Factors Affecting Project Governance in Ethical Decision Making for Public Sector Project Procurement – A Delphi Study

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Abstract

Managing public sector projects in Malaysia is a unique challenge. This is because of the ethical issues involved during the project procurement process. These ethical issues need attention because they will have an impact on the quality, cost and time of the project itself. The ethical issues here include conflict of interest, bid shopping, collusive tendering, bid cutting, corruption and the payment game. Extensive research has been conducted on the ethical issues in the tendering process or the award phase of project management. There is a lack of studies looking at the role of clients, including the government client, in relation to unethical practice in project procurement in the public sector. It is important to understand that ethical issues not only involve the contractors and suppliers but also the clients. A Delphi study was conducted with the assistance of a panel of experts consisting of practitioners that have expertise in the area of project governance and project procurement as well as academician, which further considered the relationship and the influence of the criteria and indicators of ethical decision making (EDM) and project governance (project criteria, organisational culture, contract award criteria, individual criteria, client's requirements, government procedures and professional ethics). Through the identification and integration of the factors and EDM criteria as well as the project governance criteria and EDM steps for ethical issues, a PGEDM framework was developed to promote and drive consistent decision outcome in project procurement in the public sector.

Keywords: *Project governance, procurement, transparent, governance, ethical decision making*

Introduction

Managing public projects is a challenge as government departments concede that projects are defined by political and public demands. This includes the ethical issues that have affected on public projects. These projects are conducted by human beings who have personal ethics and individual personalities that affect the procedures in conducting public projects. As organizations become

more sophisticated and disciplined in managing projects, procurement is becoming recognized as a key and integral part of the project plans (Guth, 2009). Malaysia too has taken an initiative to improve the construction industry's image by establishing the National Integrity Plan (NIP) which was launched by the government in April 2004. This plan was also established to guide the public sectors in ensuring the integrity which aligned with the objective of NIP that is to establish a fully moral and ethical society, whose citizens are strong in religious and spiritual values and imbued with the highest ethical standards. Nonetheless, there is lack of research looking into ethics in project management specifically in project procurement. As Walker (2014) further comments, there is a dearth of papers related to ethics in project management even though the project management discipline should maintain a strong and enduring interest in ethics to encourage project managers to deliver value in a more holistically manner that is consistent with being a member of a profession.

Previous research, particularly research conducted by the Australian maritime environment (Sakaran *et al.,* 2008) and the Ministry of Defence, UK (Williams *et al.,* 2009) has proved that project governance is viewed as vital in the successful delivery of public sector projects. Project governance has been practised by most of the public sectors in developing countries to ensure the smoothness of project implementation. The need for project governance focusing on ethical issues has become important, especially with the increasing number of project failures and delays due to human behaviours and the conflict that always takes place in these projects. However, the majority of work on ethics in project management specifically in project procurement takes a normative perspective by linking moral philosophy and management in addressing what can be done or is done in given situations (Muller, 2014). Rather than taking a normative point of view, this research examined the perceptions of the practitioners concerning their judgment in a descriptive manner.

However, there are some obstacles in implementing these projects under the economic plan, primarily in the procurement process. This is because government procurement is a process that also involves the political system. Public sectors' procurement spending, accounts for about 15% of the world's GDP (OECD, 2012) – if the procurement is not properly managed it can lead to waste and poor development.

Factors Contributing to Ethical Decision Making

Ethics in project management has been widely talked about and debated by practitioners and researchers and one of the areas that they focus on projects

procurement. This area has been identified as one of the major areas areas of project management that have contributed to ethical issues. Based on an extensive literature review by other scholars, researchers and writers there has been a lack of focus on ethical issues in public sectors' project procurement, particularly in the planning stage. Many studies have emphasized ethical issues in project management (Renz, 2007; Loo, 2002).

There are a number of definition for ethical decision making but for the purpose of this study, a definition that incorporates the importance of ethical decision making needs to be justified. These clarifications, combined with elements from all the above definitions, are synthesized into the following working definition for this study:

Ethics is defined as a set of principles of understanding moral issues and discipline behaviours in project procurement leading to honesty, trust, and fairness. It is a systematic attempt for an individual and organization to determine and prioritize the right rules and obligations to govern ethical decision making in project procurement.

There are many factors that affect the way we make decisions. To improve ethical decision making, one must first understand how individuals make ethical decisions in an organizational environment. Therefore, it has been identified that there are several ethical decision-making models that have numerous variables that influence the way we make decisions and ethical choices in an organization. There are many individual variables that can influence ethical decision making, such as age, gender, religion, and beliefs (Hegarty and Simms, 1978). Those who have high confidence will make decisions based on their personal judgment. On the other hand, for those who have less confidence, they will be more likely to rely on the other team members in making decisions. The ethical decision making is made more on the principles rather than the policies itself. Situational variables also play an important role in influencing ethical decision makings, such as an organizational context and an environment external to the organization. Below are the factors that contribute to ethical decision-making in project procurement:

a) Economic Downturn
   During the economic recession, most industries faced financial difficulties – this was especially true of the construction industry. These companies are willing to do anything in order to survive during the recession especially to get a tender or projects from the public sectors (Works Ministry, 2012). This opens up the opportunity for bribes and corruption to occur. Research conducted by Rahman et. al. (2007) parallel with foreign research conducted by FMI (2006) which revealed that 63% of respondents agree

that construction industry is tainted by unethical acts among construction players including the public sectors. A case had happened in Giat MARA centre, Kuala Lumpur, Malaysia that involved a lecturer at this centre. In this case, the lecturer was arrested by Anti-Corruption Agency (ACA) after he was alleged to have awarded his wife's company a tender. The man was accused of abusing his position as a quotation analysis officer by taking part in a contractor/supplier/wholesaler central committee meeting for awarding of the tender (NST, 2008). One of the main reasons of this is happening is due to personal financial needs (Rahman *et al.,* 2007)

b) National Objectives.
    The construction industry contributes major to the Malaysian economy. Projects under the 10MP gave positive impact to the country's main sectors particularly the construction and trade as well as Domestic demand (CIDB, 2013). According to Public Works Department (2014), there are ten mega projects with a value of billions of ringgit that need to be completed. Federal government development expenses increased to RM40.6 billion (USD$12.7 billion) due to the funding of building and improvements to infrastructure such as schools, hospitals and government living quarters. Under the 10MP, there is also a road development concept called "The conceptual regional highway configuration plan for Peninsular Malaysia" that needs to be completed by 2020 by Works Ministry. All these projects must be completed by 2020 to ensure that Malaysia becomes a developed country by that year. All these have caused pressure to the construction players including the public sectors. This also has caused ethical issues in project procurement as there are many contractors who wanted to get the tender by giving bribes to the people in the procurement process especially. A good deal of corruption also involves cronyism and nepotism. As a result, contracts go to companies in which powerful political figures and senior bureaucrats or their associates, friends and family members have a major ownership or financial stake (Jones, 2002). In 2004, there was a case involving a small network of contractors known as Project Management Consultants, with crony links with Malaysian senior officials and government leaders, won a high number of profitable government contracts for civil engineering consultancies without a competitive tender (Siraj and Sunita, 2006).

c) Leadership
    More than half of the respondents of the research conducted by Rahman et. al. (2007) felt that leadership is needed as role model o improve the professionalism. Leaders must show a good leadership style as they are the role model of their employees. Their conduct or behaviour will influence

the organization's norms and values. The people within the organization will normally follow the norms that are being practiced within that organization (Gupta & Sulaiman, 1999; Zabid & Alsagof, 1993). The behaviour of the top management and the immediate superior is a guidepost for acceptability of ethical or unethical behaviour in an organization. They are the role model of their staff to show the integrity is well implemented in the organization. Therefore, the Integrity Institute of Malaysia (IIM) was established in 2004 to inculcate ethical values and behaviour among the public and private sectors. They also organised conferences and campaigns to raise the public awareness of the unethical behaviour not only among the public but the most important thing is to the top management of the organization itself.

d) Non-transparent selection process
    It is crucial that the issue of transparency and accountability omit be a focus on especially when it comes to public expenditure. Problems of accountability arise when governments ignore ethics and constitutional and legal provisions in conducting public money and affairs. This also includes the disregard of the administrative systems, tasks that are complex until it is difficult to identify who is responsible for what, activities are underfunded. When the problems of accountability occur, thus there are many potentials of unethical behaviour to occur that will influence the ethical decision making in plan procurement. Failure to control the bidding exercise is also causing unethical behaviour. It will end up with under bidding by contractors and this will affect the project implementation and project delivery to the end user (Rahman *et al.,* 2007). It is important to control the bidding exercises to ensure that the public sectors are getting the most qualified contractor to perform the project based on the specific requirements. If this is not controlled it may cause the low project quality or even worse the project could not be completed within the stipulated time frame due to the bidding exercises that are not controlled by a specific body or department.

    Procurement process public sectors need to be transparent to be able to answer the following questions to avoid any ethical issues arising; • which procurement systems are the ministry adopting, how can the ministry be more efficient in the procurement process to avoid from ethical issues to occur • who are the people that will be involved in the plan procurement and • how do the public sectors make the plan procurement process transparent so that ethical issues can be evaded? These questions will Procufacilitate the public sector in overcoming ethical issues in the

procurement process. Any ethical issues and ethical behaviour should be solved in the procurement planning itself. In the public sector, as the expenders of public funds, it is important to operate the project procurement on rigid guidelines. Doing what is honest, forthright and in the best interest of the organization and public is normally included in the guidelines or the code of ethics. Unfortunately, public sectors do not always operate within these parameters and when these boundaries of the code of ethics are crossed, there is tremendous public scrutiny.

Project Governance Criteria

Many early studies did not offer a theoretical framework to demonstrate project governance practices, especially in public sectors. Project governance has only recently become an issue of importance community and literature, especially in Malaysia. Over the last ten years, there has been more interest in the governance of projects in general and the governance of large complex public projects in particular. Project Governance is the framework around selection, prioritization and project oversight for continued adherence to organizational objectives. When the public sector applied this concept to the implementation of their projects, it actually could assist in changing a project's scope base on project oversight. Previous research has proved that project governance is viewed as vital in the successful delivery of public sector projects particularly research conducted by the Australian maritime environment (Sakaran *et al.,* 2008) and the Ministry of Defence, UK. (Williams *et al.,* 2009). Project governance has been practised by most of the public sectors in developing countries to ensure the smoothness of project implementation.

According to Malaysian e-procurement (2014), transparency demands openness, communication, and accountability in government procurement and it is fundamental in increasing confidence. With lack of transparency and accountability in project procurement, it could cause a major threat to the integrity of the public sectors. In the context of public sector procurement, transparency refers to the right and ability of all interested participants in the process to know and understand the actual means and processes by which contracts are awarded and managed (Bertok 2005). Project governance ensures that the decision making in project procurement processes can be done ethically and are transparent to boost the tax payers' confidence and to add better value to the government's procurement itself.

The Delphi Study

Delphi was developed by the Rand Corporation for technological forecasting. Hasson et. al. (2000) defined Delphi as a group facilitation technique that seeks to obtain consensus on the opinions of experts through a series of structured questionnaires that are carried out in many rounds depending on the reliability of the results. These questionnaires were answered by a panel of experts who remain anonymous.

The Delphi Study has been widely used in social science research and is being increasingly used in policy making in the construction industry. However, Delphi study is rarely applied in the area of project governance. Previously, Delphi Method was used in the research related to IT (Smits & Hillegersberg, 2015) and nursing (Crisp *et al.,* 1997; Jairath & Weinstein,1993; McKenna,1994; Ravens & Hahn, 2000). However, there is the limited application of Delphi method in project governance area specifically in the public sector. In order to develop a framework, it is important to understand the ethical issues involved in project procurement. Because of the sensitivity of this topic, the Delphi Study is the most suitable way of understanding and examining the attributes to ethical issues because it doesn't involve physically meeting. Initially, the participants will not interact with each other. This technique facilitated the involvement and communication of multiple, knowledgeable participants in order to define and develop the eventual structure of the project governance framework. Through the efforts of the researcher as the facilitator, the panellists see and react to each other's ideas. This technique was conducted through mail and email. Questions and background information were sent out to the participants who have been selected on the basis of the relevance of their expertise. Then, these ideas were compiled to develop a framework and set out again for the comment. This process was carried out until agreement and consensus on the wording or process to be taken has been reached and when there are consistencies in the results.

In order to get consensus on ethical decision making in project procurement, the Delphi study is the most suitable way for this particular research. Project governance is a new concept in Malaysia. Having expertise from other countries that are more familiar with this concept can really assist in developing the project governance framework for ethical decision making. The Delphi is therefore, an iterative, multi-stage process designed to combine opinion into group consensus (McKenna, 1994, Lyn et.al. 1998). The Delphi study is a back-and-forth process that engages iteration of questionnaires. This process continues until consensus is achieved among the panellists. The traditional way of conducting a Delphi study is where the questionnaires are sent to the panellists for their evaluation, consideration, and opinion, then returned to the researcher for analysis

and summarization of the panellists' responses and re-sent to panellists again for consideration.

The intention of this approach was to discover a knowledge base concerning the theory and practice of project governance framework and to explore the opinions from the experts in the field of project governance and ethical decision making in project procurement. Therefore, for this particular research, the following objectives are identified:

- To rank the factors influencing ethical decision making
- To rank the types of ethical behaviour in project procurement
- To identify the concept of project governance in project procurement planning
- To identify and rank the factors contributing to the transparency and accountable decision making

The application of the Delphi approach in this research allows for the better participation of different and anonymous experts in this field of project governance, project procurement and ethical decision making with a saving of time and expense. At the same time, it is convenient to the researcher as well as to the panels of experts, as face-to-face communication is not needed for this approach but still could achieve the consensus. This was accomplished through a thorough structured process that involved a group of experts who are considered to be highly knowledgable in the area of project governance and ethical decision making.

The Methodology

The Delphi questionnaire survey was developed based on the questionnaire results and in-depth literature review that was previously conducted. The data from both of these processes were used as the input in developing the questionnaire for Delphi study round 1. Upon completion of each round of the Delphi Study, the results from the panels were analyzed instantly in order to be ready for the subsequent round of the Delphi Study. This process was continued and repeated until the consensus was gained from the panel. As for this research, 3 rounds of Delphi were considered sufficient in attaining conformity from all the panels. It is important to ensure the process of selecting the panels of experts for this Delphi study is done appropriately and wisely. This is because the success of a Delphi study is largely dependent on the quality of the participants or panels. Chan et. al. (2001) emphasized that the success of the Delphi method depends principally on the careful selection of the panel membership, which consists of members with expertise in the area of project procurement and project governance. Hence, a fine

balance must be struck in selecting experts who will be relatively impartial so that the information provided reflects the current knowledge (Goodman, 1987).

The Delphi participants should meet four "expertise" requirements: i) knowledge and experience with the issues under investigation; ii) capacity and willingness to participate; iii) sufficient time to participate in the Delphi; and iv) effective communication skills (Adler & Ziglio, 1996). Therefore, in choosing panellists for this study, the following criteria were adopted in order to identify eligible panels for this specific study:

a) practitioners who have extensive working experience in project procurement in public sectors, specifically in Malaysia
b) experts who have current, recent involvement in the management of procurement in public sectors
c) experts who have in-depth knowledge and understanding of project governance and project procurement

These panels were contacted personally through telephone and emails to determine if they would like to participate in this study. The panels also should fulfill the criteria that have been determined by the researcher for this research. The practitioner panellists and experts were senior representatives that have many experiences in dealing with project procurement for the public sectors from Malaysia and other countries (Table 1). This is crucial to ensure the findings are valid and strong.

Table 1:
List Panellists of Experts Responded

No.	Position	Background	Sector	Organisation
1.	Senior Lecturer	Academician	Public	AaA University
2.	Head of Department	Practitioner	Public	AaB organisation
3.	Director	Practitioner	Private	AaC organisation
4.	Senior Lecturer	Academician	Public	AaD University
5.	Chief Assistant Director	Practitioner	Public	AaB organisation
6.	Senior Lecturer	Academician	Public	AaE University
7.	Director	Practitioner	Public	AaF organisation
8.	Manager	Practitioner	Public	AaG organisation
9.	Assistant Director	Practitioner	Public	AaG organisation
10.	Assistant Director	Practitioner	Public	AaG organisation
11.	Senior Lecturer	Academician	Private	AaH University
12.	Engineer	Practitioner	Private	AaI Organisation

In order to acquire the most valuable opinions, only practitioners and academicians who met all the criteria were selected in order for this Delphi study to be successfully done. A list of the participants together with the occupation is

shown in Table 2 below. However, the names and their organisations are not reported due to anonymity.

Table 2:
The breakdown of panels of experts based on organisation

Experts/type of organisation	Number
Procurement Officers	2
Government officers	2
Professional practitioner	4
Academician	3
Professional Institution	1
TOTAL	12

Analysis and Results

Measuring consensus approach is the least developed component of the Delphi method (Crisp *et al.,* 1997). To answer the research questions, descriptive analysis (mean, median, mode, standard deviation) were used. Central tendencies (means, median and mode) and levels of dispersion (standard deviation and inter-quartile range) are calculated using SPSS version 22 to provide panels of experts with information on the collected opinion. However, the median was excluded from this analysis as it is not related to the discussion on the central tendency. Standard deviation is used in measuring the square root of the average from the mean using squared distances to emphasize the influence of the unusual data. Besides using standard deviation and mean rankings, IQD is also used to determine the consensus for round 2 and 3. According to Raskin (1994), he has identified an IQD of 1.00 or less as an indicator of consensus. IQD is the absolute value of the difference between the 75th and 25th percentiles with smaller values indicating higher degrees of consensus (Rayens & Hahn, 2000). As this study employs a 1 to 5 Likert-type scale to compute the responses, items with an IQD score of 1.00 need to have a better analysis to confirm if the consensus was achieved. Therefore, Rayens and Hahn (2000) recommend analysing the proportion of responses to determine consensus by using a 60% (positive or negative response) cut-off point.

Delphi Round 1 questionnaires were designed based on the questionnaire survey results and also an extensive literature review conducted earlier. The survey was sent out to the panels via email and two (2) weeks were given to the panels to complete and return the survey. Delphi Round 1 was divided into three (3) main parts; project attributes (Part A), factors contributing to ethical behaviour in project procurement (Part B), project governance (Part C) and client's requirement (Part D). Part A and B used SPSS 22 to analyse the feedback while to analyse part C and D content, analysis techniques were used as described by Berg (2004). This analysis was used to identify themes and keywords related to the development of a

project governance framework for ethical decision making in project procurement for Malaysian public sectors.

There were eight main groups of criteria with 92 indicators that were rated by the experts (Table 3). From 92 indicators that have been listed, 30 of the indicators were rated 4.00 and above and 60 indicators were rated under the score of 3.00 to 4.00. There were only two indicators that were rated below 3.00. Generally, all the indicators have been scored relatively high (with an average score of 3.80 above) by the experts of panellists. This shows the importance of these indicators for developing project governance framework to achieve good ethical decision making in the Malaysian public sectors.

Table 3:
Delphi Round 1to 3 Results

Ethical Decision-Making Criteria	Sub criteria	Mean (Round 1)	Mean (Round 2)	Mean (Round 3)
Organisational Culture Criteria	Leadership, Norms, Group Norms, Attitudes, Beliefs, Behaviour of colleagues, Policy, Management approach, value, work environment, communication, peer group influence, rules & regulations, organisational structures	3.93	3.93	3.93
Project Governance Criteria	Full of transparency, Authority and responsibility, Discipline governance, Professional and quality standards, Engagement of stakeholders, Risk management, Control and communication of information, Coherent and supportive relationship, Culture of improvement, Decision making, Program direction, Single accountability, Reporting and closure, Project ownership and sponsorship, Effectiveness of project management function, Forum	3.92	3.92	3.92
Professional Ethics	Personal (individual ethics), Company policy, Rules, and regulations, Organisation code of ethics, Professionals body code of ethics,	3.91	3.92	3.91
Project Criteria	Transparency, Accountability, Management, Risk allocation, urgency of project outcome, responsibility, quality, time constraint, degree of complexity, speed, personnel involved, experience, price competition, degree of flexibility, design & construction integrity, project cost, disputes & arbitration, project size & type, payment method	3.86	3.86	3.86
Government Procedures	Procurement Guidelines Book, Financial Procedures Act, Treasury Instructions, Treasury Circular Letter	3.81	3.81	3.81
Contract Award Criteria	Integrity, Responsibility, quality, risk management, best value for money, profitability, running costs, time limit for completion, contract requirement, aesthetic & functional merit, contractor company's past record, scopes, lowest price	3.77	3.77	3.77

Client's Requirements	Risk allocation/avoidance, quality, Responsibility, Disputes and arbitration, Project scope, Complexity, Certainty, price, flexibility	3.73	3.73	3.73
Individual Criteria	Moral Code, Attitude and behaviour, Personal values, Personality, Position/status, Ego strength, Locus of control, Work experience, Educational background, Socialization, age	3.67	3.67	3.67

Round 2 Delphi was sent to the experts in May 2012 and the experts were given a month to complete and return the questionnaire survey. However, due to their working commitments, the questionnaire was not returned for one-and-a-half months. Two reminders were sent to the experts who had not yet returned the questionnaire survey. At the end, a total of 11 experts returned their completed questionnaire and one of the experts decided to drop out due to work commitment. Preparation of the second questionnaire began shortly after Round One questionnaires were completed and received. The questionnaire sent to the respondents in round two was patterned after the results described in the handling of round one. This round was aimed at providing Delphi Round 1 experts with the opportunity to review the findings and the respondents were asked to re-evaluate the results to adjust the rating if they felt that it was not in the right rating. Experts have the chance to reject, accept or comment on the findings.

From 92 indicators listed, 96.7% of the experts agreed with the rating resulting from Round 1(Table 3). Three indicators reached consensus 100% from the experts (forum, certainty (firm price and strict completion date) and moral code). On the other hand, 26 indicators reached consensus with medium consensus (between 60% and 75%). Most of the experts agreed with the results from Delphi Round 1. There were no changes made to the rating resulting from Round 1 except for the three indicators.

Round 3 Delphi was sent to the experts in September 2012 and again the experts were given a month to complete and return the questionnaire survey (Table 3). However, due to their work commitments, the questionnaire was returned after one-and-a-half months. Two reminders were sent to the experts who had not yet returned the questionnaire survey. The 11 experts returned their completed questionnaire without any dropout. The questionnaire sent to the respondents in round three was patterned after the results described in the handling of round two. This final round aimed at providing Delphi Round 3 experts with the opportunity to review the findings and the respondents were asked to finalise their answers and to gain the final consensus from them.

From 92 indicators listed at the beginning of the research, 42 were considered as the main indicators for a project governance framework for ethical decision making in project procurement. This represents approximately 46% of the total number of indicators. From the original 92 indicators, 50 indicators were discarded as they fell below the cut-off points of 3.90. From the seven primary criteria, project criteria have the most number of indicators with a total of ten indicators and this is followed by organizational culture criteria with the total of nine indicators. Contract award criteria have five indicators. On the other hand, both client's requirements and individual criteria have three indicators respectively whereas government procedures have only two indicators and professional ethics criteria have one indicator. Project governance criteria have nine indicators from 14 indicators listed previously.

All these 42 indicators were closely related and were combined in the representation of the framework. Transparency and accountability indicators under project criteria were rated high where both have the mean value of 4.33. This is aligned with the integrity indicator that was listed under contract award criteria. It can be seen that the experts felt that integrity, accountability, and transparency must be included in the framework to ensure that the decision making in project procurement are made ethically. A comprehensive Delphi survey was done with the list of criteria and the open-ended questions. A consensus in response from the panel was achieved after three rounds of Delphi were conducted. This confirmed the eight primary criteria:

- Project criteria
- Organisational culture criteria
- Contract award criteria
- Client's requirements criteria
- Individual criteria
- Government procedures
- Professional ethics

The experts who were appointed and participated in this research are from top management and who have experience in their respective organisations. The entire panel of experts came from different backgrounds, in both public and private sectors. The panels are also a combination of practitioners and academicians pertinent to the context of this study. Therefore, the results presented in this research are holistic and balanced specifically in the Malaysian context.

The indicators were rated highly by the experts which demonstrate that project governance is important in the context of ethical decision making in project procurement. After three successive rounds of Delphi study, the experts have

reached their consensus, whereby 42 indicators are the primary indicators that need to be incorporated in the project governance ethical decision-making framework.

Conclusion

The Malaysian public sector is under pressure to respond to calls for integrity. The issues such as transparency, accountability, cronyism, corruption, and bribes are very common and still, exist in project procurement. The public perception towards the Malaysian public-sector procurement system, as being free from ethical issues, is quite low and it is the main concern that really worries the public. The ethical issues arise due to interference from the other public officials who are not related to the project procurement decision making that causes a conflict of interest and cronyism, where projects are awarded due to the personal relationship instead of qualifications and good background. The lack of knowledge and understanding of project governance is a challenge faced by the public officials.

With a thorough understanding of the distinctive criteria of the ethical decision making and the nature of the project procurement field, this research has employed a mixture of extensive literature review and Delphi study, which have been used to formulate, assess and verify the critical criteria of ethical decision making and ethical issues in the Malaysian public sector. Furthermore, the application of Delphi study in this research has contributed to the knowledge area of project governance, especially in the public sector. By applying Delphi study, it can actually assist in getting a better understanding and accurate information on ethical decision making among the public officials. This can help to promote project governance specifically among the Malaysian public officials, in guiding them to make decisions that are ethical and to enhance deliverables of the project outcome in order to achieve the Vision 2020.

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