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AN ATTEMPT TO CREATE NEW VALUE AT OPEN-AIR MUSEUMS IN JAPAN: USE OF WEARABLE DEVICES

Abstract:

In recent years, the business conditions of museums in Japan have been growing increasingly severe as attendance falls and the local governments that operate them are forced to cut budgets. The same is true of open-air museums, which also face the additional pressure of maintenance and management costs for their vast sites and buildings. For this reason, there are reports from across Japan of attempts to increase numbers of visitors at such museums by making them more attractive as tourism resources, by stressing hospitality or strengthening ties with the local community. It is thought that one effective means of overcoming these challenges faced by open-air museums would be through enhancement of information services, which encourage the understanding of and connections with various stakeholders. This study attempted to create new services using wearable devices in order to improve hospitality at open-air museums located on vast sites on hilly land. We implemented an action research approach to gather knowledge on solutions to problems faced in the field, by intervening in activities on site at two open-air museums in Japan. Providing information to support visitors' tours of the museums, integrated with physical information and spatial information, added new value to existing smartphone-based systems intended to support visitors by explaining museum exhibits. Through experiments in the field by proposing "Physical condition management and barrier-free information provision when viewing cultural heritage" at the Hiraizumi World Heritage Site and a new type of information service characterized by "Fusion of support for viewing works of art and health promotion activities" at an open-air art museum, we elucidated the expected results and issues involved in practical operation.

Keywords:

ICT Service Design, Open-air Museum Management, Action Research