

Luxury Brand vs. AI Generated Social Media Ads: An Experimental Study

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Background. The emergence of artificial intelligence (AI) has facilitated greater emphasis on consumer preferences and overall heightened the consumer experience (Roozen & Katidis, 2019). AI technologies can allow luxury brands the ability to transform their business operations by being able to serve their current and potential target markets (Ransbotham et al., 2017). Furthermore, luxury brands can leverage AI technologies in creating innovative marketing strategies for both targeting and positioning their brand in a “smarter” way (Pantano et al., 2018). Retailers such as Sephora, Coco Cola, and Carrefour have already started using this AI tool to better market to their customers by creating personalized messages to promote products and services that align with the consumer’s interests (Marr, 2023).

Significance of Study. Studies have indicated that luxury brands are typically reluctant to embrace advances in digital technologies (Okonkwo, 2009). It is also argued that AI technologies can help luxury brands improve consumer engagement through marketing communications in an efficient way (Prentice & Nguyen, 2020). Given the importance of how AI technology can shape the industry, it is critical for the luxury brand to embrace this technology to better engage with their customers. Current literature focusing on AI and luxury involves product development (Xu & Mehta, 2022) and online experience (Rahman et al., 2023), however, there are no studies investigating the use of AI technologies for creation of social media posts for luxury brands’ marketing strategy. Thus, the purpose of this study was to investigate social media marketing communications created by luxury brands and AI technology and to determine if there is a difference in overall follow intention.

Theoretical Framework. The study was guided by a modified version of the Stimulus-Organism-Response (S-O-R) framework (Mehrabian & Russell, 1974). The researchers suggested that the social media marketing communications created by the luxury brand and the AI technology acted as the Stimulus. The elements investigated included sensory, affect, intellectual, and behavioral aspects as conceptualized by Brakus et al. (2009). The evaluation of lovemarks and brand trust acted as the Organism. Lovemarks is the combination of brand love and respect that was conceptualized by Cho et al. (2015). Lastly, based on the social media communication and consumer emotions, follow intention, or the Response, was evaluated. The researchers investigated if the sensory, affect, intellectual, and behavioral elements of the two types of social media marketing communications (luxury brand vs. AI) had a similar or different effect on the consumer’s emotional and behavior responses.

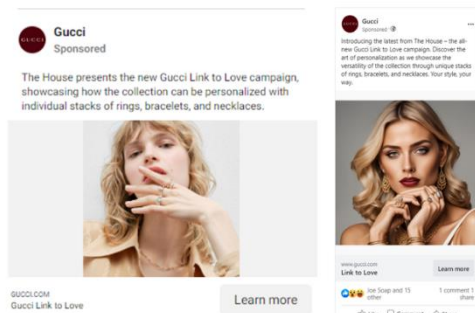


Figure 1. Study stimuli (left is brand created, and right is AI generated).

The researchers investigated if the sensory, affect, intellectual, and behavioral elements of the two types of social media marketing communications (luxury brand vs. AI) had a similar or different effect on the consumer’s emotional and behavior responses.

Methods. An experimental design was used for this study. Data was collected using an online survey, which consisted of demographic questions, reliable scales (Nunnally, 1978), screener questions, and attention

checks. In addition, two stimuli, a brand created social media ad and AI generated ad (see Figure 1), were added to the survey and participants were randomly assigned to the stimuli. Participants were required to view the stimuli before moving to the survey items. The AI generated copy portion of the ad was created using the platform ChatGPT and the image was generated by Playground AI. Centiment, a crowdsourcing survey company, was used to collect the data and included luxury consumers over the age of 18 in the US. SPSS and MPlus software programs were used to analysis the data.

Results. After the conclusion of data collection, 511 completed surveys were received. The response rate was reported at 97.7% as surveyed were rejected if participants did not pass the attention checks or the survey was incomplete. Of the participants, 49.7% were male and 49.7% were female. Most respondents were white (70.3%), obtained a high school diploma (25.1%) bachelor's degree (43.2%), and had an annual income between \$100,000-\$200,000 (70.5%). Most participants like to shop online (52.4%). A measurement model was tested through structural equation modeling (SEM) using a maximum-likelihood estimation procedure with a covariance matrix as input to test the measures using MPlus. The measurement model indicated adequate fit ($\chi^2 = 2,877.894$; $df = 499$; $p = 0.0$; $CFI = 0.90$; $RMSEA = 0.090$; $SRMR = 0.062$) based on cut off values suggested by Kline (2005). Each of the latent variables satisfied the suggested criteria for composite reliability ($CR \geq 0.70$) and average variance extracted (AVE

Table 1. Path results for two models (Brand and AI generated).

| Hypothesis | Path | t-value (Brand) | p-value (Brand) | Supported (S) or Not Supported (NS) | t-value (AI) | p-value (AI) | Supported (S) or Not Supported (NS) |
|------------|----------------------------------|-----------------|-----------------|-------------------------------------|--------------|--------------|-------------------------------------|
| H1a | Sensory → Brand Love | 3.367 | 0.001 | S | 2.181 | 0.029 | S |
| H1b | Sensory → Brand Respect | 5.762 | 0.000 | S | 4.505 | 0.000 | S |
| H1c | Sensory → Brand Trust | 7.410 | 0.000 | S | 5.333 | 0.000 | S |
| H2a | Affective → Brand Love | 3.422 | 0.001 | S | 2.899 | 0.004 | S |
| H2b | Affective → Brand Respect | 6.878 | 0.000 | S | 5.037 | 0.000 | S |
| H2c | Affective → Brand Trust | 7.298 | 0.000 | S | 3.374 | 0.001 | S |
| H3a | Intellectual → Brand Love | 8.705 | 0.000 | S | 9.536 | 0.000 | S |
| H3b | Intellectual → Brand Respect | 0.635 | 0.526 | NS | 2.389 | 0.017 | S |
| H3c | Intellectual → Brand Trust | 3.973 | 0.000 | S | 1.801 | 0.072 | NS |
| H4a | Behavioral → Brand Love | 1.106 | 0.269 | NS | 5.054 | 0.000 | S |
| H4b | Behavioral → Brand Respect | 9.701 | 0.000 | S | 8.655 | 0.000 | S |
| H4c | Behavioral → Brand Trust | 6.562 | 0.000 | S | 7.014 | 0.000 | S |
| H5 | Brand Love → Follow Intention | 10.179 | 0.000 | S | 11.462 | 0.000 | S |
| H6 | Brand Respect → Follow Intention | 6.031 | 0.000 | S | 7.920 | 0.000 | S |
| H7 | Brand Trust → Follow Intention | 9.182 | 0.000 | S | 9.175 | 0.000 | S |

other ($p < 0.05$).

Conclusions. This study was the first to investigate the consumer's emotional and behavioral responses to social media content generated by both the luxury brand and AI. The findings from this study provided empirical evidence on the effective use of AI technology by luxury brands for their marketing communications, specifically, social media. While both stimuli were successful in positively affecting follow intention of the brand, the AI generated model suggested more significant relationship guided by the framework. In general, luxury brand ads tend to be less attractive as they typically do not follow the social media ad parameters to catch the attention of users. The idea of using AI to develop social media content for luxury brands is a relatively new strategy but has the potential to heighten brand awareness and increase the luxury brand's profit (Marr, 2023). AI will also allow luxury brands to personalize brand messaging while using less resources such as employee's time and the brand's marketing budget (Prentice & Nguyen, 2020).

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