Patterns of interest in industrial brands: Instagram media uploads and sentiment

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Active interest in brands of potential customers manifests itself in their upload behavior to social networks. In the context of this study, the content uploaded consist of media annotated with certain brand-related hashtags, or comments on suchlike media. We analyze the timing of uploads of media or comments and the sentiment they reflect to Instagram with hashtag annotation related to industrial brands in the automotive, food or fashion sector. Using wavelet analysis, we can identify periodic patterns in individual as well as in pairs of hourly upload series and thus obtain insight into leading and lagging properties of the series relating to competing brands (for example, BMW and Mercedes-Benz) and detect changes in patterns as response to the launch of a new product. The approach we suggest is thus able to identify which among several brands is leading at a given time with respect to media postings by Instagram users. These insights can be useful in the context of business analytics, as they provide a means for analyzing, as well as short-term predicting, the attention potential customers pay to industrial brands, and it permits an assessment of how energized potential customers are with respect to media postings on Instagram about brands.