GEOREDDIT: GEOLOCATING SOCIAL MEDIA USERS TO ENABLE SPATIO-TEMPORAL MARKETING INSIGHTS

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Abstract

Digital marketing research increasingly relies on social media data; yet, most analyses remain aspatial, treating social media behavior as detached from physical place. This gap limits our understanding of how location shapes consumer behavior and market dynamics. The present paper introduces GeoReddit, a novel, scalable framework that infers user home locations from Reddit activity based solely on public posting behavior. Drawing on over 7 billion posts from 2005 to 2023, the authors geolocate 7.4 million United States users and 5.9 billion posts by modeling engagement in geographically anchored subreddits. These assignments are validated against official baseline data, demonstrating high representativeness. Unlike traditional approaches that rely on sparse metadata or self-reported fields, GeoReddit enables reproducible, panel-ready spatio-temporal analyses of consumer discourse at scale. To demonstrate the capabilities of this approach, the authors provide three vignette studies: regionally diverging backlashes to a national brand crisis, shifts in category sentiment following legislative changes, and event-aligned regional mobilizations. The authors offer an open-source toolkit for applying the method, filtering content, and visualizing trends across space and time. This framework unlocks new research directions on how geographical location moderates behavior on social media, redefining key assumptions in social media marketing research.

Keywords: spatial; temporal; geo-spatial; text analysis social media; user home location