The Role of Aquarium in Increasing Visitors Interactivity in Interior Design of Jakarta Aquarium

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ABSTRACT

Interactivity is a must paid attention factor when giving different attraction through public aquarium. Direct interaction between manager of aquarium and visitors when introducing information about current collections of animals is most likely ineffective. The phenomenon can be seen from changes of lifestyle in society which day after day become more adaptive through usage of technology advances in obtaining information practically and cheerfully. Advances in information technology should be applied for public aquarium in order to increase interactivity through usages of touch screen system information, aquarium display that made possible for visitors to interact closely with collections of animals, etc. This serves purposes to explain interior design process of Jakarta Aquarium that will present interactivity towards visitors in getting information about collection of animals (educational facility), giving different experience (recreational facility) as well as indirectly building interest of visitors in preserving richness of Indonesian waters through beauty if exhibited animal collection (conservational facility). The method used in Jakarta Aquarium interior design is development of design concept which creating design solution with paying attention to usages of information medium toward various visitors of aquarium.

Keywords: Aquarium, animal collections, display, information system, interactivity

1. INTRODUCTION

Aquarium is one of facilities which functions as source of inspiration and education that picks up aquatic world in increasing public awareness towards priority of maintaining sustainability of water resources. Role of aquarium has expanded as far as entertainment (recreation) since opened for public. Expectation of visitors when coming to aquarium is not only just wanted to learn new things, but also spending time and having fun with relatives, families, etc. (Weil, 2002). In fulfilling needs from people when visiting to aquarium, then solution which can be applied is showing aquarium that is able to give experience as well as education which give interactivities impacts and enjoy the beauty of animal collections as for involvement from visitors while exploring further display. According to study conducted by F. Belloti (2002) usages of multimedia information system tended to increase interactivity and satisfaction from visitors rather than information that could only be displayed in written form. Applying multimedia medium in introducing animal collections draws attention and interest of people to come to aquarium. A study conducted by Lindemann Matthies, P. and Kamer (2006) which shown that directly involved visitors towards usages of interactive touchscreen would show understanding and long-term memories towards animal collections. Role of public aquarium in giving fully interactive experience is still a challenging thing, similar with Jakarta Aquarium. Interaction with animal collections is limited to printed graphic panel when showing information about exhibited animal collection in aquarium. Usages of graphic panel give limitation when communicating information about animal collections. First, the panel is static and does not involve interaction with visitors. Second, most of the information is barely visible because there are not any particular lightings onto the panel which placed
in state of dark aquarium display (minimal lighting). Third, most of the visitors are having difficulty to identify animal collections because the panel is separated from aquarium display fixture and can only show general representation of animal collections and give monotonous display experience.

Jakarta Aquarium interior design intends to show public aquarium which can increase interactivity of visitors towards animal collections display. This is implemented through design concept development to create a solution in the form of either usage of technology advances on aquarium display fixture or compact-designed interior element (interactively giving information as well as giving interesting experience) towards visitors.

2. METHOD

The applied method in Jakarta Aquarium interior design is pragmatic method that analyzed based on the needs from various visitors of aquarium in getting interactive experience and education which later applied through design development to create design solution in order to increase interactivity of visitors through usage of technology advances in either interior element or aquarium display fixture.

Data collection in this writing was conducted through literary study method which via Jakarta Aquarium social media in order to get general information about Jakarta Aquarium. The author did field survey to Jakarta Aquarium and did study about various visitors when interacting with animal collections through display fixture and applied information system.

3. RESULT AND DISCUSSION

Jakarta Aquarium is located at Neo Soho Mall, Jl. Letjen S. Parman Kav. 28, West Jakarta. It was a strategic location in the middle of the city, as shown in this site image below:

Image 1. Site Location of Jakarta Aquarium  
(Source : https://neosohojakarta.com/)

Jakarta Aquarium interior design applied “Explore the Underwater world” which intended to present aquarium design than would give experience of exploring aquatic world through applying natural element in interior element which supported with technology advances in order to give entertainment, educate visitors and encourage interest as well as conserve the richness of Indonesian waters through exhibited animal collections.

The “Explore the Underwater World” theme was applied by implementing water element as main element that mean stability and serenity with applying cool color which was blue as well as neutral color (white and black). The implemented materials were marble, glass, stainless steel, and others which give both elegant and luxury impression as well as natural materials such as natural rock reliefs, vine plants and others in interior elements of the aquarium display area to give experience of exploring aquatic world realistically. The theme also applied through usages of organic shapes (curved) which dominant in interior elements of furniture with laser cut technique, 3D printing and others that supported with LED strip lighting accent to give dynamic and intimate impressions in the room.

When creating interior design of Jakarta Aquarium which is able to increase interactivity of visitors, then considering categories of visitor who come to explore Jakarta Aquarium could adjust multimedia facilities that used.

Table 1 : Classifications Table of Visitor and Used Multimedia Facilities

<table>
<thead>
<tr>
<th>Category</th>
<th>Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Kids, teens, adults, elderly</td>
</tr>
<tr>
<td>Occupation</td>
<td>Students, college students, employees, researchers, etc.</td>
</tr>
<tr>
<td>Purpose</td>
<td>Entertainment, education, research</td>
</tr>
<tr>
<td>Multimedia Medium</td>
<td>Touchscreen panels, posters, interactive walls, etc.</td>
</tr>
</tbody>
</table>

(Source : Jakarta Aquarium, 2020)
Analysis of the proximity of the rooms contained in Jakarta Aquarium is shown in this following bubble diagram in image 2.

![Bubble Diagram](image2.png)

Image 2. Bubble Diagram
(Source: Eveliza, 2020)

Below are the layout images that made to fulfill the needs to display collection and activity of visitors by considering circulation comfort and effectiveness of room users both visitors or administrator especially in maintenance activity.

![First Floor Layout](image3.png)

Image 3. First Floor Layout of Jakarta Aquarium
(Source: Eveliza, 2020)

Jakarta Aquarium has 2 floors with a total area of 7,200 m² precisely located on the LG-101 (Lower Ground) and LGM-101 (Lower Ground Mezzanine) floors.

Layout of entrance area (lobby) plays a vital role in order to get attention and interest of visitors to enter and explore more into Jakarta Aquarium. The interior design of the lobby showed applications of laser cut wall panel with aquatic world impression pattern with warm white LED strip light that served as decorative element and gave dynamic and interest (focal point) to the room. In the building column also applied with HPL mirror glass finishing material to give the impression of large and usage of multimedia information system like TV wall in order to give related information of Jakarta Aquarium (promo ticket price, special event, etc.).

![Interior Design](image4.png)

Image 4. Second Floor Layout of Jakarta Aquarium
(Source: Eveliza, 2020)

In sitting area (lounge), interactivity was shown through usage of multimedia via “3D project mapping” which showed animation of aquatic world that projected on gas floor area lounge. The application of the multimedia gave interest and interactivity to visitors when interacting directly with shown animation that would respond footwork from visitors on the surface of the floor. This meant so the visitors would not feel bored when sitting.
Interior design of aquarium display area emphasized on usages of display fixture which is compact-designed (furniture that has more than one functions). In the design was shown the usage of aquarium display fixture that merged with touch screen information system on the surface of the aquarium supporting frame. This meant to involve active interaction of visitors when observing aquarium animal collections display as well as getting education in form of information from animal collections that shown.

In some aquarium display areas, information systems were accessible through touchscreen multimedia in form of Ipad mini that supported by floor stand and placed near display area. Multimedia application made ease for visitors to understand and learn information of animal collections interactively within desired time period of visitors.

Information system which shown was not only for showing information about animal collections in aquarium, but visitors are also easier to access headed display area location with touch screen TV wall panel on display area wall that showed map (map legend) of Jakarta Aquarium.

Interactivity was also implemented in form of aquarium display case tube fixture display with gate openings. Visitors were able to walk into the aquarium display fixture, interact and self-document with animal collections closer which gave more education and recreation experiences (edutainment) in the same time when exploring aquarium display. As shown in Image 8.

Interactivity of visitors in aquarium display area was not only based on received information, but also in getting different yet fun experience. In aquarium display case video mapping projection on the floor of the room was given which gave experience for visitors where as if walking on water. On display area corridor walls 3D projection mapping showed animation of aquatic world that could move according to hand motion sensors from visitors so that while enjoying the beauty of animal collections visitors also could feel interactive experience in exploring the aquarium. As shown in Image 9.
4. CONCLUSIONS

In designing Jakarta Aquarium, this can be concluded that the theme shown in the interior design is Explore The Underwater World which presents impression of exploring aquatic world that applied through usage of technology advances on interior element as well as aquarium display fixture in order to increase interactivity of visitors to know and study about exhibited animal collections.

ACKNOWLEDGMENTS

The author wants to show appreciation and thanks to various parties especially to the manager of Jakarta Aquarium who had given information needed for final project that related to problems found in aquarium area so that the author was able to develop concept that create design solution in order to help increasing interactivity of visitors when exploring aquarium.

REFERENCES

