Success Factors for Stakeholder Management for Public-Private Partnerships Infrastructure Projects

Sakinah Khalidah Kaharuddin[1], Hamimah Adnan[2] and Har Einur Azrin Baharuddin[3]
[1-3]Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia
Email address of corresponding author: sknhkhldh@gmail.com

ABSTRACT

Received: 20 Mar 2020
Reviewed: 30 Mar 2020
Accepted: 15 Apr 2020

Public-Private Partnership (PPP) has been identified as a procurement method that brings the public and private sectors together to facilitate the delivery of infrastructure projects and services. PPP manages complex projects and involves multiple stakeholders. Stakeholders in the PPP project need to be properly managed to achieve the project goals, minimising risk and accommodate stakeholder interest. Stakeholder management is about the relationship between organisation and its stakeholders. Poor management of stakeholder could lead to project failure. This paper aims to identify the success factors for stakeholder management in PPP infrastructure projects in Malaysia. A qualitative methodology which involved structured interviews with expert panels in PPP was conducted to validate the stages obtained from the primary and secondary data. The findings highlighted on the four (4) stakeholder management stages which involves stakeholder analysis, stakeholder engagement, stakeholder management action plan and stakeholder management monitoring. The needs for a having a clear understanding of the role of the project among stakeholders is crucial. Good stakeholder engagement is an essential part of project stakeholders' engagement. It also appears that the regulatory plan would be implication to contribute stakeholder management to achieve the success of PPP project. In addition, stakeholder must monitor the work on site in order to achieve project success. The success factors towards achieving a successful stakeholder management process have been identified. Improvement in these stages will lead towards better presentation and improvement of the success factors of stakeholder management process in PPP infrastructure projects in Malaysia.

Keywords: *Stakeholder Management; Public-Private Partnerships, Stakeholder Management stages*

INTRODUCTION

Public-Private Partnerships (PPP) projects have traditionally been seen as a feasible alternative for many countries seeking to provide infrastructure services while being financially destitute, as in many developing countries (Osei-Kyei & Chan, 2015, 2017b; Babatunde et al., 2015). According to Cheung et al. (2010), Grimsey & Lewis (2007), the use of PPP as means of offering facilities has started where the involvement of the private sector in the implementation of infrastructure projects such as road tolling in America and United Kingdom (UK) and public system in France. PPP was first introduced by the UK Government as a PFI in 1992 with the ultimate objective of acquiring balance sheet infrastructure projects, decreasing public expenditure and also decreasing the limitations connected with borrowing restriction in the public industry (Li et al., 2005). In 2010, Malaysia initiated the New Economic Model (NEM) to ensure that the country reaches a high income and fully developed status by 2020. In the prior Malaysian infrastructure development, especially before the 1990s, the projects were typically led by the government. However, nowadays, the private sector participation in the project development

increased through the adoption of procurement. Hodge & Greve (2005) notes that the PPP privatisation, PFI and commercialisation market are included both the public and private sector. The public and private sectors play a significant role in the development of infrastructure since the private participation in the Malaysian construction industry is encouraged.

In order to achieve project success; usually, infrastructure project has many phases, models, strategies, incentives, and promotions in project development. In recent years, the success factors PPP projects have become very important to the investors and government institutions deliberately to evaluate the successful implementation of the project without they know on the success criteria provided (Osei-Kyei & Chan, 2017a). Eyiah-Botwe et al. (2016) revealed that stakeholder plays a significant role in the construction industry to attain effective project delivery. De Schepper et al. (2014) stated that stakeholder management is one of the significant factors of PPPP is stakeholder management. However, poor management of stakeholder relationships is one of the main reasons for PPP failure (De Schepper et al., 2014; Henjewele et al., 2013; Siemiatycki, 2009; Smyth & Edkins, 2007; El-Gohary et al., 2006). El-Gohary et al., (2006), Ng et al., (2013) and Amadi et. al, (2018) , reported that one of the main reasons of PPP projects failure is stakeholder opposition. On the other hand, Henjewele et al. (2013) stated that the lack of awareness of PPP concept, the lack of education among the parties involved and stakeholder, lack of access to detailed information in the PPP proposals of the consortium in PPP projects are three significant reasons for stakeholder management failures. In addition, lack of clear government framework and regulation as stated by Kwofie et al.(2016) and Ismail & Harris (2014), represents the reasons for unsuccessful PPP projects. Ahmad et al. (2017) also added the availability of finance, weak financial market, land acquisition (site availability), lack of commitment from stakeholder, imperfect public decision-making process, differences in working method and know-how between partners, inadequate distribution of responsibilities and risks are reasons of unsuccessful in Malaysia. Those unsuccessful reasons are related to stakeholders. To ensure the success of the project, the process of stakeholder management should be transparent and recognised by all shareholders. Successful implementation factors in PPP projects in lies in the partnership between the public and private sectors as well as in the relationship among other project stakeholders (Cui et al., 2018).

Stakeholder management is a concept that depicts the commitment of an organisation, proactively to deal with its stakeholder communities (Chinyio & Olomolaiye, 2010a). The concept of stakeholder management is not new. It can enable project managers to access their stakeholder engagement stages to the level of effectiveness. Although the growing amount of research on stakeholder management (Mwesigwa et al., 2019; Harris, 2010; Yang et al., 2009; Jergeas et al., 2000), little theoretical and empirical attention paid to the success factors of stakeholder management in PPP projects in Malaysia. Lack of studies come out to construct a model on success factors for PPP infrastructure projects in developing countries, particularly in Malaysia. Therefore, this paper identified the success factors that contribute to the successful delivery of stakeholder management through stakeholder management stages.

STAKEHOLDER MANAGEMENT IN PUBLIC-PRIVATE PARTNERSHIPS

Many researchers have been interested in the area of success factors of construction management that contributes to the success of stakeholder management in construction projects (Reed et al., 2009; J. Yang et al., 2009). Jergeas et al. (2000) recognised two aspects of stakeholder management for construction projects, such as communication with stakeholders and the establishment of common objectives and project priorities. Five factors recognised by Olander & Landin (2008): stakeholder requires analysis, benefits communication, negative impact interaction, alternative solutions evaluation, the project organisation and media interactions. In construction projects, Yang et al., (2011) studied numerous factors or strategies leading to effective stakeholder management. While these factors/strategies are not particular to PPP projects, they are supposed to use for the development of the conceptual framework in PPP projects. The success factors identified were classified in the main stages

of the stakeholder management process: stakeholder analysis, stakeholder engagement, stakeholder management action plan and stakeholder management monitoring.

De Schepper et al. (2014) investigated the application of general stakeholder analysis techniques in PPP projects to carried out with the PPP project scenarios, assessed the impact of the allocation of the responsibilities of the two principal stakeholders in a PPP project and recommended better recommendations on improvement of success for PPP project achievement. From the research carried out by De Schepper et al. (2014), a list of stakeholder management for the success factors to PPP projects success has obtained. Besides, the study carried out by Henjewele et al. (2013) was extracted an additional set of success factors that contribute to PPP projects success. Therefore, a list of success factors for PPP-specific and non-specific stakeholder management was created at the end of the literature review and was used to research the list of PPP practices further. Table 1 presents the literature review's success factors.

Stakeholder Analysis

One of the main elements in stakeholder analysis for a project is stakeholder identification (Karlsen, 2002; Olander, 2007; Walker et al., 2008; Jepsen & Eskerod, 2009; Bryson, 2004). The majority of stakeholder analysis techniques are based on the expertise of the key stakeholders to recognise other stakeholders of predetermined categories and, based upon the predetermined relationship characteristics and priority to their relative importance. Thus, all stakeholders must identify and the stakeholders classified. Lim et al. (2005) suggested that stakeholders classified for the better use of the rules of the success factors.

Consequently, project teams use difference stakeholder classification units based on their stakeholders. For instance, the stakeholders categorised as regulatory, community, organisational, and media by Henriques & Sadorsky (1999). Now the traditional view of stakeholder analysis is taken into account.

According to Bryson (2004), was to satisfy every stakeholder. It was necessary to determine how each stakeholder affected the organisation and the needs of every stakeholder. Furthermore, one of the further steps suggested by Bryson (2004) is to assess the significance of stakeholders. Also, Bryson (2004) recognised the significance that stakeholder issues should first identify and that the relationships between stakeholders should predict. The success factors mentioned above are not specific to PPP projects. Nonetheless, these practices in PPP projects are hypothesised to be essential for stakeholder management. De Schepper et al. (2014) proposed to undertake an in-depth analysis of the policy opportunities and opposition structure within stakeholder groups for PPP specific success factors related to stakeholder analysis.

Stakeholder Engagement

Many scholars have seen the most significant element of an efficient stakeholder management process in construction projects in the efficient and honest communication with the projects' stakeholders (Zou et al., 2014; Olander & Landin, 2008; Tang & Shen, 2013; Yang et al. (2009). It provided the stakeholders in the project a sense of ownership, engagement and involvement. In addition, many challenges in construction projects can be solved by involving stakeholders in early planning and engagement within the project group and by a systematic approach to the analysis and engagement of stakeholders in the project delivery. (Jergeas et al., 2000). In addition to the stakeholder engagement success factors described above, research into PPPs highlighted certain PPP specific practices. For instance, for success with PPP projects, Tang and Shen (2013) stated that agreement by all the parties involved in the project brief is essential. Therefore, the main stakeholders should engage actively from the early phases of the PPP projects and all parties concerned should agree on the outcome of these engagements.

Stakeholder Management Action Plan

The success factors developed and agreed upon by stakeholder management should be applied to maintain the project. An efficient implementation plan should also introduce for the effective implementation of success factors in stakeholder analysis and stakeholder engagement during the project planning phase. The success factors to successful implementation of the agreed stakeholder management plan, therefore, need to be identified. The project leader and the project team's abilities are one such factor. If there is no involvement of the project team, and the project team lacks enough experience to incorporate stakeholder management efficiently. The stakeholder management strategies produced will not operate in actual project scenarios. Because of the involvement of many stakeholders and the complexity of the stakeholder matrix in the PPP environment, the engagement of the project team is essential. Besides, the successful implementation of stakeholder management by many scholars is critical in employee training in effective stakeholder management practice (Yuan et al., 2012, Yuan et al., 2009). Stakeholder management needs particular skills that require some training and effective project engagement. PPP projects have a good concept for the industry. Also, maybe that the project team does not know the real complexities connected with the implementation of stakeholder management in PPP projects (Yuan et al., 2012; Yuan et al., 2009; Ruuska & Teigland 2009).

Stakeholder Management Monitoring

The stakeholder mix can alter as new stakeholders participate when other stakeholders drop out (Elias et al. 2002). It is essential to analyse the changes in stakeholder impact and interactions during the stakeholder management monitoring stage. Freeman recognised this in 1984 as the concept of dynamics of stakeholders. When the project progresses, relations between the project's stakeholders should be evaluated and prioritised. Successful relationships should be monitored and maintained, whereas ineffective relationships should also carefully investigate in order to improve their relationships.

Tang & Shen (2013) recognised the importance of the lessons learnt from previous PPP projects in the PPP project environment. Therefore, issues relating to stakeholder management can be explored and utilised for case studies and lessons learned for future PPP projects in the background of past PPP projects. This method is referred to as case-based reasoning (CBR), introduced by Noh et al. (2000). It is a technique of solving problems that re-use cases, experiences or tacit knowledge in the past (Noh et al., 2000). CBR is a technique of solving problems. Lim et al. (2005) used CBR techniques and suggested the success factors to help formulate stakeholder management. A similar methodology can, therefore, to use in PPP projects by establishing a system which accumulates the knowledge gained from previous PPP projects, mainly due to the long-term nature of the projects. The importance of developing performance measures that can address the voices of various stakeholders in public sector organisation understood by Neely et al. (2000), Neely et al. (2002), Taket (2004) and McAdam et al. (2005). Besides, Yuan et al. (2009) identified performance objectives based on distinct stakeholder perspectives in PPP projects. These performance measures encourage PPP project performance monitoring throughout the life cycle. Stakeholder management related the performance measure to ensure efficient implementation of stakeholder management.

METHODOLOGY

The study employed qualitative method to identify and ranked the success factors that contribute to stakeholder management process of PPP infrastructure projects in Malaysia. Structured interview was conducted to five (5) expert panels mostly experienced with stakeholder management in PPP projects. The respondents working experience range from 18 years to 38 years. The respondents were purposively selected based on their relevant experience in the development of PPP infrastructure projects in Malaysia.

Experts were identified during a semi-structured interview conducted during the early stages of this research study, in which they emerged to have a comprehensive understanding of every stakeholder management stages and were requested to nominate people in the sector. Experts with extensive knowledge and experience in PPP projects, endorsed with relevant credentials and recognised by the industry was selected as an expert respondent for this research. A list of experts has been drawn up from the replies. Furthermore, appropriate experts have been recognised, speaking previously to professional bodies such as the engineer. Table 1 shown the background of participants in the expert interview.

Table 1. Expert panel background details

Position within organisations	Year spent in Construction Industry	Year spent in PPP Project	Sector involved in PPP projects
Senior Project Manager	35 years	28 years	Water and waste, power plant
Vice President 1	35 years	30 years	Water and waste
Retired Executive Director of Privatized Entity	41 years	38 years	Water and waste
Executive Director	25 years	25 years	Water and waste
Assistance Director of Project Management	18 years	18 years	Highways

RESULTS AND ANALYSIS

The main component in the developed framework of success factors of PPP is a stakeholder management stage. This is because there are various issues and constraints that occur have led to the failure of PPP projects undertaken. Therefore, stakeholder must study success factors as an approach to reduce failure to ensure the successful delivery of stakeholder management in PPP projects.

A list of four (4) stage was listed as the stakeholder management stages based on the results findings from the study and literature review. These stages contribute to the successful delivery of stakeholder management in PPP projects. The stakeholder management stages involved *a)* Stakeholder Analysis, *b)* Stakeholder Engagement, *c)* Stakeholder Management in Action Plan, and *d)* Stakeholder Monitoring.

The structure of the framework is developed after undergoing the process of discussion on the findings that have been identified based on the scope and key issues related to the development of a framework for the successful delivery of stakeholder management in PPP projects. The structure of the framework developed is intended to highlight the solutions to the problems that occur in the stakeholder management. Thus, to understand the process, the framework for the successful delivery of stakeholder management in PPP projects is illustrated in Figure 1. The framework comprises four (4) parts which are stakeholder management stages, constraints, main characteristic and success factors for the successful delivery of stakeholder management in PPP projects. It used to improve the knowledge of every stakeholder management stages by the infrastructure stakeholders.

As this is the first framework for the successful delivery of stakeholder management in PPP infrastructure projects in Malaysia, it might be useful for the successful delivery of stakeholder management on highways that can serve as a Master Plan for the Malaysian Highway Authority (MHA).

Figure 1. Framework for the successful delivery of stakeholder management in PPP projects

CONCLUSION

The objective of this paper to provide a better insight of the process of stakeholder management process in the PPP infrastructure projects. Stakeholder can improve their management process and helps in designing the management success factors to deal with stakeholder management and the smooth running of the PPP project. Successful delivery of stakeholder management will lessen the probability of failure in PPP infrastructure projects. The finding can be used to assist stakeholder in the preparation

of stakeholder management through the identification of the success criteria for stakeholder management in PPP infrastructure projects in Malaysia. A good stakeholder management process will be the means to coordinate the best practices of stakeholder and stakeholder interactions. It involves putting priority to the information required which requires immediate attention. The approach will soften the learning curve while progressively educating and improving the current best practices of the stakeholder management process. Success factors contribute, success factors affect and followed by recommendation of best practices for successful delivery of stakeholder management in PPP infrastructure projects.

The process of framework structure development is a significant contribution to the research findings. The paper focuses on discussing stakeholder management framework in a context covering the rationale of the framework developed, the process of framework development, verification from industrial parties, and application of the framework. The framework approach showed that the key success contribution to the successful delivery of stakeholder management in PPP projects is stakeholder management. This is due to a lot of challenges and limitations faced by stakeholder are becoming increasingly difficult to the successful delivery of stakeholder managements in PPP projects becoming more complex. Thus, to avoid facing those challenges and limitations, every stakeholder involved in PPP projects should apply the success factors for the successful delivery of stakeholder management in PPP projects.

REFERENCES

Ahmad, U., Ibrahim, Y., & Minai, M. S. (2017). International Review of Management and Marketing Public Private Partnership in Malaysia: The Differences in Perceptions on the Criticality of Risk Factors and Allocation of Risks between the Private and Public Sectors. *International Review of Management and Marketing*, *7*(2), 138–150. Retrieved from http:www.econjournals.com

Amadi, C., Carrillo, P., & Tuuli, M. (2018). Stakeholder management in PPP projects : external stakeholders ' perspective. *Built Environment Project and Asset Management*. https://doi.org/10.1108/BEPAM-02-2018-0048

Ameyaw, E. E., & Chan, A. P. C. (2015). Evaluating key risk factors for PPP water projects in Ghana: a Delphi study. *Journal of Facilities Management*. https://doi.org/10.1108/JFM-10-2013-0051

Babatunde, S. O., Perera, S., Zhou, L., & Udeaja, C. (2015). Barriers to public private partnership projects in developing countries a case of Nigeria. *Engineering, Construction and Architectural Management*, *22*(6), 669–691. https://doi.org/10.1108/ECAM-12-2014-0159

Bryson, J. M. (2004). What to do when stakeholders matter: Stakeholder Identificatixon and analysis techniques. *Public Management Review*. https://doi.org/10.1080/14719030410001675722

Cheung, E., Chan, A. P. C., & Kajewski, S. (2010). The researcher's perspective on procuring public works projects. *Structural Survey*. https://doi.org/10.1108/02630801011070993

Chinyio, E., & Olomolaiye, P. (2010). *Construction Stakeholder Management*. *Construction Stakeholder Management*. https://doi.org/10.1002/9781444315349

Cui, C., Liu, Y., Hope, A., & Wang, J. (2018). Review of studies on the public–private partnerships (PPP) for infrastructure projects. *International Journal of Project Management*, *36*(5), 773–794. https://doi.org/10.1016/j.ijproman.2018.03.004

Deegan, B., & Parkin, J. (2011). Planning cycling networks: Human factors and design processes. In *Proceedings of the Institution of Civil Engineers: Engineering Sustainability*. https://doi.org/10.1680/ensu.1000018

De Schepper, S., Dooms, M., & Haezendonck, E. (2014). Stakeholder dynamics and responsibilities in Public-Private Partnerships: A mixed experience. *International Journal of Project Management*, *32*(7), 1210–1222. https://doi.org/10.1016/j.ijproman.2014.01.006

El-Gohary, N. M., Osman, H., & El-Diraby, T. E. (2006). Stakeholder management for public private partnerships. *International Journal of Project Management*, *24*(7), 595–604. https://doi.org/10.1016/j.ijproman.2006.07.009

Elias, A. A., Cavana, R. Y., & Jackson, L. S. (2002). Stakeholder analysis for R & D project management. *R and D Management*. https://doi.org/10.1111/1467-9310.00262

Eyiah-Botwe, E., Aigbavboa, C. O., & Thwala, D. W. (2016). Stakeholder Management; a Literature Review of Historical Development and Current Trends. In *Emerging trends in construction organisational practices and project management knowledge area - 9th cidb Postgraduate Conference*.

Freeman, R. E. (1984). Strategic management: A stakeholder approach. Cambridge: Cambridge. University Press.

Grimsey, D., & Lewis, M. (2007). Public Private Partnerships and Public Procurement. *Agenda*.

Harris, F. (2010). A Historical Overview of Stakeholder Management. In *Construction Stakeholder Management*. https://doi.org/10.1002/9781444315349.ch3

Henjewele, C., Fewings, P., & Pantaleo, D. R. (2013). De-marginalising the public in PPP projects through multi-stakeholders management. *Journal of Financial Management of Property and Construction*. https://doi.org/10.1108/JFMPC-05-2013-0021

Henriques, I., & Sadorsky, P. (1999). The relationship between environmental commitment and managerial perceptions of stakeholder importance. *Academy of Management Journal*. https://doi.org/10.2307/256876

Hodge, G., & Greve, C. (2005). *The challenge of public-private partnerships: Learning from international experience*. *The Challenge of Public-Private Partnerships: Learning from International Experience*.

Ismail, S., & Harris, F. A. (2014). Challenges in Implementing Public Private Partnership (PPP) in Malaysia. *Procedia - Social and Behavioral Sciences*, *164*(August), 5–10. https://doi.org/10.1016/j.sbspro.2014.11.044

Jepsen, A. L., & Eskerod, P. (2009). Stakeholder analysis in projects: Challenges in using current guidelines in the real world. *International Journal of Project Management*. https://doi.org/10.1016/j.ijproman.2008.04.002

Jergeas, G. F., & et al. (2000). Stakeholder Management on Construction Projects. *AACE International Transactions*.

Karlsen, J. T. (2002). Project stakeholder management. *EMJ - Engineering Management Journal*. https://doi.org/10.1080/10429247.2002.11415180 Kwofie, T. E., Afram, S., & Botchway, E. (2016). A critical success model for PPP public housing delivery in Ghana. *Built Environment Project and Asset Management*, *6*(1), 58–73. https://doi.org/10.1108/BEPAM-04-2014-0026

Li, B., Akintoye, A., Edwards, P. J., & Hardcastle, C. (2005). Critical success factors for PPP/PFI projects in the UK construction industry. *Construction Management and Economics*, *23*(5), 459–471. https://doi.org/10.1080/01446190500041537

Lim, G., Ahn, H., & Lee, H. (2005). Formulating strategies for stakeholder management: a case-based reasoning approach. *Expert Systems with Applications*, 28 (4)**,** 831-840.

Mathur, V. N., Price, A. D. F., & Austin, S. (2008). Conceptualizing stakeholder engagement in the context of sustainability and its assessment. *Construction Management and Economics*. https://doi.org/10.1080/01446190802061233

McAdam, R., Hazlett, S. A., & Casey, C. (2005). Performance management in the UK public sector: Addressing multiple stakeholder complexity. *International Journal of Public Sector Management*. https://doi.org/10.1108/09513550510591542

Mwesigwa, R., Bagire, V., Ntayi, J. M., & Munene, J. C. (2019). Antecedents of stakeholder management in public private partnership projects in Uganda. *World Journal of Entrepreneurship, Management and Sustainable Development*, *15*(2), 169–181. https://doi.org/10.1108/wjemsd-03-2018-0034

Neely, A., Adams, C., & Kennerley, M. (2002). The Performance Prism: The Scorecard for Measuring and Managing Business Success. *Cranfield School of Management*. https://doi.org/10.1108/eb016623

Neely, A., Mills, J., Platts, K., Richards, H., Gregory, M., Bourne, M., & Kennerley, M. (2000). Performance measurement system design: Developing and testing a process-based approach. *International Journal of Operations and Production Management*. https://doi.org/10.1108/01443570010343708

Ng, S. T., Wong, J. M. W., & Wong, K. K. W. (2013). A public private people partnerships (P4) process framework for infrastructure development in Hong Kong. *Cities*, *31*, 370–381. https://doi.org/10.1016/j.cities.2012.12.002

Noh, J. B., Lee, K. C., Kim, J. K., Lee, J. K., & Kim, S. H. (2000). Case-based reasoning approach to cognitive map-driven tacit knowledge management. *Expert Systems with Applications*. https://doi.org/10.1016/S0957-4174(00)00037-3

Olander, S., & Landin, A. (2008). A comparative study of factors affecting the external stakeholder management process. *Construction Management and Economics*, *26*(6), 553–561. https://doi.org/10.1080/01446190701821810

Olander, S. (2007). Stakeholder impact analysis in construction project management. *Construction Management and Economics*. https://doi.org/10.1080/01446190600879125

Osei-Kyei, R., & Chan, A. P. C. (2015). Review of studies on the critical success factors for public-private partnership (PPP) projects from 1990 to 2013. *International Journal of Project Management*, *33*(6), 1335–1346. https://doi.org/10.1016/j.ijproman.2015.02.008

Osei-Kyei, R., & Chan, A. P. C. (2017a). Comparative Analysis of the Success Criteria for Public–Private Partnership Projects in Ghana and Hong Kong. *Project Management Journal*, *48*(4), 80–92. https://doi.org/10.1177/875697281704800407

Osei-Kyei, R., & Chan, A. P. C. (2017b). Implementation constraints in public-private partnership: Empirical comparison between developing and developed economies/countries. *Journal of Facilities Management*, *15*(1), 90–106. https://doi.org/10.1108/JFM-07-2016-0032

Reed, M. S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., … Stringer, L. C. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of Environmental Management*. https://doi.org/10.1016/j.jenvman.2009.01.001

Ruuska, I., & Teigland, R. (2009). Ensuring project success through collective competence and creative conflict in public-private partnerships - A case study of Bygga Villa, a Swedish triple helix e-government initiative. *International Journal of Project Management*. https://doi.org/10.1016/j.ijproman.2008.02.007

Savage, G. T., Nix, T. W., Whitehead, C. J. & Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *The Executive*, 5 (2)**,** 61-75.

Siemiatycki, M. (2009). Academics and auditors: Comparing perspectives on transportation project cost overruns. *Journal of Planning Education and Research*. https://doi.org/10.1177/0739456X09348798

Smyth, H., & Edkins, A. (2007). Relationship management in the management of PFI/PPP projects in the UK. *International Journal of Project Management*, *25*(3), 232–240. https://doi.org/10.1016/j.ijproman.2006.08.003

Szolnoki, G., & Hoffmann, D. (2013). Online, face-to-face and telephone surveys - Comparing different sampling methods in wine consumer research. *Wine Economics and Policy*. https://doi.org/10.1016/j.wep.2013.10.001

Taket, A. (2004). Delivering excellence in health and social care: Quality, excellence and performance measurement. *Journal of the Operational Research Society*.

Tang, L. Y., & Shen, Q. (2013). Factors affecting effectiveness and efficiency of analyzing stakeholders' needs at the briefing stage of public private partnership projects. *International Journal of Project Management*. https://doi.org/10.1016/j.ijproman.2012.10.010

Walker, D. H. T., Bourne, L. M., & Shelley, A. (2008). Influence, stakeholder mapping and visualization. *Construction Management and Economics*. https://doi.org/10.1080/01446190701882390

Webler, T., & Tuler, S. (2000). Fairness and competence in citizen participation: Theoretical reflections from a case study. *Administration and Society*. https://doi.org/10.1177/00953990022019588

Xu, Y., Sun, C., Skibniewski, M. J., Chan, A. P. C., Yeung, J. F. Y., & Cheng, H. (2012). System Dynamics (SD) -based concession pricing model for PPP highway projects. *International Journal of Project Management*. https://doi.org/10.1016/j.ijproman.2011.06.001

Yang, J., Shen, G. Q., Ho, M., Drew, D. S., & Xue, X. (2011). Stakeholder management in construction: An empirical study to address research gaps in previous studies. *International Journal of Project Management*, *29*(7), 900–910. https://doi.org/10.1016/j.ijproman.2010.07.013

Yang, Jing., Shen, G. Q., Ho, M., Drew, D. S., & Chan, A. P. C. (2009). Exploring critical success factors for stakeholder management in construction projects. *Journal of Civil Engineering and Management*, *15*(4), 337–348. https://doi.org/10.3846/1392-3730.2009.15.337-348

Yuan, J., Guang, M., Wang, X., Li, Q., & Skibniewski, M. J. (2012). Quantitative SWOT analysis of

public housing delivery by public-private partnerships in china based on the perspective of the public sector. *Journal of Management in Engineering*. https://doi.org/10.1061/(ASCE)ME.1943-5479.0000100

Yuan, J., Zeng, A. Y., Skibniewski, M. J., & Li, Q. (2009). Selection of performance objectives and key performance indicators in public-private partnership projects to achieve value for money. *Construction Management and Economics*. https://doi.org/10.1080/01446190902748705

Zou, W., Kumaraswamy, M., Chung, J., & Wong, J. (2014). Identifying the critical success factors for relationship management in PPP projects. *International Journal of Project Management*, *32*(2), 265–274. https://doi.org/10.1016/j.ijproman.2013.05.004