

Clustering Ethno-Informatics of Naming Village in Java Island Using Data Mining

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Abstract : Ethnoscience is used to see the culture with a scientific perspective, which may help to understand how people develop various forms of knowledge and belief, initially focusing on the ecology and history of the contributions that have been there. One of the areas studied in ethnoscience is ethno-informatics, is the application of informatics in the culture. In this study the science of informatics used is data mining, a process to automatically extract knowledge from large databases, to obtain interesting patterns in order to obtain a knowledge. While the application of culture described by naming database village on the island of Java were obtained from Geographic Indonesia Information Agency (BIG), 2014. The purpose of this study is; first, to classify the naming of the village on the island of Java based on the structure of the word naming the village, including the prefix of the word, syllable contained, and complete word. Second to classify the meaning of naming the village based on specific categories, as well as its role in the community behavioral characteristics. Third, how to visualize the naming of the village to a map location, to see the similarity of naming villages in each province. In this research we have developed two theorems, i.e theorems area as a result of research studies have collected intersection naming villages in each province on the island of Java, and the composition of the wedge theorem sets the provinces in Java is used to view the peculiarities of a location study. The methodology in this study base on the method of Knowledge Discovery in Database (KDD) on data mining, the process includes preprocessing, data mining and post processing. The results showed that the Java community prioritizes merit in running his life, always working hard to achieve a more prosperous life, and love as well as water and environmental sustainment. Naming villages in each location adjacent province has a high degree of similarity, and influence each other. Cultural similarities in the province of Central Java, East Java and West Java-Banten have a high similarity, whereas in Jakarta-Yogyakarta has a low similarity. This research resulted in the cultural character of communities within the meaning of the naming of the village on the island of Java, this character is expected to serve as a guide in the behavior of people's daily life on the island of Java.

Keywords : ethnoscience, ethno-informatics, data mining, clustering, Java island culture

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