APPLICABILITY OF ISLAMIC LEADERSHIP PRINCIPLES IN CONSTRUCTION PROJECT MANAGEMENT WITH SPECIFIC REFERENCE TO JKR MALAYSIA – THE USE OF DELPHI METHOD

1)Muhamad Rosdi Senam, 2)Khairuddin Abdul Rashid, 3)Azila Ahmad Sarkawi 4)Rapiah Mohd Zaini

1)Public Works Department of Malaysia, Jalan Sultan Salahuddin
50582 Kuala Lumpur, Malaysia
123)Kuliyyah of Architecture and Environmental Design, International Islamic University Malaysia, Jalan Gombak 53100 Kuala Lumpur, Malaysia
4Faculty of Management, Multimedia University 63100 Cyberjaya, Selangor, Malaysia
Corresponding email: *mrosdis.jkr@1govuc.gov.my*

ABSTRACT

Project management continuously faces challenges in an increasingly dynamic and competitive environment. This demands for strong leadership by project manager that is fundamental and more crucial to achieving project success. Previous empirical studies have indicated the positive impacts of Islamic leadership on organisational performance and outcome in various sectors such as business, banking, etc, however no similar studies have been conducted in construction related and project management context. Delphi method is an option to the traditional and popular methods used for data collection in research such as interview and questionnaire survey. It is increasingly adopted in various areas of researches including in project management as well as Islamic studies that aim to reach consensus and decisive opinions on topics that are being researched by involving a group of panels or experts. This paper seeks to present the adoption of this method in a postgraduate study that has been conducted on the applicability of Islamic leadership principles (ILP) in project management with specific reference to JKR Malaysia (Public Works Department of Malaysia). Selected project managers with certain criteria were the respondents or experts for the Delphi interview. Two (2) rounds of Delphi interviews were conducted and sufficient to achieve the level of consistency of results. The findings indicated that Islamic leadership principles were highly applicable and it could enhance the likelihood of achieving project success in JKR project management. Acceptable level of consensus were achieved in all constructs attributing to the Islamic leadership principles and its strategies.

Keywords*: Project Management, Project Success, Islamic Leadership Principles, Delphi Method*

INTRODUCTION

The positive impact of Islamic leadership in various organisational types and settings has been proven empirically in previous research, that it is positively related to and it can increase organisational performance (Abbasi et. al, 2010; Majeed et. al, 2011; Nayal Rasyed, 2007;

Gholamreza et. al, 2013a; Gholamreza et. al, 2013b; Hakim, 2012; Wan Norhayate et. al, 2014; Kriger and Seng, 2005). However, there is lacking evidence to support that the same research has been conducted in construction projects environment or in project management (Muhamad Rosdi et. al, 2013a; 2013b; 2014a; 2014b, 2014c and 2015b).

Islam is not merely a religion but a way of life and the divine revealed and sources of the Qur'an, the Sunnah Prophet S.A.W. and other non-revealed sources of Islamic teachings are the complete and comprehensive guidance for mankind covering all aspects of human life including business transactions and project management which is part of muamalat (transactions or dealings according to Islam), (Khaliq Ahmad and Fontaine, 2011; Akram Laldin, 2011).

The completeness and comprehensiveness of Islam that provides the best guidance and as a way of life, to regulate the whole life of mankind and to resolve and fulfil all the needs of men and women, in totality is also confirmed in the following verses of the Qur'an:

"This day, I have perfected to you your religion, completed My Favour upon you, and have chosen for you Islam as your religion" (Qur'an, al-Maidah: 3,translation of Tafsir Ar-Rahman, JAKIM, 2007).

In another verse Allah Says: "And there is no creature on [or within] the earth or bird that flies with its wings except [that they are] communities like you. We have not neglected in the Register (Book) a thing. Then unto their Lord they will be gathered" (Qur'an, al-An'am: 38, translation of Tafsir Ar-Rahman, JAKIM, 2007).

Infact, Muslims are obliged to follow Islamic teachings that is also clearly mentioned in the Qur'an as follows: "To each among you, We have prescribed a law and a clear way" (Qur'an, al-Maidah: 48,translation of Tafsir Ar-Rahman, JAKIM, 2007).

This commandment is all-encompassing to all human affairs and not to exclude matters pertaining to leadership in project management. Moreover, infact it is obligatory (for Muslims) as part of obligations towards Allah to identify the lawful (halal) and otherwise those prohibited in our daily dealings (Siti Nora and Khairuddin, 2008a and 2008b; Bilal et. al, 2010; Khaliq Ahmad and Fontaine, 2011). For non-Muslims, although it is not obligatory, Islamic system, values and principles, as such, Islamic leadership will provide one best alternative to practice, since Islam will brings benefits to the whole ummah and it is not only meant for Muslims, and one best example of this is the great success of Islamic banking system. Allah says in the following verse of the Qur'an: "And We have not sent you, [O Muhammad], except as a mercy to the worlds" (Qur'an, al-Anbya': 107, translation of Tafsir Ar-Rahman, JAKIM, 2007). In this regard, the success of Islamic finance and banking system as well as Islamic insurance (Takaful) have provided sufficient proof that Islam benefits all and the brings the best to mankind as stated in the surah al-Anbya.

Despite, this development, as stated earlier and the potential of Islamic leadership, and the fact that there is no evidence and none of its kind of initiatives have been introduced into construction project management in particular the public sector projects until recently, that some early indications inclining towards this direction is seen. An acknowledgement of Islamic principles is stated in project management guidance for public projects that project manager imbuted with faith (iman), taqwa, trustworthy, high quality, etc would have better control on

projects and therefore can manoeuvre their project to success (ICU, Prime Ministers Department Malaysia, 2015; Ali Hamsa, 2016). They have internal control mechanism that can much influence their ways and behaviour towards their projects and the people involved that is oftenly neglected in the vast majority of project management literature. Nevertheless, there is still no evidence of empirical studies conducted with respect to imbuting Islamic leadership principles into the practice of project management.

Project success is commonly viewed as the successful achievement of completing a project within the agreed budget, within the specified time, expected quality and satisfy the client (Samiaah et. al, 2011; Jugdev and Müller, 2005; Wan Maimun and Ahmad Ramly, 2006; Pinto; 2008). Successful projects demand strong leadership capability by the project manager (PMBoK, 2013). Thus, improving their leadership can influence the project outcome and increasing the chances of meeting project success that is obviously the ultimate goal of any project endeavour. This research was undertaken in project management of PWD (Public Works Department), Malaysia. PWD Malaysia is also known as JKR (Jabatan Kerja Raya) and Delphi method was adopted for data collection.

PROJECT MANAGEMENT AND DEFINITION OF PROJECT SUCCESS

Project management for public projects in Malaysia is best represented by JKR as the main technical department for implementing physical and infrastructure projects (Judin, 2010; Hazimul-Din, 2010; Hannerita Zainal, 2012; JKR Strategic Framework, 2012-2015). In this respect, JKR has long been leading other government agencies on technical guidelines for buiding, road, and maintenance projects, construction contracts and project management. Project management in JKR is divided into five (5) project phases ie. planning, design, procurement, construction and handing over (JKR Project Managers' Practice Manual, 2007). As the premier technical agency, it has all the in-house technical expertise comprising of all main disciplines that makes the department capable of handling a project from sketches to until it is ready to be handed over to client and users. Planning is project inititation, that the need for having a project is established by the client with preliminary indications on budget, time and expectation of end products. Project manager and initial team members are appointed to define and obtain the client's ideas in his mind to technical documentation.

Planning is crucial to decide whether to 'go or not' with a project. In design phase, details design will be prepared taking the inputs from planning as the client's needs and wants. Revisions will be done for example if there are constraints with regard to technical guidelines, as more and full information are revealed at this stage. Procurement phase is to prepare documentations for the project to be procured and the best contractor that meets various evaluation criterias can be selected. Construction is the implementation phase to make the paper planning, design to reality. This is the real test is for the project manager, his team and stakeholders involved in any project as full team comes into and interfacing project activities running concurrently. Project fate mostly is determined in this phase. Handover is closing phase that physical components are approaching completion and testing and commissioning of deliverables items are performed. This phase is to

ensure that a project accomplishes its missions, meets its main objectives and fits for purpose to the client and satisfy him.

Project management literature has evolved on the meaning of project success from the 'Iron Triangle' of Cost, Time and Quality (Atkinson, 1999, De Wit, 1988) to include more of recent criteria that reflects the increasing in clients' requirements and demand and project complexity ie. client's satisfaction and stakeholder's satisfaction or requirement (Samiaah et. al, 2011; Jugdev and Müller, 2005; Pinto, 2010). Nonetheless, JKR project management is still basically focusing towards achieving and fulfilling the three(3) traditional and commonly accepted criteria of project success which are Time, Cost and Quality. One of the reasons is that these criteria are measurable and quantifiable leading to direct evaluation on its achievement and progress. On the contrary, client's satisfaction is not directly observable and interpreted that is also known as latent variable, although scale can be suggested to represent it. These three(3) criteria are the traditional success criteria that are widely used and accepted in literature thus being the norms of measuring project success or failure in the construction industry. The essence of the project success in terms of time, cost and quality is to meet the needs and satisfy the client on which projects are constructed for.

ISLAMIC LEADERSHIP PRINCIPLES (ILP)

Islamic leadership principles (ILP) are discussed in literature of Islamic studies (for example in Ismail Noor, 2000; 2002; Adnan, 2006; Adalat Khan, 2007; Syed Omar et. al, 2007; Dahlena Sari, 2013; Khanittha, 2015; Mohd. Sani and Nor Hartini, 2016). There are six (6) ILP that have been appraised and identified; leadership is a manifestation of human role as His Khalifah; leadership is a knowledge acquisition and translation-leading with knowledge; leadership is a responsibility; leadership is a team working; leadership by example and leadership is vision and the will to achieve the vision.

Al-Qur'an and al-Sunnah form a principal source of deriving Islamic leadership principles (as it is mentioned in verses Al-Ahzab:72, Al-An'am:165 and Al-Zukhruf:32), followed by practices of Companions that immediately upon their appointment would address clearly the followers and stating what leadership principles in Islam are.

Upon the occasion of his first speech once appointed, as first Caliph, Abu Bakr (ra) stated: O people! I have been selected as your trustee although I am not better than anyone of you. If I am right, obey me. If I am misguided, set me right". Similarly, 'Umar (ra) was quoted as saying to the people: I have appointed over you governors and agents not to beat your bodies, but rather to teach you and serve you (Jabnoun, 2012). The six (6) ILP will be discussed in the following paragraphs.

Firstly, the purpose of creation of men by Allah as His Khalifah (Vicegerent) or leaders on earth is repeated in the Qur'an such as in al-Baqarah, 2.143, al-Baqarah, 2:30; al-Hajj, 22.041; al-Anaam, 6.165; az-Zukhruf, 43:32; al-Maida, 5:8; al-Yusuf, 12:55; al-Yusuf, 12:56, In one verse Allah Says: "And (remember), when your Lord said to the angels, "I am about to place a vicegerent on the earth…"" (Qur'an, *al-Baqarah*: 30, translation of Tafsir Ar-Rahman, JAKIM, 2007). This indicates that leadership principle already embedded in us and came from the very first

moment men were created. Being Khalifah is to live by upholding the divine guidance of the Qur'an and Sunnah ie. performing good deeds and preventing from wrongdoings (amal maaruf wahna anil munkar) among fellow men, taking care of other creations, in all aspects of life including matters relating to works, in this regard, project management. Realising this principle, all activities are actions of ibadah with the inner admission as servant to Him that counted for in the Hereafter, thus men will always strive for optimisation and there is no room even as small as seed, for corrupted doings in all dealings.

Secondly, Being a knowledgeable person is very demanded in Islam. Many verses in the Qur'an shows how importance Islam views the seeking of knowledge on individual Muslim and what more important to lead and to become leaders. The first verse of the Qur'an is talking about reading in verse al-'Alaq, and in al-Zumar:09, Allah SWT asks "…Are those who know equal to those who know not?"… (Qur'an, az-Zumar: 9, translation of Tafsir Ar-Rahman, JAKIM, 2007); Truly none will take heed but men of understanding". Infact, seeking knowledge and acting with knowledge is synonymous to religious duty (obligatory) as it is repeated so many times in the Qu'ran and in the hadith of the Prophet S.A.W. For example, when Mu'awiyah (ra) reported the Prophet SAW as saying, "When Allah wishes good for someone, He bestows upon him the understanding of Deen."[Al-Bukhari and Muslim]. Understanding of Deen as as stated, reflects the call for knowledge acquisition.

Thirdly, leadership in islam is a divine trust (amanah), not an honour or previllege, neither for self fulfillment and thus it becomes a religious duty to accomplish in the best manner and in full commitment. The principle that leadership is a trust comes at the highest rank above all other reasonings. In the same notion, a leader is accountable for all his actions and endeavours towards God more than people who have vested interest in project ie. the stakeholders. Allah Says in surah al-An'am of the Qur'an that some of us will be appointed to be leaders to lead the others and in the verse of Al-Hajj, leaders are to lead himself and to serve and guide followers to do good deeds and prevent committing those that are prohibited. Allah Says: "It is He Who hath made you (His) agents, inheritors of the earth: He hath raised you in ranks, some above others: that He may try you in the gifts He hath given you: for thy Lord is quick in punishment: yet He is indeed Oft-forgiving, Most Merciful. (Qur'an, al-An'am: 165, translation of Tafsir Ar-Rahman, JAKIM, 2007).

Being trustworthy and responsible is also to be just ie. to practice justice (ad'l). Justice is a fundamental principle in Islamic religion that Islam promotes just society and against any actions of oppression and manipulation of rights (haq) and that justice ensures properity and peaceful of ummah (society) (Jabnoun, 2005; Norfazila , 2012; Khaliq and Fontaine, 2011; Amrozi, 2014; Muhamad Rosdi et. al, 2015b; Pahrol Mat Joi, 2015).

Fourthly, leadership is indeed by all perspectives is about establishing and maintaining teamwork because leaders cannot accomplish anything alone without teamwork and their followers and the very fundamental fact of the meaning of leadership itself refers to a concerted group efforts between leaders and their followers energised by influence to achieve a desired goal (Verma, 1995; Fellows et. al, 2003; Lussier and Achua, 2007; DuBrin, 2010; Beekun, 2012; Yukl, 2013). This means, leadership fails without teamwork or the the result of good leadership is the existence of teamwork. In Islamic teaching, the six pillars of *iman* and the five pillars of Islam form a

catalyst of unity. Everybody is heading towards one direction under the notion of religiosity. Islam is very much synonemous with teamworking ie. the principle of collective efforts rather than individualism that is manifested for example in the performance of daily prayer in congregation (*jemaah*) and the striving for social justice and sharing the burden of those less fortunate people in the community through the giving of charity (sedekah) and zakat. In this respect, Islam instills the practice of mutual consultation or shura for maintaining the group teamworking and cohesiveness in solving problems or facing challenges. It is also a famous tradition of the Prophet S.A.W. as well as it is a fundamental construct of leadership from the Islamic perspective (Haddara and Ennany, 2009; Khaliq and Fontaine, 2011; Handoko and Kayadibi, 2013).

Fifthly, being at the front line of the people, leaders must be an exemplary icon ethically, morally and charismatically and free from all degradations, and live with what they preach to followers or in modern term it is called 'walk the talk' as Allah clearly Reminds this in the Qur'an, in the Surah as-Saff, "O believers! Why do you say what you never do?" (Qur'an, as-Saff: 2, translation of Tafsir Ar-Rahman, JAKIM, 2007). Islam has bestowed upon the believers, the best leadership role model that to be exemplified that is the leadership of Prophet S.A.W., followed by the subsequent Caliphs of Abu Bakar, Uthman and Ali. Allah Testifies in the Qur'an on the Prophet S.A.W. as the noblest example of leadership; "Indeed in the Messenger of Allah, you have a good example, for anyone who looks forward to (please) Allah and the (reward of the) Last Day and remembers Allah much (whether in times of hardship or comfort" (Qur'an, al-Ahzab: 21, translation of Tafsir Ar-Rahman, JAKIM, 2007).

Finally, leaders articulating visions for the people and organisation they lead and make them achieving it and this distinguishes a leader with a routine manager or even a normal person (Maxwell, 2005; Lussier and Achua, 2007; DuBrin, 2010; Pinto, 2010; Yukl, 2013). Although, leaders set visions for followers and organisation they lead, in both conventional and Islamic leadership, however, Islam sets a far wider dimension of visions that is comprehensive and all-encompassing ie. to include spiritual visions (Jabnoun, 2005; Ali Jubran, 2007; Syed Fayyaz, 2007; Syed Omar et.al, 2007; Syed Othman al-Habshi; 2007; Toor, 2008b). The Prophet S.A.W. had exemplified that leadership in Islam is farsighted and encompasses the visions of both worlds ie. not only to succeed in this world but in to achieve the real and utmost level of success (al-Falah) in the Hereafter.

The leadership principles from Islamic perspective that have been herein discussed are divinely sourced leadership guidance that is in general meant for all mankind in all walks of life including project management as stated earlier in this paper. It is anticipated that the principles that bring elements of faith and religion of Islam would have positive impacts because it strives for true purpose of life and so be it in projects, correctness of behaviours, strong internal control and inner feelings that guide such correct actions, culture of transparency, perfection and excellence as well as putting justice at the right place, to the leaders and followers will have positive impacts on projects as it has demonstrated in other areas (Abbasi et. al, 2010; Majeed et. al, 2011; Nayal Rasyed, 2007; Gholamreza et. al, 2013a; Gholamreza et. al, 2013b; Hakim, 2012; Wan Norhayate et. al, 2014; Kriger and Seng, 2005; Azila et.al, 2016).

METHODOLOGY

The objective of this paper is to present the methodology, data collections, results and findings of a postgraduate research on ILP and its applicability in JKR project management. The following are the key activities involved:

i. Conducting literature review for obtaining adequate information on Islamic leadership principles and the level availability of well established instrument that can be used for this research;

ii. The design of instrument based on the information from literature and to best tailor to the project management practice in JKR;

iii. The designed instrument is validated by experts;

iv. Selection of panellist for the Delphi interview;

v. Face to face structured interview with the Delphi panellist;

vi. Results and findings

THE USE OF DELPHI METHOD AND ADVANTAGES

Delphi technique, that was developed by Dalkey and Helmer (1963) at the Rand Corporation in the 1950s in a US Air Force project, is a particularly good research method and it is widely adopted for deriving consensus among a group of individuals having expertise on a particular topic where information sought is subjective opinions, complex issues, exploratory and literature proves it as a reliable scientific method for empirically consensus-reaching in various field of researches (Rowe and Wright, 1999; Cuhls, 2003; Chia-Chien and Sandford, 2007; Skulmoski et. al, 2007; Faucher, 2010; Reza Afshari and Rosnah Mohd Yusuff, 2012) as well as in project management and construction related studies involving project managers (Brill et. al, 2006; Hallowell and Gambatese, 2010; Grisham, 2013; Muir, 2012; Pejman Ghasemi et.al, 2013; Mohd. Fairollazi Ayob, 2014; Reza Afshari, 2015).

In brief, Delphi method is a group decision making process that consist of panel of experts aiming to reach consensus and since experts opinion is sought, a purposive sample is employed whereby Delphi participants (the experts) are selected not to represent the general population (as the case in quantitative research) but rather their expert's ability to answer the research questions and objectives (Skulmoski et. al, 2007). Delphi method can also be considered as survey but it is conducted among the panel of experts or panellits as participants that is the same as respondents in typical survey (Hasson et.al, 2000; Cuhls, 2003; Okoli and Pawlowski , 2004; Wakhid Slamet, 2005). In terms of data collection approach to respondents (experts), it can be done through ethnographic interview or via questionnaire (Sarantakos, 2005).

There is no "typical" or standard Delphi; that the method is always and can be modified to suit the circumstances and research questions, that many authors view that the commonly applied in research is modified Delphi (Skulmoski et. al, 2007; Irdayanti et. al, 2015). However, original or classical Delphi according to characteristics as defined by Rowe and Wright (1999), must have these four characteristics ie. anonymity of participants that they can express their choices freely without pressure to conform the others in the group, iteration by allowing participants to refine

their answers, controlled feedback that participants can change their earlier views and the use of quantitative data analysis. By this definition given by Rowe and Wright (1999), the method that is employed in this research conforms to all the four (4) Delphi characteristics.

This method is applicable in the context of this research because it involves opinions that are subjective, subtle and qualitative in nature that a robust and reliable consensus outcome is sought as whether the Islamic leadership principles are applicable or not. A consensus opinion is derived from experts individuals involved in the area when large scale of quantitative statistical data fails to discover and provide such good insights (Okoli and Pawlowski , 2004; Grisham, 2009). In fact, Delphi method allows researchers to obtain highly reliable data from experts through the use of strategically designed surveys, in circumtances whereby traditional methods such as surveys, interviews etc. fail or not appropriate (Hallowell and Gambatese, 2010).

Secondly, the interative process Delphi method is conducted in a a few series ie. involving a few rounds normally between minimum two (2) to four (4) and the number of participants that is known as the expert panels varies depending on who the selected experts are and whether the sample is heterogenous or homogenous, normally, although varies depending on the type of research, most studies employ between 10 to 15 or 15 to 35 people and although in some cases it can reach hundreds (Gordon, 2003; Okoli and Pawlowski , 2004; Skulmoski et. al, 2007; Irdayanti et. al, 2015). The respondents for the Delphi has been identified as the HOPT and SO project managers in JKR, totaling to 43 numbers and this number is within the numbers as defined in the literature. They are at senior grade, over 25 years of project management experience as shown in the respondents' profile data, and they are experts project managers that represented different categories of specialisation of project types in JKR project management that is structured in different Branches. A person with twenty five (25) years project management experience is considered an expert project manager (Berggreen Ramsing, 2013). This number (ie. 41) is an appropriate size number for a Delphi method. In fact, project managers have previously participated in Delphi survey (Brill et. al, 2006; Grisham, 2013; Muir, 2012; Pejman Ghasemi et.al, 2013; Reza Afshari, 2015).

Thirdly, this method is well suited for research instrument when the research is new that there is incomplete knowledge and information available about a problem or phenomenon that is being researched and that it focuses to improve understanding of problems, solutions or developing forecasts (Okoli and Pawlowski , 2004; Skulmoski et. al, 2007; Uma Sekaran and Roger Bougie, 2010; Fletcher and Marchildon, 2014). This is also relevant in this research because the applicability of Islamic leadership principles in project management is new and novele research that previous data in similar context is not available and the instrument that has been developed is also new, a breakthrough of its kind in the given scenario ie. project management and in JKR.

Fourthly, due to these predetermined goals for employing a Delphi method, the key to a successful Delphi study lies in the selection of participants since their experts opinions, judgements and their ability to reach saturated level or consensus decisions will be the core of this method and this is absent in typical interview or survey (Gordon, 2003; Skulmoski et. al, 2007).

This is one of the strengths of Delphi that is not available and cannot be obtained from normal interview either by structured, semi-structured or unstructured interview.

In essence, Delphi method is an effective group decision making process with advantages of it can be modified to suit different situations of research, subjective, subtle and qualitative research, new areas with limited information an instrument, but it provides a highly reliable data that is based on experts opinions with consensus.

DESIGN OF THE QUESTIONNAIRE AND PILOTING

The objective of the instrument ie. questionnaire is to assess the applicability of ILP in JKR project management, in which JKR project phase that those leadership principles can be applied. The six (6) ILP that have been identified from the literature will form the first part of the instrument. Respondents will be given the opportunity to indicate their opinion on the applicability of the Islamic leadership principles by using Likert scale 1-5 (1-strongly not applicable to 5- strongly applicable) based on the statement of indicators supporting under each the six leadership principles. The original Likert scale that was invented by Likert (1932) used five responses of scale and it is still commonly used in research (Jamieson, 2004; Boone and Boone, 2012; Croasmun and Ostrum. 2011; Sekaran and Bougie, 2010).

The second part is to assess on applicability of ILP that can be best applied in JKR project phase ie. planning, design, procurement, construction and handover. Respondents will be given a nominal scale (1- planning, 2- design, 3- procurement, 4- construction, 5- handover), to choose from, to further assess the Islamic leadership principles in terms of where do these principles can be mostly appropriately or best applied among the five (5) project phases.

The draft instrument that was firstly prepared by author was piloted with academic experts in the field of project management leadership and Islamic studies at the Kuliyyah and from within the university. There were five experts involved and their feedbacks and positive comments were taken as inputs for further improvement of the instrument. The objectives of conducting piloting are to refine the instrument and to ensure that the instrument (questionnaire) is appropriate to be answered by respondents that it is free from ambiguities or errors, enabling respondents to give easy answer as well as providing opportunity for improvement (Naoum, 1999; 2013; Skulmoski et. al, 2007; Fellows and Liu, 2003). In addition, several rounds of discussions with supervisors is also very useful that is part of piloting process (Naoum, 1999; 2013; Fellows and Liu, 2003).

The outcome is a total of six (6) ILP and twenty five (25) indicators have been identified for assessment of applicability in the five (5) phases of project in JKR project management. The third part is to assess by asking respondents whether applying ILP will have impact on the project outcome ie. increase the chances of project success in terms of of time, cost and quality.

SELECTION OF DELPHI PANELLISTS AND DATA COLLECTION

The selection of panellists to participate in the Delphi survey were determined as the project managers that were involved in ongoing projects. This is due to the reasons as has been defined in literarature that a project manager in any given project is the person responsible for managing the project and accomplishing the project objectives, he becomes the man in the heart

and central point of every project organisation by providing technical, managerial and leadership expertise and he or she is engaged and needed to be present in all stages from inception and planning to project completion (PMBoK, 2004, 2008, 2013; Wideman, 2001; Tan, 2005b; Hannerita, 2012; Verma, 1995; Cleland and Ireland, 2000; 2002; Uher and Loosemore, 2004; Anantatmula, 2010; Zarina et. al, 2012).

The full list of project managers that met the criteria to be the respondents that were involved in project implementation were obtained, making the total number of them to be 43 respondents for Delphi survey round 1 and Delphi survey round 2.

Results from Delphi survey round 1 became the questionnaire for the subsequent stage. Internal validity was addressed by having each stage instrument piloted and validated initially by academic faculty members (lecturers), collegues that were PhD students, followed by academic experts in the field of project management leadership and Islamic studies. In addition, several rounds of discussions with supervisors is also very useful that is part of piloting process (Naoum, 1998; 2013; Fellows and Liu, 2003).

Level of consensus in Delphi can be determined by achieving the SD (Standard Deviation) score of less than 1.5 (Mohd. Fairullazi, 2014; Puteri Nur Farah Naadia (2015).

In terms of reliability, it was addressed by the high score of Cronbach's alpha value above 0.7 and 0.8 in Round 1 and Round 2. It is a value for internal reliability that is essential to be calculated when using Likert-type scale for measurement (Croasmun and Ostrum, 2011). It refers to the internal consistency reliability that shows the extent to which items in an instrument are consistent among themselves and which the overall instrument as a group, that it is measure of scale reliability (Croasmun and Ostrum, 2011; Institute for Digital Research and Education, UCLA, 2016). Low Cronbach's alpha value indicates items are heterogeneous which perform poorly in representing the dimensions being measured (Megat Zuhairi, 2012). Thus, high value indicates otherwise ie. good representation.

RESULTS AND FINDINGS

The data from Delphi Round 1 and Delphi Round 2 were analysed and an acceptable level of consensus were achieved in all six (6) ILP after the Delphi Survey Round 2. Level of consensus is determined by achieving the SD (Standard Deviation) score of less than 1.5. The main findings after are as the followings:

    i.   Finding 1: ILP are applicable in JKR project management ie. Leadership is a Manifestation of Human Role as Khalifah; Leadership is a Knowledge Acquisition and Translation-leading with Knowledge; Leadership is a Responsibility; Leadership is Team Working; Leadership By Example and Leadership is Vision and The Will to Achieve the Vision;

    ii.   Finding 3: ILP are best applicable in relation to enhancing the chances of project success, firstly; in Construction phase and secondly; Planning phase in overall five (5) project phases in JKR project management;

iii.   Finding 6: ILP can enhance to facilitating the chances of project success in JKR project management in terms of time, cost and quality.

CONTRIBUTIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

This research is significant as it has conducted an empirical research on ILP in the field of project management or construction-related type of organisation which is lacking in previous studies. It contributes to the body and knowledge of academia as well as to the industry in several ways, as follows: firstly, developing and proposing a research instrument on Islamic leadership principles and its applicability in project management context, since the vast majority of leadership studies previously were Western and Christian dominant due to its theoretical origin from those part of the world; secondly, the findings of this research strongly also supports and has extended the previous studies on the positive impact of Islamic leadership would have on organisational performance and outcome. Thirdly, the use of Delphi method which is rare in both project management and Islamic leadership studies, is another contribution that provides the support of the advantages of this method

CONCLUSION

This research has proven empirically in addition to the previous similar researches that Islamic principles are not merely religious scripts and ritual practices but they are meant to shed lights on the practical side of human activities and modern life affairs in this regard, the project management. It gives evidence that divine doctrine is applicable, practical and relevant in contemporary settings. It also provides the basis with empirical evidence for applying Islamic leadership principles to enhancing the chances of project success in the field of project management. It is evident that Islamic principles are universal and therefore there are applicable in all spheres and activities of life, and not limited only for religious and ritual purposes. As such, the outcome of this research can be viewed, as an introductory initiatives or starting point for the applicability of Islamic leadership principles in project management whether in JKR and project management in general.

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