





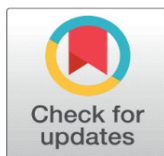
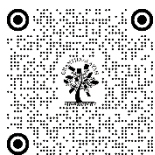


# REVIEW OF DISPLAY DESIGN ASPECTS IN CAR SHOWROOMS INFLUENCING CUSTOMERS INTEREST

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## ABSTRACT

Car showrooms are critical for showcasing the latest models and attracting potential customer where they can view and purchase vehicles. The design of car showrooms plays a crucial role in attracting potential customers and influencing their buying decisions as well as interests.

This research paper examines the importance of car showroom display and lighting in the automotive industry to enhance the customer experience, increase sales, and promote the brand image. This paper will study and compare different case studies of car showrooms to trace the display and lighting of different car showrooms. Display plays a critical role in showcasing the cars as well as their features in an attractive and engaging way which influences the customer's interest. Lighting is also a crucial element that can influence the mood and ambiance of the showroom, highlighting the cars' features and creating an inviting atmosphere for customers.

**Keywords:** Car Showroom, Interior, Design, Lighting, Display

## 1. INTRODUCTION

A showroom is a place where products are displayed for the customers or the buyers to purchase for their use such as cars, Furniture, clothes, shoes etc [Iswandi et al. \(2022\)](#). Showrooms can be of two types: Permanent showroom which is the type of showroom that is long term and permanent. Temporary showroom is the type of showroom that is used for certain times like exhibitions.

A well-designed car showroom can help to create an immersive environment that highlights the unique features and benefits of different car models. The success of a car showroom depends on many factors, including the quality of the cars on display, the design of the showroom, and the lighting used to showcase the cars.

The right lighting can enhance the aesthetic appeal of the showroom, draw attention to specific cars or features, and create a sense of luxury and exclusivity. The lighting in a car showroom can be adjusted to highlight specific features of the cars on display. For example, directional lighting can be used to draw attention to parts of the car, such as the wheels or the interior which influence the customers interest and helps in focusing over a particular thing.

Display is another critical element in creating an effective car showroom. The way cars are displayed can affect the way customers perceive them and influence their decision to purchase. Principles and elements of designs are some aspects which can enhance customers interest such as, Shape, texture, balance, repetition etc [Abdulpader et al. \(2014\)](#) Display arrangements can vary depending on the size and layout of the showroom, but there are several common strategies used by automotive retailers. The car showroom should have a billing area, car display area, restroom area, waiting area and discussion area with the clients.

## 2. RESULT AND DISCUSSION

A Car showroom needs the space for the customers to roam around a car so that they can inspect the car from their view and the space shouldn't be obstructed with anything such as furniture [Tanjaya & Honggowidjaja \(2017\)](#)

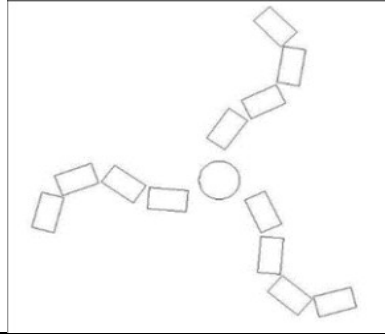
### 2.1. THE AMERICAN SUPERCAR GALLERY [FARANDY & SALAHUDDIN \(2013\)](#)

The American super car gallery in Surabaya- Jalan Basuki Rach mad 115-117 Surabaya. A shopping center (Tunjungan plaza) is the nearby place, and this building is visited by many people every day. It is not far away from residential areas. Located directly on the main road.

**Planning Concept:** Shining in the dark – is a design concept of American super car gallery. This gallery is a forum, a place where information gathering and purchasing and servicing American cars are done. Because the facilities of American cars in Surabaya are very minimal. The design style of this car showroom is modern high-tech style as the super cars are loaded with sophisticated technology, have power, stability and prestige which are different from other cars. The purpose of using this style is to display shape, atmosphere and ornaments embedded into the interior of the American super car gallery building.

**Spatial Layout:** The spatial layout pattern of the supercar gallery is based on relationships, starting from the main entrance then the reception area then the waiting room in the lobby and then the café. There are cars and accessories for display which visitors can immediately discern. A radial organization is applied in this design such as a combination of a centralized and linear design. The cars are placed almost at a 2.5 meter by 7-meter grid but the circular platform covers more space which is approx. 5 meters by 7 meters.

**Figure 1**



**Figure 1** Geometrical Planning [Farandy & Salahuddin \(2013\)](#)

**Figure 2**



**Figure 2** Layout [Farandy & Salahuddin \(2013\)](#)

The division of the space is clear and is divided according to the function of the room, visitors are free to see and relax. Angular shapes are used in the display such as rectangles squares as they symbolize robustness and stability by using materials that support the design. Columns, pillars and walls in the building are a repetition as they add several high-tech ornaments.

**Color:** Bright colors and futuristic impressions such as white, light blue, black and finished concrete are used.

**Material:** They have used glossy finishes on furniture which makes the objects look shiny and the use of matte textures on the walls and floors as they appear dark and luxurious.

**Ceiling:** Such as the floor pattern the ceiling uses forms that conform to the shape which creates unity in the high-tech atmosphere. They have lowered the ceiling and played with the deconstruction of square shaped of black and white.

**Decorative Elements:** LED panels are placed as a decorative element on the walls and information places for the visitors. All tri-colored screens are bright as they can be seen in direct sunlight, either indoor or outdoor.

**Furniture:** Designed in geometric shape and has considered the statement "Form follows functions." Natural characteristics can be seen as an emphasis in the shape of their furniture that doesn't make the room seem monotonous. The size of the furniture is comfortable for the visitors so that the information can be conveyed as well as received.

**Lighting:** Two types of lighting, namely natural and artificial. In the day natural light can be obtained, while at night there is a use of artificial lighting. The artificial lighting does not have too much intensity so that it does not glare and keep the

surrounding atmosphere comfortable. But in a space like an office, it requires high lighting intensity.

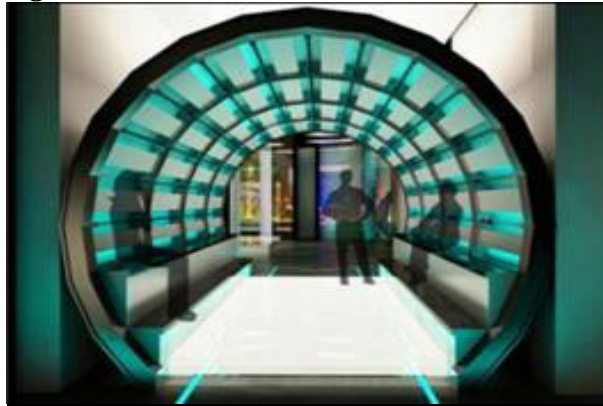
**Acoustic:** They have used sound absorbing material so that the sound does not echo, such as surfaces have rubber floor, walls have glass wool. The rooms have sound systems to facilitate communication.

**Figure 3**



**Figure 3** Perspective Gallery Farandy & Salahuddin (2013)

**Figure 4**



**Figure 4** Waiting Area Farandy & Salahuddin (2013)

**Figure 5**



**Figure 5** Café View Area Farandy & Salahuddin (2013)

**Figure 6**



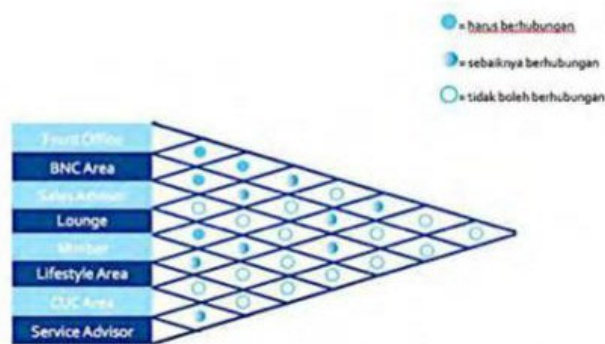
**Figure 6** Showroom View Farandy & Salahuddin (2013)

## 2.2. BMW ASTRA INTERNATIONAL KANYA (2016)

BMW astra international- Jl. Mayjen HR. Muhammad No. Kav. 2, Putat Gede, Kec. Sukomanunggal, Kota SBY, Jawa Timur 60189, Indonesia. BTN branch bank, Philips service center, it's on main road are the nearby places.

**Planning Concept:** The showroom has an industrial futuristic concept which helps in increasing sales.

**Figure 7**



**Figure 7** Spatial Relationship Kanya (2016)

**Spatial Layout:** Car area, lounge, mini bar, sales advisor area, service advisor area. Each area had defined relation to other space. The area which is related is the front office area lounge, new car area with lounge. The spaces which can be together are the front office with minibar, front office with service advisor area. From the main entrance the visitors can go to the front office and brand-new car area. Two cars are placed at an eight-meter grid.

**Design Theme:** Futuristic theme consisting of symmetrical shape and contrasting colors. Industrial theme is of 2 types of material factory and masculine shape. Material factories have metal and acrylic. Have Masculine shape, angled and firm.

**Color:** The futuristic design has monochrome color which are gradations of one color or hue only. Industrial concept colors which are neutral such as black, white, and grey.

**Materials:** Materials in fabrication are steel, iron, glass and acrylic. The materials in industrial concepts are concrete and metal. There are metal materials in furniture ceilings and aesthetic elements.

**Lighting:** The lighting is a futuristic concept which has a lot of vibrant (bright) such as blue and green. For industrial concept the showroom is black, white and grey. Aesthetic lighting is used on walls as futuristic elements.

**Figure 8**



**Figure 8** Dim Yellow Lights in the Waiting Area

**Figure 9**



**Figure 9** Concealed Lights for Car Display on the Ceiling

**Floor:** the designers have used concrete materials on floor, visualized like the car is on highway as well as floor material concrete support industrial concept. In areas such as lounges and minibars, the floor is white marble. The floor in the car display area is made using metal.

**Ceiling:** They have used white gypsum board material for the ceiling. In some dominant areas they have used drop ceiling and hidden lamps. Drop ceilings have been combined with metallic material which are processed in the form of sheets and used in metal cutting techniques.

**Furniture:** The shape of the furniture are geometric shapes such as rectangles and triangles. Some forms of furniture are asymmetrical which supports futuristic concept. Most of the furniture is white color and some furniture have other vibrant colors such as blue. The materials used in furniture are acrylic, glass and so on. Metal furniture gives an industrial touch.

Figure 10

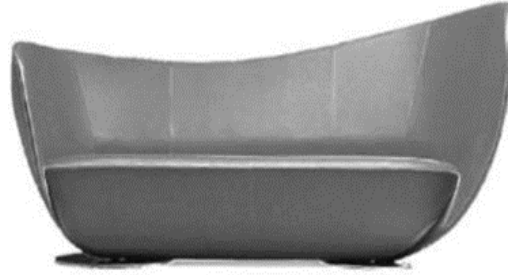


Figure 10 Metal Furniture [Kanya \(2016\)](#)

Figure 11

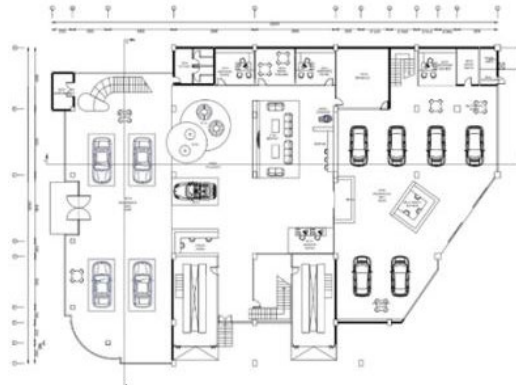


Figure 11 Plan [Kanya \(2016\)](#)

### 2.3. TOYOTA AUTO 2000 [TANJAYA & HONGGOWIDJAJA \(2017\)](#)

**Toyota Auto 2000:** Basuki Rahmat no. 115-117, Surabaya. The building is situated on the road as it is always visible to the people who are passing through and is close to the shopping center. It has high accessibility and is near residential housing. The site has two dominant parts- The showroom building and the workshop. In front of the building, it has a lobby and the main entrance. For the car owner there a side entrance.

Figure 12

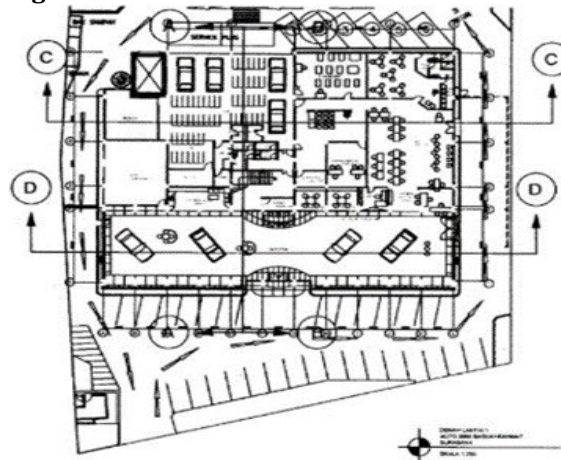
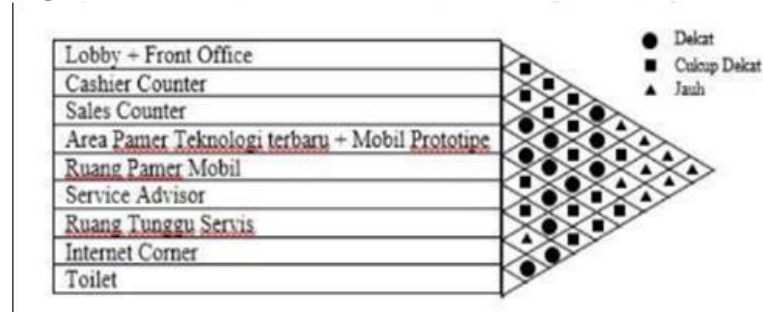


Figure 12 Basuki Rahmat's Auto2000 Layout [Tanjaya & Honggowidjaja \(2017\)](#)

The site is on the fringe of the public highway, that's why it's easy for the visitors to reach. The location has a huge public space which leads this place to be crowded. There is a public parking lot, visitors can park their private vehicles. It is facing to the road and the design area is perceived by many people.

**Planning concept:** The theme is Represent More which makes the showroom more representative. The modern combination of the color used is red, black, gray and white and has given natural touch with wood and stone motifs in the reception area. The design theme is open and comfortable for productivity. The cars are placed at 8-meter distance giving enough space for the customers to roam around.

**Figure 13**



**Figure 13** Spatial Relationships Between Spaces [Tanjaya & Honggowidjaja \(2017\)](#)

The additional facilities in the showroom were the children's play area with virtual reality and toys for under 10 years old. There is a pantry for the visitors to order drinks. There is also an internet corner. The showroom is designed in modern space, emphasizing simple shapes. The space is spacious and accessible to anyone.

**Materials used:** Parquet floor materials, granite, ceramics and concrete are used on floors and provide easy area differentiation. Other materials are vinyl. On the reception wall natural accents are given by wood and stone motifs.

**Ceiling:** The ceiling is designed on levels in negotiation room, and management room.

**Lighting:** Natural lighting in coffee shop penetrated through the window on the walls. Artificial lights are downlights as a main lighting, hidden lamps on the ceiling. The ventilation system is artificial ventilation. The small rooms have universal ceiling air conditioner.

**Figure 14**



**Figure 14** Car Display Lighting on the Top



**Figure 15**

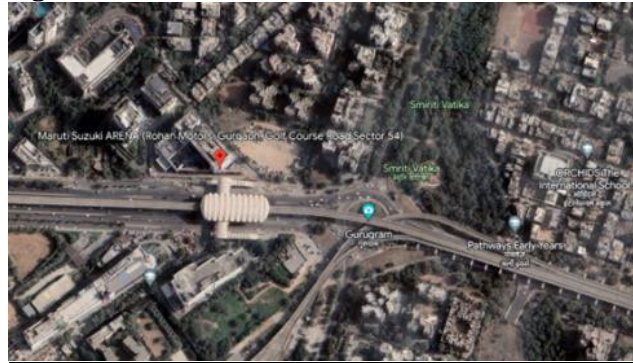


**Figure 15** Car Display Area

**Acoustic:** The sound system for the music. There is an acoustic panel wall so that the noise can be muffled sound such as in the negotiation room.

## 2.4. LIVE CASE STUDY (SOURCE: AUTHOR)

**Figure 16**

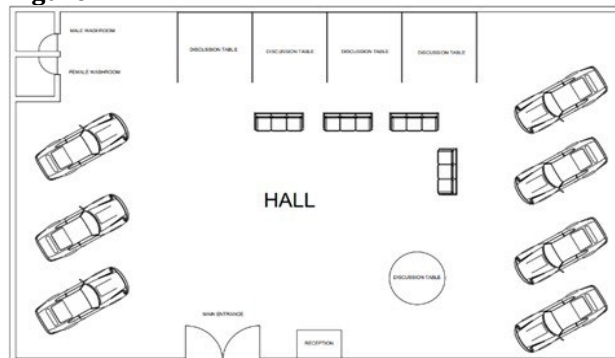


**Figure 16** Site Location

Source Author

**Maruti Suzuki:** The showroom is in Rohan motors, golf course road, sector 54, Haryana. The showroom is located near the road helping it to gain attention by the visitors while the nearby places are Smriti Vatika, Orchids international school and a church and other schools.

**Figure 17**



**Figure 17** Spaces Inside the Showroom

Source Author

The entrance of the showroom connects the hall while the reception is just beside it. Before the reception there is a discussion table. Opposite each other the cars are displayed. The other discussion table is connected with the restroom. Other places like the children's play area are also given near the display area. The cars are displayed on a grid, covering approx. 5 meters of space.

**Figure 18**



**Figure 18** Ceilings and Walls

Source Author

**Materials used:** The materials covering the floor are white shiny tiles while on the ceiling there was gypsum false ceiling containing curves.

**Figure 19**



**Figure 19** Color

Source Author

**Color:** The color theme is white with contrasting colors of furniture like black couches placed in the waiting area as well as in the discussion area.

Figure 20



Figure 20 Display of Cars

Source Author

**Lighting:** The lighting helps the visitor to see the cars and the insides properly. The natural lighting comes in through the glass door placed at the entrance.

The cars are on display without any change in floor level as they are displayed parallel with each other at almost 120 degrees and the distance left between two cars was approximately 1.5 meters.

### 3. OBSERVATIONS

Table 1

Table 1 Analysis of Case Study's

S.No.	Parameters	American supercar showroom	BMW Astra	Toyota	Maruti Suzuki	Analysis
1.	Display of Cars	Each car is displayed on the elevated platform for display.	Cars stand parallel to each other, so that customers can roam around it.	The car stands at an angle, parallelly but with huge distance (approx. 120-degree angle).	The cars stand at a certain angle, parallel with approx. 5-meter distance.	<p>The cars to be displayed properly so the customer can have a 360-degree view and should have proper lighting around it or under it.</p> <p>Each can be highlighted by leveling up the platform. The platform can rotate for a better 360-degree view.</p> <p>The roam around the space for customers is about 5 meters between the cars.</p>
2.	Lighting of display	A lighted platform under the car to highlight a	Concealed white lights on the	Yellow Light in the false ceiling of the display area of yellow	Small round concealed	<p>The lighting in the floor, ceiling and background can be used to display the car to enhance aesthetics, White light should be used for</p>
	<ul style="list-style-type: none"> <li>• Color</li> <li>• Size of light</li> </ul>					

	<ul style="list-style-type: none"> <li>Location</li> </ul>	<p>particular model and the color of the light is white. At places blue profile lighting is used on the platforms, walls and ceiling.</p>	<p>ceiling, above the car display (Approx. 2 meters away).</p>	<p>color with approximately 2m diameter to illuminate highlight the car.</p>	<p>lighting is used in the ceiling (Approx. two meters away).</p>	<p>better view of cars showing actual colors.</p>
3.	<p>Color</p> <ul style="list-style-type: none"> <li>Floor</li> <li>Background</li> <li>Ceiling</li> </ul>	<p>Black color is used in flooring, ceiling and wall which is independent, strong-willed as it automatically attracts customers, but black color prevents the eyes to see the original color and need more lighting in the surroundings for clear view.</p>	<p>White color is used in ceiling, flooring and wall which let the customer see the original color of a particular thing and need less lighting.</p>	<p>White color on the background wall but the ceiling is contrasting at a few display areas. The flooring is white with a red border which attracts customers attention.</p>	<p>White color on the walls, ceiling and floor which leads to see the original color and reflects the light most.</p>	<p>Contrasting colors can be used according to the color of the car model to highlight the cars.</p>
4.	<p>Texture of the wall</p>	<p>Glossy finishes on the wall reflecting more artificial lights.</p>	<p>Matte surface but one wall is of glass luminating natural light.</p>	<p>Glossy finish with bright light.</p>	<p>Matte finishes on the wall, substituting the artificial light.</p>	<p>Can use glossy finish to have more reflective light reducing the need for artificial light.</p> <p>Matte finish makes the surface non-reflective, increasing the need for artificial light.</p>

In conclusion, the car display in this showroom is an impressive sight to behold, with proper lighting that showcases each vehicle's unique features and design. The attention to detail in the lighting setup is evident, as it enhances the overall aesthetic appeal of the cars and creates a captivating ambience within the showroom. Not only does the lighting make the cars look more appealing, but it also helps customers to see the cars in a more detailed and accurate manner.

There can be different displays in which a car can be showcased in a car showroom such as cars placed over a level up platform with illuminating lighting, cars can be displayed with the lights on the ceiling in the display area of the car and the last method is to place the car normally on the ground with lighting on the ceiling.

The appropriate lighting is mainly white light which helps the customer to see the original color of the car's detail while other color of lights such as yellow, green, blue and red are used for aesthetic purpose. While the texture and the material of the floor should be glossy, which reflects the light and reduces the need of artificial light otherwise the matte finish can absorb the light increasing the need of the artificial light.

These can help create a more immersive and focused experience for customers interested in a particular brand or model. There are many ways to display a car which can attract a visitor in many ways. This paper would help the students to further under the comparison of different interiors of car showroom. The research on the interiors of car showroom is minimum, more research can be done on this topic.

#### **4. APPENDICES**

The review papers are comparative case studies of the car showroom of different brands. The criteria for the selection of the case studies were to analyze the ways of displaying and the lighting of the interiors of the car showroom. The aim of this research paper is to seek different types of display designs and lighting inside a car showroom. The parameters of the comparison would be lighting, display, color, Materials and texture which are being used inside a particular showroom following various principles and elements of design.

#### **CONFLICT OF INTERESTS**

None.

#### **ACKNOWLEDGMENTS**

None.

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