

Cultural Factors Influencing Project Management in ICT Multinational Corporations in Nairobi County

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Abstract- This research sought to investigate cultural factors influencing project management in ICT multinational corporations in Nairobi County. The research adopted a quantitative research approach with a focus on descriptive research design and the sampling framework was determined by Slovin's formula. Stratified sampling technique was applied for sampling the target population with questionnaires being used as principal data collection instruments. Pilot testing was conducted as a measure of evaluating the validity and reliability of the data collection tools. Arithmetic mean and standard deviation were used as primary tools of data analysis and Microsoft Excel as the preferred software for data analysis. The research findings were presented using frequency tables. The study revealed that communication skills influences management of projects. At the same time, staff training and team orientation also influences management of projects. On the contrary, the study revealed that race and tribe had insignificant influence on management of projects. It was concluded that communication and organizational culture influences project management to a significant extent. In contrast, ethnicity and gender were found to have a modest influence on project management in ICT MNCs in Nairobi County. It was recommended that ICT MNCs in Nairobi County should embrace appropriate media of communication and communication skills and at the same time, nurture staff training and team oriented cultures for effective implementation of projects. It was also recommended that the ICT MNCs in Nairobi County should not apply tribe or race as a determinant of allocating project tasks or hiring staff. Further to this, ICT MNCs in Nairobi County should ensure fair gender parity, participation and involvement in leadership when apportioning project tasks as different project members have different skill sets useful in project irrespective of gender.

Index Terms- Project Management, Multinational Corporations, Information Communication Technology

I. INTRODUCTION

Cultural factors influence project management of multinational projects with a likelihood of causing project delays (Baumann, 2013). IBM is one such company that executes multinational projects worldwide. IBM is one of the leading ICT MNC in the world today with its registered offices in the United States. The company has a presence in over 170 countries and a workforce of over 379,000 employees as of 2014 IBM Annual Report (2014). IBM reckons communication skills, media of communication and the level of communication to have an

influence on time and cost of a given project. IBM invests in communication strategies appropriate for given projects since good communication skills and appropriate level of communication facilitate quick decision making which saves time. Appropriate media of communication saves both on time and cost of a project Schwalbe (2013). In addition, IBM defends openness of individuals from high power distance cultures and team oriented organizational cultures for having an influence on project quality and delivery of projects in time (Köster, 2009).

If project timescale is of key significance then realistic time estimates are crucial. Hence project time is an indicator of project management Marks (2012). Project cost is connected to project time and project quality. Further to this, financial resources are managed in the form of costs in project management (Sanghera, 2014). Hence project cost is an indicator of project management (Callahan, Stetz and Brooks, 2011). Media of communication is crucial in keeping track of quality issues and resolution of the same (Dinsmore and Cabanis-Brewin, 2011). Therefore, media of communication is an indicator of project quality and at the same time project quality is an indicator of project management (Pries and Quigley, 2013). Therefore, project time, project cost and project qualities are indicators of project management.

Some researchers perceive ethnicity in its passive form by adopting the earliest approach in which ethnicity is seen as aligned to primitive ties that is, personal relationships based on blood, kinship bonds, religion, race, custom, and language (Njogu, Ngeta and Wanjau 2010). Therefore, stakeholder race and stakeholder language are indicators of ethnicity. Stakeholder tribe is an indicator of ethnicity (Kramer, 2011). Therefore, stakeholder language, stakeholder race and stakeholder tribe are indicators of ethnicity.

Gender equity and participation play a role in project management (Asian Development Bank, 2010). Therefore, gender equity and participation are indicators of gender. According to Brulin and Svensson (2012), gender involvement in leadership is an indicator of gender. Therefore, in this study, gender equity, participation and involvement in leadership have been identified as indicators of gender and as a variable in the study. Therefore, gender equity, gender participation and gender involvement in leadership are indicators of gender.

Despite solid organizational structures; support for team-oriented project teams, staff training and low power distance index, a number of multinational companies taking part in a project in North Africa involving Libya, Korea, United Kingdom and Denmark, estimated the project's profit would be 2 million US dollars with a project duration of 2 years. However, the project was completed after 6 years with an estimated loss of 1 million US dollars (Ochieng, 2008).

A research carried out in Ghana showed that there is fair gender equity and gender involvement in leadership where 55.8% represented males in key project management positions compared to 44.2% of females. However, irrespective of this, the study cited a public project that had an escalated project cost by almost 100% with a documented project schedule slip of 2 years and 6 months (Amponsah, 2012). At the same time, Mungeria (2012) conducted a research on professional teamwork in Kenya, in regards to team-oriented organizational culture. Mungeria observed that 47.9% of projects completed by respondents had a budget estimate of Ksh 200 to 499 Million, while 33.3% of project budgets were of Ksh 500 to 999 Million. However, 18.8% of projects where above Ksh 999 Million and few or none of the respondents commented about such projects. Inferences can be made that the marginalized projects exceeded budget and time.

While conducting a study on framework for managing multi-cultural project teams, Ochieng (2008) observes that 95.5% of respondents were of the opinion that ethnic integration of diverse project team members in respect to language, race and tribe is of importance, whereas 67% recognized organizational culture as an important cultural factor. However, despite this, Ochieng observed that projects still experience costs and schedule overruns, as well as in some cases, deteriorated quality. Therefore, the problem this study seek to investigate was how cultural factors, with respect to communication, organizational culture, ethnicity and gender as independent variables, influence project management in ICT MNCs in Nairobi County.

The study sought to assess the influence of communication on project management in Information Communication Technology Multinational Corporations in Nairobi County, to assess the influence of organizational culture on project management in Information Communication Technology Multinational Corporations in Nairobi County, to assess the influence of ethnicity on project management in Information Communication Technology Multinational Corporations in Nairobi County and to assess the influence of gender in project management in Information Communication Technology Multinational Corporations in Nairobi County.

II. LITERATURE REVIEW

While conducting a research, Ochieng and Price (2010) findings on achieving multicultural team goals observed that 84% of participants agreed communication is crucial for project quality. At the same time, Jiang and Pretorius (2011) observed that communication is of importance in project management of multinational projects and also at the same time observed that cultural differences can have an influence on the outcome of an international project.

While studying various challenges faced by cross-cultural teams, Oertig and Buergi (2006) observed that communication skills played a role in the project management of a multinational project. In addition, an observation was made to the effect that the media of communication was of importance as the respondents indicated that it was important to reach an agreement on the media of communication as it would save project time. The study used qualitative methods to understand how project

managers and leaders perceived challenges of managing cross cultural teams and the methods used to deal with such challenges.

In view of influences of cultural factors on project management, Baumann (2013) further observed that level of communication can have an impact on the project time due to influence of other cultural factors such as power distance where a significant number of participants to the study admitted having challenges relating with superior. In consideration, power distance also influenced the media of communication of the interviewees as it showed that junior staff members avoided contact with superiors by writing the superiors handwritten notes and never getting a response from the superiors. This translated to prolonging project time due to miscommunications and delayed responses. The empirical study used a qualitative research approach in a multiple case study design analyzing 6 projects.

When conducting a research on impact of stakeholder communication on project outcome in Pakistan, Naqvi, Aziz and Kashif-ur-Rehman (2011) findings revealed that a combination of media of communication and level of communication contributes to 34.3% of potential project failure whereas 65.7% remain successful. Further to the study, it was evident that lack of prioritizing the aforementioned communication factors lead to 28.6% of ICT projects to suffer from scope creep, time and cost overrun and customer dissatisfaction; compromise in project quality. The study adopted stratified sampling of 70 heterogeneous IT projects from 24 different software houses in Pakistan.

In a research on introduction of software project management techniques to ICT industry, Bolger (2007) concluded that staff training is of importance since the lack of it leads to staff having inadequate levels project management knowledge and as a consequence escalated project costs. The researcher applied qualitative research methods. At the same time, while conducting a study in Nigeria, Kejuo (2012) observed that appropriate staff training aids in reducing time that would have being spent studying how to work in an efficient manner with savings on project time as a result.

While conducting a research on leadership in project management, Xiong (2008) found that out of 69 interviewees 29% (28) supported a team oriented approach towards making decisions whereas 41 of the interviewees where of the contrary opinion citing that taking everyone's opinion in decision making would escalate to prolonged project time and as a result project costs overruns. The researcher applied descriptive research methods with a total number of responses of 69 out of 200. Response rate stood at 34.5%. At the same time, O'Sheedy (2012) while carrying out a research in New South Wales in Australia found out that most of the respondents didn't value an organizational culture of teamwork. The reason behind this was that people didn't care about anything else other than jobs allocated. However, some respondents realized the importance of team collaboration with adequate information exchange since it saved project time and costs.

In a research on applicability of western management in the Middle East, Al-shabbani (2015) observed that high power distance occasioned in the Middle East as part of the culture has the potential of prolonging the project time due to tedious and

bureaucratic decision making processes. Further to this, Sheikh (2012) observed that in a high power distance culture like Pakistan has a positive and linear relationship with project success where project success is shown as performance in terms of project time, cost and quality. The research used Quantative methods to test the research model and received 400 responses from targeted respondents.

During a research on investigation of ethnic diversity and productivity in software development team in New Zealand, Congalton (2014) observed that stakeholder race had an influence on the project quality as gathered from a one of the respondent. At the same time the researcher observed that stakeholder language also has an influence on project quality and time. In addition to this, Congalton observed that stakeholder race also has an influence on the project time and cost. In a project of interest, a project manager observed that there was a delay of 3 months and the project incurred additional and unplanned costs due to misconception of requirements by a multi-ethnic project team. The researcher employed a mixed research methods; quantitative and qualitative on 19 software projects.

Another researcher, Dugas (2013) while carrying out a research on management of global virtual project teams between Europe and East Asia found that stakeholder race and language had an influence on project time. On conducting further investigations, the researcher found out from key informants that language was a challenge as most project team members had a problem communicating with fellow colleagues in other countries as English was second language after the member's mother tongue. The informants indicated that this was time consuming as some of the team members misunderstood requirements while other required translations or more time with fellow colleagues from same ethnic group/race, who would explain to the team members what is required even possibly using mother tongue.

While conducting a research on impact of cultural differences on construction project performance in South Africa, Maphosa (2015) sort to assess the influence of stakeholder race on project schedule (time), cost and quality. The researcher applied quantitative research method by administering questionnaires 310 participants where 109 were received with a response rate of 35.16%. The researcher found that 41.3% of respondents felt that people from other races viewed project quality different, whereas 14.4% were neutral and 44.3% disagreed. On asking the respondents whether people from other races view project cost different, 35% agreed while 17.5% were neutral, 47.6% disagreed. On asking the respondents if people from other races view project time different, 50.5% agreed whereas 17.5% remained neutral and 32.1% of the respondents disagreed. This empirical data proves that stakeholder ethnicity plays a role in project management.

In a research on use of project management methods in Ghana, Tetteh (2014) found that stakeholder language has an influence on project cost and time. At the same time, stakeholder race also had an influence on project cost and time as a secondary cause agent. After conducting an empirical analysis of the participants to get to the basis of the observation, the researcher found out that some participants had challenges in training since the participants couldn't understand the trainer's training language well who happened to be foreigners. This as a

result caused delays in the project completion and initial project budget as it took more time to re-train the project end users and consequent escalation of project costs. The study applied qualitative research method with a bias towards descriptive research design.

In a study on an Exploratory Study of Gender in Project Management: Interrelationships with Role, Location, Technology, and Project Cost from a Global Perspective, Henderson and Stackman (2010) observed that gender involvement in leadership in a particular project was influenced by the project cost. 35.9% of women were assigned projects which were \$1 million or less as project managers, whereas 77% of men were assigned projects worth over \$1 million as project managers. The researchers used quantitative research methods by emailing questionnaires to 4,998 subscribers. There were 657 responses and 563 were found useable.

In contribution to influence of gender participation in project management, Legault (2005) while conducting a research on differential gender effects of project management and management by project on skilled professionals observed that 40% of women work for more than 40 hours a week against 58% of men, whereas 20% of men work for over 50 hours per week, only 6.6% of women agree to work over 50 hours per week. The researcher noted that working overtime presented opportunities to finish projects on time. On further investigations, the researcher observed that women have a short paid week as compared to men working fewer hours on the week as 42% of women stuck to the working hours stipulated in the contract compared to 18.6% of men. The researcher applied quantitative research method approach; conducted a survey on a few target groups and interviewed the participants.

While conducting a research on the influence of gender equity and participation in donor based projects, Coe (2008) observed that 6 out of 8 project managers from donor agencies that support gender equity agreed the projects received adequate support in regards to project funding and project time frames from the donors as long as the project managers observed gender equity and participation in any given project. This enabled the project managers execute projects within intended budgets and within project schedules. On further investigations, some of the interviewees indicated that gender equity or participation in a project was not enforced and no guidance or purpose was offered by senior management of the project. The researcher applied qualitative research method by using a case study approach.

While progressing with a research on impact of cultural differences on construction project performance in South Africa, Maphosa (2015) observed from the respondents' responses that gender equity didn't affect project time, cost and quality. However, in a quick rejoinder, the researcher concluded that the reason was because 88% of the respondents were male hence the answers were from a male's perspective.

III. RESEARCH DESIGN AND METHODOLOGY

The study adopted a quantitative research approach with a focus on descriptive research design. In contribution to the definition of quantitative research, Muijs (2010) cites that quantitative research is explaining phenomena by collecting numerical data that are examined using mathematic-based

methods; in particular statistics. Quantitative research methods in most cases seek to produce accurate and generalizable findings. Studies applying quantitative methods in general attempt to develop all or most of the research routines in advance and then try to follow, in a precise manner, those routines with maximum objectivity as data collection takes place (Rubin and Babbie, 2010).

Descriptive research defines a condition. In general, the condition is described by providing measures of an event or activity. Descriptive research often achieves this by means of descriptive statistics. Distinctive descriptive statistics consist of frequency counts, that are how many, measures of central tendency like the median, mode, or mean, or a measure of scattering that is variation such as the standard deviation. Statistical tests are used to evaluate the connections by use of descriptive statistics (Hair, 2011).

A target population can be defined as a set of elements a researcher desires to apply the findings of the study (Daniel, 2012). At the same time, Whitley and Kite (2012) define target population as a focal group of people the outcomes of a research will apply. The target population will consist of 140 ICT professionals from different targeted 10 ICT MNCs in Nairobi County. The respondents were pulled together from various ICT specializations: Project Management, Customer Support, Systems Integration, Business Development and Software Development.

A sampling frame is a representation of the population of interest, suitable and ample to be used as a source for picking a sample. This is almost at all times, a matter of compromise and necessitates apprehension many sampling frames are as usual imperfect representations of the corresponding populations (Wallace and Fleet, 2012).

An ideal research would have a sample large enough to represent the population so induction may occur, yet small enough to save money and time in addition to reducing the complexity of data analysis (Cottrell and McKenzie, 2011). In order to obtain the appropriate sample size, Slovin's formula was applied. Out of the 140 target population, a total of 104 questionnaires were administered to participants whom were selected in a random manner from the various departments of the ICT MNCs.

The study used stratified sampling technique with departments in the various ICT MNCs as the stratification variable. Stratified sampling is an equal opportunity of selection method, which means that every candidate in the population has an equal probability of being admitted in the sample (Johnson and Christensen, 2010). This approach was meant to ensure that each department of interest will be represented in the study. Stratified sample formula was applied to determine the number of individuals to be sampled per department and is represented as follows:

$$n_h = (N_h / N) * n$$

Where:

- n_h = sample size for stratum h
- N_h = population size for stratum h
- N = total population size, and
- n = total sample size

With the determination that the total sample size is 104, Table 3.2 represents the dispersion of the departments under study from the various ICT MNCs.

Departments	Target Population (N)	Sample Size (n)
Project management	108	80
Customer support	6	5
Systems integration	7	5
Business development	9	7
Software development	10	7
Totals	140	104

Table 3.1: Sampling Frame

Semi-structured questionnaires were used as principal data collection instruments to collect primary data. The questionnaires were self-administered. A questionnaire is a set of formatted questions that is drawn up to meet the objectives of the survey. The questionnaire provides an opportunity for the researcher to obtain personal ideas from a respondent (Johnston, O'Malley, Bachman, and Schulenberg 2010). The researcher used closed-ended questions primarily and opened-ended questions to elicit more information from the participants.

Pilot testing is a session or two before the real test which assists in fine tuning usability studies that lead to reliable results. It offers a chance to confirm the wording of the tasks, comprehending the time required for the session, and if all goes well may even supply surplus data point for study (Schade, 2015). A pilot test offers testing of all characteristics of a questionnaire including wording, order, content, layout and form. The sample respondents chosen for the pilot test need to be similar to those who will be included in the real survey in regards to the respondents' background characteristics, familiarity with the topic and attitudes and behaviors of interest (Shukla, 2008).

In contribution to the required pilot testing sample size, Melnyk and Morrison-Beedy (2012), propose pilot trials should have 40 to 50 participants. At the same time, Shukla (2008) cites that many researchers recommend a pilot test sample size of 15 to 30 participants while Hertzog (2008) proposes 10 to 40 participants. For this study, the researcher at random selected 10 participants for the pilot test from the target population which gave the researcher a chance to test hypotheses.

The questionnaires were pilot tested on 10 participants drawn from different departments of ICT MNCs so as to establish the validity. Out of 10 participants, 8 responses were received and the data aggregated to the data received during data collection process and used in data analysis.

Validity refers to the degree to which results can be, in an accurate manner, interpreted and generalized to other populations (Malovi, 2014). This study applied the Construct Validity method. Construct Validity is the extent to which scores from a test measure a theoretical construct and is usually proven by linking the test results to some behavior (Thomas, Nelson and Silverman, 2011). The validity of the study was quantified by randomization in which the researcher asked random questions from the pilot study questionnaire and also used observation to

appreciate whether the results conformed to the study. In addition, the researcher used cognitive skills in making judgments on the validity of data collected.

This study applied the Test-retest Reliability method to measure the study reliability. Test-retest Reliability is measured by comparing the scores from a set of individuals who take the test on two occasions. The correlation coefficient measures out the level of agreement between two sets of scores. The more alike the results are, the higher the correlation coefficient which ranges from +1 to -1. A correlation of +1 shows perfect agreement, while -1 indicates complete disagreement (Kline, 2013). In regards to the appropriate tool for testing Test-Retest Reliability, Vaz, Falkmer, Passmore, Parsons, and Andreou (2013) are of the view that Test-Retest Reliability can be approximated using absolute and relative indices. Relative reliability estimations concern consistency or association of position of individuals in a group, relative to others. Pearson's Product Moment Correlation Co-efficient; also referred to as the Pearson's (r) and the Intra-class Correlation coefficient (ICC) are the most common relative reliability indices. This study applied Pearson's Correlation Co-efficient as the testing tool for reliability and a decision level of greater or equal to 0.7 coefficient was accepted for this study.

Basically, there are two most common procedures which are used for data collection. These are primary and secondary data collection procedures. Primary data collection involves use of questionnaires, focus group discussions, direct observations, interviews whereas for secondary data collection involves gathering data from documents, reports, journals, books of other authors or scholars who have studied a particular field or have relevant literature of a given field of study. The study used both primary and secondary data collection procedures. Primary data collection was used in the self-administered questionnaire, whereas the researcher also studied other relevant documents, journals and books relevant to the study.

This section details how collected data during the study was prepared for analysis and presentation in order to make statistical sense to prove that the hypotheses are true or false. Data analysis can be defined as a process used to remodel, transform, and revise certain information with a view to achieve a certain conclusion for a given problem or situation (Johnson, 2011). In addition to this, Johnson further observes that data analysis aids in preventing human bias in research conclusions with the aid of proper statistical treatment. This study applied descriptive statistics to describe collected data. Descriptive statistics presents methods for describing sets of measurements (Mendenhall, Beaver and Beaver, 2012). According to Lund (2013), there are two types of statistics used to describe data; measures of central tendency which comprise of median, mode and arithmetic mean, whereas measures of spread comprises of quartile, range, variance, absolute deviation and standard deviation.

Therefore, in this study, arithmetic mean and standard deviation were used as primary tools of data analysis for the tools simplicity and ease to understand (Hinton, 2014). The two preferred statistical data analysis software applications in most studies are Microsoft Excel and SPSS. However, the researcher applied Microsoft Excel as the primary tool for analyzing data gathered during data collection from the study respondents for its ease of use and ease of accessing tutorial materials. Descriptive

statistics comprises of methods for organizing, displaying, and describing data by using graphs, tables, and summary measures (Mann and Lacke, 2010). The research findings were presented using frequency tables.

IV. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Response Rate

The researcher distributed a total of 104 questionnaires to the staff of different ICTMNC and 85 questionnaires were filled and returned representing a response rate of 81.73%.

Table 4.1: Respondents' Department

Departments	No. of questionnaires distributed	No. of questionnaires returned	Percentage
Project management	80	70	82.35
Customer support	5	0	0
Systems integration	5	5	5.88
Business development	7	4	4.71
Software development	7	6	7.06
Totals	104	85	100.00

From the table above, 70 respondents was received from project management representing 82.35%, followed by 6 from software development representing 7.06%, then 5 from systems integration representing 5.88% and finally 4 from business development representing 4.71%. Five (5) questionnaires were distributed to customer service department of which no response was received. According to Babbie and Rubin (2011), a response rate of 50% is adequate for analysis and reporting. A response rate of 60% is good and a response rate of 70% is very good. Therefore, with a response rate of 81.73%, which surpasses the threshold considered for a good response rate, validates the purpose of the research.

4.2 Profile of Respondents

The following section reviews profile of respondents with respect to age, gender, marital status and level of education.

4.2.1 Age

The researcher was interested in establishing whether the respondents were normally distributed in respect to their age. Table 4.2 represents the age range of the respondents' who participated in this research.

Table 4.2: Respondents' Age

Age range	Frequency	Percentage
Below 20 years	0	0
20 – 30 years	10	11.76
31 – 40 years	66	77.65
41 – 50 years	9	10.59
Above 50 years	0	0
Total	85	100.00

The respondents' age ranged from 20 years to 50 years of which 66 respondents were between the age of 31 years and 40 years representing 77.65%, followed by 10 between the age of 20 years and 30 years representing 11.76% and 9 between the age of 41 years and 50 years representing 10.59% of the responses.

4.2.2 Gender

The researcher wanted to ensure there was fair gender parity and no gender bias in respondents who participated in the study. Table 4.3 represents the gender of the respondents who participated in this study.

Table 4.3: Respondents' Gender

Gender	Frequency	Percentage
Male	47	55.29
Female	38	44.71
Total	85	100.00

The respondents included both male and female with 47 responses being received from male representing 55.29% and 38 responses from female representing 44.71%.

4.2.3 Highest level of education

In order to ascertain the validity of the information that was being provided by an interviewee, a critical assessment of the educational background was of importance to the study. This helped to ascertain the ability of respondents to respond to the items in the research tool. Table 4.4 represents the highest level of education of respondents who participated in the study.

Table 4.4: Highest Level of Education of the Respondents

Highest level of education	Frequency	Percentage
Diploma	0	0
Bachelor's Degree	83	97.65
Master's Degree	2	2.35
Others	0	0
Total	85	100.00

The academic backgrounds of the respondents were categorized into Diploma, Bachelor's Degree, Master's Degree and others of which 83 responses were from Bachelor's Degree respondents representing 97.65% and 2 from Master's Degree respondents representing 2.35%.

4.4 Project Management in ICT Multinational Corporations in Nairobi County

On further interviewing the respondents on project management with respect to project time, cost and quality, some of the respondents indicated that to a significant extent, delays in project schedule were encountered. In consequence, allocated project budget were overrun as indicated by some of the respondents. In regards to project quality, respondents indicated that to a significant extent, clients reported issues in projects with respect to lack of meeting project requirements.

4.5 Project Management and Communication

Respondents were interviewed on cultural factors influencing project management with respect to communication as a cultural factor. The independent variables examined were media of communication, level of communication and communication skills as represented in Table 4.5.

Table 4.5: Project Management and Communication

Project Management and Communication	Mean	Standard deviation
Media of communication influences management of projects time	3.43	0.98
Media of communication influences management of projects cost	3.71	0.95
Media of communication influences management of projects quality	3.14	1.07
Level of communication influences management of projects time	4.00	0.58
Level of communication influences management of projects cost	3.86	0.38
Level of communication influences management of projects quality	3.71	0.95
Communication skills influences management of projects time	4.00	0.58
Communication skills influences management of projects cost	4.00	0.58
Communication skills influences management of projects quality	4.00	0.58

Communication skills influences management of projects cost	Mean	Standard Deviation
Communication skills influences management of projects quality	3.76	0.74

Looking at the extent to which communication influences project management in ICT MNC, the results indicated that media of communication influences project time, cost and quality with a mean of 3.43, 3.71 and 3.14 in that order, and with a standard deviation of 0.98, 0.95 and 1.07 in that order.

Level of communication influences project time, cost and quality with a mean of 4.00, 3.86 and 3.71 in that order, and with a standard deviation of 0.58, 0.38 and 0.95 in that order. Communication skills influence project time, cost and quality with a mean of 4.0 and a standard deviation of 0.58 for each dependent variable.

Therefore, with a composite mean of 3.76, respondents' indicated that communication influences project management where media of communication, communication skills and level of communication were the independent variables against project cost, project time and project quality which were the dependent variables.

4.6 Project Management and Organizational Culture

Respondents were interviewed on cultural factors influencing project management with respect to organizational culture as a cultural factor. The independent variables examined where staff training, team-oriented and power distance as represented in Table 4.6.

Table 4.6: Project Management and Organizational Culture

Project Management and Organizational Culture	Mean	Standard deviation
Staff training influences management of projects time	4.71	0.49
Staff training influences management of projects cost	4.43	0.53
Staff training influences management of projects quality	4.71	0.49
Team-orientation influences management of projects time	4.29	0.49
Team-orientation influences management of projects cost	4.00	0.58
Team-orientation influences management of projects quality	4.00	0.58
Power distance influences management of projects time	3.29	0.76
Power distance influences management of projects cost	3.29	0.76
Power distance influences management of projects quality	3.14	0.90
Composite Mean and Standard Deviation	3.98	0.62

Respondents were asked to indicate the extent to which organizational culture influences project management in ICT

MNC. The respondents indicated that staff training, to a significant extent, influences project time, cost and quality with a mean of 4.71, 4.43 and 4.71 in that order, and with a standard deviation of 0.49, 0.53 and 0.49 in that order.

Respondents further indicated that, to a significant extent, team-orientation influences project time, cost and quality. With a mean of 4.29, 4.00 and 4.00 in that order, and with a standard deviation of 0.49, 0.58 and 0.58 in that order. Power distance influences project time, cost and quality with a mean of 3.29, 3.29 and 3.14 in that order, and with a standard deviation of 0.76, 0.76 and 0.90 in that order.

Therefore, with a composite mean of 3.98, respondents indicated that organizational culture influences project management with respect to power distance, team orientation and staff training as independent variables against project cost, project time and project quality as the dependent variables.

4.7 Project Management and Ethnicity

Respondents were interviewed on cultural factors influencing project management with respect to ethnicity as a cultural factor. The independent variables examined where race, tribe and language as represented in Table 4.7.

Table 4.7: Project Management and Ethnicity

Project Management and Ethnicity	Mean	Standard deviation
Race influences management of projects time	2.29	1.11
Race influences management of projects cost	2.29	1.11
Race influences management of projects quality	2.29	1.25
Tribe influences management of projects time	1.57	0.53
Tribe influences management of projects cost	1.57	0.53
Tribe influences management of projects quality	1.57	0.53
Language influences management of projects time	3.14	1.35
Language influences management of projects cost	3.00	1.29
Language influences management of projects quality	3.14	1.35
Composite Mean and Standard Deviation	2.32	1.01

Findings on the extent to which ethnicity influences project management in ICT MNC showed that race to an insignificant extent, influences project time, cost and quality with a mean of 2.29. Influence of tribe on project time, cost and quality had the least influence with a mean of 1.57 and standard deviation of 0.53 for each dependent variable. Language, to a moderate extent, influences project time, cost and quality with a mean of 3.14, 3.00 and 3.14 in that order, with a standard deviation of 1.35, 1.29 and 1.35 in that order.

Therefore, with a composite mean of 2.32, respondents indicated that ethnicity doesn't influence project management

with race, tribe and language as independent variables against project cost, project time and project quality as the dependent variables.

4.8 Project Management and Gender

Respondents were interviewed on cultural factors influencing project management with respect to gender as a cultural factor. The independent variables examined where gender in leadership, gender equality and gender participation as represented in Table 4.8.

Table 4.8: Project Management and Gender

Project Management and Gender	Mean	Standard deviation
Gender in leadership influences management of projects time	3.00	0.82
Gender in leadership influences management of projects cost	2.71	0.76
Gender in leadership influences management of projects quality	3.14	0.90
Gender equality influences management of projects time	3.00	1.15
Gender equality influences management of projects cost	3.00	1.15
Gender equality influences management of projects quality	3.14	1.21
Gender participation influences management of projects time	3.14	1.07
Gender participation influences management of projects cost	3.14	1.07
Gender participation influences management of projects quality	3.29	1.11

Table 5.1: Research Objectives

Research Objectives	Arithmetic Mean (\bar{x})	Standard Deviation (δ)
1. To assess the influence of communication on project management in Information Communication Technology Multinational Corporations in Nairobi County	3.76	0.74
2. To assess the influence of organizational culture on project management in Information Communication Technology Multinational Corporations in Nairobi County	3.98	0.62
3. To assess the influence of ethnicity on project management in Information Communication Technology Multinational Corporations in Nairobi County	2.32	1.01
4. To assess the influence of gender in project management in Information Communication Technology Multinational Corporations in Nairobi County	3.06	1.03

Influence of communication on project management in Information Communication Technology Multinational

management of projects quality		
Composite Mean and Standard Deviation	3.06	1.03

In regards to the extent to which gender influences project management in ICT MNC, gender in leadership has the least influence on project time, cost and quality with a mean of 3.00, 2.71 and 3.14 in that order, with a standard deviation of 0.82, 0.76 and 0.90 in that order. Gender equality influences project time, cost and quality with a mean of 3.00, 3.00 and 3.14 in that order, with a standard deviation of 1.15, 1.15 and 1.21 in that order. Gender participation influences project time, cost and quality to a moderate extent with mean of 3.14, 3.14 and 3.29 in that order, with a standard deviation of 1.07, 1.07 and 1.11 in that order.

Therefore, respondents indicated that gender has a moderate influence on project management with gender in leadership, gender equality and gender participation as the independent variables and project cost, project time and project quality as dependent variables.

V. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

A summary of key findings deduced from the data analysis of this study are summarized in Table 5.1 with respect to the research objectives and the composite mean and standard deviation derived during data analysis:

Corporations in Nairobi County had a composite mean of 3.76 and a composite standard deviation of 0.74. Influence of

organizational culture on project management in Information Communication Technology Multinational Corporations in Nairobi County had a composite mean of 3.98 and a composite standard deviation of 0.62. Influence of ethnicity on project management in Information Communication Technology Multinational Corporations in Nairobi County had a composite mean of 2.32 and a composite standard deviation of 1.01 whereas the influence of gender in project management in Information Communication Technology Multinational Corporations in Nairobi County had a composite mean of 3.06 and a composite standard deviation of 1.03.

5.2 Conclusion

In alignment with the objectives of this study, the following conclusions were arrived at after data collection and analysis from respondents of the study.

The first objective of this study was to assess the influence of communication on project management in Information Communication Technology Multinational Corporations in Nairobi County. With a composite mean of 3.76; it was concluded that communication influences project management in ICT MNCs in Nairobi County.

The second objective of this study was to assess the influence of organizational culture on project management in Information Communication Technology Multinational Corporations in Nairobi County. With a composite mean of 3.98, it was concluded that organizational culture influences project management in ICT MNCs in Nairobi County.

The third objective of this study was to assess the influence of ethnicity on project management in Information Communication Technology Multinational Corporations in Nairobi County. With a composite mean of 2.32, it was concluded that ethnicity doesn't, to a significant extent, influence project management in ICT MNCs in Nairobi County.

The fourth objective of this study was to assess the influence of gender in project management in ICT MNCs in Nairobi County. With a composite mean of 3.06, it was concluded that gender to a modest extent, influences project management in ICT MNCs in Nairobi County.

5.3 Recommendations

Recommendations for this study are based on the research objectives, findings and conclusion. Based on the research objectives, the following are the recommendations:

With a mean of 4.0, respondents agreed that type of communication skills influence project cost, time and quality. It is therefore recommended that ICT MNCs in Nairobi County should invest in improving presentation and writing skills of staff involved in various project aspects in order to deliver projects within schedule, budget and meeting project requirements. In addition, the ICT MNCs should adopt both verbal and non-verbal communication skills where applicable in order to enhance ease of communication between stakeholders involved in projects.

With a mean of 4.71, respondents agreed that staff training influence project time and quality. It is therefore recommended that ICT MNCs in Nairobi County should carry out frequent training workshops, refresher short term courses and enroll staff

to professional certification courses in order to improve the staff professional skills and enrich staff competency in running and executing projects tasks. Further to this, ICT MNCs should nurture internal training sessions for knowledge sharing among departments in order for project teams to gain across the board skills. Nevertheless, with a competent project team, projects can be delivered within schedule, budget and quality expectations of the client.

With a mean of 1.57, respondents agreed that tribe doesn't influence project cost, time and quality. It is therefore recommended that ICT MNCs in Nairobi County should not apply tribe as a determining factor when hiring or assigning a project team members. Further to this, with a mean of 2.29, respondents agreed that race doesn't influence project cost, time and quality. It is therefore recommended that stakeholder's race shouldn't influence selection of team members for a given project. In contrast, with a mean of 3.14, respondents agreed that language influences project time and quality to a moderate extent. It is therefore recommended that stakeholders' language should be considered during project team formation in order to ease communication and mitigate communication barriers between stakeholders involved in a project.

With a mean of 3.14, respondents agreed that gender participation influences project cost and time to a moderate extent. It is therefore recommended that ICT MNCs in Nairobi County should ensure unbiased and fair gender parity in apportioning of project tasks to project team members. In contrast, with a mean of 2.71, respondents agreed that gender in leadership doesn't influence project cost. It is therefore recommended that ICT MNCs in Nairobi County shouldn't discriminate leadership positions in projects based on gender.

5.4 Areas for further research

The scope of this study was limited to ICT multinational corporations in Nairobi County. It is therefore recommended that a similar study be conducted on other multinational corporations in other sectors operating in other parts of Kenya for comparison and empirical review.

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