

FACTORS INFLUENCING EFFECTIVE PERFORMANCE OF MULTI-CULTURAL CONSTRUCTION PROJECT TEAMS

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As a result of globalization, one of the major issues affecting the success of a construction project would be the formation of a multi-cultural project team. As construction project leaders continue to lead global, multi-cultural projects, there is a demand for managing a workforce that is more diverse than ever. The multi-generational workforce has distinct views on work ethic, communication and incentives; finding common ground is essential. This study examines how cultural differences could impact upon multi-cultural team performance. Postal questionnaires were sent to project leaders in Kenya and UK. The results indicate that different approaches in multi-cultural performances consist of seven key impacts: communication techniques, smoothness of handover, teamwork, issue resolution, joint decision making, people selection, people selection and prioritization. The findings suggest that project leaders managing multi-cultural construction project teams need to have the attributes to building trust among team members, provide good planning and institute good communication techniques. Our results on how cultural differences impact multi-cultural construction project teams can help construction organizations identify likely areas of potential divergence on multi-cultural projects, and researchers to identify areas of future research.

Keywords: multi-cultural, communication, trust, Kenya, UK.

INTRODUCTION

The rapid globalization of the world's economy has had significant impact on the way construction project managers work, bringing them frequently with clients, suppliers and peer that they never work before. In an era of globalization, projects in the construction industry face unique challenges in coordinating among clients, financiers, developers, designers and contractors from different countries. In addition construction project teams need to cope with the complexities of both local institutions and physical environments. Bartlett and Gosha (1989) discussed the challenges facing organizations which are intending to work effectively across borders. They identified the major challenges as being able to develop practices which balance global competitiveness, multinational flexibility and the building of a worldwide learning capability. They maintained that achieving this balance will require organizations to develop the cultural sensitivity and ability to manage and leverage learning to build future capabilities. While offering opportunities, globalization also poses significant

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challenges for construction project managers especially when different cultures are involved as a team. Multi-cultural construction project teams have their culture as a set of shared values and beliefs. Beliefs are people's perceptions of how things are done in their countries. They are reported as "practices" in a particular culture. Values are people's perceptions about the way things should be done. They are their preferred practices and people's beliefs. In a global context the management and development of people inevitably leads to considerations of diversity and related challenges.

For global construction organizations there is an increasing need to get groups of project managers from different nationalities to work together effectively either as enduring management teams or to resource specific projects addressing key business issues. Many construction organizations have found that bringing such groups of project managers together can be problematic and performance is not always at the level required or expected. In addressing the issues relating to developing effective multi-cultural construction project teams it appears that the following areas should be well thought-out: communication techniques, smoothness of handover, teamwork, issue resolution, joint decision making, people selection, people selection and prioritization. Therefore the primary purpose of this study is to investigate the following research question: what types of determinants are at play in multi-cultural team performance. The specific elements to be investigated were identified from the topic covered by the research question. This paper sets out to explore each of these areas and propose an overall framework of cross multi-cultural team performance for construction project leaders. The next section reviews relevant literature on construction challenges and cultural complexity. In this research, we focus on two cultures-Kenya and UK. The fourth section introduces the research methodology and the fifth presents the key findings of the study.

MULTI-CULTURAL IN CONSTRUCTION PROJECTS

An extensive literature review highlighted that multi-cultural is often an indistinctly used term that has a diverse range of meanings, with very few empirical studies done on its role in construction project management. It could therefore be suggested that, any construction project where contractors bring different assumptions about working norms (either in design engineering or team behaviour) is a multi-cultural project. Even when all contractors are from one country, the construction project manager may still have to deal with cultural diversity. Ochieng and Price (2010), established that some of the team differences are strictly cultural, while others stem from varied management styles and strategies, but all these differences will eventually show up during the project. Managing a multi-cultural construction project team presents new challenges and opportunities to harness new skills, in particular language and cultural knowledge. In a construction project environment, effective communication is an essential skill. It requires clients and construction project managers to acquire and promote knowledge and understanding of the cultures present, to understand their own attitudes and sometimes to adapt their working practices. Cultural differences and a lack of management talent can make it difficult for global construction organizations to attain their business objectives. According to Day (2008), organizations working with multi-cultural teams face a three-fold multi-cultural challenge.

- Enabling a mixed group work towards a common goal.
- Maximizing contribution of each project team member.
- Ensuring fair treatment for all irrespective of background.

Whether the multi-cultural character of an organization arises from its operation in various countries, or from the mixed backgrounds of a workforce in a single location, the client must address this diversity if it is to achieve these goals. Every multinational construction organization has a strategic choice in how it will face this challenge, between a fundamentally defensive, complaint approach, and one that develops the individual and the group.

CONSTRUCTION CHALLENGES IN KENYA AND UK

The concept of culture has grown in importance, especially concerning the nature of national culture (Dainty *et al.* 2007; Hofstede 2001 and Schein 1985) and organization culture (Trompenaars, 2001). The various levels of culture in the industry have already been the subject of research; the key focus has been those of team culture, project culture and corporate culture. These three concepts have become well established and researched within the field of construction management (Ankrah and Langford 2005; Dainty *et al.* 2007; Hall, 1999). In fact, the nature of culture within heavy construction engineering projects and construction organizations has been the subject of research for over a decade. Culture is an intricate and multi-faceted phenomenon, which develops through ongoing social interaction within particular contexts (Barthorpe *et al.* 2000; Meek 1988). Change, therefore, is strenuous to create and the process is likely to be lengthy. The literature reviewed showed, that research into people issues connected with cultural change in the construction industry has been partial.

As Dainty *et al.* (2007), highlighted 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 organizational variable, which is subject to conscious manipulation. In reality, the intact dialogue of culture change within the construction sector appears strangely detached from the broader defining culture (Legge 1994; Ogbona and Harris, 2002; Willmott, 1993). Dainty *et al.* (2007) states the management of change is sated with examples of failed attempts to change culture. These have focused on the content of change programmes at the exclusion of understanding the context and process change. A more nuanced understanding of construction culture and recognition that it is mutually comprised with its structure are required if multi-culturalism is to be accurately understood and responded to.

Most recently, the UK construction industry's 'Strategic Forum' proposed targets for the improvement of its people management practices within its 'Accelerating Change' Report (Strategic Forum for Construction, 2002). Unfortunately, the proposed recommendations made, largely consist of simplistic exhortations to the construction industry to tackle its past failings with little acknowledgement of labour market constraints which obstruct change. The flows of labour between developed and developing nations have always been a feature of the construction industry (International Labour Organization, 2001). In Kenya and the UK, the migrant workforce has always added much to the construction industry and to the dynamism of society. Then again, too often they are employed under different terms and conditions from local workers with whom they are working alongside. British workers continue to work overseas in large numbers, especially in professional and technical groups. From the literature search, it emerged that the scope to which the UK construction industry relies on developing nations to train its workforce is questionable (Dainty *et al.* 2007). In the UK a substitute strategy used by the industry

has been the attempt to alleviate its workforce requirements by redesigning jobs to reduce the skills needed (Dainty *et al.* 2007). This suggestion for solving the skill shortage has formed a popular discussion topic for various industry commentators and policy bodies in recent years. For example, Teece *et al.* (1997) indicated that concerns about skills development are often weakened by managerialist dialogues that mobilizes opaque concepts such as dynamic capabilities. Despite the oratorical claims to boost flexibility and continuous improvement, a lack of any established relationship with performance remains (Scarborough, 1998).

CULTURAL COMPLEXITY RELEVANCE IN CONSTRUCTION PROJECTS

Projects are a common way to carry out different type of tasks, which are in a number of ways unique. Even, if the number, complexity, and scope of the big heavy construction engineering projects have been increasing the project as a way of organizing holds its popularity. The continuous need for speed, in heavy construction engineering projects, cost and quality control, safety in the working environment and avoidance of disputes, together with technological advances, environmental issues and fragmentation of the construction industry have resulted in a spiralling and hasty increase in the complexity of projects. It has today reached a level where senior construction managers must consider its influence on heavy construction engineering project success very seriously. It is crucial to highlight that construction engineering projects are made up of a multitude of interacting parts. Generally, it could be suggested that project management understands the project as an ordered and simple and thus predictable occurrence which can be divided into contracts, activities, work packages, assignments etc. to be accomplished more or less independently. One could also see a project as a mainly sequential, assembly-like, linear process, which can be planned in any degree of detail through an adequate effort (Koskela and Howell 2002). Consequently, one could indicate that construction is generally complex in nature.

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 organizational 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 (1960s), Hofstede (1980s), and Trompenaars (1990s) 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 organizations. Shaping as well as being shaped by these governing mechanisms is something that we are used to refer as culture. Cultures materialize and evolve in response to social cravings for answers to a set of problems common to all groups (Hofstede 1991). In order to survive and to exist as a social identity, every project group regardless of its size has to come with solutions to these problems. The following section presents the research methodology.

METHOD

Three hundred postal questionnaires were distributed to senior managers in Kenya and the UK and 132 were returned giving a response rate of 44 per cent. The business classification used by the European Construction Institute (ECI) and Ministry of Trade and Industry in Kenya was applied to ensure representation from traditional project focused organizations. Organizations in this study required a certain level of cultural diversity and regular use of multi-cultural teams. Using these criteria, we identified a number of large construction organizations in Kenya and the UK, selecting the companies and the research participants based on the size of their international operations, their record of employing multi-cultural construction project teams, and their willingness to participate in this research. To achieve a diversity and variety of project environments, 31 heavy construction engineering organizations were selected from different regions in Kenya and the UK. There was a diverse pool of participants who were residents of highly developed metropolitan areas and cities in distant regions of UK and Kenya. Typically, senior managers had similar educational and work backgrounds and worked in dissimilar international environments, therefore the national culture of senior managers was the primary dissimilarity. All senior managers had a practical understanding of managing multi-cultural construction project teams and their views were considered those of well-informed practitioners. The focus was on eliciting information from a disparate set of senior managers in a cross-section of project managed. It was possible to obtain information about the wider population i.e. the numbers of senior managers who work in heavy construction engineering organizations and been involved in projects. In light of the above, this study adopted a simple random selection to ensure each individual had an equal probability of being selected from the population. The t-test was used to assess whether the means of the participants' findings from the UK and Kenya were statistically different from each other. T-test was found to be the most appropriate since the study dealt with more than two sets of means.

FINDINGS

This section summarizes the questionnaire used to measure the attitude and experience of senior managers in Kenya and UK, and assess their views on project team performance within their organizations. Two different broad themes emerged from the findings: achieving multi-cultural team goals; and maintaining team affiliations. The authors used correlation analysis to examine the relationship between the seven variables. As illustrated in Table 1 and 2 the analysis showed a significant relationship between the two themes (see Table 1 and 2).

Theme 1: Achieving multi-cultural team goals

In this survey, eighty-four percent of participants agreed that if multi-cultural construction project teams are to be effective, they need to have clear communication procedures (see Table 1). For a high performing project team, seventy-seven point four percent of participants stated that smoothness of handover was very important. In this category, the significant finding was that there was no different between participants in Kenya and the UK when it comes to achieving team goals. In terms of achieving team goals, participants from Kenya and the UK rated highly, communication, smoothness of handover, co-operation, issue resolution, and joint decision making. The Kenyan managers mean scores on smoothness to handover ($M=1.29$, $s.d. = 0.39$) and issue resolution ($M= 1.38$, $s.d. = 0.29$) were higher than those of the UK managers [smoothness to handover ($M= 1.27$, $s.d. 0.38$); issue

resolution (M=1.37, s.d.= 0.28)]. A significant difference also existed between UK and Kenyan managers on the [communication (M = 1.23, s.d. = 0.38), teamwork (M= 1.34, s.d. 0.28) and joint decision making dimension (M = 1.45, s.d. = 0.26)], with communication [(M = 1.21, s.d. = 0.38), teamwork (M = 1.32, s.d. = 0.28) and joint decision making (M= 1.43, s.d. = 0.26)] being lower than for the Kenyan managers.

Table 1: Tests for mean differences for the variables of achieving multi-cultural team goals

Participants	Variables	Mean N=132	Std. Deviation	T Test Value	Importance %
Kenya	Communication	1.21	0.38	19.442	84
UK	Communication	1.23	0.38	19.447	86
Kenya	Smoothness to handover	1.29	0.39	18.881	80.2
UK	Smoothness to handover	1.27	0.38	18.779	77.4
Kenya	Teamwork	1.32	0.28	18.821	67.3
UK	Teamwork	1.34	0.28	18.822	68.4
Kenya	Issue resolution	1.38	0.29	18.486	65.4
UK	Issue resolution	1.37	0.28	18.482	64.7
Kenya	Joint-decision making	1.43	0.26	20.872	63
UK	Joint-decision making	1.45	0.26	20.877	64

In order to achieve team goals, the project leader and client have to make sure that they do have a balanced project team which has within it most, if not, all the expertise necessary to deliver team goals. The results of the study for this question clearly demonstrate that individuals in high performing integrated project teams should have considerable freedom of issue resolution on projects. It is the responsibility of the project leader to make sure that the alignment of objectives and members of a project team will be pulling in the same direction. The main purpose of developing a set of reciprocated goals is to harness the power of the whole team. There will always be problems in heavy construction engineering projects. Bennett and Jayes (1995) noted that the essential feature of successful partnering relationships is an agreed method for resolving problems. In response to the above, the survey found that the participants perceived the use of a clear and robust issue resolution process as being very important and furthermore it needs to be understood by all team members as it will define and clarify roles, responsibilities, and authority.

Theme 2: Creating an integrated multi-cultural project team

No significant differences between Kenyan and UK managers were observed on people selection dimension (M = 1.09, s.d.= 0.05) and people selection prioritization (M = 1.33, s.d. = 0.27). Participants in Kenya and the UK both considered 'people selection' as very important. One hundred and twenty-four (ninety-three point two percent) out of one hundred and thirty-two participants agreed that successful multi-cultural project performance can be improved through the development of integrated project teams. As illustrated in Table 2, 'people selection' is the most important decision project leaders have to make when setting up a supply project team. It is essential for project leaders to create a common understanding between project team members since lack of culture compatibility between project teams was found to be the most common cause of both team and project failure (Thomas and Thomas, 2005). Interestingly, seventy percent of participants considered 'people selection' and 'prioritization' as quite important.

Table 2: Tests for mean differences for the variables of creating an integrated multi-cultural project team

Participants	Variables	Mean N=132	Std. Deviation	T Test Value	Importance %
UK	People selection	1.09	0.05	17.830	93.2
Kenya	People selection	1.09	0.05	17.830	93.2
UK	Project-selection, prioritization	1.33	0.27	20.853	70
Kenya	Project-selection, prioritization	1.33	0.27	20.853	70

Thomas and Thomas (2005) argued that a structured team selection process should be based on a clear value criteria and a robust scoring method for qualitative and quantitative criteria, as the foundation of selecting an effective integrated project team, fully aligned and focused on delivering best value on projects. In this category, the survey results suggest that when establishing an integrated multi-cultural construction project team, the key factors to consider are compatibility of individuals and project task.

OVERALL T-TEST RESULTS

In this study, six t-tests showed statistically significant differences on the dimensions of multi-cultural project team performance between Kenyan and UK participants (see Table 1 and 2). Kenyan and UK project managers had significant different mean scores on communication dimension (Kenya $t=19.442$; UK $t=19.447$). The UK project leader's t-test scores on smoothness to handover were lower than those of Kenyan project leaders (UK $t= 18.779$; Kenyan $t= 18.881$). A significant difference also surfaced between Kenyan and UK project leaders on teamwork (Kenyan $t = 18.821$; UK $t= 18.822$), issue resolution (Kenyan $t = 18.486$; UK $t=18.482$) and joint decision making (Kenyan $t= 20.872$; UK $t= 20.877$). No significant difference between Kenyan and UK project leaders were observed on people selection and project selection prioritization. The results show that performances of multi-cultural project teams are highly dependent on communication, smoothness to handover, co-operation, issue resolution, people selection and project selection prioritization.

DISCUSSION

In terms of achieving team goals, the survey results show that eighty-four percent of the participants were of the same opinion that for high performing project teams clearly defined communication procedures need to be in place. Participants identified "smoothness of handover" as very important as well. In this category, the survey results show that there was no significant difference between participants in Kenya and the UK. The survey results provide more confirmatory evidence that it is the responsibility of project leaders to make sure that the alignment of objectives and members of a project team will be pulling together. From the survey results, there are indications that the main aim of developing a set of reciprocated project goals is to utilize the power of the whole team. Overall, the participants recognized that the use of a resolution process is very important and that it needs to be understood by all team members. The survey results indicate that in creating an integrated multi-cultural construction team participants regarded people selection as very important. From the results, there is confirmation that by creating a common understanding between project team members it creates a favourable working environment. Just as Thomas and Thomas (2005) suggested that a structured team selection process should be based

on a clear value criteria, it can be argued that the findings from this category reflect the conclusions of the above authors. The survey results show that, when establishing an integrated multi-cultural project team, the key factors to consider are the compatibility of individuals and the project task.

This study has attempted to clarify the relationship between cross cultural project leaders, multi-cultural project teams and performance and the influence of cultural factors upon project success. The findings of the study highlighted the importance of further theorizing about, and empirical investigation of, cross-cultural team performance in construction in the multi-cultural context. With an ongoing increase of cultural complexity on projects, project leaders in multinational construction organizations will need to be more aware of cultural factors in order to function and achieve high levels of team performance. This research contributes to the body of knowledge by identifying the variables that influence efficient cross-cultural integration and team performance on construction projects. The factors as discussed in this study are communication, smoothness of handover, teamwork, issue resolution, joint decision making, people selection, project selection and prioritization. This research further contributes to the theory for identifying key strategies that can be utilized to address the gap in construction practices between Kenya and developed countries. Understanding how to enhance the performance of multi-cultural project teams is a central goal of contemporary construction research. The construction research community will need to advance beyond the mere appeal of cultural factors on projects toward a more complete and detail elucidation of multi-cultural project team processes.

CONCLUSIONS

The growing trend in engineering design and construction is giving rise to a need for the development of effective multi-cultural teams. Now that construction companies are able to move resources to almost any location worldwide and have the capacity to work on a global scale; for many organizations future opportunities to work entails thinking more clearly about cross-cultural issues and more overtly and systematically an understanding of multi-cultural team working. As proposed in this study, this requires the integration of thinking and practice related to cross-cultural management. Although much can be achieved by working with multi-cultural teams, the truly successful construction firms are likely to be those, which embed the change through integrated changes to cross-cultural team selection, joint decision making, communication, teamwork, effective people selection and project selection. In applying the above, participants affirmed that the value of multi-cultural team working can be captured at many levels in the organization, be they project based or permanent, and furthermore will allow project teams to reach high performance levels consistently. These findings have implications for construction managers who work on multi-cultural teams and who are committed to improving team productivity and enhancing multi-cultural team integration.

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