

The Psychophysical Impact of Design on the Number of Visitors at Summarecon Mal Kelapa Gading

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Abstract:- Shopping centers & humans are two things that influence each other. Humans as the main object in a shopping center are objects that cannot be limited and cannot be measured, especially in terms of psychology. If in the past shopping centers carried the concept of one stop shopping with the Customer Centric theory which is a strategy that places customers in the main position and becomes the core of all organizational activities, shopping centers began to change the theory used to Costumer Centric Experience, namely the customer experience when interacting with the shopping center. Psychophysics are basic issues that focus on environmental stimuli to human sensors that are closely related to the Costumer Centric Experience as explained above, so that the Psychophysical study will be raised as the basis for this research.

Keywords:- Shopping Mall, Psychophysics, Number of Visitors.

I. INTRODUCTION

After recovering from the Covid 19 pandemic, the structure and style of people's shopping have undergone significant changes. Through covid 19, technology has improved rapidly so that it provides consumers with the convenience of practical online shopping. Human response to these developments then shapes changes to the structure and style of spending. What is offered by malls that were originally modern transaction places are now required to be aware of that.

Nowadays, the development of shopping centers has begun to penetrate and unite with other purposes, not only about buying and selling activities or entertaining, shopping centers are now present to answer everything needed by visitors, for example the presence of sports venues, and waterparks in malls.

The increase in the number of visitors may be immediately felt by the developer, but with the sophistication of technology now, the increase in the number of visitors is the same as getting free marketing, where visitors who feel comfortable and interested in what they see and feel in the mall will be displayed on their respective social media. That way, the news about their good experience visiting a mall will be seen and open up opportunities for more people to come. Of the many people who come, it does not make a big transaction, but the mall will be considered active and

appropriate to continue operating and provide a sense of comfort with a good impact on owners, investors, the wheels of the economy and social life.

There have been many studies on Architecture & Psychology in shopping centers, but in this study, the researcher tried to compare a variety of variables, research methods, and research results that have been carried out based on the theme of Psychological Architecture, especially Psychophysical at Mall Kelapa Gading & Mall Artha Gading as an effort to show the novelty between this research and research that has been carried out before.

The design review will devote this research to the study of psychophysical issues in Architecture and Psychology that study the relationship between external stimuli and how people who receive these stimuli perceive them

II. FOCUS AND SCOPE

Basically, this research covers two main aspects. How is the design applied to Mall Kelapa Gading & Mall Artha Gading. The second is how to form the right design according to customers that can make them repeat visits to a Mall.

III. LITERATURE REVIEW

A. Psychophysical

Architecture is inseparable from the sensory-physiological system of humans which occupies a special place in psychology. The psychophysical aspect is developed and studied by researchers. All of them show that the consequences of human intervention on the environment are very closely related to human mental and psychological processes. In addition, architecture has the function of meeting human psychological needs, since it can show measurable real (concrete) variables that arise from intangible human psychological processes. This is because the environment contains many stimuli that trigger different human responses and behaviors. By paying attention to the above aspects, those involved in architecture can create a well-built environment for their users or consumers. According to Psychologists, Personality is defined as the dynamic organization of an individual's psychophysical system that uniquely determines an individual's actions and thoughts. The psychophysical system here means the body and the soul.

In Koswara, 1991, Allport defines individuality as what is contained in the individual who directs and directs all the actions of the individual. Allport's formulation is precisely about personality, the dynamic organization of an individual's psychophysical system that uniquely determines an individual's actions and thoughts. The psychophysical system shows that the human "soul" and "body" are a single system that is inseparable from each other, and there is always an interaction between the two in behavior control (Koswara, 1991).

Based on several opinions, personality is formed from subordinates, influenced by the environment, assessed as a complex psychophysical system and related to mental activities, so it is descriptive. sending individual responses and behaviors.

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B. Consumers and Shopping Malls

The atmosphere of retail stores utilizes affection as a form of consumer emotions in the mall that are not noticed by visitors. (Peter & Olson (2013). The physical characteristics of a shopping mall, such as building style, layout, lighting, color rendering, temperature and humidity, the presence or absence of music, the flavor used, etc., are factors that exist to attract consumers. This can affect the formation of the image of shopping streets (Berman and Evans (2007)).

From an architectural perspective, Berman & Evans (2007) stated that every bright point of sale inside the mall can lead consumers to visit a specific area within the mall. The temperature inside the shopping mall can affect the mood and comfort of visitors.

According to Subagio (2011), design is the physical design of a retail store, including the placement of layout and function, signage and symbols, aesthetics (such as color and visual combinations), layout, visits, escalators, and elevators. and other related architectural elements. Well-equipped, designed and decorated as you would find in a shopping mall. Shopping center facilities such as the availability of parking spaces are an important factor, especially for visitors to shopping centers. The spacious, safe and orderly parking lot and close to the entrance/lobby of the shopping mall create a pleasant atmosphere.

From the discussion of the journals above, it can be concluded that several things need to be considered related to this research, which will then be the basis of the research theory and its influence on the number of visitors to a mall:

Table 1: Study Implementation

No.	Journal Title	Output for research basis
1.	The Influence of Mall Interiors on Social Life, Lifestyle and Appearance of Adolescents.	- Design in clarifying segregation user. (Design affects the social, lifestyle and appearance of teenagers)
2.	The Relationship between Public Space Design and Mall Visitor Behavior in Yogyakarta (Case: Ambarukmo Plaza and Galeria Mall)	The mall is recreative The mall as an interesting place and brings an iconic and unique impression through design An easy-to-find atrium Design of public spaces that adapt to the psychological conditions and needs of visitors
3.	Transposing the Urban to the Mall: Routes, Relationships, and Resistance in Two Santiago, Chile, Shopping Centers	Malls are called safe when they become places that accommodate public and private spaces well in accordance with the mall segmentation applied The mall as a relationship space makes the mall a dream place where people seek comfort Shopping and non-shopping practices in malls: malls are not only shopping places but also "playgrounds", living rooms, or performance stages Management mall provides convenience to accommodate visitor behavior with various variations Buildings accommodate activities, priorities & visitor relationships The existence of an entertainment area that is not monotonous
4.	Shopping and Urbanity: Emerging Assemblages of Main Street, Mall, and Power Center.	Determination of the type of building layout Regarding access and road relations with mall buildings Pedestrian and consumer access with Private vehicle
5.	The Impact of Architectural Design of Shopping Malls on Consumer Behaviors: A Case of Konya	Mall as a built environment Meet value Aesthetic composition and the aesthetics of the shape according to the points that related to human behavior

C. Research Methods

The type of qualitative research is used in this study, where this research is descriptive and tends to use analytics. The study emphasizes the process and its importance, using a theoretical foundation.

This research will cover 2 shopping center locations in North Jakarta (Kelapa Gading), namely Mall Kelapa Gading & Mall Artha Gading. The two malls are only 3.8 Km apart or approximately 10-11 minutes by using a private vehicle.

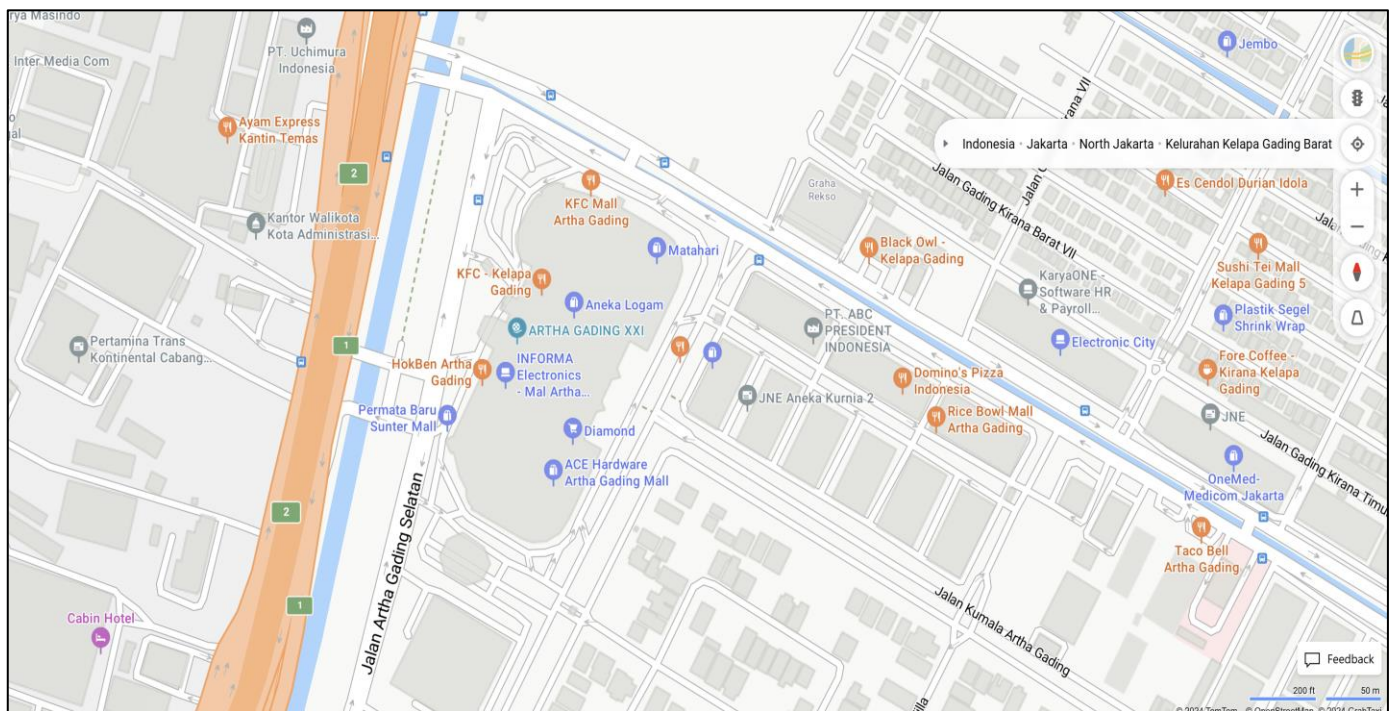


Fig 1: Location of Artha Gading Mall & Summarecon Mall Kelapa Gading
Source: Google Maps

Table 2: Data Mall Atha Gading & Summarecon Mal Kelapa Gading

It	Items	Mall Kelapa Gading	Mal Artha Gedding
1	Land Area	137.696	60.000
2	Gross Floor Area	284.902	270.000
3	Floor	3	8
4	Years of Operation	March 24, 1990	October 27, 2004
5	Developer	PT Summarecon Agung, Tbk	PT Artha Graha Network
6	Number of Visitors as of 2022	433.532	226.951
7	Total Tenant (Unit)	535	403

IV. RESULTS AND DISCUSSION

➤ Data Collection

- Questionnaire

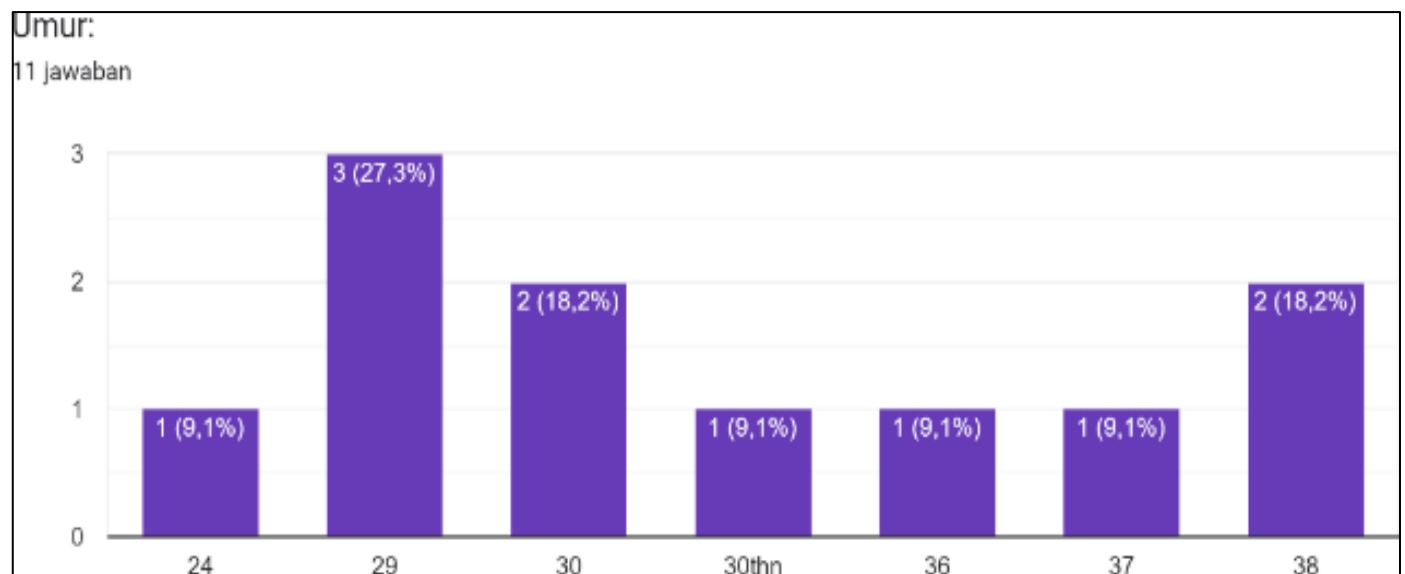


Diagram 1: Correspondent Age

Table 3: Correspondent's Response to Kelapa Gading Mall

What kind of comfort does visitors from Kelapa Gading Mall feel good that is the reason to come again?	According to visitors, what makes Mall Kelapa Gading survive with a large number of visitors?	What are the advantages of Kelapa Gading Mall compared to other malls in North Jakarta?
The atmosphere of the mall embraces all people with the use of warm colors and lighting	Mall Concept - A Combination of Fashion, Food, Entertainment	One Stop Shopping Mall & Entertainment, which is not like malls in general, there is entertainment, there is fashion, food, etc.
Close to residence, easy to access, complete tenants	Close to settlements, easy access	The tenant is super complete
There are many tenants, complete options	Complete Tenancy mix	MKG 1-5 is definitely the answer. in other places there is still only 1
All the stores needed are there	Strategy of marketing and strategic positioning	Lots of food variety and inexpensive price range
Ordinary	Because it is close to residential	His name is already known to many people
Cold air conditioning, easy parking not too far from the destination	Cleanliness and comfort	Yes, quite complete and spacious
Ease of finding tenants	Strategic Location	complete
The mall is spacious enough so that there is no accumulation of consumers,	Selection and placement of the right tenants and events that are always held	Mix quite a lot of tenants
Middle to upper price range, young access, many open hangout places	Up to date, middle to upper tenants, everything needed is there, easy access.	Complete and in the upper middle class

Spacious	Access	Transportation access
Lenhkap	Clean, and complete	Luxurious

Table 4: Response Correspondent For Artha Gading Mall

What kind of comfort do visitors from Artha Gading Mall feel good that is the reason to come again?	What do you think needs to be fixed from Artha Gading Mall?	What are the advantages of Artha Gading Mall compared to other malls in North Jakarta?
Mall visitors don't pile up	Design corridors and mall interiors to make them more lively	The condition of the mall is not crowded with visitors
Easy to access, close to residential areas	The tenant's position eliminates the second corridor because there are many corridors that are confusing and blocking, events that are neater and clearer	Easy to access
Many tenants	Revamp a thorough replay	Easy access
Lots of parking	Old design, needs to be refurbished	Not too big and lots of parking
The mall is not too crowded	Inside the mall, it looks chaotic	None
Quite spacious and not crowded like summarecon	Grouping by classification, so that malls are more lively	More leisure and calm
Access to Toll Roads	Tenant Arrangement	Easier access
Quiet visitors, so you can go around the mall more freely	The position of tenant islands needs to be rearranged	Close to toll gates
Easy access	Interior	Easy access
Price	Transportation access	Calm
Complete clean	Pwshow so that you don't get tired haha	Luxury net

• *Interview*

Carried out to 2 experienced Mall practitioners who are part of the construction and import of the Mall, with the following results:

- What MAG must do to attract more visitors includes:
 - ✓ Targeting the market.
 - ✓ MAG must have character, improve itself.
 - ✓ Tenancy mix, there must be a new arrangement for the zoning of its tenants.
 - ✓ Layout mall harus easy to access, easy to navigate.

➤ *Summarecon Mall Kelapa Gading*

- ✓ The building owner must have control over his tenants to control the design of the mall, change the concept & work with tenants for tidying
- ✓ The façade must well reflect that it is a mall and the segmentation in question

• *Observation*

Direct observation was carried out with the following results:





Fig 2: Interior of Summarecon Mall Kelapa Gading

- In terms of layout, it is not difficult to explore MKG because of its intuitive layout, without a second corridor
- Exterior shows segmentation
- The interior combines natural and artificial lighting, large areas with special themes
- Regular tenancy mix with clear zones
- Facilities for visitors are well supported with a well-arranged communal area

➤ *Mala Artha Gedding*



Fig 3: Interior Mall Artha Gading

- Multicorridor, making the visit less comfortable because several times you get lost in the same corridor
- The exterior collides with the exterior of the dominant tenant
- Interior that is not updated and not supported with a tenant design

- Tenancy mix is not organized by zone, where retailers with different categories are in the same zone
- In terms of facilities, there are few communal areas and rest areas.

➤ *Chat GPT*

Table 5: Comparison of Artha Gading Mall & Summarecon Mall Kelapa Gading Psychophysically

STOMACH	MKG
Layout & Navigation	
More complex, it can confuse visitors when looking for a store or facility, potentially reducing convenience and longevity visit	A more intuitive and organized layout makes it easier for visitors to move around and find a destination, improving the experience shopping
Open Space Facilities	
Less green area / open space, less atmosphere fresh	Have an indoor garden with a green area that makes Fresh, Comfortable Impression
Lighting	
Less, the atmosphere seems less lively	Lots of big windows, skylights, more atmosphere Warm & Attractive
Rest Zone	
Seating in public areas is limited	Plenty of seating for the public
Aesthetic Design	
Less modern & terawatt, affecting Early impressions	Modern, has greater visual appeal
Events & Activities	
Less active in holding events	There are often interesting events

In conclusion, the differences in design, layout, and facilities between Artha Gading Mall and Kelapa Gading Mall can contribute significantly to the number of visitors. Kelapa Gading Mall with a more modern and comfortable design, tends to be more attractive to visitors, while Artha Gading Mall may need to consider improvements in these aspects to increase its appeal.

To attract more visitors to Artha Gading Mall, the following concepts can be considered for the update:

➤ *Improved Visitor Experience:*

- Interactive and Digital
- Unique Entertainment Experience

➤ *Culinary Zone and Social Area:*

- Food Court Themed
- Area Co-working Space

➤ *Presenting Brands and Tenants*

➤ *Routine Events and Activities:*

- Events and Festivals
- Classes and Workshops

➤ *Open Space and Green Area Concept:*

Integrating more elements of open space and green space in the mall design, such as a garden in the rooftop area or a relaxing area with ornamental plants, can give a fresh and different impression from other malls.

➤ *Service Improvement and Comfort:*

- More Efficient Parking
- Visitor Services

By applying these concepts, Artha Gading Mall can provide a more interesting and relevant experience for visitors, thereby increasing the number of visitors and making them feel at home in the mall.

V. DATA ANALYSIS

The following are the results of triangulation & reduction of data whose variables are analyzed following the Basic Indicators of the theory discussed in CHAPTER 2. The data taken from the results of data collection is data related to things that need to be considered in mall design.

Table 6: Output of Triangulation & Data Reduction Results

Design in clarifying consumer segmentation.	- Tenancy mix, zoning tenant
The mall is recreative	Indoor garden, plant elements give a fresh feel Interactive & digital as well as unique entertainment
The mall as an interesting place and brings an iconic and unique impression through design	The mall must have a character as a differentiator Lobby design as a first impression maker in the mall Thematic food court and co-working space area
An easy-to-find atrium	Secara layout easy to access, easy to navigate Linear circulation and non-blocking Use of Skylight
The design of public spaces that adapt to the psychological conditions and needs of visitors, malls are called safe when they become places that accommodate public spaces and private spaces well in accordance with the segmentation of malls applied	Layouting so that customers don't get lost in unwanted corridors Seating area in the toilet waiting room with its equipment Open space for rest Separate zones to make visitors feel more organized
The mall as a relationship space makes the mall a dream place where people seek comfort. Shopping and non-shopping practices in malls: malls are not only shopping places but also "playgrounds", living rooms, or performance stages	Mall concept – a combination of fashion, food, entertainment The existence of a communal area as a meeting point and relationship space (can enjoy more time in the mall)
Management mall provides convenience to accommodate visitor behavior with various variations	Ease of finding tenants Interior trends change from white to yellow Comfortable lighting, precise lumens Legality of unit sales to maintain conformity with building design Setting up sales trading & branding concepts Efficient parking
Buildings accommodate activities, priorities & visitor relationships	- Providing a variety of needs
Determination of the type of building layout	- The existence of a second corridor and even a multi-corridor is not for any party
Access to pedestrians and consumers by private vehicles	- Parking is easy and not too far from the destination
Mall as a built environment	The mall is spacious enough so there is no accumulation of visitors Selection and placement of the right tenant The mall collaborates with tenants for tidying
Fulfilling the aesthetic value of composition and form aesthetics in accordance with points related to human behavior	Design development from MKG 1-5 The use of white light color according to the right lumens (by lighting consultant) can provide a relaxing effect Exterior façade Combination of natural and artificial lighting Design elements with clean lines, quality materials

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