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Using Images to Increase Social Media Engagement

Yiyi Li, PhD and Ying Xie, PhD

As a real estate professional, you likely manage social media for your properties. You've probably wracked your brain to come up with ideas day after day to improve consumer engagement. However, with so many posts popping up on different platforms every day, the goal of catching your audience's attention has become unprecedentedly difficult. Luckily, you still have one powerful tool that has not been overused by your competitors—images. But because not all images are created equal, you need to use them in the right way to ensure maximum consumer engagement.

Our Research and Findings

Our paper, “Is a picture worth a thousand words? An empirical study of image content and social media engagement,” published in the *Journal of Marketing Research* is one of the first scientific studies aiming to quantify the impact of image content on social engagement. We collected three large data sets—two from Twitter and one from Instagram—to examine whether including images in a social media post helps to increase engagement. More importantly, what kind of images increase audience engagement?



We first find a robust “mere presence” effect of image content on Twitter, a platform where image and text content coexist. Including an image in a tweet increases the number of retweets by 119% on average for tweets related to air traveling and 213% for tweets about SUVs. The effect on the number of likes is similar, with an 87% increase for air-travel related tweets and 151% increase for SUV-related tweets. However, our

results also suggest that posting a “linked” picture—tweeting with picture hyperlinks—is not a good idea. These tweets receive less engagement even when compared to text-only tweets.

We further look at the role of specific image characteristics. To process large quantities of image content, we employ Google Cloud Vision API to extract information from image data and augment that with manual coding for more complex characteristics. The analytics to ensure causal relationship are pretty complex, but ultimately we show that image characteristics are quite important. Interestingly, the effects of some characteristics may be context specific, depending on product categories.

We find that high-quality and professionally shot images consistently lead to higher engagement regardless of platform or product category. As one can imagine, it is hard to come up with an objective definition for picture quality. We solved the problem by hiring research assistants to rate picture quality manually. The pictures rated as “high quality” generally have a clear-cut theme subject, follow composition rules, and have proper lighting and high resolution. In terms of picture source, we have considered photos shot by professional photographers, amateurs, and screenshots. Among the three sources, screenshots attract the least engagement while professionally shot photos are the most preferred.

What (or Who) Should be in Your Photos?

Another factor that we focus on is the presence of human face in pictures. Selfies are very common on social media, but is it a good idea to use selfies to increase engagement? As revealed by our analysis, it depends on which platform you post the pictures. While pictures with human faces can increase engagement measures by 38% to 291% on Twitter, such an effect is absent on Instagram. We think this is because selfies or other human images are more common on Instagram than on Twitter and therefore may not be unique enough to attract additional engagement on the former.

Our analysis also reveals that the effect of picture colorfulness depends on product category. While colorful pictures increase engagement for air-travel-related posts, monotonic pictures with less color variation are better received when the posts are related to Sport Utility Vehicles, a utilitarian product.

Lastly, we wondered whether a text-image fit effect exists. For example, do only relevant images to the text content increase the popularity of a social media post? Again, the answer depends on where you post the pictures. We find that relevant pictures lead to more engagement on Twitter but do not have such an effect on Instagram. Furthermore, we find that none of the text content features, such as topics, emotion tones, or post length, matter much for posts on Instagram, a platform designed to share visual content.

Real Estate Implications

Unsurprisingly, in real estate, social media posts with an image will perform better than posts relying solely on text. Our findings, while applicable to all social media platforms, will be particularly helpful when considering how you market properties on Twitter. For example, a focus on professional, well-composed photographs with a thoughtful tweet describing the images may increase engagement. Of course, the ultimate interaction with a tweet showing your property would involve the viewer clicking a link to your listing. Assuring that there is an easy-to-find link separate from the image may increase engagement. Our findings show that including the link as an image preview is not effective; users want to be able to maximize the image before leaving Twitter.

When considering how to apply these findings to real estate, it is important to be intentional about which images make your posts. It may be worth the time or money to increase the quality of your listing images. Your social media audience will engage better with quality photographs. Adding a personal touch, such as a model enjoying the house, may increase engagement. With careful planning and quality, your images can drive social media engagement.

Recommended Reading

Li, Yiyi and Ying Xie (2020), “Is a Picture Worth a Thousand Words? An Empirical Study of Image Content and Social Media Engagement,” *Journal of Marketing Research*, 57, 1-19.

About the Authors

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Dr. Yiyi Li (PhD – University of Texas at Dallas) specializes in quantitative marketing, applied econometrics, and empirical industrial organization. Li’s research seeks to measure and quantify two related issues: the impact of multi-channel advertising on consumer’s search and purchase decision, and the impact of content strategy on social media marketing effectiveness.

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Dr. Ying Xie’s (PhD – Northwestern University) research focuses on building quantitative models to study the role of information in consumer decision making and derive implications for firms, regulators, and other stakeholders based on the model output. She is especially interested in topics related to consumer learning, social influences, UGC dynamics, and platform mechanism design. Her work has appeared in top marketing and management journals including *Journal of Marketing Research*, *Marketing Science* and *Management Science*. Prior to her arrival at UT Dallas, she served on marketing faculty at Washington University in Saint Louis and Rutgers University.



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