

1                   **An Assessment of Factors influencing Collaboration**  
2                   **and Impacts on Organisational Performance: A**  
3                   **Review**

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10                  **Abstract.** Poor organisational performance is partly attributed to lack of  
11                  collaboration within an organisation. Therefore, this paper sought to establish the  
12                  factors that influence collaboration and the impact of collaboration on  
13                  organisational performance. A literature review was conducted to achieve the  
14                  objectives of the study. Literature from Google Scholar, Emerald, and Science  
15                  Direct were used, based on the keywords relevant to the study. The materials  
16                  consulted included journals and conference proceedings. Thematic content  
17                  analysis was used to identify factors that influence collaboration in an  
18                  organisation. The findings revealed that collaborative leadership, collaborative  
19                  culture, attributes of partners, strategic and external environment factors  
20                  influence collaboration. Further findings revealed that collaboration could  
21                  influence an organisation's performance in terms of knowledge creation an  
22                  transfer, innovativeness, ability to leverage resources to achieve maximum  
23                  benefits, as well as competitive advantage. This study provides knowledge on  
24                  which factors influence collaboration in order improve the quality or extent of  
25                  collaboration in an organisation. By understanding the factors of collaboration,  
26                  which in turn influence organisational performance, strategies can be developed  
27                  to encourage collaboration and thus performance, by the stakeholders and  
28                  managers.

29                  **Keywords:** Collaboration, Organisations, Performance, Success

30                  **1 Introduction**

31                  The construction industry all over the world contributes to more than 10% of the  
32                  world's economy [1]. Often, the construction industry is utilised by government to  
33                  stimulate growth toward the economy since it is a prime indicator of economic activity  
34                  [2]. With construction being the prime economic activity, it is crucial that construction  
35                  projects become successful. However, performance in the construction industry has  
36                  been poor due to poor communication and poor exchange of information and

37 knowledge amongst project participants or project team [3]. This is as a result of lack  
38 of or inadequate collaboration among the project teams.

39 Collaboration has been described as “shared accountability between individuals,  
40 some interdependence between individuals and clarity of roles/goals” [4]. In this  
41 arrangement, team tasks were regarded as generally a little more predictable, less urgent  
42 and complex. When done right, collaboration can improve productivity and  
43 profitability, increase innovation, and result in a cost reduction [5]. Collaboration can  
44 be beneficial for all stakeholders during the process of a project in order to improve  
45 organisational performance and to be a long-term relationship and to also create value  
46 [6], [7].

47 Previous similar studies revealed that the functioning and knowledge sharing of the  
48 collaboration team is relied has a direct effect on the quality and inter-instituted  
49 collaboration and team performance [8]. It is further stated that the collaboration  
50 attitude, culture behind each individual and competence reflects the team performance  
51 involved in the project [9]. Collaboration has characteristics and attributes contribute  
52 to quality improvement and performance in an organisation. Other case studies  
53 conducted by [10], [11] and [12] in Hong Kong, United States of America (USA) and  
54 in the United Kingdom (UK), respectively, posited that collaboration increases the  
55 chances of a construction project being completed on time, at the budgeted cost, with  
56 the quality satisfaction from the client, with the least amounts of conflicts, a better  
57 relationship with the client and less defects claimed. However, the current study sought  
58 to identify the factors of collaboration using a literature review.

59 The current study’s objectives were therefore to identify factors that influence  
60 collaboration and in turn, organisational performance. The methods used in conducting  
61 the review are presented briefly in the subsequent section. Thereafter, the information  
62 distilled from the review is presented. Conclusions drawn from the findings are  
63 subsequently presented.

## 64 **2 Methods**

65 The current paper is part of an on-going Master’s study. It presents findings from a  
66 literature review stage. Therefore, a desktop study approach was used to conduct the  
67 current study in order to identify common themes from existing studies, on the factors  
68 that influence collaboration in construction organisations and projects. Materials were  
69 sought from databases including Science Direct, Google Scholar, Emerald Insight and  
70 Google. The materials used included journal articles and conference papers. The  
71 materials were used based on the possession of the keywords relevant to the study  
72 including collaboration, construction, teamwork, organisational performance and  
73 project performance. Thematic content analysis was used to identify themes on the  
74 factors which influence collaboration and the impact of collaboration on organizational  
75 performance. The framework of factors developed will be tested using quantitative data  
76 in an on-going second phase of the study, in order to validate the framework of factors  
77 and test hypothesised relationships. The current paper presents findings from the  
78 review.

### 79 **3 Factors influencing Collaboration**

80 Numerous factors influence the development and success of collaboration in any  
81 industry aimed at improving organisational and project performance. [13] identified  
82 factors such as the environment, strategy, size of the organisation, technology and how  
83 it is improving, age of the participants and their cultural background. Other studies  
84 identified strategic factors, external environment; attributes of the partners,  
85 collaborative leadership and culture as collaboration influencers.

#### 86 **3.1 Strategic factors**

87 Strategic factors affecting collaboration may include setting goals that are clear for  
88 supplementary purposes [14], [15]; the regulation of distributing results for  
89 collaboration in order to prevent important information from leaking out before time  
90 [16]; methods of resolving common problems before resorting to harsh methods that  
91 involve domination, arbitration or persuasion; governance in order to clarify role of  
92 each individual in the collaboration and governance in defining how performance will  
93 be measured amongst the main agents [17], [18].

#### 94 **3.2 External environment**

95 The external environment incorporates three factors including IT capacity and  
96 integration and information system [17]; similar geographic locations of the partners,  
97 which affect collaboration positively when they are closer to each other and the  
98 management of knowledge, including the management of assets [17].

#### 99 **3.3 Attributes of the partners**

100 The attributes of partners or team members influence their level of collaboration. Such  
101 attributes include technological ability where they are able to develop and innovate new  
102 technology [17]; complementarities where partners can complement one another's  
103 technological abilities, experience in collaboration; diversity in gender, age, and  
104 education levels, knowledge absorption and integration of new knowledge [19], [20].

#### 105 **3.4 Collaborative leadership**

106 Collaborative leadership influences collaboration in an entity. Effective leadership  
107 brings about competitive advantage [21]. The traditional form of leadership mostly  
108 consists of power, hierarchical, command and control structure. An organisation  
109 requires leadership skills in a hierarchical model from top down; however, that  
110 approach and model of leadership is no longer enough [22]. With collaboration being  
111 about bringing individuals together with a shared goal to address shared concerns of  
112 the organisation, there must be a collaborative leader that is employed in almost any

113 situation. Therefore, collaborative leadership involves the process of engaging  
114 collectively in order to achieve common goals [21]. It is “the process of engaging  
115 collective intelligence to deliver results across organisational boundaries when ordinary  
116 mechanisms of control are absent” [21]. Intellectual individuals gathered together are  
117 more smart, and creative, and believe that power is greatest in collective team. This  
118 encourages suggestions and ideas from the team, allows roles and responsibilities to  
119 evolve and fluctuate, and offer ongoing and immediate feedback with personalised  
120 coaching [21].

### 121 **3.5 Collaborative culture**

122 Collaborative culture between the partners is to be fair in order to overcome differences  
123 quicker. Confidence in perceiving the partners’ honesty, believing that information is  
124 to remain within the organisation and believing in the collaboration to be of a positive  
125 effect influence the extent of collaboration in an entity [23], [24], [25], [26]. Further,  
126 immersion in forming a long term relationship and investing in a good collaborative  
127 relationship as well as communication to allow information flow, participation,  
128 exchanging of information, and mutual communication determines the level of  
129 collaboration among partners and culture in an organisation [17], [26].

### 130 **3.6 Political factors**

131 Political influences have great potential outcome on collaboration due to organisations  
132 being able to increase the amount of certainty and have a certain degree of  
133 organisational influence [27]. For example, stakeholders that are more powerful in the  
134 organisation collaborate with the ‘weaker’ individuals together in order for the  
135 stakeholders to have control over what they do; while the stakeholders also collaborate  
136 amongst themselves in order to prevent opponents from reconditioning the domain in  
137 which they work in [28]. A political perspective on inter-organisational collaboration  
138 is said to have an advantage due to it being a tool also for acquisition of power and  
139 influence [29].

140 In summary, the above factors, strategic, political, external environment, leadership  
141 and culture, influence collaboration in an organisation, which in turn affect an  
142 organisation in one way or another.

## 143 **4 Effects of Collaboration on Organisational Performance**

144 There is a wide variety of literature that has been studied all over the world, each of  
145 which is written about the different effects of collaboration on knowledge creation and  
146 organisational performance creation [27], [30]. Collaboration is about working together  
147 with partners or stakeholders in order to leverage all kinds of resources and provide  
148 maximum benefits [31]. In addition, one of the most crucial effects of collaboration is  
149 its potential to build an organisation capacity through the transfer of knowledge [27].  
150 Collaboration is about learning from each other or your partners whereas it is used as a

151 necessary tool that creates transfer of organisational or individual knowledge [27].  
 152 Amongst the context of a community or organisation is where the process of knowledge  
 153 creation occurs. Not only can the transfer of knowledge exist from one organisation to  
 154 another, through collaboration, new knowledge is able to be created and transferred  
 155 within an organisation [32].

156 Knowledge exchange has been found to be the fundamental role of what people in  
 157 collaboration are supposed to be doing [33]. According to [34], the central position of  
 158 the concept of collaboration is taken by knowledge exchange. An industry of  
 159 knowledge intensity, such as construction, requires different combinations of  
 160 knowledge sharing for innovation [35]. This suggests that knowledge creation is related  
 161 to innovativeness in an organisation. These views are shared by [36] and [36] who  
 162 viewed that in order for industries to innovate, there should be combinations of  
 163 knowledge sharing. Since knowledge exchange spans throughout all the project phases,  
 164 it provides a continuous assessment and improves the quality of collaboration.

165 In summary, the literature synthesis presented above revealed that the extent of  
 166 collaboration in an organization could depend on certain factors. The concept of a  
 167 collaborative structure leads to critical thinking and with disposition such as habit,  
 168 desire to be well-informed, a readiness to seek reason, inquisitiveness and flexibility,  
 169 better collaborators are borne [37], [38]. Further, culture, leadership, and strategic and  
 170 external environment factors including geographic locations, knowledge and asset  
 171 management were observed to influence the level of collaboration in an organisation.  
 172 It was therefore hypothesized that these factors influence the degree of collaboration  
 173 which in turn influences organizational performance. These relationships are depicted  
 174 in the Figure 1. The framework, which is not exhaustive at this stage of the Master's  
 175 study, will be further developed and tested in the quantitative research.



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**Figure 1.** Hypothesized relationships between collaboration and organizational performance.

## 179 **5 Conclusion**

180 The study sought to identify the factors that influence collaboration. As a smaller part  
 181 of a wider study being conducted on the impact of collaboration on organisational  
 182 performance, key concepts and relationships were identified from the preliminary  
 183 review and presented in the current paper. The factors include strategic factors,  
 184 leadership and culture, external environment and political factors. However, it is  
 185 notable that the factors presented herein are not exhaustive. The findings of the study  
 186 are envisaged to be beneficial to managers in different sectors in forming strategies to  
 187 improve collaboration and thus performance in their organisation.

188 Further studies are on-going to test the identified relationships and validate the  
 189 findings herein in order to determine the critical factors that influence collaboration and  
 190 which should be encouraged or harnessed to improve performance and achieve desired  
 191 targets or results.

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