The Signage Placement Directions On The Pedestrian Path, Iskandar Muda Road, Medan City

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ABSTRACT
The city of Medan as the capital city of North Sumatra Province has made significant progress. This coTechnology and Computer Scienccommercial buildings in several places, one of which was in the Jalan Iskandar Muda corridor. In general, these buildings are spread along road corridors that function as commercial areas in the city of Medan. Presence signage on Jalan Iskandar Muda, Medan City, it turns out that they tend to maximize the economic potential of the region, resulting in a shift in the function of urban space into a space for advertising media expression. As an effort to create city comfort that supports visual aesthetics and does not interfere with pedestrian comfort, this research produces a design concept in the form of placement signage according to the designated zone, namely in the pedestrian zone, the design of the height proportion signage to the width of the pedestrian path using a human scale approach, panel or plane dimension design signage by using the concept golden section, as well as setting the point of placement or spread signage using the concept of rhythm and local regulations that have been established with the aim of limiting the number of signage on the pedestrian path.

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INTRODUCTION

The city will never be separated from two important aspects that complement each other, namely the physical aspect as a form of space with forming elements in it, where humans are the subjects and users of urban space (Soetomo, 2002: 19). As users of urban space, humans naturally need comfort to live in them. According to Rustam Hakim and Hardi Utomo (2003) in Anggriani (2009), comfort is everything that shows the use of space in an appropriate and harmonious way, both with the space itself and with various shapes, textures, colors, symbols and signs, sounds and impressions. Intensity and color of light, odor

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and so on. Urban design activities are closely related to human sensory responses to the physical environment of the city such as visual appearance, aesthetic quality, and spatial character. Urban design, Signage has a role as an element that gives color and describes the dynamics of city life. Signage has the potential and is sufficient to contribute in giving the character of the landscape of several cities today (Cullen, 1961).

In determining the free zone signage in this study using the Medan City Perwal No. 38 of 2014 where it has been previously explained that the laying of signage on the sidewalk must be at least 50 meters from the intersection of the free zone signage only applied to the Iskandar Muda road section and placed from the direction of the arrival of the vehicle towards the turn to another road segment. The use of land which is dominated by trade and service activities in the Jalan Iskandar Muda corridor, Medan City in the end gave birth to a fairly high movement of people, one of which is pedestrians. The perpetrators took advantage of this situation advertising with the proliferation of pillars signage on pedestrian paths where the majority of its contents promote goods and services. In general, a pedestrian path is a special place or path for people to walk. This path is the target location for its establishment signage. This condition is in stark contrast to what has been described by Hamid Shirvani (1985) regarding the placement zone signage.

**RESEARCH METHOD**

Based on the type, in this study using descriptive research methods. Descriptive research is research that describes a symptom, event, event that is happening now. Descriptive research aims to collect information that describes existing symptoms, identify problems or examine conditions and prevailing practices, to establish plans and decisions in the future. Descriptive research methods are essentially looking for theories and then applying or integrating them into the object of research. The analytical method used in this study in general is to use an approach to standards and theories (literature studies) related to the research title, namely "Directions for Placement Signage On the Pedestrian Path, Jalan Iskandar Muda, Medan City".

In the process of determining the placement direction signage, the first thing to do is to divide the research location into 3 road zones. This location cut is based on the density of people's activities in the pedestrian zone and the dimensions for each pedestrian path as well as the existence of activity centers such as malls, shops, and offices around the area, as shown in Figure 1.

![Figure 1. Map of Iskandar Muda Road, Medan City](image-url)
RESULTS AND DISCUSSIONS

Amenity is a pedestrian space supporting path that can be used for the placement of pedestrian space facilities. On the pedestrian path in the corridor of Jalan Iskandar Muda zone A, almost all amenity lanes are located on the left and right sides of the road that can be used as placement locations signage. The length of pedestrians in this road zone is different. The difference in length is due to the disconnection of the pedestrian path by the entrance and exit of the building. The dimensions of the pedestrian in this road zone are 2.65 meters where the pedestrian traffic zone has a width of 1.20 meters furniture 1.20 meters, curb zone or 0.10 m boundary zone and frontage zone 0.15 m.

Road Zone A can be seen of Figure 2, this road segment is a road with one-way traffic flow (one way) which starts from the intersection of Gatot Subroto Road - Iskandar Muda Road to the intersection of Iskandar Muda Road - Gajah Mada Road. Asfor Iskandar Muda Road zone A this has a length of up to 668.51 meters. In this zone, the existence of an unofficial public transport stop at the intersection of Gatot Subroto Road and Iskandar Muda Road, office activities as well as trade and services raises crowds of people who are the main targets of placing signage. Beside signage also as one street furniture. The pedestrian dimensions in this road zone include a total width of 2.65 meters where the pedestrian traffic zone has a width of 1.20 meters, the pedestrian zone is 1.20 meters wide, and the pedestrian zone is 1. Furniture 1.20 meters, curb zone or 0.10 m bo can be seen of Figure 2, undary zone and frontage zone 0.15m.

Road Zone B can be seen of Figure 2, which starts from the intersection of Jalan Iskandar Muda - Jalan Gajah Mada to the intersection of Iskandar Muda Road - Abdullah Lubis Road. The length of this road zone is 867.47 meters. The activities in this corridor are also dominated by trading activities even more than road corridor A. In this road zone there is also a bus stop which is one of the places for laying signage. As for the overall dimensions of the pedestrian in this road zone reach 2.90 meters where the pedestrian traffic zone has a width of 1.65 meters, the zone is 1 furniture 1.00 meters, curb zone or 0.10 m boundary zone and frontage zone 0.15 m.

Road Zone C can be seen of Figure 2, which starts from the intersection of Jalan Iskandar Muda - Jalan Abdullah Lubis. Until the intersection of Iskandar Muda Road - Djamin Ginting Road. The road zone has a length of 554.64 meters. Activities in this road corridor are classified as not crowded. Because the existing activities are dominated by office activities such as banking and lecture activities. The pedestrian dimension in this road zone is the smallest, namely 2.40 meters where the pedestrian traffic zone has a width of 1.15 meters, the pedestrian zone is 1.15 meters wide. Furniture 1.00 meters, curb zone or 0.10 m boundary zone and frontage zone 0.15 m.

Where for zone pedestrians, signage allowed is signage public or general. In addition, if adjusting between the operating condition signage that exist today with the Medan Mayor Regulation No. 38 of 2014 concerning the arrangement of advertisements, the implementation of signage which are also often referred to as advertisements, it can be concluded that they are still not appropriate, including:

- Distance between signage type polesignage which is too tight, which is approximately 1 (one) meter, where the distance between the buildings should besignage on the same side of the road at least 50 (fifty) meters.
- The foundation point or commonly referred to as the pillar for signage type pole sign located on the outside of the side walk and some are even above the road. Pole signage should installed on the inner side of the sidewalk without disturbing activities on the side walk.
- The billboard panels are installed not perpendicular to the road, and evena cross the road;
• Many advertisements are placed at cross road sand should be located signage (billboards) on side walks must be at least 50 (fifty) meters away from the intersection where the area belonging to the road is less than 12 (twelve) meters.

![Figure 2. Map of Iskandar Muda Road Amenity Medam City](image)

Placement signage on track pedestrians on Jalan Iskandar Muda, Medan City, as described above, causes disruption of visual aesthetics in the area in the road corridor itself and interferes with pedestrian comfort. Seeing these conditions, the author is interested in conducting research with the title "Direction of Placement" Signage on the Pedestrian Path, Iskandar Muda Road, Medan City.

In determining the placement point signage by applying the concept of rhythm, the researcher uses a dynamic rhythm approach where there is repetition of existence signage with different placements and adjustable distance, as shown in Figure 3.

![Figure 3. Free Zone Map Signage Iskandar Muda Road, Medan City](image)

Based on the regulations of the Mayor of Medan No. 38 of 2014 regarding technical administration of advertisements, bill boards or signage set at a height of 9 meters where the base height of the panel from the pavement is 3 meters and applies to pedestrians or sidewalks measuring more than 2 meters. meters.
Judging from the height, of course, it will affect the dimensions of the large billboard panels as well. In addition, if this size is adjusted to the concept of spatial proportion, then the height of the billboard set by the Medan City government itself is considered to be still not in proportion to the space where the billboard is placed. Placed.

To obtain a neutral and harmonious space scale, the results of the division between the width of the pedestrian and the height signage must reach numbers 1 to 2. This means that if the calculation results in a number 2, then high signage or "H" in the calculation is the minimum height allowed. Conversely, if the result is 1, then high signage is a high quantity signage maximum allowed. Numbers 1 and 2 are a determination in the value of the proportion of height signage. The following is the result of the calculation in determining the height signage on the pedestrian path in each zone of Jalan Iskandar Muda, Medan City, as shown in Table 1.

Table 1. Height Proportion Signage on Jalan Iskandar Muda Medan City

<table>
<thead>
<tr>
<th>Road Zone</th>
<th>Wide Pedestrian (D)</th>
<th>Tall Signage (H)</th>
<th>Results Calculation (D/ )</th>
<th>Generated Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2.65 m</td>
<td>&lt;1.325 m</td>
<td>&gt; 2</td>
<td>Spacious room or silent impression</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.325 m</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.65 m</td>
<td>1</td>
<td>Neutral or harmonious space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 2.65 m</td>
<td>&lt;1</td>
<td>The space is a bit cramped</td>
</tr>
<tr>
<td>B</td>
<td>2.90 m</td>
<td>&lt;1.45 m</td>
<td>&gt; 2</td>
<td>Spacious room or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.45 m</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.90 m</td>
<td>1</td>
<td>Neutral or harmonious space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 2.90 m</td>
<td>&lt;1</td>
<td>The space is a bit cramped</td>
</tr>
<tr>
<td>C</td>
<td>2.40 m</td>
<td>&lt;1.20 m</td>
<td>&gt; 2</td>
<td>Spacious room or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.20 m</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.40 m</td>
<td>1</td>
<td>Neutral or harmonious space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 2.40 m</td>
<td>&lt;1</td>
<td>The space is a bit cramped</td>
</tr>
</tbody>
</table>

Source: 2018 Analysis Results

For dimensions signage type ground sign, from the calculation method Golden Section produces the number 0.618 which means the length and width of the field signage it is in accordance with golden section where A is the width of the field signage sought is 0.8157 m and B as length signage follow the minimum height signage that is 1.32 m.

Whereas for pole sign, From the results of these calculations produce the number 0.618 which means the length and width of the field signage it is in accordance with golden section where B is the width of the field signage that follows the zone furniture with a width of 1.20 meters and A is the length of the plane signage which is the value of (phi) from B itself which is 0.74 meters.

For panel dimensions signage type ground sign on Jalan Iskandar Muda Zone B, from the results of these calculations the number is 0.618 which means the length and width of the field
signage it is in accordance with golden section where A is the width of the field signage sought is 0.896 m and B as length signage follow the minimum height signage that is 1.45 m.

As for the type pole sign, the results of calculations using the method golden section also produces the number 0.618 which means the length and width of the field signage it is in accordance with golden section where B is the width of the field signage that follows the zone furniture with a width of 1.00 meters and A is the length of the field signage which is the value of (phi) from B itself which is 0.618 meters.

For panel dimensions signage type ground sign on Jalan Iskandar Muda Zone C, the calculation results produce the number 0.618 which means the length and width of the field signage it is in accordance with golden section where A is the width of the field signage sought is 0.7416 m and B as length signage follow the minimum height signage that is 1.20 m.

As for the panel dimensions signage type pole sign, also produces the number 0.618 which means the length and width of the field signage it is in accordance with golden section where B is the width of the field signage that follows the zone furniture with a width of 1.00 meters and A is the length of the field signage. Which, in determining the placement point signage.

By applying the concept of rhythm, the researcher uses a dynamic rhythm approach where there is repetition of existence signage with different placements and adjustable distances with existence track amenities pedestrians in each road zone. That is, the entire zone furniture on a proper pedestrian path for the location signage (results overlays between free zones signage and pedestrian paths that have amenity lanes or furniture) will be occupied by 1 (one) unit signage in each zone furniture. The basis for laying signage with this concept is a situation where it is not possible to place more than 1 signage in 1 pedestrian zone with a certain distance, because signage have to share space with street furniture others such as electricity poles, street lamps, shade plants and so on. Another reason is the distribution of the pedestrian zone with the amenity paths in the research location being spread unevenly, especially with different path lengths.

On track pedestrians Street Iskandar Muda zone A which starts from the intersection of Jalan Gatot Subroto - Jalan Iskandar Muda to the intersection of Jalan Iskandar Muda - Jalan Gajah Mada, there is a repetition signage as much as 25 placement point. While on Jalan Iskandar Muda zone B, which starts from the intersection of Iskandar Muda Road - Gajah Mada Road to the intersection of Iskandar Muda Road - Abdullah Lubis Rd, there is a repetition of the existence of signage a total of 17 placement points. Whereas on Iskandar Muda Road zone C starting from the intersection of Abdullah ubisRoad to the intersection of Iskandar Muda Road – Jamin Ginting, there was a signage a total of 21 placement points, as shown in Figure 4.
CONCLUSION

Placement instructions signage on the pedestrian path of Iskandar Muda Road, Medan City is based on the thought that the existence of signage plays an important role in a city in order to create visual comfort for the people who are in it. From the results of this study, that it can be concluded:

1. Placement or laying signage a good thing is to pay attention to several factors that can meet the visibility signage. These include about placement signage customized based on message or content signage with placement location signage on the zone pedestrian, height and dimensions signage balanced or proportional to where it is located, as well as setting the distance signage one with the other.

2. In fact, these rules have not been applied to the roads in the city of Medan, especially the Iskandar Muda road corridor. The forms of non-conformance in question are signage private or commercial in nature which is placed in a pedestrian zone where it should be signage only allowed signage public, altitude signage which is not balanced with the space it is in, the dimensions of the panel signage that exceeds the dimension of the zone space furniture (street furniture zone) on pedestrian paths and laying signage which are adjacent to each other and are placed at intersections that can close the view of vehicle users on the highway.

3. The main problem regarding the existence of signage on Iskandar Street. The youth of Medan City, especially those found on the pedestrian path at this time are signage more utilized as economic potential to increase Medan City's Original Regional Revenue (PAD) through the value of the billboard tax rental as regulated in Medan Mayor Regulation Number 58 of 2011 concerning Technical Instructions for Implementation of Medan City Regional Regulation Number 11 of 2011 concerning Advertising Tax.

4. The Medan City Government itself has made regulations regarding the technical implementation of billboards as contained in the Medan Mayor Regulation Number 34 of 2014. However, this is considered to be still not optimal enough to minimize the number of advertisements. Signage which is so much. Because, only part of the
regulation is in accordance with the placement factors signage that supports the convenience of the visual aesthetics of the city, including distance management signage and free zone signage eat the cross road of the signage.

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REFERENCES
Law of the Republic of Indonesia Number: 38 of 2004 concerning Street.
Lumbantoruan Frans, Pedestrianization of Medan City Center Area (Case Study of Brigjen Katamso Street in Front of Maimun Palace Medan), University of North Sumatra, 2008.
Regional Regulation of Medan City Number: 13 of 2011 concerning Medan City Spatial Plan 2011-2031.
Regulation of the Mayor of Medan Number: 38 of 2014 concerning Setup advertisement.
Regulation of the Mayor of Medan Number 58 of 2011 concerning Technical Guidelines for the Implementation of Medan City Regional Regulation No. 11 of 2011 concerning Advertising Tax.
Siregar Zulkifli, Arrangement Study Signage on Jalan Gatot Subroto Medan as an Effort to Create a Visually Human City, University of North Sumatra, 2013