Owners’ Satisfaction Towards Service Charge Collection of High-Rise Residential In Kuala Lumpur, Malaysia

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Abstract: Living in city centre of Kuala Lumpur, put lack of choice for residents in choosing type of dwelling. This study, by using fuzzy conjoint model, discussed the result of a study on high-rise residential schemes in Kuala Lumpur. This study purposely done to find the agreeable level of Kuala Lumpur’s high-rise residents towards service charges and quality for the service given to them by Management Corporation. This investigation was ignite by the difficulties face by management in collecting service charge. The survey was conducted among 750 residents who own and stay in their own unit from 150 schemes of high-rise. It also limited to the unit with the price of RM250,000 (USD71,430) and below. The analysis used to analyse the survey is fuzzy conjoint model where the result were presented in linguistic value of ‘agree’. The analysis shows that residents were not satisfied with the service charge fare and they need to know the disbursement of service charge. They also admit that sometimes the payment delay and slightly agree that they paid on time. There are lots of complaints and also they think that they are paying more than the quality of service given to them.

Key-Words: High-rise housing management, High-rise residential, Fuzzy conjoint model, Fuzzy linguistic, Management corporation

1 Introduction
Escalating land prices particularly in urban areas makes building high-rise residential a more practical proposition from the economic point of view. Population growths coupled with dwindling land stock make high-rise living an alternative (Jamila, 1994). Multi-storey residential schemes are therefore seen as an appropriate choice when it comes to addressing the mismatch of demand and supply.

But differ from other property this property needs to be managed and maintained by one management to ensure everything goes as it should. Nevertheless collecting the management fund is not a small matter which impacting the value of the property extremely decrease. A residential high-rise unit is different from other residential property types with regard to its management responsibilities.

2 Theoretical Framework
To most individuals housing represents the largest single investment in life. People are beginning to realise that effective facilities management is very important to ensure that everything goes well. Facilities management is an activity with wide range of activity; it is not an easy task.

The focus of property management and facilities management is often associated with maintenance job and collecting rent (Singh, 1996). Each residential unit is owned by different owners. The analysis on residents’ responses was calculated using Fuzzy method. Unlike the case for single-owner dwellings where responsibilities for managing and maintaining the property lie exclusively with the owner, a high-rise residential complex needs to be organised and maintained by a Management Corporation and, because of that, gives rise to the issue of facilities management (Linariza & Ashok, 2003).

Adding to the difficulty, owners from different backgrounds and ethnicity contribute to the need for proper and systematic residential complex management. This is to ensure that the management serves the interests of the majority of owners and in the same time not neglecting the interests of the minority at the same time (Liias, 1998). In this study, researcher tries to
figure out the main purpose to live in high-rise residential.

3 Methodology

A survey was conducted on 750 residents from 150 schemes of multi ownership. This research only focusing to Kuala Lumpur and Selangor since these two states consist the most numbers of stratified housing scheme in Malaysia. The responses on the survey were analyzed using Fuzzy Conjoint method adapted from Turksen Model. The linguistic values based on the residents’ responses were calculated using Fuzzy method. In this study, researcher tries to figure out the agreed level of the owners’ satisfaction towards service charge and service quality.

3.1 Analysis Method Using Fuzzy Conjoint Model

A conjoint analysis was used to examine the level of satisfaction level of residents towards service charge collection for management and maintenance. Conjoint analysis is an overall preferences rating for an alternative can be de-composed into a combination of preferences for it component. The Fuzzy Conjoint Model is developed by integrating fuzzy measurement of evaluations into the vector preference model. The fuzzy conjoint analysis used in this study is a method originally designed by Turksen, in which the method is used for the analysis of consumer preferences.

The Fuzzy Conjoint Model adapted from Turksen is:

$$\mu_B(y_j, A) = \frac{\sum_{i=1}^{T} W_i \cdot \mu_R(x_j, A)}{\sum_{i=1}^{T} W_i}$$

Where,

- $\mu_B(y_j, A)$ - The estimated overall evaluation which is a weighted sum of the membership functions of the fuzzy sets that represent the attribute evaluation;
- $W_i$ - A crisp attribute “agree” weights (1-7);
- $\mu_R(x_j, A)$ - The degree of membership for respondent $i$ for item $A$ according to linguistic label $y_i = 1, 2, \ldots, T$;
- $T$ - The number of linguistic label; and
- $A$ - Factors affecting the agreed level.

In this study, the variable of linguistic for domain element is “agreement”. The crisp weight is a rating of attribute’s relevant using Likert scale ranged from 1: “very disagree” to 7: “strongly agree”, as shown in Table 1.

The membership value degree calculated above, represents the fuzzy set of response given by respondents is then compared to fuzzy set (Biswas, 1995). This can be conducted using fuzzy similarity measure based on Euclidean distance of two fuzzy sets (Turksen, 1994).

3.2 Fuzzy Similarity Degree between Two Fuzzy Set

There are few formulas to determine the fuzzy similarity degree between two fuzzy sets. This study will make use of the formula of dot product based on Euclidean Inner Product formulated by Biswas (1995). The fuzzy similarity degree between fuzzy set $R$ and $M$ is defined by:

$$S(R, M) = \frac{R \cdot M}{\max(R \cdot R, M \cdot M)}$$

Where,

- $R = (\mu_R(x_1), \mu_R(x_2), \ldots)$
- $M = (\mu_M(x_1), \mu_M(x_2), \ldots)$
- $R, M$ are vectors.

4 Analysis and discussion

Table 2 shows the results of items factors in choosing to live in high-rise residential. It analysing the service charge handling towards residents in high-rise community. We can see that residents disagree with the fare charge to them compare to the service given with score of 0.3802. They also quite agree with their knowledge about the service charge disbursement but they are strongly agreed that they should know about the disbursement with score of 0.3410 and 0.5395. It also shows that, residents agree with score 0.4686 that they also agree about the consequences of delayed payment towards maintenance activities with score of 0.4258. Besides, they agree with score of 0.4274 that they are paying the fare with higher rates compare to the quality given to them. Nevertheless in another two categories, they falls under slightly agree for always pay on time and sometimes they pay it late with score of 0.3913 and 0.3914 correspondingly. However, residents agree that the delay happened regarding the counter is only opened in weekday with score of 0.4205 followed by strongly agree that the payment counter should be open in weekend and public holiday with score of 0.5790.
Table 1: Likert scale for the fuzzy linguistic value represent agreed level

<table>
<thead>
<tr>
<th>Scale</th>
<th>Agreed Level</th>
<th>Fuzzy Linguistic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 – very disagree</td>
<td>{1/1, 0.7/2, 0.2/3, 0.1/4, 0/5, 0/6, 0/7}</td>
</tr>
<tr>
<td>2</td>
<td>2 – disagree</td>
<td>{0.6/1, 0.5/2, 0.6/3, 0.3/4, 0.1/5, 0/6, 0/7}</td>
</tr>
<tr>
<td>3</td>
<td>3 – quite disagree</td>
<td>{0.2/1, 0.7/2, 0.7/3, 0.4/4, 0.2/5, 0.1/6, 0/7}</td>
</tr>
<tr>
<td>4</td>
<td>4 – neutral</td>
<td>{0/1, 0.1/2, 0.7/3, 1/4, 0.7/5, 0.1/6, 0/7}</td>
</tr>
<tr>
<td>5</td>
<td>5 – quite agree</td>
<td>{0/1, 0.1/2, 0.3/3, 0.7/4, 1/5, 0.7/6, 0.2/7}</td>
</tr>
<tr>
<td>6</td>
<td>6 – agree</td>
<td>{0/1, 0.2/2, 0.3/3, 0.7/4, 0.6/5, 1/6, 0.6/7}</td>
</tr>
<tr>
<td>7</td>
<td>7 – strongly agree</td>
<td>{0/1, 0.1/2, 0.3/3, 0.1/4, 0.2/5, 0.1/6, 1/7}</td>
</tr>
</tbody>
</table>

Note: \(0.16\) means 0.1 at 6

Table 2: Agreed level towards service charge and level of quality in service

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Linguistic of agreeable</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The service charge fee is fair with the service quality.</td>
<td>Disagree</td>
<td>0.3802</td>
</tr>
<tr>
<td>2</td>
<td>All service charge disbursement was reveal to all residents</td>
<td>Less agree</td>
<td>0.3410</td>
</tr>
<tr>
<td>3</td>
<td>You think that you need to know all disbursement In service charge</td>
<td>Highly agree</td>
<td>0.5395</td>
</tr>
<tr>
<td>4</td>
<td>You are very alert about the consequences of not having enough fund to maintain and manage the building</td>
<td>Agree</td>
<td>0.4686</td>
</tr>
<tr>
<td>5</td>
<td>Lots of complaint have been made regarding service quality</td>
<td>Agree</td>
<td>0.4258</td>
</tr>
<tr>
<td>6</td>
<td>You have paid the service charge at higher rate</td>
<td>Agree</td>
<td>0.4274</td>
</tr>
<tr>
<td>7</td>
<td>You always pay your service charge as scheduled</td>
<td>Slightly agree</td>
<td>0.3913</td>
</tr>
<tr>
<td>8</td>
<td>Sometimes you miss paying your service charge</td>
<td>Slightly agree</td>
<td>0.3914</td>
</tr>
<tr>
<td>9</td>
<td>The delay payment happen because of you don’t have time to pay it</td>
<td>Agree</td>
<td>0.4205</td>
</tr>
<tr>
<td>10</td>
<td>The payment counter should be open on weekend</td>
<td>Highly agree</td>
<td>0.5790</td>
</tr>
</tbody>
</table>

The analysis shows that residents were not satisfied with the service charge fare and they need to know the disbursement of service charge. They also admit that sometimes the payment delay and slightly agree that they paid on time. There are lots of complaints and also they think that they are paying more than the quality of service given to them.

References: