work environment. In specific culture, only close friends of a person can enter a small private area of him/her. This means that in specific culture companies, it is more likely to be acquaintances with close friends - as in diffuse culture (Trompenaars and Hampden-Turner, 1998). In a company with diffuse culture, the boss is the boss even outside of work place and his authorities extend many areas of his subordinates. The diffuse culture has so small public and large private areas. This means that it is harder to get to know a person in a diffuse culture, but when this person reaches a close friendship point, this lets him or her to access all private spaces.

In the light of the given fundamental descriptions of specific and diffuse cultures, it is important to present some key characteristics of specific and diffuse cultures to understand how these can influence on people’s behaviors. Table 3.2.2.1.5 presents these characteristics briefly.

<table>
<thead>
<tr>
<th>Specific</th>
<th>Diffuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct, clear, exact, definitive and transparent expressions appear.</td>
<td>Indirect, ambiguous, circuitous, evasive and opaque expressions appear.</td>
</tr>
</tbody>
</table>

32
Belief in a relationship doesn’t have much influence on work goals. | Belief in a good relationship has much influence on work goals.
---|---
Personal and work life is kept separately. | Personal and work life overlap.

Table 3.2.2.1. 5: Specific and Diffuse Cultures (Trompenaars and Hampden – Turner, 1998, p. 81)

3.2.2.1.6. Sequential versus Synchronic
Trompenaars and Hampden (1998) defined another dimension which is dealing with time management in different cultures. People from different cultures have different assumptions about the management of time. In sequential oriented cultures, people’s view about time management encompass a series of passing events. On the contrary, in synchronic oriented culture, past, present and future events are all related with the important notion of memories and past which will shape the present activity. The sequential people care for the schedule in advance. According to sequential people, even being late for a few minutes will affect all day time management. Therefore, they keep the appointments very strictly and do only one activity at a time. On the other hand, the synchronic people are less punctual about time management but it does not mean that time is not important to them. In synchronic culture time is usually subordinate the relations and necessary time is given based on a particular relationship. The member of synchronic culture is as a circus plate juggler who keeps multiple plates at the top of the sticks. That means synchronic people do parallel activities at a time (Trompenaars and Hampden, 1998).

3.2.3. Hall’s Culture’s Model
Edward T. Hall (1959, 1981) is an American cultural anthropologist whom was one of the first researchers propose a cultural model based on cultural variation in interpersonal communication in several societies. He underlines personal space and time patterns in his cultural study in order to show the critical relationships between different parts of cultures. Accordingly, he defined three fundamental cultural dimensions which are explained in details below.

3.2.3.1. Dimensions

3.2.3.1.1. Context (High versus Low)
Hall and Hall (1990) defined context as the information which surrounds an event and it is completely bound up with the meaning of that event. This event or context can be different and depends upon the national culture. Therefore, the cultures can be compared as either high context or low context.

A high context versus low context communication refers to the fact that how people communicate, how they see their language, how much listener know about the subject, whether as neutral and explicit or affective and tacit (Hall, 1959, Carmel, 1999). In high context culture, message is short and not detailed, most of the information is already in the person and that person does not give much information during his/her communication with others. Therefore, the ambiguity is given value. People from high context oriented culture, do not require and expect much detailed and background information since they inform themselves very well about everything that is important and related to their lives. Low context culture is opposite. Mass of the information is explicitly stated in message and
certainty is given value. People from low context oriented culture compartmentalized their personal lives, their work and some other aspects of their lives. Therefore, any time they interact with others about a subject matter, they need deep background information about that subject (Hall and Hall, 1990; Carmel, 1999).

High context people are biased to become impatient and irritated when people from low context oriented culture give them information that they do not need. Inversely, low context culture oriented people stay loss when high context people do not provide them with sufficient and efficient information. Therefore, in a workplace, it is an important challenge to find the appropriate level of context in every situation, as too much information can lead employees to feel they are being talked down to, too little information may mystify employees or make them feel left out (Hall and Hall, 1990).

There are some highlights given below that can advocate cooperation between people from high context and low context (See table 3.2.3.1.1.).

<table>
<thead>
<tr>
<th><strong>High-context culture</strong></th>
<th><strong>Low-context culture</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Information is very much in a physical context, tacit and implicit messages which are quite short and not detailed, with the use of metaphor.</td>
<td>Information is very much in coded, explicit and transmitted part of the message which is quite clear and simple.</td>
</tr>
<tr>
<td>More nonverbal communication and indirect verbal communication are preferred.</td>
<td>More verbal communication and direct verbal communication are preferred.</td>
</tr>
<tr>
<td>Talk only about the topic and doesn’t say the exact objective.</td>
<td>Say the exact objective.</td>
</tr>
<tr>
<td>Decisions are made by intuition and feelings.</td>
<td>Decisions rely on facts and logic.</td>
</tr>
<tr>
<td>People are relationship oriented, collectivist and sentient.</td>
<td>People are task oriented, individualist and logical.</td>
</tr>
<tr>
<td>Long term relationship. It builds up slowly within strong and clear circle boundaries. Relationships are focused more than a task.</td>
<td>Short term relationship. It builds up so quickly within vague and extensive circle boundaries and it finishes so quickly. The task is focused more than relationships</td>
</tr>
<tr>
<td>Time is quite flexible. Focus on process.</td>
<td>Time is greatly planned. Focus on product.</td>
</tr>
</tbody>
</table>

Table 3.2.3.1.1: High Context versus Low Context Cultures (Hall, 1976, p. 105; Changingminds.org, 2002).

3.2.3.1.2. Time
Hall (1990) stated that there are many kinds of time system in the world but the most important ones for international business are linear and expandable times. He has paid attention on those two systems and named them as monochronic time and polychronic time. Hall (1990) defined monochronic time as paying attention to doing only one thing at a time and on the opposite side, polychronic time as being involved with many things at once. In monochronic culture, time is structured, sequential and linear. That is, time is scheduled and compartmentalized in order to provide possibility for individuals to focus on one thing at a
time. Therefore, in monochronic culture, events are taken one at a time and schedule takes priority and treated as unchangeable. People from monochronic culture plan things in great details, treat deadlines very seriously, and are punctual and obsessive about appointments. Moreover, individuals from monochronic culture perceive the time as a tangible asset and are tough about things like money that can be saved, spend, wasted and lost. On the contrary side, Halls (1990) emphasized that polychronic times are antithesis of monochronic time and characterized by the simultaneous occurrence of many things and a greater involvement of people. People from polychronic culture change plans more often and easily. In polychronic culture, time is unlimited and simultaneously. So many events can happen at a time, such as multiple tasks or conversations. Moreover, in polychronic culture, time is fluid and flexible and delays are less important.

Fundamental description of monochronic and polychronic cultures is given above. However it is significant to present some key concepts of monochronic and polychronic oriented cultures which help to distinguish these two from each other. So, some of the differences between these two cultural approaches are given in the table 3.2.3.1.2.

<table>
<thead>
<tr>
<th>Monochronic</th>
<th>Polychronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rely on doing one work at a time.</td>
<td>Rely on doing more multiple work things at a once.</td>
</tr>
<tr>
<td>Concentrate on the work easily.</td>
<td>Have concentration difficulty and get easily distracted.</td>
</tr>
<tr>
<td>“Time commitments (schedule, program and deadline)” are considered very carefully and seriously.</td>
<td>“Time commitments (schedule, program and deadline)” are considered as a goal to be reached, if possible.</td>
</tr>
<tr>
<td>People are from low context cultures; need information.</td>
<td>People are from high context; already have the information”.</td>
</tr>
<tr>
<td>Work is a priority</td>
<td>People are priority</td>
</tr>
<tr>
<td>Plans are held regularly and without any delay.</td>
<td>Plans can be changed frequently and easily.</td>
</tr>
<tr>
<td>Pay attention to privacy rules; not interested in bothering others.</td>
<td>Pay more attention to close relations (family, friends, and business contacts) than privacy rules.</td>
</tr>
<tr>
<td>Show respect to others’ private stuffs; rarely lend and borrow.</td>
<td>Borrow and lend stuff is very normal and easy; frequently lend and borrow.</td>
</tr>
<tr>
<td>Short term relationships are preferred.</td>
<td>Long time relationships are preferred.</td>
</tr>
</tbody>
</table>

Table 3.2.3.1 2: Monochronic Versus Polychronic Cultures (Hall and Hall, 1990, p.15)

3.3. Unifying the Cultural Models of Hofstede, Hall and Trompenaars

In order to conduct this thesis, I come up with a unified framework that help the researcher in analyzing various cultural differences that influence on globally distributed software projects. Therefore, I integrate the three selected cultural models under one unified model according to their similarities and differences. However, this is not a first attempt in unifying cultural models. Several scholars such as Nardon and Strees (2009) and Browaeys and Price (2009) compared varying cultural models in order to decrease redundancies. All of these three cultural models introduce varying criteria which serve our research question and research aims. These three models frequently focus on different aspects of social norms, belief and values. However, these cultural models have similarities, differences, contradictories and
overlaps which can cause complexity during applying them to the findings separately (Nardon and Steers, 2009). Therefore, in this section, instead of applying only one model, I have tried to show that all models have dimensions to contribute our understanding of culture differences in globally distributed software development projects.

In order to come up with a unified cultural model for this research, I have studied the extensive amount of literature about cultural studies with particularly considering Hofstede’s, Trompenaars’s and Hall’s cultural models and then I put cultural conditions and concepts in relation to the purpose of this study. Therefore, I have identified the new cultural framework that consists of eight dimensions based on integration of Hofstede’s, Hall’s and Trompenaars’s cultural models. For each dimension in each model, I compare it with other dimensions in the other two models and then according to their similarities or differences, I put them under a same category and thereafter, I have chosen a new name for each one. A short description of each of these dimensions are (See table 3.3 for a whole picture of three selected cultural models and the dimensions of integrated model and see section 3.3.1 for detailed information about each new dimension):

**Power value orientation** will be used in order to analyze hierarchy versus equality in decision making style, organizational structure, individual preferences, and behaviors among different cultures. This dimension is significantly related to Hofstede’s power distance dimension (2010) since power distance is used for analyzing power distribution, or on the other word hierarchy level among different cultures. This dimension also reminds about the Trompenaars’ achievement and ascription dimension (1998) that is used to legitimate power and status that has high influence with hierarchy oriented culture.

**Rule Value Orientation** is the second dimension of the unified cultural framework and presents rules versus relationship among cultures. Rule value orientation is the combination of Hofstede’s avoidance of uncertainty (2010) since it is related to using of rules or the relationship of people and Trompenaars’ universalism and particularism (2010) since it is particularly emphasized that either the rules or personal relationships are important.

**Competition value orientation** is the third dimension of the unified cultural framework and focuses on competitive versus cooperative behaviors of individuals in cultures. Competition value orientation is related to the Hofstede’s (2010) masculinity and femininity dimension since it is used for particularly analyzing the degree of the individual preferences of competition against the corporation among individuals from different cultures.

**Relationship Value Orientation** is the fifth dimension of the unified cultural framework that concerns individual relations with others based on their preferences about being part a group or stand individually. Relationship value orientation is related to Hofstede’s (2010) and Trompenaars’s (1998) individualism and collectivism dimensions since both Hofstede and Trompenaars discussed individual’s preferences for being an individual or a part of a group. Trompenaars’ individualism and communitarianism and Hofstede’s individualism and collectivism dimensions are similar.

**Time Value orientation** is the sixth dimension of unified cultural framework that will expose differences in the time perceptions among individuals from different culture. Time value Orientation is a combination of Hofstede’s short term and long term (2010), Hall’s (1990) and Trompenaars’s (1998) time dimensions which all covered time orientation as an important cultural matter in their studies.
Communication Value Orientation explores differences among individuals in communication styles. It is a combination of Trompenaars since he focuses on individuals’ emotional orientation (Trompenaars, 1998) and Hall (1990) since he particularly focuses on how much context surrounds individuals’ communication or messages.

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<td><strong>Power Value Orientation</strong></td>
<td>Power Distance</td>
<td>Achievement and Ascription</td>
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<td><strong>Hierarchy vs Equality</strong></td>
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<td>Universalism and Particularism</td>
<td>High low value orientation</td>
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<td><strong>Rules vs Relationships</strong></td>
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<td><strong>Structure Value Orientation</strong></td>
<td>Individualism and collectivism</td>
<td>Individualism and communalism</td>
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<td><strong>Individualism vs Collectivism</strong></td>
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<td><strong>Time Value orientation</strong></td>
<td>Long short time</td>
<td>Relationship with time (mono/poly) (past present and future)</td>
<td>Time (mono/poly)</td>
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<td><strong>Competition Value orientation</strong></td>
<td>Masculinity and Femininity</td>
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<td><strong>Cooperative vs Competence</strong></td>
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<td><strong>Communication Value orientation</strong></td>
<td>Neutral and Affective</td>
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<td>High and Low context</td>
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Table 3.3: Comparing and Integrating Three Cultural Models (own source)

3.3.1. Unified Cultural Framework

3.3.1.1. Power Value Orientation

Hofstede (2010) explains the power distance (high - low) as individual’s attitudes toward authority and status and the distance between individuals in the hierarchy. His comparative study looks into the preferences of individuals for power distribution particularly identifying individual’s preferences of decision making style, organizational structure, role of managers and privileges’ symbols (status versus competence). However, Hofstede’s study particularly informs readers about dependence and interdependence on relationships between subordinates and superiors in different cultures (Ibid).

Trompenaars (1998) explains his achievement versus ascription dimension as legitimating power and status. His comparative study focuses on how status and rewards allocated more than distribution of power and authority, and particularly emphasizes individual’s preferences about use of titles and getting status and rewards. Trompenaars and Hampden-Turner (1993) particularly underlined that people with ascribed-oriented culture, use titles, status and formal position commonly and show proper respect to others according to their status. For that reason, according to Trompenaars’ viewpoint this behavior reinforces hierarchy. Meanwhile, Trompenaars (1998) explains specific versus diffuse dimension as integration or compartmentalized of people’s various role. However, in his comparative study he focuses on individual’s involvement in business relationships and in particular he emphasizes on

Hofstede’s power distance and Trompenaars’s achievement versus ascription and specific versus diffuse dimensions are describing similar concerns since all these three dimensions are highlighting the significance of power from different angles. Therefore, these three dimensions are integrated to a single dimension which I name it as power value orientation. In literature, Nardon and Streers (2009) also categorized these three dimensions under a single dimension and named as ‘Power distribution in society’ (p. 38) in their studies. I reason my selection of Power value orientation as a cultural dimension similar to Nardon and Streers’s (2009) justification. However, in this study, Power value orientation focuses on individual preferences (willing or reluctant), behaviors, beliefs and relationships concerning authority, decision making style (participatory or autocratic), organization structure (tall or flat) and usage of titles in a globally distributed company. These cultural differences can elaborates how meetings are held, how tasks are assigned and how position and rewards are earned. (See table 3.3)

3.3.1.2. Rule Value Orientation (Rules versus Relationships)

Hofstede (2010) explains the avoidance of uncertainty as the degree of tolerance for uncertainty and instability in diverse cultures. His comparative study is particularly focusing on individual’s attitudes towards to risky situations, ambiguous behaviors and issues, use of rules and regulation for controlling situations and predictability of reducing uncertainty or increasing absolute truth. In his study, he highlighted that rules and laws can prevent uncertainties in the behavior of people from different cultures.

Trompenaars’s universalisms versus particularism focuses on the relative importance of rules and laws opposite to personal relationships in diverse cultures. And in his comparative study, he particularly emphasized how rules are valued and what is more important either rules or personal relationships (Trompenaars and Hamden-Turner, 1998).

Both Trompenaars and Hofstede presented a similar viewpoint when they discussed that using of rules for controlling individual’s behavior is a critical dimension to distinguish cultures (or cultural differences). Both these researchers emphasized this issue through different cultural dimension. For that reason, I unified Hofstede’s avoidance of uncertainty and Trompenaars’s universalism versus particularism under a new single dimension and named it as rule value orientation since both researchers focused on it in their cultural models. Rule value orientation focuses on the attitudes of individuals towards the uncertainty and rules of organization in cross cultural contexts. This dimension elaborates the level of tolerance on uncertainty and rules, how individuals deal with uncertain situations, how organizational rules and personal relationships are valued in cross cultural settings by individuals. (See table 3.3.)

3.3.1.3. Competition Value Orientation (Competitiveness versus Cooperative)

Hofstede (2008) explains the masculinity and femininity as gender roles and in his corporation study; he focuses on the social roles of the individual’s gender rather than biological distinction or sex (Ibid). In other words, the terms of masculine and feminine gender roles refers to the degree of seeing yourself as to be a woman or man in society (Ibid). Because, it is possible for someone to be a female and see herself as masculine or be a male and see himself as feminine (Ibid; Burke and Stets, 2003). Hofstede’s masculinity and femininity rooted in the social gender instead of biological sex. His comparative study (1980 - 2001) concerns the individual’s desires on the importance of work goals (achievement and competition) in contradiction to personal goals (harmony and cooperation). And his comparison study, particularly argues preferences of individuals which are achievement,
success, compete, taking care of business, control over the environment against quality of life, taking care of other people, harmony in the environment issues (Hofstede, 2010). Hofstede in his comparative study particularly analyses the degree of individual preferences on competition against the corporation among individuals from different cultures. However, the label of masculinity and femininity for this dimension might cause readers to get confused about whether it focuses on social roles or biological distinction or both of them. Furthermore, Hofstede’s masculinity and femininity cultural dimension is examining especially competitiveness and cooperation cultures. For that reason, I defined a new dimension named as competition value orientation. The new dimension reveals the problems that occur due to the individuals behaviors on taking care of their personal goals or their work environment harmony and quality of an individual’s life. Besides, it analyses work style of individuals from different cultures and effort of individuals on job satisfaction either it is related to harmony in the work environment or achieving personal goals. (See table 3.3.)

3.3.1.4. Relationship Value Orientation (Group versus Individualism)

Hofstede (1991) clarified the individualism and collectivism cultural dimensions as independence and interdependence and the loyalty towards oneself and towards a group. This dimension also gives a noticeable value to the importance that cultural grouping attaches to relationships, for example, some cultures care about personal relationship rather than the deal to be completed.

His comparison study focuses on the decision making preferences (group vs individual), identity (individual based or group based), focus (personal relationship, achieving harmony vs individual achievement), the reward systems (group based vs individual based) and organizational concern (look after employees or employees look after themselves), value standards (universalist or particularism) personal relationships, and achieving harmony.

Trompenaars (1991) described the individualism and communitarianism as people’s priority for seeing themselves first and foremost as an individual against being a member of a group. In his comparison study, he focuses on decision making, motivation and negotiations (Ibid).

As it is shown earlier, both Hofstede and Trompenaars discussed individual’s preferences on being an individual or a part of a group. Trompenaars’ individualism and communitarianism and Hofstede’s individualism and collectivism dimensions are similar to each other. Therefore, I have integrated these two dimensions under a unique one and named it as relationship value orientation. Also in literature several authors such as Browaeys and Price (2009) and Nardon and Steers (2009) categorized Trompenaars’ individualism and communitarianism and Hofstede’s individual and group cultural dimension under a single dimension in their cultural studies as well, and this categorization named as ‘rule orientation by Nardon and Steers, 2009 p. 38) and named as ‘Individualism and Collectivism’ by Browaeys and Price, 2009, (p. 85). I reason my selection of relationship value orientation as a cultural dimension similar to justification of those two studies. (2009). However, The new dimension, relationship value orientation, concerns individual relations with others based on their preferences about being a part a group or stand individually. This dimension can support analyzing the relationship of globally distributed team members with each other regarding their preferences. It also determines the desire for individual or group reward system, decisions making styles, individual or group goals and their impacts. Also this dimension expresses how feedbacks are given and how they impact on teams. (See table 3.3.)
3.3.1.5. Time Value Orientation (Monochronic vs Polychronic)
Hofstede (1991) introduced the short-term and long-term cultural dimensions. Short-term cultures are characterized by respecting for tradition, past and present, while long term culture marked by hard work, personal thrift and personal sacrifice for future benefits (Hofstede, 1991). Additionally, Hofstede (1991) discussed about the idea of working for now or future as part of those cultural dimensions (Hofstede, 1991).

Hall (1990) in his cultural model concentrated on how individuals’ perceive the flow of time. And he introduced the time culture dimension by monochronic versus polychronic orientations. Hall’s comparison study has particularly explored time orientation in relation to organizing work activities. However, he highlighted if some cultures do single action sequentially that culture referred as a monochronic oriented culture while other cultures approach multiple actions simultaneously that culture is referred to be polychronic oriented culture.

Trompenaars’s time dimension (past, present, and future) includes the degree of doing a task sequentially or simultaneously (1993). Trompenaars’s time dimension is another presentation of both Hofstede’s short term and long term and Hall’s monochronic and polychronic dimensions. The reason is on one hand, Hofstede’s short term and long term cultural dimension emphasizes the past, present and future time orientation. On the other hand, Hall’s monochronic and polychronic are analyzing individuals preferences for doing activities in a sequential or simultaneously way.

As it is explained above, all cultural models (Hall, Hofstede, and Trompenaars) covered time orientation as an important cultural matter in their studies. I have put those three time dimensions from three scholars under a new dimension and called them time value orientation.

I reason my selection of time value as a cultural dimension similar to Browaeys and Price’s justification (2009). Time value orientation will expose differences in the time perceptions among individuals from different culture that might have a different understanding and perception about the flow of time according to their environment, history and traditions. Time value orientation regards to how individuals from different cultures perceive and use time, and how individuals from different cultures impact on functionality, deadlines, and moving away from schedule, changes on schedule, work time. (See table 3.3.)

3.3.1.6. Communication Value Orientation (high context versus low context)
Hall (1990) introduced the concept of context and described the role it plays in the communication process, and context relates to the background, framework and surrounding circumstances where communication takes a place. He particularly focuses on how much context surrounds individuals’ communication or messages (Ibid). Therefore, he divided context in his cultural model to high-context messages and low-context messages. High-context messages carry the mass of information in the explicit code. High-context individuals are neutral and explicit and require a high degree of trust in their relationship. In contrast, Low-context messages carry coded and tacit and most of the information is already in person. individuals in low-context culture are implicit and affective and require a high degree of precision in their communication (Hall, 1990).

Trompenaars (1998) introduced a neutral versus affective dimension and described them as showing or controlling emotions. They discussed the emotional orientation of individuals from different cultures in their relationships with others. They also emphasized that
differences between neutral and affective approaches in relationships can create some communication problems. In their opinion, communication is an exchange of information, ideas and emotions which encompasses communication style, verbal, nonverbal, direct, and direct and tone of voice.

The context dimension that Hall (1990) elaborated brings Trompenaars’s affective and neutral dimension (1998) to mind. Based on these two separated dimensions, we can understand that people from high-context culture are neutral and use nonverbal communication style while people at low-context culture are emotional and use verbal communication style. However, Hall primarily focuses on how individuals communicate (Hall, 1990) and Trompenaars focuses on individuals’ emotional orientation (Trompenaars, 1998). Therefore, I integrate these dimensions and unify them under a single dimension named as communication value orientation. Communication value orientation explores differences among individuals in using language (verbal and nonverbal communication), language barriers (use of vocabulary, speed, accent, poor knowledge), style of thinking and communication (directness versus indirectness, neutral versus affective, unwillingness to express an idea, expressing agreement and disagreement, misunderstandings and conflicts effects. (See table 3.3.)

3.3.2. Justification of the Unified Cultural Model

The unified theoretical framework with eight dimensions supposed to be suitable for globally distributed companies or in other words cross cultural settings. As I stated previously, there are published many cultural models which make the selection of culture model complicated for researchers. However, these cultural models have similarities, differences, contradictions and overlaps which can create even complexity for readers and researchers (Nardon and Steers, 2009). Therefore, in this new model, I avoid redundancies of three selected models. However, in the development of this new framework integration and adaptation approaches are used based on three significant cultural models in order to come up with only one cultural model. Through this integration and adaptation approach from these three significant cultural models broad perspective is gained, complexity is reduced, each of the new cultural dimensions content is defined clearly and redundancies are avoided and weaknesses are completed with each other of these models. So that this new cultural framework is comprehensive, detailed and clear and cover different angles. Briefly, this new framework displays all cultural dimensions of these three cultural models (Hofstede, Hall and Trompenaars) which arise in globally distributed projects.

For that reason, this new framework provides researchers with several benefits; first, it saves the researchers’ time in the selection of a cultural model. Second, it gives the idea of adaptation and integration approaches on the cultural models instead of evaluating approaches to select only one cultural model for a research. Third, it provides researchers with wide perspectives over different aspects of each created dimension among different cultures (Hofstede, Hall and Trompenaars). Additionally, it will be beneficial for empirical data mapping and data analysis of this study. Lastly, this new cultural model can be used for other studies with the purpose of digging cultural differences in globally distributed projects.
4. Methodology

The aim of this chapter is to provide an introduction and motivation toward the chosen research methodology for this thesis.

4.1. Research Approach

There are three types of research approaches: qualitative, quantitative and mixed methods (Yin, 2009; Denzin and Lincoln, 2005; Creswell, 2009). Considering the aim of this study, conducting a qualitative approach will be the most appropriate approach for this study. Briefly, the qualitative research enables researcher to collect data from participants setting and to make interpretations of the meaning of the data (Creswell, 1994; Creswell, 1998). The process of qualitative research approach involves conducting interviews and observation of empirical material (Denzin and Lincoln, 2005). The reason for choosing the qualitative approach is that it can better serve the interpretivism philosophy which has influenced this study. As interpretivism philosophical concerns understanding and examine the meaning of attitudes, perceptions and behaviors of individuals or groups in their natural setting which gives insight about specific issues and situations. The aim of my study is to identify issues that arise because of cultural differences in distributed business analysis process in general and requirement engineering in specific. Therefore in my research, I have focused on the cultural differences and its impacts on the requirement engineering phase of the business analysis process since I have tried to understand attitudes, perspectives and behaviors of the stakeholder from different cultures. I believe that the qualitative approach might help to understand and examine this phenomenon deeper. As I am dealing with participants’ attitude and interpretations regarding the cultural differences in their work setting, I believe that the qualitative research approach fulfills the aim of this research.

4.2. Research Type

An exploratory case study is chosen as the research type of this study in order to achieve this study goal that is to understand the influence of cultural differences of the business analysis process in globally distributed software development projects through the analyzing explanations and opinions of business analyst and project managers in their natural settings. Through conducting the case study, the influence of cultural differences on activities, behaviors, and perceptions of distributed team members during the business analysis process are investigated. Basically case study is a preferred strategy of inquiry when what, where, who, how and why type of questions are being posted, and when there is a phenomenon within some real-life setting (Yin, 2003). In other words, a case study is a strategy where investigators explore in depth a problem, event, and situations in a real life setting. Case study enables researchers use a variety of data collection methods for collecting required data over a sustained period of time (Stake 1995 cited in Creswell, 1999). The case study type enables researchers to gain holistic and meaningful characteristics of real life events (Yin, 2003). Moreover, Yin (2003) categorized case studies as explanatory, exploratory, or descriptive. The exploratory case study can define as a strategy that tries to find out what is happening, seeking new insights, and generating ideas and hypotheses for new research (Robson, 2002 cited in Host et al., 2012). It considers what question to develop hypotheses and proposition for inquiry. Actually the type of what question is a form of a how many and a how much line of inquiry. On the other hand, who and where questions are likely to favor survey strategies. These strategies bring support when the research goal is to describe the incidence or
prevalence of a phenomenon or when it is to be predictive about certain outcomes (Yin, 2003).

In this research it was aimed to understand how cultural differences can influence the business analysis process in GSD projects, what issues or problems might be faced during this process, who are joining this process actively, from where are theory joining, and what cultural issues are important and can be the reason of success or failure of this process, what the existing principles and issues are and how they are used in this software development cycle. Therefore, the exploratory case study is the most convenient strategy to fulfill these underlying questions.

Distributed team members’ attitudes, behaviors, and perspectives regarding several defined issues in their cultural setting will be collected through semi-structure email based interviews. Therefore, conducting an exploratory case study for this study is the most suitable research strategy in order to get the right solution according to the research question.

4.3. **Research Method**

4.3.1. **Data Collection**

Qualitative research involves multiple data collection methods such as interview, observations, literature review and document reading (Creswell, 2009). In this study, data have been collected by conducting a series of semi-structured e-mail-based interviews with open-ended questions in order to have a deeper understanding of participants’ viewpoints, attitudes and experiences about cultural differences and the issues related to them in globally distributed software development project. Because of the difference in location of us as the researcher and the interviewees, the interview questions will be emailed to the interviewees. Hence semi-structured email-based interviews are found suitable for this study since it is providing enough flexibility and freedom for respondents to discuss their answers and viewpoints (Creswell, 2009). In order to formulate the interview questions, varying literatures in the field of business analysis, requirement engineering, GSD projects, and cultural models have been reviewed to create a deeper understanding about the involved concepts and procedures.

Each interview consists of 32 questions and one part for any general comment that interviewees are eager to add. The participation in the interviews was totally optional and interviewees are introduced by the company. As interviews were email-based, the interviewees are given 5-7 weeks to complete the questions and send it back. The interview questions are sent out in May 2011 and it is finished by September 2011. Semi-structured interviews with open ended questions are emailed to the interviewees from GTECH Turkey and Poland branches. Three respondents from Turkey branch and two respondents from Poland branch participated in the interviews. They are mainly working in the business analysis process. Three business analysts and two project managers are interviewed who have directly active roles in all phases of the business analysis process. Due to their active roles in the business analysis process, they are found suitable for the interviews. Also, it is important to mention that e-mailing interviews is not the best choice since it is not face to face and the

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1 The research interview questions were sent by Ahmet Tolga Yılmaz. After he received the emails from respondents with outcomes, he forwarded them to me by email. Basically, the outcome of interviews was shared between Ahmet Tolga Yılmaz and me. See subsection 4.5 Ethical Consideration for a more detailed explanation of how the thesis work started in cooperation with Ahmet Tolga Yılmaz and me and how we decided to write up the work as two individual thesis.  
2 This work was performed together with Ahmet Tolga Yılmaz.  
3 This work was performed by Ahmet Tolga Yılmaz.
participants did not answer all the questions; however it helped to fulfill the required amount of data for conducting this study. Additionally, we needed some documents about the selected company in order to get to know the company and how they are working. These documents have mostly been used as reference for describing the company, see chapter 1.

4.3.2. Data Analysis

The data analysis process for this study contains two parts. First, using Creswell’s qualitative data analysis process and second, applying the unified cultural research model I introduced earlier (see chapter 3 for more information about the unified cultural model). So in the first part, Creswell’s model is employed to label and organizes the data and in the second part, The codified data will be categorized by applying my cultural model to them in order to satisfy the research aims and questions.

An overview of Creswell qualitative data analysis process is shown in the figure 4.3.2. According to his model, in the first place Ahmet Tolga Yilmaz has transcribed the semi-structured interviews. In the second step, I read all the transcribed for two more times in order to examine my initial understanding, edit the data and obtain a general sense of the information and reflect on its overall meaning. In this step, I have also labeled my data by using the dates of interviews and the position and branch of the interviewees. This has helped me to control which position in which branch said what. Labeling the data with dates has supported me in keeping track of when data received. In the third step, I have categorized the collected data according to their similarities and differences. In order to do that, I actually used my unified model to categorize the collected data. Therefore, for analyzing each cultural dimension, I have studied my texts through and decided how each text is similar to or different from the concepts and the idea of the cultural dimensions from the model. Finally in the last step, I compared the answers of the respondents with each other and checked how they are similar or different regarding the cultural dimension assigned to them. Based on this comparison, I could analyze the influence of possible cultural differences in global distributed requirement engineering process.

![Figure 4.3.1. Data Analysis in Qualitative Research (Cresswell, 2009, p. 185)](image)

4 The documents were requested by Ahmet Tolga Yilmaz who shared the documents with me.
So from a general point of view, for analyzing my data:

- first, in order to get a sense of whole, I read all transcriptions carefully
- second, I re-read the findings and coded them by the interview date, position and branch of the interviewee
- third, I picked a text, then read and compared it with my cultural model and went through my data and asked what is about? How this data is similar to or different from each cultural dimension? I then underlined the meanings and wrote the name of the category that the piece of the text could belong to in the margin of that text.
- lastly, besides comparing the data with the cultural model (the previous step), I compared the similarities and differences between categorized answer of each interviewee. By doing so, I could realize how employees emphasized on a cultural dimension as an influential cultural difference when it comes to do globally distributed GSD projects.

I read and investigated the interviews and later their transcriptions plenty of times in order to receive a comprehensive and reliable understanding of my data.

4.4. Validity and Reliability

"Validity means that the researcher checks for the accuracy of the findings by employing certain procedures" (Gibbs, 2007 cited in Creswell, 2009, p. 190).

A researcher can check the accuracy of the findings and also the final outcomes by employing certain procedures. For this study, I have followed Creswell’s (2009) suggestions in order to assure the validity of my research:

- Data triangulation was used in order to examine the evidence from the sources and build a coherent justification in order to contribute validity. It is provided by using multiple research methods and sources.

- Added the supervisor and a business analyst and a project manager from DSD company as an external auditor in order to consider different and external viewpoints.

- Used peer debriefing to enhance the accuracy of the account. Classmates’ comments are considered as peer debriefing that provides having different perspectives on interpretation.

- Spent prolonged time in the field by studying different related literature in order to understand the concepts and procedures of requirement engineering and business analysis to make accurate questioning and valid the findings.

- I used my comments and viewpoints on the findings for a follow-up interview with participants. That supports the accuracy of the findings.

According to Gibbs (2007 cited in Creswell, 2009, p. 190), “reliability indicates that a researcher’s approach is consistent across different researchers and different project approaches”. Yin (2007) suggested that a qualitative researcher needs to document the procedures of his/her study and document as many of the steps of the procedures as possible. He also recommended setting up a detailed case study protocol and database. Following procedures are taken in order to cover the reliability of this study.
• The transcripts are checked to be sure that they do not contain any mistakes;
• The codes are checked plenty of times to be sure if they have mistaken during the process of coding data;
• Regular documented meetings are organized between me and my supervisor;
• To provide consistency of codes, the codes are cross-checked and compared.

4.5. Ethical Considerations

In this study some ethical concerns are highly considered. In order to ethically advocate this study, there are several considerations that I should take care of during the data collection, data interpretation and analysis process.

The first ethical consideration is to ask for permission from the selected organization to conduct this research in that setting. To do that, I first explained the purpose of the research and the data collection method to them. Then, I gave them some information about the selection of participants and the fact that the research is going to be part of an academic work and there is not business purpose behind conducting that.

The second ethical consideration is that the participants’ name will not be exposed. Therefore, in this study the participants only explained about their gender, nationality, the branch they work in, position and experience if they wanted to. Besides, they were informed that they could withdraw their information from the study at any time they want before submitting of the research. Moreover, researcher contact information is given in case participants need it. Besides, a copy of the interview questions was sent to the company in advance of starting the interviews in order to inform them about the content of the interviews. Thereby, their concerns about the questions were eliminated. However, according to the consent I distributed before each interview, the answers to the interview questions could not be shared with other interviewees or company managers or anybody else. The answers are just accessible by me and my supervisor all during conducting the thesis and they will be removed after finishing the job.

The third ethical consideration is that to warranty of keeping the chosen company data away from third parties when there are any disagreements or conflicts occur between the researcher and the company.

The forth ethical consideration is if any, risks involved in conducting this research, the participants of this research will be informed about it.

The last ethical consideration is to consider the research process how it started and how it ended up. I started to this research with my classmate Ahmet Tolga Yılmaz. Since our aim was to make a joint thesis, we cooperated in finding the case company and in the data collection section of this research. However, Ahmet Tolga Yılmaz and I prepared the semi-structured interview questions together in data collection process. He performed the interviews individually and he shared the outcome with me. On the other hand, we decided to request some documents from the case company in order to get to know company at that time. Ahmet Tolga Yılmaz requested those documents from the case company by email. We shared those documents too. Although we started the thesis project together we decided to write up the research in two individual thesis. Hence, I have cooperated with Ahmet Tolga Yılmaz to find the case company, he performed the interviews of this research, and we both shared the outcome and some documents related to the case company. After the data collection I have continued with the study and done the rest of this research individually.
All of the above ethical considerations, together with a short description of the research, research question and purpose of the study are organized and printed in the form of consent and signed by the researcher and the interviewees before each interview session. A copy of that also is signed by the manager who agreed the company be the case of this study.
5. Findings and Analysis

In this chapter, I will demonstrate the findings and at the same time analyze them by applying the cultural framework that is introduced in the chapter 3. In order to refresh the readers’ thoughts about the proposed cultural framework, I give a short summary of that in advance of starting with the main analysis section.

5.1. Cultural Framework

In this section, I present a quick reminder about the cultural framework that is going to be applied to the findings. This helps the readers refreshing their minds about what the cultural dimensions were. The table 5.1 gives a comprehensive and summarized picture of each cultural dimension. For detailed information, readers can go back through the chapter 3.

I applied each of the following dimensions to my findings. However each of these dimensions contains varying items that might or might not be traceable in and applicable to the data I have collected. In section 5.1 a deeper analysis of the findings based on the cultural dimensions is given.

<table>
<thead>
<tr>
<th>Cultural Dimension</th>
<th>Comment</th>
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<tbody>
<tr>
<td>Power Value</td>
<td>Individual’s preferences on decision making style (<em>consultative or autocratically</em>), organizational structure (<em>centralization versus decentralization</em>), role of manager (<em>autocrat versus democrat</em>) and privileges symbols (<em>status versus competence</em>). Also <em>achievement versus ascription</em> dimension. People with ascribed-oriented culture, use titles, status and formal position commonly and show proper respect to others according to their status and are selected and given rewards based on their age, education or background. In achievement-oriented culture people are given credit based on their skills and experience and are given rewards based on their achievements.</td>
</tr>
<tr>
<td>Rule Value</td>
<td><em>Avoidance of uncertainties</em> which includes individual’s attitudes towards risky situation, ambiguous behavior and issues, use of rules and regulation for control and predicting those situations. Also <em>universalism versus particularism</em> which shows preferences of respectively either rules or personal relationships over each other.</td>
</tr>
</tbody>
</table>

Table 5.1: Cultural dimension and comment on items included in each dimension

(continued...)

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**Cont. Table 5.1.** Cultural dimension and comment on items included in each dimension

5.2. **Analyzing Applied Cultural Dimensions**

In this section, I analyze the findings based on the each cultural dimension (see table 5.1 for dimensions).

5.2.1. **Power Value Orientation**

The analysis of the findings which are collected from interviews declares that the decision making in the company is majorly consultative and democratic rather than autocratic. As interviewees stated every specialist has the right to speak and give his/her advices and also proposed changes are considered during workshop sessions in which every employee can discuss his/her ideas. People get the chance to talk and share their thoughts and challenge the solutions through

“Frequent internal meetings”, (Poland)

“At the end of project, project members are surveyed and asked their opinions to make the project better. During the project, project members are free to pass their ideas in periodic project meetings to enhance the development and functions”, (Turkey)
“Informal meetings are encouraged in small groups or between two individuals. Formal meetings are linked to the process”, (Poland)

“lots of participation from within company” (Poland) in decision making

However interviews show that there are situations where decision making become more autocratic

“Put the leads with the conflict in a room, facilitate them to ensure an appropriate course of action is in place. If necessary, bring in architects, designers and strategic planners to dictate the solution” (Poland)

“Dictate the solution” (Poland) can be understood as solution is decided by managers and architects, designers and strategic planners should follow that.

Also, the company as interviewees explained “follow the standard waterfall methodology” (Poland) for development process. This means structure of the work is not very flexible and employees should follow a pre-defined strategy. Similar centralized structure is happening at the time of assigning the roles and resources

“Our company has a fixed group of software specialist roles. It’s unlikely that resources switch during this phase”, (Poland)

“Project tasks are determined and roles and responsibility matrix is defined and distributed to the project members”, (Turkey)

“We use predefined roles” (Turkey)

Managers also have more autocratic behavior when it comes to some level of decisions and also conflicts between employees. The analysis of interviews show that specific decisions and most of conflicts are decided and finalized by managers rather than giving the chance to employees to consult the problem and come to a group decision

“PM or the team lead resolves conflicts”, (Turkey)

“PM handles those conflicts”, (Turkey)

“Conflicts are managed by direct and matrix managers that are linked to the specific process”, (Poland)

“In case there are conflicts, the program manager organizes a discipline leads meeting and posts decisions where applicable”, (Turkey)

Decisions regarding software requirement process “is made by program/project manager and if necessary escalated to the director of SW engineering and regional technology director”, (Poland)

“Tailoring requests are submitted by an engineer, reviewed by their manager, and approved/declined by the TPG group”, (Turkey)

“Before every major SDP milestone, the program manager conducts a readiness review” (Turkey)

However, studying the interviews demonstrates that employees are given the chance to work according to their preferences as long as they can meet the deadlines and produce expected artifacts. But analyzing the interviews expresses that flexibility in working based on personal
preferences depends on the circumstances and level of employee and not every interviewees experience that.

In addition to decision making, the role of management and organizational structure, interviewees discussed how achievements-culture and ascriptions-culture of people are important and influential in defining hierarchies and status. Interviews stated that employees get their position or are assigned to varying tasks

“Based on experience and results”, (Poland)

“Experience is the first choice”, (Turkey)

“Based on skills mainly and experience”, (Poland)

“Simply the performance is important on promotions”, (Turkey)

“The organization prefers experience over education”, (Turkey)

“For senior position however, people with a higher degree of education might have better chances” (Turkey)

Also, interviewed employees explained that the titles are not important in the company and people are not referred by them. Accordingly, analyzing the interviews indicates that employees in this company noticing the experience and skills of people rather than age, titles and backgrounds. In this case, they know why a person stands in a level higher or lower than another person.

5.2.2. Rule Value Orientation

According to the interviewees, the company in general and business analysis and software requirement teams in particular should produce a final product based on customers’ requirements. In this way, team members and managers need to be aware of unexpected situations such as changes that customer requests during the project, conflicts, risky situations and ambiguous issues and behavior of customer or employees that might arise during the project (See table 5.1). In this case, the analysis of the findings show that different teams such as “technical and software specialists”, “project management” and “team leaders” work together in order to “identify software products that are to be delivered to the customer during the project”. This whole situation refers as avoidance of uncertainty – as it is shown in the cultural framework. To avoid uncertainties, interviewees discussed different actions that they or their managers are taking

“Inspection meetings to verify documented requirements gathered during requirements workshops are achievable, measurable and deliverable”, (Poland)

“Frequent internal and customer weekly meetings throughout the project lifecycle”, (Poland)

“Specific defect meetings or urgent/critical fix meetings also take place when necessary”, (Poland)

“Put the leads with the conflict in a room, facilitate them to ensure an appropriate course of action is in place”, (Poland)

Additionally, interviewees very much focused on using pre-defined rules, standards or tools in order to avoid unexpected problems
“Our company strategy is to follow the standard waterfall methodology”, (Poland)

Work requirements are “Well defined and reinforced with frequent status reviews and meetings with senior company management”, (Poland)

“Procedures and rules are there to be adhered to in the first instance because they are normally implemented based on best practices and years of experience”, (Poland)

In another situation, interviewees explained that varying reviews and meetings are held by different groups or managerial levels in order to avoid any unexpected issue

“Anything regarding the process itself needs to be reviewed by the TPG group”, (Turkey)

“Formal inspections”, “Project status meetings”, “Phase readiness reviews”, (Turkey)

“Discipline leads meeting”, (Turkey)

“Staying within the corporate guidelines and procedures”, (Turkey)

Therefore, the analysis of findings determines that varying methods are taken in order to prevent or predict the unexpected situations. By holding varying meetings, referring to examined procedures and standards for doing tasks and estimating possible changes, employees try to control and manage what might come in future in order to guarantee the success of the project. However, interviewees explained that there are situations that the current standards or procedures cannot be followed

“Company procedures and rules are well defined, strict and controlled. There are a few occasions that you need to change it according to the conditions by consulting the upper management. Then if approved, we define the new requirements under the new procedures in order to avoid unexpected consequences to be happened” (Turkey)

In this case, they try to handle the exceptions by talking a new rule (without using personal relationships). One of interviewees stated that for making decisions about software requirement process

“My subordinates are submitting to me the analysis for the decision if the standard process cannot be followed”. (Poland)

Or in another cases interviewees explained

“Need to change it according to the conditions by consulting the upper management”, (Turkey)

“There are regular meetings per process and exception meetings if the standard process cannot be followed”, (Poland)

“If a rule needs to be changed, than it needs to follow a change request procedure; all sub deliverables have to fit into the larger picture” (Turkey)

Regarding above statements, the analysis of findings declares that in both branches of this company, rules and standards are preferred to the personal relations in order to avoid any uncertainty. However in one case, an interviewee stated that connections in their organization help people to get better positions.
5.2.3. Competition Value Orientation

In order to analyze if the company, its strategy and its individual employees stand as work-goal oriented or personal-goal oriented, I have reviewed the interviews. In this regard interviewees are asked about how they see achievement, success, competition, taking care of business, control over environment (which are the criteria of work-goal oriented), quality of life, taking care of other people, harmony in the environment and cooperation in their work place (which are the criteria of personal-goal oriented). (See table 5.1)

The interviewees stated that they receive both group and individual feedback about their progress and quality of work. The analysis of that determines that when people receive a value or criticism in group, then they work together to improve or remove the matter. And consequently this creates the spirit of cooperation among them. In additions, by referring to the fact that many different types of group meetings are held in this company (both Poland and Turkey branches), it can be understood that the cooperation and harmony between people improves because when people conduct meetings, do brainstormings and exchange ideas in order to provide a final practical solution as customer asked for, then they can share their ideas and understand other people's thoughts. In other words, when people discuss their deviations, then they understand each other better and therefore work together to improve a situation.

In another discussion by interviewees, they talked about how work-goal oriented is the company, how achievements and success of projects are important, and so on.

“Company look for a profit at the end of a completion of the project.”, (Turkey)

“The main goal, in general, is to deliver project within the proposed time and proposed budget so that the company can get a profit.”, (Turkey)

“Only if a deadline is to be met, helping my colleague is perceived reasonable.”, (Turkey)

“We invested lots of funds to ensure we do follow standard processes. This ensures better quality” (Turkey)

The analysis of interviews also determines that the company is very much work-goal oriented. The company generally prefers to take care of its business and success rather than creating harmony and cooperation between employees. People mostly are looked forward to finalize projects within the assigned schedule and budget so that the company can be successful in its job and earn its profit. However, the interviewees declared that the company provides best performers with gold and silver awards. This indicates that the company along with taking care of its business and success is aware of its employees’ attempts and value and takes care of its key contributors. Besides, the company as the interviewees stated does different activities to take care of its personnel

“All team members need to have the right amount of training to understand every relevant activity within the project.” (Turkey)

Or

“We sometimes have out of office events to unwind from work and get the employees closer together. This is a great motivation elevator and stress remover. In such events, private matters are exchanged and that is good.” (Turkey)
Therefore, the analysis reveals that by facilitating its employees with required information and knowledge or providing enjoying times, the company takes care of its personnel and their needs.

Additionally, the analysis of interviews determines that the company is work-goal oriented because there is a strong control over the environment which includes employees’ behavior, work status, work quality, and so on. For example as the interviewees stated there are many different “review” sessions (Turkey and Poland), “inspection” sessions (Turkey and Poland) and “standards processes” (Turkey and Poland), “guidelines” and “rules” (Turkey and Poland).

5.2.4. Structure/Relationship Value Orientation

As the interviewees in Poland branch discussed people are working mostly in group. They frequently have meetings within their groups, with other technical or non-technical groups or with groups from other branches.

Individual or group meetings “are regular per process”, (Poland)

“Informal meetings are encouraged in small groups or between two individuals. Formal meetings are linked to the process.”, (Poland)

“Inspection meetings to verify documented requirements”, (Poland)

“We also have frequent internal and customer weekly meetings throughout the project lifecycle”, (Poland)

“Deviations are completely … discussed …”, (Poland)

“Informal meetings are best used when addressing sensitive issues such as performance or personality issues within your team” (Poland)

The analysis of findings asserts that when a group causes a problem in a project or the company, they all are warned about that problem. And therefore, the work and the behaviour of each one of team members become the identification of the whole group. Also, people in the company see themselves as part of a whole group.

“I have no issues with observing, sharing, encouraging these expressions from other departments or my team” (Poland)

In Turkey branch of the company, the interviewees stated their ideas about how group-based or individual-based they are and they act.

“Requirements are … shared with the project members.” (Turkey)

“Depends on the project subgroup, size and the phase. Different groups are establishing the internal meetings based on the requirements. But in general PM establish weekly update/monitoring meetings and group leaders are attending to those meetings.” (Turkey)

Different individual- and group-based meetings as “formal inspections”, “project status meetings”, “phase readiness reviews” (Turkey)

The analysis of interviews reveals that both the Turkey and Poland branches of the company construct a group-based spirit in doing their tasks and employees have a group-based identity.
Evaluating employees’ performance, giving feedback and award system in both Poland and Turkey branch are both individual- and group-based. Individual employees are usually given feedback about her/his tasks and performances and besides groups are given reports on how they progress in whole and the quality of their group works. However, the gold and silver award system that they have is normally individual-based in both branches.

“Silver and gold awards are being submitted by teams or managers, evaluated and given out for key contributors.”, (Poland)

“There are no specific rewards directed solely at the SD process within our organization, and our rewards are based on commitment, professionalism and flexibility above and beyond what is expected by any given team member based on their position.”, (Poland)

“Project manager evaluated the performance of the project members and nominates the high performers to their upper managers. If approved the high performers are rewarded in silver and gold status levels which are determined according to the contribution efforts.”, (Turkey)

Getting “both” personalized feedback reports or group feedback, (Poland)

“We get group feedback by discipline, for example, Quality Assurance Team, Business Analysis Team. The software lead provides feedback against each team delivering each product as part of the project.”, (Poland)

A group-based feedback from “SRP” to “SW Development and QA team about the abnormalities found that may affect the decisions and development” (Turkey)

According to the interviews, decision making in both Turkey and Poland branches is sometimes individual-based and sometimes group-based and it mostly depends on circumstances and the importance of decision. For example, an employee stated that how it is critical for teams to agree upon a delivery.

“It’s critical to get the requirements right as early as possible to ensure you all agree on what, how and when you will deliver”, (Poland)

In order to understand customers’ requirements, “during project development phase, informal internal meetings are taken place via teleconference system.” (Turkey)

However, some other employees stated that there are situations where team leaders or project managers should work out a solo-solution.

“Put the leads with the conflict in a room, facilitate them to ensure an appropriate course of action is in place. If necessary, bring in architects, designers and strategic planners to dictate the solution”, (Poland)

For managing conflicts in software requirement process “PM handles those conflicts”, (Turkey)

“In case there are conflicts, the program manager organizes a discipline leads meeting and posts decisions where applicable”, (Turkey)

“If the deliverables are in danger, I usually consult upper management for flexibilities in the project. These are mostly related with administrative issues.” (Turkey)
Accordingly, the analysis of findings determines that decision making in both branches of this company relies on conditions, consequences of decision on deliverables and having the authority to decide over a matter. Therefore, decisions can be either solitary or group-based.

5.2.5. Time Value Orientation

Regarding doing tasks sequentially or simultaneously (See table 5.1), interviews show that both Poland and Turkey branches prefer to give priority to the tasks that probably mark as more important or with closer deadlines. However employees in both branches usually carry out their tasks simultaneously.

“Work is structured based on priorities”, (Poland) [giving priority - Simultaneous/sequential]

“Often business requirements are being discussed in parallel to requirements gathering on the systems side”, (Poland) [Simultaneous]

“I liken my role as a circus plate juggler who has to keep multiple plates spinning at the top of sticks.”, (Poland) [Simultaneous]

“My position is a multi-disciplinary position contains both technical and administrative tasks. Most of the tasks require my direct involvement to the given case.”, (Turkey) [Simultaneous]

“Sometimes resources are limited due to the number of projects handled at the same period. Depending on the urgency of delivery times, these lines can be bypassed.”, (Turkey) [giving priority - Simultaneous/sequential]

“All of us have parallel activities at any given time. It is very important to create the 4 quadrants (important and urgent, important but less urgent, not important but urgent, not important and not urgent) frequently in order to keep on good track. It is too easy to tackle the last quadrant; but once you are aware of the 4 quadrants, this is easy to handle” (Turkey) [giving priority – sequential]

The analysis of interviews determines that in most cases employees conduct their tasks simultaneously. However usually they plan their jobs based on the deadlines, significance of assigned tasks and available and required resources for doing a task which might result in doing different jobs at the same time and postpone some others for later time.

Time value in terms of short-term culture long-term culture (See table 5.1) is also a discussion point in cultural differences. Accordingly, interviewees discussed varying matters that can be studied to explore short-term or long-term culture in the company.

As the interviewees in both Poland and Turkey mentioned, mainly standards and rules define the working process of the company. The analysis of findings reveals that the employees and the company give much value to traditions and pre-defined instructions. So people normally do their tasks according to what has been defined previously, for example waterfall methodology for their software development process. However the company welcomes change proposals, the process of introducing, approving and applying a change needs hierarchical decisions and time. Along with this prospect, the company, as interviewees in both branches stated, emphasizes on its “benefits versus costs” and “soon and right”
deliverables which requires hard-work by employees. This can assert that the company relies on a long-term culture in specific circumstances.

5.2.6. Communication Value Orientation

One aspect in communication value focuses on high-context and low-context messaging at the time of communication (See table 5.1.). This communication can be verbal or non-verbal. Employees in both Turkey and Poland branches expressed that they use verbal as well as non-verbal communications in order to exchange information internally and with other branches.

“Phone calls, conference calls, shared documents repositories e.g. Documentum, Wiki, Jira, Quality Center, pMax etc”, (Poland)

“All of them (Such as SharePoint, emailing system, video conferencing, phone calls etc.) and other 3rd party or internally developed applications to track and manage software defects” (Poland)

“Requirements are briefly described and documented”, (Turkey)

“Teleconference is the standard meeting method since most of the contributing project members are from different countries.”, (Turkey)

“Shared documentation tool is sued to share the project documentation… technical documents are shared by the developer/owner inside the documentation tool and the announced to other contributors.”, (Turkey)

“Different groups are establishing the internal meetings based on the requirements.”, (Turkey)

“PMA (ProcessMax), Clarity and Cocumentum (WebTop) to store documents, Various meetings using phone conferencing systems, All our processes follow the CMMI guidelines”, (Turkey)

“Emailing system, fax and phone calls”, (Turkey)

“Formal inspections, project status meetings, phase readiness reviews”, (Turkey)

“Each step of its processes is well documented” (Turkey)

The analysis of interviews determines that in this company both verbal and non-verbal communications are in use. Employees in this company exchange both coded and clear information because they sometimes just communicate the information via meetings and phone calls and sometimes they document the information. The analysis also explains that however people have trust in each other they prefer to have everything official and documented. The analysis asserts that the employees create both high-context and low-context culture for themselves to work in.

Additionally studying the interviews determines that people usually do not reveal their feelings throughout the work however they are not prevented from that

“I have no issues with observing, sharing, encouraging these expressions from other departments or my team.”, (Poland)
“In some respects, showing your “human side” is an excellent way to ensure better communication and cooperation with your team, peers and senior management.” (Poland)

“Expressing the feelings is healthy as long as there is no harm to the individuals physically and psychologically.” (Poland)

“Reflecting feelings usually have very big impact on outcomes, to date such expressions have always been taken by appreciation.”, (Turkey)

Nonetheless, as it is mentioned by different interviewees, near the deadlines people might be stressful and feel pressured and accordingly showing unstable behavior. Still, as employees stated, this is the job of project manager or leaders to control and moderate these feelings and help people to continue their works.

“When people are under stress (deadlines, overworked, etc), then (negative) feelings might come to the surface. However, their managers task is it to moderate and facilitate to avoid feelings are counter-productive. However, enthusiastic behavior, even when expressive, elevates team motivation.”, (Turkey)

“If an idea is not liked due to personal or business reasons, generally expressive and enthusiastic behaviours are faced. Such people avoid discussing in further communication or don’t complete task until they are warned. PM tries to handle such conflicts as possible as he/she can by explaining the reasons.” (Turkey)

Therefore a general understanding of the analysis reveals that in this company feelings are given value and are taken care of as much as possible. So employees are working in an affective culture.

5.3. **Individual Comments about Cross-Cultural Environment in the Company**

The interviewees in both Turkey and Poland branch expressed their general viewpoints about working in a cross-cultural company and distributed projects. They talked about different matters such as using sharing tools in the company, language issues, communication problems, and etc can bring out or diminish cultural differences.

The analysis of findings I have collected shows that the interviewees who have been engaged in a failed project have observed several causes that direct the whole project to an unsuccessful state.

“Cross-cultural businesses can always create troubles … since individuals, who are in the same project, are having different understanding of timing and the ways each individual makes business may vary.” (Turkey)

“We should have considered much more about working hours, time zone issues and their English skills for the ministry of lottery.”

Reasons of failing in a specific project “time zone”, “holiday and working hours”, “spoken language”, “teleconferencing tool” (Turkey)
Reasons of failing in a specific project “language barrier and some time zone issues”, “some difficulties in communication and troubles at solving some misunderstood and misinterpreted software requirements” (Poland)

“Teleconferencing system to get software requirements was wrong decision just because of the language barrier among stakeholders … from that time we have used another communication tool, which is written based.” (Poland)

“Teleconference is the standard meeting method.” (Turkey)

“Documentations are conflicting each other” (Poland)

“The good thing about using a tool such as PMAX enforces all team members use the same process and ‘language’, irrelevant where they are from.” (Turkey)

“Having teleconferencing session during the Software Requirement period is useless, since not everybody has a certain level of spoken English skills. There might be some misunderstanding and misinterpreted requirement even we agreed on them” (Poland)

“I believe that they are not punctual at all and the way they work quite different than ours. For them, being late for 15 minutes is not a huge problem” (Poland)

“We couldn’t be able to implement the system on time just because of the language barrier, time zone differences and different understanding of timing” (Poland)

The analysis of the findings determines that basically level of spoken and written language, used communication tool, time differences, having dissimilar understanding of time management reflects on the success of the project. The analysis of interviews asserts that however for example teleconferencing has been experienced as an ineffective tool in exchanging information, it is still in use. Additionally, the analysis reveals that employees cannot solely rely on spoken or written facts and instead they need to cross-check the collected information and use them along with each other. Also, the analysis determines that being in two different regions with different timing and time management systems create problems that can result in failure of a project.
6. Result

In this chapter, I develop the results based on analyzing the findings. The results are basically meant to satisfy the research question of this study:

*How can cultural differences influence on business analysis process in a globally distributed IT company?*

Throughout this chapter, I first demonstrate the results according to each of the cultural dimensions that are studied in the analysis chapter and then in the second part I give a whole overview of the results in order to answer the research question and also some suggestions regarding the final outcomes.

6.1. Cultural Dimensions

6.1.1. Power Value Orientation

Studying the analysis of findings asserts that the company follows a democratic and consultative decision making style. This is understandable when the interviewees discussed that how they have frequent internal and external meetings, how they discuss difference of ideas, and how they suggest and share their thoughts about the requirement process with their managers. However, there are situations such as conflicts between team members that project manager or team leaders directly decide over and then announce their decisions to the team members. So it should be questioned if this orientation can cause team members to not be able to handle difficulties and also raise autocratic behavior in the company instead of sitting around and debate over problems.

Also, the result of the analysis shows that the company is stubborn about its requirement engineering process and disregarding the assigned project and its properties, employees must follow the pre-defined standards. Such attitude can cause employees to assume that the company does not value their innovation and creativity and therefore push them to be lazy and unconcerned. It is also considerable that dictating and following the same standards for every project, regardless of the context and settings, can result in autocratic behavior in the company.

Moreover, the result of the analysis determines that in this company people are not evaluated based on their relations, age or background. Yet, they are given credits according to their knowledge and experience. Such attitude can reduce the distance between employees and also create more trustable environment throughout the projects. This is because people know that any given role or task bases on their abilities and capabilities not their relations or similar things.

6.1.2. Rule Value Orientation

The result of the analysis shows that both branches of the company frequently hold varying types of meetings in order to discuss their understandings about collected requirements, estimate required resources, conflicts and disagreements and so on. Besides, they are meant to follow a set of specific guidelines and standards for conducting their tasks. These declare that the company anticipates possible issues and ambiguous situations and tries to avoid them by putting them into discussion and also by following the results of previous experiences in the form of standards. However, it can be asked that how flexible these standards and rules are when it comes to apply them to different projects conducted in varying contexts and settings.
Additionally, the outcomes of the analysis determines that the company puts its rules and standards in advance of personal relations when it comes to assigning roles and tasks, allocating resources, evaluating employees’ performances and so on. In other words, personal relations are not given as equal value as rules and standards are given.

6.1.3. Competition Value Orientation

Looking in to the result of the analysis reveals that the employees are more interested in creating a harmonic and cooperative environment rather than having a competitive context in which people prefer to reach their personal goals and achievements. In both branches, employees share their information and discuss them throughout meetings in order to gain a better and equal understanding about their customers’ requirements. Yet, things such as giving awards or rating the employees’ performance are given value in the company. Such awards can encourage good or bad competition among employees. That is, rating employees’ performances and giving awards accordingly can create positive competition among employees or can result in distance and decreasing cooperation level between them. So this is a tricky action that cannot be fully supported or declined.

Additionally, as the result of analysis determines, the company in most situations puts its benefits and good first. Having strong control over work environment, solo-decisions about conflicts, achieving business benefits, success in projects and so on are examples of having a notable work-goal attitude in the company. Still there are situations where the company provides its employees with sufficient trainings and preparation in order to help them improve. Regarding both these results, it is considerable that the attitude of the company and its employees do not move in the same direction. Employees prefer to cooperate and collaborate while the company prefers to reach its success and finalize its projects on time and gain its benefits. So it should be questioned if having two different attitudes – in most situations – by the company and its employees can affect how these two entities influence each other and support each other’s desires.

6.1.4. Structure/Relationship Value Orientation

Studying the result of the analysis asserts that people in the company are mostly dedicated to stay and work in groups. And on this account, team members together accept responsibilities, do brainstorming, receive feedbacks, and exchange thoughts in order to conduct a task. Employees are fond of being part of a group and are seeing their groups as their identifications. However, events such as award system of the company can detach group members because it is an individual reward in which each person’s performance and quality of work is measured and accordingly is given a silver or gold award or nothing. Even though it is understandable from analyzing employees’ interviews that people prefer to be known and work as part of a group.

Decision making is not clearly individual or group-based because it very much depends on situation and level of decisions. So sometimes for fast decision making or complicated situations, one person finalizes a decision and sometimes different persons put their ideas together and do a plan.

6.1.5. Time Value Orientation

The outcomes of the analysis states that usually the company and its employees need to conduct simultaneous tasks because there are always varying jobs that have the same priority and importance. And this is accepted by employees that they need to replace their tasks by urgent ones and be ready for receiving a new job with high priority while they are working on the assigned ones. However, it should be questioned that as people in Turkey and Poland
branches work together in order to conduct a group project beside their own projects, how they can realize about each others’ tasks and the priority of those tasks. It should be considered that if knowing or not knowing this matter can make problem in planning the meetings, deadlines and so on.

The company looks into the future and long-term benefits. However for conducting projects it usually follows its traditional standards and guidelines. This means that the company relies on both short-term and long-term culture. Therefore, it can be asked if this duality in culture does not make any contradiction in carrying out projects. In other words, does or does not the company need to follow a clear path or strategy in order to meet its mission and vision.

6.1.6. Communication Value Orientation

Studying the result of the analysis determines that people in both Poland and Turkey branches use varying types of communications in order to exchange and share information within their groups and with outsiders. People can rely on both coded and documented data or oral and non-coded one for conducting their tasks. It is wondering if employees have control over what they use as communication means. It can be asked if using different types of communication means can cause people to lose information or how employees can keep all coming information from different resources updated and adjusted. As the result of analysis asserts one of the main issues that employees stated as the problem in the company is the communication. So it should be noticed how communication should be conducted in a distributed company to help people doing their jobs not confuse them and consequently reduce the quality of the deliverables.

Another point of discussion in communication dimension is showing or hiding feelings in a context. In this company, as the result of the analysis shows people are not prevented from showing and talking about their feelings. However the team leaders try to control the flow of feelings in order to reduce the effects of bad or negative feelings on the other employees.

6.2. Overall Result and Suggestions

The overall results of the study answer the research question of this study which is “how can cultural differences influence business analysis process in a culturally distributed IT company?”

The outcome of the analysis determines that treating varying matters in the company and teams in both democratic and autocratic way seems to help conducting the tasks which are distributed among teams located in different locations. The reason is some matters such as details of a contract with a customer or handling financial problems need having the proper information about the company’s financial, technological, and similar resources. So in such situations autocratic decisions make sense. However, the result of the analysis shows that the team leaders or project managers try not to leave the conflicts to the team members to solve. Instead they dictate a solution to the team members. Such attitude grows autocratic behavior and vertical hierarchy in the company. This creates a distance between team members and leaders and prevents employees from sharing their ideas and creative solutions. Alternatively, team leaders can give more time to the teams in order to discuss and reason their thoughts and vote for the best one(s). In this way, the leaders have supervised their teams and avoided solo-decisions at the same time. The same problem is observable when people are dictated the similar standards for every different project. However it is good to rely on successful practices, things can be unlike for each project. Following the same standard for everything puts the company in danger of losing time, efforts and other resources. So probably by establishing a research and development section or only assigning some individuals to search
for the most suitable development method for successfully doing a project helps the company conduct its projects in the most appropriate way.

So when it comes to decision making in a culturally distributed company varying items need to be considered. Being only autocratic or only democratic may not work all the times. So it is important to understand for what purpose the decision is, how it influences employees, if it is helpful or necessary for employees to participate in decision making and if it is yes, then how employees can contribute to that and so on.

Additionally, when it comes to plan a project and assign roles, it should be considered that if people can work simultaneous tasks or they need time to finish one and start another job. As the result of the analysis determines the people in this company have learnt to examine the priority of tasks and move them back or forth accordingly. Therefore, in a culturally distributed company it is important to learn how people treat pool of jobs, can they work simultaneously or can they understand the priority of the jobs. And regarding this matter, how employees in different locations can understand the situation of people in other locations.

Another cultural consideration that influences the distributed project is time. Having a dissimilar understanding about the timing and time difference directly influences project planning, meetings and deadlines. As the result of the analysis reveals, timing has been a huge factor in failing or succeeding a project in this company, for example people in one branch do not understand time language of another one or they do not care about punctuality as the other branch does. Accordingly, time and time management as a cultural difference vastly influence progression of a business analysis process.

Communication is another cultural issue that influences a whole project. The result of the study reveals that varying communication methods and means are in use in different branches of this company which makes the job hard for people. The reason is that the information passing through varying means is needed to be reliable and updated. The employees in many cases share verbal information that is not registered or documented anywhere. So, all the resources that send and receive information should be adjusted with each other in order to avoid mistakes and misunderstandings. Therefore, it is necessary to clear communication methods and means in a culturally distributed company to advocate team members conducting their tasks not confusing them by different information and consequently reducing the quality of the deliverables.

Under the matter of communication, the level of spoken and written language is considerable. The result of the analysis shows that English - which is mainly in use in this company - for many employees is not their main language. So when it comes to verbally communicate, level of language becomes a matter. Thus, the company has decided to document all exchanged information but the result of the analysis shows that people still do work based on what they verbally tell each other.

In a general thinking, each of the analyzed cultural dimensions can influence the business analysis process in a culturally distributed company. However their influence might be of different weight, they cannot be totally overlooked. In this specific case, communication means, timing, autocratic or democratic decisions and language are seen to be the main cultural differences. However the competitions between people, following rules and standards, structure and relationship between the company and employees or employees themselves are not seen as the influential cultural factors, they are not totally ignored because each of them can be a source of concern for future projects. Additionally, the final results are context-based and it can be different in another setting.
7. Discussion

This study examined the influence of cultural differences on the business analysis process of globally distributed software development projects. I determined a cultural framework by unifying Hofstede’s, Trompenaars’s and Hall’s cultural model and applied that unified model to the empirical findings. In this section, I will discuss the results (See chapter 6 for the results) of my analysis.

The purpose of this thesis is to investigate the cultural differences and their influences on behavior, perspective and interpretation of globally distributed software development team member while they are working on the business analysis process of a software development project. Therefore, the following research question is addressed:

*How can cultural differences influence on business analysis process in a globally distributed IT company?*

In the analysis chapter, I started with identifying and categorizing stakeholders’ reactions toward, perspectives and interpretations about varying cultural dimensions based on the unified model of this study. Thereafter, I examined how these cultural issues influence the business analysis process of GSD projects.

The result of this study shows that several cultural factors such as language skills, communication style, time coordination, time understanding and decision making and coordination style have heavy influence on the business analysis process in general and requirement engineering process in specific. Actually the influence of these cultural dimensions totally depends upon the setting of a study. So the results that are discussed in this study might be different in whole or part when it comes to another research with unlike context and aim.

According to the final outcomes, language heavily influences the culturally distributed business analysis process. Especially, spoken and written language skills of distance team member can create misunderstanding, misinterpretation, disagreements and conflicts. It is identified from interviews that the English language is mainly used language in software development project and it seems that project team members do not have a certain or similar level of written and spoken English. This matter is similar to the discussion by Gladstone (2012) who highlighted language issues as the main cultural factor in globally distributed organizations. He (Ibid) explained language issues often introduces misunderstandings since individuals can have different level of language skills and communication and interpretation style which differ from culture to culture. In another study by Carmel (1999) the non verbal communication style is the reason of ambiguity and misunderstandings because it highly relies on culture. Moreover, non-verbal communication style becomes much more complicated when remote team members use electronic communication tools. This matter is also discussed by various researchers (e.g. Carmel, 1999; Edward and Shridhar, 2002; Kobayashi, 2004). They discussed language issues and communication style issues as common problems of globally distributed projects and suggested several methods to handle these issues such as proper language training methods that can give a certain level of English skills, buddy system method where the team members paired across the sites, travelling method that helps to understand different cultures and written based formal document that can support individuals with lower level language competence. However, According to the outcomes of this study, team members cannot only rely on the written documents. I believe that relying on written documents with low language skill might create misunderstanding and misinterpretation problems. Therefore, I suggest to globally distributed companies cross
check written documents before use along with others when they face language competence problems. And I also suggest that globally distributed companies use common and understandable language and communication style, be aware of cultural differences in order to have a proper communication and negotiation. Moreover, The result of the study reveals that communication style and communication methods are influential cultural factors that influence a whole project and makes the job harder. This also leads distributed teams to unreliable information, confusion and misunderstanding. This matter also discussed by Pandey et al. (2010). He explained that effective communication methods and information documentation are very important activities for business analysis process since this process requires proper communication and collaboration. This matter also discussed by Karolak (1998). He explained that documentation is very important for clarifying ambiguity assumptions and to support maintability in globally distributed projects.

The final outcomes reveals that different understanding of time and time management and time zone differences directly influence software project planning, meetings and deadlines. This result supports the experience of Huang and Trauth (2007). They highlighted time as the main cultural problem in globally distributed projects and explained several aspects such as time commitment, adherence to schedule and availability for synchronous communication directly impact on time management and understanding and planning time. These aspects can be the reason of misinterpretation of time and schedules, delays, tensions near the deadlines, mistrust among stakeholders and restrictions on regular working hours that consequently they can cause a huge failure in a software development project. Several authors also discussed this matter and explained about culture as a culturally bounded common concept that can influence scheduling, planning, meeting and deadlines and suggested cultural trainings (e.g. Carmel, 1999; Sarker and Sahay, 2003; Saunders et al., 2004; Despande et al., 2010). Despont et al., (2010) also suggested that a project manager should keep themselves well informed about different cultural events and national holidays and festivals and provide their team members with this information and also cultural training in order to understand different cultures.

The result of this study exposes that autocratic and consultative attitudes are culturally bound concepts and heavily influences culturally distributed business analysis process. This seems similar to the discussion by Hanisch et al., (2001) who highlighted power distribution and respecting hierarchy as the main cultural problem in distributed organizations which can cause problems in achieving trust and communication among stakeholders. The result of this study reveals that autocratic behavior and vertical hierarchy can create a distance between employers and leaders, prevent employees from sharing their ideas and creative solutions and might push them to be lazy and unconcerned. Therefore, I suggest that project managers give more time to their teams in order to discuss and reason their thoughts and vote for the best one(s). The outcomes also indicate that employees at any level are not evaluated based on their relationship, age or background that can result in reducing the distance between employees and negatively influence their trust. Similarly several studies discussed this matter (Herbsleb and Moitra, 2001; Edward and Shridhar, 2002; Damian and Zowghi, 2003; Phongpaibul and Boehm, 2005; Despande, 2010). They explained that power orientation can create distance between leaders and employees and can diminish team morale, team performance and trust between team members. So the whole business analysis and requirement engineering process can be negatively affected by a different view of power distance, and differences in hierarchy structure.

As I explained earlier, the results of this research show that communication style, language, time coordination, time understanding and management, decision making style are the main
cultural difference that have a major influence on the business analysis process in general and requirement engineering in specific. On the other hand, The final outcomes indicate that there are several cultural issues which do not have distinguishable influence on business analysis and requirement engineering process. Accordingly, in this particular study (specific context and specific phase of software development process) the competition between stakeholder and team harmony issues, following standards and rules, ambiguity and personal relationship issues, structure and relationship understanding are not seen the main influential cultural issues. However, this may not be necessarily the same in every project and every cultural setting. Similarly various authors more or less discussed these matters as influential cultural differences (Hofstede, 1980; Hall, 1959; Trompenaars, 1993; Brockmann and Thaumüller, 2009). They explained competition and collaboration, following rules and standards, personal relation, ambiguity and group harmony as important and challenging matters when work in different cultural contexts and remote collaboration is the topic.
8. Conclusion and Contribution

8.1. Conclusion
To conclude, this study looks into the cultural matters that can influence culturally distributed business analysis process. In order to complete this research, three different cultural models were studied and then compared in order to find the similarities and differences between them and thereafter according to the outcomes a united cultural model is developed. The final cultural model is applied to the findings of the study.

In order to answer the research question of this research, I have worked on data collected from a culturally distributed IT Company with head office in USA and many branches in different countries; a single case study. For this study, I chose to work on Turkey and Poland branches.

In addition, a comprehensive literature review about business analysis and requirement engineering process, existing cultural models and cultural issues is followed by interviews from employees in Poland and Turkey branches of the chosen company.

This study resulted in varying cultural dimensions that can influence the work of culturally distributed business analysis process.

8.2. Contribution
The current study contributes to the existing cultural issues that are happening during the culturally distributed business analysis process and alerts companies to be aware of those possible cultural dimensions. It also makes a contribution to the available literatures that discuss cultural models in the area of IT and IS. Additionally, this research introduces a united cultural model the extracted from varying cultural models.
9. Future Works

It is suggested that the united model that is generated through this research and applied to the findings of this study is being tried for the similar or other cultural matters in different contexts. Additionally, the cultural dimensions and the generated cultural model can be investigated in quantitative and mixed-methods studies.

Furthermore, during this research it is faced with some issues about female and male (physical) gender equality due to cultural differences, such as in accepting and being at work-relation with women. Therefore, gender equality in different cultures can be investigated.
References


Porter, R., E., 1972, An Overview of Intercultural Communication, pp. 3


Appendices

Appendix A: Information Consent
Following information consent sent to interviewees to involve in this research.

Thesis topic: The Influence of Cultural Differences on the Business Analysis Process in Globally Distributed IT Companies: A Case Study of Turkey and Poland Branches of an IT Corporation

Researcher: Serap Caliskan, Master of Information Systems (2 years), Linnaeus University Cell (0046736963810; 00905424856561) or Email (scaex07@student.lnu.se)

The purpose of the research: Investigating the influence of the Cultural differences in the business analysis process of the IT corporation of Poland and Turkey Branches of Globally distributed IT company.

Supervisor: Tobias Andersson-Gidlund, Linnaeus University, email (Tobias.Andersson-Gidlund@lnu.se)

Participation: Participating in this study is completely volunteer based.

The benefits of this research to participants, this research will provide a deep understanding of the influence of cultural differences on the business analysis process in general and on the requirements engineering process in particular. Participants can learn due to cultural differences which type issues might arise and their possible impacts on business analysis process. Also it shows to participant about several cultural issues which has highly influenced on Business analysis process.

Risks and Confidentiality: Participants in the research have rights to access to their own data at any time, and, Author and supervisor of this thesis can access whole data through all steps. Collected data from participants will be used for only this master thesis. Participants can ask for further information about the whole study and their participation any time to researcher, Serap Caliskan. Furthermore, Participants’ names will not appear in any publication of the research. Participants’ data/information will be safely stored.

Legal Rights and Signatures:
I consent to participate in this study and the data/information I share with Serap Caliskan can be used in her master thesis ‘The Influence of Cultural Differences on the Business Analysis
Process in Globally Distributed IT Companies: A Case Study of Turkey and Poland Branches of an IT Corporation. My signature below indicates my consent.

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Appendix B: Interview Questions

1. Could you please tell some information about the company you are working for?
2. Could you briefly describe your duties in the company?
3. How many years you have worked in this company?
4. How are you contributing to Software Requirement Process? What level of responsibilities do you have based on your role in the requirement process? (Such as Software Development Team, Operation Department, Customer) Elaborate your answer.
5. Are your objectives or goals clearly defined before starting to Software Development Process?
6. Which tools are used to communicate among branches in terms of Software Requirement Process? (Such as SharePoint, emailing system, video conferencing, phone calls etc.)
7. How are decisions made regarding to Software Requirement Process? What level of consensus is there among manager and developers when making decisions in Requirement Process? Elaborate your answer.
8. How are decisions made regarding to Software Requirement Process? What level of consensus is there among you and your subordinate when making decisions in Requirement Process? Elaborate your answer.
9. Do you have an individual or a group reward system regarding to Software Development Process? Elaborate your answer.
10. Do you get personalized feedback reports or group feedback? Elaborate your answer.
11. In which circumstances are individual or group/team meetings taken place regarding to Software Requirement Process? Elaborate your answer.
12. How do you manage conflicts in Software Requirement Process when different people from other branches are part of the same Software Requirement Process?
13. How necessary is it to bypass hierarchical lines getting your work or software project process faster? Elaborate your answer.
14. What level of the employee’s participation is considered during the decision making in Software Requirement Process? Elaborate your answer.
15. How are software project group roles established? Are there any possibilities and flexibilities to switch roles during the Software Requirement of the project?
16. How much do you need to know the parts of the Software Requirement Process regarding your role in the process? What level of employee’s skills is desirable for Software Requirement Process? Elaborate your answer.
17. In which type of discussion meetings do you find a female or a male leader effective? Elaborate your answer.
18. How well is your work requirements defined (specified) in order that you become aware of what you are expected to do? Elaborate your answer.
19. What level of flexibility is possible when you need to do work in your own way? In which circumstances? Elaborate your answer.
20. In which circumstances can procedures, rules or instructions can be broken in order to handle conflicts in Software Requirement Process?
21. What is your opinion about stretching procedures or rules to help your colleagues? To what extent is “helping to your colleagues “perceived reasonable? Under which circumstances? Elaborate your answer.
22. What level of bending (stretching) rules is transparent to the other branches? Exemplify your answer.
23. How do you perceive expressing feelings (such as disdain, dislike, expressive or enthusiastic behaviors) by colleagues or people from other branches? What impact do feelings express have in an interpersonal communication and cooperation with other branches regarding to Software Process? Elaborate your answer.
24. How are your colleagues chosen for a particular task? Is it based on her/his professional background, seniority, age, position or level of responsibility taken etc.? Elaborate your answer.
25. Are “titles” (e.g. master, professor, doctorate etc.) used extensively to clarify your status in organization or used only when it is related to your competence you bring to your task? Elaborate your answer.
26. Do you get position at work because of your “title” (e.g. master, professor, doctorate etc.)? Elaborate your answer.
27. How many parallel activities are you doing at a time regarding to your work? When do you think other activities take time? In what level of strictness are you keeping your appointment? Elaborate your answer.
28. What level of informal or formal meetings is there possible regarding to Software Requirement Process? Under which circumstances are Informal or Formal meeting preferable? Elaborate your answer.
29. What are the main reasons of the conflicts at your workplace? How does manager look at the conflict and find solutions to handle it (e.g. Discussing of disagreements and conflicts openly or giving people time and opportunities to work quietly through disagreements or conflicts)?
30. Are your objectives or goals clearly defined before starting to Software Development Process?
31. What type of changes do you encounter in Software Requirement Process (such as a changing point of contact)? How comfortable are you, depending on these changes in your daily work or project work? What level of compromise do you and your colleagues have when dealing these changes in order to achieve to harmony at work? Elaborate your answer.
32. Can you give a more specific example in terms of individuals’ attitudes in stakeholder relations, which bring failure in the business?