## **Abstract**

As the increasing use of the internet, so the use of internet as information site are also increasing. One of this information vendor are university. Many university provide information related to the university through website. On field many university having an headings label which are not relevant to the information provided. Headings label are label which describe the information below it, One of the example are title in the news. To solve this problem we can use labeling method that come directly from user which mean labeling source come from the user of that website user. To get an headings label that comes from the website user we can use crowdsourcing. Crowdsourcing are a method that give work to a crowdworker to get an information with a relatively fast time. Crowdsourcing method that mixed with Natural Language Processing and Text Mining can be used as source of labeling that come directly from user. From the system that have been made, 7 out of 10 title that come from recommendation successfully outperform the original title on Telkom University website. The system can also show the token which have high relevance to the article.

Keywords: crowdsourcing, natural language processing, headings label, text mining, crowdworker, information architecture