



Contribution ID: 11

Type: Abstract for Research Paper

## Sentiment Analysis Model for Online Public Participation Forums

Public participation (PP) is a key constitutional principle outlined in the Constitution of Kenya. It promotes democratic and accountable exercise of power. It gives the citizens opportunity to enhance self-development and service delivery while accounting for their leaders' actions. However, lack of/insufficient public participation in Kenyan county governments is impeding effective devolution process. Among the reasons advanced for this development are inadequate communications. Still even in cases where PP has been successfully carried out, capturing, and analysing the sentiments of the participants remain a serious challenge. Therefore, an online PP tool with embedded sentiment analysis algorithms specifically designed for the counties can be quite resourceful under the circumstances. The main objective of the study was to develop a sentiment analysis model for use in public participation forums in County Governments in Kenya. The specific objectives are to; evaluate the difficulty in obtaining sentiments; determine the challenges faced in the design of an effective sentiment analysis model for public participation forums; design a sentiment model for public participation forums in county governments and evaluate the performance of sentiment analysis model for public participation forums in county governments. The study was conducted through the design thinking process. The population of interest of this study comprised of county management and staff also area residents in Nakuru, Busia and Baringo counties who have participated in public participation forums before. A sample size of 514 respondents comprising 23 county administrators and 491 residents were purposively sampled for the project. The findings indicates that there exists a statistically significant difference in public participation amongst the three counties (Baringo, Busia and Nakuru). The results of regression analysis revealed that human-based factors significantly influence public participation ( $\beta=0.520$ ;  $p<0.05$ ) while technological factors affect public participation significantly ( $\beta=0.449$ ;  $p<0.05$ ). These findings were incorporated on the model design.

**Primary author:** MANASES, MALACHI (STUDENT)

**Co-authors:** THIGA, Moses (Kabarak University); Dr MASESE, Nelson (Kabarak University)

**Track Classification:** ICT for Development