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# Trust to Contractor in Housing Construction

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**Abstract**: Trust is the willingness to rely upon the actions of others, to be dependent upon them, and thus to be vulnerable to their actions. In housing construction, where contract is usually awarded without tender, trust of the developer to the contractor is a very important factor. This paper studies trust relationship, specifically on the developer's side to contractor. Trust is measured by identifying three major factors: characteristics, how to build, and the benefits of trust. Fifteen respondents from fifteen housing developers in West Surabaya, Indonesia, participated in the questionnaire survey. The results indicated that characteristics of trust depend on the credibility of the contractor, which is the depth of its experience. Trust can be built by creating team compatibility and aligning issues; and behaving professionally. Trust can help the contractor accelerate in solving the problem in construction.

**Keywords**: Credibility, housing construction, partnering, trust to contractor.

## Introduction

Housing construction contracts are usually awarded without tender, thus the building of trust to contractor is vital in carrying out the work. Wood and Mc. Dermott [1] in a pilot study of trust in UK construction industry, reported that there was a clear desire of the managers to move beyond narrow self interest to a philosophy of partnering and co-operation to gain higher returns by lowering transactions cost and reducing conflict. To produce these benefits, trust should be developed between the co-operating partners [2,3]. A variety of work has pointed to the advantages that derive to project organization from exploiting trust-based relationships. Trust is a critical success element to most business, and it is shown to cement the critical stakeholder relationships that often determine the success of a project [4].

Trust and respect between contractor and developer are very important to reach the common goals in the housing project. Distrust results in poorly designed and implemented change initiative. Distrust is the source of many of the problems that plague the organization [5]. Lack of attention has been given to bring trust concepts to specific context in construction [6,7].

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The reflection on characteristic of trust suggests that to establish any relationships, a minimal degree of trust has to be actualized, i.e. their ability to keep promises, to communicate openly and honestly, to share information to produce mutually beneficial outcomes. Handling problems in an open and honest way allows the problem to be solved more cheaply and enables other team members to adapt to new information more readily [8]. There are factors and instruments that enable trust to be developed, hence allowing the increased efficiency in the work being done [1]. It is important to look at how this decision impacts the running and outcomes of a project.

The relationship between the developer as the owner and the contractor as executor has specific characteristic. Trust is one of the most important factors to achieve partnering success between developer and contractor [9]. In an environment of incomplete contracts, trust is essential to help overcome problems.

## Trust

Trust is the willingness to rely upon the actions of others, to be dependent upon them, and thus to be vulnerable to their actions. Trust always involves element of risk, that a partner will abuse the trust placed on him or her [1]. Trust is built up over a series of interpersonal encounters [10], in which the parties establish reciprocal obligations [11]. Trust is a multi-dimensional, multi faceted social phenomenon, which is regarded by some as an attitude, by others as a personality trait, and by yet others as a vital social lubricant [1]. Gambretta [12] saw trust as an elusive concept. Misztal [13] noted the continuing conceptual confusion that surrounded this social phenomenon. Trust is more than simple confidence and less than

blind faith. Backgrounds of expectations are the ones that create the unseen land mines in the process of establishing and maintaining trust. Trust is a belief that those on whom someone depends will meet one's expectations of them [5]. Trust is belief in the reliance, ability, and integrity of others [14]. An extensive list of qualities of trust, or more accurately descriptions of trust, could be found in the writing of Kumar [15], which listed dependability, honesty, interdependence, openness and fairness.

Trust is behavioral or attitudinal in nature [16], a psychological state comprising the intention to accept vulnerability based upon positive expectation of the intentions or behaviors of others [4]. Positive attitudes to people are vital to successful communication. If trust is present, people can spontaneously engage in constructive interaction without pondering what hidden motives exchange partners might have, who formally are responsible for problems, or what the risks are in disclosing information [7].

**Characteristics of Trust**

Characteristics of trust have been identified into several elements; credibility, promise keeping, confidence, and communication [1]. Credibility/competence here is interpreted as the action in which a person offer or gain satisfaction from the relationship, or that value added is created. Credibility is based on expertise, and trustworthiness [17]. Competence is the conviction that work activities can be carried out skillfully and successfully**.** Competence trust is the belief that the other party has the ability to perform the work assigned [4]. Two parties who cannot rely on each other to keep promises are unlikely to be able to develop trust in each other. Failure to keep to what was promised is a breach of trust or betrayal [1]. Having confidence can lead to trust, because there is confidence in their competency and reliability that a person will keep their promise. Confidence in housing construction can be built from total commitment, responsibility, and the competence to finish a project [18]. Communication is the transfer of information from one person to another person [17]. A good communication needs openness, honesty, and truthfulness [1]. These communication methods can be more specifically termed as openness, team building, effective communication, problem resolution, and timely responsiveness. Open communication refers to the free flow of resources in term of ideas, knowledge, skills, and technology through different effective channel [19].

**How to Build Trust**

The trust-building process can be made by several ways such as; experience, problem solving, shared goals, reciprocity, and reasonable behavior [11]. Experience of working together can be supported by other factors. Participant experiences help solidity, or create a new learning experience [17]. Some experiences that support to build trust can be explained in three items. The first is spending time and working together, the second is communication through action and outcome, and the third is consistently prove themselves to be reliable [11]. Communication was identified as the driver in the trust building process. Open communication in the project team was one of the key factors in stimulating effective relationship management. Not only did it affect work relationships, it also affected the effectiveness of problem solving. Open communication refers to the free flow of resources in term of idea, knowledge, skill, and technology through different effective channels [19]. Problem solving is a relationship among symptoms, problems and opportunities that face the planner [14]. Through problem solving, others reveal their openness and honesty, and willingness to share information. The important points of problem solving are sharing information. Team members are encouraged to resolved problems within their authority, at their level, without help or direction from above.

Shared goals mean that everyone can be seen to fulfill a joint task, rather than viewing their own role as separate from the rest of the project team [8]. The shared goal can be built by two factors, the first is compatibility of team and alignment issues, and the second is knowing the owner and work process. Reciprocity is an important characteristic of trust relationships. Reciprocity can be made by three factors, the first is sacrificing behavior, the second is fair and reasonable, and the third is mutual respect and tolerance for each other. The theory of reasoned action states that when a behavior is a matter of choice, the best predictor of the behavior is the person's intention to perform. Intention is best predicted from two factors, the first is attitudes toward the bahavior, and the second is subjective norm [14]. The idea of behaving reasonably is about behaving professionally [1].

**Benefits of Trust**

Benefits of trust can be identified by asking the question how and why people take decision. It is important to look at how the decision to trust impacts the running and outcomes of a project. Trust has three benefits, the first is reduce uncertainty, the second is reduce risk, and third is to resolve the problem more quickly and flexibility [5]. Uncertainty exists when there is more than one possible outcome of a course of action but the probability of each outcome is not known [20]. Uncertainty will be reduced if team members can produce information

more clear and accurate [1]. Where there is uncertainty there is risk. Risk is very much related to personal attitudes. Risk exists when a decision is expressed in term of a range of possible outcomes and when known probabilities can be attached. With better understanding of outcomes in the event of risk factors, contingencies in costs and programme may be reduced [1,8]. Flexibility in term of organizational designs gives someone more autonomy, demonstrates trust, and simultaneously invites self-discipline [17]. By communicating honestly, if the problem falls outside the scope of contracts, trusting teams can quickly resolve the problem on the ground and deliver a solution.

## Research Method

The study employed a questionnaire survey to collect data. The questionnaires contained closed types questions and was structured into three major parts. The first part was about characteristics of trusts, the second focused on building trust, and the last asked about benefits of trust. Total respondents were fifteen medium-class housing developers in West Surabaya, Indonesia, listed as members of Indonesian Real Estate Association (REI). The respondents were required to answer all of questions using rating scales from Strongly Disagree (1) to Strongly Agree (5), in which the higher the scores the higher the levels of respondents trust will be. Score of three part of trust factors (characteristics of trust, building trust, and benefits of trust) would first be analyzed by averaging the score of its respective indicators. Analysis were performed to see if there are any differences of perceptions in relation with the profession of the respondent. Because the sample size is less than 30, the basic statistic procedure should be performed by the nonparametric procedure.

The different group of respondents between manager group and supervisor group were calculated by Mann-Withney (U) test [20]. Mann-Whitney (U) test is a usefull nonparametric procedure originally proposed by Mann and Whitney. The basic concept is the rank-sum test that determines two independent samples [21]. Initially, the hypothesis testing needs the statements of a null hypothesis, and an alternative null hypothesis. The null hypothesis (H0) thus states "there is no difference in mean response between the two classes (manager and supervisor)". The alternative hypothesis states "there is a difference in mean response between the two classes". The probability of getting the observed mean difference when the null hypothesis is true is called the P value. If the P value is small, compared to the cut off value of 0.05 (level of significance), then the observed result is unlikely to occur if the null hypothesis is true. The rejection region for the z statistic can be determined by using the standard normal table. Reject at level of significant $\alpha$ if $z \geq z_{\alpha}$. $z_{\alpha}$.

The value of $U$ can be calculated using the following equation:

$$U = n_1 n_2 + \frac{n_1(n_1+1)}{2} - R_1 \quad (1)$$

In Equation 1, $n_1$, is the number of items in the manager group and $n_2$, is the number of items in the supervisor group. $R_1$ is the smallest cumulative rank between the manager group and the supervisor group Expected value $U$, $E(U)$ can be calculated by,

$$E(U) = \frac{n_1.n_2}{2} \quad (2)$$

Standard error statistic $U$ calculated using the following

$$\sigma_u = \sqrt{\frac{n_1.n_2(n_1+n_2+1)}{12}} \quad (3)$$

and Normal standard deviation

$$Z = \frac{U - E(U)}{\sigma u} \quad (4)$$

## Result and Discussions

### General Information

The respondents have various levels of positions in their company. There are nine managers, and six supervisors, all from different companies. Their companies are fifteen housing developers in West Surabaya [22]

### Characteristics of Trust Analysis

Table 1 presents the mean scores and ranks of nine subfactors of characteristics of trust perceived by different positions of respondents.

The order of characteristics of trust, which were sorted by their total mean score, generated some interesting finding discussed below. Based on descriptive analysis, it can be seen that managers and supervisors have different opinions or perspective. The Managers feel that *credibility* which is formed by the subfactor *expertise,* has the higher mean and placed in the first rank (mean sore 4.33). This opinion means that they build their *credibility* by *expertise.* On the other hand Supervisors have different view in the characteristics of trust. Acording to the Supervisors there are two important characteristics of trust. The first is *completion of promise* with subfactor *good quality* (mean score 4.00) and the second is *confidence* with subfactor *ability to complete the work* (mean score 4.00). It means that they should make completion of promise in *good quality* construction product, and confidence is achieved by ability to complete the work. It shows a tendency that supervisors at a technical level, are

**Table 1.** Mean Scores and Ranks of Characteristics of Trust

| No | Factors of characteristics of trust | Manager | | Supervisor | | Total | |
|---|---|---|---|---|---|---|---|
| | | Mean | Rank | Mean | Rank | Mean | Rank |
| I. | Credibility | | | | | | |
| 1. | Expertise | **4.33** | 1 | 3.83 | 3 | 4.13 | 1 |
| 2. | Trustworthiness | 3.78 | 3 | 3.50 | 5 | 3.67 | 4 |
| II. | Completion of promise | | | | | | |
| 1. | On time | 3.44 | 6 | 3.33 | 7 | 3.40 | 6 |
| 2. | Good quality | **4.11** | 2 | **4.00** | 1 | 4.07 | 2 |
| III. | Confidence | | | | | | |
| 1. | Total commitment | 3.44 | 6 | 3.17 | 8 | 3.33 | 8 |
| 2. | Responsibility | 3.44 | 6 | 3.50 | 5 | 3.47 | 5 |
| 3. | Ability to complete the work | 3.56 | 4 | **4.00** | 1 | 3.73 | 3 |
| IV. | Communication | | | | | | |
| 1. | Openess communication | 3.22 | 8 | 3.67 | 4 | 3.40 | 6 |
| 2. | Honesty truthfulness | 2.89 | 9 | 2.83 | 9 | 2.87 | 9 |
| | Sum | 32.21 | | 31.83 | | 32.07 | |
| | Mean Average | 3.58 | | 3.54 | | 3.56 | |

**Table 2.** Mann-Whitney Test of Characteristics of Trust

| No | Factors of characteristics of trust | Manager | | Supervisor | |
|---|---|---|---|---|---|
| | | Mean | Rank | Mean | Rank |
| I. | Credibility | | | | |
| 1. | Expertise | **4.33** | 1 | 3.83 | 5 |
| 2. | Trustworthiness | 3.78 | 6 | 3.50 | 10 |
| II. | Completion of promise | | | | |
| 1. | On time | 3.44 | 12 | 3.33 | 14 |
| 2. | Good quality | 4.11 | 2 | **4.00** | 3 |
| III. | Confidence | | | | |
| 1. | Total commitment | 3.44 | 12 | 3.17 | 16 |
| 2. | Responsibility | 3.44 | 12 | 3.50 | 10 |
| 3. | Ability to complete the work | 3.56 | 8 | **4.00** | 3 |
| IV. | Communication | | | | |
| 1. | Openness communication | 3.22 | 15 | 3.67 | 7 |
| 2. | Honesty and truthfulness | 2.89 | 17 | 2.83 | 18 |
| | Sum | 32.21 | 85 | 31.83 | 88 |
| | Average | 3.58 | | 3.54 | |

more concern in how they make a *good quality* construction work. They are also concern with the contractors' ability to complete the work. However both parties (manager and supervisor) seem to agree on *completion of promise in good quality* (Point II.2). Manager and supervisor also have similar opinion that the lowest rank of characteristics of trust is factor of *communication* with subfactor of *honesty and truthfulness*.

Mann-Whitney test of characteristics of trust is shown in Table 2. Using Formulas 1 to 4, it is found that, U = 41, E(U) = 40.5, $\sigma_u$ = 11.32, and z = 0.044. Since z is smaller than Zα = 1.96, the observed value does not fall in the rejection area, and the null hypothesis is not rejected at $\alpha$ = 0.05 (the null hypothesis is accepted).

In general, it means that manager and supervisor have similar opinion that there is no significant difference in the perception of respondent from differents positions regarding their perceptions of the characteristics of trust.

**How to Build Trust Analysis**

Table 3 presents the mean scores and ranks of eleven subfactors of how to build trust perceived by different positions of respondents.

In accordance to the order of the subfactors on how to build trust, which were sorted by the mean score, manager saw that factor *compatibility of team and alignment issues* is one of the important factors to build trust (mean score 4.11). It can be achieved by making cohesive group, and the result is more effective and more productive. It is a process to develop issues or to resolve the problems. In formulating an alignment issues, manager can resolve the problem at the lowest level, and no jumping of levels of authority is allowed. On the other hand, supervisor

**Table 3.** Mean Scores and Ranks of How to Build Trust

| No | Factors of how to build trust | Manager | | Supervisor | | Total | |
|---|---|---|---|---|---|---|---|
| | | Mean | Rank | Mean | Rank | Mean | Rank |
| I. | Experience | | | | | | |
| 1. | Spending time and working together | 2.89 | 10 | 3.00 | 11 | 2.93 | 10 |
| 2. | Communication through action and outcome | 3.33 | 7 | 2.83 | 9 | 3.13 | 9 |
| 3. | Consistently prove themselves to be reliable | 3.22 | 8 | 3.83 | 3 | 3.47 | 5 |
| II. | Problem solving | | | | | | |
| 1. | Share information with openness | 3.78 | 3 | 3.33 | 6 | 3.60 | 4 |
| 2. | Solve the problem with everybody's agreement | 2.78 | 11 | 2.83 | 9 | 2.80 | 11 |
| III. | Shared goals | | | | | | |
| 1. | Compatibility of team and alignment issues | **4.11** | 1 | **4.16** | 2 | 4.13 | 1 |
| 2. | Knowing the firm client, and work process | 3.44 | 6 | 3.17 | 7 | 3.33 | 7 |
| IV. | Reciprocity | | | | | | |
| 1. | Sacrificing behavior | 3.00 | 9 | 3.50 | 5 | 3.20 | 8 |
| 2. | Fair and reasonable | 3.78 | 3 | 3.67 | 4 | 3.73 | 3 |
| 3. | Mutual respect and tolerance for each other | 3.56 | 5 | 3.17 | 7 | 3.40 | 6 |
| V. | Reasonable behavior | | | | | | |
| 1. | Behaving professionally | 4.00 | 2 | **4.33** | 1 | 4.13 | 1 |
| | Sum | 37.89 | | 37.82 | | 37.85 | |
| | Average | 3.44 | | 3.44 | | 3.44 | |

**Table 4.** Mann-Withney Test of How to Build Trust

| No | Factors of how to build trust | Manager | | Supervisor | |
|---|---|---|---|---|---|
| | | Mean | Rank | Mean | Rank |
| I. | Experience | | | | |
| 1. | Spending time and working together | 2.89 | 19 | 3.00 | 18 |
| 2. | Communication through action and outcome | 3.33 | 12 | 2.83 | 21 |
| 3. | Consistently prove themselves to be reliable | 3.22 | 14 | 3.83 | 5 |
| II. | Problem solving | | | | |
| 1. | Share information with openness | 3.78 | 7 | 3.33 | 12 |
| 2. | Solve the problem with everybody's agreement | 2.78 | 22 | 2.83 | 21 |
| III. | Shared goals | | | | |
| 1. | Compatibility of team and alignment issues | **4.11** | 3 | **4.16** | 2 |
| 2. | Knowing the firm client, and work process | 3.44 | 11 | 3.17 | 15 |
| IV. | Reciprocity | | | | |
| 1. | Sacrificing behavior | 3.00 | 18 | 3.50 | 10 |
| 2. | Fair and reasonable | 3.78 | 6 | 3.67 | 8 |
| 3. | Mutual respect and tolerance for each other | 3.56 | 9 | 3.17 | 15 |
| V. | Reasonable behavior | | | | |
| 1. | Behaving professionally | **4.00** | 4 | **4.33** | 1 |
| | Sum | 37.89 | 125 | 37.82 | 128 |
| | Average | 3.44 | | 3.43 | |

also saw that *behaving professionally* factor is the important thing to build trust (mean score 4.33).

Project management team, involves a three-party team, those are; owner, supervisor/manager, and contractor. It can be a success relationships among team members if the team respect the professional relationship of each other. Considering the argument above, the researchers then hypothesized that the position of the respondents might influence their perceptions toward the Mann-Whitney Test in Table 4.

From Formulas 1-4, it is found that, U = 62, E(U) = 60.5, $\sigma_u$ = 15.23, and z = 0.098, smaller than Zα = 1.96, thus the observed value does not fall in the rejection area, and the null hypothesis is not rejected at α = 0.05 (the null hypothesis is accepted).

In general, it means that manager and supervisor have similar opinion. There is no significant differences in the perception of the manager and supervisor regarding their perception of how to build trust. It can be seen from Table 4, that the important thing of building trust is indicated by two factors; *behaving professionally (point V.1)* and *sharing goals within compatibility of their team and aligning issues (point III.1).* Their professionality and compatibility of team and alignment issues were much more important than *solving the problem with everybody's agreement* (point II.2).

**Benefits of Trust Analysis**

Table 5 presents the mean scores and ranks of five subfactors of benefits of trust perceived by different positions of respondents.

From Table 5, it can be seen that the two respondents position (manager and supervisor) agree that the first rank of benefit of trust is flexibility with subfactor of *quicken problem solving* (point III.2). Trust makes people more flexible. In construction work, the more flexible the parties the easier to solve the problem. Both managers and supervisors, agree that the lowest rank of the benefit of trust *uncertainty* with subfactor of *clear and accurate information*. It means that they did not view that trust can reduce uncertainty which can only be achieved by clear and accurate information.

Considering the argument above, the researchers then hypothesized that the position of the respondents might influence their perceptions toward the Mann-Whitney Test. This test can be noticed from Table 6.

From Formulas 1 to 4, it is found that, U = 17, E(U) = 12.5, $\sigma_u = 4.79$, and $Z = 0.939 < Z\alpha = 1.96$, thus the observed value does not fall in the rejection area, and the null hypothesis is not rejected at $\alpha = 0.05$ (the null hypothesis is accepted).

In general, it means that manager and supervisor had similar opinion. There is no significant difference in the perception of respondent from different positions (manager and supervisor) regarding their perception of benefit of trust. Further Table 6 indicates that the benefit of trust is the ability to *quicken problem solving*. Hence, benefit of trust makes people more flexible in their work that can help to solve the problem faster.

**The Whole Analysis**

The whole analysis was made to analyze all of the respondents from different positions together in one analysis. This analysis based on the frequency and percentage of each score of characteristics of trust, how to build trust, and benefits of trust (Table 7).

As can be noted from Table 7, the biggest frequency (73.3%) with a rating scale of four (4) are attributed to subfactors *fair and reasonable* and *behaving professionally*. It means 73.30% respondent agree that building trust can be reached by behaving fair and reasonable to make a good reciprocal relationships and behaving professionally can build trust among participants. The second biggest of this scale 4 is shown by the factor *credibility* with the subfactor *expertise*. It shows that 60% respondent also agree that characteristics of trust depend on the *expertise*

**Table 5.** Mean Scores and Ranks of Benefits of Trust.

| No | Factors of benefit of trust | Manager | | Supervisor | | Total | |
|---|---|---|---|---|---|---|---|
| | | Mean | Rank | Mean | Rank | Mean | Rank |
| I | Uncertainty | | | | | | |
| 1. | Clear and accurate information | 3.00 | 5 | 3.17 | 4 | 3.07 | 5 |
| II. | Risk | | | | | | |
| 1. | Reduced contingencies in program | 4.33 | 2 | 3.00 | 5 | 3.80 | 3 |
| 2. | Reduced transaction cost | 3.11 | 4 | 3.67 | 2 | 3.33 | 4 |
| III. | Flexibility | | | | | | |
| 1. | Verbal instruction | 4.33 | 2 | 3.67 | 2 | 4.07 | 2 |
| 2. | Quicken Problem Solving | **4.67** | 1 | **4.00** | 1 | 4.40 | 1 |
| | Sum | 19.44 | | 17.51 | | 18.67 | |
| | Average | 3.89 | | 3.50 | | 3.73 | |

**Table 6.** Mann-Whitney Test of Benefits of Trust.

| No | Factors of benefit of tust | Manager | | Supervisor | |
|---|---|---|---|---|---|
| | | Mean | Rank | Mean | Rank |
| I | Uncertainty | | | | |
| 1. | Clear and accurate information | 3.00 | 10 | 3.17 | 7 |
| II. | Risk | | | | |
| 1. | Reduced contingencies in program | 4.33 | 2 | 3.00 | 10 |
| 2. | Reduced transaction cost | 3.11 | 8 | 3.67 | 5 |
| III. | Flexibility | | | | |
| 1. | Verbal instruction | 4.33 | 2 | 3.67 | 5 |
| 2. | Quicken Problem Solving | 4.67 | 1 | 4.00 | 4 |
| | Sum | 19.44 | 23 | 17.51 | 31 |
| | Average | 3.89 | | 3.50 | |

**Table 7.** Frequency and Percentage Score's Distribution of Respondents' Positions

| No. | Item of trust | Score | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | | 2 | | 3 | | 4 | | 5 | |
| | | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % |
| **A.** | **Characteristic of trust** | | | | | | | | | | |
| I. | Credibility | | | | | | | | | | |
| 1. | Expertise | 0 | 0 | 0 | 0.0 | 2 | 13.3 | 9 | 60.0 | 4 | 26.7 |
| 2. | Trustworthy | 0 | 0 | 0 | 0.0 | 7 | 46.7 | 6 | 40.0 | 2 | 13.3 |
| II. | Completion of promise | | | | | | | | | | |
| 1. | On time | 0 | 0 | 0 | 0.0 | 10 | 66.7 | 4 | 26.7 | 1 | 6.6 |
| 2. | Good quality | 0 | 0 | 1 | 6.7 | 3 | 20.0 | 5 | 33.3 | 6 | 40.0 |
| III. | Confidence | | | | | | | | | | |
| 1. | Total commitment | 0 | 0 | 1 | 6.7 | 9 | 60.0 | 4 | 26.7 | 1 | 6.6 |
| 2. | Responsibility | 0 | 0 | 0 | 0.0 | 9 | 60.0 | 5 | 33.3 | 1 | 6.7 |
| 3. | Ability to complete the work | 0 | 0 | 2 | 13.3 | 3 | 20.0 | 7 | 46.7 | 3 | 20.0 |
| IV. | Communication | | | | | | | | | | |
| 1. | Openness communication | 0 | 0 | 4 | 26.7 | 4 | 26.7 | 4 | 26.6 | 3 | 20.0 |
| 2. | Honesty and truthfulness | 0 | 0 | 6 | 40.0 | 5 | 33.3 | 4 | 26.7 | 0 | 0.0 |
| **B.** | **How to build trust** | | | | | | | | | | |
| I. | Experience | | | | | | | | | | |
| 1. | Spending time | 0 | 0.0 | 5 | 33.3 | 6 | 40.0 | 4 | 26.7 | 0 | 0.0 |
| 2. | Communication, action, outcome | 2 | 13.3 | 1 | 6.7 | 7 | 46.7 | 3 | 20.0 | 2 | 13.3 |
| 3. | Consistenly, reliable | 1 | 6.7 | 2 | 13.3 | 5 | 33.3 | 3 | 20.0 | 4 | 26.7 |
| II. | Problem solving | | | | | | | | | | |
| 1. | Share information | 0 | 0.0 | 2 | 13.3 | 5 | 33.3 | 5 | 33.4 | 3 | 20.0 |
| 2. | Solve the problem | 0 | 0.0 | 6 | 40.0 | 6 | 40.0 | 3 | 20.0 | 0 | 0.0 |
| III. | Shared goals | | | | | | | | | | |
| 1. | Compatibility of team | 0 | 0.0 | 0 | 0 | 3 | 20.0 | 7 | 46.7 | 5 | 33.3 |
| 2. | Knowing the firm, client, work process | 0 | 0.0 | 1 | 6,7 | 8 | 53,3 | 6 | 40.0 | 0 | 0.0 |
| IV. | Reciprocity | | | | | | | | | | |
| 1. | Sacrificing behavior | 0 | 0.0 | 2 | 13.3 | 8 | 53.4 | 5 | 33.3 | 0 | 0.0 |
| 2. | Fair and reasonable | 0 | 0.0 | 0 | 0.0 | 4 | 26.7 | 11 | **73.3** | 0 | 0.0 |
| 3. | Mutual respect | 0 | 0.0 | 0 | 0.0 | 10 | 66.7 | 4 | 26.7 | 1 | 6.6 |
| V. | Reasonable behavior | | | | | | | | | | |
| 1. | Behaving professionally | 0 | 0.0 | 0 | 0.0 | 1 | 6.7 | 11 | **73.3** | 3 | 20.0 |
| **C.** | **Benefits of trust** | | | | | | | | | | |
| I. | Uncertainty | | | | | | | | | | |
| 1. | Clear and accurate information | 2 | 13.4 | 1 | 6.7 | 8 | 53.3 | 2 | 13.3 | 2 | 13.3 |
| II. | Risk | | | | | | | | | | |
| 1. | Reduced contingencies | 1 | 6.7 | 2 | 13.3 | 2 | 13.3 | 4 | 26.7 | 6 | 40.0 |
| 2. | Reduced cost | 2 | 13.3 | 1 | 6.7 | 3 | 20.0 | 8 | 53.3 | 1 | 6.7 |
| III. | Flexibility | | | | | | | | | | |
| 1. | Verbal instruction | 0 | 0.0 | 0 | 0.0 | 4 | 26.7 | 6 | 40.0 | 5 | 33.7 |
| 2. | Quicken problem solving | 0 | 0.0 | 0 | 0.0 | 1 | 6.7 | 7 | 46.7 | 7 | 46.**7** |

that the participants have. Expert power, also known as the authority of knowledge, comes from specialized learning. It is power that arises from a person's knowledge of an information about complex situation. Respondents agree that the characteristic of trust depend on credibility of contractor in the depth of its expertise. It is also interesting to see the presence of *quicken problem solving* as an important source of trust benefit felt by 46.70% respondent.

## Conclusion

This research has empirically analyzed the characteristics, how to build, and the benefits of trust in construction housing project in West Surabaya. The mean scores in the 15 housing developers indicated that in general the respondent's perception about the characteristic of trust is somewhat similar (mean score almost more than 3.00). Respondents agrees that the characteristic of trust depend on credibility of manager in which the depth of its expertise (mean score 4.33). Meanwhile, the finding of this research provides valuable insight on how to build trust. It can be seen that contractors need to create the compatibility of their team and alignment issues (mean score 4.11). In addition, they should behave professionally (mean score 4.33) to establish relationship build on trust, though they would see this as being pragmatic. The circumstances benefits of trust, the result of the survey finds out that, in general, respondent agrees (mean score 4.0) that trust makes ability to complete the work, so it can help to accelerate

problem solving. Construction projects involve large number of people from different organization coming together and working to very tight deadlines. All of them need trust in construction to gain the higher returns by lowering transactions cost and reducing conflict.

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