Analysis of Railway Station Space based on Social Media

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At present, the environment around railway stations are significantly changing by population growth and urban redevelopment projects due to downtown regression. Railway station of the city center in particular has an aspect as a commercial facility that is not limited to transportation, and it plays an important role. Therefore, the railway station space is changing rapidly by the diversification of needs and the changes in wayside environment. On the other hand, by rapid development of the information technology, the spread of smart devices is in progress. As the social networking service such as Twitter and Facebook has been generalized widely, the data called big data has been created. The big data and data mining in public attention in various fields will be a clue for the qualitative improvement of the city in the field of urban design. In this study, the authors aimed at the big data and the railway station space. They used a photograph community site and Twitter in the social media with the various kinds. They are going to clarify the relationship between the railway station and its surrounding area by using the posted data. They are analyzing the collected photos and texts through social media by using GIS. They grasped the relationship between the shooting position of the photos and the egress element in the analysis of photos. And they grasped the topics on Twitter. Also, they extracted the areas with the similar characteristics on Twitter.

As a result, the authors could grasp the relationship between the railway station and its surrounding area by utilizing big data in this study.

Keywords: Railway Station, Social Media, Data mining, Spatial Analysis