








“Online marketing campaigns’ aesthetics: Measuring the direct effect on customers’ decision-making”

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ONLINE MARKETING CAMPAIGNS' AESTHETICS: MEASURING THE DIRECT EFFECT ON CUSTOMERS' DECISION-MAKING

Abstract

This research aims to investigate the direct and formal effect of visual aesthetics on customers' willingness to participate in an online marketing campaign, given that visual aesthetics is considered a salient design characteristic that customers tend to refer to when expressing their experience with the online retailer environment. This research study incorporates the Theory of Reasoned Action (TRA) and the Technology Acceptance Model (TAM) to propose and estimate this direct effect through structural aesthetics TAM model. In order to validate the proposed model, an online survey with interactive experience was constructed utilizing an open-source platform and was primarily sent to scholars specializing in HCI, informatics, user experience, and digital marketing research in the United Kingdom. The data were obtained from 360 participants, and Partial Least Squares (PLS) path modeling using SmartPLS 4 was employed to evaluate the proposed model. The empirical evaluation demonstrated and confirmed the authenticity and novelty of significant direct and formal effects of customers' perceived visual aesthetics on their willingness to participate in an online marketing campaign ($\beta = 0.462$, $t = 10.847$, $p < 0.001$), and their usage attitude ($\beta = 0.789$, $t = 39.622$, $p < 0.001$). These findings highlight the importance of visual aesthetics in online marketing campaign design, suggesting that concise, well-organized, and visually appealing user interfaces is more likely to engage customers than a complex, cluttered one.

Keywords

Online Marketing Campaign, Human-Computer Interaction (HCI), User Experience (UX), Visual Aesthetics, Customers Willingness to Participate

JEL Classification

C38, L81, M30, M37

INTRODUCTION

In order to thrive in today's highly competitive digital landscapes, online marketing campaigns must possess visually captivating and aesthetically pleasing designs (Schrepp et al., 2021; Crolic et al., 2019). The research has predominantly focused on the usability characteristics of products, such as efficiency, learnability, intuitive use, controllability, and error tolerance, over an extended duration (Szajna & Scamell, 1993; Al Sokkar & Law, 2013; Tractinsky, 2018). However, due to the proliferation of the internet, the scope of attention has expanded over the last decade to include User Experience (UX) variables such as visual aesthetics, stimulation, and novelty (Rogers et al., 2002; Nusairat et al., 2020; Alsokkar, et al., 2023). This raises a crucial inquiry: what are the key aspects that affect shoppers' intents, actions, satisfaction, and subsequent behavior in a certain online marketing campaign for a retail environment?

Initially, one may perceive the visual appeal of web interfaces as an independent component of the design and development of an online marketing campaign. However, most prominent studies on visual aes-

thetics have shown that the perceived visual aesthetics or beauty of a marketing campaign can directly influence the customer's attitude toward its usage and indirectly influence their participation (e.g., Tractinsky, 2018; Porat & Tractinsky, 2012). The widely recognized statements "Attractive things work better" frequently summarize this discovery (Al Sokkar, 2014; Norman, 2003; Tractinsky et al., 2000). However, since the effect of visual aesthetics on customers' willingness to participate in online marketing campaigns has been moderated by other factors (Alsokkar et al., 2023; O'Brien, 2010; Palvia, 2009; Van der Heijden, 2003), it is crucial to examine the effect on it directly, as customers can determine the worth of participating based on their user experience and perception of the specific traits of visual aesthetics as a non-instrumental quality of online marketing campaigns. Hence, more investigation and clarification of this direct effect is required.

1. LITERATURE REVIEW AND HYPOTHESES

In the digital age, online marketing campaigns have become a crucial tool for businesses to reach and engage their target audiences. As the online landscape becomes increasingly saturated with content, the visual aesthetics of these campaigns have emerged as a critical factor in capturing customer attention and influencing behavior. Visual aesthetics refers to the overall visual appeal and design elements of online marketing campaigns, including color schemes, typography, imagery, and layout. Recent studies have highlighted the importance of visual aesthetics in creating a positive first impression and engaging users in digital environments (Sauer & Sonderegger, 2022). This heightened emphasis on visual aesthetics underscores the necessity for brands to prioritize these elements in their marketing strategies. By adopting a cohesive and visually appealing design, businesses can not only enhance the user experience but also foster brand loyalty and encourage conversions.

The concept of aesthetics is associated with a significant halo effect, as demonstrated by Al Sokkar and Law (2013), this concept refers to the tendency for first impressions or features of something to impact overall assessments, even when contradictory data are later offered (Al Sokkar & Law, 2013). Empirical research studies on this concept have demonstrated that initial impressions based on visual aspects may influence users' evaluation of the product's utility (e.g., (Rosenzweig, 2014; Vazquez et al., 2021; Alsokkar, et al., 202)). In the same vein, other research studies have concluded that a well-designed user interface facilitates the correct and lucid delivery of information (Muller

& de Klerk, 2020; Tan & Huam, 2021; AlFarraj et al., 2021; Ghaith et al., 2024). Al Sokkar and Law (2013) contend that visual aesthetics significantly influences user preference through a pronounced halo effect. However, there is limited information regarding the mechanisms of this halo effect in e-commerce, particularly concerning a customer's decision-making process when engaging with a web vendor, whether in a formal or informal, direct or indirect manner (Al Sokkar & Law, 2013). However, extensive research studies on visual aesthetics have consistently demonstrated that the perceived beauty or visual appeal of a website or marketing campaign can significantly impact the customer's attitude toward its usage (Nusairat et al., 2020; Alsokkar et al., 2023; Tractinsky, 2018; Porat & Tractinsky, 2012; Flavián, et al., 2006). Other researches were performed in the context of an online marketing campaign (Kusumasondjaja, 2020; Pegan & Verginella, 2024); For instance, Ki and Kim (2019) explored the role of visual aesthetics in influencer marketing campaigns on Instagram. This research revealed that visually cohesive and aesthetically pleasing content from influencers resulted in more positive attitudes toward the promoted brands. Besides, the study also emphasized the importance of maintaining a consistent visual style and incorporating brand elements seamlessly into influencer content (Ki & Kim, 2019). While visual aesthetics directly affects usage attitudes, recent studies have also explored their indirect effects on users' willingness to participate in online marketing campaigns. For instance, the study by Vazquez et al. (2020) examined the relationship between visual aesthetics, perceived enjoyment, and user participation in online brand communities. The findings of this study suggested that visually appealing community designs indirectly increased user participation

by enhancing perceived enjoyment and fostering a sense of belonging among community members (Vazquez et al., 2021). Kaur et al. (2022) conducted another research to explore the role of visual aesthetics in gamified marketing campaigns. The research findings indicated that visually appealing game designs indirectly increased user participation by enhancing perceived entertainment value and motivating users to engage with the branded content. Besides, the study emphasized the importance of cohesive visual themes and interactive elements in creating engaging gamified experiences (Kaur et al., 2023).

Practically, the attractiveness of web interfaces may seem to be disconnected from the overall design and development of an online marketing campaign since they may be generated separately. Therefore, the assessment of the direct effect of visual aesthetics on customer participation and decision-making is never considered. With this in mind and by going back to the late 1960s, it is worth considering that Martin Fishbein and Icek Ajzen introduced the Theory of Reasoned Action (TRA) to examine the decision-making processes of individuals who consider the consequences of their choices before engaging in a certain activity (Fishbein & Ajzen, 1975). TRA explains and predicts people's voluntary behaviors based on their attitudes, subjective norms, and perceived behavioral control, and it was seen as a complete way to understand and predict people's behaviors, as well as some theories related to technology acceptance, like the Technology Acceptance Model (TAM) and the Information Systems Success Model (ISSM) (Davis, 1989; DeLone & McLean, 2004). In light of this, many research efforts designed both TAM and ISSM to propose solutions and models that explain how customers adopt and utilize technology, as well as their intention to participate in transactions or make purchases, in which some of these studies aimed to incorporate other variables such as usability and visual aesthetics or attractiveness into their analysis (Hammouri et al., 2021; Alshurideh et al., 2019; Orehovački et al., 2013; Palvia, 2009; Van der Heijden, 2003). For instance, Van der Heijden (2003) conducted an empirical study to examine a TAM-based theoretical model to propose perceived visual attractiveness as an external factor that influences users' attitudes toward utilizing technology or website in-

terfaces. The study's findings suggest that future investigations ought to consider the importance of incorporating visual aesthetics as a means to impact the intention of online customers to engage in activities or complete purchases (Van der Heijden, 2003). In a similar vein, Al Sokkar et al. (2023) conducted a research to validate a structural model that was founded upon TAM. This model was designed to measure the impact of physical environment stylistics on an individual's emotional state. The findings indicate that the visual aesthetic quality of e-commerce user interfaces significantly influence users' emotional reactions. Besides, it also confirms that this quality is a crucial factor in determining how customers perceive the usability of these interfaces, which in turn influences their attitudes towards their use (Al Sokkar et al., 2023).

User Experience (UX) utilizes conceptual frameworks to cultivate aesthetic principles within its field, and the main research interests include interface design, business models, and a philosophy that emphasizes user-centric design as the cornerstone of every UX framework (Law & Van Schaik, 2010; O'Brien, 2010). In light of this research interest, Thüring et al. (2007) conducted a series of studies to examine the components of UX, employing the discipline of Human-Computer Interaction (HCI). The study concluded that a broader perspective should be adopted when considering user experience, which consists of three primary components known as the Component of User Experience (CUE) model, namely: instrumental qualities, non-instrumental qualities, and emotional reactions. With regard to visual aesthetics, it falls within the category of non-instrumental qualities, which consist of elements that meet users' needs in a way that goes beyond mere task completion. Therefore, HCI research justifies the definition of visual aesthetics as the sensory experience a product provides and its alignment with individuals' objectives and interests (Thüring & Mahlke, 2007). The findings indicated that the CUE model serves as an effective framework for examining visual aesthetics as components of user experience and their interrelations with other elements of the model. Consequently, several research studies were undertaken based on the CUE model to study the relationship between visual aesthetics and other elements in the other UX components (Al Sokkar & Law, 2013; Orehovački et al.,

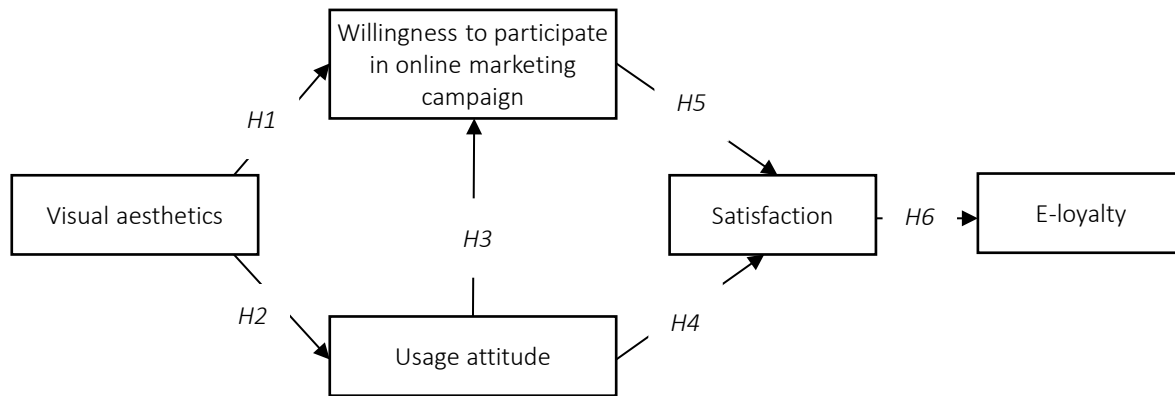


Figure 1. Research model: aesthetics TAM-based model

2013; Alsokkar et al., 2023). Nevertheless, these study topics did not examine the explicit association between visual aesthetics and the tendency to participate or intention to purchase. Investigating this direct effect would incorporate novel dimensions of user experience and non-instrumental elements, as customers often mention visual aesthetics as a prominent design aspect when discussing their experiences in an online shop setting (O'Brien, 2010; Al Sokkar, 2014; Kusumasondjaja, 2020; Vazquez et al., 2021; Al Sokkar et al., 2023).

While the beneficial influence of visual aesthetics on customer usage attitudes has been consistently validated, it has also been found to exert a considerable halo effect on user preferences, thereby introducing an additional connection within the TRA chain (belief → attitude → intention → behavior) by establishing a new direct relationship between belief and intention. This new relationship will depend on how serious the usage context is considered, as demonstrated by the study that distinguishes between the visual aesthetics of games and formal classroom learning (De Angeli et al., 2006). At this point, it could be explained that the aesthetic experience pertains to the process of actively and fully engaging with one's environment, which includes both passive observation and complete immersion (Pine & Gilmore, 1998; Oh et al., 2007; Crolic et al., 2019). This involves customers engaging in a digitally enhanced environment, where they actively participate and thoroughly immerse themselves (O'Brien, 2010). Given this fact, it is important to note that research, strategic planning, and methodology connected to e-commerce and digital marketing have influenced UX by highlight-

ing the importance of visual aesthetics, including visual identity, in defining the user experience throughout an interaction event (Roto et al., 2011; Al Sokkar et al., 2023). This research study contends that there is a dearth of research models capable of integrating these interconnected notions, particularly the direct effect of visual aesthetics on customers' willingness to participate in an online marketing campaign. Until now, it remains unclear whether the nature and behavior of visual aesthetics' halo effect applies to e-commerce and online marketing campaign contexts; that is, whether it has a direct or indirect impact on interaction consequences such as customers' willingness to participate in an online marketing campaign, their usage attitude, satisfaction, and e-loyalty.

This research aims to investigate the direct and formal effect of visual aesthetics on customers' willingness to participate in an online marketing campaign.

Consequently, Figure 1 suggests a conceptual aesthetics TAM-based model to investigate the causal relationships between these factors both on direct and indirect levels while striving to achieve a harmonious equilibrium between authenticity, manageability, and comprehensibility. Accordingly, the following hypotheses were developed:

- H1: *Visual aesthetics positively affect customers' usage attitude.*
- H2: *Visual aesthetics positively affect customers' willingness to participate in an online marketing campaign.*

- H3: *Customers' usage attitude positively affects their willingness to participate in an online marketing campaign.*
- H4: *Customers' usage attitude positively affects their satisfaction.*
- H5: *Customers' willingness to participate in an online marketing campaign positively affects their satisfaction.*
- H6: *Customers' positive level satisfaction positively affects their e-loyalty.*

2. METHODOLOGY

To evaluate the primary objective of this research and the aforementioned model hypotheses, an online survey with interactive experience was constructed utilizing an open-source platform, and personal contacts and academic networks to disseminate the survey were used; the survey was primarily sent to scholars in the United Kingdom who are specialized in HCI, informatics, user experience, and digital marketing research. In general, a positive survey methodology was utilized in constructing this survey, and research instruments were developed utilizing online survey items adapted from previous studies (AlSokkar et al., 2024; Al-Gasawneh et al., 2023; Palvia, 2009; O'Brien, 2010; Kim et al., 2009). Nonetheless, these

instruments were modified to suit the specific aim of this study and online marketing campaign, as detailed in Table 1. The questionnaire underwent pre-testing by graduate students and faculty members in the form of a pilot study. This endeavor has led to only minor adjustments being made to the survey instrument.

A total of 360 valid replies were obtained from the online survey, which was conducted over a period of about one month. The descriptive analysis indicated that 42.5% of the respondents were females, and the majority 40% aged under 25 between 18-24 years, 27% within the age of 25 to 34 years, 18% within the range of 35 to 44 years, 10% within the range of 45 to 54 years, and 5% are aged over 55. The survey participants, on average, dedicated 7 minutes to complete the survey. Table 2 contains detailed information about the participants.

Table 2. Participants' demographics

Variable	Category	N	%
Gender	Male	207	57.5%
	Female	153	42.5%
Age	18-24 years	143	40%
	25-34 years	100	27%
	35-44 years	64	18%
	45-54 years	35	10%
	≥ 50 years	18	5 %
Education	High school and college	50	13.89%
	Undergraduate	94	26.11%
	Postgraduate	216	60%
Total		360	100%

Table 1. Measured constructs and related items

Constructs	Items
Visual aesthetics	AE1: This online marketing campaign is attractive.
	AE2: This online marketing campaign is aesthetically appealing.
	AE3: I liked the graphics and images used on this online marketing campaign.
	AE4: This online marketing campaign appealed to my visual senses.
Willingness to participate in online marketing campaign	WP1: I am interested in participating in this online marketing campaign.
	WP2: I will be recommending this online marketing campaign to my friends.
	WP3: Rather than stop using this online marketing campaign, I intend to continue using it.
	WP4: I am willing to provide information to this online vendor and its marketing campaign.
Usage attitude	UA1: I enjoyed using an online marketing campaign.
	UA2: I value the online marketing campaign.
	UA3: I am interested in exploring the online marketing campaign.
	UA4: I felt compelled to make a purchase after going through this online marketing campaign.
Satisfaction	S1: Going through this online marketing campaign made me feel pleased.
	S2: Going through this online marketing campaign made me feel delighted.
	S3: Going through this online marketing campaign made me feel content.
	S4: Going through this online marketing campaign made me feel satisfied.
E-loyalty	E-I1: I feel having a strong relationship with this online vendor.
	E-I2: I am likely to continue the relationship with this online vendor in the future.

The online survey comprises two sections. The participants had the option to travel between these pages using two buttons labeled “Next” and “Previous” located at the bottom of the page. The final page consists solely of a note expressing gratitude for one’s participation. The data were submitted upon the participant’s selection of the “Submit” button on the last page. Section 1: Data were collected on the participants’ demographics, past online buying experiences, and familiarity with the research website and its online marketing campaign. The second section instructed participants to visit a specific landing page to learn about their seasonal marketing campaign. Participants were then asked to report the amount of time spent on the website and its related campaign pages. On average, participants completed the activity in 3.4 minutes, with a standard deviation SD of 2.2 minutes. Participants were requested to provide feedback on the online campaign webpages based on their prior interactions. Participants were then asked to reply to the items presented in Table 1. The Likert scale employed in this study consisted of seven points, with the extreme left and right anchors labeled as “poor” and “good”, respectively. An additional inquiry was made regarding the participants’ level of knowledge regarding the specific campaign and whether or not it had impacted on their decision to participate.

3. RESULTS AND DISCUSSION

Although the questionnaires included in this study have been previously validated in earlier research (Van der Heijden, 2003; Lavie & Tractinsky, 2004; Palvia, 2009; O’Brien, 2010; Lee et al., 2015; Al-Gasawneh et al., 2022; Masa’deh et al., 2023; Al Sokkar et al., 2024), this study conducted additional evaluations to ascertain the reliability and validity of the instruments, which were modified to correspond with the specific aim of this study pertaining to an online marketing campaign. With this objective in mind, this research utilized IBM SPSS Statistics to ensure the reliability of the instruments used and its’ related items. As presented in Table 3, there was a high degree of internal consistency for each construct, as all related items for each construct had Cronbach’s alpha reliability coefficients over 0.70 (Chin, 2009; Henseler, et al., 2015). On the other hand, in order to ascertain the construct validity, an exploratory factor analysis was conducted on all items associated with each construct utilizing Direct Oblimin rotation. The results presented in Table 3 also indicated that all items for each construct have successfully loaded onto a respective factor, and the cross-loadings for each component were much below the maximum allowable level of 0.4. Conversely, the convergent validity of each component, as well as the Composite Reliability (CR) of the whole constructs, were assessed. The find-

Table 3. Construct validity and reliability of the aesthetics TAM-based model

Constructs	Item	Loading	AVE	CR	Cronbach’s α
Visual Aesthetics (VA)	VA1	0.951	0.838	0.359	0.953
	VA2	0.960			
	VA3	0.917			
	VA4	0.920			
Willingness to Participate in Online Marketing Campaign (WP)	WP1	0.980	0.248	0.922	0.982
	WP2	0.960			
	WP3	0.911			
	WP4	0.910			
Usage Attitude (UA)	UA1	0.900	0.268	0.994	0.982
	UA2	0.910			
	UA3	0.398			
	UA4	0.950			
Satisfaction (SF)	SF1	0.932	0.088	0.955	0.973
	SF2	0.962			
	SF3	0.920			
	SF4	0.952			
E-loyalty (E-I)	e-L1	0.994	0.920	0.994	0.298
	e-L2	0.905			

ings indicated that eigenvalues for each construct were greater than 1.00, and the item loadings for all constructs were greater than 0.5. In addition to the aforementioned analysis, Table 4 shows that all HTMT values for the measured constructs were less than 0.90, ranging from 0.641 to 0.875. Subsequently, it becomes evident that each measurement of the latent construct was completely independent of one another (Henseler et al., 2015). Based on an analysis of the measurement models' convergent and discriminant validity, it can be concluded that the scale utilized to assess the constructs and their corresponding items in the CFA model was both valid and reliable.

Table 4. Discriminate validity (HTMT) for constructs

	VA	WP	UA	SF	EL
VA					
WP	0.641				
UA	0.733	0.739			
SF	0.673	0.699	0.754		
EL	0.732	0.689	0.674	0.875	

To investigate the correlations between the two measured constructs' scores, "Visual Aesthetics and Participant's Willingness to Participate in Online Marketing Campaign", Pearson product-moment correlation coefficients was conducted. The findings revealed a strong correlation between these concepts ($r = 0.827, p < 0.01$), indicating that participants viewed visual aesthetics as a quality that is directly related to their willingness to participate in online marketing campaigns. Indeed, their willingness to participate was also linked to its attractiveness and visual appeal. To gain a deeper comprehension of the impact of both factors, a regression analysis was conducted to determine the extent to which participants perceived visual aesthetics could account for the variation in their willingness to participate, and the results indicated that 70.7% of it could be accounted for visual aesthetics. These results could contribute to the main argument of this research work; more specifically it can be considered as evidence for the direct and formal effect it looked for, since customers determined the worth of participating in online marketing campaigns based on their user experience and perception of specific traits, such as visual aesthetics as a non-instrumental quality. Simultaneously, these results could support the need for further analysis to validate the proposed conceptual model.

The aesthetics TAM-based model and its related hypotheses were assessed using path modeling with Partial Least Squares (PLS). The selection of this approach was based on its ability to illustrate the relationships not just between latent variables and their observable counterparts, but also between latent variables themselves. Besides, several research studies have shown that the Partial Least Squares (PLS) method can enhance the explanation of variability in response variables, hence simplifying the computation of complicated models (Chin, 2009; Henseler et al., 2015). PLS-based path modeling offers a feasible substitute for covariance-based Structural Equation Modeling (SEM) as PLS permits the evaluation of both formative and reflective constructs and has fewer limitations regarding the distribution of variables and the assumptions made regarding error terms. Additionally, compared to SEM, PLS necessitates a reduced sample size. In accordance with the recommendation made by Chin et al. (2009), the Smart-PLS 4 program was utilized in order to analyze the study model and the scales that accompanied it. This study followed the recommendations of Henseler et al. (2015) by evaluating the possible exclusion of paths that were considered negligible due to the existence of other variables. This assessment was conducted using a bootstrap approach with a sample size of $N = 5000$, and the statistical significance of the data was assessed by computing the β -weights associated with each anticipated structural path for each measurement model.

Regarding the results of the structural model that has been proposed in this research study; Figure 2 and Table 5 summarize the path analysis and indicates that customers' perceived Visual Aesthetics have a positive impact on their Willingness to Participate in an Online Marketing Campaign ($\beta = 0.462, t = 10.847, p < 0.001$), and it strongly influences their Usage Attitude ($\beta = 0.789, t = 39.622, p < 0.001$). These results provided support for both hypotheses *H1* and *H2*. Additionally, the results indicated that Usage Attitude has a positive impact on Willingness to Participate in an Online Marketing Campaign ($\beta = 0.488, t = 11.110, p < 0.001$), which further supports the hypothesis *H3*, and the R^2 values for the customer's Usage Attitude and Willingness to Participate in Online Marketing Campaign were 0.623 and 0.807, respectively. This indicates that the perceived Visual Aesthetics

could account for 62.3% of the total variance in Usage Attitude, and that Visual Aesthetics, along with Usage Attitude, could account for 80.7% of the total variance in Willingness to Participate in Online Marketing Campaign. Besides, the findings provided evidence in favor of hypotheses *H4* and *H5*. To be more specific, the findings of the study indicate that the Usage Attitude of a customer has a positive impact on their level of satisfaction ($\beta = 0.323$, $t = 5.885$, $p < 0.001$), and their Willingness to Participate in an Online Marketing Campaign has a positive impact on their level of satisfaction ($\beta = 0.611$, $t = 11.123$, $p < 0.001$). The R^2 value for Customer Satisfaction was 0.815, which indicates that both Usage Attitude and Willingness to Participate in Online Marketing Campaign may combined predict 81.5% of the total variance in Satisfaction. Finally, the findings of this assessment indicated that the level of customer satisfaction has a noteworthy and positive influence on their level of e-loyalty ($\beta = 0.930$, $t = 102.068$, $p < 0.001$). This demonstrates that hypothesis *H6* is correct and confirmed, and that the

variance in Customer e-loyalty can be ascribed to their level of satisfaction to the extent of 86.5%.

Since visual aesthetics was always mediated by other factors (for example, usability, enjoyment, pleasure, or trust), the visual aesthetics of an online marketing campaign will invariably influence a customer's perception of the service or product. Undoubtedly, a well-defined and organized online marketing campaign that includes just a handful of components is easier to scan than convoluted and cluttered ones. Furthermore, excellent visual clarity conveys the impression that the online marketing campaign is simple, and thus indicates for a good usability and other design characteristics that directly affect user willingness to participate in an online marketing campaign (Muller & de Klerk, 2020; Tang & Huam, 2021; AlFarraj et al., 2021). Customers can determine the value of participating in online marketing campaigns based on their user experience and perception of specific traits, such as aesthetics as a non-instrumental quality, so it was important to investigate

Table 5. Summary of the aesthetics TAM-based model related hypotheses

Hypothesis	Path	β	Std. dev.	t-value	p-value	VIF	Decision
H1	(VA) \rightarrow (WP)	0.426	0.043	10.748	0.000	1.651	Supported
H2	(VA) \rightarrow (UA)	0.987	0.002	226.93	0.000	1.000	Supported
H3	(UA) \rightarrow (WP)	0.884	0.044	11.110	0.000	1.651	Supported
H4	(UA) \rightarrow (SF)	0.323	0.055	5.885	0.000	2655.	Supported
H5	(WP) \rightarrow (SF)	0.116	0.055	321.11	0.000	2655.	Supported
H6	(SF) \rightarrow (E-L)	0.903	0.090	860.201	0.000	1.000	Supported

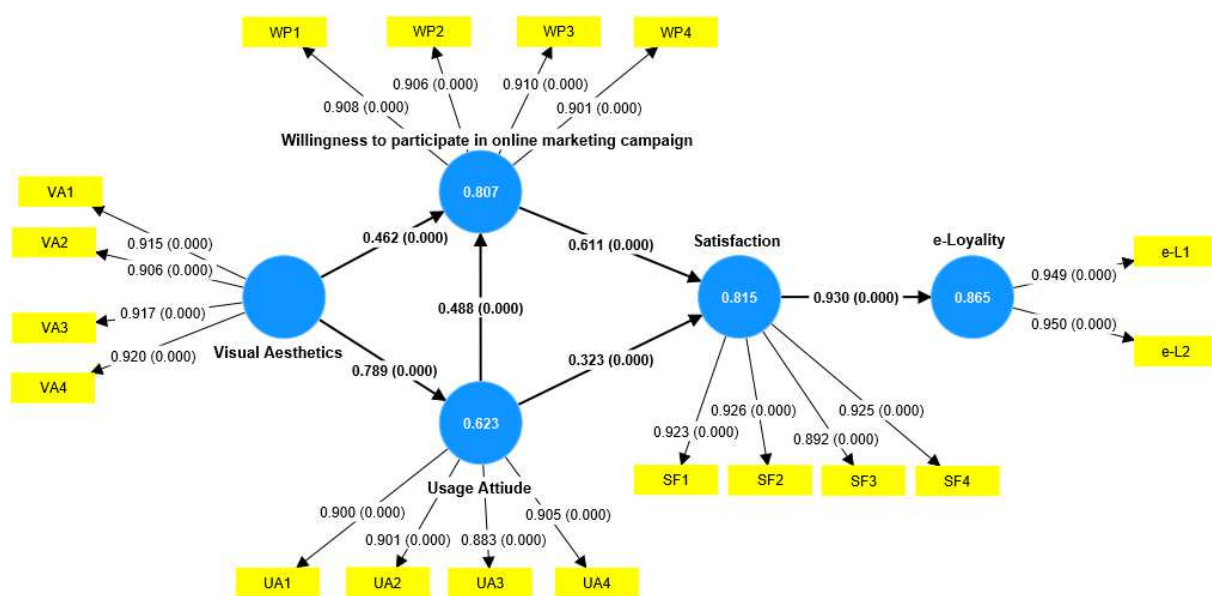


Figure 2. Validated aesthetics TAM-based model

the proposed direct effect in this research study. In order to examine this direct effect using a structural model, the research study was expanded, and TAM was utilized. An online survey involving 360 participants was conducted for the proposed structural model assessment, which was then analyzed using Partial Least Squares (PLS) path modeling. The empirical evaluation demonstrated the authenticity and novelty of the direct and formal effect of customers perceived visual aesthetics on their willingness to participate in an online marketing campaign. Hence, this positive direct effect will lead to positive interaction consequences with the online marketing campaign such as the studied customer satisfaction and e-loyalty. Therefore, it is advised that requirement engineers and visual designers to consider customers' expectations regarding visual aesthetics as a crucial requirement that directly influences the design of online marketing campaigns.

As for theoretical implications, this study aimed to enhance understanding of the importance of visual aesthetics as a non-instrumental quality that can greatly influence user preference. To achieve this, the study developed and validated an aesthetics TAM-based model that surpasses tradi-

tional models. Notably, the model highlights the direct and formal impact of visual aesthetics on customers' willingness to participate in an online marketing campaign. This relationship has the potential to provide fresh perspectives and make valuable contributions to the disciplines of e-commerce, digital marketing, and UX. The evolution of visual aesthetics holds significant importance as it can influence customers' decision-making, satisfaction, loyalty, and overall user experience. Similarly, important, this direct and formal relationship may be extrapolated and used in every situation or encounter involving internet marketing campaigns. Nevertheless, the outcome of the interaction may differ based on the specific characteristics of the campaign being considered. For practical implications: when planning an online campaign, visual designers typically give priority to accessibility and other relevant considerations. The study's findings suggest that visual designers and e-commerce businesses can benefit from analyzing the emotional reactions of their customers to visual aesthetics as prominent design elements. This study can provide more thorough design ideas and perhaps improve their marketing methods, leading to higher levels of customer satisfaction and loyalty.

CONCLUSION

This research investigates the direct and formal effect of visual aesthetics on the customer's willingness to participate in an online marketing campaign, as it is a prominent design attribute frequently cited by customers when articulating their online retail experiences, given that visual aesthetics has consistently been mediated by usability, enjoyment, pleasure, or trust. Ideally, the aesthetic value of an internet marketing campaign will affect a customer's perception, and an intended online campaign with a few components is simpler to scan than a complicated one. Similarly, within the HCI research field, excellent visual clarity gives the impression that the online marketing campaign is simple, which indicates good usability and other design characteristics that directly affect the user's willingness to participate. Therefore, it is vital to study the direct influence since customer experience and assessment of features like aesthetics as a non-instrumental quality may determine the worth of participating in online marketing campaigns.

To assess this direct effect through a structural model, the research study was expanded through employing the Technology Acceptance Model (TAM). Partial Least Squares (PLS) path modeling was used to examine 360 participants online survey for the suggested structural model evaluation. The study found that customer perception of visual aesthetics directly affects their willingness to participate in an online marketing campaign. Hence, this positive direct effect will lead to enhanced interaction consequences with the online marketing campaign such as the studied customer satisfaction and e-loyalty. Although this research has successfully accomplished its main aim, it does have some notable shortcomings in terms of its traits or implementations. An online survey was conducted to assess the validity of

the aesthetics TAM-based model: This approach demonstrated advantages over traditional paper-based survey methodologies in terms of accuracy, effectiveness, and being able to reach people who would have otherwise been difficult to contact. However, due to the lack of information, it is not feasible to accurately determine the actual behavior of participants in this experiment. Therefore, it remains uncertain whether there are notable differences in the performance of various people with the same interactive experience.

There are several potential ramifications that might arise from undertaking more research in the future with the intention of advancing the findings of this study. For instance, the aesthetics TAM model has limited application, as mentioned before. Therefore, more research inquiries about the field of online advertising and human computer interaction are considered essential. It is advisable to conduct research studies to validate the model in different online marketing campaign settings that include a wide range of scopes with different items or services. Besides, it is advisable for future research to consider extending the aesthetics TAM model to include the process of buying or subscribing.

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REFERENCES

1. Abuaddous, H., Al Sokkar, A. A. M., & Abualodous, A. (2018). The impact of knowledge management on organizational performance. *International Journal of Advanced Computer Science and Applications*, 9(4). <http://dx.doi.org/10.14569/IJACSA.2018.090432>
2. Al Sokkar, A. A., & Law, E. L.-C. (2013). In situ observations of non-verbal emotional behaviours for multimodal avatar design in e-commerce. In *Proceedings of the International Conference on Multimedia, Interaction, Design and Innovation* (pp. 1-12). <https://doi.org/10.1145/2500342.2500356>
3. Al Sokkar, A. A. M. (2014). *Multimodal human-computer interaction for enhancing customers' decision-making and experience on B2C e-commerce websites* (PhD thesis). University of Leicester. Retrieved from https://figshare.le.ac.uk/articles/thesis/Multimodal_human-computer_interaction_for_enhancing_customers_decision-making_and_experience_on_B2C_e-commerce_websites/10130822?file=18257909
4. AlFarraj, O., Alalwan, A. A., Obeidat, M. Z., Baabdullah, A., Aldmour, R., & Al-Haddad, S. (2021). Examining the impact of influencers' credibility dimensions: attractiveness, trustworthiness and expertise on the purchase intention in the aesthetic dermatology industry. *Review of International Business and Strategy*, 31(3), 355-374. <http://dx.doi.org/10.1108/RIBS-07-2020-0089>
5. Al-Gasawneh, J. A., Alzubi, K. N., Anuar, M. M., Padlee, S. F., ul-Haque, A., & Saputra, J. (2022). Marketing performance sustainability in the Jordanian hospitality industry: The roles of customer relationship management and service quality. *Sustainability*, 14(2), 803. <https://doi.org/10.3390/su14020803>
6. Al-Gasawneh, J., Alsoud, M., Al-sokkar, A., Warrad, L. H., Saputra, J., & Daoud, M. K. (2023). Internet Advertisements and Brand Equity amongst User-Generated Content and Purchase Intention. *Migration Letters*, 20(S8), 467-478. <https://doi.org/10.59670/ml.v20iS8.4623>
7. Almajali, D. A., Omar, F., Alsokkar, A., Alshrideh, A. S., Masa'Deh, R., & Dahalin, Z. (2022). Enter-

- prise resource planning success in Jordan from the perspective of IT-Business strategic alignment. *Cogent Social Sciences*, 8(1), 1-21. <https://doi.org/10.1080/23311886.2022.2062095>
8. Alshurideh, M., Al Kurdi, B., & Salloum, S. (2019). Examining the main mobile learning system drivers' effects: A mix empirical examination of both the Expectation-Confirmation Model (ECM) and the Technology Acceptance Model (TAM). In *Proceedings of the International Conference on Advanced Intelligent Systems and Informatics* (pp. 406-417). Retrieved from https://link.springer.com/chapter/10.1007/978-3-030-31129-2_37
 9. Alsokkar, A. A., Law, E., Almajali, D., & Alshinwan, M. (2023). The effect of multimodality on customers' decision-making and experiencing: A comparative study. *International Journal of Data and Network Science*, 7(1), 1-14. <http://dx.doi.org/10.5267/j.ijdns.2022.12.012>
 10. Al Sokkar, A. A., & Law, E. L.-C. (2013). Validating an Episodic UX Model on Online Shopping. In *Proceedings of the 5th ACM SIGCHI symposium on Engineering interactive computing systems* (pp. 296-306). <https://doi.org/10.1145/2494603.2480301>
 11. AlSokkar, A., Law, E. L.-C., Almajali, D. A., Al-Gasawneh, & Alshinwan, M. (2024). An Indexed Approach for Expectation-Confirmation Theory: A Trust-based model. *Electronic Markets*, 34(1). Retrieved from <https://link.springer.com/article/10.1007/s12525-024-00694-3>
 12. Al-Sous, N., Almajali, D., & Al-Sokkar, A. A. M. (2023). Antecedents of social media influencers on customer purchase intention: Empirical study in Jordan. *International Journal of Data and Network Science* 7, 1-6. <http://dx.doi.org/10.5267/j.ijdns.2022.11.010>
 13. AL-Sous, N., Almajali, D., Alsokkar, A., Majali, T., Mansour, A., Alshurideh, A., Masadeh, R., & Dahalin, Z. (2022). Antecedents of e-commerce on intention to use the international trade center: An Exploratory Study. *International Journal of Data and Network Science*, 6(4), 1531-1542. <http://dx.doi.org/10.5267/j.ijdns.2022.4.023>
 14. Anderson, E. (1998). Customer Satisfaction and Word of Mouth. *Journal of Service Research*, 1(1), 5-17. <https://doi.org/10.1177/109467059800100102>
 15. Chin, W. W. (2009). How to write up and report PLS analyses. In: *Handbook of partial least squares: Concepts, methods and applications* (pp. 655-690). London, New York, NY: Springer. Retrieved from https://link.springer.com/chapter/10.1007/978-3-540-32827-8_29
 16. Crolic, C., Zheng, Y., Hoegg, J. & Alba, J. (2019). The influence of product aesthetics on consumer inference making. *Journal of the Association for Consumer Research*, 4(4), 398-408. Retrieved from <https://www.journals.uchicago.edu/doi/abs/10.1086/705033>
 17. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340. <http://dx.doi.org/10.2307/249008>
 18. De Angeli, A., Sutcliffe, A., & Hartmann, J. (2006). Interaction, usability and aesthetics: what influences users' preferences? In *Proceedings of the 6th conference on Designing Interactive systems* (pp. 271-280). <https://doi.org/10.1145/1142405.1142446>
 19. DeLone, W., & McLean, E. (2004). Measuring e-commerce success: Applying the DeLone & McLean information systems success model. *International Journal of Electronic Commerce*, 9(1), 31-47. <http://dx.doi.org/10.1080/10864415.2004.11044317>
 20. Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Addison-Wesley Publication Company.
 21. Flavián, C., Guinalíu, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information & Management*, 43(1), 1-14. <https://doi.org/10.1016/j.im.2005.01.002>
 22. Ghaith, M., Al-rawashdeh G. H., Alzoud, M. A., Ghaith, Y. M., Alotoum, F. J., & AlSokkar, A. M. (2024). Examining the Effects of Digital Payment and Impulsive Buying on Purchase Intention. In *Proceedings of 2024 2nd International Conference on Cyber Resilience (ICCR)* (pp. 1-7). IEEE. Retrieved from <https://ieeexplore.ieee.org/document/10532804>
 23. Hammouri, Q., Al-Gasawneh, J. A., Abu-Shanab, E. A., Nusairat, N. M., & Akhoshaidah, H. (2021). Determinants of the continuous use of mobile apps: The mediating role of users awareness and the moderating role of customer focus. *International Journal of Data and Network Science*, 5(4), 667-680. <http://dx.doi.org/10.5267/j.ijdns.2021.7.014>
 24. Hammouri, Q., Aloqool, A., Saleh, B. A., Aldossary, H., al Frejat, S. Y., Halim, M., Almajali, D. A., Al-Hasawneh, J. A., & Darawsheh, S. E. (2023). An empirical investigation on acceptance of e-wallets in the fintech era in Jordan: extending UTAUT2 model with perceived trust. *International Journal of Data and Network Science*, 7(3), 1249-1258. <http://dx.doi.org/10.5267/j.ijdns.2023.4.013>
 25. Hanandeh, A., Kilani, Q., Alserhan, A. F., Khasawneh, Z., Hijazin, A. F. K., Abu Nahleh, I., & Hammouri, Q. (2023). E-marketing, EWOM, and social media influencers' effects on Intention to purchase and customer's happiness at Amman Stock Exchange. *International Journal of Data and Network Science*, 7(4), 1921-1928. <http://dx.doi.org/10.5267/j.ijdns.2023.7.001>
 26. Hassenzahl, M. (2001). The effect of perceived hedonic quality on product appealingness. *International Journal of Human-Computer Interaction*, 13(4), 481-499. https://doi.org/10.1207/S15327590I-JHC1304_07
 27. Hassenzahl, M. (2018). The thing and I: understanding the relationship between user and product. In *Funology* (pp. 31-42). http://dx.doi.org/10.1007/1-4020-2967-5_4

28. Hassenzahl, M., & Monk, A. (2010). The inference of perceived usability from beauty. *Human-Computer Interaction*, 25(3), 235-260. <http://dx.doi.org/10.1080/07370024.2010.500139>
29. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115-135. <https://psycnet.apa.org/doi/10.1007/s11747-014-0403-8>
30. Kaur, J., Lavuri, R., Parida, R., & Singh, S. V. (2023). Exploring the impact of gamification elements in brand apps on the purchase intention of consumers. *Journal of Global Information Management (JGIM)*, 31(1), 1-30. <http://dx.doi.org/10.4018/JGIM.317216>
31. Ki, C., & Kim, Y. (2019). The mechanism by which social media influencers persuade consumers: The role of consumers' desire to mimic. *Psychology & Marketing*, 36(10), 905-922. <https://doi.org/10.1002/mar.21244>
32. Kim, D., Ferrin, D., & Rao, R. (2009). Trust and satisfaction, two stepping stones for successful e-commerce relationships: A longitudinal exploration. *Information Systems Research*, 20(2), 237-257. Retrieved from <https://pubsonline.informs.org/doi/10.1287/isre.1080.0188>
33. Kusumasondjaja, S. (2020). Exploring the role of visual aesthetics and presentation modality in luxury fashion brand communication on Instagram. *Journal of Fashion Marketing and Management: An International Journal*, 24(1), 15-31. <https://doi.org/10.1108/JFMM-02-2019-0019>
34. Lavie, T., & Tractinsky, N. (2004). Assessing dimensions of perceived visual aesthetics of web sites. *International Journal of Human-Computer Studies*, 60(3), 269-298. <http://dx.doi.org/10.1016/j.ijhcs.2003.09.002>
35. Law, E. L.-C., & Van Schaik, P. (2010). Modelling user experience—An agenda for research and practice. *Interacting with computers*, 22(5), 313-322. <http://dx.doi.org/10.1016/j.intcom.2010.04.006>
36. Lee, H., Chung, N., & Jung, T. (2015). Examining the cultural differences in acceptance of mobile augmented reality: Comparison of South Korea and Ireland. In *Information and Communication Technologies in Tourism 2015* (pp. 477-491). Springer. http://dx.doi.org/10.1007/978-3-319-14343-9_35
37. Masadeh, R., AlMajali, D. A., AlSokkar, A. A. M., Alshinwan, M., & Shehdadeh, M. (2023). Antecedents of Intention to Use E-Auction: An Empirical Study. *Sustainability*, 15(6), 1-11. <https://doi.org/10.3390/su15064871>
38. Muller, C., & de Klerk, N. (2020). Influence of design aesthetics and brand name on generation Y students' intention to use wearable activity-tracking devices. *International Journal of eBusiness and eGovernment Studies*, 12(2), 107-121. <http://dx.doi.org/10.34111/ijebeg.202012202>
39. Norman, D. (2003). *Emotional design: Why we love (or hate) everyday things*. Boulder, USA: Basic Books.
40. Nusairat, N., Hammouri, Q., Al-Ghadi, H., Ahmad, A. M. K., & Al Haj Edit, M. (2020). The effect of design of restaurant on customer behavioral intentions. *Management Science Letters*, 10(9), 1929-1938. <http://dx.doi.org/10.5267/j.msl.2020.2.021>
41. O'Brien, H. L. (2010). The influence of hedonic and utilitarian motivations on user engagement: The case of online shopping experiences. *Interacting with computers*, 22(5), 344-352. <https://doi.org/10.1016/j.intcom.2010.04.001>
42. Oh, H., Fiore, A. M., & Jeoung, M. (2007). Measuring experience economy concepts: Tourism applications. *Journal of Travel Research*, 46(2), 119-132. <https://doi.org/10.1177/0047287507304039>
43. Orehovački, T., Al Sokkar, A. A. M., Derboven, J., & Khan, A. (2013). *Exploring the hedonic quality of slow technology*. CHI 2013 Workshop on Changing Perspectives of Time in HCI. Retrieved from https://www.researchgate.net/publication/236840561_Exploring_the_Hedonic_Quality_of_Slow_Technology
44. Palvia, P. (2009). The role of trust in e-commerce relational exchange: A unified model. *Information & Management*, 46(4), 213-220. <https://doi.org/10.1016/j.im.2009.02.003>
45. Pegan, G., & Verginella, C. (2024). Influencer Marketing and Consumer Behaviour: Insights into the Effectiveness of Fashion Influencers' Sponsored Content on Instagram. In *Springer eBooks* (pp. 155-184). Retrieved from https://ideas.repec.org/h/spr/sprchp/978-3-031-35589-9_8.html
46. Pine, J., & Gilmore, J. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97-105. <https://hbr.org/1998/07/welcome-to-the-experience-economy>
47. Porat, T., & Tractinsky, N. (2012). It's a pleasure buying here: The effects of web-store design on consumers' emotions and attitudes. *Human-Computer Interaction*, 27(3), 235-276. <http://dx.doi.org/10.1080/07370024.2011.646927>
48. Rabaai, A., Al-lozi, E., Hammouri, Q., Nooh Bany, M., Alsmade, A. A., & Al-Gasawneh, J. A. (2022). Continuance intention to use smartwatches: An empirical study. *International Journal of Data and Network Science*, 6(4), 1643-1658. <http://dx.doi.org/10.5267/j.ijdns.2022.4.012>
49. Rogers, Y., Sharp, H., & Preece, J. (2002). *Interaction Design: Beyond Human-Computer Interaction* (1st ed.). Chichester, England: John Wiley and Sons Ltd.
50. Rosenzweig, P. (2014). *The halo effect... and the eight other business delusions that deceive managers*. Simon and Schuster.
51. Roto, V. (2007). *User experience from product creation perspective*. Lancaster.
52. Roto, V., Law, E., Vermeeren, A., & Hoonhout, J. (2011). *User Experience White Paper – Bringing clarity to the concept of user experience*. Retrieved from https://www.academia.edu/853674/User_Experience_White_Paper_Bringing_clarity_to_the_concept_of_user_experience

53. Sauer, J., & Sonderegger, A. (2022). Visual aesthetics and user experience: A multiple-session experiment. *International Journal of Human-Computer Studies*, 165, 102837. <https://doi.org/10.1016/j.ijhcs.2022.102837>
54. Schrepp, M., Otten, R., Blum, K., & Thomaschewski, J. (2021). What causes the dependency between perceived aesthetics and perceived usability? *International Journal of Interactive Multimedia & Artificial Intelligence*, 6(6), 78-85. <http://dx.doi.org/10.9781/ijimai.2020.12.005>
55. Szajna, B., & Scamell, R. (1993). The Effects of Information System User Expectations on their Performance and Perceptions. *MIS Quarterly*, 17(4), 493-514. <https://doi.org/10.2307/249589>
56. Tang, L., & Huam, H. T. (2021). A Preliminary Study on the Factors Affecting Cosmetic and Personal Care (CPC) Products Online Social Shopping Purchase Intention. *International Journal of Business and Technology Management*, 3(3), 1-15. Retrieved from <https://myjms.mohe.gov.my/index.php/ijbtm/article/view/15032>
57. Thüring, M., & Mahlke, S. (2007). Usability, aesthetics and emotions in human-technology interaction. *International Journal of Psychology*, 42(4), 253-264. <http://dx.doi.org/10.1080/00207590701396674>
58. Tractinsky, N. (2018). The usability construct: a dead end? *Human-Computer Interaction*, 33(2), 131-177. <http://dx.doi.org/10.1080/07370024.2017.1298038>
59. Tractinsky, N., Katz, A. S., & Ikar, D. (2000). What is beautiful is usable. *Interacting with computers*, 13(2), 127-145. [https://doi.org/10.1016/S0953-5438\(00\)00031-X](https://doi.org/10.1016/S0953-5438(00)00031-X)
60. Van der Heijden, H. (2003). Factors influencing the usage of web-sites: the case of a generic portal in The Netherlands. *Information & Management*, 40(6), 541-549. [https://doi.org/10.1016/S0378-7206\(02\)00079-4](https://doi.org/10.1016/S0378-7206(02)00079-4)
61. Vazquez, D., Cheung, J., Nguyen, B., Dennis, C., & Kent, A. (2021). Examining the influence of user-generated content on the fashion consumer online experience. *Journal of Fashion Marketing and Management*, 25(3), 528-547. <https://doi.org/10.1108/JFMM-02-2020-0018>