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USE OF TECHNOLOGY ACCEPTANCE MODEL IN ANALYSING THE UTILISATION OF
SATELLITE-AIDED TOOLS FOR DISASTER MANAGEMENT IN COUNTRIES WITH DIFFERENT
DEVELOPMENTAL STATUS

Abstract

Satellites play an important and growing role in disaster management. A number of international space-based disaster response and management platforms have been put in place to ensure there is an order to the flow of information from the space community to the national disaster response and management for the effective utilisation of space platforms and satellite-aided tools. Technology development in the recent years has seen the rise of satellite-aided tools for disaster management and response. Despite all the capacity-building efforts, information that is available and high technically developed satellite tools, there is still overwhelming evidence that on the ground level, where these tools are supposed to be used, they are not being effectively put to use, especially in developing countries. There seems some discrepancy between what the space community expects and believe about the potency of the space tools during disasters and what is really being used by the people on the ground that carry out the actual response and management of disasters in their respective countries. In this paper we use a technology acceptance model approach to investigate how exposure of different demographic groups to satellite-aided disaster management tools affects their perceived usefulness and ease of use, which eventually leads to the behavioural intention to use satellite aided tools for disaster management. This will help determine trends on the use of technology that increase the likelihood of the use of these tools by various countries when they are affected by disasters. We also consider whether exposure to other unrelated technologies makes it easier for developed countries to embrace these powerful satellite aided tools for disaster management and response.