ABSTRACT

In recent years, social media has developed rapidly. This progress is underpinned by the providers' sites offering the latest innovations in order to attract users. In addition to being a communication channel, social media can also provide a user's location coordinates through the check-in feature. With this feature, individuals can indicate their surroundings by sharing particulars about their location. In this case, the location sharing displays a map that reveals the time and place at which an individual's status was posted; thus, individuals' activities in the virtual world reflect that what is happening in the real world. Therefore, Location check-in reveals the existence of individual hidden activities that show human movement. Furthermore, the check-in feature generates unprecedentedly rich information about urban space. As an effect, location-based social media provides new knowledge that reinforces previous theories about human movement.

In this dissertation, the author analyses 211,922 check-ins on Twitter in Makassar City. Specifically, this study discusses whether human movement sourced from location-based social media can be used as a data source for urban planning. In previous research, the dataset was utilized to analyse people's movement by comparing the population on Twitter with the real urban population. The analysis uses three data sources: Twitter data, the population census, and questionnaire data. Secondly, a mapping approach was used to study the dynamic urban land-use pattern by combining check-in features and individual text-posting activities. Thirdly, using a grid based on an aggregation method to analyse the city center's location and delineate the boundaries of the city. Forth, quantified the mobility of urban inhabitants by examining individuals' movement patterns and calculated how far people travel in the city. Lastly, analysed the activity of social media users in the public spaces and public facilities by identifying the type of places that become a priority for people visit.

This study concludes that there is a correlation between the urban population and the Twitter population in identifying the existence of people in a region. The author also observes that the check-in distribution in an area offers an excellent opportunity to define the land-use function. Due to social media data being dynamic, in certain conditions space will change its function. This situation depends on the time, the day and the users' text-posted status. In this regard, the findings provide input for stakeholders in creating an up-to-date urban land-use pattern. Finally, the author concludes that, as a data source, location-based social media has great potential for helping understand the shape and structure of a city.