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CONSUMERS’ TRUST DYNAMICS: EDITED PHOTO EFFECTS

Completed Research Paper

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ABSTRACT

We explore the impact of photo editing perception on consumer trust and engagement in service providers. Integrating social information processing and source credibility theories and a survey, we propose and find that consumers perceive edited photos as less trustworthy, resulting in a lower intention to engage in business. Theoretically, our findings extend the information systems and P2P business literature by highlighting the importance of visual literacy in consumer decision-making and trust dynamics. We further advise service providers to consider authenticity and demographic factors in their visual strategies, especially when personal photos play a significant role in trust development. By revealing the effect of visual literacy on service providers’ perceived trustworthiness we contribute to a deeper understanding of the interplay between technology, trust, and consumer behavior in digital marketplaces. We recognize our sample diversity limitations and plan to extend the study with broader demographic inclusivity and controlled image manipulation experiments.

Keywords

Photo Editing, Consumer Trust, Visual Literacy, Peer-to-Peer Business

INTRODUCTION

In this current world of digital technology innovation, users’ ability to manipulate and enhance images has become ubiquitous (Swerzenski 2021). With the rise of social media platforms (e.g., TikTok, Capcut, Snapchat, Facebook, and Instagram) that heavily rely on unstructured data like images and videos further boosted the popularity of various photo editing tools. Having easier than ever access to various user-friendly, AI enabled photo/video editing applications, users are more likely to retouch and enhance their photographs effortlessly (Gill, 2021). These factors contributed to the revolution in image editing that led to a higher number of users sharing their edited photos across various platforms (e.g., personal social media profiles to professional business accounts). Studies report that the range varies from 30% to 90% (Ozimek et al. 2023).

However, despite this widespread use of edited images, there remains a significant gap in the literature regarding their effect on consumers’ perceptions of trustworthiness. On one hand, consumers may perceive an untidy or un-edited photo as an indication of the person’s lack of care and professionalism, on the other side, they may consider an edited photo as deceiving. Hence, the visual literacy of a consumer can shape their trust on that provider in both ways and it’s imperative to explore this phenomenon further. Moreover, the subsequent impact of this perceived trust emerging from providers photos on consumers’ intentions to engage with them for business remains relatively unexplored. Therefore, we, in this research, endeavor to fill this gap by addressing the following research questions, i) Do consumers’ visual literacy affect providers’ perceived trustworthiness? ii) how does the trust that emerges from providers’ photos affect consumers’ intention to accept services from those providers? To address these research questions, we employed a comprehensive survey methodology with fifty student samples.

Our study holds considerable significance in shedding light on a relatively unexplored dimension of the digital era. The outcomes of our study are expected to offer valuable insights for both businesses and IS literature alike. For businesses, especially for entrepreneurs and P2P business providers, understanding photo editing affects consumers’ trust and subsequently, their intentions to engage with services, can be instrumental in devising effective online marketing and branding strategies. Moreover, individuals seeking to establish trust in their online presence can benefit from a deeper understanding of how photo editing choices may influence their audiences’ perceptions. We anticipate that our findings will contribute to a more
comprehensive comprehension of the dynamics of trust in the digital age and will ultimately help businesses and individuals navigate the evolving landscape of online interactions and transactions.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Visual Literacy and Perceived Trustworthiness

The advent of digital photo editing tools, notably since the launch of Photoshop in the late 90s, has revolutionized personal and commercial image presentation (Swerzenski, 2021). With the proliferation of AI and big data technologies, contemporary tools offer sophisticated editing capabilities that challenge the distinction between authentic and altered images. The ubiquity of these tools, especially on mobile platforms, has been catalyzed by the rise of social media and the need for enhanced visual engagement. Research indicates that multimodal data, including visual presentations (provider images) and textual information (provider bios, consumer reviews), significantly influence consumer behavior, along with quantitative measures like ratings (Ert et al., 2016; Lee & Shin, 2014; Chen-Yu & Kincade, 2001). Despite the known impact of these elements, the specific role of visual literacy in shaping consumer perceptions of service providers remains an understudied avenue.

Visual literacy, encompassing the comprehension of visual media, awareness of visual manipulation, and aesthetic appreciation (Messaris, 1994), plays a critical role in the digital era's consumer decision-making processes. Enhanced visual literacy enables consumers to discern edited from authentic images, influencing their perception of the individual or entity presented. Social information processing theory posits that individuals utilize available cues, including visual and textual, to form impressions (Walther, 2016). In peer-to-peer (P2P) business structures, where direct familiarity is absent, these cues become paramount in decision-making. This assertion is supported by studies in high-uncertainty contexts like online dating, where visual cues significantly impact perceived trustworthiness (Toma & D'Angelo, 2017; Gibbs et al., 2011; Heino et al., 2010; Appel et al., 2023).

The Source Credibility Theory (SCT), foundational in marketing and communication literature, asserts that the perceived credibility of the source critically impacts communication effectiveness (Hovland et al., 1953; Metzger et al., 2003). In online P2P exchanges, consumers often engage with both structured (e.g., ratings) and unstructured data (e.g., images, bio texts, reviews) before committing to a service. Given the reliance on these elements, perceived manipulation of visual content (e.g., edited photos) can detrimentally affect the perceived trustworthiness of the provider (Lowry et al., 2014; Pornpitakpan, 2004).

H1: Consumers’ perceived trustworthiness will be lower on providers whose photos they perceive as edited.

Perceived Trust and Intention

The sharing economy and P2P business models, epitomized by platforms such as Airbnb, Turo, and Vrbo, represent a departure from traditional service exchanges. These models are characterized by transient interactions where parties typically do not meet beforehand, introducing challenges in assessing service quality prior to engagement (Wilson et al., 2016). Unlike traditional B2C or C2C e-commerce, where tangible product assessments and provider reputation are accessible, the intangible nature of services in the sharing economy necessitates alternative trust-building mechanisms. In the absence of physical examination, consumers traditionally rely on provider reputation, manifested through ratings and comments, to gauge service quality. However, this reliance is complicated in the sharing economy due to the homogeneity and overwhelmingly positive nature of reviews, as observed in platforms like Airbnb (Bridges & Vásquez, 2018). Zhang et al. (2020) identify four influencer types affecting consumer trust, highlighting provider’s self-disclosure, especially through personal photos, as a potent method for reducing uncertainty and fostering trust.

Trust is instrumental in bridging the gap between unfamiliar parties, particularly where information asymmetry, economic risks, and personal safety are concerns (Ert et al. 2016; Delhey et al. 2011). It is not merely a facilitative factor but a prerequisite shaping consumer purchase intentions in digital marketplaces. Empirical research within P2P contexts underscores the pivotal role of perceived trust in molding consumer purchase intentions, suggesting a direct link between trust and consumer willingness to engage (Ert et al. 2016; Tussyadiah and Park 2018). Hence, we propose that-

H2: Consumers’ perceived trustworthiness resulting from visual literacy positively affects their intention to accept the service from a provider.

METHODOLOGY

Data Collection

To empirically test our hypotheses, we designed a survey using the Qualtrics platform, targeting both undergraduate and graduate student populations. We integrated a set of fifty authentic host images directly sourced from Airbnb into the survey instrument. Participants were engaged in a hypothetical scenario simulating the need to book a cross-country rental for accommodation. Each participant was randomly assigned one host image and asked to assess its authenticity by responding to
the prompt: "Does the photo appear to have filters or editing applied, or does it look raw and unedited?" Responses were dichotomized into a binary variable with '1' indicating perceived editing and '0' indicating no perceived editing. We designed our survey following established IS literature (e.g., Venkatesh et al., 2003; Venkatesh et al., 2012).

To ascertain the perceived trustworthiness of the hosts, we employed a seven-point Likert scale comprising five items, based on the validated scale by Ma et al. (2017). Additionally, participants indicated their intention to book with the evaluated host by using another seven-point Likert scale, responding to the statement: "Regarding the rental host whose photo you've reviewed, please indicate your likelihood of booking a rental from them, ranging from 'Strongly Unlikely' to 'Strongly Likely'." Upon completion of the survey, participants were assigned a unique numeric identifier for verification purposes. They were informed of the possibility to earn ten participation points, with the assurance that non-participation carried no adverse consequences. The anonymity of responses was strictly maintained to ensure the integrity and confidentiality of the research process.

Data Analysis

Upon collection, the dataset comprised 55 responses. However, due to incompleteness, five responses were omitted from the analysis, resulting in a total of 50 usable responses. Our initial analytical step involved conducting an independent samples t-test to examine the differences in perceived trustworthiness between two distinct groups: Group 1 (perceived edited photos, mean (µ) = 4.49) and Group 2 (perceived unedited photos, mean (µ) = 5.20). We calculated the average trustworthiness score using the method recommended by Ma et al. (2017) and Zhang et al. (2020). The results of the t-test indicated a statistically significant difference in perceived trustworthiness between the groups (t = 2.458, df = 45.957, p-value = 0.017), lending empirical support to Hypothesis 1.

Following the t-test, we employed a Tobit regression analysis to elucidate the impact of perceived trustworthiness on consumers' intention to engage with service providers. Given the left-censored nature of the dependent variable, 'intention to book', a Tobit regression was deemed an appropriate analytical method, aligning with the suggestions of Chattopadhyay and Mitra (2019) and Liang et al. (2017). In the regression model, we included controls for participant age, education level, and gender to mitigate confounding effects, as guided by extant literature (Zhang et al., 2020). Given that participants were only presented with the hosts' photos and did not receive any additional information about the hosts, this approach effectively standardized the hosts across a single dimension — their photographic representation. Consequently, this methodological decision negates the need to control for other host-related factors, focusing the analysis solely on the impact of perceived photo editing on trustworthiness. Prior to regression analysis, perceived trust, participants’ age, and education variables were standardized, and the intention to book variable was log-transformed to satisfy the assumption of normality. The regression analysis yielded significant findings (presented in Table 1), demonstrating a positive and significant relationship between hosts’ perceived trustworthiness and guests’ booking intentions. This finding corroborates the theoretical underpinnings of our research and the extant literature on the role of trust in consumer decision-making processes.

<table>
<thead>
<tr>
<th></th>
<th>Model1</th>
<th>Model2</th>
</tr>
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<tbody>
<tr>
<td>Intercept</td>
<td>1.48 (0.05) ***</td>
<td>1.52 (0.06) ***</td>
</tr>
<tr>
<td>Trust</td>
<td>0.20 (0.05) ***</td>
<td>0.24 (0.04) ***</td>
</tr>
<tr>
<td>Age</td>
<td>0.13 (0.05) *</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>-0.17 (0.05) **</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.08 (0.09)</td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable = log (intention to book)

P *** < 0.001; p** < 0.01; p* < 0.05

Table 1. Tobit Regression Results

DISCUSSION

This research aimed to investigate the differential impact of photo editing perception on consumers’ trust in service providers and the subsequent influence on their engagement intentions. By conducting a rigorous analysis, our study empirically supports both proposed hypotheses, contributing valuable insights to the Information Systems (IS) and business domains.

Theoretical Contributions

Our study leverages the intersection of social information processing theory and source credibility theory to underscore the importance of visual literacy in shaping consumer perceptions. In an era dominated by AI-enabled and accessible photo editing tools, our findings reveal that consumers typically perceive edited photos as less trustworthy, thus extending the IS literature...
on trust and image perception. This is particularly relevant given the ubiquity of photo editing and its implications for consumer trust and decision-making. Furthermore, our research confirms and expands upon existing literature by illustrating that perceived trustworthiness significantly influences consumer intentions to engage with service providers. This not only reinforces the established connection between trust and intention in consumer behavior research but also highlights the critical role of visual literacy-derived trust in these dynamics.

Practical Implications
From a practical standpoint, our results suggest nuanced strategies for service providers in the sharing economy. Understanding that consumers' age and education level significantly influence their service acceptance decisions, providers should adopt more tailored approaches rather than a one-size-fits-all strategy. For instance, service providers might benefit from maintaining authenticity in their visual presentations to enhance trustworthiness among discerning consumers. Additionally, service providers, particularly those engaged in peer-to-peer (P2P) businesses, should exercise caution when posting edited photos on their profiles, considering the impact on consumer trust.

Limitations and Future Research
While our study provides insightful contributions, it has some limitations. The reliance on a student sample may raise concerns about generalizability, and the relatively small sample size limits the robustness of our findings. To address these issues, we plan on including a broader and more diverse demographic through platforms such as Amazon MTurk, Upwork, or Prolific. Additionally, we aim to control for sample size and diversity. Future experimental studies might also consider varying host photos by gender, age, and race to comprehensively understand these potential confounding factors. Next, we focus on analyzing Airbnb host photos within specific travel scenarios, which somewhat narrows our insights to the peer-to-peer rental sector. To broaden the applicability of our findings, we intend to conduct future experiments across diverse contexts, including transactions on platforms like Facebook Marketplace and Nextdoor. This expansion will enhance the generalizability of our results and aim to deliver more comprehensive and robust conclusions.

By advancing our understanding of visual literacy's impact on trust and consumer behavior, this study paves the way for more nuanced and effective strategies in online marketplaces and contributes to the broader discourse on trust and technology in the sharing economy.

CONCLUSION
This study underscores the significant role of perceived photo editing in shaping consumer trust and intention to engage within sharing economy and P2P business models. By confirming that consumers perceive edited photos as less trustworthy and that this perception impacts their engagement intentions, we contribute important insights to the IS and business literature, particularly in understanding the dynamics of visual literacy. Our findings suggest practical implications for service providers in tailoring their visual strategies to enhance trustworthiness, e.g., posting authentic photos. Recognizing limitations related to sample size and diversity, future research should expand demographic inclusivity and control for image manipulation to validate and extend these findings.

In essence, our research highlights the evolving interplay between technology, trust, and consumer behavior, pointing toward the need for continued exploration in the digital and visual domains of consumer engagement.

REFERENCES
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