ANALYSIS OF THE CURRENT HOUSING MARKET IN COLOMBO METRO REGION TO ENHANCE THE PROSPECTIVE CONSUMER SATISFACTION

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ABSTRACT

Housing is an essential element of social development. One consumer may purchase such a house once for his/her entire lifetime. Therefore, when making a housing purchasing decision, it is intensively explored more than it is considered in purchasing other consumable products. Property developer has the responsibility of understanding the consumer behaviour. The main research problem is the lack of attention towards the analysis of the current housing market of the Colombo Metro region from the consumer perspective. An extensive literature synthesis was carried out to gather information on the general attributes of the housing market and determinants of housing supply. Furthermore, investigation on the housing demand and consumer behaviour reference to Colombo Metro region were conducted through the literature synthesis. Subsequently, case studies and a survey have been adopted to proceed with the study following the mixed research approach. Semi-structured interviews for case studies and questionnaire survey were employed as the primary data collection. The primary data analysis was conducted through manual content analysis, Relative Important Index (RII) techniques and elementary statistical analysis. The findings revealed, how the prospective consumers are considering Person, Product, Place, Price related factors when purchasing a residential property. For an example this research discovered that quick access to Colombo is the highly considered fact by the consumers. It revealed that the consumer behaviour in Colombo Metro region is different from other contexts. Therefore, carrying out a study to analyse the current housing will be very important to maximize the consumer satisfaction in house purchasing.

Keywords: *Consumer Behaviour; Consumer Satisfaction; Housing Market.*

1.   INTRODUCTION

Housing is an essential element of social development, not only providing shelter and space but also leading to other material and social resources. Mainly, it impacts consumption patterns and household incomes and the future expectations of consumers (Niriellage, 2011). According to Nastaran and Ranaei (2010) housing has been an essential human necessity throughout history. Further, after the Universal Declaration of Human Rights 1948, they expressed that an essential factor of people's standard of living is measured through housing necessity. Nevertheless, internal (and international)

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migration, poverty, shortage building lands, improper infrastructure planning, and increasing urbanization led to housing, an acute problem in developing countries. Housing is considered as a normal good, and it denotes if the incomes of the household rise, the household will tend to purchase a more expensive house comprised of more facilities than the prior residence (Waddell, 2000). Niriellage (2011) expressed that the Sri Lankan government participates in taxation, expenditure, regulation amending to capital market gain while improving housing facilities for the low-income households. Housing price is impacted due to public policy law and regulations, and the government has several building codes, housing codes and zoning ordinances as main determinants of house costs (McDonald, 2012). Niriellage (2011) further explained Banking facilities are highly influenced by people to gain interest in private housing, and it lifts the housing market to a high level.

There are several researches done on consumer satisfaction of house purchasing. In the research called "Housing tenure status and housing satisfaction" (Lane and Kinesy, 1980) express the relationship between demographic factors of the tenure and house purchasing satisfaction. In that research author identified people live in different types of dwellings but the satisfaction is comparatively based on the quality of the structure of house. Research done by Muellbauer and Murphy (2008) determined that house prices are highly impact the satisfaction of the consumer. Further author stated that equilibrium of housing supply and demand will lead to affordable house price.

Kenn, et al., (2021) done research about the house quality, financial capabilities, and government policies influence on the purchasing decision of a property consumers. That research concluded that environmental factor and subjective norm factor have positive influence as well as financial factor has a negative influence on the purchasing decision. Since the consumer behaviour in Colombo Metro region is different from other contexts, carrying out a study to analyse the current housing market from the consumers perspective will be very important to maximize the consumer satisfaction in house purchasing. The aim of the study is to investigate the current housing market in the Colombo Metro region while reviewing the consumer behaviour in the housing market to suggest strategies to maximize the prospective consumer satisfaction.

2. LITERATURE REVIEW

2.1 GENERAL ATTRIBUTES OF THE HOUSING MARKET

McDonald (2012) states that housing could be identified as a consumer good and an economic asset. Therefore, it relevant to the fundamental economic analysis of consumer behaviour. Furthermore, housing comes to peoples' main achievement in their lives based on several factors. Housing is a category in the real estate field. Real estate is comprised of two main components, which are housing and commercial. The above categorization is based on the functional purpose of real estate (Vasiliene, et al., 2019). The housing market depends on several factors, and McDonald (2012) identified them as the choice of residential location, housing prices and land values, quality of life from the consumers' perspective. Location is a mandatory factor that the consumer considers due to the neighbourhood surrounding, schools, employment location, shopping, and access to transport. According to Niriellage (2011), growth of a city is measured equally by the growth of population and new buildings constructed. Due to the rapid urbanization and frequent change in the economy, people cannot achieve their housing requirements.

Furthermore, Niriellage (2011) has elaborate that the government has a massive responsibility to develop the housing market for the nation. Not only the government, both public and private stakeholders should play an important role to fulfil the requirement mentioned above.

2.2 DETERMINANTS OF HOUSING SUPPLY

Determinants of housing supply could be identified as population growth, land component and government policies. The housing market trend is always going parallel with the demographic trends. Compared to other data statistics, population data is the most reliable and high level of certainty, and the minimum assumptions have consisted of it. Research is done by Reed (2016) focused on the population trend directly impacted by the housing market. The land is a significant factor that determines the housing market (Martinuzzi, et al., 2007). Government impact in the housing market is specified in several kinds of research. In 1977, the government introduced a complete package of economic developments that changed the economic condition in Sri Lanka according to Liyanage (1997) stating that the government had planned to move with the market despite acting against it. Medagedara (1988) has indicated several factors had a direct impact on the price increase of the lands.

2.3 HOUSING DEMAND AND CONSUMER BEHAVIOUR

Consumers of real estate consider a wide range of elements. Individuals' standards, attitudes, and ambitions, as well as those of their families, businesses, government officials, and others, all influence demand for real estate (Mothersbaugh, et al., 2020). Demand for housing in the economy varies depending on consumer income, the price of other items, and, most importantly, household preferences. As a result, a consumer's decision to purchase a certain house is a critical aspect in determining housing market demand. The consumer behaviour has been elaborated as the purchasing decision of a particular product or service (Morden, 1991). Consumer as a living creature, it has very subjective desires, expectations, and attitudes. Therefore, it is mandatory to have a clear perception of consumers' characteristics and purchasing behaviours. In any housing supply firm marketing strategies is the best solution to identify it properly. Marketing strategies is basically created through marketing mix i.e., product, place, price, and promotion (4Ps). Indeed, this is a combination of elements that meets the consumer's needs providing certain values. Therefore, it can be pointed out that the consumer should be the focal point of such marketing strategy. Thus, in view of the fact, the marketing strategy should be formulated based on the consumer behaviours. Deriving from the above marketing strategy, consumer behaviour of housing market could be discussed as Person, Product, Place and Price.

2.4 IMPORTANCE OF IDENTIFYING THE HOUSING MARKET AND CONSUMER BEHAVIOUR

The ineffectual plan of land development has resulted in an uncontrolled urban sprawl. Urbanization is a central challenge in different regions of the world, and it is highly affected in densely populated regions. Smart growth and conservation efforts are important for identifying the ecosystem impacts on human activities (Martinuzzi, et al., 2007). Every individual's main intention is to obtain better houses for their living. To achieve the best status of living, the housing market trend should be identified to better

the whole society. The author examined that the material living standards, health, education, personal activities, and social connection could be considered as main factors (McDonald, 2012). Consumer as a living creature it has very subjective desires, expectations, and attitudes (Mothersbaugh, et al., 2020). Therefore, it is mandatory to have a clear perception of consumers' characteristics and purchasing behaviours in housing market.

3. METHODOLOGY

Since the research problem is "how the consumers' perspective on determining factors of housing market changes from person to person?", it is putting the research in assessing opinions and behaviour perspectives, answering the questions that begins with "how". So, the most relevant approach for the first phase is the qualitative method. In the first phase, it discovers what supply and demand side determining factors are considered. Two cases in the housing market in Colombo Metro region are referred from the consumers' perspective. The housing suppliers were selected using purposive sampling since one represents as a government entity and other one as the highest market share in middle income housing supplier. This study is limited to two major housing suppliers mainly due to accessibility constraints.

In the second phase a quantitative approach based on the collected records and evidence is carried out to find the highest impacting determinant out of the above discussed factors in the first phase. Hence, this method was used to analyse the factors considered before purchasing a housing in Colombo Metro region of the prospective housing consumers. It is suitable to elaborate the consumers behaviour while focusing to an appropriate sample size. Finally, it can be determined that this research applied the mixed approach to enrich the quality of the analysis and findings while progressing with this research.

At final phase a with the data collected from the questionnaire survey a relationship study was carried out to determine relation between each determinant factors and income levels.

4. FINDINGS AND ANALYSIS

4.1 CASE STUDY ANALYSIS

Table 1 presents the stakeholders that were interviewed using a semi-structured interview method to identify the supply and demand side factors of housing market from two cases.

Table 1: Profiles of selected organizations under cases

Organization	Respondent	Experience	Description
A	C1R1	5 years	Project Architect in Middle income housing program
	CIR2	20 years	Assistant Director - Real Estate Development Division
	C1R3	16 years	Assistant Director - Colombo Metro region planning Division
B	C2R1	6 years	Assistant Architect
	C2R2	5 years	Assistant Marketing Manager
	C2R3	6 years	Quantity Surveyor

In the case study analysis, it is summarized that, both cases are not much concern about the population growth rates. Further, private sector housing developer mentioned that it changes due to externalities. Under land component, government housing supplier said that they select most commercially viable location they are vesting the lands and centrality is considered. Private sector housing supplier said that context analysis is done and "New City Concept" which provides all the facilities within the boundary of the housing complex. They also considered the high future value of a particular land. Regarding the government policies, government sector housing supplier stated that PPP projects are in practice. Most of the projects are BOI projects. Abide by Condominium act; EIA, PPC adhering to the building regulations enacted by UDA; Less time for approvals. Even private sector housing supplier stated same, and they mentioned that time is higher for approvals for their projects.

4.2   QUESTIONNAIRE SURVEY ANALYSIS

The questionnaire survey was distributed among 120 prospective housing consumers in Colombo Metro region. The collected data was analysed using SPSS version 20 to derive the primary objective of the research. All the respondents were asked to rank the consideration scale while purchasing a built residential property (refer Table 2).

Table 2: Ranking of determinants according to the RII values

Determinant of house purchasing decision	Category	RII	Rank
Quick access to Colombo city	Place Related	0.832565284	1
Price of property	Price Related	0.814132104	2
Recreational facilities (gym, swimming pools, garden area)	Product Related	0.807987711	3
Proximity to shopping malls	Place Related	0.806451613	4
In-built amenities (central Gas system, Solar PV, Electrical vehicle charging)	Product Related	0.795698925	5
Proximity to hospital	Place Related	0.795698925	6
Quality of construction	Product Related	0.78801	7
Size of living room, bedrooms, kitchen, and dining	Product Related	0.746543779	8
Proximity to leading schools	Place Related	0.740399386	9
Safety/crime rate	Place Related	0.715821813	10
Design	Product Related	0.700460829	11
Flexibility of agreements by the developer	Product Related	0.668202765	12
Easiness of taking loans from banks	Price Related	0.657450077	13
The time is taken to pay back the loan	Price Related	0.657450077	14
The status level of neighbours	Place Related	0.655913978	15
Legal environment	Product Related	0.649769585	16
Increment of property value in future	Price Related	0.606758833	17
Astrological aspects of a house	Product Related	0.360983103	18

People who are willing to purchase a property with the main intention of quick access to Colombo Business District. Next in order, the proximity to hospital, quality of construction, size of living room, bedrooms, kitchen, and dining, proximity to leading schools, safety/crime rate, design of the property, flexibility of agreements by the developer and easiness to take bank loans are considered before a purchase of a house in Colombo metro region. Least considered determent of house purchasing is the astrological aspects of a house. It shows the least RII value comparing to other determinants. Most of the respondents are not much considered in astrological aspect in already built properties before purchasing them as residential properties.

4.3 RELATIONSHIP BETWEEN PRODUCT, PRICE AND PLACE RELATED FACTORS AND PROSPECTIVE CONSUMER'S CONSIDERATION

Consideration of the Product, Price, and Place related factors before purchasing a residential property is varying according to the respondents' demographic attributes such as income, age, experience on the housing market, etc. According to the questionnaire survey results, relationship between product related factor vs the prospective consumers' income is investigated using elementary statistical analysis method. Because income is a crucial factor for prospective consumers' housing decision. For the analysis, following statements are considered. The main three factors; "Product, Price & Place" are considered on the perspective of a fourth factor of "Person". Table 3 presents the house purchasing facts derived through literature review.

Table 3: House purchasing facts derived through literature review

		Statement
Product related	01	I would consider the design before I purchase a residential property
	02	I would consider the in-built amenities (central Gas system, Solar PV, Electrical vehicle charging) before I purchase a residential property
	03	I would consider recreational facilities (gym, swimming pools, garden area) before I purchase a residential property
	04	I would consider astrological aspects of a house before I purchase a residential property
Place related	05	I would consider the quick access to Colombo city before I purchase a residential property
	06	I would consider the status level of neighbours before I purchase a residential property
	07	I would consider the Safety/crime rate before I purchase a residential property before I purchase a residential property
Price related	08	I would consider the easiness of taking loans from banks before I purchase a residential property
	09	I would consider the increment of property value in future before I purchase a residential property

Figure 1 represents the people's agreement towards whether the design is considered or not before a housing purchase. Considering the portion, who strongly and averagely agreed that housing design matters, the bar chart is created showing their income levels. So, Figure 1 explains, that with the increase of the income, people tend to consider the design of the house more before purchasing it.
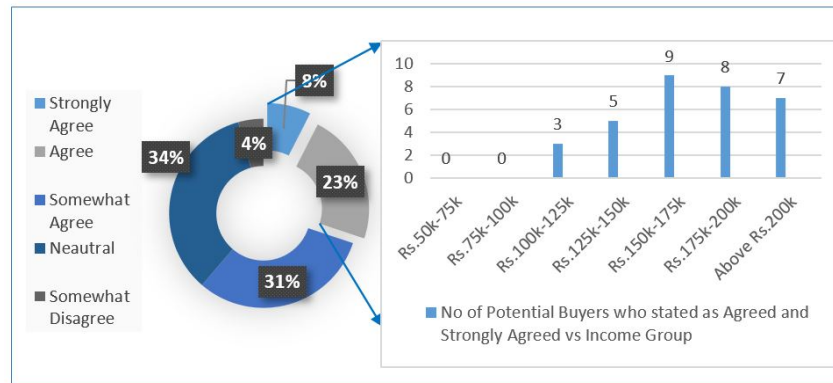
Figure 1: Relationship between the income and consideration of the design before purchasing a residential property

Table 4 presents the percentage of prospective housing consumers who "Agreed" or "Strongly Agreed" on Statement 01.

Table 4: Percentage of prospective housing consumers who "Agreed" or "Strongly Agreed" on Statement 01

Single Family detached House	Single Family detached House in gated Community	Apartment	Apartment in mixed development
40.74%	37.03%	11.11%	11.11%

Significant relationship which shows most of the respondent who strongly agreed or agreed on the above statement are selected their house type as single family detached house or single family detached house in gated community. It's a clear indication that people love to lift their image on their own social circle. Furthermore, people who selected apartments as their resident, are not much concern about it. The reason may be their intention of selecting it as a short-term option.

Figure 2 shows the relationship between the income and quick access to Colombo city before purchasing a residential property.
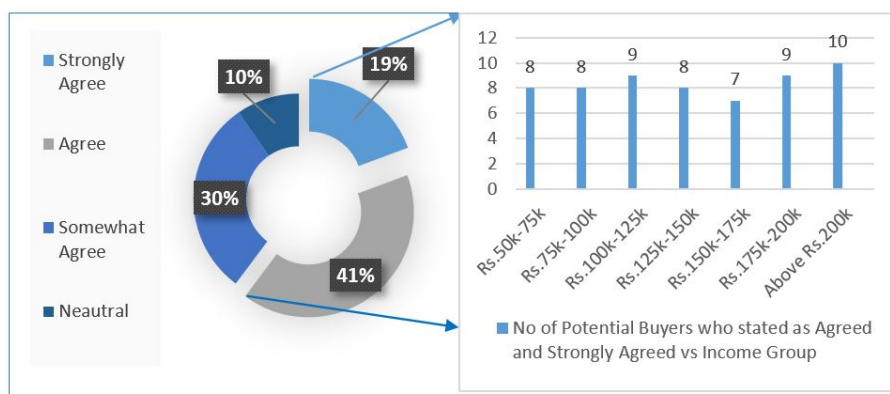

Figure 2: Relationship between the income and quick access to Colombo city before purchasing a residential property.

There is no significant relationship between income and willingness to get quick access to Colombo city. This shows all the respondents are very much need to get quick access

to Colombo from their own residence. It is very clear that most of the people are highly concern about the quick access to Colombo city from their resident.

According to Figure 3, when the income is lower, people tend to go for loans. Strongly agreed 36% and agreed 36% people are from the total sample. As it emphasizes according to the bar chart, high number of prospective consumers in the monthly income range between Rs.75,000-100,000 considered highly about the easiness of taking loans. Table 5 shows that nearly 60% from the people who "Agreed" or "Strongly Agreed" on Statement 08, are employed in government sector. It indicates that government sector people mostly looking for housing loans.
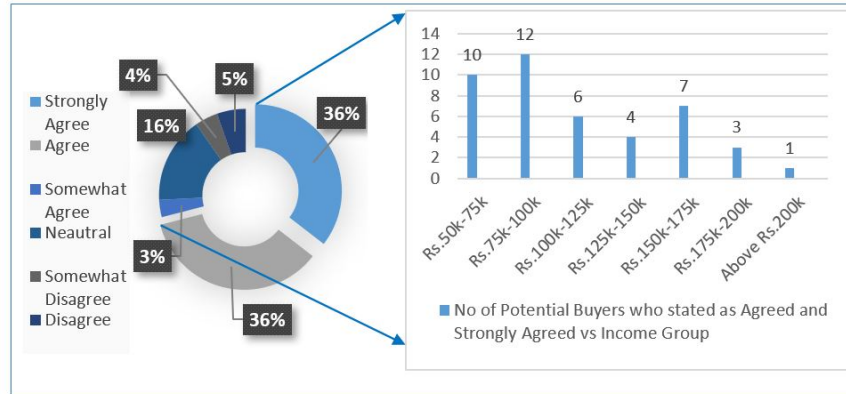

Figure 3: Relationship between the income and consideration of easiness of taking loans before purchasing a residential property.

Table 5: Percentage of prospective housing consumers who "Agreed" or "Strongly Agreed" on Statement 08

Employed in government sector	Employed in private sector	Self employed
59.37%	21.21%	25%

Table 6 shows that strategies to enhance the prospective consumer satisfaction while purchasing a residential property.

Table 6: Strategies to enhance the prospective consumer satisfaction

	Strategies
Product related	In Apartment designing, increasing the usable space while maximizing the building efficiency should be concerned.
	Customization according to the consumer's preferences before constructing detached houses.
	In apartments Cost effective in-built amenities including sustainable energy sources could be used.
	Consider new recreational facilities such as Club house, BBQ area, Kids play area, Spa and viewing decks.
	Due to lack of space in City centre, it's better to find suitable location, that already has the locational advantage of recreational facilities in closer proximity
Place related	Most suitable location for residential property is 5km-10km from the Colombo city centre

Strategies	
	If the location is distance is exceeding 10km from the city centre, it should be near to an express way
	Consider the status level of the neighbourhood in creating detached houses more than it considered in apartment creation
	Access control including multi layered commercial access control system with perimeter security CCTV could be used.
Price related	Focused on materials with better quality to increase the life cycle of the property
	Higher concern on the selection the property location because increment property value is mainly based on the location.

5.   DISCUSSION

Housing is a real estate product which is not a homogenous product (Calem, et al., 2010). Hence, housing market is not a perfectly competitive market. Therefore, housing market is imperfect and due to this imperfection real estate market in Sri Lanka prices are distorted and lands comprising with other resources are misallocated. Every individual's main intention is to obtain better houses for their living while satisfying their buying decision. Due to the rapid urbanization and frequent change in the economy, difficulty of fulfilling housing requirement was discussed (Niriellage, 2011). Focusing on the major determinants of housing supply which are population growth, land component and government policies had identified. Achieving this objective at first through the literature review was beneficial, because it leads the path to enhance the consumer satisfaction of buying residential property.

In the economy demand for housing is varying due to level of income of the consumers, price of other goods and specially the taste of households. Therefore, consumers buying decision of a particular property is very important factor which determine the housing market demand (Marthya, et al., 2020). Furthermore, the consumer behaviour of housing market could be discussed as Person, Product, Place and Price (4Ps). impact of the determinants of housing supply in Colombo Metro region is discussed while conducting semi structured interviews with professionals in two leading property developing firms. However, comparing two cases, UDA occupied more lands in Colombo Business District while private developer focused on the sub urban areas. UDA attempts to fulfil the housing requirement of middle-income people rather than totally considering the profit maximization and private developer give main priority to profit maximization. In the analysis, consumer behaviour is discussed as two property developers' perspectives. From the RII analysis, first consideration of the consumers' is quick access to Colombo city while purchasing a residential property. The 2nd highest consideration is price of the property and 3rd one is the recreational facilities. Relationship between income and the house purchasing determinants consideration level were examined through an elementary statistical analysis. In the analysis, it was identified that design consideration is increasing with the consumer's income is increasing and single detached houses have more design consideration than apartment construction. Another current trend identified is prospective consumers almost equally considered in-built amenities despite of their income and it is mainly focused on apartment construction. Consumers who selected city centre as the location highly considered the recreational facilities. Regarding the price related factors, it was proven that prospective consumers who are working in government sector, highly

considered on obtaining loan while purchasing a residential property. However, as property developers are not much concern on above facts lead to dissatisfaction of prospective consumers while purchasing a residential property according to the findings.

6. CONCLUSIONS

This study focusses key factors affecting the housing market supply and the demand side represents the determinants of consumer behaviour. Through the literature review, four main determinants of housing supply have been identified: population growth, land, and government policies. Determinants of consumer behaviour has been categorized under four main sections as Person related, Product related, Place related and Price related factors. Moreover, since the impact identification of supply side factors and fulfilling the determinants of consumer behaviour is a necessity to enhance the consumer satisfaction. Therefore, following strategies could be applied to maximize the consumer satisfaction of house purchasing in Colombo Metro region. The contribution to the research direction is the impact it could make on brokers, real estate agents, planners and any stakeholder related to construction field to take informative decision.

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