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Managing cross-cultural communication in multicultural construction project teams: The case of Kenya and UK

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Abstract

The increasing global nature of construction projects has highlighted the importance of multiculturalism and the new challenges it brings to project execution. However, there has, as yet, been no empirical work that quantifies explicitly the extent to which communication determines the success of multicultural projects. This paper explores the ability of project managers in Kenya and the UK in communicating effectively on multicultural projects. The study examines the cultural factors that influence communication and explores how communication can be made effective in multicultural project environments. Using data from 20 interviews in Kenya (10) and UK (10), the results show that communications within multicultural project environments can be effective when project managers demonstrate an awareness of cultural variation. Participants further highlighted that, one of the critical components of building multicultural project teams is the creation and development of effective cross cultural collectivism, trust, communication and empathy in leadership. The study underscores an urgent need for future research to investigate effective guidelines or strategies for effective collectivism and communication in multicultural project teams.

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1. Introduction

Multicultural project teams have become more common in recent years, and contemporary international management literature has identified that the management of multicultural teams is an important aspect of human resource management. Recent studies have focussed on the positive effects of using multicultural teams, for example, Earley and Mosakowski (2000) stated that multicultural teams are used because they are perceived to out-perform monoculture teams, especially when performance requires multiple skills and judgement. However, there has been little research into construction-specific multicultural teams, and many construction organisations, although expanding into global operations do not fully appreciate the implica-

tions and are often unable to respond to cultural factors affecting their project teams.

In the last twenty years project management has developed considerably with a much greater understanding of the key variables that lead to project success. Project performance has been widely researched by a number of researchers (Baiden, 2006; Cheng et al., 2006; Chervier, 2003; Kumaraswamy et al., 2004; Ochieng, 2008), and the findings have clearly illustrated that best project performance is achieved when the whole project team is fully integrated and aligned with project objectives. During this period, there has been a change in the way that many major heavy construction engineering projects are delivered. This is especially noticeable in Western Europe where local levels of investment have dropped and many project management contractors are now working on projects in other parts of the world (Weatherley, 2006). The increased application and development of rapid worldwide electronic

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communications has led to a number of heavy construction engineering projects being designed and developed in dispersed locations many thousands of miles away from the actual construction sites. In addition, there has been an inclination by clients to develop and undertake such projects in partnership with other companies as joint ventures, often collaborating with local companies based in the territory where the assets will be built. This has resulted in more multicultural project teams with team members from different cultures and backgrounds working together.

A number of authors including Weatherley (2006) agree that project success is difficult enough to accomplish where the project team is located close to the construction project environment, and the situation is made considerably complex for multicultural project teams, that are widely sepageographically and that have dissimilar organisational and regional cultures. The geographical division of multicultural project teams poses its own communication challenges. Emmitt and Gorse (2007) have shown that, for factual data transfer, a number of communication problems have been addressed due to the developof rapid global information systems and telecommunications, however, when it comes to multicultural project teams many issues remain unresolved. For example, the loss of face-to-face communication can lead to misunderstanding and the loss of non-verbal signals such as eye contact and body language. This can subsequently lead to difficulty in achieving mutual trust and confidence within multicultural project teams. It is also difficult to manage or supervise multicultural project teams without face-to-face contact or to confer or develop relationships (Weatherley, 2006).

There is a need for increased research efforts in understanding influential factors that affect multicultural project teams. There is mounting evidence and opinion indicating that integrated team work is a primary key in efforts towards improving product delivery within the construction industry (Egan, 2002). Given the uniqueness of culture to particular project teams, and its persistent influence in societies and organisations this study presents a balance between the experiences of project managers from a European (UK) and African perspectives (Kenya). The study aimed to explore how project managers with different cultural background have managed communications on multicultural project teams. Specifically, the study was designed to explore the efficacy of cross-cultural communications strategies in heavy construction engineering project. For the purposes of this study, heavy engineering encompasses industrial projects which include power plants, pharmaceutical plants, refinery plants, highways and pipelines. Heavy engineering, projects can range from small to very large, and they are usually carried out for the client by contractors and sub contractors. The nature of these projects means the wealth of heavy engineering design and construction industry is inextricably bound up with the health of the world's economies. Clients can include oil, chemical, pharmaceutical, food manufacturing and water companies all over the world (on and offshore). For this reason, contractors and sub contractors work with a cross-section of clients in a variety of economic sectors. To ensure that the findings encapsulated the key contextual issues in multicultural teamwork, cultural differences pertaining to communication, between participants from Kenya and the UK were also investigated. A brief exami-

Table 1 Cultural complexity projects managed by participants.

Year managed	Participant	Project	Country of Implementation	Impacts of cultural complexity	Project outcome	Participant country of origin
2004	A	Refinery plant	Dubai	Impacts were seen	Successful	England
2005	В	Power plant	Kenya	Impacts were seen	Successful	Kenya
2002	C	Pharmaceutical plants	UK	Impacts were seen	Successful	England
2005	D	Refinery plant	Azerbaijan	Impacts were seen	Unsuccessful	England
2005	E	Refinery plant	Azerbaijan	Impacts were seen	Successful	England
2005	F	Refinery plant	Azerbaijan	Impacts were seen	Successful	England
2004	G	Power plant	Kenya	No impact in project	Successful	Kenya
2004	Н	Dam	Kenya	Impacts were seen	Successful	Kenya
2003	I	Food plant	UK	No impact in project	Successful better than expected	England
2001	J	Refinery plant	Saudi Arabia	Impacts were seen	Successful	England
2003	K	Refinery plant	Azerbaijan	Impacts were seen	Successful	England
2003	L	Power plant	Kenya	Impacts were seen	Successful	Kenya
2003	M	Power plant	Kenya	Impacts were seen	Successful	Kenya
2004	N	Dam	Kenya	Impacts were seen	Successful	Kenya
2004	O	Dam	Ethiopia	Impacts were seen	Successful	Kenya
2004	P	Dam	Ethiopia	Impacts were seen	Successful	Kenya
2005	Q	Power plant	Kenya	Impacts were seen	Successful	Kenya
2003	R	Manufacturing plant	Hong Kong	Impacts were seen	Successful	England
2004	S	Refinery plant	Azerbaijan	Impacts were seen	Successful	England
2002	T	Dam	Kenya	Impacts were seen	Successful	Kenya

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nation of communication, multicultural project teams and construction industry is undertaken before presenting the methodology, key findings and conclusion.

2. Defining communication in a multicultural environment

Axley (1984) considered communication as metaphorical pipeline along which information is transformed from one individual to another. Thomason (1988), defined "communication as the lifeblood of any system of human interaction as without it, no meaningful or coherent activity can take place". Nevertheless, defining communication is obscure as it is such a multi-dimensional and imprecise concept. Despite, the difficulties inherent in defining communication, it is essential that a working definition of the concept is developed to fortify the analysis of communication practice contained in this paper. In this study, communication is viewed as a professional practice where suitable tools and regulations can be applied in order to improve the utility of the data communicated, and is a social process of interaction between individuals.

The problematic context of communicating in multicultural project teams raises questions as to how project managers and clients can go about overcoming the structural and cultural conditions and constraints which define its operation, in order that it can develop an infrastructure that facilitates more effective communication in the future of heavy construction engineering sector. Moreover, it highlights that the construction research community and the industry need to find solutions of effecting change within the sector in such a way as to overcome the present and future cultural constraints on the sectors development. In a theoretical sense, it could be argued that using effective communication tools should be fairly straightforward, however, the translation of theoretical perspectives actually into practice depends upon their interpretation by the individuals. Arguably, many of those with experience of working with multicultural project teams have yet to develop skills to cope with such a challenging communication environment. Given that, multicultural project teams involve people from a wide variety of cultures, there is no guarantee that the use of espoused good practices will result in successful project outcomes. In this paper, the phenomenon of communication as it appears in multicultural construction project teams is explored.

3. Background on multicultural construction project teams

The management and development of construction project teams within a global context unavoidably leads to a consideration of diversity and related challenges. Within overseas construction projects, it is essential for organisations to help their project managers to appreciate the international context and develop the ability to understand everyday issues from different cultural perspectives. Bartlett and Goshal (1989) identified the main challenge facing organisations intending to work overseas as the introduc-

tion of practices, which balance global competitiveness, multinational flexibility and the building of global learning capability. The authors further argued that organisations must develop the cultural sensitivity and ability to manage and build future capabilities if they are to achieve this balance.

Elv and Thomas (2001) and Jehn et al. (1999) demonstrated that diversity increases the number of different perspectives, styles, knowledge and insights that the team bring to complex problems. The world's most innovative firms, such as Microsoft, took advantage of this by introducing multicultural teamwork. Unfortunately, in contrast to sectors such as IT, manufacturing and aerospace, the construction industry has not sufficiently taken into account the issue of cultural complexity and its influence upon team dynamics. There is indication to an assimilationist attitude, which largely ignores the needs of different project teams, expecting them to become accustomed to the dominant industry, national or organisational culture (Loosemore and Al Muslmani, 1999; Loosemore and Chau, 2002). However, current thinking on team integration requires organisations to value explicitly multicultural teamwork, to adapt to it and use it to generate improvements in project work performance and team effectiveness. However, it should also be noted that linking different individual cultures to project outcomes is controversial. The understanding of the behavioural dynamics of multicultural project teams in construction is still in its infancy. Although project teams from different cultures may well bring different perspectives and styles, the necessary conditions, likely consequences and overall performance implications are yet to be universally accepted.

Existing literature on cultural diversity examines team members' demographical backgrounds and other factors relevant to their cultural characteristics, values and discernments (Ansari and Jackson, 1996; Jackson et al., 1992; Kandola and Fullerton, 1998; Watson et al., 1993). The cultural diversity of a project team has a number of benefits, including the variety of perspectives, skills and personal attributes that multicultural team individuals can contribute (Maznevski, 1994). As confirmed by McLeod and Lobel (1992) diverse groups generate more ideas of high quality in brainstorming tasks. Culturally diverse teams perform better than homogenous teams when it comes to identifying problems and generating answers Jackson et al. (1992). According to Townsend et al. (1998), organisations that utilise multicultural teams make significant gains in productivity. For example, Ng and Tung (1998) established that culturally diverse teams of a multi-branch financial services firm reported higher levels of financial profitability compared to their culturally homogenous counterparts. More recently, Marquardt and Hovarth (2001) established that by assembling the energy and synergy of individuals from different backgrounds, organisations could generate creative approaches to problems and challenges that are faced by corporate teams in project-based operations.

It has also been ascertained that communication in multicultural teams stimulates the formation of an emergent team culture. Unlike homogenous or monoculture teams. multicultural teams cannot refer to a pre-existing identity because of their short lived individual project-based life cycle Earley and Mosakowski (2000). They develop and depend on a team culture of straightforward rules, performance expectations and individual perceptions. Earley and Mosakowski (2000) further confirmed that an effective multicultural team has a strong emergent culture as shared individual prospects facilitate communication and team performance. This suggests that the positive effect and trust generated by the perceived shared understanding can fuel performance improvement and boost team effectiveness. Most importantly, effective interaction among project team members can facilitate the formation of a strong emergent team culture Pearson and Nelson (2003). Nonetheless, multicultural teams are particularly susceptible to communications problems that can affect team cohesion. Individuals in multicultural project teams have different perceptions of the environment, motives and behaviour intentions. Shaw (1981) argued that the effects of such differences could be visible in lower team performance due to impeded social cohesion. Further research by Evans and Dion (1991), on team cohesion and team performance showed a positive correlation between these two variables. Elron (1997) asserted that cohesive teams respond faster to changes and challenges and are more efficient.

Managing cultural differences and cross-cultural conflicts is generally the most common challenge to multicultural teams (Elron, 1997), however, there has been limited research on "people issues" within multicultural teams in construction management literature. Richardson (1996) noted that the recognition of techniques such as lean production and business process re-engineering are indicative of this point of view, as they mirror fashions in mainstream management, which are themselves based on a traditional culture of prescription and control. People management in construction has become an important topic within the construction industry (Dainty et al., 2007; Egan, 1998). The industry needs to address its poor performance in people management by focusing on cultural issues (Dainty et al., 2007). Cultural issues among team individuals can cause conflict, misunderstanding and poor performance (Shenkar and Zeira, 1992). Five of the most distinctive challenges managers face are: developing team cohesiveness; maintaining communication richness; dealing with coordination and control issues; handling geographic distances and dispersion of teams; and managing cultural diversity, differences and conflicts (Pearson and Nelson, 2003). Construction project managers from different countries are likely to translate and respond differently to the same strategic issues or team tasks because they have distinct perceptions of environmental opportunities and threats.

While many researchers have investigated culture in construction (Kandola and Fullerton, 1998; Meek, 1998; Barthorpe et al., 2000, 1999), understanding of cross cul-

tural communication on multicultural project teams is insufficiently developed. Furthermore, the industry has not sufficiently responded to cultural issues facing its workforce within the construction industry. Heavy international engineering construction projects can involve multinational project teams from different political, legal, economic and cultural backgrounds. As the environment is becoming more complex and changes occur at a rapid rate, multicultural construction project teams must improve their ability to address such external challenges. There is plenty of data on how to lead an international organisation, but these data are often not pertinent to construction project management. The sense of belonging to a group gives a feeling of safety and comfort to a team member (Schein, 1985). This feeling gives the team better options for responding to project challenges. It also breaks the comfort zones and can help foster innovative solutions to project issues that might arise.

4. Aspiration of the construction industry

According to Clark and Ip (1999), trans-global economic developments offer an opportunity to introduce products utilising up-to-date knowledge in a cost-effective manner. In any construction multicultural project team, it is essential for the senior managers to be cross-culturally competent.

Being familiar with cultural issues empowers project leaders with the requisite knowledge for improving the efficiency of managing multicultural project teams. In the last 10 years, there has been growing research interest in soft issues including many social and cultural factors, which affect people management on projects (Egan, 1998; Shenkar and Zeira, 1992). Addressing the poor performance of multicultural project teams remains an aspiration within the construction industry (Baiden, 2006). There is a need for increased research efforts in understanding influential factors that affect managing cultural complexity and communication in multicultural project teams. There is mounting evidence and opinion indicating that integrated teamwork is a primary key in efforts towards improving product delivery within the construction industry (Egan, 2002).

Due to the demand of international construction projects involving multicultural project teams, there is a growing trend towards discussing cross-cultural complexity more openly within the construction industry. This has been influenced by clients in both the developing and developed countries demanding for improved people management and communication strategies. Before exploring the effective management of multicultural project teams, there is a need to examine if cross-cultural complexity and cross-cultural communication can be effectively managed. Given the uniqueness of culture to particular project teams, and its persistent influence in societies and organisations, this paper presents a balance between the experiences of project managers from a developed and developing country. The

outcome is a universal approach that should be of benefit to a broad range of professionals and non-professionals working with multicultural project teams within the construction industry.

5. Methodology

The main form of data collection comprised semi-structured interviews with senior project managers in Kenya and the UK. The results were particularly important in this study as the participants were selected from a cross-section of project teams, organisations and project environments. The sample was designed to achieve both Kenyan and UK participants with experience of cultural complexity on projects. The second requirement was to select project leaders with multicultural heavy engineering project experience. It was critical to find participants who had managed multicultural project teams successfully and experienced impacts of cultural complexity as illustrated in Table 1 because the management of cultural complexity was of specific to this research.

In order to investigate the factors that influenced multicultural project teams it was necessary to have a range of organisations in terms of status, size, and projects managed. The eight organisations that were selected, where 20 of the participants interviewed, operated in the energy, pharmaceutical and petrochemical sector. The selected organisations were well balanced in terms of projects managed. In general terms there was a link between the existence of project work and the type of projects undertaken. The 20 participants were selected on the basis of their project management experience, with each having long-standing familiarity in managing large and complex projects over a period of many years. Each participant provided information regarding the heavy engineering projects they had managed outside UK and Kenya. The nature of these projects ranged from medium size pharmaceutical plants to major oil plants. This allowed a variety of multicultural issues to be explored within the broad context of international project management activities. The concern of the research was to gather multiple sources of evidence that would validate general findings and omit any subjective bias that might arise.

Interviewee variety is essential to the quality of data obtained in qualitative research. In this study, the aim of interviewee variety was to explore a diverse proportion of expert views from successful senior project managers on cross-cultural communication within the Kenyan and UK heavy construction industry. The main advantage of this sample was that each participant had worked on projects in developing countries. This allowed the authors to focus in-depth on the experiences of each participant. This was particularly important because the research subject is in a research area of which there is little available data in Kenya and the UK. The participants worked in various types of organisation formations and project arrangements. All participants had a practical understanding of managing

multicultural project teams and their views were considered those of knowledgeable practitioners. Adopting a semistructured questionnaire provided a high degree of flexibility during the interviews. The questionnaire was initially piloted to ensure that it met the objectives of identifying the participants who had experienced cultural issues on projects in developing countries. Face-to-face interviews enabled a probing of responses to explore what the participants were saying so as to ensure that each senior project manager gave as full an answer as possible. The use of interviews also allowed the authors to elaborate points that were unclear to participants. Cross-cultural communication practices were explored across a variety of project teams, organisations, project environments, behavioural, culture and socio-cultural environments. Adopting a semi-structured questionnaire with rather than questions provided a high degree of flexibility during the interviews. Participants from Kenya and UK were asked the following questions which were based on multicultural construction project teams:

- Could you identify the ways in which your organisation has created an environment in which communication may be more effectively used in managing 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 project teams?
- How do you think a good multicultural project team can help the success of a project? Can you give some examples?

Twenty interviews were conducted with participants in Kenya (10) and UK (10). All interviews were recorded and transcribed verbatim and they were then analysed through the use of qualitative analysis software package NUDIST NVivo™. During the analysis, broad themes and patterns were looked for, rather than narrow, precisely variables of qualitative research. The data analysis phase was an ongoing process of fieldwork itself, rather than as a final stage in a linear model. This allowed data to be coded under conceptual headings that could then be retrieved in order to produce cross-cultural comparisons. One of the primary functions of the NVivo software that emerged was the ability to add memos to sections of the data, as thoughts and connections were made during all phases of the data analysis. It enabled the authors to sort through the data and at the same time allowed exploration for patterns and recurring phenomena. This enabled the authors to compare, contrast and synthesise. It was essential that the codes were not seen as ends in themselves, as the answers are not in the codes but in the data. The codification system was drawn from the initial interview questions that had been based on appraisal of key issues arising from the literature.

Initial and subsequent impressions and thoughts were recorded in detail, thus emphasising the organic nature of this method for data analysis. As the data analysis progressed, further details were obtained and sections of the data intensively analysed. At this stage, the authors had already generated some categories through the ongoing theoretical reflections and applied these for initial coding purposes, refining and extending the categories as they went along. In some cases, a particular section would fall into more than one category, but this seemed to indicate the interlinking of themes rather than a fault in coding, for example trust, communication and teamwork. Working categories were developed that explained cross-cultural communication complexity on project teams. Following the construction of a category, the next component of the process was the presentation of the data in a narrative form supported by evidence from the statements recorded during the interview phase and making theoretical references as necessary.

Case studies were employed to validate the findings. This yielded a better consistency of the findings since it allowed a systematic comparison of different organisations by exploring different management features and examining different levels of behavioural variables involved. Employing various data collection methods provided a complete picture of the issue under investigation. There was a logical progression to the order of the parent codes. This was an attempt to ensure that the main objectives of the study were met. Once this phase was complete, the authors took each topic in turn and inserted the relevant interview extracts. The analysis continued until data had been reduced amply to enable conclusions to be drawn from the coded data. The findings are presented below, where appropriate illustrative quotations drawn from the interview transcripts have been used to convey participants view.

6. Findings

Key dimensions of cultural differences on communication behaviours drawn from participants in Kenya and UK were used to collate the main attributes deemed to be the most important for multicultural construction project teams. The reported results present generalised findings based on the 20 interviews. The results are presented below under headings drawn from the analysis.

6.1. How heavy engineering projects differ from other industries

As established from the participants, this is an industry which has an enormous impact on the way we live our lives. The plants which contractors in this industry design and construct contribute to so many of the products we take for granted. The contractors in this sector design, supply, construct and put into operation industrial plants which process all manner of substances – any kind of construction

in fact in which a chemical or physical change takes place. This industry comprises establishments, not classified to any other industry, primarily engaged in constructing heavy and civil engineering works. The work performed may include new work, reconstruction, rehabilitation, and repairs. For this reason contractors work with a cross-section of clients in a variety of economic sectors. All of the participants in this study could identify with at least some of the projects types listed in Table 1. Eighteen participants suggested that complexity differed from firm to firm. Criteria included: team size, project size, culture, risk, processes and culture. Participants confirmed that 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.

As a result, all 20 participants indicated that new technology is important. Participants highlighted that engineering design and construction is a competitive industry and technology is its lifeblood. It emerged that organisations need to be innovative and continually introduce new technology to maintain their competitive advantage and meet the challenge of new competition from overseas, particularly in respect to manpower costs. Participants further asserted that, it also enables them to solve new and more difficult problems more effectively and efficiently than ever before, which allows a greater variety of projects to be tempted. For example, participant A affirmed that information technology has led to great improvements in process design throughout the introduction of intelligent database. A team of engineers from different countries work together at the same time to meet a number of different designs, objectives, based on cost, the environment, safety and performance, to produce a basic engineering design. Participant D, E, J, K, Q and T further noted that new technology in heavy engineering projects is not just confined to variations of computer technology. After all this industry is all about processes and new process technologies are being developed continuously to improve safety and efficiency, such as chlorine-free pulp processing plants which will have greatly reduced emissions. Participant D and E acknowledged that organisations have developed new technologies in the last 10 years which can reduce carbon dioxide emissions from oil platforms. As we expected from this theme, two major classifications emerged: complexity and new technology.

6.2. Managing communication at all levels

All 20 participants believed that communication is important.

For example, Participant A:

"It should not be about criticising people, it should be about being clearer. If an individual had a problem then he could come forward and solve it collectively as a team rather than sit back. As a project manager if contractors come to me with a problem, I would try and solve it collectively. This minimises recurrence of the problem. My aim is to always have a collective intent".

"Participant A stated that conflict on projects can be divided into positive and negative. With positive conflict, you can get somebody to do something in a particular way, which they might of considered doing it differently. This leads to the generation of a better solution. As a project manager, you can encourage that type of conflict within a project environment because it does lead to good results. Negative conflict is the opposite; people hold different views on how issues can be resolved. The most important thing is to find out why a conflict has occurred. The best way is to highlight to the team why you have decided to resolve an issue in a certain way".

Participant B:

"Resolve conflict in a group by establishing whether you can work in a team by using evaluation forms. We also look at your previous work experience. We have also tried to ensure that resources are available to everyone within the team. In the environment we work in there is a lot of conflict. You always get people who disagree".

Participant B went on to further suggest the way he handles conflict is to get people to sit down and talk about it – finding out why the conflict happened is important.

"You can then try to achieve compromise. Most of the issues are project related".

Of the 20 participants, 12 agreed that when faced with conflict it is essential to highlight the objectives of the project and demonstrate what the objectives of the project are. If not, the project goals will not be achieved. All the participants acknowledged that effective communication is about not only sending data or information; it includes ensuring that any message is received and understood by those team members to whom it is addressed. This is made easier by team members knowing each other perhaps through relationships developed on previous projects.

Participants in Kenya and the UK acknowledged that effective communication on projects is aided by the early establishment of clear lines of responsibility and clear robust issue resolution process within the integrated team. Participants highlighted that in order to achieve effective cross-cultural communication, adequate internal and external communication needs to be in place. It was established that effective communication is the key to managing expectations, misconceptions, and misgivings on multicultural project teams. The study also found that communication patterns varied between the two countries. In Kenya, we established that data is contained in unequivocal codes, such as spoken or written words, whereas in the UK send-

ing and receiving data is highly dependent upon the physical context and non-verbal communication.

6.3. Achieving project team performance

Participants D, E, F claimed that:

"One has to be clear about the value management approach; the focus has to be on what are your needs".

Participants agreed that value management techniques are important because they help one in highlighting the values of the project straight away. Value management also helps to identify the purpose of the project and helps the team to understand why they are doing the project. Several participants noted that as a project leader it is essential to ensure that everyone has the right attitude by communicating to the team clearly.

As observed in the UK, participants used team workshops and meetings rather than newsletters and emails because face-to-face communication is more effective. The way in which project leaders communicated on projects has more influence than the actual words we use. For example, results of work by Mehrabian (1981) showed that the relative influence of verbal and non-verbal communication on feelings and attitudes are 7% verbal, 38% vocal and 55% facial. As a result, project team members need to pay careful attention to the vocal and facial aspects of their delivery, which may comprise 93% of the communication in some circumstances. For example, participant D stated that when it comes to questioning team assumptions, again value management techniques have to be in place. He further stated the need to get people to sit down, discuss the project structure and explain why they should perform the project in a certain way. This can be achieved by holding workshops where people discuss various issues, which emerge from the project. As a project leader, one needs to be disciplined and to respect the lines of communication that are in place.

6.4. Ensuring high quality standards

Participant D stated that:

"What we do is to hold meetings on a weekly basis. I chair the meeting. We sit round a table and talk about the project. I do update the project program as we go along. In the meeting I also let people know about the changes that have been made. It is all about making sure that everything is discussed. In this meeting, you can end up having 20 issues popping up that you may have to deal with. We go through each issue and it is important that I do give everyone the opportunity to talk".

To develop as a project team, it is essential that learning occurs. It is good practice not only to review the project objectives and deliverables as a team at regular meetings but also to conduct a process review. It was found that there is a need to communicate lessons learnt from previous company projects. The participants also expressed the view that where suitable, such learning should be included or taken account of in the present project. In some instances, the participants highlighted that communicating learning can occur as the project proceeds and it is essential that opportunity is given to review what is being done to pinpoint learning points and if possible, to refine the way the team is working. Clients have for some time interviewed people who have been selected to run projects. The main reason behind this is for them to assess an individual's technical ability and to see if they can be part of a team. The participants agreed that when it comes to communicating project procedures it is hard to get the message through to team members. There was an expressed view that you need to motivate team members or else they may take a week to do something, which should only take them a day. For example, participant C suggested:

"One former project manager, who is now a director one time said that he used to spend 70% of his time talking to people and the other 30% at his desk. The surprising thing is that the director was one of the most successful project managers within the organisation. It is interesting to note that, he rated communication as the most important tool when it came to managing projects."

Participant (C) went on to claim,

"The former project manager used to talk to people to enable them understand issues and problems".

Participant C acknowledged that his failure has been lack of communication with his junior colleagues. From the above, effective communication on construction projects is not just about informing. As stated above, a key aspect of communication is the ability of the client and project leader to listen, to give feedback and to respond to any project issues, which might arise. On the other hand, good communication with a high level of trust, honesty, and respect for others is significant in building and maintaining high team performance. Furthermore, communication must be maintained with members as individuals and as a team. Participants suggested that adequate internal and external communication systems must be in place. The participants agreed that senior managers must take an active role in keeping team members informed. Communication from the project leader to team members must be consistent regardless of their project location, and all project team members must be aware that this communication is equal. There was a general perception that expectations, misconceptions and misgivings from those outside the project team may increase with lack of information. Effective communication is the key to managing expectations and minimising misconceptions and misgivings.

The issues raised have been summarised below as seven key dimensions of cultural differences on communication behaviours.

- Establish clear lines of responsibility.
- Institute team effectiveness (collectiveness).
- Establish trust.
- Implement honesty.
- Encourage respect for others.
- Introduce cultural empathy.
- Implement value management techniques.

The two groups differed in a number ways, for instance participants in Kenya highly rated cultural empathy when compared to the UK participants. Whilst reflecting on their personal experiences, it was observed that the national culture from the two countries differed when it came to emotional dependence on the team. Participants in Kenya were more conforming, orderly and traditional when it came to tackling personal issues with project workers whilst a few of the participants in the UK believed that project leaders had to be particularistic when dealing with personal issues. Even though the participants differed in a number of ways, there was equal recognition that project leaders need to establish clear project goals, team effectiveness and trust; and encourage respect between team members. Both sets of participants acknowledged the importance of the four variables when it comes to achieving effective team performance on projects. The only slight difference between the two sets of participants was the use of value management techniques.

6.5. Adding value within the team

The success of managing a multicultural project team does not lie in the simple delivery of the outcome anymore. In a continually changing global context, senior project managers are required to deliver a project which will gratify or exceed the client's needs and expectations at the time of delivery. In the context of this study, value management focuses on the definition and iterative appraisal of team needs and expectations. Because of its broad focus, Participant D, E, F, K and S highlighted that value management techniques can be used to identify key communication issues and processes necessary to address them. In order to obtain successful results, Participant D, E, F, K and S, further asserted that the processes need to be reviewed throughout the time scale of the project.

The consensus in the UK was that a project manager could do well without value management techniques as long as the four variables mentioned above are in place. In Kenya, participants felt that since most of the projects are financed by the government and international aid agencies, it was essential to have value management techniques since expatriates who work on projects in Kenya have different social values about personal achievements as they do on decision making and communication processes. Participants in the UK considered that language is a major vehicle for communication but can be a big issue since words have different meanings and values to people. In order to manage potential language barriers on projects, a high majority

of participants in the UK suggested that project managers should have the ability to understand and clearly communicate team goals, roles and norms to other members of a multicultural team. Participants asserted that it is vital for a project manager to be cross-culturally and communicatively competent.

6.6. Building trust within multicultural project teams

Participant (C) highlighted that multicultural project teams can be sub-divided into three:

"A construction project team with individuals from cultural backgrounds working in the same country. These are project teams which have project team members that come from ethnic minorities that are culturally distinct";

"Contractors that are partially or totally dispersed in a number of countries but meet face-to-face"; and

"Construction project teams that have individuals in a number of countries, working together only through electronic medias and have never met each other".

Participant T, S, R, Q, P and O, asserted that one of the important components of building multicultural project teams is the creation and development of trust. In this study, it was found that trust provides the invisible glue which can hold a dislocated team together. Participants appeared to agree that it is more natural to trust people in whom we can identify a level of positive inevitability in their actions and words. Working with other cultures in a construction project environment can lead to a stressful level of impulsiveness in our interactions. Participant T, S, R, Q, P and O, recommended that trust could be developed where there are good interpersonal relationships and mutual respect between project leaders and team members. Participant P recognised that trust can be promoted within projects by the behaviour of individual team members and it can become apparent at different levels. For example, trust can be at a social and professional level. However, participants suggested that as trust increases within the project team, the team members will become more open and honest with each other and this openness will enable them to jointly identify, assess, plan and manage cultural complexity more effectively.

Despite the above, Participant K, H, I and G high-lighted that trust can be built as the project teams start to work on a project. For a multicultural project team to be fully integrated, all the team members need to trust and understand each other. Participants noted that this could be achieved by team building and team effectiveness training events. They also appeared to believe that in order to instigate, build, and maintain trust within the integrated project team the nucleus should monitor behaviour and project leaders should flag up and address any project issue that risks breaking the trust. All 20 participants agreed that trust reduces complexity and helps in building up a team.

Participant E emphasised that,

"Trust is extremely important. If you don't have trust, it's hard to have an integrated multicultural project team. Trust also means that if I do something wrong then I will be accountable. So if I do something good you say so and if I do something wrong you say so as well. This makes it easier because if an individual does something wrong rather than keeping quite, they will ask for help".

Most participants agreed that trust is a fragile, intangible, and generally difficult to quantify but it is essential to the success of multicultural team integration. It emerged trust can be cultivated where there are good interpersonal relationships and mutual respect between project leaders and team members. From the above, it does show that trust depends on the interaction of individuals and interpersonal relationships. In this study, it has been shown that, in order for a multicultural project team to be fully integrated, all team members need to trust and understand each other. In both countries trust is considered to be very important, but is nevertheless treated differently. One notable difference that emerged was that in Kenya participants had difficulty in achieving trust due to tribalism, whilst in the UK, it was suggested at times, that it is difficult to achieve trust because of the adversarial nature of the construction industry.

6.7. Creating collectivism

All the 20 participants described the relevance of collectivism to projects. Hofstede (1980) noted that individualism or collectivism describes whether the culture values either individual (individualism) or group goals (collectivism). According to Javidan and House (2001), this point reflects the degree to which individuals of a certain culture are encouraged to integrate into teams within organisations and society. When the discussion centred on the nature of collectivism, participants suggested that collective cultures demonstrate a more emotional dependence on the project team. They are more conforming, organised, traditional, and team oriented. In Kenya, participants highlighted that in most projects, multicultural teams differed in orientation between individualism and collectivism because of challenges to developing team roles in the projects. In this study, the authors noted that when it came to defining roles on projects all the participants acknowledged that culture does vary. It was found that in a collective project environment the interest of the project group succeeded over the interest of the individual member. Interestingly, Participant S, A, H, D and B argued that in an individualistic project environment the interest of an individual could prevail over the interest of a project group. This is perhaps surprising since Participant A suggested that in a project:

"There has to be encouragement of teamwork within the project process. The mechanisms of integration depend on collectivism within the project process. It is important as well for the client/project manager to know how to engage with different type of people and also have the right attitude. This allows you to end up with a happy team".

In their analysis Hofstede (1991), Schwartz (1990) and Triandis (1993) argued that collectivism and individualism are two ends of the same continuum. The authors highlighted that collectivists perceive themselves as independent individuals of an "in-group" who share the same responsibility of team success whilst in an individualistic organisation it is common for an individual to bear the total responsibility for either success or failure of the business. Recent research by Abraham (1997), Dickson et al. (2003), Singelis et al. (1995) showed that there are two types of collectivism and individualism i.e. vertical and horizontal. Horizontal collectivism is associated with subordination to the goal and good of the immediate cluster to which they belong; vertical collectivists are more likely to have a sturdy commitment to the organisation as a separate unity. Vertical individualists tend to believe in a desire for the enjoyment of competition at work and strong importance on superior performance and winning. On the other hand, horizontal individualism is linked to the need for independence rooted in freedom that does coexist with the longing for conformity.

In discussions, the participants expressed satisfaction with collectivism on projects and dissatisfaction with individualism. All participants identified the counter productive effects of individualism within their organisations. They were able to highlight that this is largely caused by contractors who want to do things their way rather than conform to an imposed standard. During the discussions, some project leaders admitted of their unwillingness, at times, to conform to an imposed standard and usually led to direct conflict within the project team. Participant T suggested:

"There are number of ways in which individualism can be managed and its effect harnessed. This can be done through encouragement of team participation and redefining team boundaries".

However, participants recognised that the development of multicultural project teams does require a commitment from all the team members (client, project manager, and contractors). All participants identified that the project leader must have empathy. Participants cited that effective project leaders should understand the leadership style preferred by the project team so that the project leader's authority is respected. From the findings it emerged that most of the participants were able to achieve project and organisational goals. This finding suggests that in a project environment the project team must institute a supportive and positive culture. It is the responsibility of the project leader to ensure that this supportive culture is introduced and sustained. In order to maximise team effectiveness participant T pointed out that

"It helps to understand personal problems. For example we had a guy who spilt up with his wife and all of a sudden wanted to do extra hours. He felt that working more hours took his mind away from what he was going through. So I gave him more work within the project and that really helped him. Another guy wanted to do less hours for different reasons. So, understanding people's personal issues is important and to know as well that everybody is different".

In the above extract participant T demonstrated to the project team member by example the attitudes and behaviours he expected within the team. Participants in this study argued that an effective leader should be fair and consistent when dealing with team members. This can be achieved by not showing favour or partnership on the way they relate to one another. In general, participants described the value and need for a supportive culture through the personal encouragement of team members. They suggested that it can be achieved with an effective management style that "listens to team members" concerns and complaints. In addition it should have a positive 'can do' management style to address the issues described by participant T. In addition, participants felt that this approach has to be balanced by certifying that there is an expectation that the project team will perform and meet their project objectives.

A growing stream of cross-cultural research has described how basic assumptions, beliefs, values and behavioural norms vary across the individualism-collectivism dichotomy (Hofstede, 1991; Schwartz, 1990; Triandis, 1993) and how this cultural disparity may be central to understanding work behaviour in project settings. In this study, we established that individualist's place more emphasis on self-sufficiency and are more familiarised toward project task achievement, sometimes at the expense of relationships, whereas collectivists give emphasis to harmonious relationships with the "in-group", sometimes at the expense of project task accomplishment. From the two sets of data (Kenya and UK), it became apparent that individualist's are more likely to be driven by their own beliefs, values and attitudes whilst collectivists are more likely to be driven by social norms, duties and responsibilities. Drawing together the above issues, and translating them into the construction industry, it can be asserted that in a collectivist culture, the interest of the project team tends to prevail over the interest of the individual. In an individualistic culture, the interest of the individual prevails over the interest of the group. It is worth noting that collectivism and individualism are two ends of the same continuum (Hofstede, 1991; Schwartz, 1990; Triandis, 1993). According to Hofstede (2001) and Triandis (1993), collectivists identify themselves as independent members of an "in-group", who share the same fate and responsibility for achievement of the work, and they tend to act cooperatively in their groups interest. Participants noted that in a collectivist culture, failure is often ascribed to the lack of effort of the entire project team. Participants further acknowledged that in a multicultural project team, individual achievement is not valued in a collectivist culture; whereas in an individualistic project team it is one of the most important values. Thus, in a collectivist project team, even though the project leader might play the most important role in successful realisation of a project task, reward is often given to all team members. The consensus that emerges in this study is that a collectivist culture in heavy engineering projects emphasizes the importance of team effort to success, and is not likely to attach failure to an individual person even though this person is the project leader.

From the above, the authors identified four key factors that influence multicultural project teams at team levels. These were cross cultural communication, cross cultural collectivism, cross cultural empathy in project leadership and cross cultural trust. What needs to be well understood is that the effective structure of a multicultural project team depends on a well structured integration system, between the client, project manager and the project team. As illustrated by the two groups in this study, the culture of a project manager plays a major role in how the project team will perceive cross-cultural communication on projects.

7. Conclusion

This study has explored the practices of 20 senior project managers with regards to dealing with cross cultural issues in multicultural project teams. The research has highlighted a number of principles that need to be realised before a fully integrated multicultural project team can be fully realised. This study reveals that participants in Kenya and the UK acknowledged that effective communication on projects is aided by the early establishment of clear lines of responsibility and clear robust issue resolution process within the integrated team. As noted in this study, both internal and external cross-cultural communication provides the invisible glue which can hold a dislocated multicultural project team together. It was established that effective communication is the key to managing expectations, misconceptions, and misgivings on multicultural project teams. As confirmed, good communication strategies are primary in establishing, cultivating, and maintaining strong working relationships on heavy construction engineering projects.

Most participants agreed that trust is a fragile, intangible, and generally difficult to quantify but it is essential to the success of multicultural teamwork. It emerged trust can be cultivated where there are good interpersonal skills and mutual respect between project leaders and team members. It has been shown, in order for a multicultural project team to be fully integrated, all team members need to trust and understand each other. It is evident from the findings that all participants favoured collectivism rather than individualism when it comes to carrying out project tasks. Participants in this study highlighted the counter productive effects of individualism within their projects. Although vastly experienced in terms of managing project teams, par-

ticipants agreed that the project manager's role is to balance their decisions in such a way to merge the requirements of all multicultural project teams involved.

The research has established that communication in multicultural teams is a significant factor in the successful completion of heavy construction engineering projects. It is essential for project leaders to ensure that the nature of the interactions do not affect the strength of the relationships between project teams and their ability to transfer knowledge and information required to complete project tasks successfully. As substantiated from the findings, project leaders need to implement a clear and robust procedure of resolving conflicts that might arise. What needs to be well understood is that the effective structure of multicultural teamwork depends on a well inter-connected communication system, between the client, project manager, and the project team.

While, the participants in this study were chosen to provide a representative sample of multicultural project teams, they do reflect the experiences of senior managers who have experienced impacts of cultural complexity on heavy construction engineering projects. In particular, the 20 participants have managed large industrial projects. Nevertheless, addressing cross-cultural communication in heavy construction engineering projects can be viewed as principal enabler for improving the sector in the future. Since it has been confirmed that cross-cultural communication complexity exists within the construction industry, it will be valuable to have further research work focusing on cross cultural collectivism and communication. What this study does highlight is the need for considerably more research into multicultural project teams in construction management. What it did uncover suggests that we need a better understanding of multicultural project teams in construction project management. With the growth in globalisation, construction project managers will need to work on cultural diverse project teams. The good news is that multicultural project teams will bring fresh ideas and new approaches to problem solving. The challenge is that they will also bring understanding and expectations regarding team dynamics.

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