

High Rise Residential Building Quality: Residents Satisfaction Survey

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Abstract

It is widely recognized that the quality of design is crucial to the success of the construction or production process and fairly minor changes in design can often result in giving major effects on the cost and efficiency of production and construction as well as on the usefulness, constructability and marketability of the product especially in developing high rise residential property development. The purpose of this study is to figure out the critical perception of resident for property manager, considering the sustainable and building quality of property development in their high rise residential complex. This paper evaluates and examine the frequency of the building quality factors that affect the sustainability and comfort of living for the resident in the selected high rise residential complex in Malaysia. A total of 500 respondents consisting of 20 property managers participated in this study. The respondents were asked to indicate how important each of building equipments in giving them the comfort of living in the selected high rise residential complex. Accordingly, the living satisfaction by the framework model plays a meaningful role in preparing and developing sustainable and good building quality in Malaysia high rise residential complex.

Keywords: High Rise Residential, Construction, Resident, Quality, Building

1. Introduction

The increased in the number of complaints on service quality in the apartments are becoming more critical due to the lack of focus on the important service qualities that leads to residents' dissatisfaction. The firms are under increasing pressure to demonstrate that their services are customer-focused and that continuous performance improvement is being delivered (Zailan, 2001; Parasuraman, Zeithaml, and Berry, 1994; Hemmasi, Strong, and Taylor, 1994). The understanding of customer expectations is the key success because any gaps in service quality can be identified by referring the customer's perspective. By doing this, the firms will know their performance on delivering service quality and also can identify optimal costs of minimizing service quality gaps and of prioritizing which gaps to focus on.

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New regulations are intended to improve the sustainability of buildings especially high rise residential building in Malaysia. Whilst the main target is the more efficient operation of building services, initial construction makes a significant contribution to the lifetime costs and the environmental impact of a new development (Gruis, and Nieboer, 2004; Haksik, Yongki, and Dongkeun, 2000). The increase in demand for housing and the scarcity of land for development of landed residential properties in major urban areas in Malaysia such as Penang, Kuala Lumpur, Selangor and Johor Bahru, has resulted in the rapid development of high rise residential schemes in these high density areas. Viewed from the end of 2000, the property outlook suggests that with land prices experiencing an upward trend, strata properties, particularly affordable schemes, continue to receive encouraging demand in the local housing market. High rise living in urban centers is a logical response to soaring land prices. This has been successfully implemented in Singapore and Hong Kong where the traditional lifestyle is high density, high rise living.

The focus of property management at that time is often associated with maintenance job and rent collection (Singh, 1996). Property management in general is an activity that covers a wide range of activities such as property development, facilities management, project management, property portfolio management, human resources management, space management, risk management and also investment management. Historically property management has not been given priority in the property market since the focus of the property market is mostly on single or double storey landed property.

Nowadays people are beginning to realize that effective property management in high-rise living can sustain the property value and maintain high returns on their investment. The continuous growth of high-rise residential buildings indicates that there is a need for an effective ownership and property management system to instill a quality living experience among high-rise residents in this country. However, the current practice of property management in Malaysia poses numerous problems, which affect all parties involved: the developers, property managers, owners and residents of high-rise residential complexes.

The statistics as in figure 1 shows the increasing number of high rise residential buildings in Malaysia, which means the quality of every building constructed must be reached the customer requirement. Statistic collected from the Department of Statistic Malaysia (Department of Statistics, 2012) shown in figure 2 shows the number of new launches of housing in Malaysia since quarter 1 2003 till quarter 2 2012 based on the Logarithmic scale with the scale of 10.

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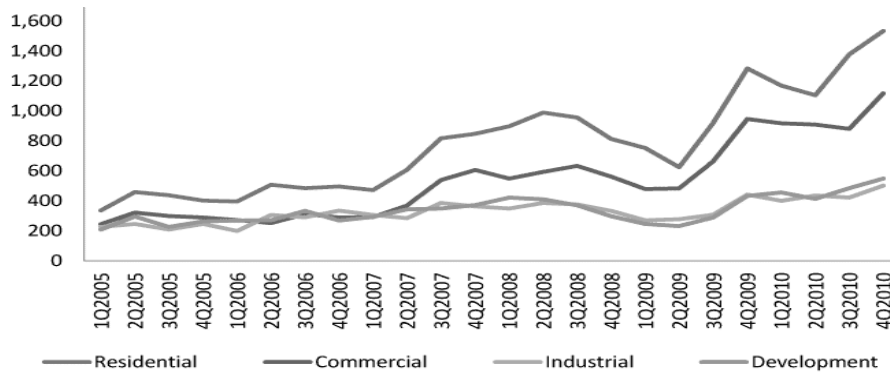


Figure 1. Malaysia Transaction Volume of Properties above RM1mil by Sub-sectors

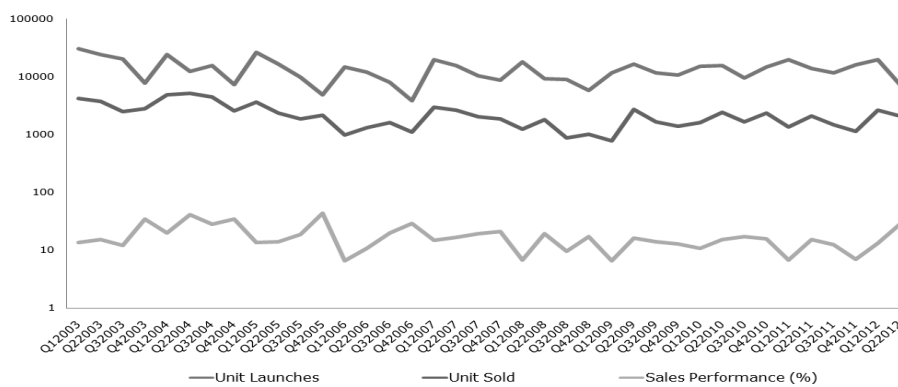


Figure 2. Malaysia New Launches of Housing from Q1 2003 till Q2 2012

2. Current Condition

Property management and maintenance are part and parcel of high-rise living but the standard of management service provided by most of the property managers and developers are questionable. Most are not professional, lacking in experience and to profit orientated and not knowledgeable in managing a residential complex. Property management was not taken into consideration during the early planning stage of development (Bebko, 2000; Liias, 1998). The emphasis is on the cost, location and aesthetics of the building that can attract buyers. Marketability of the building is the most important criteria for a developer. The numbers of units that can be sold are the most important in their marketing strategy. Property managers are not consulted in determining the maintenance fee that should be collected but it was solely determined by the developer themselves, some of which have no experience in property management (Caruana, Money and Berthon, 2000).

Owners are now knowledgeable in the proper property management practices for their unit and therefore good management is essential and will enhance the value of the property (Cui, Lewis, and Park, 2003; Dale, 2003). In the past owners might be satisfied with only the basic care-taking and cleaning service but current owners demand that housing management encompasses a variety of services from cleaning and security services to comprehensive maintenance (Bloemer, Ko de Ruyter, and Wetzels, 1999). Other than problems related to

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parcel owners, the weakness in the property management system is also related to the unprofessional practice of property managers in the country.

Table 1 shows the volume numbers of report that have been submitted to the property manager (based on residents) meanwhile Table 2 shows report that property manager received from the residents in a month. Based on these tables, the volume number of reports submitted and report received are not tallied. This means further research on validating the data should be done to make sure the data are accurate.

Table 1. Report Submitted by Residents to Property Manager (in A month)

	N	Range	Min	Max	Sum	Mean		Std. Dev	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Stat	Std. Error	Stat	Stat	Std. Error	Stat	Std. Error
RSDoors	500	2.00	1.00	3.00	666.00	1.3320	.02648	.59201	1.605	.109	1.481	.218
RSDoorKnob	500	2.00	1.00	3.00	822.00	1.6440	.02750	.61483	.398	.109	-.661	.218
RSDoorLock	500	2.00	1.00	3.00	697.00	1.3940	.02784	.62253	1.333	.109	.641	.218
RSWindows	500	2.00	1.00	3.00	615.00	1.2300	.02390	.53448	2.274	.109	4.130	.218
RSRoofing	500	2.00	1.00	3.00	818.00	1.6360	.03478	.77763	.734	.109	-.970	.218
RSPlumbing	500	2.00	1.00	3.00	776.00	1.5520	.03828	.85601	1.002	.109	-.883	.218
RSWall	500	2.00	1.00	3.00	590.00	1.1800	.02281	.51002	2.806	.109	6.666	.218
RSTelephone	500	3.00	1.00	4.00	930.00	1.8600	.04486	1.00320	.678	.109	-.937	.218
RSHVAC	500	2.00	1.00	3.00	803.00	1.6060	.03806	.85101	.851	.109	-	.218
RSPainting	500	1.00	1.00	2.00	561.00	1.1220	.01465	.32761	2.317	.109	3.381	.218
RSFloor	500	1.00	1.00	2.00	595.00	1.1900	.01756	.39269	1.585	.109	.515	.218
RSLighting	500	1.00	1.00	2.00	681.00	1.3620	.02151	.48106	.576	.109	-	.218
RSPowerSS	500	1.00	1.00	2.00	663.00	1.3260	.02098	.46922	.745	.109	-	.218
RSLift	500	2.00	1.00	3.00	845.00	1.6900	.03427	.76621	.592	.109	-	.218
Valid N (listwise)	500											

3. Methodology

Both quantitative and qualitative methods have been used as a research method to achieve the objective of this research. Under qualitative methods is concerned, this research is described to determine a quality and sustainable involved in performing the evaluation on resident's and property manager's intention at their high rise residential buildings. For the qualitative methods, about 20 property managers and 50 residents have been selected randomly for the interview session. The interview session took about 10 minutes for each person which total up to 700 minutes for gathering the qualitative data. This study carried out

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with assistance from Research Assistants that have been appointed at the early stage of this research. All of the factors have been determined and the standard provision of the technical performance in delivering all the information of the selected high rise residential property is also analyzed. From this method and analysis, a proposed guideline of quality assessment as an evaluation tool is suggested to be used for high rise residential property residents with regards to the effect of quality and sustainability of the high rise residential property building itself in Malaysia.

Table 2. Report Received at Property Manager Desk (in A month)

Statistic	N	Range	Min	Max	Sum	Mean		Std. Dev	Var	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Stat	Std. Error	Stat	Stat	Stat	Std. Error	Stat	Std. Error
RRDoors	20	3.00	1.00	4.00	42.00	2.1000	.23952	1.07115	1.147	.354	.512	-	.992
RRDoorKnob	20	3.00	1.00	4.00	36.00	1.8000	.24709	1.10501	1.221	1.217	.512	.185	.992
RRDoorLock	20	2.00	1.00	3.00	34.00	1.7000	.20647	.92338	.853	.677	.512	-	.992
RRWindows	20	1.00	1.00	2.00	26.00	1.3000	.10513	.47016	.221	.945	.512	-	.992
RRRoofing	20	2.00	1.00	3.00	25.00	1.2500	.12301	.55012	.303	2.239	.512	4.657	.992
RRPlumbing	20	2.00	1.00	3.00	38.00	1.9000	.22827	1.02084	1.042	.218	.512	-	.992
RRWall	20	1.00	1.00	2.00	24.00	1.2000	.09177	.41039	.168	1.624	.512	.699	.992
RRTelephone	20	3.00	1.00	4.00	34.00	1.7000	.23056	1.03110	1.063	1.319	.512	.589	.992
RRHVAC	20	1.00	1.00	2.00	25.00	1.2500	.09934	.44426	.197	1.251	.512	-	.992
RRPainting	20	1.00	1.00	2.00	24.00	1.2000	.09177	.41039	.168	1.624	.512	.699	.992
RRFloor	20	2.00	1.00	3.00	28.00	1.4000	.13377	.59824	.358	1.245	.512	.783	.992
RRLighting	20	2.00	1.00	3.00	37.00	1.8500	.19568	.87509	.766	.315	.512	-	.992
RRPowerSS	20	3.00	1.00	4.00	33.00	1.6500	.19568	.87509	.766	1.321	.512	1.289	.992
RRLift	20	2.00	1.00	3.00	35.00	1.7500	.16018	.71635	.513	.418	.512	-	.992
Valid N (listwise)	20												

*based on the 10 different high rise building [500 respondents and 20 property manager]

Meanwhile, the quantitative method is referring to the questionnaire survey. The questionnaire survey was carried out as much as 500 forms for random residents and another 20 forms for random property manager within 2 months in the year 2011. The questionnaire survey forms are delivered through research assistant to the selected high rise residential buildings and the respondents are asked at the same time which approximately 5 minutes per respondents. The questionnaires include a brief introduction of the light well with layout image and the point of answer as a guide and simple questions relating to the following aspect;

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- a) Basic info regarding the residents and understanding of the issue.
- b) Evaluation about quality of the environments in the high rise residential property building.
- c) The frequency of the report that has been received and made.

4. Results

Table 3 and table 4 show the results of items factors and building quality in high rise residential. It shows the critical building quality in two different types of high rise residential building which is called the Private Housing and Public Housing.

Table 3. Resident's Perspective of Building Quality.

	N	Range	Min	Max	Sum	Mean		Std. Dev	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Stat	Std. Error	Stat	Stat	Std. Error	Stat	Std. Error
Door	500	2.00	1.00	3.00	1084.00	2.1680	.03658	.81799	-.319	.109	-1.436	.218
DoorKnob	500	2.00	1.00	3.00	914.00	1.8280	.03939	.88089	.342	.109	-1.627	.218
DoorLock	500	2.00	1.00	3.00	809.00	1.6180	.03502	.78314	.786	.109	-.931	.218
Windows	500	1.00	1.00	2.00	715.00	1.4300	.02216	.49557	.284	.109	-1.927	.218
Roofing	500	2.00	1.00	3.00	787.00	1.5740	.03594	.80363	.921	.109	-.828	.218
Plumbing	500	2.00	1.00	3.00	1044.00	2.0880	.04332	.96857	-.177	.109	-1.916	.218
Wall	500	1.00	1.00	2.00	654.00	1.3080	.02067	.46213	.834	.109	-1.309	.218
Telephone	500	2.00	1.00	3.00	966.00	1.9320	.04339	.97018	.137	.109	-1.929	.218
HVAC	500	2.00	1.00	3.00	881.00	1.7620	.04057	.90719	.488	.109	-1.610	.218
Painting	500	2.00	1.00	3.00	878.00	1.7560	.03351	.74939	.432	.109	-1.112	.218
Floor	500	2.00	1.00	3.00	916.00	1.8320	.03993	.89296	.336	.109	-1.665	.218
Lighting	500	2.00	1.00	3.00	812.00	1.6240	.03847	.86029	.806	.109	-1.165	.218
PowerSS	500	2.00	1.00	3.00	893.00	1.7860	.04219	.94339	.439	.109	-1.736	.218
Lift	500	2.00	1.00	3.00	1034.00	2.0680	.04311	.96397	-.136	.109	-1.915	.218
OverallQuality	500	2.00	1.00	3.00	942.00	1.8840	.04158	.92966	.233	.109	-1.807	.218
Valid N (listwise)	500											

Based on the resident's perspective, it was detected that the results for windows and wall were really interesting. All the residents were very satisfied with both items. There are no bad results (ie not satisfied) has been selected for these items. The maximum selection for these two was 'neither'. Unfortunately, door, plumbing and lift are three major items that really critical based on the resident's perspective. Based on the rank, the door was at the top of the list, followed by plumbing and the lift was the last one.

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Table 4. Resident's Perspective of Building Quality based on Type of Housing.

		OVERALL QUALITY			Total (%)
		Satisfied (%)	Neither (%)	Dissatisfied (%)	
RESIDENTIAL	PUBLIC HOUSING	92 (26.75%)	62 (18.02%)	190 (55.23%)	344 (68.80%)
	PRIVATE HOUSING	156 (100.00%)	0 (0.00%)	0 (0.00%)	156 (31.20%)
TOTAL (%)		248 (49.60%)	62 (1.24%)	190 (38.00%)	500 (100.00%)

Eventhough, some indication arose in the previous table shown the movement towards the dissatisfied quality in both type of housing in Malaysia. But, overall quality result from a resident's perspective show that, more than 55% of the resident dissatisfied with the building quality of public housing meanwhile, 100% of the resident from private housing which total of 156 residents satisfied with their building quality. As a result, about 248 residents which the percentage total of 49.60% from 500 randomly selected residents in Malaysia, satisfied with their building quality and about only 1.24% put themselves in between of the satisfaction level (between satisfied and dissatisfied) on their building quality. Based on this survey, about 38% agreed that their housing building quality is in dissatisfied situation.

5. Way Forward

To strengthen this study, the author has also examined the condition of the building quality from the perspective of property manager. Most of them answered the survey by selecting either as the result of building quality in their place instead of satisfied or dissatisfied. Unfortunately, satisfaction has been chosen as a result of overall quality of their building. This result has been supported and shown in Table.5.

For sustainable development to become common practice, legislation is needed to ensure further measures are taken to safeguard the environment. While best practice and guidelines are helpful in raising awareness of opportunities for improvements, the bottom line is the dominant factor in procuring buildings. Property development is a market-driven business, and high rise residential buildings are financial instruments to most developers and clients.

6. Conclusion

Basically, the satisfaction on the environmental survey of these buildings shows that some improvements still need to be considered. The actual situation brought out in this paper has the possibility to indicate some guidelines for new development. Other factors such surrounding development should also be considered for the future development. The most important thing is the new development needs to take into account the satisfaction of the [Type text]

residents when all the units have been occupied and the standards of sustainability to be followed as well.

Table 5. Property Manager Perspective of Building Quality.

	N	Range	Min	Max	Sum	Mean		Std. Dev	Var	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Stat	Std. Error	Stat	Stat	Stat	Std. Error	Stat	Std. Error
Door	20	2.00	1.00	3.00	34.00	1.7000	.19331	.86450	.747	.663	.512	-	.992
DoorKnob	20	2.00	1.00	3.00	36.00	1.8000	.18638	.83351	.695	.412	.512	-	.992
DoorLock	20	2.00	1.00	3.00	34.00	1.7000	.19331	.86450	.747	.663	.512	-	.992
Windows	20	2.00	1.00	3.00	35.00	1.7500	.19022	.85070	.724	.534	.512	-	.992
Roofing	20	2.00	1.00	3.00	34.00	1.7000	.19331	.86450	.747	.663	.512	-	.992
Plumbing	20	2.00	1.00	3.00	34.00	1.7000	.17918	.80131	.642	.627	.512	-	.992
Wall	20	2.00	1.00	3.00	38.00	1.9000	.21643	.96791	.937	.217	.512	-	.992
Telephone	20	2.00	1.00	3.00	45.00	2.2500	.17584	.78640	.618	-.496	.512	-	.992
HVAC	20	2.00	1.00	3.00	30.00	1.5000	.17014	.76089	.579	1.195	.512	-	.992
Painting	20	2.00	1.00	3.00	35.00	1.7500	.19022	.85070	.724	.534	.512	-	.992
Floor	20	2.00	1.00	3.00	31.00	1.5500	.18460	.82558	.682	1.071	.512	-	.992
Lighting	20	2.00	1.00	3.00	35.00	1.7500	.20359	.91047	.829	.552	.512	-	.992
PowerSS	20	2.00	1.00	3.00	34.00	1.7000	.17918	.80131	.642	.627	.512	-	.992
Lift	20	2.00	1.00	3.00	35.00	1.7500	.19022	.85070	.724	.534	.512	-	.992
OverallQuality	20	1.00	1.00	2.00	28.00	1.4000	.11239	.50262	.253	.442	.512	-	.992
Valid N (listwise)	20												

Typically, the assessment results by the property manager is better than the resident who occupy that place. This situation is indeed happening and no doubt it is critical. If analyzed in depth, this difference result occurs because, the property managers do not live in the house and just be in the area according to the hours of duty. In addition, the property managers don't own the house than residents who buy and own their homes. This is the clear and obvious differences.

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It is clear that there is a pressing need to formulate and produce a set of practical guidelines for the management of high-rise residential buildings in this country. It is very important to note that extensive rules, regulations and guidelines must always go hand in hand with strict enforcement and monitoring to ensure their effectiveness in solving the problems of high rise residential living.

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