

# Measuring engagement on Twitter using a composite index: An application to social media influencers

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## Abstract

Engagement on social media networks is a complex concept involving numerous interconnected and challenging-to-evaluate elements.

We propose a composite index as a tool to quantify the engagement on the social network Twitter, recently converted on X, and we use this composite index for evaluating a group of Social Media Influencers (SMI). Due to the multicriteria nature of the engagement, we calculate the synthetic indicator using the multicriteria method TOPSIS (Technique for Order of Preference by Similarity to Ideal Solution). We consider two approach for measuring the engagement: the production approach, the follower. Consequently, we obtain three rankings, one for each approach and a third, which is global. A comparison of these three rankings shows the suitability and pertinence of the three approach. This represents a recent finding when contrasted with previous research, which solely focused on either one of the approaches (Harrigan, et al.2021, Veale et al. 2015).

**Key words:** Multicriteria analysis; Composite indicators; Engagement; Social Media Influencers