

# Comparative Analysis Between Self-Management and Contractual System in Banjarmasin-Banjarbaru Areas Housing Project : Reviewed from the Quality, Time, and the Customer Satisfaction Projects

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## Abstract

The success of implementing housing projects can be seen from the system used as a measure of the success of implementing housing projects. The performance of the housing project implementation project consists of several aspects, among others, can be viewed from the aspects of quality, time and customer satisfaction. The housing project implementation system in Indonesia generally tends to use a self-managed system and a contractual system. The method used in this research is descriptive analytic by using data collection through questionnaires and interviews. The research was conducted on 19 subcontractors with the same type of housing and structure in the Banjarmasin-Banjarbaru housing area. Processing and data analysis were carried out in several stages, namely validity and reliability testing, descriptive analysis and research hypothesis testing using the Independent Sample T-Test. The results obtained from the quality aspect obtained a significant value resulting from the difference test of 0.026 ( $p < 0.05$ ) that there is a significant comparison between the self-managed system and the contractual system in terms of quality aspects. The result of the Mean Difference value from the quality aspect is 6.90. From the time aspect, the significant value generated from the difference test is 0.06 ( $p > 0.05$ ), so it can be concluded that there is no significant comparison between the self-managed system and the contractual system in terms of time. The result of the Mean Difference value from the time aspect is 5.14. The aspect of customer satisfaction obtained a significant value resulting from the difference test is 0.001 ( $p < 0.05$ ), so it can be concluded that there is a significant comparison between the self-management system and the contractual system in terms of customer satisfaction aspects. The result of the Mean Difference value from the aspect of customer satisfaction is 2.89. It can be concluded that in terms of quality, time, and customer satisfaction, self-managed systems have a higher average value than the contractual system.

**Keywords:** Self-management systems, Contractual systems, Quality and Time aspects, Customer satisfaction project

## Introduction

Housing and settlements are one of the basic human needs. As written in The Constitution 1945 Article 28, that the house is one of the basic rights of the people and therefore every citizen has the right to live in and get a good and healthy living environment. Along with the development of the national economy, the property industry has also experienced a steady increase, including the housing business. Banjarmasin-Banjarbaru City is an area that continues to experience development every year, including in terms of housing. Both of these areas are strategic residential areas. Data from the Housing and Settlement of Banjarbaru City revealed that the occupancy rate of housing continues to grow, fast, the area is very potential, and strategic.

The success of implementing a housing project can be seen from the system used as a measure of the success of implementing a housing project. The performance of the housing project implementation project consists of several aspects, among others, can be viewed from the aspects of quality, time and customer satisfaction. The housing project implementation system in Indonesia generally tends to use a self-managed system and a contractual system (Abrar, 2011).

Many choices of governance or construction management models are chosen by contractors in developing housing. There is a self-management model in which the entire project work process from planning, implementation, to the supervision stage is carried out by the project owner himself. Meanwhile, the contractual model is the implementation of a project done by another party because the owner cannot do it himself. According to Abrar (2011), when a project owner chooses a contractor to work on his housing project, he must choose the right contractor, because that is the key to the success of his project.

Housing project development models, whether self-managed or contractual, if viewed from various aspects, each has advantages and disadvantages. This study tries to compare which of the two methods is considered superior in housing development projects in the Banjarmasin and Banjarbaru areas, especially when viewed from the aspects of quality, time and customer satisfaction.

According to Suharto (1995), self-management is a work package that is handled by the owner himself, both managing and executing the activities listed in the work package, which includes planning, organizing, controlling, and supervising the implementation of the work scope of the package concerned. Meanwhile, Andi (2005) states that what is meant by a contractual project is if the condition of the developer is not possible to carry out the project on his own, so he then chooses a contractor for the physical work of the project. In a contractual system, selecting the right contractor is the key to project success.

However, according to Ervianto, there are several conditions that must be fulfilled by contractors in contractual projects, i.e.

1. Carry out the work according to the plan drawings, regulations and requirements, anullings and additional terms set by the service user.
2. Creating implementation drawings approved by the supervisory consultant as representatives of service users.
3. Provide work safety tools as required in regulations to maintain the safety of workers and the community.

4. Make work reports in the form of daily, weekly and monthly reports.
5. Submit all or part of the work that has been completed in accordance with applicable regulations.

The success of housing projects both with self-managed and contractual systems is largely determined by 3 things, that is on time, on quality and on cost. According to Asiyanto (2004), definite quality is always related to cost and time parameters, quality parameters will increase costs and possibly schedule. While reducing costs with a fixed scope of work and schedule, will likely reduce quality.

Time is an important parameter, as are costs and resources. How much dependence on other parameters varies from one project to another. Planning and controlling time is done by arranging schedules, that is by identifying the points when the work starts and when it ends. The relationship between schedule and costs in project activities is very close, so solving it requires an integrated approach, which is realizing that one parameter has a direct effect on another, and in turn also has an impact on the overall project results (Syah, 2004).

Besides quality and time, no less important is customer satisfaction. According to Kotler (2000), to win the competition, a company must be able to provide satisfaction to its customers, for example by providing products of better quality, lower prices, faster product delivery and better service than its competitors.

## **Methods**

This study uses a descriptive analytic method, which focuses on the problem of self-managed and contractual housing development projects. Furthermore, all data regarding the self-managed and contractual housing development projects were analyzed in terms of quality, time and customer satisfaction for conclusions to be drawn.

## **Research Variable and Technique of Determining**

The research variables put forward are quality aspects, time aspects, and customer satisfaction aspects, which are grouped respectively into the self-managed system data group and the contractual system data group. And the technique of determining the scale to determine the quality and time aspects in this study uses a Likert-like scale with a score rating of 1 to 5. 1 (strongly agrees), 2 (agrees), 3 (quite agrees), 4 (disagrees) and 5 (strongly disagree). Meanwhile, to determine consumer satisfaction, a Likert scale of 1 to 5 is used, i.e. 1 (very satisfied), 2 (satisfied), 3 (quite satisfied), 4 (dissatisfied) and 5 (very dissatisfied).

## **Data Collection**

The data used consists of primary and secondary data. Primary data obtained by interviews and questionnaires regarding the comparison of self-management systems and contractual systems to housing projects in terms of time aspects, quality aspects, and customer satisfaction aspects. Meanwhile, secondary data includes housing data for the Banjarmasin-Banjarbaru area, developer data for the Banjarmasin-Banjarbaru area and data for housing consumers in the Banjarmasin-Banjarbaru area, which are obtained from developers, contractors and housing consumers in the Banjarmasin and Banjarbaru areas.

## **Population and Research Sample**

The population of this research is all housing developers, contractors and consumers in the Banjarmasin-

Banjarbaru areas. While the sample used is 19 housing projects types 36 and 45 which are divided into 9 self-managed housing systems and 10 contractual system housing with 10 residential consumers.

### Hypothesis, Validity and Reliability Instrument Test

The research hypothesis test is to do a comparison test between the self-management system and the contractual system in terms of quality, time, and customer satisfaction aspects of the Banjarmasin-Banjarbaru housing project. The results achieved from this analytical test are the comparisons of each of these comparative analyzes. To find out the comparison results of each research variable in the two data groups. This research analysis test using statistical analysis, namely the independent test sample t-test. And the analysis factor used was the KMO and Bartlett's Test on the aspects of quality, time and customer satisfaction aspects.

### Data Analysis

Data analysis in this study used statistical model analysis, where if the research data were normally distributed, then parametric statistical methods would be used, which is the independent sample t-test. Meanwhile, if the data is not normally distributed, nonparametric statistical methods will be used, namely the Mann Whitney test. Testing of the data used the Shapiro Wilk normality test method on quality and time factors (the number of research samples was less than 50), and used the Kolmogorov-Smirnov test on the consumer satisfaction factor (number of samples was more than 50). If the resulting significant value is greater than the alpha value (0.05), the data is declared to be normally distributed.

### Discussion

#### Data Recapitulation

This research which becomes the object of research is the implementation of the construction of residential buildings in the Banjarmasin-Banjarbaru areas. The tables below group the data according to self-managed and contractual classifications.

**Table 1. Data of Housing Costumer  
Banjarmasin-Banjarbaru Areas with Self-Managed System**

No	Name of Developer	Name of Housing	Address	Respondent
1	Aminuddin	Chaprika Residence	Sungai Jingah, Banjarmasin	10
2	Umar Hilal Alkatiri	Rise-Royal Residence	Jalan Golf, Banjarbaru	10
3	Hj. Mauriah	Griya Persada	Banjarmasin	10
4	Ananda Pratama	Mandiri Lestari	Banjarmasin	10
5	Ramadhani	Perumahan Kasturi	Jl.Ir.PM Noor Banjarbaru	10
6	Abdullah	Perumahan Brima Sakti	Banjarbaru	10
7	M.Husri	The Hayati Residence	Jl. A.Yani Banjarmasin	10
8	Pandji	Triwijaya Residence	Jl.Pangeran Banjarmasin	10
9	Hidayatullah	Perumahan Shafwah	Trikora Banjarbaru	10
			<b>Total</b>	<b>90</b>

**Table 2 Data of Housing Costumer  
Banjarmasin-Banjarbaru Areas with Self-Managed System**

No	Name of Developer	Name of Housing	Address	Respondent
1	Haji Ulid	Al Fath Residence	Jalan Pramuka Km 6 Banjarmasin	10
2	Hj.Hamidah	Catalia Residence	Jalan Pramuka Km 6 Banjarmasin	10
3	Auliyarahman	Grand Purnama 2	Banjarmasin	10
4	Dwi Persada	Grey Royal	Banjarbaru	10
5	M.Irwan	Griya Utama	Banjarbaru	10
6	Hj.Indah	Idaman Estate	Banjarbaru	10
7	Budi	Harmoni Regency	Banjarmasin	10
8	Amrullah	Komp.Borneo Lestari	Banjarmasin	10
9	Hasri	Kasturi Indah	Banjarmasin	10
10	Joko Haris	Bumi Wahyu Utama	Banjarmasin	10
<b>Total</b>				<b>100</b>

**Table 3. Data of Housing Developer Banjarmasin-Banjarbaru Areas with Contractual System**

No	Name of Developer	Name of Housing	Address	Respondent
1	Aminuddin	Chaprika Residence	Sungai Jingah, Banjarmasin	3
2	Umar Hilal Alkatiri	Rise-Royal Residence	Jalan Golf, Banjarbaru	3
3	Hj.Mauriah	Griya Persada	Banjarmasin	3
4	Ananda Pratama	Mandiri Lestari	Banjarmasin	3
5	Ramadhani	Perumahan Kasturi	Jl.Ir.PM Noor Banjarbaru	3
6	Abdullah	Perumahan Brima Sakti	Banjarbaru	3
7	M.Husri	The Hayati Residence	Jl. A.Yani Banjarmasin	3
8	Pandji	Triwijaya Residence	Jl.Pangeran Banjarmasin	3
9	Hidayatullah	Perumahan Shafwah	Trikora Banjarbaru	3
<b>Total</b>				<b>27</b>

**Table 4. Data of Housing Developer Banjarmasin-Banjarbaru Areas with Contractual System**

No	Name of Developer	Name of Housing	Address	Responden
1	Haji Ulid	Al Fath Residence	Jalan Pramuka Km 6 Banjarmasin	3
2	Hj.Hamidah	Catalia Residence	Jalan Pramuka Km 6 anjarmasin	3
3	Auliyarahman	Grand Purnama 2	Banjarmasin	3
4	Dwi Persada	Grey Royal	Banjarbaru	3
5	M.Irwan	Griya Utama	Banjarbaru	3
6	Hj.Indah	Idaman Estate	Banjarbaru	3
7	Budi	Harmoni Regency	Banjarmasin	3
8	Amrullah	Komp.Borneo Lestari	Banjarmasin	3

9	Hasri	Kasturi Indah	Banjarmasin	3
10	Joko Haris	Bumi Wahyu Utama	Banjarmasin	3
			<b>Total</b>	<b>30</b>

Based on this research, it is concluded that the self-management system and the contractual system in the Banjarmasin-Banjarbaru housing project based on the research aspects are as follows.

### Quality and Time Aspects

#### Quality

Based on the quality aspect, it shows that the self-managed system has an average value of 55.00, while the contractual system has an average value of 48.10. The significant value resulting from the difference test is 0.026 (lower than 0.05), so it can be concluded that there is a significant comparison of housing contracts based on a self-managed system with a contractual system in terms of quality. The average value of self-managed systems which is greater than the contractual system shows that the self-managed system has several advantages and advantages in the housing work process in terms of the quality of work.

From the quality aspect, in the self-management system the most important indicators are 3 indicators, namely overcoming any work dependency and project difficulties, following up on any changes by making necessary improvements and prevention, and coordinating coordination to increase work effort, smoothen, or eliminate obstacles or work dependencies.

From the quality aspect of the contractual system, there are 3 most important indicators, including ensuring that project interests can be understood and have company support, so communication data must be complete, clear, and informative, understand company interests and strategies that must be implemented and prepare and revise quality and control plans quality in accordance with work procedures.

#### Time Aspect

Based on the aspect of working time, it shows that the self-managed system has an average value of 49.81, while the contractual system has an average value of 44.67. The significant value generated from the difference test is 0.06 (higher than 0.05), so it can be concluded that there is no significant comparison between the self-managed system and the contractual system in terms of time. The average value of the self-managed system which is greater than the contractual system shows that the self-managed system has several advantages and advantages in the housing work process in terms of the efficiency of the completion time of the work.

In implementing the self-management system, the contractor makes a mature plan from the implementation budget plan (RAP) of the number of workers involved and the time provided is carefully scrutinized by making a break down in the form of an implementation schedule. In its implementation, the contractor assigns a team that specifically works on one work object with a predetermined budget and time. Controlling the use of materials is carried out by making an implementation budget plan and making a material back-down list so that material use is controlled, which results in savings, efficiency and waste. From the time aspect of the self-management system, there are 2 important indicators, including if there

is a delay in the achievement of work progress, there will be an immediate attempt to close the delay and the final completion of all work can be accepted according to consumer expectations.

### **Customer Satisfaction Aspects**

In terms of customer satisfaction, it shows that the self-managed system has an average value of 29.04, while the contractual system has an average value of 26.15. The significant value resulting from the difference test is 0.001 (lower than 0.05), so it can be concluded that there is a significant comparison of housing contracts based on the self-managed system and the contractual system in terms of customer satisfaction aspects. The average value of self-managed systems that is greater than the contractual system indicates that the self-managed system has several advantages and advantages in the housing work process in terms of customer satisfaction with the results of housing work.

From the aspect of customer satisfaction in the self-management system, there are 3 important indicators, that is transparency of company employees to provide home information, satisfaction with explanations to consumers about the home maintenance process and satisfaction with the response (willingness to serve) given to consumer desires.

### **Facts and Expectations of the Self-Management and Contractual Systems**

Both the self-managed system and the contractual system have their own advantages and disadvantages. In a self-managed system, for example, the highest indicator that determines whether they buy or not buy a house is based on the consideration of aspects of consumer satisfaction with the developer. While the contractual system, the highest indicator is in the aspect of the house maintenance process.

Based on the perspective of expectations, it shows that the self-managed system is far superior and profitable than the contractual system. When viewed from the aspect of consumer satisfaction, housing projects managed directly by the developer tend to be more profitable, because the developer has complete knowledge of the advantages and disadvantages of the project, so that the quality of housing is more guaranteed. But self-management also has its weaknesses, this is more due to the factor in the incomplete explanation of the developer regarding the progress of the housing construction process. Meanwhile, in the contractual system, consumers are generally dissatisfied with housing projects. This is more due to the housing project undertaken by other parties (experts), causing the results to be less than optimal and this has an effect on customer satisfaction.

### **Conclusion And Suggestion**

#### **Conclusion**

In terms of quality, the self-managed system shows an average value of 55.00, while the contractual system has an average value of 48.10. The significant value generated from the difference test is 0.026 (lower than 0.05), so it can be concluded that there is a significant comparison between the self-managed system and the contractual system in terms of quality aspects. In terms of time, it shows that the self-managed system has an average value of 49.81, while the contractual system has an average value of 44.67. The significant value generated from the difference test is 0.06 (higher than 0.05), so it can be concluded that there is no significant comparison between the self-managed system and the contractual system in terms of time.

In terms of customer satisfaction, it shows that the self-managed system has an average value of 29.04, while the full contract system has an average value of 26.15. The significant value generated from the difference test is 0.001 (lower than 0.05), so it can be concluded that there is a significant comparison between the self-managed system and the contractual system in terms of customer satisfaction aspects.

### Suggestion

For housing developers, it is hoped that they can improve their capacity in designing strategies to improve the quality of housing projects, that is by analyzing the factors that affect the quality of housing in terms of quality, time and customer satisfaction. For residential consumers, especially prospective buyers, when they want to buy a house, they need to pay attention to many aspects, so that it provides long-term benefits. For Construction Management research, it is hoped that further analysis of housing project management using self-managed or contractual systems can be carried out.

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