ADDRESSING CULTURAL ISSUES WHEN MANAGING MULTICULTURAL CONSTRUCTION PROJECT TEAMS

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This paper examines the nature of multicultural project teams and their place in the global business environment. It highlights some of the issues regarding cultural complexity that exist in multicultural project teams and argues that, getting multicultural project teams to work effectively across international boundaries has become a major concern. The inclination is likely to continue and the future of business will increasingly depend on doing projects effectively in different cultural environments. This is difficult enough to achieve where the team is situated in the same office located close to the construction site. But it is much more difficult for multicultural global projects that have a range of diverse companies involved, are widely separated geographically and that have very different organisational and regional cultures. This study explored the efficacy of multicultural team working in heavy construction engineering in Kenya and the UK. The research employed both qualitative and quantitative methodologies to capture all the relevant experiences of senior managers. Using evidence from the two sets of participants, the study highlights some of the barriers to effective multicultural team working and demonstrates the critical importance of building cultural understanding through leadership. The findings revealed a number of determinants, attributes, and variables that either facilitated or limited the effectiveness of multicultural team working.

Keywords: Kenya, UK, cultural complexity, multicultural team working.

INTRODUCTION

As we enter what is expected to be a deep and long recession, it is increasingly essential that not only practicing construction managers but also governments and educators in developing and developed economies understand how the global construction industry can build on its strengths. Niebles (2009) notes that, during this challenging economic environment, the first steps any construction firm must take are to understand its global exposure, quantify the impact on the business, and assess the various scenarios that might occur depending on the duration and severity of the economic crisis. Once this is understood, there are a few key objectives a business should look at in order to determine the best way to go forward and to maximise performance. The chance to work around the globe has always been one of the big attractions of a career in construction management. But the days are long gone when construction companies parachuted huge numbers of staff into foreign parts on lengthy contracts. According to NCE (2008), the way UK business operates abroad

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now is to set-up a local company and employ mainly local people who speak the same language and understand the culture of local trade. Or they go into partnership with indigenous organisations, again relying mainly on local staff. As established from the literature reviewed, the UK marketplace is divided into firms that are focused solely on the UK and those with a big interest overseas (NCE, 2008). As illustrated in Table 1, these mainly tend to be big firms like Mott MacDonald, WSP, Atkins, Scott Wilson, Halcrow and Arup.

Table 1: UK firms with a big interest overseas

]	Position	Last year	Company	Staff	Last year
-	1	1	Mott MacDonald	7021	5940
2	2	3	Atkins	6000	5211
3	3	2	WSP	5889	5444
4	4	4	Arup	5324	4075
4	5	5	Halcrow	3336	2628
(6	6	Scott Wilson	2379	2005
2	3 4 5	2 4 5	Atkins WSP Arup Halcrow	6000 5889 5324 3336	5211 5444 4075 2628

Source: NCE (2008)

From the above statistics, it could be suggested that the construction industry in the UK must address cultural issues if its aim is to become efficient in developing economies. A number of construction projects tend to be constructed by a blend of contractors and project teams most of who will not have worked together before and are not likely to work together again (Dainty *et al.*, 2007). From the literature reviewed, it was established that Kenya is a country where construction projects are often beset with severe problems (Mitullah and Wachira 2003). The construction industry in Kenya may be growing but is obviously not developing. Each construction project brings together a range of different cultural recipes and employment rules. Senior managers are engaged in an endless process of setting out objectives of the firm with those of the project.

The literature reviewed in Kenya and the UK, showed that research into people issues connected with cultural change in the construction industry has been partial (Dainty et al. 2007; Mitullah and Wachira 2003). As Dainty et al. (2007) noted, the overriding focus has been on research for management, rather than research of management. It is crucial for the construction research community to strengthen the debatable assumption that culture is an organisational variable, which is subject to conscious manipulation. A more nuanced understanding of construction culture and recognition that it is mutually comprised with its structure are required if cultural complexity is to be accurately understood and responded to. The aim of this paper therefore is to propose strategies for managing multicultural construction project teams. The objective is to identify key factors that are considered necessary for successful integration of multicultural teams. Following this introduction, the second section reviews multicultural construction project teams and discusses contextual factors that contribute to project success. The third section introduces the research methodology and the fourth presents the key findings of the results and makes recommendation for further research in this area.

CULTURAL CONTEXT

Construction projects and project participants are all different and the big challenge facing clients and construction senior managers, which a business manager is fortunate to be almost without, is the need for setting up a construction site team spirit almost immediately (Egan 2002). In a construction project, the project team is new. It is brought together for the project and its participants are not chosen as project team players but by the lowest price tag. They are not the projects employees but leased from their home firm, which probably has other success criteria than the project in question. Since the project is new and the site is unbroken, nothing at all is as it was in the previous project. A second problem facing senior managers is that they need to act fast. In a project environment there is no such thing as a second try. The culture of team working must be introduced from the very beginning and kept all the time. In addition, service and support must be introduced in order to gain confidence and the project's targets must be clearly communicated, particularly if the construction project is one where recurrent changes may be expected (Emitt and Gorse 2007).

Flourishing construction project management requires analysis of how cultural and project complexity affects the project constraints of quality, cost, time, environment and health and safety. We suggest that clients and project leaders in Kenya and the UK require this knowledge in order to manage cultural complexity of construction projects. It is crucial that throughout the project life cycle clients and senior managers develop plans and standardise with the purpose of managing cultural complexity in the most efficient way. As stated by Emmit and Gorse (2007), incessant communication and coordination during the project's life cycle facilitates effective management of cultural complexity, which is sustained by Baccarini (1996), Laufer *et al.* (1996) and Williams (1999). However, it is essential to leave room for team adjustments within the standardised framework of construction project management. This allows flexibility for the project team to create project specific solutions in order to maximise commitment on the individual level and thus increases project impetus and project success.

The primary function of national and organisational cultures in a project environment is to minimise uncertainty and ambiguity in everyday project team interaction and decision making by providing a framework for situational interpretation and limiting alternatives for appropriate behaviour and response. Cultures surface and develop in response to social craving and answers to a set of problems common to all groups (Hofstede 1991). The cultural weight that each contractor brings to a project is more often than not unconscious. Part of our culture may be conscious and explainable to others. However, few of us are completely aware of how our actions and ways of thinking are dictated by more hidden or in fact unconscious values. For example, attitudes towards authority, approaches to carrying out task, concern for efficiency, communication patterns, and learning styles. It is significant that, cultural norms and values are passed on from generation to generation. No one culture is right and another wrong but within each cultural grouping, whether organisational or ethnic, there is a shared view of what is considered right or wrong, logical and illogical, fair and unfair.

These norms do affect the ways project teams communicate and behave within project environments. Based on the studies of Hall (1960), Hofstede (1979 and 1980), and Trompenaars (1993) the human interaction does not occur in a vacuum or isolation. Instead it takes place in a social environment governed by a complex set of formal and

informal values, norms, rules, codes of conduct, laws and regulations, policies and as well as in a variety of organisations. Shaping as well as being shaped by these governing mechanisms is something that we are used to refer as culture. In order for a project team to survive and to exist as a social identity, every project group regardless of its size has to come with solutions to these problems. These solutions then become characteristic for the group, which separate them from others. The following section presents the research methodology.

RESEARCH METHOD

Both qualitative and quantitative methods were used. The use of both research methods was useful, as they all recognise the complexity, pressures, demands, and extreme constraints of the project environments, which senior project leaders face. The triangulation ensured that issues germane to the experiences and attitudes towards multicultural team working were appropriately explored. Participants were interviewed in their own working environments and the focus was on participant understandings and experiences of managing multicultural project teams. Field and Morse (1998) urged the employment of a qualitative approach especially in extracting data from experts in the field; while Bryman (1988), Easterbly *et al.* (2003), and Tilden *et al.* (1990) hold that, a quantitative method using interviews with knowledgeable participants enriches and extends understanding of the topic, and provides valuable data.

Turner (1981) further argued that qualitative research is likely to generate detailed, significant data that can be used by both the researcher and participants. Bryman (1988) further stated that by combining the two, the researchers' claims for the validity of his or her conclusions are enhanced if they can be shown to provide mutual confirmation. The use of multiple methods or triangulation was an attempt to secure an in-depth understanding of the phenomena in question. The data were collected in the form of in-depth interviews and a questionnaire. Twenty interviews were conducted with participants in Kenya (10) and UK (10). Three hundred postal questionnaires were distributed to senior managers in Kenya and the UK and one hundred and thirty two were returned giving a response rate of forty-four percent. A copy of the questionnaire can be found in Ochieng (2008). Participants from Kenya and UK were asked the following questions which were based on multicultural construction project teams:

- Could you identify issues which still need to be addressed in your organisation in general respect to multicultural project teams?
- What are the key problems you face in managing multicultural construction project teams?
- Could you identify the ways in which multicultural construction project teams can be effectively implemented in construction projects?
- What factors contribute to the success of multicultural construction project teams?

According to Denzin and Lincoln (1998), the combination of multiple methods to collect data in a single study is best understood as a strategy that adds rigour, breadth, and depth to the investigation. Rigour was achieved by focusing on verification strategies. These included the responsiveness of the researcher during the data collection and data analysis period, methodological coherence, and sampling strategy. Data analysis was achieved through the use of qualitative analysis software package NUDIST NVivoTM. During the analysis, broad themes and patterns were looked for,

rather than narrow, precisely variables of qualitative research. The *t-test* was used to assess whether the means of data from Kenya and the UK were statistically different from each other. Careful consideration was given to how best to collect and analyse data covering possible differences in construction project management practice. A solution seemed to be to focus the research on ensuring diversity in the sample, in terms of construction engineering projects managed by subjects. Such diversity ensured that potential differences in practice could be identified and this facilitated the analysis of any influences on different projects that were researched.

SAMPLE

There was a diverse pool of participants, including managers who were residents of highly developed areas and cities in Kenya and the UK. Typically, participants had previously worked in international environments; therefore, the national culture of participants was the primary dissimilarity. All participants had a practical understanding of managing multicultural construction project teams and their views were considered those of knowledgeable practitioners. As illustrated in Table 2, participants were split into five project titles. Statistical evidence in this research indicated that the majority of male participants in Kenya and the UK were project managers this is perhaps surprising since there were no female construction managers. It was found that the majority of female participants worked as project managers.

Table 2: Profile of participants' project title

Project title	Male	Female	Number	Percentage
Project director	6	1	7	5.3
Project manager	67	3	70	53
Project planner	11	2	13	10
Construction manager	9		9	7
Project engineer	33		33	25
Total	126	6	132	100

Source: Ochieng 2008

Table 2 shows that a large proportion of participants, fifty-three percent, identified management as their main project work area. Those participants involved with management were evenly distributed between those working in construction, process, energy, and petrochemical projects. The results are presented below under headings drawn from the analysis.

FINDINGS

This section presents a summary of the findings. The reported results present generalised findings based on the twenty interviews and *t-test* results.

Type of cross-cultural leadership

In order to form an effective multicultural project team, several participants in Kenya and the UK noted that project leaders need to understand the type of leadership style preferred by the project team. Participants highlighted that:

Multicultural team formation is dictated the way the project is led. Project leaders further suggested that its' about being able to address any cultural issues which may arise and instituting a right culture for the project team.

It was established that it would be extremely helpful if construction project leaders received some form of multicultural training and mentoring on how to develop and manage good multicultural team relationships.

Managing multicultural team maturity

Many of the participants in the UK and Kenya agreed that once the multicultural project team had been selected and the project leader chosen it is vital to put in place formalised team building activities and workshops. Participants reported that holding an initial professionally facilitated workshop gives the team the right start and maximises the likelihood of forming a good multicultural construction project team. Holding an initial team building activity allows the multicultural team to develop another fundamental of team maturity that is clear explicit rules and goals. There was mention of the fact that such events can be used to refine the aim and objectives of a project.

Valuing multicultural diversity

In multicultural diversity, participants noted that it is important to understand differences between cultures. Participants confirmed that, all too often project leaders see cultural diversity within their operations as an area of difficulty rather than as an opportunity to introduce competitive advantage. From the analysis, we established that the nature and value of multicultural diversity has not been well embedded within a number of construction firms in the UK and Kenya. In many ways research in this area has not been developed in line with the current trend to globalisation. Two participants in the UK commented on the apparent inability of construction organisations to develop project leaders with cross cultural capabilities. The two participants pointed out that:

It is essential to make project leaders aware of cultural diversity issues before they get assigned to their first project.

However, it is vital not to only understand differences between cultures but to also identify the potential advantages and disadvantages likely to be brought to a team by project leaders of different cultures.

National cultural differences

Most participants in Kenya and the UK agreed that national cultures can differ in many ways. For instance, it was suggested that multicultural team members from different cultures vary in their communication behaviour, their motivation for seeking and disclosing information, and their need to engage in self-categorisation. As Emmitt and Gorse (2003), stated, individuals on a project team have their own agenda, goals, and experiences that differ from the next individual in the project information chain. While free access of data is possible within a company, access becomes difficulty when looked in terms of temporary project environment. Participants suggested that the characteristics of a project leader can enhance the effectiveness of communications; similarities (e.g. values, work experiences) between the project leader and project teams. Participants went on to point out that national cultural differences can be addressed if project leaders focus on five cultural orientations: uncertainty avoidance, communication richness, individualism, performance orientations and collectivism. This finding indicates that, multicultural team formation requires project leaders to be skilled communicators, to be able to give and receive constructive feedback, to openly discuss problems, and to communicate a desire for trusting relationships with multicultural team members. This finding suggests that, it

is essential that for project leaders to be able to recognise other project approaches toward work and decision-making and to adapt their project strategies based on their knowledge of other cultures.

OVERALL T-TEST RESULTS

This section focuses on relationships between pairs of variables and categories. The investigation of relationships was found to be an important step in explanation and consequently contributed to the building of the four categories. Bryman and Cramer (2005) highlighted that the *t-test* is a parametric test assuming a normal distribution but when its assumption are met it is more powerful than corresponding two-sample non-parametric tests. By matching the two means, it was found that the degree of error deriving from differences between the Kenyan and the UK participants was reduced. The analysis helped to show a significant relationship between the four category's mean scores. This was achieved by comparing the difference between the two means with the standard error of the difference in the means of each variable, which is calculated using the following expression:

t= sample one mean – sample two mean

standard error of the difference in mean

To compare the two means for each variable, the following procedure was followed using SPSS for windows 12.0:-Analyse-Compare Means-Independent-samples T Test [opens independent-Samples T test]-satis-button-[puts satis under Test Variables-[e.g. cross cultural leadership]-Define Groups-in box beside Group 1: Kenya-box beside Group 2: UK-Continue-OK. In this study, four t-tests showed statistically significant differences on the dimensions of cross-cultural issues between Kenyan and UK participants (see Table 3). Kenyan and UK project leaders had significant different mean scores on cross-cultural leadership style, t (109) = -3.01, p ≤. 06. The Kenyan project leaders mean scores on the interpersonal skills dimension (M = 20, s.d. = 2.1) were higher than those of the UK project leaders (M = 18, s.d. =2.6). A significant difference also surfaced between Kenyan and UK project leaders on managing multicultural maturity dimension, t (111) = 2.27, p \leq 0.8, with maturity dimension scores for the Kenyan project leaders (M = 24, s.d. = 0.5) being higher than for the UK project leaders. No significant differences between Kenyan and UK project leaders were observed on multicultural diversity dimension t (117) = 0.92, $p \ge 0.7$), although multicultural diversity for the Kenyan project leaders (M = 22, s.d. = 5.3) were slightly higher than for the UK project leaders (M = 20, s.d. = 3.5).

Similarly, no significant differences between Kenyan and UK project leaders were observed on the national cultural dimension t (107) = 0.06, p. 07), with national cultural scores being slightly higher for the Kenyan project leaders, (M = 16.78, s.d. = 2.6). The results from the statistical test affirm that different national cultures have different preferred ways of structuring multicultural project teams. Managing multicultural construction project teams means handling both national and organisation culture differences at the same time. The *t-test* results indicate that cultural obstacles do vary depending upon characteristics of the project environment. Overall, the results show there is significant difference in the ranking of application areas and criteria for multicultural team formation between participants in Kenya and the UK.

Table 3: Test for med	an differen	ces for the v	variables o	f multicultural teams
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Variable	Mean	Standard Deviation (s.d)	T-test
Cross-cultural leadership			
Kenya	20	2.1	-3.01*
UK	18	2.6	
Multicultural team maturity			
Kenyan	24	3.6	-2.27*
UK	22	3.2	
Valuing multicultural diversity			
Kenyan	22	5.3	0.92
UK	20	3.5	
National cultural differences			
Kenyan	16.78	2.6	0.06
UK	16.81	2.8	

DISCUSSION

The findings of this study suggest that the formation on multicultural construction project teams is likely to depend on the establishment of a number of cultural conditions and identifiable project level practices. In addressing the issues relating to developing effective multicultural construction project teams it appeared that the following areas should be considered:

- Identifying a cross cultural leadership style preferred by the project team so that the project leaders authority is respected;
- formalising team activities and workshops so as to enhance multicultural team maturity;
- understanding the nature and value of multicultural diversity;
- classifying the nature and implications of national cultural differences within the multicultural construction project team.

The statistical *t-test* results further indicated that participants in this study agreed that formation of multicultural construction project teams depends on:

- understanding about factors relating to effective multicultural team maturity;
- recognising and leveraging cultural diversity and in leadership style;
- formulating processes for understanding, valuing and leveraging national cultural differences.

CONCLUSIONS

The research has highlighted a number of principles that need to be addressed before a fully integrated multicultural construction project team can be formed. The strategies proposed in this study cannot be expected to resolve all the cultural issues and multicultural team working issues in construction projects. However, their use defines an approach that is superior to the traditional approaches typically adopted and consequently merits far wider application. What does this mean for project leaders and international construction organisations? They must actively promote multicultural team working as the means of addressing poor performance on people management and cultural issues on construction projects. In particular, if organisational change is to be effectively introduced in developing countries such as Kenya, the organisations will have to ensure that their key decisions are being informed by the knowledge and experience of local or indigenous managers. This will require project leaders to have a

better understanding of cultural change processes and procedures in developing countries.

The proposed strategies present a better way of optimising the performance of project-based operations thus enabling construction organisations to reform their poor performance on projects and empower them to better manage emerging culture challenges in their future projects. In spite of the current difficulties the industry faces, there is an increasing need to get multicultural construction project teams from different nationalities to work together effectively. Many construction organisations have found that multicultural team integration can be problematic and at times performance is not always at the level required or expected. With an ongoing increase of multicultural construction project teams, project leaders in multinational construction organisations must be aware of cultural diversity issues in order to function effectively and achieve high levels of team performance. From the literature reviewed and the results of this study, we established that there is a growing demand for a more comprehensive study of cross cultural factors which should include the general nature of construction projects and socioeconomic characteristics of international construction projects.

REFERENCES

- Baccarini, D. (1996). The concept of project complexity a review, *International Journal of Project Management*, 14(4), 201-204.
- Bryman, A. (1988). Quantity and Quality Social Research. Routledge, New York.
- Bryman, A. and Cramer, D. (2005). *Quantitative Data Analysis with SPSS 12 and 13. A guide for Social Scientists*. Routledge, East Sussex.
- Dainty, A. R. J., Green, S., and Bagilhole, B (2007). *People and Culture in Construction*, Oxon: Taylor and Francis Group.
- Denzin, N. K. and Lincoln, Y. S. (1998). *Collecting and Interpreting Qualitative Materials*: Editor's Sage Publications.
- Easterby-Smith, M., Richard, T., and Andy, L. (2003). *Management Research: An introduction*. Sage Publications.
- Egan, J. (2002). Accelerating Change, London: Rethinking Construction.
- Emmitt, S. and Gorse, C.A. (2003). *Construction Communication*, Oxford: Blackwell Publishing Limited.
- Emmitt, S. and Gorse, C. A. (2007). *Communication Construction Teams*, Oxon: Taylor and Francis.
- Field, P. A. and Morse, J. M. (1998). *Nursing Research: The Application of Qualitative Approaches*: London Croom helm.
- Hall, E. T. (1960). The Silent language in overseas business, *Harvard Business Review*, 87-96.
- Hofstede, G (1979) Futures for Work, Kluwer Academic Publishers.
- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-related Values*. London: Sage Publications.
- Hofstede, G. (1991). *Cultures and Organisations: Software of the Mind, Intercultural Cooperation and its importance for Survival*. New York, NY: McGraw-Hill.

- Laufer, A., Denker, G. R. and Shenhar, A. J. (1996). Simultaneous management: the key to excellence in capital projects. *International Journal of Project Management*, 14(4), 189-200.
- Mitullah, W. V. and Wachira, N. I. (2003). Informal labour in the construction industry in Kenya: A case study of Nairobi. International Labour Office, Geneva; Working paper 204.
- NCE-New Civil Engineer (2008), [http://www.nce.co.uk/staff-on-overseas-projects/1995343.article Accessed 14th April 2009].
- Niebles, E. (2009). Management: tough times make it time to reappraise systems [available at http://www.nce.co.uk/market-data/consultants-file/management-tough-times-make-it-time-to-reappraise-systems/1995523.article].
- Ochieng, E. G. (2008). Framework for Managing Multicultural Project Teams Unpublished PhD Thesis, Loughborough University.
- Tilden, V., Nelson, C., Mary, B. (1990). Use of Qualitative Methods to Enhance Content Validity. *Nursing Research*, 39(3), 172-175.
- Trompenaars, F. (1993). Riding the Waves of Culture, London: Nicholas Brealey.
- Turner, B.A. (1981). Some Practical Aspects of Qualitative Data Analysis: One Way of Organising the Cognitive Process associated with generation of grounded theory'. Quality and Quantity, 15, 225-47, 83-4.
- Williams, T. M. (1999). The need for new paradigms for complex projects, *International Journal of Project Management*, 17(5), 269-273.