Probabilistic Pre-requisites Contributing to Successful Housing Association Partnering

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Abstract: The necessity to achieve value for money (VFM) has been paramount during the current economic climate, with reductions in investment inducing Housing Associations (HAs) to minimise waste and pursue the maximisation of value. Differing characteristics between HAs and private sector clients have a bearing on the pre-requisites associated with a successful partnering outcome. The purpose of this paper is to assist HAs maximise VFM by increasing the likelihood of a successful partnering outcome through gaining an understanding of the most important pre-requisites to be implemented into the arrangement from a HA perspective. A quantitative analysis was adopted to identify the level of importance placed by HA on the probabilistic pre-requisites that contribute to a successful partnering outcome. The results highlight the most important probabilistic pre-requisites from a HA perspective. The research concluded that the three most importantly ranked pre-requisites that contribute to a successful partnering arrangement, perceived exclusively by HAs, were mutual trust between parties; stakeholder commitment and mutual objectives. The plethora of construction partnering research is predominantly based on the construction industry generally. This research focuses on the specific needs of HAs. The findings therefore enable HAs to differentiate between the most and least important pre-requisites identified within the literature. This will increase the probability of a successful partnering arrangement through the unveiling of the pre-requisites that HAs should focus on implementing. Subsequently, the research will assist HAs maximise VFM during the challenging economic period where investment into social housing has been reduced.

Key words: Housing, partnering, procurement, public sector.

1. Introduction

A recently published report from the Scottish Federation of Housing Associations [1] highlighted that currently, HAs and co-operatives own and manage approximately 47% of Scotland’s affordable social housing stock. This translates into 279,144 dwellings equating to approximately 11% of all Scottish homes. The indicative value of Scottish Housing Association assets is approximately £7.6 billion. According to the Registrar General in Scotland [2], over the next 25 years, the number of dwellings in Scotland is projected to increase by more than a fifth to 2.8 million. A recent report by Gibb and Leishman [3] emphasised the reduced funding available for new build social housing. The cuts in funding will exacerbate the need for more social housing in Scotland. The former Housing Minister in the Scottish Parliament, Alex Neil [4], highlighted to HAs, that achieving VFM was an essential element to underpin the Scottish Government’s future investment programme in housing.

HAs have been encouraged to utilise partnering for delivering construction and maintenance projects. The Housing Report Forum [5] encouraged HAs to embrace partnering via long term strategic supply chain alliances. Fortune and Setiawan [6] noted that HAs have been lobbied indirectly through the widespread promotion of the recommendations by Egan [7], to adopt partnering agreements in improving the performance of projects. The success or failure of a partnering agreement is significantly dependent on...
specific pre-requisites. Eriksson et al. [8] noted that increasing the awareness of the pre-requisites that assist successful partnering outcomes and the potential barriers that contribute to unsuccessful partnering arrangements is vitally important when implementing partnering. The pre-requisites associated with a successful partnering arrangement are detailed in Figure 1, and were reviewed within the literature [9-16].

Even though Housing Associations are private organisations, they are still non-profit bodies who are regulated rigorously by government departments. A substantial proportion of funding to enable the construction of new dwellings comes from grants provided by the government. These differences separate Housing Associations clients from private sector counterparts. A consequence of the thorough regulation is the requirement to demonstrate competitiveness. Fisher and Green [17] highlighted that if partnering

![Fig. 1 Partnering Pre-requisites.](image-url)
is to be followed, then those charged with public spending need to be equipped with appropriate tools to identify and provide sanctions to protect against anti-competitive behaviour that can result from partnering agreements. Another differing characteristic is that procedures implemented by the public sector can often work against the mutual trust and open relationship, which forms the prerequisite of partnering [18]. Funding mechanisms also differ between Housing Associations and private sector clients, as tenants' rent and government grants are the drivers for investing in maintenance and new build. Another significant difference is that Housing Associations are not-for-profit bodies, who are committed to providing low cost social housing, as opposed to private sector organisations that may primarily focus on profit. Housing Associations may also be prevented to include within the arrangement a provision to share savings with the contractor [19]. According to Burnes and Coram [20], another barrier is the risk-aversive nature of public sector organisations that is embedded within the ethos. These inherent characteristics separate Housing Associations from private sector counterparts, therefore effective implementation of partnering arrangements must be exclusively focussed on from this perspective.

Despite these inherent characteristics, HAs have been encouraged to utilise partnering. A plethora of research has been conducted to identify the key pre-requisites associated with successful partnering arrangements within the construction industry generally. There is however limited literature available that focuses on pre-requisites considered by specific client groups. The characteristics that differentiate HAs from other clients highlight the importance of focussing exclusively on their needs. Previous research on HA partnering has primarily adopted case study methodologies to identify partnering mechanisms and outcomes [14, 21, 22]. This research will therefore utilise quantitative methods to rigorously assess the importance of the identified partnering pre-requisites from the sole perspective of HAs. Unveiling the fundamental pre-requisites for HA partnering provides guidance on effective partnering and subsequently increases the probability of achieving VFM. A potential consequence is assisting HAs commission more maintenance and construction projects as the capital invested will be more effectively utilised.

2. Methodology

A quantitative research methodology was selected to determine the level of importance placed upon the identified pre-requisites that assist successful partnering from the literature within the specific context of HAs. A questionnaire was compiled and distributed to HA procurement personnel. This questionnaire was produced to identify the level of importance placed by HAs on the pre-requisites identified within the literature. Gaining an understanding of the necessary pre-requisites could increase the probability of achieving a successful partnering outcome. The survey sample was compiled by utilising the Scottish Federation of Housing Associations information on the current HAs operating in Scotland. The investigation enabled the identification of 75 HAs throughout Scotland that possessed the capabilities of answering the questionnaire.

Ordinal ranking was selected for HA respondents (Housing Association Procurement Personnel) to rank in order the level of importance for each pre-requisite. Utilising the ordinal ranking method enabled the level of importance for the pre-requisites to be ranked against each other and therefore guarantee that each pre-requisite ranked was assigned a unique value. A rating method was discarded to mitigate the risk of minimal differentiation among pre-requisites, as there was the possibility that HAs rated the pre-requisites identically. From the 75 questionnaires distributed in the summer of 2011, 43 responses were received, providing a response rate of 57%. From the responses, 35 of the 43 returned the completed questionnaire through e-mail with seven of the 43 returning the completed questionnaire through fax. The 12 specific pre-requisites directly correlated with the researched
literature. Respondents were provided with the opportunity to rank an additional two factors they believed should be included. The ranking values were represented as 1 = Highest Ranking Factor, 12 = Lowest Ranking Factor. Only two of the 43 HAs included additional factors, which suggest the literature analysis encapsulated all factors. A ranked synopsis table was produced to differentiate between the four tiers of pre-requisites, in terms of importance, for HAs to review.

3. Survey Analysis/Discussion

3.1 Stakeholder Commitment

Stakeholder commitment was considered as an important pre-requisite that contributes to successful HA partnering outcomes as 22 of the 43 HAs (51%) ranked this pre-requisite within the top three. The mean rank for stakeholder commitment was calculated at 3.79, reinforcing the importance placed by HAs. The mode was calculated at 2, highlighting the most common rank for commitment from stakeholders was second. The standard deviation however was high, equating to 2.493, highlighting a high degree of variance between responses. There was also a maximum range of 11 as there were responses ranging from 1 to 12.

The research highlighted that stakeholder commitment was the second most important pre-requisite for HAs that if implemented, will increase the probability of a successful outcome. The results concur with Bresnen and Marshall [11], identifying long term commitment as the willingness of the parties involved in a partnering agreement, to integrate and commit continuously to ensure unanticipated problems arising are rectified as effectively and timely as possible. The results also support the findings of Black et al. [10], who also identified commitment as one of the most important success factors for partnering. Housing Associations embarking on a partnering arrangement must ensure that their respective management structure commits to the partnering arrangement, which is filtered to all personnel involved in the process.

3.2 Mutual Trust between Parties

HAs considers mutual trust between parties as an important pre-requisite that contributes to successful partnering arrangements as 36 of the 43 HAs (84%) ranked this pre-requisite within the top three. The calculated mean rank was 2.65, highlighting a high level of importance placed by HAs, which was further reinforced with a measured mode of 1, as the most common rank for mutual trust was first. Similar to stakeholder commitment, the standard deviation for mutual trust of 2.429 was high, as there were high degrees of variance between respondents. The range of 10 indicated that HAs ranked mutual trust between first and eleventh.

The research identified the most important pre-requisite which contributes to a successful Housing Association partnering agreement was mutual trust between parties. The quantitative results support Kaluarachchi and Jones [14] who highlighted that mutual trust between partners was a fundamental component of a long-term partnering arrangement. The importance of mutual trust placed by HAs concurred with research conducted by Black et al. [10], who also identified mutual trust as the most important factor. The difference in philosophy between a quasi-public sector Housing Association and a private sector contractor could subsequently result in difficulties when forming a trusting relation. However, if establishing mutual trust between the parties is achieved, it will facilitate the destruction of partnering barriers and will greatly enhance the exchange of information and mutually rectify arising difficulties that produce beneficial outcomes to all partners.

3.3 Effective Communication

Effective communication between parties was not ranked as importantly as mutual trust or stakeholder commitment when considering the level of contribution to successful HA partnering arrangements. 13 of the 43 HAs (30%) ranked effective communication within the top three. The calculated mean level of importance was
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4.75, with a mode of 6, representing sixth as the most frequently used rank by HAs. The standard deviation however was lower, equating to 1.878 as 72% of HAs ranked effective communication between 3 and 7. This affected the range which was lower than commitment and trust, at eight, as results were more clustered for communication.

The fifth most important pre-requisite identified by HAs was effective communication, with a calculated mean of 4.74 and a mode of 6. The results concur with Beach et al. [9], who believed that communication is vitally important between partners to ensure a mutual understanding of expectations, attitudes and limitations. The results also concur with Cheng et al. [13], who advocated that effective communication can facilitate the exchanging ideas, visions and overcoming difficulties. The processes and forums of communication could be more challenging for Housing Association partners, due to complex departmental arrangements. Housing Associations normally comprise of procurement, technical and maintenance teams, who all liaise with housing managers and tenant committees. Managing the dynamics of a Housing Association partnering arrangement could be challenging.

3.4 Equitable Relations

Equitable relationships and integrated team was not perceived by HAs as an important pre-requisite that contributes to successful HA partnering arrangements. 34 of the 43 HAs (79%) ranked equitable relationships at seven or below. Only three of the 43 HAs (7%) ranked equitable relationships within the top three, all of which were ranked at number three. The mean level of importance was calculated at 7.84, and the mode measuring at 8, highlighting the most common rank from a HA perspective was eighth. The standard deviation of 2.192 was lower than commitment and trust. Similar to communication, the range was calculated at eight as HAs ranked the factor at both third and eleventh.

Equitable relations were not regarded by HAs as an important pre-requisite that contributes to successful HA partnering arrangements with a ranking of ninth. The results signified that HAs do not consider equitable relations as an important pre-requisite, which opposes the importance placed by Ng et al. [15] that equitable relations will create mutual goals, with a commitment to satisfy each partner’s requirements and continually search for solutions that confirm with the evolving expectations throughout the project. Establishment of an equitable relationship between Housing Associations and contracting partners can facilitate the manifestation of mutual motivation and encourage parties to work together to ensure all objectives are met.

The current economic conditions could tempt the manifestation of over powerful partners demanding control of the terms and risk distribution of the partnering arrangement.

3.5 Mutual Objectives

Mutual vision, goals and objectives was not ranked as importantly as mutual trust or stakeholder commitment when considering the contribution to successful HA partnering arrangements however, was considered more important than effective communication. 17 of the 43 HAs (40%) ranked mutual vision, goals and objectives within the top three ranks. The calculated mean level of importance was 4.07, with a mode of 4, highlighting the most common rank for mutual vision, goals and objectives was fourth. The standard deviation equated to 2.086, identifying a level of variance. The range was lower than commitment and trust, at nine, as responses ranked between one and ten.

HAs consider mutual objectives as an important pre-requisite that will increase the probability of a successful HA partnering arrangement. The results for mutual objectives support the assertions by Ng et al. [15] that mutual objectives must be developed to satisfy each stakeholders requirement for a mutually successful project. The results also concur with Swan and Khalfan [23], who considered mutual objectives as one of the fundamental elements required for
successful partnering. The utilisation of mutual objectives will incentivise Housing Associations and contracting partners to work together to ensure a successful partnering arrangement. However, the mutual objectives must be communicated to all levels of the Housing association and partner to ensure a collective attempt of achievement, as failure to work towards mutual goals could ultimately result in the failure of the arrangement.

3.6 Continual Evaluation and Improvement of Performance

Continual evaluation was not ranked as highly as mutual trust or stakeholder commitment when considering the impact, the pre-requisite has on contributing to successful HA partnering arrangements. 17 of the 43 HAs ranked continual evaluation and improvement within the top three levels of importance. The mean level of importance for continual evaluation was calculated at 4.09. The mode was calculated at 5, highlighting the most common rank for continual evaluation was fifth. The standard deviation equated to 2.338, highlighting a degree of variance as HAs ranked continual evaluation and improvement between first and ninth, therefore resulting in a range of eight.

The fourth most important pre-requisite was continual evaluation and improvement of performance, which ranked very similarly to mutual objectives, but slightly lower, in terms of importance, with a higher mean of 4.09 and mode of 5. Continuous improvement techniques were identified by Kaluarachchi and Jones [14] as fundamental to the partnering process and considered effective communication and coordination as key drivers for a sustained improvement of performance. The level of importance placed by HAs supports the view of Ng et al. [15], who emphasised that to facilitate the success of a partnering arrangement, continual reviews of performance are required to assess compliance with mutual goals. Housing Associations and the contracting partners could dedicate specific personnel to continually monitor and evaluate key performance indicators to strive for improvement throughout all stages of the arrangement.

3.7 Conflict Resolution Process for Disputes Arising

Conflict resolution process was not perceived as an important pre-requisite that contributes to successful HA partnering arrangements. 34 of the 43 HAs (79%) ranked conflict resolution process at six or below with only four of the 43 HAs (9%) ranking conflict resolution process within the top three, of which three were two and one, was three. The calculated mean was 7.14, with a mode of 6, highlighting that HAs do not consider conflict resolution as an important pre-requisite. The standard deviation was 2.696, highlighting a high degree of variance, with a range of 10 as responses ranged from second to twelfth.

HAs did not view conflict resolution process for disputes arising as an important pre-requisite that increases the probability of a successful HA partnering outcome. The calculated results highlighted a low importance level from a HA perspective, opposing the beliefs of Lu and Yan [24], who noted that the ethos of partnering can effectively facilitate the resolution of problems and conflicts, without destroying the harmony between partners.

3.8 Early Involvement of Key Participants

Early involvement of key participants was another pre-requisite not considered important in contributing to a successful HA partnering arrangement. 36 of the 43 HAs (84%) ranked early involvement at six or below, which represents a large majority of HAs that do not ensure the early involvement of key participant. Only five of the 43 HAs (12%) ranked early involvement of key participants within the top three, of which four were two and one was three. The mean level of importance was calculated at 7.95 with a mode of 9, highlighting that HAs do not consider this pre-requisite as key to contributing to a successful HA partnering arrangements. The standard deviation was 2.734, emphasising a high degree of variance with a
range of 10, as responses ranged from second to twelfth.

The eighth most important pre-requisite was the early involvement of key participants. The research indicated that HAs do not consider this as an important pre-requisite that contributes to a successful HA partnering arrangement. The research challenges the view of Beach et al. [9], who emphasised the importance of early involvement of key participants to enable the involved partners to utilise the accumulated knowledge and expertise to facilitate and maximise the success of the project. This pre-requisite will only facilitate the partnering arrangement if key stakeholders understand the partnering process. Should the knowledgeable Housing Association personnel be involved from an early stage, there is scope for the removal of waste prior to project finalisation.

3.9 Stakeholder Strength and Enthusiasm

HAs did not consider stakeholder strength and enthusiasm as an important pre-requisite that increases the likelihood of a successful HA partnering arrangement. A significant 40 of the 43 HAs (93%) ranked shareholder enthusiasm at six or below. Only two of the 43 HAs (5%) ranked shareholder enthusiasm within the top three, all of which were three. The calculated mean level of importance was 9.30, with the mode measuring 10, emphasising that HAs do not consider shareholder strength and enthusiasm as an important pre-requisite that assists the success of HA partnering projects.

HAs did not consider shareholders strength and enthusiasm as importantly contributing to a successful HA partnering arrangement. Stakeholder strength and enthusiasm was ranked as tenth. The results challenge the level of importance emphasised by Ng et al. [15] that partners must operate beyond acceptance to a level of true commitment and leadership, therefore actively promote the ultimate working relationship. HAs fragmented departmental structures could be compromising the enthusiasm spreading between partners. HA personnel should therefore champion partnering and spread the enthusiasm among all parties.

3.10 Partnering Workshops

HAs considers partnering workshops as the least important pre-requisite that contributes to successful partnering arrangements. None of the HAs ranked partnering workshops above six. A significant 67% of HAs ranked partnering workshops as the lowest rank of 12. The mean level of importance was calculated at 11.33, with the mode measured at 12, representing that partnering workshops was considered the least important pre-requisite that contributes to successful HA partnering arrangements. The standard deviation was low at 1.523 with a range of 8, as results were more clustered with low ranks.

The research conclusively identified that HAs identified partnering workshops as the least important pre-requisite to increase the probability of VFM. Partnering workshops scored a mean rank of 11.33 and a mode of 12, with a significant 27 of the 43 HAs ranking partnering workshops at twelfth. The research challenges the assertions of Bayliss et al. [25], who emphasised that regular workshops were one of the most effective tools to effectuate the partnering approach. The number of partnering workshops that should be conducted is intrinsically linked with specific circumstances, including level of experience, stage of the overall arrangement and the scale of project. HAs and partners should assess the reasonable number of workshops that are necessary from the outset.

3.11 Acceptance of Mistakes

Acceptance of mistakes was another pre-requisite that HAs did not perceive as importantly contributing to successful partnering arrangements. A significant 41 of the 43 HAs (95%) ranked acceptance of mistakes at seven or below. Only two of the 43 HAs (5%) ranked acceptance of mistakes within the top five, all of which were five. The mean level of importance was calculated at 9.51, with a mode of 11, highlighting that acceptance
of mistakes is not an important pre-requisite of HA partnering arrangements. The standard deviation was also low at 1.723 with a range of eight, as results were more clustered for acceptance of mistakes with a generally low rank.

Acceptance of mistakes was not considered as an important pre-requisite that assists the success of HA partnering arrangements. The research highlighted that this pre-requisite would not increase the likelihood of a successful HA partnering agreement, opposing the level of importance identified by Ng et al. [15], who suggested that it is paramount for stakeholders to be accepting of other parties mistakes, as stakeholders can learn from each other’s mistakes and improve efficiency in future relationships. As HAs place significant importance on the satisfaction of their tenants, it may be more difficult to tolerate and accept mistakes. The adversarial nature of traditionally procured projects, can inadvertently promote stakeholders to take advantage of mistakes, which is the antithesis of the partnering ethos.

3.12 Shared Project Risks

HAs placed a degree of importance on shared project risks contributing to successful HA partnering arrangements however, not as important as mutual trust or stakeholder commitment. 10 of the 43 HAs (23%) ranked shared risk within the top three ranks, with 6 of the 10 being ranked as first. The mean level of importance associated with shared risk was 5.77, with the mode being measured at 7, highlighting that HAs believe that shared project risks is a pre-requisite of HA partnering arrangements. The standard deviation however was high, equating to 3.015 as the results significantly varied, with a maximum range of 11, due to HAs ranking shared project risks first and twelfth.

Shared project risks were ranked by HAs as the sixth most important pre-requisite that contributes to a successful HA partnering arrangements. The results highlight a degree of importance associated with this pre-requisite and supports Chan et al. [12] highlighting that the sharing of risk was a contributory element to one of the critical factors associated with successful partnering. The theory associated with apportioning risk to the partner more able to respond is logical however, in the event of over powerful partners forming, the majority of risks could be transferred to the weaker partner. HAs must ensure that any risks that a contracting partner is more able to reduce and control, are transferred from the outset.

4. Ranked Synopsis Table

A ranked synopsis of the level of importance for the pre-requisites that contribute to successful partnering has been produced to distribute to HAs. The ranked synopsis table enables HAs to understand the necessary pre-requisites to be implemented into a partnering arrangement and consequently increase the probability of a successful outcome. The table of ranked pre-requisites is based on solely the HA client sector. The formulation of ranked position is based on: i) the frequency of inclusion outwith ranks 1 to 3; ii) the quantitative mean; iii) the calculated mode. To ensure no inherent bias with the relative strengths, a weighting of 33% was ascribed to each element. Each pre-requisite was multiplied by the percentage weighting and accumulated to determine a total value of analysed results. The calculated number indicates that the lower the total value of the pre-requisite, the more important the pre-requisite is perceived by HAs within the context of assisting the success of a partnering project. The ranked synopsis table is illustrated in Table 1.

The empirical data conclusively identified four tiers of partnering pre-requisites, in terms of importance for HAs to consider. The top tier of pre-requisites included: mutual trust between parties; stakeholder commitment and mutual objectives. These are paramount to the contribution of a successful HA partnering arrangement. The second tier included: continual evaluation and
improvement of performance; effective communication and shared project risks. The research indicated that these pre-requisites must also be adhered to by HAs to further mitigate the risk of an unsuccessful partnering arrangement. The third tier of pre-requisites include: conflict resolution processes for disputes arising; early involvement of key participants and equitable relations. These pre-requisites were not perceived by HAs as contributing to a successful partnering project. The lowest ranked pre-requisites, which constituted the fourth tier, included: stakeholder strength and enthusiasm; acceptance of mistakes and partnering workshops. The pre-requisites within the third and fourth tiers highlight that HAs place minimal levels of importance on contributing to a successful partnering arrangement. The results have identified that the high ranking pre-requisites, specifically the top six, should be the focus of attention and the prioritised pre-requisites for HAs to increase the probability of a successful partnering project. The low ranked pre-requisites need not be fully discarded. The distribution of focus must however be shifted towards the higher ranked factors. Figure 14 illustrates the four tiers of pre-requisites for HA partnering arrangements.
Fig. 14  Tiers of Pre-requisites.
5. Conclusions

The findings in this paper now enable HAs to differentiate between the most and least important pre-requisites through utilising the ranked synopsis. Furthermore, this research will assist HAs increase the probability of a successful partnering arrangement, through clearly identifying the necessary pre-requisites to be implemented. This will consequently assist compliance with government targets and could therefore increase the number of affordable properties developed or maintained through more effective use of capital invested. The findings in this paper can also be utilised by contracting partners operating within the social housing sector, as the results provide an understanding of the pre-requisites considered important by HAs. Recommendations from this research are that the ranked synopsis of pre-requisites that contribute to a successful partnering arrangement are reviewed by HAs and the contracting partners throughout all stages of the project. Such a review can ensure implementation and continual adherence to the identified pre-requisites. This would promote the awareness between HAs and their contracting partner of the necessity for compliance.

References


