

MARKETING COLLOQUIA

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Jeremy Yang

Assistant Professor of Business

Administration

Harvard University, Harvard Business School

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ENGAGEMENT THAT SELLS: INFLUENCER VIDEO ADVERTISING ON TIKTOK

ABSTRACT:

Many ads are engaging yet ineffective. This problem is exacerbated in influencer advertising when the incentives of influencers and advertisers are not perfectly aligned. This paper develops an algorithm to predict the effect of influencer video advertising on product sales. We propose the concept of product engagement score, or pe-score, to capture how engaging the product is as presented in an influencer video ad. We locate product placement with an object detection algorithm and estimate pixel-level engagement as a saliency map by training a deep 3D convolutional neural network on video-level engagement data. Pe-score is computed as the pixel-level, engagement-weighted product placement in a video. We construct and evaluate the algorithm with around 20,000 influencer video ads on TikTok. We leverage variation in video posting time to identify the causal effect of video ads on product sales. Videos with higher pe-scores indeed lift more sales. This effect is robust and more pronounced among impulsive, hedonic, or inexpensive products. Meanwhile, engagement increases with human presence, sad or happy emotions, and stimulating or novel activities. We discuss how various stakeholders in influencer advertising can use pe-score in a scalable way to develop content, align incentives, and improve efficiency.