Characterization of Shopping Streets Using Detailed Geographic Information from The Web

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Abstract: In Japan, there are so many commercial accumulations called "Shoutengai",or shopping street in English. Shopping streets have their own history reflecting life style of local people and may have symbolic values in each area. However, recently many shopping streets are declining and facing many problems. For example a lot of shops are defeated and closed by competition with large shopping malls in the suburban areas. So it is required to regenerate or vitalize the shopping streets. Then, first of all, we have to figure out where shopping streets are or what situation shopping streets are facing. Shopping streets must be several types for instance relatively prospering, declining, having historical landscapes and more. So in this research, we will characterize and classify shopping streets according to several types using construction data of stores, landscapes, people flow data, and so on, and prepare an environment that we can find out how shopping streets should be remedied. There are diverse data such as point data of offices or shops, statistics data of commercial accumulation, Global Positioning System(GPS) data of visitors by mobile phones and others in Japan. Also, we can collect a lot of pictures or maps from the Web for

shopping streets and shops there automatically. We will put the data of the illustrational maps and the pictures of shopping streets on the map, and combine with above diverse data. In this way, we will demonstrate how the data above could be integrated to extract and characterize shopping streets in Japan. We expect to get the result that an arrangement of the state situation of shopping streets in Japan and discovery of the clue of the problems that sopping streets in Japan are faced with in this research.