

The African Journal of Information Systems

Volume 7 | Issue 4

Article 2

September 2015

Managing challenges of multicultural Information Systems project teams in South Africa

Udo Richard Averweg

eThekweni Municipality and University of KwaZulu-Natal, udo.averweg@gmail.com

Tom Addison

University of the Witwatersrand (retired), tomaddison9@gmail.com

Follow this and additional works at: <https://digitalcommons.kennesaw.edu/ajis>

 Part of the [Management Information Systems Commons](#)

Recommended Citation

Averweg, Udo Richard and Addison, Tom (2015) "Managing challenges of multicultural Information Systems project teams in South Africa," *The African Journal of Information Systems*: Vol. 7 : Iss. 4 , Article 2.

Available at: <https://digitalcommons.kennesaw.edu/ajis/vol7/iss4/2>

This Article is brought to you for free and open access by DigitalCommons@Kennesaw State University. It has been accepted for inclusion in The African Journal of Information Systems by an authorized editor of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.



Managing challenges of multicultural Information Systems project teams in South Africa

Cover Page Footnote

An earlier version of this research was presented at the 7th International Development Informatics Association (IDIA) Conference in Bangkok, Thailand, 1-3 November 2013.



Managing Challenges of Multicultural Information Systems Project Teams in South Africa

Research Paper

Volume 7, Issue 4, October 2015, ISSN 1936-0282

Udo Richard AVERWEG

eThekweni Municipality and University of
KwaZulu-Natal
udo.averweg@durban.gov.za

Tom ADDISON

University of Witwatersrand (retired)
tomaddison9@gmail.com

(Received November 2014, accepted April 2015)

ABSTRACT

Information Systems (IS) project teams in South Africa need to be led by individuals whose skills include managing cultural diversity. A three phase Delphi study was used to collect and rank the methods used to manage culturally diverse IS project teams in the Johannesburg area of South Africa. The ‘top’ fifteen methods were selected and are presented in the report. The leading method found was to appoint project managers or team leaders who are aware of diversity issues, followed by the placing of increased emphasis on goals, objectives, boundaries and tasks. The paper’s principal contribution is that the study is in an African and IS context; recommendations are made towards future research directions on this topic. In addition, the authors introduce, for the first time, a contribution in the form of a ‘tie-breaking’ method to the Delphi technique theory.

Keywords

Cultural diversity, Information Systems Project Teams, Multicultural.

INTRODUCTION

The effective use of multicultural project teams can provide a source of experience to improve the likelihood of project success and thereby enhance the achievement of organisational goals. However, cultural differences, associated diversity and related conflicts can mitigate against the successful completion of projects in the multicultural society found in South Africa. A key aspect about South Africa is its heterogeneity in cultures (Mnkandla, 2014).

A project is defined as “a temporary group activity designed to produce a unique product, service, or result” (Project Management Institute, 2014). Cultural diversity in Information Systems (IS) project teams is a reality that is shaped by the transformation of South African society. IS team composition is

showing a steady trend away from groups which were historically predominantly racially white, to teams of a mixed culture, matching the university graduation rate of people in their early twenties from tertiary institutions (Addison, 2005). Although societal transformation is taking place in South Africa (boosted largely by broad-based black economic empowerment initiatives) management of multicultural teams in organisations still consists of somewhat older predominantly white staff members. Organizations in South Africa that developed prior to the advent of democracy in 1994, modelled their businesses on those in the United Kingdom and in the United States of America, and the style of management was usually of a 'Western' nature. This still prevails to some extent in several medium-sized and larger organisations in South Africa. Nowadays there is growing diversity in organisations' workforces in South Africa.

Given the changing landscape of the South African society landscape post-1994, there is evidence of significant racial transformation within organizations in which mixed culture teams have emerged. Multicultural projects are becoming the norm (Anbari, Khilkhanova, Romanova and Umpleby, 2003). Organizations and project teams are becoming more mature in managing cultural differences. In organizations, employees now need to be able to work in teams which have members from various backgrounds (Tung cited in Granrose and Oskamp, 1997). Such multicultural teams have been set up to harvest gains and achieve goals for organizations. Multicultural teams need to be effectively managed by project managers so that project success and organizational goals can be achieved. Youker (2004) argues that to be effective project managers in an environment "we must know what the values, beliefs and norms are in that culture". However, cultural differences can create substantial obstacles to effective teamwork (Brett, Behfar and Kern, 2006). Should appropriate methods not be used to effectively manage a project in such multicultural teams, this may cause the project life cycle to be at potential risk.

According to Anbari et al. (2003), cultural differences in team members can interfere with successful project completion. These researchers indicate that in order to "achieve project goals and avoid potential risks, project managers should be culturally sensitive" in organizations. In medium-sized and larger commercial organizations in South Africa many work teams and groups are found culturally diverse. Culture is broadly defined "as characteristic ways of thinking, feeling and behaving shared among members of an identifiable group" (Gibson and Gibbs, 2006). The focus of this research paper is on multicultural IS project teams in organizations. We take a prescriptive research perspective – one that focuses on the 'how to' of managing multicultural IS project teams in organizations in South Africa.

Zander (1982) advises that there are various techniques and methods managers can use to strengthen the desire of the team's members for the team to succeed. Therefore IS project managers need appropriate methods to ensure that their IS project teams avoid potential risks of team work failure and achieve project success. Management techniques and methods that can be applied to an IS project team fall into both proactive and reactive categories. Reactive categories will be event-driven and all events will require interpretation of prior action (Smith, Peterson and Schwartz, 2002). Furthermore some methods may be IS project manager-initiated and others organization-initiated (e.g. organizational policies and staff training courses).

Traditional projects, such as IS projects, may be affected by personality conflicts; cultural differences among (IS) project team members may create additional misunderstanding throughout the project's life cycle (Anbari et al., 2003).

The overall objective of this research is to espouse greater interest in the investigation of the project management methods for managing multicultural IS project teams and the issues that professional and

scholarly project management communities in South Africa need to focus on in the foreseeable future. The specific objectives of this research are therefore twofold:

1. to identify methods used in organisations in South Africa for managing multicultural IS project teams; and
2. from these results of methods identified, to provide a future research landscape for managing multicultural IS project teams.

LITERATURE REVIEW OF IS PROJECT TEAMS

The literature suggests a strong correlation between IS project performance and the performance of an IS project team. An IS project team is usually composed of people who work together or have mutual goals. The people composing such IS teams often have different genders, races, religions, nationalities, ages, and departmental affiliations: this leads to cultural diversity in such teams. This cultural diversity requires effective management by the IS project team manager so that the project team's goals are achieved and project success is attained. IS project team members should be involved in the performance of common activities and individually contribute to the cohesion of the IS project team (Katzenbach and Smith, 1993). Cohesion is rooted in the feelings IS team members have for one another as well as a common goal – becoming 'We' instead of 'Me'.

Within IS project teams, essentially no homogenous groups exist as some other form of diversity exists in all teams. This may lead to an IS project team's goals to be perceived differently among the team members. With different cultures in IS project teams, there is thus a need to better understand and effectively manage the associated cultural diversity so that the IS project team's cohesion may achieve successful project completion and organizational goals. The cultural background of team members influences a team's performance and team management (Scarlat, Zarzu and Prodan, 2014).

Burlea (2009) defines an IS project team as a group of people who have complementary skills and share the responsibility of success (or failure) of an IS project. Frame (1995) recognized the importance of the cultural aspects of project management. IS project teams in organizations are often multicultural and such teams require effective project management. The management of cultural differences throughout a project life cycle is an important consideration in organizations; these cultural differences among project members may create additional misunderstandings throughout the project life cycle (Anbari et al., 2003). Members of an IS project team are frequently engaged in complex IS and information technology (IT) processes in an organization. As Borchers (2003) notes, the development of software products 'has always been difficult' and there is a need to study some of the cultural dynamics within an IS project team.

Technology allows one to move beyond one's existing, and sometimes confining cultures. With the advent of new technologies such as the Internet and cellular phones in post-1994 South Africa, traditional cultural diversity is undergoing rapid change not only in South African society but also with organizations and in IS project teams. Shore, Chung-Herrera, Dean, Ehrhart, Jung, Randel and Singh (2009) note that "we still have a very rudimentary understanding of diversity ... in a work setting". There is therefore a need for a better understanding of diversity in organizations in South Africa.

METHODOLOGY

The Delphi technique was selected as the most appropriate technique for undertaking this study, as it has rigorous processes (phases) of discovery, paring and ranking. In addition, it has been successfully used previously in empirical work (Addison, 2003) and in theoretical contributions (Addison and Allan, 2002). It is used extensively in IS research to identify and rank key issues for management attention (Delbecq, Van de Ven and Gustafson, 1975). Various researchers have used the technique to conduct research into IS management issues – see, for example, Brancheau, Janz and Wetherbe (1996) and Keil, Cule, Lyytinen and Schmidt (1998).

The method consists of knowledgeable and expert contributors individually submitting information, opinions or results to a central coordinator (in this case the second author). The coordinator processes the contributions, looking for central and extreme tendencies and associated rationales. The results are then ‘fed back’ to the respondent groups, which are asked to resubmit their views, assisted by the ‘new’ input provided by the coordinator. A significant difference between the Delphi technique and other methods of joint decision-making is that respondents do not communicate directly with one another (Delbecq et al., 1975). There is therefore no risk that participants’ opinions will be suppressed by others by virtue of their individual rank/status or personality. There is also a high degree of anonymity (participants are known only to the coordinator), participants do not have to travel, and within a given time limit, they are able to respond at their most convenient time. The most up-to-date knowledge of experts can be obtained by researchers more efficiently than, for example, referring to scientific and other academic journals, as there is a considerable delay in articles being published in journals, and thus in the accessibility of new knowledge (Delbecq et al., 1975).

The Delphi technique for research in IS

Delbecq et al. (1975) point out that whereas practitioners of the Delphi technique are in general agreement regarding objectives (of Delphi studies), there are variations among practitioners regarding design - for example in the number of iterations.

Schmidt (1997) argues that there are three distinct phases in data collection. The first phase is to discover the issues, the second phase is to determine the most important issues, and the third phase is to rank the issues. The method suggested by Schmidt (1997), was used in surveys conducted by Keil et al. (1998) and by Addison (2003).

In the first phase (discovery phase by gathering the methods), participants are asked to list and describe their views of the six most important issues. Descriptions are necessary because different respondents may use different terminology for the same issue.

In the second phase, a consolidated list (in random order), is issued to the participants, who will be asked to select the top ten percent of the issues from a consolidated list. The coordinator eliminates all issues that were not selected by a simple majority of the respondents. If necessary (ie. if more than twenty items have still not been eliminated), a second round of this phase can be conducted by using a condensed list.

In the third phase, the final list is sent to the respondents. Respondents are asked to rank the items on this list; controlled feedback is given to respondents after each phase.

With respect to determining an optimum number of respondents for survey purposes, Delbecq et al. (1975) suggest that few new ideas are generated within a homogeneous group once the size exceeds thirty well-chosen participants; for decision-making purposes.

This study was conducted over a two-year period in the Johannesburg area, province of Gauteng, South Africa. Gauteng is the economic hub of South Africa and has the largest number of commercial organizations and IS professionals. The 'vast majority' of Institute of Information Technology Practitioners South Africa members are found in the province of Gauteng (Parry, 2015).

SURVEY AND RESULTS

First phase of the Delphi technique (gathering the methods)

A pilot questionnaire was sent by the second author to senior students registered for the first year of the Master in Commerce (Information Systems) degree at the University of the Witwatersrand in Johannesburg, South Africa. The pilot questionnaire contained statements such as 'What techniques/practices do you use (or plan to use) to facilitate the managing of multicultural IS project teams? Please provide a maximum of six such procedures/methods, and a brief rationale for each'. Responses received from the students enabled a refinement of the initial questionnaire.

The revised questionnaire was then sent to respondents selected from an address book containing 208 entries. This consisted of the first researcher's own contacts (including past students on the Masters and Chief Information Officer programmes) and known IS business contacts. Seventy-eight responses were received but of these, twenty respondents stated they were too busy to help. Some replies were unusable vague responses or statements like 'just focussing on goals'. Discarding these unusable responses, forty-one useful replies were thus received with seventy suggested methods.

Two responses suggested that the issues had all previously been dealt with and no longer applied. Other responses which were discarded included (1) listing values instead of methods; (2) statements such as 'treat staff equally'; and (3) vague comments such as 'agree rules of engagement'.

This was followed by a confirmation stage in which a series of personalized questions were sent to individual respondents in order to ensure that first phase responses had been correctly interpreted. Methods (worded differently) which seemed to be the same; from different respondents, were re-worded and the relevant respondents were contacted by the coordinator to confirm the re-wording. The methods were grouped subjectively by the coordinator into appropriate sub-headings. This resulted in seventy respondent-identified methods being available (see Annexure 1). These identified methods served as input for the next (second) phase of the Delphi technique process.

Second phase of the Delphi technique (determining the most important methods)

The second phase started with a pilot study. The objectives of this pilot study were to:

- compact the Annexure 1 list by identifying duplications. There was also a need to eliminate from this list any methods which were not only for multicultural team management, but for the management of *any* IS project team;
- and to test the written instructions for complying with the second phase.

Five of the six respondents replied to the pilot test. Where a majority of these respondents concurred, some methods were deleted or combined with others. Consideration was given to removing another

twenty items that were identified as general (not only multicultural) IS project team management elements.

After reflection by the coordinator, these methods were retained as it was evident that respondents in the first phase of the Delphi technique regarded these methods as important issues. The coordinator re-worded them so that, for example, 'prepare a detailed project plan' was re-worded to read 'give additional emphasis to preparing a detailed project plan'. Thereafter renewed requests for participation among the existing respondents followed.

Sixty-two 'retained' methods were presented to respondents, who were asked to nominate fifteen methods they believed to be the most important. After thirty-three valid responses had been received from respondents, the 'top group' ranking of fifteen methods had stabilized. The top twenty methods identified by respondents surveyed are reflected in Table 1. It should be noted that Table 1 is not a 'true' ranking as the table entries are based on reported occurrences and not necessarily importance.

'Rank'	Revised method number	Method
1	12	Accommodate cultural/religious festivals, holidays, preferences, prayer times and diets in timeliness and activities
2	25	Place increased emphasis on encouraging contribution from all team members in problem solving
3	11	Place increased emphasis on goals, objectives, boundaries and tasks
4	1	Appoint project manager or team leaders who are aware of cultural diversity issues
5	17	Enable all team members to demonstrate their skills.
6	34	Provide a climate encouraging open-mindedness and humour
7	46	Use English for all communication including documentation
8	61	Review policies to ensure they are culture-free and culture-fair
9	13	Place increased emphasis on thoroughly checking that all requirements, instructions and methods are completely understood by everyone
10	58	Vary the types of social functions
11	14	Propagate attitude of patience and tolerance
12	6	Place increased emphasis on focusing on a standard methodology which is used by all team members
13	16	Always greet all
14	21	Place increased emphasis on conducting true, unbiased diagnoses about effectiveness of project tasks/processes
15	32	Place increased emphasis on providing a climate to encourage issues to be discussed
16	37	Ensure all team members are exposed to / attend diversity training courses
17	59	Implement climate surveys
18	18	Avoid references to race
19	20	Develop interest in cultural matters affecting all team members
20	33	Provide a climate for individuals to talk easily about their culture

Table 1. Top twenty methods identified by respondents surveyed

Third phase of the Delphi technique (ranking the most important methods)

From Table 1, the top fifteen methods were presented to the respondent list. The respondents were asked to rank the methods in order of importance. Respondents used a '1' to '15' allocation, where a ranking of '1' was the most important method and a ranking of '15' the least important method. Forty-three

previous respondents were contacted, and thirty-nine respondents replied. From the thirty-nine responses, their allocations were then aggregated: the method with the lowest aggregate became the most important and the method with the largest aggregate total became the method with the least importance of the fifteen methods presented. As the responses were being received, the top five (as well as the 10th to 15th) ranked positions stabilised relatively early. This stability was checked several times as replies were received i.e. after the 33rd, 35th and 39th replies had been received.

The 6th and 7th ranked positions as well as the 8th and 9th ranked positions were sensitive (ie. ranks interchanged as responses were received by the coordinator). Four panel members who had not previously responded in the third phase were contacted personally, and asked to act as ‘tiebreakers’¹ to complete the ranking of the 6th, 7th, 8th and 9th most important methods. This was accomplished by requesting them to rank a smaller list, and replies were received from three of these four panel members. The ‘tiebreaking’ process did not result in any rankings being changed. The final fifteen ranked methods with their associated revised method numbers are reflected in Table 2.

‘Rank’	Revised method number	Method
1	1	Appoint project managers or team leaders who are aware of cultural diversity issues
2	11	Place increased emphasis on goals, objectives, boundaries and tasks
3	13	Place increased emphasis on thoroughly checking that all requirements, instructions and methods are completely understood by everyone
4	17	Enable all team members to demonstrate their skills
5	6	Place increased emphasis on focusing on a standard methodology which is used by all team members
6	32	Place increased emphasis on providing a climate to encourage issues to be discussed
7	34	Provide a climate encouraging open-mindedness and humour
8	25	Place increased emphasis on encouraging contribution from all team members in problem solving
9	21	Place increased emphasis on conducting true, unbiased diagnoses about effectiveness of project tasks/processes
10	14	Propagate attitude of patience and tolerance
11	61	Review policies to ensure they are culture-free and culture-fair
12	12	Accommodate cultural/religious festivals, holidays, preferences, prayer times and diets in timelines and activities
13	46	Use English for all communication including documentation
14	37	Ensure all team members are exposed to/attend diversity training courses
15	58	Vary the types of social functions

Table 2. Final fifteen ranked methods (after third phase)

From Table 2, the finally ranked methods include a blend of both formal and informal items:

- formal methods comprise revised methods numbered 17, 32, 34, 25, 14 and 58; and
- informal methods comprise revised methods numbered 1, 11, 13, 6, 21, 61, 12, 46 and 37.

¹ The authors contend that ‘tie-breaking’ is a unique and useful improvement to the Delphi technique

From Table 2, it can be deduced that most of the methods can be labelled as proactive; and revised methods numbered 25 and 21 can be labelled as reactive. Furthermore most of the methods should be IS project manager-initiated (with the exception of revised methods numbered 61 and 37 which are deemed organisation-initiated methods).

Some respondents amplified their responses by providing rationale for inclusion or support of a selected method. This is a selection of some of these responses:

- ‘avoid reference to race’ was interpreted by a respondent as inviting IS project team members to find other ways of describing the same thing (race);
- the presence of a method to avoid sending some IS project team staff to certain business client organizations to mitigate the ‘fit’ of a client’s organizational culture;
- a respondent raised the concern that ‘in the pursuit of overcoming differences, it is necessary to emphasize differences’. Other respondents suggested, however, that ‘recognizes’ may be more appropriate than ‘emphasizes’ and ‘overcoming’. Another respondent pointed out that the (same) method had a connotation of organizational culture whereas most of the other methods had a national culture connotation; and
- the use of a common language (English) to improve communication, was not ranked as an important issue. This is not necessarily respondents’ opinion of its importance; as this represents an item that nowadays may be interpreted as a ‘given’. The acceptance of imperfect English skills is sometimes taken for granted as South Africa moves towards an expanded acceptance of cultural diversity. English is *the* language predominantly used in organisations and South African parliament (and elsewhere), and is either the first or second language of the entire South African population.

Summary of survey and results

In summary, the authors described the first phase of the Delphi technique (gathering the methods) and the results obtained. This was followed by the second phase of the Delphi technique (determining the most important methods). The results reflect the top twenty methods identified by the respondents surveyed. In the third phase of the Delphi technique, the most important methods were ranked, and we listed these ‘final’ fifteen methods.

From this list of methods, the formal and informal items were identified, we deduce those that can be labelled as proactive and those that can be labelled as reactive. Those methods that are IS project manager-initiated and the ones which are deemed organization-initiated are identified. As some respondents amplified their responses by providing rationale for inclusion or support of a selected method, these ‘amplified’ responses were then discussed.

BENEFITS OF MANAGING CULTURAL DIVERSITY BY IS PROJECT MANAGERS

The goal of managing cultural diversity is maximising the ability of all staff (including those in IS project teams) to contribute to organizational goals. As noted by Cox (1994), managing cultural’s end goal is maximising the ability to contribute to organizational goals and to achieve their full potential unhindered by group identities such as gender, race, religion, nationality, age, and departmental affiliation. Given the cultural diversity found in IS project teams in organizations, this needs to be managed so that an IS project team can reach its potential and team cohesion is spawned. IS project managers can soften inter-cultural misunderstandings (and even conflicts) in order to get a better team performance (Scarlat et al., 2014).

Thomas (1992) states that while there are many different perspectives of diversity management, diversity management is a necessary tool to fully enable a diverse team to reach its full potential. The management styles of IS project managers when leading a diverse team is an important risk factor to consider for the team's success. Anbari et al. (2003) assert that many risks can be avoided and projects can succeed if project managers are culturally sensitive. By doing so, 'core difficulties' can be reduced and controlled (Borchers, 2003). One suggestion in this regard is to implement awareness programs and appropriate training at all levels in an organization. Another suggestion is if a cultural group within an IS project team has a predominant culture, the 'majority' of the team members need to be attuned to the perspectives of the 'minority' team members. The key determinant is that *appropriate* management practices must be used to manage cultural diversity as found in IS project teams. The methods used may be proactive, reactive, IS project manager-initiated and organisation-initiated. By doing so, this will serve to promote enhanced performance among culturally diverse groups in IS project teams, mitigating potential IS project risks.

CONCLUSION

Maier (2002) suggests that the academic world has not met the demands of managers in commerce and industry for adequate research on how to lead diverse groups of people. This may be difficult given that when we think of cultural diversity nowadays, we also need to think of the diversity that is developing with IT advancement. In terms of IS project teams, cultural diversity is no longer funnelled primarily on gender, race and religion but instead cultural diversity is rather re-engineering itself towards individual talent and the new requirements of new emergent and advanced IS project management.

From our research results, the 'top' three methods used in organizations in South Africa for managing multicultural IS project teams were:

1. appoint project managers or team leaders who are aware of cultural diversity issues;
2. place increased emphasis on goals, objectives, boundaries and tasks; and
3. place increased emphasis on thoroughly checking that all requirements, instructions and methods are completely understood by everyone.

While at this stage this research does not fill this vacuum, the evidence from this survey nevertheless presents some useful pointers towards further research dealing with multicultural IS projects teams in organizations in South Africa. Our research also responds to Mnkandla's (2014) plea for increased empirical research on issues specific to IS project management. With regards to IS project teams in organizations and future empirical research, three suggestions are made:

- the findings can be divided into various other perspectives to gauge whether, for example, formal or informal methods have preference, or whether IS project manager-initiated methods or organisation-initiated methods have greater success;
- inspecting and exploring 'lower' ranked methods to gauge whether their ranking is caused by contextual (or other) factors; and
- expanding the study to other major cities in South Africa to ascertain whether there are different rankings (and even methods) plausible in different provinces in South Africa.

Such research approaches may encourage the development of new perspectives and insights for future methods to be used in organisations in South Africa when managing multicultural IS project teams.

ACKNOWLEDGMENTS

An earlier version of this research was presented at the 7th International Development Informatics Association (IDIA) Conference in Bangkok, Thailand, 1-3 November 2013.

REFERENCES

- Addison, T.M. (2003) E-commerce project development risks: Evidence from a Delphi survey. *International Journal of Information Management*, 23(1): 25-40, January.
- Addison, T.M. (2005) Multicultural Groups in Information Systems project teams: Considerations for South Africa. *Working paper*, University of the Witwatersrand, Johannesburg, South Africa.
- Addison, T.M. and Allan, G.W. (2002) The Delphi Technique as a method for Management Research. *Proceedings of the European Conference on Research Methodology for Business and Management Studies* (D. Remenyi (ed)), Reading, England, 28-30 April 2002, 1-6, ISBN 0-9540488-3-0.
- Anbari, F.T., Khilkhanova, E.V., Romanova, M.V. and Umpleby, S.A. (2003) *Cross Cultural Differences and their Implications for Managing International Projects*; retrieved November 30, 2012 from http://www.gwu.edu/~umpleby/recent_papers/2003_cross_cultural_differences_managin_international_projects_anbari_khilkhanova_romanova_umpleby.htm
- Borchers, G. (2003) The software engineering impacts of cultural factors on multi-cultural software development teams. *ICSE 03 Proceedings of the 25th International Conference on Software Engineering*, 540-545, IEEE Computer Society Washington, DC, USA.
- Brancheau, J.C., Janz, B.D. and Wetherbe, J.C. (1996) Key Issues in Information Systems Management: 1994-95 SIM Delphi Results. *MIS Quarterly*, 20, 2, 225-242.
- Brett, J., Behfar, K. and Kern, M.C. (2006) Managing Multicultural Teams. *Harvard Business Review*, November.
- Burlea, A.S. (2009) Success Factors for an Information Systems Projects Team Creating New Context (*sic*). *Communications of the IBIMA*, 9: 202-207.
- Cox, T. Jr. (1994) *Cultural Diversity in Organizations*. Berrett-Koehler, San Francisco, USA.
- Delbecq, A.L., Van de Ven, A.H. and Gustafson, D.H. (1975) *Group Techniques for Program Planning*. Scott, Foresman and Company, Glenview, Illinois.
- Frame, J.D. (1995) *Managing Projects in Organizations: How to make the best use of time, techniques, and people*. Jossey-Bass Publishers, San Francisco, USA.
- Gibson, C.B. and Gibbs, J.L. (2006) Unpacking the concept of virtuality: the effects of geographic dispersion, electronic dependence, dynamic structure, and national diversity on team innovation. *Administrative Science Quarterly*, 51(3): 451-495.
- Granrose, C.S. and Oskamp, S. (1997) Cross-cultural workgroups: An Overview. *The Claremont Symposium on Applied Social Psychology*. Sage Publications.
- Katzenbach, J.R. and Smith, D.K. (1993) *The Wisdom of Teams*. McKinsey & Company, New York, NY, USA.
- Keil, M., Cule, P.E., Lyytinen, K. and Schmidt, R.C. (1998) A Framework for Identifying Software Project Risks. *Communications of the ACM*, November, 41(11): 76-83.
- Maier, C. (2002) *Leading Diversity – A Conceptual Framework*. Published Dissertation. Difo-Druck GmbH, Bamberg.
- Mnkandla, E. (2014) A review of Communication Tools and Techniques for Successful ICT Projects. *The African Journal of Information Systems*, 6(1): 1. Available: <http://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article=1113&context=ajis> [Last accessed 10 January 2014].
- Parry, A. (2015) Chief Executive Officer, Institute of Information Technology Professionals South Africa. *Personal communication*, 22 April.

- Project Management Institute (2014) *What is Project Management?* Available: <http://www.pmi.org/About-Us/About-Us-What-is-Project-Management.aspx> [Last accessed 27 February 2014].
- Scarlat, C., Zarzu, C-L. and Prodan, A. (2014) Managing multicultural project teams. *CrossCultural Management Journal*, 5, 169-179.
- Schmidt, R.C. (1997) Managing Delphi Surveys Using Nonparametric Statistical Techniques. *Decision Sciences*, 28(3): 763-774, Summer.
- Shore, L.M., Chung-Herrera, B.G., Dean, M.A., Ehrhart, K.H., Jung, D.I., Randel, A.E. and Singh, G. (2009) Diversity in organizations: Where are we now and where are we going? *Human Management Review*, 19: 117-133.
- Smith, P.B., Peterson, M.F. and Schwartz, S.H. (2002) Cultural values, sources of guidance, and their relevance to managerial behavior. *Journal of Cross-Cultural Psychology*, 33(2): 188-208.
- Thomas, R.R. (1992) *Beyond Race and Gender*. Amacom, New York, USA.
- Youker, R. (2004) What is culture in organizations? *Proceedings of the International Project Management Association (IPMA) of the 18th World Congress on Project Management*, Budapest, Hungary, 18-21 June
- Zander, A. (1982) *Making Groups Effective*. Jossey-Bass Publishers, San Francisco, USA.

**First phase of Delphi technique:
Respondent-identified methods being available (after confirmation by co-ordinator)**

Team selection and composition

- 1 Encourage cultural diversity when recruiting or selecting a team
- 2 Appoint project manager or team leaders who are aware of cultural diversity issues
- 3 Interview individuals at project initiation
- 4 Attempt to give junior team members less threatening projects
- 5 Select team members who will fit the client's culture
- 6 Ensure no absolute minorities

Use of methodology

- 7 Ensure a standard methodology is used by all in Information Systems
- 8 Place more emphasis on results than on methods used
- 9 Use 'extreme' programming (pairs of programmers)

Project definition

- 10 Prepare a very detailed project plan
- 11 Ensure the project assumptions are spelled out very clearly
- 12 Place a very strong emphasis on goals, objectives, boundaries and tasks
- 13 Accommodate cultural/religious festivals in project timelines

Project Manager behaviour

- 14 Thoroughly check that all requirements, instructions and methods are completely understood by everyone
- 15 Propagate attitude of patience and tolerance
- 16 Recognise and confront stereotyping
- 17 Always greet all
- 18 Enable all team members to demonstrate their skills
- 19 Avoid references to race
- 20 Allow absence or leave for cultural reasons or funeral attendance
- 21 Establish (life) goals of the team members
- 22 Develop interest in cultural matters affecting all team members
- 23 Conduct true, unbiased diagnoses about effectiveness of project tasks/processes

Processes and agenda of team review meetings

- 24 Hold regular meetings (more [regular than] teams without cultural diversity)
- 25 Set shorter term goals set for less proactive team members
- 26 Provide diagrammatic explanations when possible
- 27 Encourage contribution from all team members in problem solving
- 28 Use brainstorming in initial stages
- 29 Avoid scheduling meetings during prayer periods
- 30 Broaden agenda to include dialogue about diversity
- 31 Declare frequently that team success is dependent on complete understanding of requirements and declarations by members when requirements are not understood

Individual appraisal

- 32 Request team members with limited experience to continuously record (write-up) what they have learned
- 33 Document performance review criteria and performance scales in advance, to ensure tendency to favour 'sameness' is excluded

Individual needs

- 34 (For contracting organisations) - avoid sending staff to certain industries
- 35 Provide a climate to encourage issues to be discussed
- 36 Provide a climate for individuals to talk easily about their culture
- 37 Provide a climate encouraging open-mindedness and humour
- 38 Encourage team members with problems to obtain guidance from person of same culture

Mentoring

- 39 Emphasise development (and de-emphasise sponsorship) in mentorship activities

Training and workshops

- 40 Ensure all team members are exposed to/attend diversity training courses
- 41 Ensure the major emphasis is on ethnicity in diversity training/workshops
- 42 Expose all team members to a programme to understand the history of South Africa
- 43 Design team training so that it identifies and tackles blockages

Additional activities

- 44 Send team members on 'immersion' programmes (township environment)
- 45 Encourage talks by/with individuals about their own cultures
- 46 Run a 'game' asking participants to share experiences they believe may be unique to their culture
- 47 Conduct / run Team Building exercises
- 48 Accommodate cultural/religious festivals *e.g.* fasting, when plan social activities
- 49 Institutionalise non-hierarchical forums for ongoing dialogue on diversity
- 50 Engage specialists to observe team interactions

Language and communication

- 51 Use English for all communication including documentation
- 52 Allow members to communicate with each other in a home language
- 53 Allow selected project support activities (*e.g.* mentoring) to be in second or third languages
- 54 Allow use of eMail if low risk of misinterpretation
- 55 Set up Translation Services Centres
- 56 Ensure all communications are put in writing, with minutes if a meeting
- 57 Accept imperfect English skills
- 58 Encourage staff to learn a different language
- 59 Coach English second language members on the job
- 60 Allocate a team member who speaks the client's language

Religion

- 61 Observe all religious holidays
- 62 Allow time off for prayers/religious traditions
- 63 Encourage informal (lunchtime) discussion about religious customs

Socialising

- 64 Allow (do not discourage) any social sub-groups
- 65 Vary the types of social functions
- 66 Accommodate dietary requirements when planning social activities

Policies and systems supporting diversity

- 67 Implement climate surveys
- 68 Reward/penalise culturally sensitive/insensitive managers (and others)
- 69 Review policies to ensure they are culture-free and culture-fair

Mechanisms for anonymous complaints

- 70 Install a management issues/suggestions box