World Academy of Science, Engineering and Technology International Journal of Computer and Information Engineering Vol:14, No:02, 2020

A Framework for Analyzing Public Interaction of Saudi Universities on Twitter

Authors: Sahar Al-Qahtani, Rabeeh Ayaz Abbasi, Naif Radi Aljohani

Abstract : Many universities use social media platforms as new communication channels to disseminate information and promptly communicate with their audience. As Twitter is one of the widely used social media platforms, this research aims to explore the adaption and utilization of Twitter by universities. We propose a framework called 'Social Network Analysis for Universities on Twitter' (SNAUT) to analyze the usage of Twitter by universities and to measure their interaction with public. The study includes a sample of around 110,000 tweets from 36 Saudi universities, including both public and private universities. Using SNAUT, we can (1) investigate the purpose of using Twitter by universities, (2) determine the broad topics discussed by them, and (3) identify the groups closely associated with the universities. The results show that most of the Saudi universities (whether public or private) actively use Twitter. Results also reveal that public universities respond to public queries more frequently, but private universities stand out more in terms of information dissemination using retweets and diverse hashtags. Finally, we develop a ranking mechanism in SNAUT for ranking universities based on their social interaction with the public on Twitter.

Keywords: social media, twitter, social network analysis, universities, higher education, Saudi Arabia

Conference Title: ICSNA 2020: International Conference on Social Network Analysis

Conference Location : Melbourne, Australia **Conference Dates :** February 03-04, 2020