

Netto Jr. & Raju, 2017

Volume 3 Issue 2, pp. 1470-1486

Date of Publication: 16th October, 2017

DOI-<https://dx.doi.org/10.20319/pijss.2017.32.14701486>

This paper can be cited as: Netto, J., & Raju, V. (2017). Significance of Project Management Skills and Balancing of Managerial Conflicts between Project Stakeholders. *PEOPLE: International Journal of Social Sciences*, 3(2), 1470-1486.

This work is licensed under the Creative Commons Attribution-Non-commercial 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

SIGNIFICANCE OF PROJECT MANAGEMENT SKILLS AND BALANCING OF MANAGERIAL CONFLICTS BETWEEN PROJECT STAKEHOLDERS

Mr. Joshua Allan Netto Jr.

PhD Aspirant, Limkokwing University of Creative Technology, Malaysia

[*josh.netto@gmail.com*](mailto:josh.netto@gmail.com)

Assoc. Prof. Dr. Valliappan Raju

Assoc. Prof. Dr. Valliappan Raju, Post Graduate Centre, Limkokwing University of Creative Technology, Malaysia

Abstract

As the business environment in the building and construction industry becomes increasingly competitive with a high importance on efficiency and productivity, it is significant for project management teams to develop the right skills and competencies to handle projects well in order to balance the differing-needs of their key stakeholders. The critical part is the subject of project stakeholder satisfaction that Weaver (2007, p. 20-21) mentions as the objective of project management, which links all the competencies of the project manager, the human management factor, and the importance of leading the project with the drive to achieve completion “as efficiently as possible, to the satisfaction of the project’s stakeholders. As a result, achieving key project stakeholder satisfaction appears mysterious due to the subjectivity of the defining success because project success is “perceived differently by different stakeholders” (Shokri-Ghasabeh & Kavousi-Chabok, 2009). The client on one hand, being the paymaster for the project measures success in terms of the delivery of value. The consultants, on the other hand, have a deep interest in their reputation as designers protect

the interests and needs of their clients as their hired agent. The contractors, in contrast, often choose to participate in a project based on the client's financial capabilities, and have interest to call the designs and the completeness of contract documents into question, since variations present opportunities to make additional profit, or to incur losses on the part of the contractor should these not be put forward. In view of this the leadership, management capabilities and communication skills of the project manager and the project management team is critical, which includes interpersonal skills through negotiations, expectations management, influencing problem solving and decision-making skills in order to delicately balance the needs and expectations of these stakeholders, complete the project, and gain acceptance of the deliverable to the stakeholder's satisfaction at the close out of the project. This research paper studies and describes about the relationship between constructor, client and consultant in project management perspective.

Keywords

Project Management, Construction, Communication, Consultant, Stakeholder, Property, Management, Leadership

1. Introduction

The significance of the construction industry to the Malaysian economy is only set to grow, as shown by the latest figures published by the Department of Statistics Malaysia, where the “value of construction work grew by 10.7% year-on-year basis to a record RM 31.9 billion in the third quarter of 2016” (Department of Statistics Malaysia, Official Portal, 2016). This is due to the fact that Malaysia is actively progressing towards its goal of becoming a high-income nation by 2020. The environment on such projects too is challenging, and is known to be “traditionally aggressive, with the potential for conflicts between clients, architects, construction teams and other stakeholders”. (Roffeypark, 2015, p. 8). Hence, as the country's investment and dependence on construction projects increase, a greater appreciation and emphasis has been placed on project management skills and competencies when managing such projects (Mahmud, 2009, p. 23).

However, expertise, know-how and qualifications in the Malaysian construction industry show much room for improvement. A study on the performance of construction firms in Asia from 1990 to 1999 showed that only one Malaysian firm was able to remain on the list for three years, with the highest ranking of 180 among 225 contractors (Ofori, 2010, p. 8). Rightly then, the construction industry in Malaysia is also said to be “facing chronic

problems including poor performance” (Memon et al, 2012, p. 45). Bridging the understanding of construction and project management best practices and techniques with a view to achieving project management success becomes increasingly critical as cost and efficiency pressures continue to mount, and clients in Malaysia show trends of becoming more demanding, particularly in the private sector to deliver projects “within budget and tighter completion dates...faster construction time, better quality, cost an value for the projects with reducing running costs” (Hassan et al, 2009, p. 231).

Skills and competencies are at the core of the project management practice. The authority in project management, the Project Management Institute, defines the project management practice as “the application of knowledge, skills, tools and techniques to project activities to meet the project requirements” (Project Management Institute, 2013, p. 5). These skills and competencies are especially important when using stakeholder satisfaction as a yardstick to measure project management success. It is important here to highlight the distinction between project success, and project management success, whereby project success is how well the project accomplished what it was setup to do, and if the agreed deliverable was achieved, whereas project management success addresses the management practices which is relevant to the “planning, organizing, coordinating, leading and controlling resources to accomplish the project objective” (Rugenyi, 2015, p. 1). Successful management of a project essentially leads to key stakeholder satisfaction upon completion of the deliverable and project closeout.

2. Literature Review

With regard to project stakeholders, it is interesting to note that “A Guide to the Project Management Body of Knowledge” known as the PMBOK Guide, one of the core publications of project management best practices, has an entire knowledge area dedicated to Project Stakeholder Management. The main project stakeholders presented in the PMBOK Guide are the sponsor, customers and users, sellers, business partners, organizational groups, functional managers and other stakeholders. These stakeholders and their individual involvement on the project are shown in the following table, which provides insight possible causes of underlying differing interests among key stakeholders.

Table 1: Differing Project Interests

Project Stakeholder	Involvement on the Project
Sponsor	The person or group who provides resources and support for the project and is accountable for enabling success.
Customers and Users	Customers are the persons or organizations who will approve and manage the project's product service or result. Users are the persons or organizations who will use the project's product service or result.
Sellers	Sellers, also called vendors, suppliers, or contractors, are external companies that enter into a contractual agreement to provide components or services necessary for the project.
Business Partners	Business partners are external organizations that have a special relationship with the enterprise, sometimes attained through a certification process. Also provide specialized expertise or fill a specified role such as installation, customizing, training or support.
Organizational Groups	Organizational groups are internal stakeholders who are affected by the activities of the project team. These groups support the business environment where the projects are executed.
Functional Managers	Functional managers are key individuals who play a management role within an administrative or functional area of the business, such as human resources, finance, accounting, procurement.
Other Stakeholders	Additional stakeholders, such as procurement entities, financial institutions, government regulators, subject matter experts, consultants, and others.

Source: Adapted from the PMBOK Guide (Project Management Institute, 2013, pp. 32-33)

From the above table, we clearly see the potential undercurrents of differing interests based on the stakeholder group's varying involvement on the projects. The Projects in Controlled Environments manual (AXELOS Limited, 2009), another authority in project management, also acknowledges the differing interests on a project, which are represented through three key groups of the Business, the User and the Supplier, as illustrated in the following figure, which is taken from AXELOS Limited (2009, p. 32)

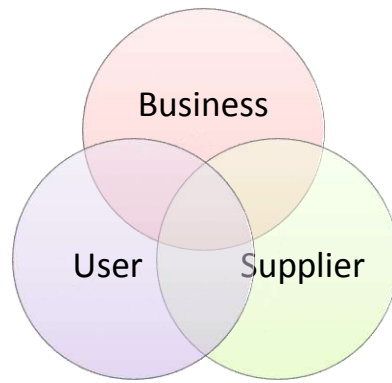


Figure 1: *Differing Project Interests*

The “business” stakeholders are often the financiers of the project, and their main interest is to fulfil the realization of the benefits from the business endeavor, hence the drive toward value for money and cost consciousness. The “user” category, on the other hand are the individuals that will use the products or the output of the project, hence their interest involves the ease of operations of the product and the functionality of the output to enable their job to be done once the project is completed. The “supplier” category are the individuals that build the projects output, ensures the deliverables are completed, and often put up and support warranties on the output. Hence, the supplier is concerned with the ease of which the product can be made, and the technical integrity of the output when completed.

The collaboration and engagement of key project stakeholders has posed a significant challenge in the Malaysian environment. Chua (2012) mentioned a number of dispute areas including time and cost overruns, disagreement on claims, variation orders, poor communication, design errors, inclement weather, finance and payment issues, unforeseen site conditions, poor workmanship, incomplete and delay in issuing information, handling of additional works, unfair allocation of risk, slow client’s response and discrepancies or mistakes in contract documents as among the many causes of construction disputes. These have a wide and diverse range of impacts such as damage to business relationships, increase in project costs, project delays, the undermining of the team’s spirit, damage to the reputation of companies and project abandonment. The process of litigation or arbitration is also lengthy and expensive and places a tremendous toll on the country’s legal system. (Chua, 2012)

Koh (2005) in his study construction disputes in Malaysia found a number of causes and contributors from the clients, designers and contractors. The findings from his study are summarized in the following table.

Table 2: Causes of Construction Disputes

Project Stakeholder	Contributors to Construction Project Disputes
Clients	Deficient/poor management, supervision and coordination efforts on the part of the project, ambiguities in contract documents and reluctance to check for constructability, clarity and completeness of construction process.
Designers	Incompleteness of drawing and specifications as well as design and specification oversights and errors or omissions resulting from uncoordinated civil, structural, architectural, mechanical and electrical designs and lastly inadequate in open and factual communication.
Contractors	Delay/suspension of works, inadequate contractor management, supervision and coordination, failure to understand and correctly bid or price the works, reluctance to seek clarification and failure to plan and execute the changes of works.

Source: Adapted from Koh (2005, p. 84-86)

Construction disputes are rampant in the Malaysian industry, placing a tremendous toll on the country's legal system, which gave rise to the introduction of the Construction Industry Payment and Adjudication Act 2012, with the purpose of providing a cheap and relatively quick alternative to dispute resolution, when compared to a full litigation. In addition to the major disputes areas, there are also related latent issues that place the contractors "at the mercy of the clients", such as wrongfully withholding payments and retention sums, even deliberately delaying such payment for financial advantage. (Azman et al, 2014, p. 2).

2.1 Key Stakeholders on Malaysian Commercial Construction Projects in Malaysia

Takim & Adnan (2008, p. 1) in the study of project success in Malaysia identified four key project stakeholders and stakeholder groups, namely, the government, private clients, consultants and contractors. However, it is to be noted that this research scope is limited to the construction management practice on commercial projects in Malaysia. In view of this, this research only involves three of the four stakeholders mentioned by Takim & Adnan (2008, p. 1), and excludes the government since the discussion is around non-public projects owned by private or public-listed companies in Malaysia.

At this juncture, it is important to mention that the PAM 2006 standard form contract is often regarded as the default contract for commercial projects in Malaysia, with 90% of the building contracts in the private sector based on this form, making it very significant to the construction industry in Malaysia, and the backbone for commercial construction contractual governance (Rajoo, 2010, p. 248) (Zakaria et al, 2013, p. 37). Thuraisingham (2011, p. 5) discusses the key stakeholders that the architect or contractor administrator actively manages in discharging his professional duties in the contract implementation and management phase. In summary, there are three main stakeholders in the commercial construction projects in Malaysia, as shown in the following figure.

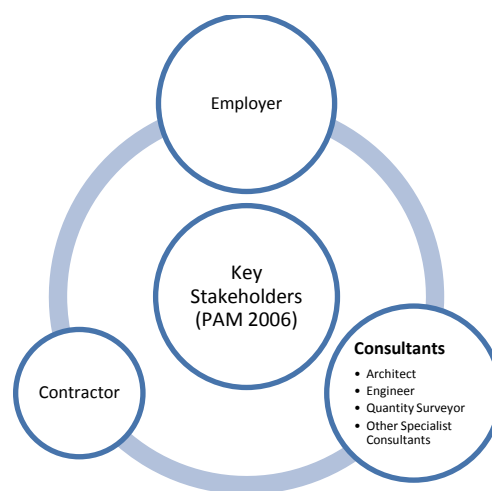


Figure 2: *Key Stakeholders in the PAM 2006 Standard Form Contract*

2.2 The Interests that Guide Key Construction Project Stakeholders

2.2.1 The Clients

Well before the selection of the contractor, the client has multiple options when considering the type of contract, and the use of standard form contracts. This addresses the fundamental objective of the construction contract, which is the apportionment of risk and responsibility between the client and the contractor. The use of standard form contracts is advantageous in this regard, since the clauses have been “tried and tested over the years, so their interpretation becomes easier and there is less need to become involved in costly litigation”. (Miles, 1996, pp. 1-2)

In essence, the implementation of a construction contract is in effect an attempt for the client as the project owner to share or transfer risk to the contractor. In this regard, when choosing the PAM 2006, the preferred standard form contract on Malaysian commercial

construction projects, the client makes an informed decision to empower the consultants, particularly the architect, to act as his representative, agent and an independent certifier. This creates a distribution of the risk between the client, consultant and contractor, although the majority of exposure in this form of contract is placed upon the contractor (Thuraisingam, 2011, p. 18) (Rajoo, 2010, p. 156).

During the tendering process, the client also makes an evaluation of alternatives, which is often driven by price, through mechanisms such as the competitive bidding processes. The increase in interest toward competitive bidding, particularly on commercial projects in Malaysia is critical to understanding the client's intentions in the evaluation of alternatives to "produce the lowest commercially viable tender price in the current market condition", while seeking to transfer a sizeable amount of risk and responsibility to the contractor, and reducing the consultants participation in the bidding process at the same time (Oyeyipo et al, 2016, p. 2).

The unending drive by the various kinds of client and employer organizations, such as property owners, developers, real estate investors, or owners cum operators, to reduce their cost structure results in the contractors being obliged to offer the "lowest prices in order to be chosen, and that the price tendered by the chosen contractor is all that the client will have to pay" (Miles, 1996, p. 6).

2.2.2 The Consultants

The consultants on commercial construction projects in Malaysia face an overlap of roles as the agent of the employer, the supplier of designs and contractual information, change authority and independent certifier. This is due to the fact that the architect, as the lead consultant relies on the engineers, quantity surveyors, designers and other consultants as subject matter experts in the compliance, claim and verification of variations processes (Suratkon, 2004, p. ii). The PAM 2006 contract presents the backdrop for this relationship, since consultants, particularly the lead architect is empowered to act with a certain degree of independence and authority on the project (Thuraisingam, 2011).

Under the traditional construction contract arrangement, particularly under the PAM 2006 standard form contract, it is the client that appoints consultants to specify the building design. The design information comes after the gathering and analysis of the client's requirements for the project, and capturing them in form of "tender documents including qualification documents and bill of quantities", which are approved by the client before distribution (Mohamad et al, 2010, p. 37).

This conventional client, consultant, contractor approach creates a channel of instruction with the consultants as the intermediary, with directives from the client to the contractor issued formally through an Architect's Instruction (Zakaria et al, 2013, p. 38). The consultant's authority as administrators of change create a dilemma in practice, since the consultants too have an interest to minimize change and variations, especially those relevant to inadequacies in contract documents. This leads to situations where it is advantageous on the client's part to defend these documents in the fear that "that the contractor will scrutinize the contract documents for errors and ambiguities that may lead to claims, exploit their monopolist position by excessive pricing of extra work, or save money by shrinking on quality" (Kadefors et al, 2001, p. 3).

This underscores the importance minimizing variations from the viewpoint of the consultants, since not only does it cast doubt on the contract documents, but also may affect the client's post-purchase behaviour toward them as agents. Kadefors (1999, p. 238) aptly mentions, "for the design professionals as well, there is an indirect economic interest in that too many approved contractor variations may affect the client's impression of their professional competence and, thereby, their reputation and chances of getting future appointments."

2.2.3 The Contractors

The most openly recognized and obvious interest shared in common on commercial construction projects is economic interests (Kadefors, 1999, p. 237). This is very clear in the case of the contractor and client relationship, where the contractor seeks to gain economic benefit from the client's project. These interests drives the intentions and actions of the contractor when choosing to engage in a construction project, from as early participation in the pre-qualification stages, all the way through the tendering process where pricing and profit expectations come into play, and remaining committed from commencement until full completion of the construction project, where claims and considerations for credit and capital are relevant.

Oyepiyo et al (2016, p. 2) identifies a number of factors, such as the reputation of the client, physical resources necessary, present state of the workload, ability of the client to pay, margin of profit involved, availability of work, financial resources, identity of consultants, time available to tender, project size, owner promoter, contract conditions, number of competitors tendering and experience in projects. All of these considerations spring from the contractors understanding of the client's intention and interest to transfer risk and minimize

cost, while the contractor's themselves seek to minimize their own risk exposure and rationalize the financial investment required to complete the project.

The risk allocations on commercial construction projects call for the contractor to continue these counter measures and defense mechanisms against the client and consultants throughout the project. The economic intentions of the contractor and the quest to maximize the profitability of the contract are especially apparent in how the contractor manages the risks placed on him. This is due to the contractual background of Malaysian construction projects where the contractor bears most of the construction risks at the operational stage (Miles, 1996). This creates a scenario described by Kadefors (1999, p.238) where the contractors are obligated and "have an indirect economic interest to call the drawings into question", which may throw the competence of the consultant's team into doubt.

2.3 The 'Adversarial Relationship' in the Construction Sector

As established in the previous section, there are three key stakeholder groups on commercial construction projects in Malaysia, namely, the clients, consultants and contractors. The collaboration and engagement of key project stakeholders have posed a significant challenge in the Malaysian environment. These have taken a tremendous toll on the country's legal system, which has given rise to the introduction of the Construction Industry Payment and Adjudication Act 2012, with the purpose of providing a cheap and relatively quick alternative to dispute resolution, when compared to a full litigation.

Chua (2012, p. 7-18) in his research on the causes of construction disputes, mentioned a number of dispute areas including time and cost overruns, disagreement on claims, variation orders, poor communication, design errors, inclement weather, finance and payment issues, unforeseen site conditions, poor workmanship, incomplete and delay in issuing information, handling of additional works, unfair allocation of risk, slow client's response and discrepancies or mistakes in contract documents as among the many causes of construction disputes. In addition to these major disputes areas, there are also related latent issues that place the contractors "at the mercy of the clients", such as wrongfully withholding payments and retention sums, even deliberately delaying such payment for financial advantage. (Azman et al, 2014, p. 2).

Koh (2005, p. 84-86) in his study on construction disputes in Malaysia found a number of causes and contributors from the three key stakeholders groups, which he calls the clients, designers and contractors. The clients were found to have caused disputes through deficient and poor management, supervision and coordination efforts on the project, ambiguities in contract documents, reluctance to check for constructability, including

providing clarity and completeness of construction process. The designers contributed to disputes through incompleteness of drawing and specifications, as well as design and specification oversights and errors or omissions resulting from uncoordinated civil, structural, architectural, mechanical and electrical designs, and inadequate in open and factual communication. The contractors caused their fair share of disputes by delaying or suspending works, inadequate contractor management, supervision and coordination, failure to understand and correctly bid or price the works, reluctance to seek clarification and failure to plan and execute the changes of works.

2.4 Key Research Issues

Current best practices in project management recognizes that one of the main functions of project management is not only to communicate with project stakeholders and manage their needs and expectations, but also “managing conflicting interests and fostering appropriate stakeholder engagement in project decisions and activities” (Project Management Institute, 2013, p. 391). As discussed earlier, the wide and varying interests of key project stakeholders calls for a balance on the part of the project manager, and presents a challenge to keeping a professional, cooperative and collaborative environment.

The importance of the role of the project management team and the competence of its personnel is gaining significance in the Malaysian context. Muneera et al (2014, p. 1) states that “in the construction industry, successful organizations now focus on ensuring that project managers acquire the core competencies required to be successful in their assignments...due to the nature of the construction industry where it is the project manager who, at the center of the project network, is responsible for orchestrating the whole construction process”. This highlights the importance of the project manager and the project management team, and the key role played thru project management practices as central to the success of a project.

As a result, Omidvar (2011, p. 1) too points out on recent recognition of the competency of project managers as critical to project success. This is because of nature of the assignment to the project manager to “lead the team that is responsible for achieving project objectives” (Project Management Institute, 2013, p. 16). Relevant to this, Diekmann & Girard (1995, as cited in Koh 1995, p. 86-87) concludes that people “hold the key to avoiding construction disputes” and causes of disputes are often due to “human factors of management method (sic)” used by the project participants.

As pointed out by Muneera et al (2014), project management is likened to an orchestration, a delicate balancing of the project stakeholders’ expectations and their

divergent needs. An appreciation of the skills and competencies required has led to the increase in the engagements of project management consultants as external service providers to client organizations, particularly for large commercial projects in Malaysia (Mahmud, 2009, p. 15). This arrangement has not only opened the door for clients with the opportunity to bring in talent and competencies into their project environment without the need to source, recruit and retain such talent within the parent organization, but also the capacity to transfer the project management risk to an external consulting organization.

Hence, the key research issue understands the underlying interests of key project stakeholders and determining the requirement project management skills in order balance and even prevents managerial conflicts between project stakeholders.

3. Research Methodology

The selected paradigm for this research has adopted multiple worldviews with the objective of understanding the research problem from convergent perspectives. Creswell & Plano-Clark (2011, p. 41) in their discussion on worldviews mention such multiple stances, where the researcher believes in both singular and multiple realities with practicality in mind, adopting the “collect data by what works” to address the research question, and multiple stances that include both biased and unbiased perspectives. These are elements of the pragmatic worldview, which draws on many ideas, using diverse approaches, placing value on both subjective and objective knowledge.

The ontology, epistemology, axiology, methodology and rhetoric of the pragmatic worldview are shown in the following table.

Table 3: *Elements of the Pragmatic Worldview*

Ontology (What is the nature of reality?)	Singular and multiple realities (e.g., researchers test hypotheses and provide multiple perspectives)
Epistemology (What is the relationship between the research and that being researched?)	Practicality (e.g., researchers collect data by “what works” to address research question)
Axiology (What is the role of values?)	Multiple stances (e.g., researchers include both biased and unbiased perspectives)
Methodology (What is the	Combining (e.g., researchers collect both quantitative and

process of research?)	qualitative data and mix them)
Rhetoric (What is the language of the research?)	Formal or informal (e.g., researchers may employ both formal and informal styles of writing)

Source: Creswell & Plano-Clark (2011, p. 41)

The objective of the pragmatist research paradigm is on the consequences of the research, particularly on addressing and answering the research issues and questions, with the methodology adapted and tailored to the consequences of the research. This adopted objective ties in with the significance of the research topic, and prevalence of the research problem in the construction industry in general, and the identified research gap where a detailed understanding of underlying issues is lacking. In view of this, with a pragmatic approach and an appreciation for multiple stances and perspectives, this research will use a mixed research design with multiple phases of data collection and analysis, before a discussion of the findings and conclusions. The following figure is taken from Creswell & Plano Clark (2011, p. 69).

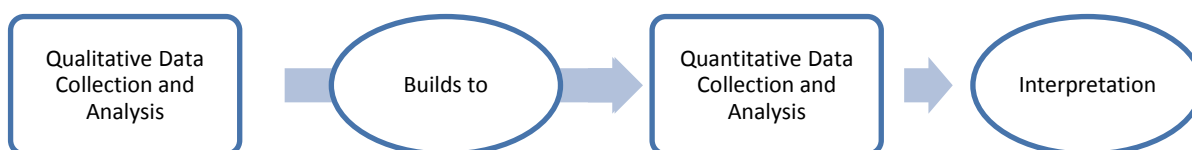


Figure 3: The Exploratory Sequential Design

Creswell & Plano Clark mention several reasons for the selection of mixed methods research, which offset the strengths and weaknesses of adopting just quantitative and qualitative research techniques. Some might argue that quantitative research is weak in understanding the context or the setting of the research problem, and the voices of the participants are not directly heard, while qualitative research may be seen as deficient because of the personal interpretations made by the researcher, with an ensuing bias and limiting generalizability (Creswell & Plano Clark, 2011).

4. Conclusion

Construction disputes are rampant in the Malaysian industry, placing a tremendous toll on the country's legal system, which has given rise to legislative changes such as

Construction Industry Payment and Adjudication Act 2012. The differing interests and the lack of engagement among key project stakeholders is a global problem, and a nationwide problem in particular, placing a tremendous weight on the country's legal systems due to the number of disputes, with far-reaching impacts on developers, property owners, suppliers, sub-contractors, logistics providers and so-on.

In view of this, the importance of the role of the project management and the competence of its personnel is gaining significance in the Malaysian context. The increased pressure on the practice is also due to the escalating demands of construction client organizations take on bigger and more complex projects, while conversely setting tighter budgets and compressed schedules. This calls for delicate balance, or an orchestration of the project stakeholders' expectations and their divergent needs, placing a tremendous importance on the skills, knowledge and competence of the project manager to deliver the project according to scope, on time and under budget, while satisfying the key stakeholder groups on the project.

4.1 Scope of Future Research

While this research has chosen to focus on just the three key project stakeholders in commercial construction industry, there are many other project stakeholders such as suppliers, employees, shareholders, creditors and the government that have interests of their own, and benefit in some way from the project outcome. Their interests and is divergence too should be explored, since it also contributes or compromises the engagement among project stakeholders.

4.2 Research Limitation

There are several limitations of this research that are due to the budget, time constraints and the resources of the researcher at the time of writing. There are several types of clients, which range from property investors, which may be financial institutions which are only interested in capital investments and liquidation value of the property, to business owners that operate the project product that benefit from operations, to property developers that benefit from the sub sale or sub lease of the property. These may have varying interests among themselves that influence engagement among stakeholders.

There are also different types of contractor organizations, which specialize in design, engineering or infrastructure projects that may have different levels of expertise and different interests to meet and protect.

References

- Ansah, S. K. (2011). Causes and Effects of Delayed Payments by Clients on Construction Projects in Ghana. *Journal of Construction Project Management and Innovation*, 1(1), 27-45.
- AXELOS Limited. (2009). *Managing Successful Projects with PRINCE2*. Norwich: TSO.
- Azhari Azman, M. N., Dzulkalnine, N., Hamid, Z. A., Mohd Kamar, K. A., & Mohd Nawati, M. N. (2013). Payment Scenario in the Malaysian Construction Industry Prior to CIPAA. *CIB World Building Congress 2013*.
- Azman, M. N., Dzulkalnine, N., Hamid, Z. A., Mohd Kamar, K. A., & Mohd Nawati, M. (2014). Payment Scenario in the Malaysian Construction Industry Prior to CIPAA. *Jurnal Teknologi*. <https://doi.org/10.11113/jt.v70.2804>
- Chua, S. (2012). *Study on the Issues of Construction Disputes in Malaysia and Singapore*. Construction Industry Development Board. (2000). *CIDB Standard Form of Contract for Building Works 2000 Edition*. Construction Industry Development Board.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (3rd ed.). Thousand Oaks: SAGE Publications, Inc.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research* (2nd ed.). Thousand Oaks: Sage Publications, Inc.
- Department of Statistics Malaysia, Official Portal. (2016, November 10th). Retrieved February 2nd, 2017, from Construction: https://www.dosm.gov.my/v1/index.php?r=column/ctwoByCat&parent_id=76&menu_id=OEY5SWtFSVVFVUpmUXEyaHppMVhEdz09
- Friedlander, M. C. (2003, October). *Risk Allocation in Design-Build Construction Projects*. Government of Malaysia. (2012). *Construction Industry Payment and Adjudication Act 2012*. Percetakan Malaysia Nasional Berhad.
- Hassan, F., Samad, Z. A., Hassan, S., Che Mat, M., & Isnin, Z. (2009). *Training the Construction Workforce: A Case Study of*. 230-241.
- Judi, S., & Rashid, R. (2010). Contractor's Right of Action For Late or Non-Payment by the Employer. *Journal of Surveying, Construction and Property*, 1(1).
- Kadefors, A. (1999). *Client-Contractor Relations: How Fairness Considerations and Interests Influence Contractor Variation Negotiations*. *Proceedings IGLC-7*, 231-240.
- Kadefors, A., Gerle, C., & Nyberg, L. (2001). *Trust and Distrust in Temporary Client-Contractor Relations*.

- Koh, C. P. (2005). *The Causes of Construction Dispute on Client Organizations*. Faculty of Civil Engineering, University Teknologi Malaysia.
- Mahmud, N. B. (2009). *A Study of Effectiveness of Project Management Consultancy (PMC) Services*.
- Memon, A. H., Rahman, I. A., & Azis, A. A. (2012, March). *Time and Cost Performance in Construction Projects in Southern and Central Regions of Peninsular Malaysia*. *International Journal of Advances in Applied Sciences (IJAAS)*, 1(1), 45-52.
- Miles, D. (1996). *Labour-Based Technology - A Review of Current Practice*. Contracting in Employment Intensive Works.
- Mohamad, R., Hamdan, A. R., Ali Othman, Z., & Mohamad Noor, N. (2010, March). *Decision Support Systems (DSS) in Construction Tendering Processes*. *International Journal of Computer Science*, 7(2), 35-45.
- Muneera, E., Anuar, A., & Zulkiflee, A. S. (2014, April). *Preparing Project Managers to Achieve Project Success - A Human Management Perspective*. *International Journal of Research in Management & Technology*, 4(2), 104-110.
- Munthiu, M.-C. (2009). *The Buying Decision Process and Types of Buying Decision Behavior*. *Sibiu Alma Mater University Journals. Series A. Economic Sciences*, 2(4), 27-33.
- Ofori, G. (2010). *Challenges of Construction Industries in Developing Countries: Lessons from Various Countries*. Department of Building, National University of Singapore.
- Omidvar, G., Jaryani, F., Abdul Samad, Z. b., Zafarghandi, S. F., & Nasab, S. S. (2011). *A Proposed Framework for Project Managers' Competencies and Role of E-Portfolio to Meet These Competencies*. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 1(4), 311-321.
<https://doi.org/10.7763/IJEEEE.2011.V1.51>
- Oyeyipo, O. O., Odusami, K. T., Ojelabi, R. A., & Afolabi, A. O. (2016). *Factors Affecting Contractor's Bidding Decision for Construction Projects in Nigeria*. *Journal of Construction in Developing Countries*. <https://doi.org/10.21315/jcdc2016.21.2.2>
- Pertubuhan Arkitek Malaysia. (2006). *Agreement and Conditions of PAM Contract 2006 (Without Quantities)*.
- Pinto, J. (2010). *Project Management: Achieving Competitive Advantage* (2nd ed.). New Jersey: Pearson Education, Inc.
- Project Management Institute. (2013). *A Guide to the Project Management Body of Knowledge*. Pennsylvania: Project Management Institute, Inc.

- Rajoo, S. (2010). The Pam 2006 Standard Form of Building Contract - A Change in Risk Allocation. *Malayan Law Journal*.
- Ramachandra, T. (2012). Construction Payment Delays and Losses: Perceptions of New Zealand. *Proceedings PMI New Zealand Chapter 18th Annual Conference 2012: Concise Paper*.
- Roffeypark. (2015). *Building Leadership Capability in the Construction Sector*. White Paper.
- Rugenyi, F. (2015, November). Assessment of the Triple Constraints in Projects in Nariobi: The Project Managers' Perspective. *International Journal of Academic Research in Business and Social Sciences*, 5(11). <https://doi.org/10.6007/IJARBSS/v5-i11/1889>
- Sambasivan, M., & Yau, W. (2007). Causes and Effects of Delays in Malaysian Construction Industry. *International Journal of Project Management*(25), 517-526.
- Shokri-Ghasabeh, M., & Kavousi-Chabok, K. (2009, August). Generic Project Success and Project Management Success Criteria and Factors: Literature Review and Survey. *WSEAS Transactions on Business and Economics*, 6(8), 456-468.
- Suratkon, A. (2004). The Change in Roles of Architects and Quantity Surveyors from Conventional to Partnering Approach.
- Takim, R., & Adnan, H. (2008, July). Analysis of Effectiveness Measures of Construction Project Success in Malaysia. *Asian Social Science*, 4(7), 74-91.
- Thuraisingam, T. (2011). *The Architect as Contract Administrator: A Legal Perspective*. Malaysian Institute of Architects, Northern Chapter.
- Weaver, P. (2007). *The Origins of Project Management*. Fourth Annual PMI College of Sceduling Conference.
- Zakaria, Z. b., Ismail, S. b., & Md Yusof, A. b. (2013, 34-41). An Overview of Comparison between Construction Contracts in Malaysia: The Roles and Responsibilities of Contract Administrator in Achieving Final Account Closing Success. *Proceedings of the 2013 International Conference on Education and Educational Technologies*, 34-41.
- Zulkifli, U. Z., Zakaria, N., & Salleh, H. b. (2011, December). The Comparative Study of International Standard Form of Building Contract (FIDIC Condiitons of Contracts for Construction - The New Red Book 1999) and Malaysian's Standard Form of Building Contract (PWD203A). *International Engineering Education Conference 2011*.