EFFECTS OF CULTURAL DIFFERENCES IN CONSTRUCTION PROJECTS: AN INVESTIGATION AMONG UK CONSTRUCTION PROFESSIONALS

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ABSTRACT

Managing cultural diversity in construction is crucial for the success especially in international projects. Understanding and successfully managing cultural differences can provide several advantages for project as well as company success. On the other hand, problems arising from cultural differences can cause waste of resources and delay of construction. The specific objectives of this study are to find out the opinions of managers about the possible effects of cultural diversity on some management practices in construction business; the relationship between the management of cultural diversity and success; and the possible advantages and problems of working with different cultures in the construction industry. Within this context, semi-structured interviews are carried out among eleven senior managers who have some years' of experience in international projects and are involved in UK construction business. The interviews took place over a 3-month period between November 2007 and January 2008, and each lasted approximately 1 hour. Analysis of the qualitative data has been carried out using the NVivo 2.0 software program. Based on the results; one of the main advantages of working with different cultures was found as knowledge sharing, and managing cultural differences successfully were seen as one of the key elements in project success. The analysis of the interviews showed that cultural differences have an impact on management practices in construction but in different ways and levels. The highlighted practices that can be significantly influenced by cultural differences were human resources management, knowledge management, communication management, safety management, time management, and negotiation.

Keywords: culture, construction, diversity, management, UK.

INTRODUCTION

In today's constantly changing global business environment, cultural issues and understanding cultures have become essential and a prerequisite for business success (Walker et al. 2003). The importance of culture and cultural differences has become more critical especially for companies operating in international markets or having employees from

different cultures. Since culture has the potential to impact on business activities, companies have to consider the cultural concepts in their daily businesses to operate successfully in the global marketplace.

Culture and cultural differences are important issues for every organization in every industry. As Ankrah and Proverbs (2004) stated, these concepts become more critical in construction due to the nature of contracting, internationalisation of procurement, joint venturing, and partnering in this industry. Like in other industries, the increase in strategic alliances in construction also increases the significance of cultural differences due to the interaction of people from different cultures (Shore and Cross 2005). The advantages of managing cultural differences successfully have been addressed by many researchers (Fatehi 1996). It can enhance organizational effectiveness and give an organization a strong competitive advantage. On the other hand, failure to manage cultural differences can cause serious problems such as delay of construction and decrease in productivity. Therefore, understanding and managing cultural differences in this industry is becoming an increasingly important topic especially in international construction projects which involve participants from different cultural backgrounds.

CULTURE AND CONSTRUCTION

There are many different definitions of culture. The definitions differ greatly according to the research fields. Hofstede's (1984) definition in terms of organizations is "the collective programming of the mind which distinguishes one group from another". Barthorpe et al. (2000) presented an overview of the literature published on the subject of culture and defined it simply as "what we are and what we do as a society". A research carried out by Abeysekera (2002) showed that culture in the construction industry is considered to be about the "characteristics of the industry, approaches to construction, competence of craftsmen and people who work in the industry, and the goals, values and strategies of the organisations they work in". Culture has several properties which have also been widely accepted (Barthorpe et al. 2000, Loosemore 1999). It is shared, learned, symbolic, tradition, shapes behaviour and can change over time.

In researching national cultures, Hofstede (1984) identified four dimensions of culture. These extensively used and well known dimensions are; power distance, uncertainty avoidance, individualism/collectivism and masculinity/femininity. The four dimensions provide a framework for considering the effects of cultural differences on management and organization. Another study of how cultures differ has been developed by Trompenaars (1993) who identified seven dimensions of culture which are universalism-particularism, collectivism-individualism, neutral-emotional, diffuse-specific, achievement-aspiration, attitudes to time, and attitudes to the environment.

There is a growing interest in the studies on the culture of the construction industry, projects, and the effects of culture and cultural differences on construction. Hall (1999) investigated the links between cultural diversity and international construction activity from a British perspective. He found that British construction companies adopted an ethnocentric response to the cultural differences that they encountered when working overseas. Mahalingam et al. (2005) investigated which institutional or cultural differences had the most significant impacts on global projects. Liu and Fellows (1999) investigated the impact of culture on construction project goals. Several researchers conducted studies on the impact of cultural differences on management practices in construction such as quality management (Pheng and Alfelor 2000), dispute resolution (Chan and Suen 2005), and communication (Loosemore and Al Muslmani 1999).

Previous studies and experiences in the construction industry showed that cultural differences have an impact on daily businesses, either negative or positive, of construction enterprises working nationally or internationally. Cultural differences are therefore an issue which cannot be ignored in this industry and special attention should be given to the management of cultural differences. Cultural diversity management is defined as an organizational reaction to

the need for competitiveness and to the increasing variety of the workforce (Fleury 1999). According to Adler (1991), companies could adopt three approaches when working in a culturally diverse environment. These are:

- The parochial approach (members of the company believe that "our way is the only way"). In this approach, cultural diversity is ignored.
- The ethnocentric approach ("our way is the best way"). In ethnocentric approach, the members of the organisation recognise the diversity of their environment, but only as a source of problems.
- The synergistic approach ("our way and their way differ, but neither is inherently superior to the other"). In this approach, which is the least used, organizations recognise cultural differences to create competitive advantages for their organisation (Hall and Jaggar 1997).

RESEARCH METHODOLOGY

The specific objectives of this study are to find out the opinions of managers about the possible effects of cultural diversity on some management practices in construction business; the relationship between the management of cultural diversity and success; and the possible advantages and problems of working with different cultures in the construction industry. Within this context, semi-structured interviews are carried out among 11 senior managers, including directors, project managers, group managers, HR managers and construction managers, who have some years' of experience in international construction projects and are involved in UK construction business. In order to provide enhanced understanding and generate rich descriptions of the concept of cultural diversity in construction, a qualitative methodology has been utilized. The majority of the participants have more than 20 years of experience in the construction industry. It is assumed that these participants have enough knowledge about the organizational structure, culture and strategies. Similarly, the companies they work for have more than 20 years of experience in international construction projects. The interviews took place over a 3-month period between November 2007 and January 2008, and each lasted approximately 1 hour. In interviews, the participants were asked a number of open-ended questions and they were strongly shaped by the probing questions to seek further details.

The interviews with these participants were audio-recorded and transcribed. The data collected were coded and analyzed using the qualitative analysis methods proposed by Strauss and Corbin (1998), including coding of individual interview data and coding of the overall data set. Then, the NVivo 2.0 software program was used in the analysis of the qualitative data. Finally, emerged themes from the data were identified which will be discussed in the following section. Table 1 illustrates a summary of the NVivo analysis results including the number of interviewees who mentioned each issue.

STUDY FINDINGS

During the interviews, the participants were asked to indicate the relationship between cultural differences and success; the effects of cultural differences on management practices; and the possible advantages/disadvantages of cultural differences in construction business. All interviewees acknowledged the importance of cultural issues in performing business activities in the construction business environment.

CULTURAL DIFFERENCES AND SUCCESS

Cultural differences can have major impacts on the outcomes and success of construction projects. However, there are also studies that showed no impact on projects even if the differences existed (Nummelin 2005). In this study, a direct relationship between project success and cultural differences were pointed out by all of the participants. Managing cultural

Table 1. Summary of NVivo analysis

Theme		Number of interviewees who mentioned the issue
Project success	*Cultural awareness*	
	Understanding cultures	11
	Religion	5
	Ethnicity	2
	Cultural identity	3
	Values	5
	Experience in international projects	
	Local offices	4
	Culture of partners	4
	Experience in similar projects	5
	Teamwork	6
	Benchmarking and learning	
	Best practices	4
	Efficiency	3
	Project location	
	Regional cultural differences	4
	Natural events	3
	Company strategy	
	Equal opportunities policy	6
	Staff development strategy	1
	Training programmes	3
	Employee selection	2
	Diversification	1
	Effective management system	1
Effects of cultural differences	*Human resources management*	
	Requirements of staff	8
	Understanding the culture of staff	7
	Adaptation to culture	6
	Flexibility	6
	Trust	2
	Capabilities of staff	4
	Efficiency	4
	Knowledge management	
	Knowledge transfer	6
	Knowledge sharing	9
	Knowledge capture	5
	Learning	8
	Knowledge loss	2
	New business methods	3
	Knowledge management team	1
	Experienced staff	3
	Training	2
	Project databank	2
	Communication management	
	Language	11
	Personal relationships	3
	Regional differences	4
	Safety management	
	Safety standards	6
	Safety practices	4
	Communication	5
	Time management	

Effects of cultural differences	Working hours	6
	Requirements	4
	Personal characteristics	3
	Negotiation	
	First contact	6
	Language	7
	Communication	7
	Learning the culture	4
	Future projects	3
	Delay	2
	Profit	1
	Risk management	1
	Quality Management	1
	IT management	1
Advantages of cultural differences	Knowledge sharing	9
	Innovation	7
	Problem-solving	6
	Learning	7
	Different business methods	3
	Marketing	1
Disadvantages of cultural differences	*Miscommunication*	
	Language differences	8
	Decrease in productivity	4
	Prejudices	4
	Culture shock	
	Lack of experience	6
	Cultural training programmes	6
	Different living conditions	3
	Informal briefings	5
	Teamwork	4
	Adaptation to culture	6
	Requirements of people	4
	Different working styles	2

differences successfully were seen by the respondents as one of the key elements in project success. Understanding, respecting and accepting different cultures are considered as highly important issues for performing construction projects successfully. One interviewee illustrated this by saying: *"You have to appreciate who you working with, to make any project a success. Someone has got different values different sort of drivers. So, that is the important thing to make sure that you as a team, you understand what the differences are and appreciate them"* (Interviewee E). On the other hand, the majority of the managers also considered ignoring and mismanaging cultural differences as one of the important causes for project failure. One manager noted the importance of understanding the business methods in different countries to prevent failure: *"We had some offices in France and it did not work. One of the reasons was because there was not enough understanding about how French do business compared with the British do business. You think that within European Union it would be the same. It's absolutely not"* (Interviewee G).

Besides cultural factors, some other issues affecting project success were also noted by the participants during the interviews. These factors include having experience in international projects, benchmarking and learning, project location, company strategy, and having an effective management system. One manager reported the significance of having local offices and employing local people in these offices while doing business internationally. Employing local people were considered as important for establishing good relationships with governmental bodies and local people: *"We have always had the greatest success where we had local offices. For example Malaysia, Indonesia or Dubai. The greatest success comes from the fact that we have an office there with locals employed in the office"* (Interviewee A).

EFFECTS OF CULTURAL DIFFERENCES ON MANAGEMENT PRACTICES

Previous studies related to the impacts of cultural differences on management practices in construction showed that the differences have an impact on those practices, either negative or positive. However, exactly how culture affects management is still a difficult question to answer (Shore and Cross 2005). According to the participants cultural differences can have an effect on all management practices, but in different ways and levels. However, some management practices were more highlighted in the interviews. These are human resources management, knowledge management, communication management, safety management, time management, and negotiation that will be discussed in the following sections. According to the participants, cultural differences can have more effects on these management practices than other practices such as IT management.

HUMAN RESOURCES MANAGEMENT

As might be expected, one of the main issues pointed out by the interviewees was managing the culturally diverse human resources. The importance of cultural awareness was highlighted by most of the managers. Understanding and accepting cultures and the requirements of people, including religious requirements, from different cultural backgrounds seemed to be the key points in overcoming the possible problems related with cultural differences. Flexibility in managing culturally diverse people and adaptability to the cultures were also highlighted many times during the interviews. As one manager stated: *"I think one of the main important issues with regard to management of any company is its staff. Managing the staff here is just as important as managing the staff in Dubai or Malaysia or Indonesia. You still have to manage the staff. So it's adapting to the culture of the staff. There is always the religious aspect and that is quite involved and very important locally. And depends on which country you are in. It's understanding and adapting to that. So I think as a manager, the important thing is managing the staff rather managing the project because you have to manage the staff first in order to manage the project. Manage them within their requirements locally. That's quite important"* (Interviewee A). According to the comments of the participants it seemed that the companies adopted a polycentric approach, in which cultural diversity is accepted, when working in culturally diverse environments. However, this might be interpreted with caution since further detailed analysis is required whether the firms adopted this approach or not.

KNOWLEDGE MANAGEMENT

There has been limited research on the impact of culture on knowledge management (Ang and Massingham 2007). While several researches showed no evidence that cultural differences have an impact on knowledge management practices (Jensen and Szulanski 2004), some of the researches showed an impact on practices such as knowledge sharing (Voel and Han 2005). The interviewees gave also different comments about this subject. Some managers saw no direct connection with cultural differences and an impact on knowledge management or had no specific idea about this issue. On the other hand, the highlighted point was the direct relationship between knowledge sharing and culture and was noted by the majority of the interviewees. Here, knowledge sharing and consequently learning was also seen as one the most important advantages working with different cultures. As one manager commented: *"The knowledge, the culture, goes back to my original point about learning. More cultures you come across, I think the more acceptable we become. In other words, more adaptable and more broader you become as a person. From my experience, the knowledge management, knowledge sharing and knowledge capture are best placed being in that persons culture, team that he is faced with. And you can respect that, capture that. We are going to employ a knowledge manager. One of her areas would be to look at the cultural ways of working in our offices. See what advantages they bring. We recognize that the knowledge capture, knowledge management is now a major issue. So if you are working with different cultures, we need to respect, then there would be very good practices"* (Interviewee J).

COMMUNICATION MANAGEMENT

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Since language is the most important medium of communication and is often used to distinguish one culture from another (Walker et al. 2003), differences in language can be a major source of communication problems (Loosemore and Al Muslmani 1999). A common theme that emerged from analysis of the interviews was the problems of communication with people from different cultural backgrounds. Language differences were noted as the biggest problem in effective communication. It was stated that these problems can seriously effect business processes and thus decrease productivity. As one manager reported: *"Communication management between each participant of the project. The communication is the base. I think it is the most affected management practice by cross cultural diversity"* (Interviewee B). Another manager commented: *"Language is a clear cultural difference, however patience can be most important in this regard and making an effort to communicate on both sides is necessary for success. The influence often depends on the personal beliefs of those involved as to whether it is positive or negative"* (Interviewee K).

SAFETY MANAGEMENT

Safety management was also reported as one of the main practices that can be influenced by cultural differences. One manager indicated the connection between communication problems and safety applications when working with people from different cultures and saw safety as the most influenced practice. Another manager pointed out the different standards and practices in safety applications in different countries and noted the problems related with these applications when working in culturally diverse environments: *"In my experience this is the most obvious indicator of cultural differences, safety practices in eastern Europe (for example) appear to be far less than in the UK and this can lead to issues on site"* (Interviewee K). Similar comments were given by another manager: *"I think that each nationality has the different safety construct in their mind. Just like an American. They pay attention to everything. But some people from other nationalities, they do not concern much in safety"* (Interviewee B).

TIME MANAGEMENT

Hall (1998) defined two basic time systems; monochronic and polychronic time. Monochronic time means paying attention to and doing only one thing at a time. Generally, British, Americans and Germans are considered to be monochronic. In monochronic cultures time is seen as a resource and an opportunity cost that equates to money. Polychronic time means being involved with many things at once. Generally, Asians, Latin Americans and Arabs are considered to be polychronic. In polychronic cultures people may not be interested in time schedules and do not see time as a resource. It is obvious that if those two cultures work together in projects, problems could arise (Abeysekera 2003). During the interviews some managers commented about this subject: *"I manage my time and I expect each member of staff to manage their time and prioritize. There is no difference whether you are in the UK office or in the Dubai office. I still have to manage my time. I would suggest that I do more than one thing in one time, all of the time. My whole day I do several things happening. And I never get the opportunity to start one thing and complete and go to the next. That does not happened in my life at all"* (Interviewee A). Another manager pointed out the problems due to working days of different cultures: *"Each nationality has their own holiday. Our company and the joint venture had to set up a joint venture holiday! So they put this into our schedule. And we used this as our standard working days in our schedule"* (Interviewee B).

NEGOTIATION

Negotiation is one of the most difficult and important tasks that international managers face in their businesses (Fatehi 1996). Due to cultural differences, negotiations can become a difficult activity since many of the rules used in one country may not apply elsewhere (Gulbro and Herbig 1999). In this study, negotiation was also considered as a practice that can be highly

affected by cultural differences, either negative or positive. On the negative side, language and thus communication problems were noted as the biggest barriers for negotiating successfully. On the positive side, negotiation was seen as an opportunity to learn the client's or other contractor's culture. It is stated that, when performing successfully, it can give advantages to win and carry out future projects. One of the managers illustrated this by saying: *"I think in the beginning of the projects if you negotiating with the client or with the contractor or with the consultants, negotiating is a good sign. It's the sign you might be pretty close to win the project which is positive and that's a good opportunity to understand the culture. So you are learning a lot of the culture of that country and you are trying to adapt almost all the way through negotiating. On the positive side, it's an opportunity to learn the culture of the client. Once you negotiated successfully, you carried out the project successfully within that culture, it's every chance you will win another project then"* (Interviewee A).

ADVANTAGES OF CULTURAL DIFFERENCES IN CONSTRUCTION PROJECTS

As mentioned previously, cultural differences can provide several advantages for organizations. It can enhance organizational effectiveness and give an organization a strong competitive advantage. Cox and Blake (1991) highlighted six areas where the management of cultural diversity can create a competitive advantage. These areas are: cost, resource acquisition, marketing, creativity, problem solving, and organizational flexibility. One common theme that emerged from analysis of the interviews related to the advantages of cultural differences was knowledge sharing. Knowledge sharing is an important knowledge management practice for organizations to learn and develop (Dulaimi 2006). According to the managers, it is one of the main advantages working with different cultures: *"They bring something different to share knowledge and experience, and they bring the best skills together. But the difference is the culture. So you have to understand and respect. The advantages could be the disadvantages and likewise. You got to understand whom you working with"* (Interviewee E).

Innovation and problem solving were the other highlighted advantages. The possibility of more innovation in culturally diverse teams was a common idea by all of the managers. Similarly, coming up with alternative solutions to problems was pointed out as a vital benefit: *"I think they can open your mind and you can come out with different things. It gives value for the project and more flexibility, and this is a continuous thing. Things like the integration of language line"* (Interviewee H). On the other hand, one manager also noted the enjoyable part of working with different cultures: "*I find working with people of different cultures a very interesting and very enjoyable environment to work it. The conversation and discussions are more diverse and for the time being at least I always know what the weather is like in Latvia!"* (Interviewee K).

DISADVANTAGES OF CULTURAL DIFFERENCES IN CONSTRUCTION PROJECTS

There can be serious problems in projects when working with different cultures. If mismanaged, it can cause decrease in productivity and failure of projects. Dealing with coordination and control issues, maintaining communication richness, and developing and maintaining team cohesiveness are also some other major challenges (Marquardt and Horvath 2001). Among the several problems reported from the managers, communication was considered to be the most important one. Language differences and miscommunication due to different meanings were noted as serious causes for possible conflicts. One manager explained this by saying: *"We are working in different areas with different cultures. We are going into areas where people that first language is not necessarily English. I have been in a situation recently and we had to go through the language line. You know we had to talk and the first time I did not really exactly understand what they wanted to. I said yes yes! It can be very difficult"* (Interviewee H).

Prejudices are remarked also as a serious problem in organizations. If people have some prejudices about others having different cultural backgrounds, this can also lead to serious conflicts: *"Whether people like it or not, people from all cultural backgrounds have usually some prejudices or they do not necessarily express them. But they exist. It is hard to deal with because if you have got a whole group of people who are misbehaving, treating somebody unfairly for reasons of prejudice, changing that mindset and making it acceptable for the person who is the victim can be very hard to do. It can be huge difficult to shift their opinions"* (Interviewee G).

Another emerged theme was culture shock. When entering a new culture, professionals, managers or engineers can experience a cultural shock. One of the main reasons for that is the inability to deal with cross-cultural adaptation. It can significantly affect the performance of the managers and thus result in serious problems in the projects. During the interviews, the main reported factor for getting a culture shock was lack of experience. It was pointed out that those managers that do not have adequate experience in international projects and working with different cultures, and not worked in another country before, are more likely to be shocked: *"I think it is experience that softens that shock. Some people would be shocked because they never left the UK. They will be shocked and there are many reasons for that. I think as engineers, professionals generally culture shock is a bit less. I do not think this is big at professional level. Probably more at labouring level"* (Interviewee J). Another manager considered the different living conditions in different areas, even in the same country, as one of the main reasons for getting a culture shock: *"I think we all get some kind of culture shock. You can have a culture shock if you are going to Romania for a while and it does not matter how much money you got. You can get culture shock when you move from London to Scotland. It's not just the food, its pace of life. It's tradition"* (Interviewee C).

Pre-departure preparations and cultural training may reduce the cultural shock that people experience when entering a new culture (Fatehi 1996). According to the given information, there is lack of cultural training programmes in the majority of the companies. Instead of formal training practices, informal briefings are seemed to be the most common used method when companies send people abroad. One manager illustrated this by saying: *"We do when we send people abroad. There is a cultural training. We tell them about the customs and practices. We are trying to educate. They must be prepared a little bit"* (Interviewee C).

CONCLUSION

Culture has the potential to impact on business activities. Therefore, companies have to consider the cultural issues in their daily businesses to operate successfully in the global marketplace. This study is based on interviews with managers from the UK construction industry. The analysis of the interviews showed that cultural differences have an impact on management practices in construction but in different levels. The results of the study could be summarized as follows:
- There is a direct relationship between project success and cultural differences. Understanding, respecting and accepting different cultures are key issues for managing projects successfully when doing business with people from different cultural backgrounds.
- Ignoring and mismanaging cultural differences can lead to project failures.
- Cultural differences can have an effect on all management practices.
- Human resources management, knowledge management, communication management, safety management, time management, and negotiation are the practices that can be significantly influenced by cultural differences.
- The main advantages of working with different cultures are knowledge sharing, innovation and problem-solving.
- Language differences and miscommunication were considered as important problems when working with people from different cultures.
- There is lack of cultural training programmes in the majority of the companies. Informal briefings are the most common used method.

It seems to be that the construction industry should pay more attention to the management of cultural differences and professional training programmes related with culture. As one manager noted: *"I think the construction industry has a very long way to go and you know we could do a bit more. We will do more in internal training. We could do more to understand that not everybody is the same"* (Interviewee G).

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