

Analysis and Evaluation of Landscape Based on Social Media

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In recent years, tourism-based community development that make full use of local resource such as nature, culture, history and industry is expected. In tourism-based community development, beside to improve the attractiveness of local resource, it is important to know the volition of visitor to travel such as “I want to go” , and “I want to go again” . We should advance strategic community development that visitor's preference and behaviors.

Meanwhile, with the rapid development of the information technology in recent years, the development of smart devices and the use of social media are expanding. Along with these phenomenon, huge spatial data groups called big data have been created. Big data is included evaluation data such as reviews on sightseeing. To improve the attractiveness of tourist area and create new value, the utilization of such big data is expected so much. We conceive that it will be a clue to improving future sightseeing area by analysing big data.

In this study, the authors try to analyze and evaluate the landscape in Nara as tourist area using texts and photographs posted on social media. They used Twitter and Flickr in social media service with the various kinds.

Texts posted by visitor extracted from Twitter organized using text mining such as morphological analysis. In addition, they extracted emotional texts and sorted out emotional words. To understand the impression evaluation in each object, they analysed evaluation of object by using emotional words. Also, they extracted the landscape which visitors looked using cooccurrence words.

Photos taken by visitor extracted from Flickr sorted out by using computer vision. They clarified the position where each landscape elements is photographed by using hot spot analysis. To understand the each nationality, they grasped subject information that is easy to photograph in each nationality. In addition, they clarified main subject based on tag information in photos and calculate both subject distance and photographing direction in each object.

As a result, the authors revealed the landscape by visitor using posted on social media in this study.

Keywords: tourist area, social media, text mining, computer vision