

37 sector under PPP arrangements and that has saved capital expenditure of RM 161
38 billion [4]. Nonetheless, KL Sentral, Light Rail Transit (LRT), highways and medical
39 facilities are examples of successful project which benefit the public in Malaysia
40 through Public-Private Partnership [5-6]. The PPP projects' success criteria have
41 become very important and challenging for investors and public authorities in
42 developing economy to assess their implemented projects whether it is successful or
43 not [7]. To achieve a successful project delivery, the stakeholder plays an important
44 role in the construction industry [8]. Nevertheless, to see the implemented projects have
45 become successful or not, this research endeavours to assist stakeholder to achieve
46 successful delivery of PPP projects. Therefore, this research was aim to identify the
47 emerging factors on stakeholder management that link up a useful guidance to the
48 stakeholders involvement in PPP to handling, planning strategies and initiatives to be
49 implemented towards the achievement of successful delivery in PPP projects.

50 **2 Literature Review**

51 **2.1 Public-Private Partnerships**

52 PPP is a partnership of public and private sector to facilitate the delivery projects and
53 services. The purpose of PPP was to build and operate infrastructure which are
54 delivering cost-effective and efficient projects as to meet budget constraints [9].
55 Procuring public infrastructure an effective strategy in the PPP policy should be
56 established [10]. Consequently, nothing new with the involvement of the private sector
57 in delivery of public facilities and services, but in the past, it was either limited to
58 financing or provision of long-term services [11]. Governments are seeking for PPP to
59 develop public facilities due to limited availability of public funds for these initiatives
60 [12]. As a result, PPP projects received fund injections from the private sector with the
61 efficiency of project management instead of using government funds. Generally, PPP
62 projects' organize a special purpose vehicle (SPV) or a concessionaire company to deal
63 with contractor, lenders, investors, insurance providers, and other parties especially
64 government authority [13]. An effective PPP projects is the key between the public and
65 private sectors as well as in the relationship among other stakeholders [14].
66 Collaboration between public and private sectors are required as PPP projects involve
67 various stakeholders as the projects are large and complex. [15-18]. Many stakeholders
68 usually involve in thisprojects and infrastructure [19-20].

69 **2.2 Stakeholder Management**

70 Stakeholder management is about relationship between organisation and its
71 stakeholders. The relationship impact among the stakeholders can be both on
72 individuals and organisations, positively or negatively. Stakeholders need to be
73 managed as to minimise their negative impacts and ensure that they achieve the
74 organisation's goals. Two aspects identified for managing stakeholders in construction
75 projects are communication with stakeholders and setting of common goals, objectives
76 and project priorities [21]. Five factors identified; analysis of stakeholder concerns and
77 needs, communication of benefits and negative impacts, evaluations of alternative

78 solutions, project organization, and media relations [22]. In relation to research
 79 undertaken related to PPP project scenarios, the application of general stakeholder
 80 analysis techniques in PPP projects determined the impact of allocating the
 81 responsibilities of the main two stakeholders suggested unique recommendations for
 82 better stakeholder management. [23]. It is important to consider the best practices
 83 related to the life cycle of PPP projects, which are the conception, design and
 84 construction and operational and maintenance phases. Therefore, the best practices,
 85 such as communicating with all stakeholders and be honest and integrate stakeholders
 86 into the process, are all related to the construction stage.

87 **3 Methodology**

88 The case studies is used to test the validity of success delivery of PPP projects related
 89 to the emerging factors for the success delivery of stakeholder management in PPP,
 90 identified from the related literature. In order to gather the empirical data to understand
 91 the success delivery of stakeholder management in PPP projects in Malaysia for this
 92 research, a multiple case study approach was employed. Case studies style are selected
 93 when the researcher intends to understand and analyse in depth of a phenomenon or
 94 cases which can be an individual person up to an organisation or projects. The use of
 95 case studies style is among of the construction research advocate. The data presented
 96 in this paper represent by the qualitative interviews, observations, and a documentary
 97 review of the documents related to selected case studies [24-25]. Nine (9) selected PPP
 98 projects in Malaysia are highways projects namely as case study C1, C2, C3, C4, C5,
 99 C6, C7, C8 and case study C9.

100 **4 Result and Discussion**

101 It is clear that the project will succeed or fail for some of the same reasons. Hence, it is
 102 vital to identify the emerging factors for the success delivery of stakeholder
 103 management in PPP projects. Based on respondents' experiences, these are the factors
 104 proposed;

105 **Table 1.** The proposed factors for the success delivery of stakeholder management in PPP
 106 projects.

Code	Emerging factors	Respondents	Attributes
EF1	Understand the key drivers of stakeholder management	C1, C2, C9	<ul style="list-style-type: none"> • Good understanding of the projects' objectives • Understand group and need • Clear responsibilities from stakeholder • Clear contractual structure of stakeholder from various parties • Stakeholder must know their commitment

EF2	Good stakeholder engagement	C1, C2, C9	<ul style="list-style-type: none"> • Clear with stakeholder scoping of work and contract obligations
EF3	Build trust between stakeholder	C1,C2,C4,C5	<ul style="list-style-type: none"> • Appropriate stakeholder engagement process • Stakeholder work together more easily and effectively • Stakeholder must be sincere
EF4	Bankability/Availability of financial	C1, C7	Strong funding
EF5	Technology Transfer	C3,C4,C5,C6,C8	<ul style="list-style-type: none"> • Knowledge transfer and experience • The use of latest technology in PPP project • Introducing new technologies and encouraging technology transfer
EF6	Fast completed and earn revenue	C4,C5,C9	Fast completed project delivery to end-user, concessionaire holders can earn revenue as soon highway was operated
EF7	Fast decision making	C1,C2	<ul style="list-style-type: none"> • Stakeholder has the equal access to the interests • All stakeholders have to be taken into account when making decision

107 **4.1 Understand the key drivers of stakeholder management**

108 C1 and C2 highlighted that understanding the key drivers of stakeholder management
 109 is to have good understanding of each other objectives. It is important to determine
 110 stakeholder group and understand their needs and the roles they play for project success.
 111 C2 stated that clear responsibilities from stakeholder is a way for stakeholder to
 112 understand their key drivers. C2 also added way for stakeholder to understand their key
 113 driver is to get clear contractual structure from various parties. C9 stated that,
 114 stakeholder must know their commitment to monitor the works on site and C1 stated
 115 they must be clear with their scoping of work and contract obligations where those who
 116 simply need to be kept informed of progress, and those who will directly influence
 117 project outcomes. Therefore, it is important to identify and assess the interests of
 118 stakeholders.

119 **4.2 Good stakeholder engagement**

120 All respondents except C1, C2 and C9 agreed that good stakeholder engagement is one
 121 of the emerging factors for the success delivery of stakeholder management in PPP
 122 projects. Therefore, it is importance to designing of appropriate stakeholders'
 123 engagement as the factors for the project success.

124 **4.3 Build trust between stakeholder**

125 C1 stated that one key elements of project success is establishing trust between
126 stakeholders. If there is trust between stakeholder, they can work together easily and
127 effectively. C4 and C5 added that communication is one of the best ways to gaining
128 trust between stakeholder. C2 also added that stakeholder must be sincere and build
129 trust as good relationship is one of the success factor of the project.

130 **4.4 Bankability/ availability of financial**

131 C7 stated the responsibility to obtain funds is more on the private sector. First owner
132 for case study 7 failed to get funding, second owner take over the project to get funding
133 by convincing the bank with feasibility study, traffic forecast, cash flow and revenue.
134 C1 added that strong funding can ensure the success of PPP implementation. From case
135 study, it found that they get funding through Employees Provident Fund (EPF).
136 Therefore, bankability/ availability of financial is a key factors for success delivery in
137 PPP projects.

138 **4.5 Technology Transfer**

139 C3, C4, C5, C6 and C8 agreed that technology transfer is important for project success.
140 C3 added that the use of latest technology in PPP will bring out a greater outcome to a
141 project. C4 also has the same opinion where introducing new technologies and
142 encouraging technology transfer will effectively affect the success to a project. C5 and
143 C8 mentioned that technology transfer is important to ensure the return of investment.
144 Hence, the role of government, the academic and industrial community is to build a
145 collaborative culture for the effective use of technology with government policies that
146 drive the transfer of technology [26].

147 **4.6 Fast completed and earn revenue**

148 All respondents agreed that PPP project can achieve fast completed projects though
149 with some challenges. C9 added if the project was fast completed to end-user,
150 concessionaire holders can earn revenue as soon as highway operated. C4 admitted that
151 PPP can accelerate the development of a project. However, C5 suggested that to ensure
152 fast project delivery, relevant government authorities, particularly Unit Kerjasama
153 Awam Swasta (UKAS), must ensure that no long delay in any process before the PPP
154 project is awarded to the SPV or private company. Therefore, faster project completions
155 can earn the revenue is another factors for successful delivery of stakeholder
156 management.

157 **4.7 Fast decision making**

158 C2 stated that the decision-making is important to ensure that every stakeholder has the
159 equal access to the interests. Moreover, C1 added that too long to make a decision may

160 result in delays and increase cost for a project. The theory posits that all stakeholders
 161 have to be taken into account when making decision that can affect their interests within
 162 the corporation. C1 provide an example such as top management. Therefore, fast
 163 decision making is important for project success.

164 5 Conclusions

165 The successful project delivery release on the stakeholder plays an important role in
 166 PPP projects. PPP provides benefits for both the public and private sector, based on
 167 trust in all parties involved, openness, fairness and mutual respect. Concessionnaire
 168 holder agreed that understanding the key drivers of stakeholder management, good
 169 stakeholder engagement, builds trust between stakeholder, understanding concession
 170 agreement, bankability/ availability of financial, technology transfer, fast completed
 171 and earn revenue and fast decision making were emerging factors for successful
 172 delivery of stakeholder management in PPP projects. Therefore, PPP attempt to offer
 173 many benefits to all stakeholder who are involved in PPP project.

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