

Media System for Activation Visitors' Behavior In the Aquarium

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Keywords: aquarium, media system, rally system, interactive media, mobile content

In the recent years, renewal has become essential for many public facilities owing to aging of these facilities¹⁾. For instance, renewal of facilities is necessary for Notojima Aquarium, which opened more than 30 years ago; however, this is not easy because of the high renovation costs. Therefore, services that create new attractions are being sought. In this research, with the aim of enhancing the quality of aquarium exhibits, we developed a media system to attract visitors' attention to individual exhibits and to revitalize visitors' activities when watching the exhibits in the aquarium²⁾. Furthermore, this system will provide opportunities for learning about exhibits through experience. The developed rally

system is called "Notojima Aquarium Rally." The rally is similar to catch-and-release fishing (Fig.1). The system comprises the visitor's mobile device, local network, and a virtual aquarium showing three-dimensional computer graphics holographic fishes. Visitors explore the virtual aquarium by walking around the facilities in the aquarium and catch and collect virtual fishes in their mobile devices (Fig.2). At the final point of the rally, the visitors release their fishes from their mobile device into a large virtual aquarium. The main characteristic of this system is the interface to catch fishes to attract visitor's attentions. We experimented and evaluated this system in the aquarium. The questionnaire survey is conducted and the active history logs of the visitors were extracted. As a result, the novelty of this system and the interest it stimulated were highly appreciated by the visitors. However, the learning effect was not sufficient. By analyzing the behavior log data of the participants, the rally experience time, and the number of visits to the virtual aquarium, we found that movement and participation of visitors in the aquarium improved.

Acknowledgement The researches were financially supported by JSPS (16K00723), Japan.

References

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Figure 1. Notojima Aquarium Rally

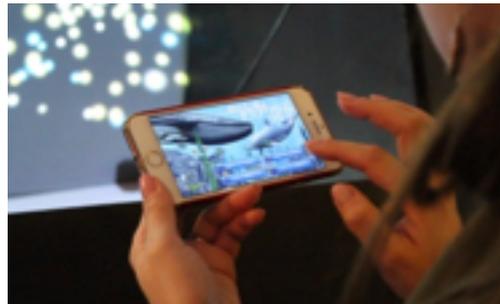


Figure2. Mobile Application