JOHOR LAND BERHAD ; EXPECTATION AND ACTUAL SATISFACTION OF CUSTOMER OF JOHOR LAND BERHAD

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LETTER OF TRANSMITTAL

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Dear madam,

SUBMISSION OF PROJECT PAPER

With reference to above matter, I hereby enclose the final project paper entitled **"Johor Land Berhad ; Expectation and Actual Satisfaction of Customers of Johor Land berhad"** for your kind perusal. I hope that the report will fulfill the requirements needed by Faculty of Business and Management.

Your kindness to accept the report is very much appreciated.

Thank you.

Yours Sincerely
Radin Effendy b. Radin Abd. Rahman

ACKNOWLEDGEMENTS

Alhamdullilah, praise to Allah, the Most Gracious, the Most Merciful and Peace and blessing to Allah be upon his beloved Muhammad, the Seal of Prophets and upon his families, accompanies and followers forever, for giving me the strength for completing this Project Paper as a requirement to obtain a Bachelor In Business Administration (Hons) Marketing.

To Pn. Zaihan bte Abd Latip,my research advisor, who has guide me from the beginning of the preparation of this research paper, Assoc. Prof. Dr Arshad Hj Hashim my second examiner, who gave me a really good comment and guidance throughout the process of analyzing the data.

Johor Land Marketing Senior Manager En. Hizam b. Abd. Rauf, Marketing Manager En. Ma' som Marji and the employees of Johor Land Berhad for their co – operation and supervision during the practical period and preparation of this project. Respondents and to everybody who help me in completing the project, directly or indirectly. To my beloved family and friends, thank so much for the support and pray towards my success.

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Abstract

The primary objective of the research is to identify the level of satisfaction of customers of Johor Land Berhad toward their purchasing. A satisfaction index is develop which will serve as benchmarking in identifying the satisfaction. The index also shows the company current situation and it may help the company to identify point of improvement need in order to deliver a better value for the customers. In this study, factors which is considered as important by consumers when they want to buy a house is also identify and an importance index is develop. When both of satisfaction and importance index has been developed, the company will be able to more understanding the needs and wants of the consumers, thus develop a better marketing strategy, and deliver a better value in their products.

1.0 Introduction

1.1 Introduction to company

Johor Land Berhad is an integrated property development group incorporated in 1972 with activities covering many facets from property development, construction, property investment, management, and manufacturing of building materials and producing natural rubber latex concentrated.

Johor Land Berhad was listed on the Main Board of Kuala Lumpur Stock Exchange on December 31, 1996. Johor Land Berhad is a subsidiary of Kulim (M) Berhad and a member of Johor Corporation Group of Companies. The Group, through Johor Land Berhad and Advance Development Sdn Bhd, which is also a property developer, has a land bank of more than 2,000 acres strategically located in the vicinity of the growth areas of Pasir Gudang and Ulu Tiram. Our land bank will sustain the Group's property development activities for at least the next 15 years.

Johor Land Berhad has more than thirty years of experience in property development and construction and has established itself as one of the

leading and prominent property developers in Johor.To date Johor Land Berhad has successfully developed several housing and commercial projects in Johor Bahru, Ulu Tiram, Senai and Pasir Gudang area. In collaboration with Johor Corporation, it has delivered a total of over 22,000 residential and 1,000 commercial units. In recognition of its ability to deliver quality and affordable housing, the Ministry of Public Enterprises awarded Johor Land Berhad with the "Excellent Performance Award" in 1993.

The group's current major development is Taman Bukit Dahlia in Pasir Gudang and Taman Bukit Tiram in Ulu Tiram. Taman Bukit Dahlia will comprise of more than 4,000 units of mixed development on a 400 acres land and it is 70% completed until now. Where as Taman Bukit Tiram will comprise of 2,800 units of mixed development on 300 acres of land upon completion. Its other ongoing projects include an apartment block located at the Skudai - Pasir Gudang crossroads and a commercial project at Kota Tinggi known as Kota Sentral.

Johor Land Berhad has been awarded with MS ISO 9002 : 1994 for Development Of Residential and Commercial properties from SIRIM in August 1999 and in February 2002 Johor Land Berhad managed to upgrade MS ISO 9001 : 2000 certification for Design Management, Development of Residential and Commercial Properties.

1.2 Significance of study

The study is to identify who are Johor Land Berhad major customers. What do they expect to get from their purchasing by judging the show house and information from brochures and sales agents explanation and how satisfied are they with Johor Land Berhad products and services before and after purchasing so that a suitable and more effective marketing plan can be develop. This study is also to find out, what are the factors, which considered as important by a prospect, when they are looking up to buy a house.

1.3 Research problem

For the past 20 years, the number of competitors in property sector in Johor has increased as a result of rapid development. With increasing urbanization and number of industrial parks in Johor Bahru, more housing estates are needed so as to cater to the needs of people to have a house.

However with intense competition exist the customers have more option and thus become choosier. Therefore the company wants to know who have been their major customer, characteristics they consider during the decision making process and either the company has really satisfied their customers through their offering and services provided.

1.4 Research question

1) What are the factors, customers take into account when deciding on purchasing a house, and how important are these factors

2) Is there a gap between "expected" and "actual" satisfaction base on what is promised by Johor Land Berhad.

3) Are customers satisfied with Johor Land Berhad products and services.

1.5 Research Objective

1) To investigate what are the factors customers consider in purchasing a house and its importance.

2) To identify gap between customers expectation and actual satisfaction

3) To identify the level of satisfaction of the customers with the purchase.

4) To give recommendation to Johor Land Berhad, on how to improve their products and services. .

1.6 Hypotheses

1) Factors considered by customer when deciding on purchasing and how Important are the factors

H_1 = Most of the factors stated are considered as important by respondents.

H_0 = Most of the factors stated are not considered as important by Respondents

2) Gap between "expected" and "actual" satisfaction

H_1 = Gap between "expected" and "actual" satisfaction is positive

H_0 = Gap between "expected" and "actual " satisfaction is negative

3) Customer satisfaction

H_1 = Most of the customers are satisfied with houses developed by Johor Land Berhad.

H_0 = Most of the customers are not satisfied with houses developed by Johor Land Berhad

4) Improvement needed by Johor Land Berhad.

H_1 = Johor Land Berhad. must maintain their current products and services level of quality.

H_0 = Johor Land Berhad . need to do a lot of improvement on their products and services

1.7 Scope and coverage

This study focus on customer satisfaction by comparing what the customer expect they are going to get from their purchasing by judging from the show houses, brochures and sales agent explanation and the actual satisfaction after buying the house. Recently the developer has five housing estates, one apartment and six-business centre, the study will cover customers from three housing estates, which has been occupied between 1997 to 2004.

1.8 Time frame

Time frame for the study is restricted between 17th November 2003 to 6th February 2004

1.9 Limitation

1) Time limitation

The research major limitation is time constraint. In order to acquire more accurate and reliable data, a longer period is required to gather all the information needed for the research purpose.

2) Respondent cooperation

There are a lot of people who refuse to cooperate, either they totally refuse to cooperate, refuse halfway, did not answering key question or did not tell the truth, where what they told the researcher and what they stated in the forms is different.

3) Inexperience researcher

The researcher is inexperienced in conducting a research before, therefore the findings may not be accurate enough in term of analyzing the data and generating the finding

4) Distance

The distance between Johor Land Berhad office and their housing estates is too far (20 to 45 kilometers), so as and the distance between one estate and another.

5) Transportation

As distance between office and estates, and from estate to another is far, it makes it difficult to reach the estate, as the researcher did not have own vehicle and public transport to get to the estates are hard to get.

2.0 LITERATURE REVIEW

The purpose of literature review is to present the concept and theories, statement and related literature, which are relevant to this study. It gives idea of what is the objective of the study. The topics presented are customer satisfaction, service quality, customer experience, and perception.

Consumer satisfaction is a central concept in modern marketing. It is very important to marketer because it is generally assumed to be a significant determinants of consumer's loyalty and positive word-of-mouth, which will direct to repeat purchase. Gerson Richard F. (1996) defined customer satisfaction as, when a product or service, meets or exceeds his or her satisfaction. However, there are various types of customers with different kind of needs and wants, thus level of satisfaction between one and another is also different. Therefore, it is hard to fulfill all the needs and wants, required by customer and it make's it even more difficult to measure whether the business has successfully satisfied a customer. Yi (1990) explains, Customer satisfaction can and should be viewed as an attitude since it is difficult to predict and measure.

Satisfaction can be determined as the extent to which a product's perceived performance matches buyer expectations. If the performance falls short of

expectations, customer will be dissatisfied, if it meets expectation or even exceed expectation, customer will be satisfied and even delighted, Philip Kotler (1980). Schools of though suggest that satisfaction is viewed as feeling, emotion, and / or attitude that affect consumer's present and future behavior. Chudy and Sant (1993) suggest that, the other key influence on customer satisfaction is the customer perception of the quality offers by competitors. If the customer perceived that alternative brand offers a level of quality, more closely aligned to their expectations, then they are less inclined to be satisfied with current brand.

Satisfaction is an "overall customer attitude towards a service provider" (Levesque and McDougall, 1996, p. 14), or an emotional reaction to the difference between what customers anticipate and what they receive (Zineldin, 2000), regarding the fulfilment of some need, goal or desire (Oliver, 1999). A similar definition is provided by Gerpott *et al.* (2001) who propose that satisfaction is based on a customer's estimated experience of the extent to which a provider's services fulfill his or her expectations

Therefore to be more successful, companies are aiming for higher customer satisfaction in order to build the customer loyalty and to avoid them from switching to other company when a better offer come along. Consumer

satisfaction has different levels of specificity in various studies. Although satisfaction with, say, a product attribute (Bettman, 1974), a salesperson (Swan and Oliver, 1985), and a consumption experience (Bearden and Teel, 1983; Oliver, 1980, 1981) may be useful, a more fundamental level is and should be the satisfaction with a product - either a commodity or service.

According to the review conducted by Yi (1990), product-level consumer satisfaction can be generally defined as the consumer's "response to the evaluation of the perceived discrepancy between some comparisons (e.g. expectations) and the perceived performance of the product", as advocated by, for example, Day (1984), Kotler (1991), Parasuraman *et al.* (1985, 1988), and Tse and Wilton (1988). Marketing researchers also distinguish between transaction-specific and cumulative consumer satisfaction (Andreassen, 2000; Boulding *et al.*, 1993; Holbrook and Corfman, 1985; Johnson *et al.*, 1995; Olshavsky, 1985). Transaction-specific consumer satisfaction is a post-consumption evaluative judgment of a specific purchase occasion (De Ruyter *et al.*, 1997; Oliver, 1980, 1993), on which the rich body of literature on consumer satisfaction is focused (for a critical review, see Yi, 1990).

In contrast, cumulative consumer satisfaction is a relatively new idea that represents an overall evaluation based on the entire purchase and

consumption experience with a product over time (Anderson *et al.*, 1994; Fornell, 1992; Johnson and Fornell, 1991). It is more fundamental and useful than transaction-specific consumer satisfaction in predicting consumer's subsequent behaviors and firm's economic performance (Fornell *et al.*, 1996; Johnson *et al.*, 1995, 2001).

There is now a growing realization that providing service excellence may represent the difference between business success and failure (Parasuraman *et al.*, 1985; Brown and Swartz, 1989; Cronin and Taylor, 1992; Sung *et al.*, 1997). The services sector generally now views quality as making a positive contribution to their competitive position.

"Quality" is the degree to which a company meets customers' perceptions on a variety of characteristics of the delivered products/services and is often expressed and managed using a variety of technical quality factors such as percentage of defect goods. At its most basic, quality has been defined as "conforming to requirements" (Crosby, 1984). This implies that organizations must establish requirements and specifications, once they have established that the quality goal of the various functions of an organization is to comply strictly with these specifications. However, the questions remain - whose requirements and whose specifications (Palmer *et al.*, 1998)? Thus a second

series of definitions state that quality is all about fitness for use, a definition based primarily on satisfying customers' needs (Juran, 1982). These two definitions can be united in the concept of customer-perceived quality, where quality can only be defined by customers and occurs where an organization supplies goods or services to a specification that satisfies their needs..

Many conceptualizations of service quality have sought to distinguish between its objective, technical dimensions and its more qualitative dimensions. Gro¨nroos (1983) distinguished between "technical" and "functional" dimensions of service provision. Technical quality refers to the result of the service and/or the question: what has been provided? In this case the houses and technical services. Functional quality, on the other hand, refers to the way the service has been delivered and relates to the question: how has the service been provided? Technical quality refers to the relatively quantifiable aspects of the developer's service offer, which consumers experience during their interactions with sales agents and technical support group.

Because it can be easily measured by both consumer and supplier, it becomes an important basis for judging service quality (Palmer, 1998). According to Gro¨nroos (1988, 1990); however, these more technical aspects of a service are easily copied and competitive positioning may be easily lost.

Functional quality, in contrast, can be used to create a competitive edge by focusing on the more personal aspects of the service encounter. Gro¨nroos (1984) argues that technical quality is a necessary but not sufficient condition for higher levels of service quality and that functional quality is likely to be more important than technical quality, if the latter is at least of a sufficient standard. Saleh and Ryan (1991) concur with this viewpoint and take it a step further, suggesting that the quality of functional service may even offset problems experienced by consumers with the technical component.

According to McDougall (1996), many institutions are directing their strategies towards increasing customer satisfaction and loyalty through improved service quality. In developer case, it is focusing on continuously improved, after sales service provided by the developer to their customer through their technical staff. Service quality is one of the components in the customer perceptions, in this property buying sector. It is related to what customer will tell others about the developer overall performance (word-of-mouth) If the service is good, positive word-of-mouth will spread and the developer will prosper, but if it is negative word-of-mouth, the developer will suffer.

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Performance and productivity can be viewed as a company's ability to provide customer value.To be able to improve performance effectively, it is important to identify those factors of performance that should be particularly addressed - either because they are key to success, or because they identify under-performance.

Improvement should start by acquiring appropriate knowledge and expertise "in-house" (or working with consultants who are willing to share expertise and facilitate a self-sustaining exit strategy). This allows improvement activity to be continuous - not resulting from the next crisis situation. Improvement becomes an integral part of operations management and an investment in the future

National Association of Home Builders (NAHB) United States of America, by NAHB research center staff, has published an article on customer satisfaction pointed as guidance to developer. According to NAHB research center staff, one must focus on the three important areas in order to satisfy their home buyers and watch their customer satisfaction ratings go up: deliver homes 100% complete at closing, close on time, and provide responsive warranty service.NAHB Research Center surveys* indicate that if the developer consistently follow all three rules, they will have loyal

customers for life. Miss one, and overall customer satisfaction levels plummet.

When customers sign the contract, they are 100% satisfied that they are buying the best home for the money or they would have bought elsewhere. From this point forward, maintaining 100% levels of customer satisfaction depends entirely on how well the developer deliver.

The first factor is delivering the Home 100% Complete. Nothing says "quality control" to homebuyers like a final inspection with no punch-list items. Customers expecting a sizable list are truly impressed. They feel their builder has acted in their best interest to protect them. They enter the warranty period confident that there will be little or no problems to fix.

Kennedy Community Development, 1997 National Housing Quality Award winner, performs a 600-point inspection one week before closing. All items, without exception, must be fixed prior to the customer's final inspection. Kennedy's satisfaction ratings are consistently in the high 90% range.

The second is delivering on time. Delaying a closing date can be a crisis for homebuyer. Sales contracts that give developer's rights to deliver anytime within a year are meaningless at ensuring customer satisfaction. If the buyer believes that the developer is responsible, imagine what kind of referrals they are giving.

T. W. Lewis builds in the Phoenix area where scarcity of trade contractors can upset closing dates. When customers sign a sales contract, they are given a range of expected closing dates. Six weeks before closing, after construction progresses through several of the scarce trades, a firm closing date is set. Using this method, customers are prepared to remain flexible so that a crisis is avoided.

Third factors are responsive warranty service. Customers make most homebuyer referrals during their warranty period. Therefore, it is extremely important to maintain, or even improve, customer satisfaction levels during this time. When callbacks occur, remedy the situation promptly to show you accept responsibility thereby maintaining customer's confidence. Each callback is a customer satisfaction "moment of truth" that has lasting effects. Neumann Homes, Naperville IL, has a 15/24/7 warranty customer response program. Ken Neumann, President, says "We have a commitment to

respond to all customers in some form within 15 minutes of their contact, solve the vast majority in 24 hours, and complete all work on major issues in 7 days." Currently 74% are completed in 24 hours and an additional 23% are completed within 7 days. Examine data from customer satisfaction surveys to find how these three keys to customer satisfaction provide you with an opportunity to improve customer satisfaction.

Service according to Kotler (1996), are any activity or benefit that one party can offer to another. It is intangible and does not result in ownership of anything. There are four services characteristic, intangibility, inseparability, variability and perishability. Intangibility means service cannot be tasted, felt, heard or smell, inseparibility shows that service cannot be separated from their provider's ether the provider is a human or machines. Variability refers to the quality of services depends on who provides them, when, where and how are they being provided, the forth characteristic is perishability means that service cannot be stored for later used.

It is fact that customers are unable to compare services side-by-side as they do comparing products. Customer rely on surrogates cues to evaluate service quality, Martin J. Gorbein (1995). As actual services vary from day to day, providers to providers and from customers to another's, marketer attempts to standardize their services in order to provide consistency of

quality and also as a benchmarking on their quality performance. Some researchers believe that customer's evaluation of service quality is a function of the magnitude and direction of the gap between the customer's expectations of service and the customer assessment (perception) of the service actually delivered, Fein (1995). in properties sector, where satisfaction comes from combination of the product (house) quality and the service provided by developer, Gronroos (1993) has the best description of service quality. According to him, service quality is described as both technical and functional, the first means what the customer gets and later how the customer receives the service. Gronroos said that, when a customer assess services quality, the company profile act as a filter. If a company has a positive image, it is easier to overlook smaller mistakes in its service delivery, and regard them as temporary disturbances. Such assessment is a result of customer past experience when dealing with the service provider or from others experience (positive words-of-mouth), Halsted and page (1992) found that satisfaction with the complaints response led to higher repurchase intentions for dissatisfied consumers.

It is the experience and attitudes of the individuals in closest contact with customers that are most likely to affect whether or not customers are satisfied and willing to return to the company. It is also the people in direct contact with customers who determine who the retained and satisfied customers are, and their experience determines how they treat the

customers it is also a determinants factor in the success of a property business sectors. Lovelock (1996) has divided services into three levels of contact, reflecting actual customer behavior as it relates to the core products. These three levels cover a spectrum of customer involvement in the service delivery system for the core product, representing the extent of contact with either service personnel or physical service elements or both. Experience will influence customer expectations towards both developer future project and service attached to it. If the previous house they have previously bought satisfied them and the after sales service either for technical purpose or for documentation purpose satisfied them, their expectations will be high and they might spread positive words-of-mouth to others. For this reason, customer experience must be considered b the business as it may lead to a bad or good perception towards the service provider.

Customer satisfaction has been deemed directly to affect customer retention and companies' market share (Rust and Subramanian, 1992). Service quality, service features, and customer-complaint handling determine customer satisfaction in banks. Service offerings, such as extended hours of operation and competitive interest rates also play a role in determining satisfaction (Levesque and McDougall, 1996). Later research, however, has indicated that companies are more successful if they apply customer-retention rather than customer-satisfaction strategies (Knox, 1998). Moreover, customer retention has been found to be a key to profitability

(Desai and Mahajan, 1998) and an important determinant of market share among service firms (Appiah-Adu, 1999).

Performance and productivity can be viewed as a company's ability to provide customer value. To be able to improve performance effectively, it is important to identify those factors of performance that should be particularly addressed - either because they are key to success, or because they identify under-performance.

Improvement should start by acquiring appropriate knowledge and expertise "in-house" (or working with consultants who are willing to share expertise and facilitate a self-sustaining exit strategy). This allows improvement activity to be continuous - not resulting from the next crisis situation. Improvement becomes an integral part of operations management and an investment in the future

Customer satisfaction brings many benefits. Satisfied customers are less price sensitive, buy additional products, are less influenced by competitors and stay loyal longer (Zineldin, 2000). Although customer satisfaction is important, it is not equally important to the company. There are many customers whose satisfaction is less important, such as those a company cannot serve or who are unprofitable; on the other hand, there are customers

whose satisfaction is crucial to a company's survival, and the goal should always be to satisfy those customers (Bhote, 1996).

Ovenden (1995) argues that organizations must be aware of how well or badly its customers are treated. Customers rarely complain, and when someone does, it might be too late to retain that customer. One important component in the concept of satisfaction is complaint management. Nyer (2000) has investigated the relation between consumer complaints and consumer satisfaction. The author found that encouraging consumers to complain increased their satisfaction, and this was especially the case for the most dissatisfied customers. Research has also found that the more intensely a customer complains the greater the increases in satisfaction. Johnston (2001) claims that complaint management not only results in customer satisfaction, but also leads to operational improvement and improved financial performance.

However, not all retained customers are satisfied; they may stay with a provider only because of lack of alternatives (Eriksson and Löfmarck Vaghult, 2000).

As after a deal has been closed, customer will judge the developer base on the services they provided. According to Karen(1988), perceived value of the offering to the buyer is determined more by the service rendered than the product offered. This mean, customer will judge a product from the services provided by the producer. It is very suitable to describe the situation in property sector, Therefore developers must pay a lot of attention to it.

3.0 Theoretical Framework

A consumer satisfaction survey has emerged as far by the best method of periodically assessing the customer satisfaction. The surveys are not marketing tools, but an information gaining tools. Enough homework needs to be done before embarking on the actual survey. These include:

- Defining objective of the survey
- Design survey approach
- Develop questionnaires and forms
- Administer survey
- Methods of compiling data and analyzing the findings
- Format the report to present the findings.

There is no point in asking irrelevant question on consumer satisfaction questionnaires. The basic purpose is to find out what right or wrong the company done, where is the scope for improvement, how customers perceived the company b, base on what they have provided and how can the company serve the customer better.

A consumer satisfaction measurement should at least identify the following objectives:

- Importance to consumer
- Consumers perception towards the company performance
- Company's performance relative to customer priority
- Priorities for improvement

Survey forms should be easy to fill out with minimum amount of time and effort on consumer's part. It should be designed to actively encourage the consumers to complete the questions. The accurate data must be provided in the form and sufficiently reliable for management decision-making. This can be achieved by incorporating objective type question where the respondents have to rank on scale. The scale shows how much consumers satisfied for the company's product compared with the other competitors. Enough space should be provided for the customer's own opinions. These enable them to state any additional requirements or report any shortcomings that are not covered by the objective questions.

Variables in the questionnaire are chosen to answering the research question as stated before. It acts as guidance in the research progress. There are two major parts in the questionnaire, where the variable has the similarity and are link to one another.

The first part is in section A. In this section, the variables are meant to identify factors, which are being considered as important to the respondents when they decided to purchase a house. There are 13 factors, which is being grouped into three major factors, which is the house, estate and the developer. Four determinants are being used which is "Not considered", "Less important", "Important" and "very important". The respondents are asked to tick which determinant is best for each of the factors in the section.

Factors grouped under house are price, design, interior design, location within estate and built quality. Price is the first factor as in the researcher opinion. When people deciding to buy a house, they will consider the price first as it will determine how to get a loan and how to set up their budget. Design is considered as a factor because in my opinion, design is a symbol of status and a determinant to price charged to it. Interior design is, how well the inside is built and designs, so as the finishing. How the developer construct the interior design is important as it has link to safety and family convenience.

Some of prospect buyers are very concern and too specific about where their house is located. They would ask for specific "ot" for themselves, which has something to do with factors such as "feng Shui" , astrology (movement of stars) or any other type of local believe in their process of decision making. Therefore, factor of "location within the estate" is chosen. The last factor in

this group is "built quality". Built quality is very important as when people decide to buy a house, they are expecting to live in there for a long time and past it to next generation. In buying a house, it also involves a lot of money. The house must be suitable for a living and convenience to them and need as less reconstruction as it can from the buyers. Otherwise there will be a lot of complaint and unsatisfaction voice by the buyers, and so spreading a negative word-of-mouth which is able to tarnish the reputation of a company.

The next group is regarding the "estate" it self. The factors being considered are location, public amenities, environment, safety and business prospect. "Location" is chosen as the researcher wants to know either the respondents considered location as important. As for today, public transportation are easy to get and more people are able to get their own vehicle, do they still think that distance is a problem. Next is the "public amenity" such as telephone, road lamp, garden or park and praying house either for Muslims or for non-Muslims. All of this is considered as basic needs of people everywhere they are living.

Environment is also a factor. In today's life where most people are working and the tension is high, environment is assume to be important to create a peace and harmony condition which will give a relaxing effect on people mind. "Safety" is something, which cannot be tolerated. With crime rate increasing, safety is assumed to be important in selecting where people's

want to live as in some place the crime rate is very high compared to another. The last factor in this group is business prospect. Here the researcher wants to know either prospect to run a business in a location is considered as important or not by the respondents. It can be used as determinants either a location is selected just because they wanted to live there or because they wanted to run a business.

The last group is the developer it self. There are three factors here, which are developer background, sales package and customer service. For the past five years, there are a lot of complaints regarding unfinished projects. Either the developer did not pay the constructor or the constructor it self blackmailed the money and run. Therefore developer background is chosen as a factor so as to identified ether with so many fraudulent cases, are the people's becoming more cautious to the developer background or they did not take it as important.

The second is sales package, it is a mix of offering from the developer such as free gift, contest or any service provided to the buyers. The researcher wants to know either is it because of this factor, why they buy a house or it is just one of the factors. The last factor is customer service, before and after sales. Customer service is meant to help the consumers with their problems either before or after they buy a house. In buying a house, there will be a lot of procedure and documentation to be done with government and financial

agencies. Most of us are not familiar to it, therefore helps from the expert are needed.

The next part consist of two section which is section B for customer expectation and section C for customer satisfaction (actual) they get from their purchasing. Variables in this section are actually being derive from the first part. It is then is being specified to fulfill the need of this study.

In section B, the researcher wants to know about customer satisfaction with the show house, do they get clear view of what is offered by reading the brochures and through explanation from sale agents. From here, customer expectation toward the house, which they are going to buy, is pictured.

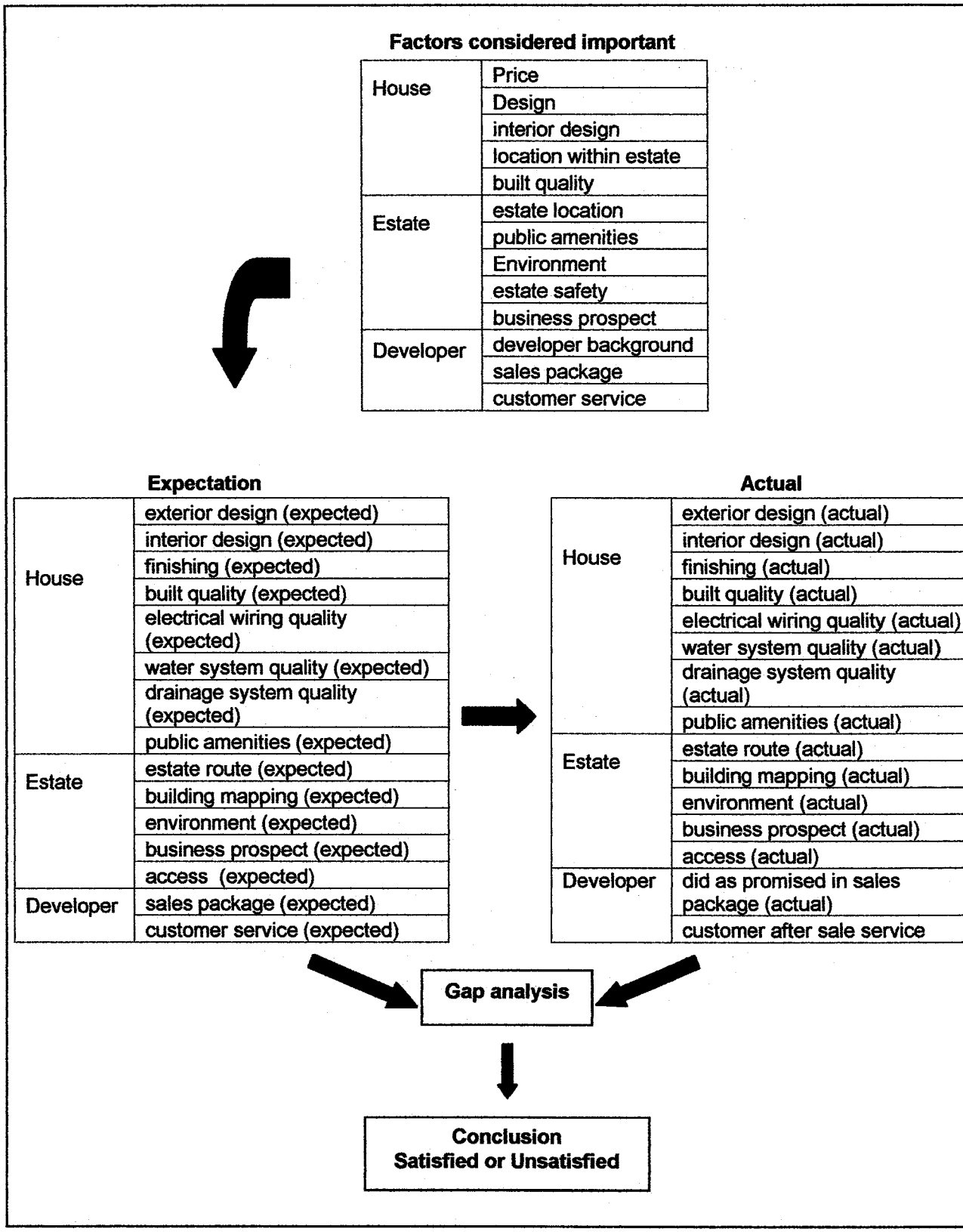
The variables in this section are also group under house, estate and developer. Under house, there are exterior design, interior design, interior finishing, built quality, electrical wiring quality, water system quality and drainage system quality. Grouped under estate are public amenity, estate route, building mapping, environment, prospect for business and access/exit convenience. Sales package and customer service are grouped under developer.

Section C is to identify customer satisfaction after they have purchase the house. One to one comparison is done to identify the satisfaction. Same

variables as in section B are used, except for variables grouped under developer. Sales package is change with, developer did as promised, and customer service is change with customer after sale service. For both of section B and C, Likert scale is used to determine the satisfaction level.

Diagram 3.1 is a summarize of the theoretical framework which is used as a guidance in the study.

Table 3.1 : Theoretical framework



4.0 Research methodology

Methodology and design is the framework or descriptions where it specifies the details of the procedures necessary in order to obtain the information needed. It is used to structure or solve the research problems and research work.

Exploratory research design is an alternative way for conducting the research, it is an unstructured, informal research that is undertaken to gain better understanding of the dimensions of the problem. It is usually conducted when the researcher does not know much about the problems and need additional information. This is systematic but flexible in that it allows the researcher to investigate whatever sources that is necessary in order to gain good information for the problem.

4.1 Data collection method

There are two ways in gathering data for the study. First is the primary data , which is specially collected by the researcher, and second is the secondary data which data or any information gathered from resources collected and published by others.

Primary data

Primary data are originated for the specific purpose of addressing the problem at hand. Questionnaires and personal interview are methods used to gain data for the purpose of this study.

Secondary data

Secondary data is the data that is already published. It purposes is to solve problems other than problems at hand. There are various sources of secondary data, gathered as guidance in the process of running this study. The sources of the data are as follows:

- **Internal**

Gained within the organization, either from their prospectus, reports or any documentation related to the objective of the study.

- **External**

Gained from outside the organization. It can take forms of article from newspaper, websites article, or articles from magazine.

4.2 Survey instrument

4.2.1 Questionnaires

The main instrument used in order to collect data in this study is using questionnaires. It is a set of structured question designed to generate the data necessary for accomplishing the research process. It provides standardization and uniformity in data collecting process, facilitates the gathering of complete and accurate data at possible cost.

Close-ended question is used to ensure the accuracy of answers among set of predetermined alternative responses. The respondent will have to choose only one variable from each question, which best reflect how they feel. Therefore it will be easier for the researcher to analyze the data.

Likert-scale is also used . By using the scale, the researcher will get to know in deep of how the customer actually felt and therefore will be able to determine the level of customer satisfaction.

A total of 69 questionnaires were personally distributed to the customer of Johor Land Berhad. field interviews using questionnaires have been conducted for four times within three weeks.

4.2.2 Personal interview

Personal interviews involved face-to-face communication between two persons, an interviewer and a respondent during which interviewers initiates the gathering of primary data from the respondent. For the purpose of this study, personal interview had been done between the researcher and the Senior Manager (Marketing), En. Mohd. Hizam b. Abd. Rauf and the Manager (Marketing) En. Ma'som Marji and the staff to get clearer information in setting up the questionnaires for their customers and to gain more information that can be used to help the process and as a finding .

4.3 Target population

Target population for the study consists of residents from housing estate, which has been developed by Johor Lands Bhd from Johor Bahru to Pasir Gudang and Ulu Tiram.

4.4 Sampling frame

Sampling frame for the studies are Johor Land Berhad customer who has bought houses priced between RM 95 000 to RM 130 000 and occupied between 1994 to 2003.

4.5 Sampling technique

Probability or random sampling has been used in this study., where the respondents are randomly choose from the sampling frame. 69 respondents had been selected and interviewed using the questionnaires.

4.6 Field work and interviews

Field interviews using the questionnaires have been conducted for four times within three weeks. Prior to the actual interview and distribution of the questionnaires , brief discussion to explain the questionnaires content was held with the management.

4.7 Procedure for analyzing the data

Data collected has been analyzed using SPSS (Statistical Package for Social Science). Frequency and cross tabulation are parts of test conducted using SPSS.

5.0 Results and interpretation

This study is using two methods of analysis. First is frequency distribution and the second is cross tabulation. Frequency distribution is done to find out how frequent a factor is chosen while cross tabulation is done to determine correlation between variables.

There are five sections in the questionnaires form. Section A is to determine the "importance" of factors, which is assumed to be considered in the process of decision making in buying a house. Section B is to find how satisfied are the respondents with the show houses, information from brochures and sales agents, and what is their expectation of what will they get from the house they are considering to buy. Section C is to determine their level of satisfaction from the actual house they get from the developer. In section D, respondents is being asked to stated their overall opinion about the developer and to gives comment on the developer.

While in section E, respondent's backgrounds are recorded. Section E is being divided into two parts, where the first part is placed before Section A and the rest are placed at the last part of the questionnaire. It is done so as the second part contains questions, which are considered privacy by respondent such as income and marital status. Therefore it is placed last so as to reduce "reluctance" of respondents to answering the questions.

5.1 Descriptions of respondent.

Description of respondent's is shows in this section. A frequency test is done to describe the respondents. The following are frequency tables and for each table a statement of respondent's description is stated.

Table 5.1.1: Frequency and percentage by description of respondents on "respondent's gender"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	48	69.6	69.6	69.6
	female	21	30.4	30.4	100.0
	Total	69	100.0	100.0	

Referring to Table 5.1.1, 69.6% or 48 of the respondents are male and 30.4% or 21 of the respondents are female.

Table 5.1.2: Frequency and percentage by description of respondents on "respondent's work sector"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Private	50	72.5	72.5	72.5
	government	12	17.4	17.4	89.9
	own business	6	8.7	8.7	98.6
	Not working	1	1.4	1.4	100.0
	Total	69	100.0	100.0	

Referring to Table 5.1.2, 72.5% or 50 of the respondents are working in private sector,17.4% or 12 of the respondents are working in government sector.8.7% or 6 are running own business and one not working .

Table 5.1.3: Frequency and percentage by description of respondents on "respondent's age"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	35 and below	34	49.3	49.3	49.3
	36 - 40	19	27.5	27.5	76.8
	41 - 45	8	11.6	11.6	88.4
	over 45	8	11.6	11.6	100.0
	Total	69	100.0	100.0	

Table 5.1.3, shows 49.3% or 34 respondents are aged 35 and below. 27.5% or 19 are aged 36 to 40. 11.6% or 8 respondents are aged 41 to 45 and another 8 respondents are aged over 45 (11.6%)

Table 5.1.4: Frequency and percentage by description of respondents on "respondent's spouse age"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	5	7.2	7.2	7.2
	35 and below	32	46.4	46.4	53.6
	36 - 40	16	23.2	23.2	76.8
	41 - 45	12	17.4	17.4	94.2
	over 45	4	5.8	5.8	100.0
	Total	69	100.0	100.0	

Table 5.1.4, shows the respondents spouse age. 46.4% or 32 respondents are aged 35 and below. 23.2% or 16 are aged 36 to 40. 17.4% or 12 respondents are aged 41 to 45 and another 4 respondents are aged over 45 (5.8%). Two of my respondents are unmarried, the other three are not sure about their spouse age.

Table 5.1.5: Frequency and percentage by description of respondents on "respondent's income level"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	2	2.9	2.9	2.9
	Below RM 2000	28	40.6	40.6	43.5
	RM 2000 - RM 3000	24	34.8	34.8	78.3
	RM 3001 - RM 4000	9	13.0	13.0	91.3
	RM 4001 - RM 5000	2	2.9	2.9	94.2
	Exceed RM 5000	1	1.4	1.4	95.7
	none	3	4.3	4.3	100.0
	Total	69	100.0	100.0	

Table 5.1.5, shows 40.6% or 28 of the respondents income is below RM 2000. 34.8% or 24 of the respondents income level is RM 2000 to RM 3000. 13% or 9 of the respondents income level is RM 3001 to RM 4000. 2.9% or 2 of the respondents income level is RM 4001 to RM 5000. 1.4% or one of the respondent income levels is exceeding RM 5000. Three or 4.3% are not working while another 2.9% refuse to state their income level.

Table 5.1.6: Frequency and percentage by description of respondents on "respondent's spouse income level"

		Frequency	Percent	Valid percent	Cumulative percent
Valid	.00	2	2.9	2.9	2.9
	below RM 2000	27	39.1	39.1	42.0
	RM 2000 - RM 3000	17	24.6	24.6	66.7
	RM 3001 - RM 4000	6	8.7	8.7	75.4
	RM 4001 - RM 5000	2	2.9	2.9	78.3
	Exceed RM 5000	1	1.4	1.4	79.7
	none	14	20.3	20.3	100.0
	Total	69	100.0	100.0	

Table 5.1.6, shows 39.1% or 27 of the respondents income is below RM 2000. 24.6% or 17 of the respondents income level is RM 2000 to RM 3000. 8.7% or 6 of the respondents income level is RM 3001 to RM 4000. 2.9% or 2 of the respondents income level is RM 4001 to RM 5000. 1.4% or one of the respondent income levels is exceeding RM 5000. Three or 20.3% are not working while another 2.9% or two of the respondents are still unmarried.

Table 5.1.7: Frequency and percentage by description of respondents on "years of marriage"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	4	5.8	5.8	5.8
	less 5 years	6	8.7	8.7	14.5
	5 - 10 years	29	42.0	42.0	56.5
	11 - 15 years	11	15.9	15.9	72.5
	over 15 years	19	27.5	27.5	100.0
	Total	69	100.0	100.0	

As shown by the Table, six couples or 8.7% has been married less than five years. 29 couples or 42% has married for five to ten years. 11 couples or 15.9% has been married for 11 to 15 years and another 27.5% or 19 couples has been married for more than 15 years.

T able 5.1.8: Frequency and percentage by description of respondents on "number of children"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	5	7.2	7.2	7.2
	None	2	2.9	2.9	10.1
	1 – 3	43	62.3	62.3	72.5
	More than 3	19	27.5	27.5	100.0
	Total	69	100.0	100.0	

62.3% of the respondents has one to three children's. 27.5% has more than three children's. Two (2.9%) has no children and another five (7.2%) did not state anything.

Table 5.1.9: Frequency and percentage by description of respondents on "hired maid"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	1.4	1.4	1.4
	Yes	9	13.0	13.0	14.5
	No	59	85.5	85.5	100.0
	Total	69	100.0	100.0	

85.5% of the respondents did not hire a maid, 13.1% hired a maid and 1.4% did not state anything.

5.2 Statistic summary

Section A: Factors considered important in buying a house.

Section A is to determine the "importance" of factors, which is assumed to be considered in the process of decision making in buying a house.

Table 5.2.1: Descriptive statistic of section A: Factors considered important in buying a house. (House)

Variable		Mode	Mean	Min	Max	Std Deviation	Variance
House	price	4.0000	3.4203	1.00	4.00	0.6509	0.4327
	design	3.0000	3.1884	2.00	4.00	0.5759	0.3316
	interior design	3.0000	3.2029	2.00	4.00	0.5836	0.3406
	location within estate	3.0000	3.1884	1.00	4.00	0.6919	0.4787
	built quality	3.0000	3.4348	1.00	4.00	0.6058	0.3670

As shown by Table 5.2.1, for variables grouped under "House", "price" is the most important where the mode is 4.0000 (very important) is the most chosen by respondents, the other factors are considered as "important" as mode of 3.0000 is the most given for each of them. Highest "mean" is 3.4348, which is for the factor of "built quality", with "standard deviation" of 0.6058 and "variance" of 0.3670, while the lowest is "location within estate" where the "mean" is 3.1884, "standard deviation" of 0.6919 and "variance" of 0.4787

Table 5.2.2 : Descriptive statistic of section A : Factors considered important in buying a house.(Estate)

Variable		Mode	Mean	Min	Max	Std Deviation	Variance
Estate	estate location	3.0000	3.3043	1.00	4.00	0.6486	0.4207
	public amenities	3.0000	3.3188	1.00	4.00	0.6062	0.3674
	Environment	3.0000	3.2899	0.00	4.00	0.7689	0.5912
	estate safety	4.0000	3.4348	0.00	4.00	0.7761	0.6023
	business prospect	3.0000	2.5942	0.00	4.00	1.0192	1.0388

For variables grouped under "estate", Table 5.2.2 shows "estate safety" is the most important where the mode is 4.0000 meaning "very important" is the most chosen by respondents, the other factors are considered as "important" as mode of 3.0000 is the most given for each of them. Highest "mean" is 3.4348, which is also a factor of "estate safety", with "standard deviation" of 0.7761 and "variance" of 0.6023, while the lowest is "business prospect" where the "mean" is 2.5942, "standard deviation" of 1.0192 and "variance" of 1.0388

Table 5.2.3: Descriptive statistic of section A: Factors considered important in buying a house.(Developer)

Variable		Mode	Mean	Min	Max	Std Deviation	Variance
Developer	developer background	4.0000	3.3043	0.00	4.00	0.8455	0.7148
	sales package	3.0000	3.1159	0.00	4.00	0.7580	0.5746
	customer service	3.0000	3.1739	0.00	4.00	0.7661	0.5870

Table 5.2.3 shows variables grouped under "developer"." Developer background" is the most important where the mode is 4.0000 (very important) is the most chosen by respondents, the other factors are considered as "important" as mode of 3.0000 is the most given for each of them. Highest "mean" is 3.3043, which is also a factor of "developer background", with "standard deviation" of 0.8455 and "variance" of 0.7148, while the lowest is "sales package" where the "mean" is 3.1159, "standard deviation" of 0.7580 and "variance" of 0.5746.

Complete table for descriptive statistic of section A is as follow.

Table 5.2.4: Descriptive statistic of section A: Factors considered important i buying a house.

Variable		Mode	Mean	Min	Max	Std Deviation	Variance
House	Price	4.0000	3.4203	1.00	4.00	0.6509	0.4327
	Design	3.0000	3.1884	2.00	4.00	0.5759	0.3316
	interior design	3.0000	3.2029	2.00	4.00	0.5836	0.3406
	location within estate	3.0000	3.1884	1.00	4.00	0.6919	0.4787
	built quality	3.0000	3.4348	1.00	4.00	0.6058	0.3670
Estate	estate location	3.0000	3.3043	1.00	4.00	0.6486	0.4207
	public amenities	3.0000	3.3188	1.00	4.00	0.6062	0.3674
	Environment	3.0000	3.2899	0.00	4.00	0.7689	0.5912
	estate safety	4.0000	3.4348	0.00	4.00	0.7761	0.6023
	business prospect	3.0000	2.5942	0.00	4.00	1.0192	1.0388
Developer	developer background	4.0000	3.3043	0.00	4.00	0.8455	0.7148
	sales package	3.0000	3.1159	0.00	4.00	0.7580	0.5746
	customer service	3.0000	3.1739	0.00	4.00	0.7661	0.5870

From the results, it is found that most of the respondents considered "price", "estate safety" and "developer background" as "very important" factors in the process of decision making in buying a house. For the rest of the factors, most of the respondents considered them as "important" factors in the process of decision making in buying a house.

Frequency test has been done for each of the factors. Only three of the factors which considered as "very important" are shown below.

Table 5.2.5: Frequency and percentage by perceived important on "price"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	unconsidered	1	1.4	1.4	1.4
	less important	3	4.3	4.3	5.8
	important	31	44.9	44.9	50.7
	very important	34	49.3	49.3	100.0
	Total	69	100.0	100.0	

49.35% of the respondents consider the price as very important, 44.9% says it important. 4.3 % says less important and 1.4% say it is not considered.

Table 5.2.6: Frequency and percentage by perceived important on "estate safety"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	2	2.9	2.9	2.9
	important	31	44.9	44.9	47.8
	Very important	36	52.2	52.2	100.0
	Total	69	100.0	100.0	

52.2% of the respondents consider the estate safety as very important, 44.9% says it is important. 2.9% did not answer. None of the respondents says the factor as less important or unconsidered.

Table 5.2.7: Frequency and percentage by perceived important on "developer background"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	2	2.9	2.9	2.9
	Less important	5	7.2	7.2	10.1
	Important	30	43.5	43.5	53.6
	very important	32	46.4	46.4	100.0
	Total	69	100.0	100.0	

46.4% of the respondents say developer background as very important, 43.5% says it is important. 7.2% says it is less important and another 2.9% did not answer.

Section B: Respondent's satisfaction towards show houses, information from brochures and sales agent explanation (expectation to actual house)

Section B is to find how satisfied are the respondents with the show houses, information from brochures and sales agents, and what is their expectation of what will they get from the house they are considering to buy.

Table 5.2.8: Descriptive statistic of section B: Satisfaction towards show house, information from brochures and sales agent explanation. (Customer expectation)

Variable		Mode	Mean	Min	Max
House	exterior design (expected)	8.0000	6.8406	3.00	10.00
	interior design (expected)	5.0000	6.6812	2.00	10.00
	finishing (expected)	5.0000	6.4928	1.00	10.00
	built quality (expected)	5.0000	6.2899	0.00	10.00
	electrical wiring quality (expected)	8.0000	6.5072	1.00	10.00
	water system quality (expected)	5.0000	6.3913	3.00	10.00
	drainage system quality (expected)	8.0000	6.7826	2.00	10.00
	public amenities (expected)	5.0000	6.4058	1.00	10.00

As shown by Table 5.2.8, there are eight variables grouped under "House", are rated "5" means they are "fair". The other three are rate "8" for "satisfied". Highest "mean" is 6.8406, which is for the factor of "exterior design", it is also ranked "8" for "satisfied", while the lowest is "built quality", ranked "5" for "fair" where the "mean" is 6.2899.

Table 5.2.9: Descriptive statistic of section B: Satisfaction towards show house, information from brochures and sales agent explanation. (Customer expectation)

Variable	Mode	Mean	Min	Max	Variable
Estate	estate route (expected)	8.0000	7.2608	3.00	10.00
	building mapping (expected)	8.0000	7.1304	3.00	10.00
	environment (expected)	8.0000	7.0725	1.00	10.00
	business prospect (expected)	5.0000	6.5507	2.00	10.00
	access (expected)	8.0000	6.6377	1.00	10.00

Five variables are grouped under "estate", four of the factors, are rated "8" means they are "satisfied", and one are rated "5" for " fair". Highest "mean" is 7.2608, which is for the factor of "estate route", it is also ranked "8" for "satisfied", while the lowest is "business prospect", ranked "5" for "fair" where the "mean" is 6.5507.

Table 5.2.10: Descriptive statistic of section B: Satisfaction towards show house, information from brochures and sales agent explanation. (Customer expectation)

Variable	Mode	Mean	Min	Max	Variable
Developer	sales package (expected)	8.0000	6.5217	2.00	10.00
	customer service (expected)	5.0000	6.3188	0.00	10.00

There are only two variables grouped under "developer", one of the factors, are rated "8" means they are "satisfied", the other one are rated "5" for " fair". Highest "mean" is 6.5217, which is for the factor of "sales package. It is also ranked "8" for "satisfied", while the lowest is "customer service", ranked "5" for "fair" where the "mean" is 6.3188.

Complete table for descriptive statistic of section B is as follow.

Table 5.2.11: Descriptive statistic of section B: Satisfaction towards show house, information from brochures and sales agent explanation. (Customer expectation)

Variable		Mode	Mean	Min	Max
House	exterior design (expected)	8.0000	6.8406	3.00	10.00
	interior design (expected)	5.0000	6.6812	2.00	10.00
	finishing (expected)	5.0000	6.4928	1.00	10.00
	built quality (expected)	5.0000	6.2899	0.00	10.00
	electrical wiring quality (expected)	8.0000	6.5072	1.00	10.00
	water system quality (expected)	5.0000	6.3913	3.00	10.00
	drainage system quality (expected)	8.0000	6.7826	2.00	10.00
	public amenities (expected)	5.0000	6.4058	1.00	10.00
Estate	estate route (expected)	8.0000	7.2608	3.00	10.00
	building mapping (expected)	8.0000	7.1304	3.00	10.00
	environment (expected)	8.0000	7.0725	1.00	10.00
	business prospect (expected)	5.0000	6.5507	2.00	10.00
	access (expected)	8.0000	6.6377	1.00	10.00
Developer	sales package (expected)	8.0000	6.5217	2.00	10.00
	customer service (expected)	5.0000	6.3188	0.00	10.00

From the results, it is found that most of the respondents are satisfied with the show house and information they get from brochures and sales agent,

where eight over fifteen of the factors are considered as "satisfying" and another seven factors are considered as "fair".

Frequency analysis has been done and only six factors with mode of eight are shown below.

Table 5.2.12: Frequency and percentage by customer satisfaction on "exterior design" (expected)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(3) unsatisfying	3	4.3	4.3	4.3
	(4) unsatisfying	2	2.9	2.9	7.2
	(5) fairly satisfying	15	21.7	21.7	29.0
	(6) fairly satisfying	10	14.5	14.5	43.5
	(7) satisfying	8	11.6	11.6	55.1
	(8) satisfying	20	29.0	29.0	84.1
	(9) very satisfying	6	8.7	8.7	92.8
	(10) very satisfying	5	7.2	7.2	100.0
	Total	69	100.0	100.0	

29% of respondents give eight for "satisfying", for the factor exterior design, 21.7% rated five for "fairly satisfying", 14.5% rated six for "fairly satisfying", 11.6% rated seven for "satisfying", 8.7% rated nine and 7.2% rated ten for "very satisfying",4.3% rated three and 2.9% rated four for "unsatisfying"

Table 5.2.13: Frequency and percentage by customer satisfaction on "electrical wiring quality" (expected)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) very unsatisfying	1	1.4	1.4	1.4
	(3) unsatisfying	4	5.8	5.8	7.2
	(4) unsatisfying	7	10.1	10.1	17.4
	(5) fairly satisfying	12	17.4	17.4	34.8
	(6) fairly satisfying	8	11.6	11.6	46.4
	(7) satisfying	12	17.4	17.4	63.8
	(8) satisfying	14	20.3	20.3	84.1
	(9) very satisfying	6	8.7	8.7	92.8
	(10) very satisfying	5	7.2	7.2	100.0
	Total	69	100.0	100.0	

For factor of electrical wiring quality, 20.3% of respondents rated eight and 17.4% rated seven for "satisfying". Another 17.4% rated five for "fairly satisfying", 11.6% rated six for "fairly satisfying", 10.1% rated four for "unsatisfying", 8.7% rated nine and 7.2% rated ten for "very satisfying",5.8% rated three and 1.4% rated four for "unsatisfying"

Table 5.2.14: Frequency and percentage by customer satisfaction on "estate route" (expected)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(3) unsatisfying	3	4.3	4.3	4.3
	(5) fairly satisfying	11	15.9	15.9	20.3
	(6) fairly satisfying	8	11.6	11.6	31.9
	(7) satisfying	9	13.0	13.0	44.9
	(8) satisfying	22	31.9	31.9	76.8
	(9) very satisfying	10	14.5	14.5	91.3
	(10) very satisfying	6	8.7	8.7	100.0
	Total	69	100.0	100.0	

Table 5.2.14 shows 31.9% of respondents give eight for "satisfying", for the factor estate route, 15.9% rated five for "fairly satisfying", 14.5% rated nine for "very satisfying", 13.0% rated seven for "satisfying", 11.6% rated six for "fairly satisfying" and 8.7% rated ten for "very satisfying",4.3% rated three for "unsatisfying"

Table 5.2.15: Frequency and percentage by customer satisfaction on "business prospect" (expected)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(2) very unsatisfying	2	2.9	2.9	2.9
	(3) unsatisfying	3	4.3	4.3	7.2
	(4) unsatisfying	2	2.9	2.9	10.1
	(5) fairly satisfying	15	21.7	21.7	31.9
	(6) fairly satisfying	12	17.4	17.4	49.3
	(7) satisfying	10	14.5	14.5	63.8
	(8) satisfying	15	21.7	21.7	85.5
	(9) very satisfying	6	8.7	8.7	94.2
	(10) very satisfying	4	5.8	5.8	100.0
	Total	69	100.0	100.0	

21.7% of respondents give eight for "satisfying", for the factor business prospect, another 21.7% rated five for "fairly satisfying", 17.4% rated six for "fairly satisfying", 14.5% rated seven for "satisfying", 8.7% rated nine and 5.8% rated ten for "very satisfying",4.3% rated three and 2.9% rated four for "unsatisfying"

Table 5.2.16: Frequency and percentage by customer satisfaction on "sales package" (expected)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(2) very unsatisfying	1	1.4	1.4	1.4
	(3) unsatisfying	5	7.2	7.2	8.7
	(4) unsatisfying	3	4.3	4.3	13.0
	(5) fairly satisfying	14	20.3	20.3	33.3
	(6) fairly satisfying	11	15.9	15.9	49.3
	(7) satisfying	10	14.5	14.5	63.8
	(8) satisfying	15	21.7	21.7	85.5
	(9) very satisfying	5	7.2	7.2	92.8
	(10) very satisfying	5	7.2	7.2	100.0
	Total	69	100.0	100.0	

For factor of sales package quality, 21.7% of respondents rated eight and 20.3% rated five for "fairly satisfying". Another 15.9% rated six for "fairly satisfying", 14.5% rated seven for "satisfying", 7.2% rated four for "unsatisfying", another 7.2% rated nine and ten for "very satisfying",1.4% rated two for "very unsatisfying"

Table 5.2.17: Frequency and percentage by customer satisfaction on "customer service" (expected)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	1.4	1.4	1.4
	(2) very unsatisfying	4	5.8	5.8	7.2
	(3) unsatisfying	4	5.8	5.8	13.0
	(4) unsatisfying	3	4.3	4.3	17.4
	(5) fairly satisfying	17	24.6	24.6	42.0
	(6) fairly satisfying	7	10.1	10.1	52.2
	(7) satisfying	4	5.8	5.8	58.0
	(8) satisfying	17	24.6	24.6	82.6
	(9) very satisfying	7	10.1	10.1	92.8
	(10) very satisfying	5	7.2	7.2	100.0
	Total	69	100.0	100.0	

24.6% of respondents give eight for "satisfying", for the factor customer service, another 24.6% rated five for "fairly satisfying", 10.1% rated six for "fairly satisfying", another 10.1% rated nine for "very satisfying", 7.2% rated ten for "very satisfying",5.8% rated two and three for "unsatisfying" and "very unsatisfying" and another 5.8% rated seven for "satisfying". 1.4% did not state anything.

Section C: Customers satisfaction from purchasing (actual)

Section C is to determine the respondent's actual level of satisfaction from the actual house they get from the developer, the determinant factors in this section are also the same as in section B.

Table 5.2.18 : Descriptive statistic of section C : Customer satisfaction from purchasing. (Actual satisfaction)

Variable		Mode	Mean	Min	Max
House	exterior design (actual)	5.0000	6.1884	1.00	10.00
	interior design (actual)	5.0000	6.1014	1.00	10.00
	finishing (actual)	5.0000	5.5217	1.00	10.00
	built quality (actual)	4.0000	5.1159	0.00	10.00
	electrical wiring quality (actual)	5.0000	5.6667	1.00	10.00
	water system quality (actual)	5.0000	5.7101	1.00	10.00
	drainage system quality (actual)	8.0000	6.0870	0.00	10.00
	public amenities (actual)	5.0000	5.8696	1.00	10.00

As shown by Table 5.2.18, there are eight variables grouped under "House", six of the factors, are rated "5" means they are "fair", the rest (one each) are rated "8" for "satisfied" ad "4" for "unsatisfied". Highest "mean" is 6.1884, which is for the factor of "exterior design", it is also ranked "5" for " fair". The lowest is "built quality", ranked "4" for "unsatisfied" where the "mean" is 5.1159.

Table 5.2.19: Descriptive statistic of section C : Customer satisfaction from purchasing. (Actual satisfaction)

Variable		Mode	Mean	Min	Max
Estate	Estate route (actual)	8.0000	6.2681	1.00	10.00
	Building mapping (actual)	8.0000	6.8841	1.00	10.00
	environment (actual)	5.0000	6.5652	0.00	10.00
	business prospect (actual)	5.0000	5.7536	1.00	10.00
	access (actual)	8.0000	6.1159	1.00	10.00

Five variables are grouped under "estate", three of the factors, are rated "8" means they are "satisfied", the other two are rated "5" for "fair". Highest "mean" is 6.8841, which is for the factor of "building mapping", it is also ranked "8" for "satisfied". The lowest is "business prospect", ranked "5" for "fair" where the "mean" is 5.7536.

Table 5.2.20 : Descriptive statistic of section C :

Customer satisfaction from purchasing. (Actual satisfaction)

Variable		Mode	Mean	Min	Max
Developer	Did as promised in sales package (actual)	5.0000	5.5797	0.00	10.00
	customer after sale service	5.0000	5.3043	1.00	10.00

There are only two variables grouped under "developer", both are rated "5" for "fair". Highest "mean" is 5.5797, which is for the factor of "sales package. The lowest is "customer service", where the "mean" is 5.3043.

Complete table for descriptive statistic of section C is as follow.

Table 5.2.21 : Descriptive statistic of section C:

Customer satisfaction from purchasing. (Actual satisfaction)

Variable		Mode	Mean	Min	Max
House	exterior design (actual)	5.0000	6.1884	1.00	10.00
	interior design (actual)	5.0000	6.1014	1.00	10.00
	finishing (actual)	5.0000	5.5217	1.00	10.00
	built quality (actual)	4.0000	5.1159	0.00	10.00
	electrical wiring quality (actual)	5.0000	5.6667	1.00	10.00
	water system quality (actual)	5.0000	5.7101	1.00	10.00
	drainage system quality (actual)	8.0000	6.0870	0.00	10.00
	public amenities (actual)	5.0000	5.8696	1.00	10.00
Estate	estate route (actual)	8.0000	6.2681	1.00	10.00
	building mapping (actual)	8.0000	6.8841	1.00	10.00
	environment (actual)	5.0000	6.5652	0.00	10.00
	business prospect (actual)	5.0000	5.7536	1.00	10.00
	access (actual)	8.0000	6.1159	1.00	10.00
Developer	did as promised in sales package (actual)	5.0000	5.5797	0.00	10.00
	customer after sale service	5.0000	5.3043	1.00	10.00

From the results, it is founded that most of the respondents rated "fair" for the factors in section C .Where ten out of fifteen factors are considered as "fair" , four are considered as " satisfying" and one are considered as "unsatisfying".

The frequency tests are as follows.

Table 5.2.22: Frequency and percentage by customer satisfaction on "exterior design" (actual)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) very unsatisfying	2	2.9	2.9	2.9
	(2) very unsatisfying	2	2.9	2.9	5.8
	(3) unsatisfying	1	1.4	1.4	7.2
	(4) unsatisfying	2	2.9	2.9	10.1
	(5) fairly satisfying	20	29.0	29.0	39.1
	(6) fairly satisfying	15	21.7	21.7	60.9
	(7) satisfying	5	7.2	7.2	68.1
	(8) satisfying	15	21.7	21.7	89.9
	(9) very satisfying	5	7.2	7.2	97.1
	(10) very satisfying	2	2.9	2.9	100.0
	Total	69	100.0	100.0	

29% of respondents give five for "satisfying" for the factor of exterior design 21.7% rated eight for "satisfying", another 21.7% rated six for "fairly satisfying". 7.2% rated nine for "very satisfying", another 7.2% rated seven for "satisfying", 2.9% rated ten for "very satisfying", four for "unsatisfying", another 2.9% rated one and two for "very unsatisfying", 1.4% rated three for "unsatisfying"

Table 5.2.23: Frequency and percentage by customer satisfaction on "built quality" (actual)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) very unsatisfying	7	10.1	10.1	10.1
	(2) very unsatisfying	1	1.4	1.4	11.6
	(3) unsatisfying	5	7.2	7.2	18.8
	(4) unsatisfying	15	21.7	21.7	40.6
	(5) fairly satisfying	11	15.9	15.9	56.5
	(6) fairly satisfying	13	18.8	18.8	75.4
	(7) satisfying	7	10.1	10.1	85.5
	(8) satisfying	4	5.8	5.8	91.3
	(9) very satisfying	5	7.2	7.2	98.6
	(10) very satisfying	1	1.4	1.4	100.0
	Total	69	100.0	100.0	

21.7% of respondents rated four for "unsatisfying" for the factor of built quality 18.8% rated six and 15.9% rated five for "fairly satisfying". 10.1% rated seven for "satisfying", another 10.1% rated one for "very unsatisfying", 7.2% rated nine for "very satisfying", another 7.2% rated three for "unsatisfying", 5.8% rated eight for "satisfying", 1.4% rated ten for "very satisfying", another 1.4% rated one for "very unsatisfying".

Table 5.2.24: Frequency and percentage by customer satisfaction on "building mapping" (actual)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) very unsatisfying	1	1.4	1.4	1.4
	(2) very unsatisfying	1	1.4	1.4	2.9
	(3) unsatisfying	1	1.4	1.4	4.3
	(4) unsatisfying	3	4.3	4.3	8.7
	(5) fairly satisfying	9	13.0	13.0	21.7
	(6) fairly satisfying	14	20.3	20.3	42.0
	(7) satisfying	10	14.5	14.5	56.5
	(8) satisfying	16	23.2	23.2	79.7
	(9) very satisfying	10	14.5	14.5	94.2
	(10) very satisfying	4	5.8	5.8	100.0
	Total	69	100.0	100.0	

23.2% of respondents rated eight for "satisfying" for the factor of building mapping. 20.3% rated six for" fairly satisfying". 14.5% rated nine for "very satisfying", another 14.5% rated seven for "satisfying", 13% rated five for "fairly satisfying", another 5.8% rated ten for "very satisfying", 4.3% rated four for "unsatisfying", 1.4% rated three for "unsatisfying", another 1.4% rated one for and two for "very unsatisfying".

Table 5.2.25: Frequency and percentage by customer satisfaction on "access" (actual)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) very unsatisfying	3	4.3	4.3	4.3
	(2) very unsatisfying	3	4.3	4.3	8.7
	(3) unsatisfying	4	5.8	5.8	14.5
	(4) unsatisfying	7	10.1	10.1	24.6
	(5) fairly satisfying	13	18.8	18.8	43.5
	(6) fairly satisfying	8	11.6	11.6	55.1
	(7) satisfying	6	8.7	8.7	63.8
	(8) satisfying	14	20.3	20.3	84.1
	(9) very satisfying	4	5.8	5.8	89.9
	(10) very satisfying	7	10.1	10.1	100.0
	Total	69	100.0	100.0	

20.3% of respondents rated eight for "satisfying" for the factor of access. 18.8% rated five and 11.6% rated six for "fairly satisfying". 10.1% rated ten for "very satisfying", another 10.1% rated four for "unsatisfying", 8.7% rated seven for "satisfying". 5.8 % rated nine for "satisfying", another 5.8% rated three for " unsatisfying", 4.3% rated one and two for "very unsatisfying".

Table 5.2.26: Frequency and percentage by customer satisfaction on "did as promised in sales package" (actual)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	1.4	1.4	1.4
	(1) very unsatisfying	2	2.9	2.9	4.3
	(2) very unsatisfying	6	8.7	8.7	13.0
	(3) unsatisfying	6	8.7	8.7	21.7
	(4) unsatisfying	3	4.3	4.3	26.1
	(5) fairly satisfying	17	24.6	24.6	50.7
	(6) fairly satisfying	11	15.9	15.9	66.7
	(7) satisfying	6	8.7	8.7	75.4
	(8) satisfying	9	13.0	13.0	88.4
	(9) very satisfying	4	5.8	5.8	94.2
	(10) very satisfying	4	5.8	5.8	100.0
	Total	69	100.0	100.0	

24.6% of respondents rated five and 15.9% rated six for "fairly satisfying", for the factor of sales package. 13.0% rated eight for "satisfying". 8.7% rated seven for "satisfying", another 8.7% rated three for "unsatisfying" and two for "very unsatisfying", 5.8% rated nine and ten for "very satisfying". 4.3% rated four for "unsatisfying", 2.9% rated one for "very unsatisfying" and 1.4% did not stated anything.

Table 5.2.27: Frequency and percentage by customer satisfaction on "customer after sale service" (Actual)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) very unsatisfying	7	10.1	10.1	10.1
	(2) very unsatisfying	4	5.8	5.8	15.9
	(3) unsatisfying	5	7.2	7.2	23.2
	(4) unsatisfying	8	11.6	11.6	34.8
	(5) fairly satisfying	13	18.8	18.8	53.6
	(6) fairly satisfying	9	13.0	13.0	66.7
	(7) satisfying	8	11.6	11.6	78.3
	(8) satisfying	7	10.1	10.1	88.4
	(9) very satisfying	7	10.1	10.1	98.6
	(10) very satisfying	1	1.4	1.4	100.0
	Total	69	100.0	100.0	

18.8% of respondents rated five and 13.0% rated six for "fairly satisfying", for the factor of customer after sale service. 11.6% rated seven for "satisfying". 10.1% rated nine and ten for "very satisfying". Another 10.1% rated one for "very unsatisfying". 7.2% rated three for "unsatisfying". 5.8% rated two for "very unsatisfying" and 1.4% rated two for "very unsatisfying".

5.3 Summary

In the first chapter, research question is derive from the research problem and a hypothesis has been developed from the research question. In this section, we will answer the research question and prove the hypotheses.

We will first answer the first research question and prove the hypotheses. The research question is, what are the factors, the customers take into account when deciding on purchasing and how important are these factors. A hypothesis develop from the research question, is as follow.

H_1 = Most of the factors stated are considered as important by respondents.

H_0 = Most of the factors stated are not considered as important by respondents

To answer the question and prove the hypothesis, a frequency test is done to each of the factors grouped under house, estate and developer. Later a further test to find out the importance index is done. The importance index is used to determine the importance of the factors stated. Same procedure is done to each of the factors in order to find out the importance index.

Summary of section A (importance)

Table 5.3.1 : Importance index Table : Factors (by group) considered in the process of decision making in buying a house

Factors		Weighting factors	Importance (mean)	Weighted score
House	Price	0.2000	3.4203	0.6841
	Design	0.2000	3.1884	0.6377
	Finishing	0.2000	3.2029	0.6406
	Location inside estate	0.2000	3.1884	0.6377
	Material quality	0.2000	3.4348	0.6870
	WEIGHTED AVERAGE			0.6574
	IMPORTANCE INDEX (%)			65.7392

Referring to the Table above, for factors grouped under house, highest weighted score is 0.6874 for the factor of material quality. The lowest is 0.6377 for the factors of design and location inside the estate. Importance index is 65.7392%

Table 5.3.2 : Importance index Table : Factors (by group) considered in the process of decision making in buying a house

Factors		Weighting factors	Importance (mean)	Weighted score
Estate	Location	0.2000	3.3043	0.6609
	Public amenities	0.2000	3.3188	0.6638
	Environment	0.2000	3.2899	0.6580
	Safety	0.2000	3.4348	0.6870
	Prospect for business	0.2000	2.5942	0.5188
	WEIGHTED AVERAGE			0.6377
	IMPORTANCE INDEX (%)			63.7680

Table 5.3.2 shows, for factors groped under estate, highest weighted score is 0.6870 for the factor of safety. The lowest is 0.5188 for the factor of prospect for business. Importance index is 63.7680%

Table 5.3.3 : Importance index Table : Factors (by group) considered in the process of decision making in buying a house

Factors		Weighting factors	Importance (mean)	Weighted score
Developer	Background	0.3333	3.3043	1.1014
	Sales package	0.3333	3.1159	1.0386
	Customer Service	0.3333	3.1739	1.0580
	WEIGHTED AVERAGE			1.0660
	IMPORTANCE INDEX (%)			106.6011

Table 5.3.3 shows, for factors grouped under developer, highest weighted score is 1.1014 for the factor of background. The lowest is 1.0386 for the factor of sales package. Importance index is 106.6011%

All of the importance index exceed 50%, therefore it is concluded that the respondent's consider all of the factors important.

The conclusion is then strengthening by Table 5.3.4. The Table shows that all of the factors are rated above 50% of 'importance" level, with eight of the factors are rated above 90%, four are rated above 85%+ and a factor which is "prospect for business" is rated 57.97% ..

Table 5.3.4 : Summary of factors considered in house purchasing

	Factors	Importance	Not importance	Mean	Std Deviation
House	Price	94.20	5.80	3.4203	0.6509
	Design	91.30	8.70	3.1884	0.5759
	Finishing	91.30	8.70	3.2029	0.5836
	Location inside estate	86.96	13.04	3.1884	0.6919
	Material quality	97.10	2.90	3.4348	0.6058
Estate	Location	92.75	7.25	3.3043	0.6486
	Public amenities	95.65	4.35	3.3188	0.6062
	Environment	95.65	4.35	3.2899	0.7689
	Safety	97.10	2.90	3.4348	0.7761
	Prospect for business	57.97	42.03	2.5942	1.0192
Developer	Background	89.86	10.14	3.3043	0.8455
	Sales package	86.96	13.04	3.1159	0.7580
	Customer Service	88.41	11.59	3.1739	0.7661

Table 5.3.5 is then used to identify which factors are considered as more important. The results are as follows.

Table 5.3.5 : Importance index Table : Factors (overall) considered in the process of decision making in buying a house

Factors		Weighting factors	Importance (mean)	Weighted score
House	Price	0.0769	3.4203	0.2631
	Design	0.0769	3.1884	0.2453
	Finishing	0.0769	3.2029	0.2464
	Location inside estate	0.0769	3.1884	0.2453
	Material quality	0.0769	3.4348	0.2642
Estate	Location	0.0769	3.3043	0.2542
	Public amenities	0.0769	3.3188	0.2553
	Environment	0.0769	3.2899	0.2531
	Safety	0.0769	3.4348	0.2642
	Prospect for business	0.0769	2.5942	0.1996
Developer	Background	0.0769	3.3043	0.2542
	Sales package	0.0769	3.1159	0.2397
	Customer Service	0.0769	3.1739	0.2441

Material quality and estate safety have the highest weighted score of 0.2642, followed by price, 0.2631. the lowest is prospect for business, 0.1996.

Therefore, for the first research question, H_1 which says, most of the factors stated are considered as important by respondents, is accepted.

Research question one:

What are the factors, the customers take into account when deciding on purchasing and how important are these factors

H_1 = Most of the factors stated are considered as important by respondents. (Accepted)

The second research question develop is regarding the gap between expected and actual satisfaction of the customers. The research question is, Is there is a gap between "expected" and "actual" base on what is promised by Johor Land Berhad. Hypothesis which has been develop for the question is as follows,

H_1 = Gap between "expected" and "actual" is positive

H_0 = Gap between "expected" and "actual" negative

In this section, gap between "expected" and "actual" is being analyzed to determine customer satisfaction and to determine which factors Johor Land Berhad, need to improve. The result from this analysis will also be used to set up a level of percentage for satisfaction level, on which each group in section C (actual satisfaction) satisfaction index must exceed.

Referring to Table 5.3.6, it is founded that, for all of the factors being analyzed, the gap value are positive so as the percentage of gap. Positive value mean, expectation exceed actual satisfaction, therefore it shows that most of the respondents are not satisfied with what they get from their purchasing. This also shows that actual house built by Johor Land Berhad and the whole sales package, does not match as shown by Johor Land Berhad show houses or as promised by sales agent or through brochures.

The highest gap is 18.66%, which is "built quality", it shows that most of the respondents are not satisfied with their house built quality. Problem with built quality has created more problem and dissatisfaction. The following factors are also quite high in gap percentage, they are "finishing", 14.96%, "electrical and wiring", 12.92%, "water system", and "drainage". The next highest gap percentage is 16.06% which is the factor of "customer service" before and after sales, it has made the factor of "sales package/did as promise" has high gap percentage which is 14.44%.

Table 5.3.6: Summary of gap analysis (expected and actual) of satisfaction

Variable		Weighted score (expected)	Weighted score (Actual)	Gap	Percenta of gap
House	exterior design	0.8551	0.7736	0.0815	9.53
	interior design	0.8352	0.7627	0.0725	8.68
	finishing	0.8116	0.6902	0.1214	14.96
	built quality	0.7862	0.6395	0.1468	18.66
	electrical wiring quality	0.8134	0.7083	0.1051	12.92
	water system quality	0.7989	0.7138	0.0852	10.66
	drainage system quality	0.8478	0.7609	0.0870	10.26
	public amenities	0.8007	0.7337	0.0670	8.37
Estate	estate route	1.4522	1.2536	0.1985	13.67
	building mapping	1.4261	1.3768	0.0493	3.45
	environment	1.4145	1.3130	0.1015	7.17
	business prospect	1.3101	1.1507	0.1594	12.17
	access	1.3275	1.2232	0.1044	7.86
Developer	sales package /did as promised	3.2609	2.7899	0.4710	14.44
	customer service /after sales service	3.1594	2.6522	0.5073	16.06

Therefore, Johor Land Berhad must pay more attention to improve the above factors, especially factors grouped under "house" as it has the highest gap and most of factors with high gap come from this group. Johor Land Berhad must also improve their customer service, especially after sale service.

Therefore, for the second research question, H_1 which says, gap between "expected" and "actual" is positive, is accepted.

Research question two:

Is there a gap between "expected" and "actual" satisfaction base on what is promised by Johor Land Berhad.

Gap between "expected" and "actual" satisfaction

H_1 = Gap between "expected" and "actual" satisfaction is positive.

(Accepted)

We are now examining the third research questin . Third research question is regarding the actual satisfaction of customers of Johor Land Berhad from their purchasing.

The research question is, are customers satisfied with Johor Land Berhad products and services. And the hypothesis which has been developed regarding the customer satisfaction is as follow.

H_1 = Most of the customers are satisfied with houses developed by Johor Land Berhad.

H_0 = Most of the customers are not satisfied with houses developed by Johor Land Berhad

As been stated before, result from "gap analysis" will become a benchmark for this section. The result of gap analysis is used to determine the meaning of "fair" in section C, which is about satisfaction from purchasing they have made. As the result from gap analysis is positive for all of the factors, therefore the term "fair" is defined as, "more towards unsatisfied" and for a factor to be considered as satisfying, it must exceed the term "fair" or 60% of satisfaction index .

Table 5.3.7 ; Summary of section C:

Satisfaction index Table :Customer satisfaction from purchasing.

(Actual satisfaction)

Factors		Weighting factors	Importance (mean)	Weighted score
House	exterior design (actual)	0.1250	6.1884	0.7736
	interior design (actual)	0.1250	6.1014	0.7627
	finishing (actual)	0.1250	5.5217	0.6902
	built quality (actual)	0.1250	5.1159	0.6395
	electrical wiring quality (actual)	0.1250	5.6667	0.7083
	water system quality (actual)	0.1250	5.7101	0.7138
	drainage system quality (actual)	0.1250	6.0870	0.7609
	public amenities (actual)	0.1250	5.8696	0.7337
	WEIGHTED AVERAGE			0.7228
	SATISFACTION INDEX (%)			72.2825

From Table 5.3.7 current satisfaction index for factors grouped under "house", is 72.2825%. Highest weighted score is 0.7736 for the factor of exterior design. The lowest is built quality, 0.6395.

Table 5.3.8 : Summary of section C:
Satisfaction index table: Customer satisfaction from purchasing.
(Actual satisfaction)

Factors		Weighting factors	Importance (mean)	Weighted score
Estate	estate route (actual)	0.2000	6.2681	1.2536
	building mapping (actual)	0.2000	6.8841	1.3768
	environment (actual)	0.2000	6.5652	1.3130
	business prospect (actual)	0.2000	5.7536	1.1507
	access (actual)	0.2000	6.1159	1.2232
	WEIGHTED AVERAGE			1.2635
	SATISFACTION INDEX (%)			126.3476

Table 5.3.8 shows estate satisfaction index is 126.3476%. The highest is 1.3768 which is building mapping and the lowest is 1.1507 which is business prospect.

Table 5.3.9 : Summary of section C:
Satisfaction index table: Customer satisfaction from purchasing.
(Actual satisfaction)

Factors		Weighting factors	Importance (mean)	Weighted score
Developer	did as promised in sales package (actual)	0.5000	5.5797	2.7899
	customer after sale service	0.5000	5.3043	2.6522
	WEIGHTED AVERAGE			2.7210
	SATISFACTION INDEX (%)			272.1000

Table 5.3.9 shows developer satisfaction index is 272.10%. The highest is 2.7899 which is did as promised in sale package and the lowest is 2.6522 which is customer after sale service.

Table 5.3.10 : Gap of satisfaction index (expected and actual)

Group	Satisfaction index		Gap
	Expected	actual	
House	30.5933	72.2825	-41.6892
Estate	138.6084	126.3476	12.2608
Developer	321.0125	272.1000	48.9125

To answer the research question, a gap between customer expectation and customer actual satisfaction is analyzed. The result is shown in Table 5.3.10 Gap between house satisfaction index is - 41.6892 %, estate satisfaction index, 12.2608% and developer satisfaction index 48.9125%. None of the satisfaction index exceed 60%, therefore it is concluded that most of the respondents are not satisfied with their purchasing.

The conclusion is then further strengthening by Table 5.3.11. The Table shows that all of the factors are rated below 60% of 'importance" level. The highest is 57.97%, which is for building mapping and the lowest is 24.64%, which is for the factor of built quality.

Table 5.3.11 : Summary of actual satisfaction from house purchasing

	Factors	Satisfied	Not satisfied	Mean
House	exterior design (actual)	39.13	60.87	6.1884
	interior design (actual)	37.68	62.32	6.1014
	finishing (actual)	30.43	69.57	5.5217
	Built quality (actual)	24.64	75.36	5.1159
	electrical wiring quality (actual)	31.88	68.12	5.6667
	water system quality (actual)	28.99	71.01	5.7101
	drainage system quality (actual)	43.48	56.52	6.0870
	public amenities (actual)	42.03	57.97	5.8696
Estate	estate route (actual)	53.62	46.38	6.2681
	building mapping (actual)	57.97	42.03	6.8841
	environment (actual)	55.07	44.93	6.5652
	business prospect (actual)	36.23	63.77	5.7536
	access (actual)	44.93	55.07	6.1159
Developer	did as promised in sale package (actual)	33.33	66.67	5.5797
	customer after sale service	33.33	66.67	5.3043

Therefore, for the third research question, H_1 which says, most of the customers are satisfied with houses developed by Johor Land Berhad.

, is rejected and H_0 is accepted.

Research question three;

Are customers satisfied with Johor Land Berhad products and services.

H_0 = Most of the customers are not satisfied with houses developed by Johor Land Berhad . (Accepted)

6.0 Conclusion and recommendation

6.1 Conclusion

In this chapter, we will first conclude all of the section in chapter five. Section 5.1 of the chapter describes the respondents. Most of the respondent's are male and working in private sector with income RM 2000 and below. Most of the respondent's and their spouse are aged 35 years and below. Most of them have been married for five to ten years with one to tree child's and mostly did not hire a maid.

There are three parts in section 5.2. Section A is to find out factors considered as important by consumers in buying a house. Section B is to find out respondents satisfaction towards show house, information from brochures and sales agent explanation, thus picture the customer expectation toward the house they are considering to buy. Section C is to determine actual satisfaction from purchasing they have made.

From section A , it s founded that all of the factor are considered as important by the consumers. Three of the factors which are price, estate safety and developer background is considered as very important by the respondent's. From section B, it is founded that most of the respondent's are highly satisfy, therefore the expectation towards actual satisfaction is assume to be high. In

section C, for most of the factors, the respondents have rated it for fair. It shows there is a gap between expectation and actual satisfaction.

In section 5.3, research questions from chapter one are answered by proving the hypothesis. There are three research questions and four hypothesis developed in chapter one. First, second and third research questions, and hypothesis are answered and proven in section 5.3.

The first research question is regarding the factors, which customers take into account when deciding on purchasing and how important are these factors

Referring to Table 5.2.1, 5.2.2 and 5.2.3 where a frequency test is done to all of the factors in Section A: Factors considered important in buying a house, four of thirteen factors are rated four for very important. The rest of the factors are rated three for important.

Then, by referring to Table 5.3.1, 5.3.2 and 5.3.3 of Importance index table, it is found that importance index for all of the factors is exceeding 60% of importance level.

Therefore from the finding, alternative hypotheses,H_1 = Most of the factors stated are considered as important by respondents, s accepted

The second research question, which is, Is there is a gap between "expected" and "actual" satisfaction base on what is promised by Johor Land Berhad, Is then analyzed. Referring to chapter five, Table 5.3.6: Summary of gap analysis (expected and actual) of satisfaction, it is found that all of the factors have a positive gap. Therefore base by the finding, the alternative hypotheses H_1 = Gap between "expected" and "actual" satisfaction is positive, is accepted.

The third research question and hypothesis is then analyzed and proven.
The research question three is, are customers satisfied with Johor Land Berhad products and services.

Table 5.3.6: Summary of gap analysis (expected and actual) of satisfaction it is found that all of the factors have a positive gap. Positive gap means customer expectation has exceed actual satisfaction. Therefore the term fair is being considered as more towards unsatisfying. All of the factors considered in Section C: Customer satisfaction from purchasing (Actual satisfaction), must exceed term fair or 60% of satisfaction index level so as to be considered as satisfying.

Then, by referring to Table 5.3.10: Gap of satisfaction index, it is found that none of the factors exceed 60%. Therefore from the finding, alternative

hypotheses is rejected and null hypothesis which say most of the customers are not satisfied with houses developed by Johor Land Berhad is accepted.

Fourth hypothesis is then proven. The fourth hypothesis is a conclusion of the research questions and hypothesis, which has been answered and proven.

The fourth hypothesis act as a conclusion, it determine either Johor Land Berhad need an improvement or must they maintain their current quality level. The hypothesis is as follows.

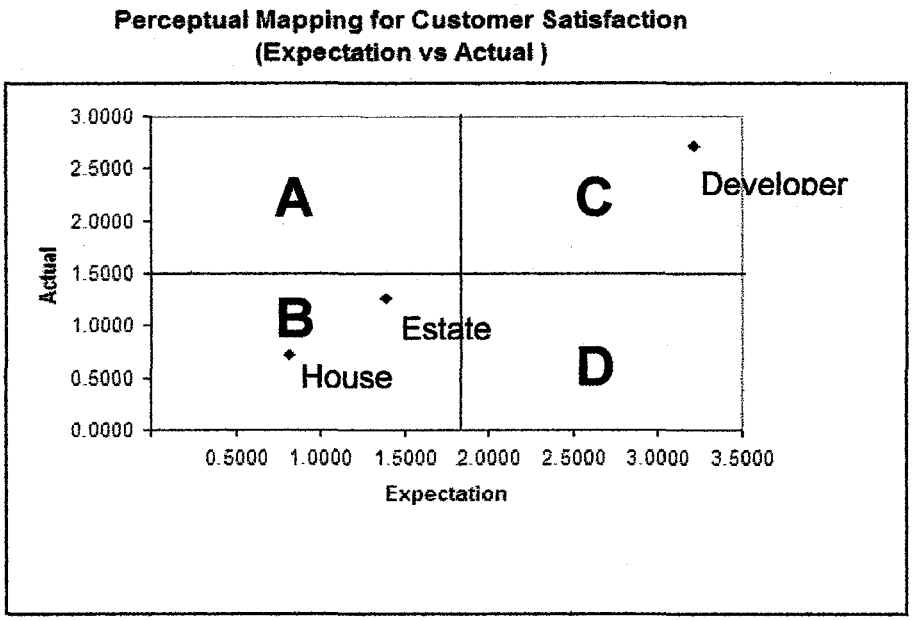
H_1 = Johor Land Berhad. must maintain their current products and services level of quality.

H_0 = Johor Land Berhad . needs to do a lot of improvement on their products and services

base on the hyphothesis which has been proven in section 5.3, for fourth hypotheses, hypothesis alternative which says, Johor Land Berhad. must maintain their current products and services level of quality, is rejected and null hypothesis saying Johor Land Berhad . needs to do a lot of improvement on their products and services, is accepted.

6.2 Recommendation

Base on the findings and conclusion, which has been made, a recommendation is made. From the gap analysis and satisfaction index, which has been done before, a perceptual mapping for Johor Land Berhad is developed. Perceptual mapping is used to picture current situation of the company. From here S.W.O.T, analysis is being done and recommendation is made. The perceptual mapping table is shown below.



Referring to the table above, it shows that current situation of the company is not very good. Section A mean the high actual satisfaction, low expected satisfaction which mean actual satisfaction has exceed customers expectation. This section is the best as it shows that the developer has

deliver satisfaction, which is beyond customer's expectation it is the strength of the company. Section B mean low customer expectation and low satisfaction, this section is a weakness point which must be improve by the developer.

Section C mean high actual satisfaction, high expected satisfaction. It shows the developer has deliver value which is expected by the customers it also as an opportunity for the company. Section D is a threat, it mean low actual satisfaction and high expected satisfaction. It shows that the developer has deliver value which is below customer expectation.

From the perceptual mapping table, it is found that two of the factors, which are the factor of house and estate condition, are both in sector B that is weakness. However, the factor of developer is in the best sector, which is opportunity.

Therefore it is recommended that Johor Land Bhd. should improve their houses quality and the condition of their housing estates. It may be done through continuously monitoring or supervising the quality of works done by their contractors.

The company should make full use of their advantage, which are factors grouped under the factor of developer. Providing the best customer service

and through offering in sale package is their major opportunity. The company should use it along with continuously improving their products and services so that they will be able to cater a bigger market segment in property sector.

As a guide for improvement, Table 6.1can be used as a guidance. In the table , comments of respondents from their housing estate is compiled and grouped into three major groups. The groups are built, finishing, customer service and others.

From the table it is found that a negative comment has exceeded positive comments. The most being comments is finishing where 23% of overall comments are from here and it is all is negative comments. The next is customer service where 26.77% of the comments are from here. 7.16% is positive comments and 19.62% is negative comments.

23.21% of the comments are from built, where 7.16% is positive comments and 16.05% is negative comments. The balance of 8.95% comes from others type of comments. 1.79% is positive comments and 7.16% is negative comments.

Table 6.1 ; List of customer comments toward Johor Land Berhad.

			Frequency		Percent by variables		Overall frequency by group	Percent	Cumulative percent
			each	type	each	type			
Built	Positive	not too bad	1.00	4.00	1.79	7.16	13.00	23.21	23.21
		good quality	1.00		1.79				
		everything is as promise	1.00		1.79				
		100% guaranteed	1.00		1.79				
	Negative	backyard land is too small	1.00	9.00	1.79	16.05			
		bad overall quality	5.00		8.90				
		everything is not as promise	1.00		1.79				
		sensitivity towards contractor work quality	1.00		1.79				
		need to reconstruct	1.00		1.79				
Finishing	Negative	leakage	8.00	23.00	14.29	41.07	23.00	41.07	64.28
		crack	8.00		14.29				
		low quality material	4.00		7.14				
		bad plastering/finishing	3.00		5.36				

Table 6.1; List of customer comments toward Johor Land Berhad.

			Frequency		Percent by variables		Overall frequency by group	Percent	Cumulative percent
			each	type	each	type			
Customer service	Positive	good service	3.00	4.00	5.36	7.15	15.00	26.77	91.05
		quick respond on complaint	1.00		1.79				
	Negative	late respond on complaint	7.00	11.00	12.47	19.62			
		no action taken	2.00		3.57				
		re-occur problem	1.00		1.79				
		bad service	1.00		1.79				
Others	Positive	strategic location	1.00	1.00	1.79	1.79	5.00	8.95	100.00
	Negative	land tenure	1.00	4.00	1.79	7.16			
		less amenities	1.00		1.79				
		pest problem	1.00		1.79				
		need alterative access/exit	1.00		1.79				

Sum of comments: (%)		
	Positive comments	16.10
	Negative comments	83.90

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APPENDICES

- Appendix I – Definitions of terms
- Appendix II - Questionnaire
- Appendix III – Table of crosstab

Appendix I – Definitions of terms

- Respondent
- Customer service
- Quality
- Satisfaction
- Gap

Definition of terms

Respondents ;

Residents of housing estates developed by Johor Land Berhad

Customer service ;

A customer oriented corporate philosophy that integrates and manages all of the elements of the customer interface to meet or exceed customer quality expectation.

Quality ;

Degree to which a company meets customers' perceptions on a variety

of characteristics of the delivered products/services

Satisfaction ;

Extent to which a product's perceived performance matches buyer expectations.

Gap ;

Differences between expectation and actual satisfaction

Appendix II - Questionnaire

- Distributed to the respondents using simple random technique

PLEASE TICK (/)

I) Gender ☐ Male ☐ Female

II) Ownership Buyer ☐ Rent ☐ Family ☐

Please state _____

III) Working sector Private ☐ Government ☐ Own Business ☐

Please state _____

SECTION A
FACTORS CONSIDERED IN BUYING A HOUSE
I THINK THE FACTOR IS

	Unconsidered	Less Important	Important	Very Important
I) House				
- Price	☐	☐	☐	☐
- Design	☐	☐	☐	☐
- Interior design				
- Location within estate	☐	☐	☐	☐
- Material quality	☐	☐	☐	☐
II) Estate				
- Location	☐	☐	☐	☐
- Public amenities	☐	☐	☐	☐
- Environment	☐	☐	☐	☐
- Safety	☐	☐	☐	☐
- Prospect for business	☐	☐	☐	☐
III) Developer				
- Background	☐	☐	☐	☐
- Sale package	☐	☐	☐	☐
- Customer service	☐	☐	☐	☐

PLEASE CIRCLE THE MOST SUITABLE ANSWER

SECTION B
EXPECTATION OF SATISFACTION

BASE ON SHOW HOUSE, BROCHURE AND SALES AGENT EXPLAINATION , FOR THE FOLLOWING FACTORS, I THINK;

	Very Unsatisfying	Fair	Very Satisfying
House			
- Interior design	1.....2.....3....4.....5.....6.....7....8....9....10		
- Exterior design	1.....2.....3... 4.....5.....6.....7....8....9....10		
- Finishing	1.....2.....3... 4.....5..... 6... .7....8....9....10		
- Built quality	1.....2.....3....4. ... 5.....6.....7....8....9... .10		
- Electrical wiring	1.....2.....3....4.....5.....6.....7....8... .9....10		
Quality	1.....2.....3...4.....5.....6.....7....8 ....9.... 10		
- Water system quality	1.....2.....3...4.....5.....6.....7....8... .9... .10		
- Drainage system quality	1.....2.....3...4.....5.....6.....7....8... .9....10		
Housing estate			
- Public amenities	1.....2.....3...4.....5.....6.....7....8....9... . 10		
- Estate route	1.....2.....3...4.....5.....6.....7....8....9... .10		
- Building mapping	1.....2.....3...4.....5.....6.....7....8....9... .10		
- Environment	1.....2.....3...4.....5.....6.....7....8... .9.....10		
- Prospect for business	1.....2.....3... 4.....5.....6....7... 8... .9 .. .10		
- Access / exit	1.... 2.....3... 4.....5.....6.....7....8... .9....10		
Developer			
- Sale package	1.....2.....3...4.....5.....6.....7....8....9....10		
- Customer service	1.....2.....3...4.....5.....6.....7....8....9....10		

PLEASE CIRCLE THE MOST SUITABLE ANSWER

SECTION C
ACTUAL OF SATISFACTION

AFTER I HAVE OCCUPIED THIS HOUSE, I FOUND THAT THE FOLLOWING FACTORS ARE ;

	Very Unsatisfying				**Fair**				**Very Satisfying**
House									
- Interior design	1	2	3	4	5	6	7	8	9 10
- Exterior design	1	2	3	4	5	6	7	8	9 10
- Finishing	1	2	3	4	5	6	7	8	9 10
- Built quality	1	2	3	4	5	6	7	8	9 10
- Electrical wiring	1	2	3	4	5	6	7	8	9 10
Quality	1	2	3	4	5	6	7	8	9 10
- Water system quality	1	2	3	4	5	6	7	8	9 10
- Drainage system quality	1	2	3	4	5	6	7	8	9 10
Housing estate									
- Public amenities	1	2	3	4	5	6	7	8	9 .10
- Estate route	1	2	3	4	5	6	7	8	9 10
- Building mapping	1	2	3	4	5	6	7	8	9 10
- Environment	1	2	3	4	5	6	7	8	9 .10
- Prospect for business	1	2	3	4	5	6	7	8	9 10
- Access / exit	1	2	3	4	5	6	7	8	9 .10
Developer									
- Did as promised	1	2	3	4	5	6	7	8	9 10
- Customer after Sale service	1	2	3	4	5	6	7	8	9 10

SECTION D
IN MY OPINION, THE DEVELOPER IS ;

(1)	(2)	(3)	(4)	(5)
VERY UNSATISFYING	**UNSATISFYING**	**FAIR**	**SATISFYING**	**VERY SATISFYING**

Please comment ;

_____

_____

_____

SECTION E

		Respondent	Spouse
Age		___	___
Income level	Below RM 2000	☐	☐
	RM 2001 - RM 3000	☐	☐
	RM 3001 - RM 4000	☐	☐
	RM 4001 - RM 5000	☐	☐
	Above RM 5000	☐	☐

How long have you been married _____
years

Number of children's _____

Hired maid Yes☐ No☐

Appendix III – Table of crosstab

- Crosstab between demographic factors and customers actual level of satisfaction

- Demographic factors
  - Work sector
  - Respondent age
  - Respondent income level
  - Spouse income level

- Actual satisfaction level factors
  - Built quality
  - Public amenities
  - Customer after sale service
  - Environment

Definition of terms

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- Demographic factors
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  - Respondent age
  - Respondent income level
  - Spouse income level

- Actual satisfaction level factors
  - Built quality
  - Public amenities
  - Customer after sale service
  - Environment

Case Processing Summary

	Cases			
	Missing		Total	
	N	Percent	N	Percent
built quality (actual) * work sector	0	.0%	69	100.0%
built quality (actual) * respondent age	0	.0%	69	100.0%
built quality (actual) * respondent income level	0	.0%	69	100.0%
built quality (actual) * spouse income level	0	.0%	69	100.0%
public amenities (actual) * work sector	0	.0%	69	100.0%
public amenities (actual) * respondent age	0	.0%	69	100.0%
public amenities (actual) * respondent income level	0	.0%	69	100.0%
public amenities (actual) * spouse income level	0	.0%	69	100.0%
customer aftersale service * work sector	0	.0%	69	100.0%
customer aftersale service * respondent age	0	.0%	69	100.0%
customer aftersale service * respondent income level	0	.0%	69	100.0%
customer aftersale service * spouse income level	0	.0%	69	100.0%
environment (actual) * work sector	0	.0%	69	100.0%
environment (actual) * respondent age	0	.0%	69	100.0%
environment (actual) * respondent income level	0	.0%	69	100.0%
environment (actual) * spouse income level	0	.0%	69	100.0%

Case Processing Summary

	Cases	
	Valid	
	N	Percent
built quality (actual) * work sector	69	100.0%
built quality (actual) * respondent age	69	100.0%
built quality (actual) * respondent income level	69	100.0%
built quality (actual) * spouse income level	69	100.0%
public amenities (actual) * work sector	69	100.0%
public amenities (actual) * respondent age	69	100.0%
public amenities (actual) * respondent income level	69	100.0%
public amenities (actual) * spouse income level	69	100.0%
customer aftersale service * work sector	69	100.0%
customer aftersale service * respondent age	69	100.0%
customer aftersale service * respondent income level	69	100.0%
customer aftersale service * spouse income level	69	100.0%
environment (actual) * work sector	69	100.0%
environment (actual) * respondent age	69	100.0%
environment (actual) * respondent income level	69	100.0%
environment (actual) * spouse income level	69	100.0%

built quality (actual) * work sector

Crosstab

Count

		work sector		
		private	government	own business
built quality (actual)	(1) most unsatisfied	37	8	6
	(3) umost satisfied	13	4	
Total		50	12	6

Crosstab

Count

		work sector	
		not working	Total
built quality (actual)	(1) most unsatisfied	1	52
	(3) umost satisfied		17
Total		1	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.202	
	Cramer's V	.202	
	Contingency Coefficient	.198	
Interval by Interval	Pearson's R	-.126	.083
Ordinal by Ordinal	Spearman Correlation	-.081	.107
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.419
	Cramer's V		.419
	Contingency Coefficient		.419
Interval by Interval	Pearson's R	-1.042	.301[c]
Ordinal by Ordinal	Spearman Correlation	-.664	.509[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

built quality (actual) * respondent age

Crosstab

Count

		respondent age		
		35 and below	36 - 40	41 - 45
built quality (actual)	(1) most unsatisfied	25	16	6
	(3) umost satisfied	9	3	2
Total		34	19	8

Crosstab

Count

		responden	
		over 45	Total
built quality (actual)	(1) most unsatisfied	5	52
	(3) umost satisfied	3	17
Total		8	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.151	
	Cramer's V	.151	
	Contingency Coefficient	.149	
Interval by Interval	Pearson's R	.048	.131
Ordinal by Ordinal	Spearman Correlation	.011	.128
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.665
	Cramer's V		.665
	Contingency Coefficient		.665
Interval by Interval	Pearson's R	.393	.695[c]
Ordinal by Ordinal	Spearman Correlation	.090	.929[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

built quality (actual) * respondent income level

Crosstab

Count

		respondent income level		
		.00	below RM 2000	RM 2000 - RM 3000
built quality (actual)	(1) most unsatisfied	2	18	18
	(3) umost satisfied		10	6
Total		2	28	24

Crosstab

Count

		respondent income level		
		RM 3001 - RM 4000	RM 4001 - RM 5000	Exceed RM 5000
built quality (actual)	(1) most unsatisfied	8	2	1
	(3) umost satisfied	1		
Total		9	2	1

Crosstab

Count

		responden	
		none	Total
built quality (actual)	(1) most unsatisfied	3	52
	(3) umost satisfied		17
Total		3	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.279	
	Cramer's V	.279	
	Contingency Coefficient	.268	
Interval by Interval	Pearson's R	-.214	.072
Ordinal by Ordinal	Spearman Correlation	-.208	.102
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.499
	Cramer's V		.499
	Contingency Coefficient		.499
Interval by Interval	Pearson's R	-1.791	.078[c]
Ordinal by Ordinal	Spearman Correlation	-1.739	.087[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

built quality (actual) * spouse income level

Crosstab

Count

		spouse income level		
		.00	below RM 2000	RM 2000 - RM 3000
built quality (actual)	(1) most unsatisfied	1	19	14
	(3) umost satisfied	1	8	3
Total		2	27	17

Crosstab

Count

		spouse income level		
		RM 3001 - RM 4000	RM 4001 - RM 5000	Exceed RM 5000
built quality (actual)	(1) most unsatisfied	4	2	1
	(3) umost satisfied	2		
Total		6	2	1

Crosstab

Count

		spouse	
		none	Total
built quality (actual)	(1) most unsatisfied	11	52
	(3) umost satisfied	3	17
Total		14	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.202	
	Cramer's V	.202	
	Contingency Coefficient	.198	
Interval by Interval	Pearson's R	-.093	.118
Ordinal by Ordinal	Spearman Correlation	-.115	.122
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.833
	Cramer's V		.833
	Contingency Coefficient		.833
Interval by Interval	Pearson's R	-.762	.449[c]
Ordinal by Ordinal	Spearman Correlation	-.945	.348[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

public amenities (actual) * work sector

Crosstab

Count

		work sector		
		private	government	own business
public amenities (actual)	(1) most unsatisfied	27	6	6
	(3) umost satisfied	23	6	
Total		50	12	6

Crosstab

Count

		work sector	
		not working	Total
public amenities (actual)	(1) most unsatisfied	1	40
	(3) umost satisfied		29
Total		1	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.288	
	Cramer's V	.288	
	Contingency Coefficient	.276	
Interval by Interval	Pearson's R	-.222	.089
Ordinal by Ordinal	Spearman Correlation	-.168	.110
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.127
	Cramer's V		.127
	Contingency Coefficient		.127
Interval by Interval	Pearson's R	-1.866	.066[c]
Ordinal by Ordinal	Spearman Correlation	-1.399	.167[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

public amenities (actual) * respondent age

Crosstab

Count

		respondent age		
		35 and below	36 - 40	41 - 45
public amenities (actual)	(1) most unsatisfied	17	12	6
	(3) umost satisfied	17	7	2
Total		34	19	8

Crosstab

Count

		responden	
		over 45	Total
public amenities (actual)	(1) most unsatisfied	5	40
	(3) umost satisfied	3	29
Total		8	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.175	
	Cramer's V	.175	
	Contingency Coefficient	.172	
Interval by Interval	Pearson's R	-.137	.118
Ordinal by Ordinal	Spearman Correlation	-.156	.118
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.549
	Cramer's V		.549
	Contingency Coefficient		.549
Interval by Interval	Pearson's R	-1.135	.260[c]
Ordinal by Ordinal	Spearman Correlation	-1.294	.200[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

public amenities (actual) * respondent income level

Crosstab

Count

		respondent income level		
		.00	below RM 2000	RM 2000 - RM 3000
public amenities (actual)	(1) most unsatisfied	2	17	14
	(3) umost satisfied		11	10
Total		2	28	24

Crosstab

Count

		respondent income level		
		RM 3001 - RM 4000	RM 4001 - RM 5000	Exceed RM 5000
public amenities (actual)	(1) most unsatisfied	4	1	1
	(3) umost satisfied	5	1	
Total		9	2	1

Crosstab

Count

		responden	
		none	Total
public amenities (actual)	(1) most unsatisfied	1	40
	(3) umost satisfied	2	29
Total		3	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.233	
	Cramer's V	.233	
	Contingency Coefficient	.227	
Interval by Interval	Pearson's R	.132	.118
Ordinal by Ordinal	Spearman Correlation	.136	.118
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.712
	Cramer's V		.712
	Contingency Coefficient		.712
Interval by Interval	Pearson's R	1.092	.279[c]
Ordinal by Ordinal	Spearman Correlation	1.124	.265[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

public amenities (actual) * spouse income level

Crosstab

Count

		spouse income level		
		.00	below RM 2000	RM 2000 - RM 3000
public amenities (actual)	(1) most unsatisfied		14	13
	(3) umost satisfied	2	13	4
Total		2	27	17

Crosstab

Count

		spouse income level		
		RM 3001 - RM 4000	RM 4001 - RM 5000	Exceed RM 5000
public amenities (actual)	(1) most unsatisfied	3		1
	(3) umost satisfied	3	2	
Total		6	2	1

Crosstab

Count

		spouse	
		none	Total
public amenities (actual)	(1) most unsatisfied	9	40
	(3) umost satisfied	5	29
Total		14	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.370	
	Cramer's V	.370	
	Contingency Coefficient	.347	
Interval by Interval	Pearson's R	-.090	.119
Ordinal by Ordinal	Spearman Correlation	-.129	.122
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.151
	Cramer's V		.151
	Contingency Coefficient		.151
Interval by Interval	Pearson's R	-.741	.461[c]
Ordinal by Ordinal	Spearman Correlation	-1.068	.289[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

customer aftersale service * work sector

Crosstab

Count

		work sector		
		private	government	own business
customer aftersale service	.00		1	
	(1) most unsatisfied	31	8	6
	(3) umost satisfied	19	3	
Total		50	12	6

Crosstab

Count

		work sector	
		not working	Total
customer aftersale service	.00		1
	(1) most unsatisfied	1	46
	(3) umost satisfied		22
Total		1	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.363	
	Cramer's V	.256	
	Contingency Coefficient	.341	
Interval by Interval	Pearson's R	-.256	.073
Ordinal by Ordinal	Spearman Correlation	-.253	.095
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.169
	Cramer's V		.169
	Contingency Coefficient		.169
Interval by Interval	Pearson's R	-2.163	.034[c]
Ordinal by Ordinal	Spearman Correlation	-2.143	.036[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

customer aftersale service * respondent age

Crosstab

Count

		respondent age		
		35 and below	36 - 40	41 - 45
customer aftersale service	.00		1	
	(1) most unsatisfied	24	13	3
	(3) umost satisfied	10	5	5
Total		34	19	8

Crosstab

Count

		responden	
		over 45	Total
customer aftersale service	.00		1
	(1) most unsatisfied	6	46
	(3) umost satisfied	2	22
Total		8	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.308	
	Cramer's V	.218	
	Contingency Coefficient	.294	
Interval by Interval	Pearson's R	.063	.118
Ordinal by Ordinal	Spearman Correlation	.061	.120
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.365
	Cramer's V		.365
	Contingency Coefficient		.365
Interval by Interval	Pearson's R	.517	.607[c]
Ordinal by Ordinal	Spearman Correlation	.501	.618[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

customer aftersale service * respondent income level

Crosstab

Count

		respondent income level		
		.00	below RM 2000	RM 2000 - RM 3000
customer aftersale service	.00		1	
	(1) most unsatisfied	2	22	13
	(3) umost satisfied		5	11
Total		2	28	24

Crosstab

Count

		respondent income level		
		RM 3001 - RM 4000	RM 4001 - RM 5000	Exceed RM 5000
customer aftersale service	.00			
	(1) most unsatisfied	4	2	1
	(3) umost satisfied	5		
Total		9	2	1

Crosstab

Count

		responden	
		none	Total
customer aftersale service	.00		1
	(1) most unsatisfied	2	46
	(3) umost satisfied	1	22
Total		3	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.390	
	Cramer's V	.276	
	Contingency Coefficient	.363	
Interval by Interval	Pearson's R	.139	.112
Ordinal by Ordinal	Spearman Correlation	.250	.108
N of Valid Cases		69	

Crosstab

Count

		spouse	
		none	Total
customer aftersale service	.00		1
	(1) most unsatisfied	10	46
	(3) umost satisfied	4	22
Total		14	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.203	
	Cramer's V	.143	
	Contingency Coefficient	.199	
Interval by Interval	Pearson's R	-.021	.117
Ordinal by Ordinal	Spearman Correlation	.005	.120
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.997
	Cramer's V		.997
	Contingency Coefficient		.997
Interval by Interval	Pearson's R	-.172	.864[c]
Ordinal by Ordinal	Spearman Correlation	.041	.968[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

environment (actual) * work sector

Crosstab

Count

		work sector		
		private	government	own business
environment (actual)	(1) most unsatisfied	21	6	4
	(3) umost satisfied	29	6	2
Total		50	12	6

Crosstab

Count

		work sector	
		not working	Total
environment (actual)	(1) most unsatisfied	1	32
	(3) umost satisfied		37
Total		1	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.194	
	Cramer's V	.194	
	Contingency Coefficient	.190	
Interval by Interval	Pearson's R	-.184	.112
Ordinal by Ordinal	Spearman Correlation	-.159	.119
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.458
	Cramer's V		.458
	Contingency Coefficient		.458
Interval by Interval	Pearson's R	-1.534	.130[c]
Ordinal by Ordinal	Spearman Correlation	-1.320	.191[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

environment (actual) * respondent age

Crosstab

Count

		respondent age		
		35 and below	36 - 40	41 - 45
environment (actual)	(1) most unsatisfied	14	10	2
	(3) umost satisfied	20	9	6
Total		34	19	8

Crosstab

Count

		responden	
		over 45	Total
environment (actual)	(1) most unsatisfied	6	32
	(3) umost satisfied	2	37
Total		8	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.263	
	Cramer's V	.263	
	Contingency Coefficient	.254	
Interval by Interval	Pearson's R	-.131	.118
Ordinal by Ordinal	Spearman Correlation	-.115	.120
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.189
	Cramer's V		.189
	Contingency Coefficient		.189
Interval by Interval	Pearson's R	-1.085	.282[c]
Ordinal by Ordinal	Spearman Correlation	-.948	.346[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

environment (actual) * respondent income level

Crosstab

Count

		respondent income level		
		.00	below RM 2000	RM 2000 - RM 3000
environment (actual)	(1) most unsatisfied	2	12	9
	(3) umost satisfied		16	15
Total		2	28	24

Crosstab

Count

		respondent income level		
		RM 3001 - RM 4000	RM 4001 - RM 5000	Exceed RM 5000
environment (actual)	(1) most unsatisfied	5	2	1
	(3) umost satisfied	4		
Total		9	2	1

Crosstab

Count

		responden	
		none	Total
environment (actual)	(1) most unsatisfied	1	32
	(3) umost satisfied	2	37
Total		3	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.323	
	Cramer's V	.323	
	Contingency Coefficient	.307	
Interval by Interval	Pearson's R	-.043	.122
Ordinal by Ordinal	Spearman Correlation	-.033	.123
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.304
	Cramer's V		.304
	Contingency Coefficient		.304
Interval by Interval	Pearson's R	-.350	.727[c]
Ordinal by Ordinal	Spearman Correlation	-.273	.786[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

environment (actual) * spouse income level

Crosstab

Count

		spouse income level		
		.00	below RM 2000	RM 2000 - RM 3000
environment (actual)	(1) most unsatisfied		11	9
	(3) umost satisfied	2	16	8
Total		2	27	17

Crosstab

Count

		spouse income level		
		RM 3001 - RM 4000	RM 4001 - RM 5000	Exceed RM 5000
environment (actual)	(1) most unsatisfied	3	1	1
	(3) umost satisfied	3	1	
Total		6	2	1

Crosstab

Count

		spouse	
		none	Total
environment (actual)	(1) most unsatisfied	7	32
	(3) umost satisfied	7	37
Total		14	69

Symmetric Measures

		Value	Asymp. Std. Error[a]
Nominal by Nominal	Phi	.230	
	Cramer's V	.230	
	Contingency Coefficient	.224	
Interval by Interval	Pearson's R	-.110	.119
Ordinal by Ordinal	Spearman Correlation	-.141	.118
N of Valid Cases		69	

Symmetric Measures

		Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi		.725
	Cramer's V		.725
	Contingency Coefficient		.725
Interval by Interval	Pearson's R	-.908	.367[c]
Ordinal by Ordinal	Spearman Correlation	-1.166	.248[c]
N of Valid Cases			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.