How Social Media Factors Influence User's Travel Purchase Intention

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Abstract-This research aims to investigate the impact of specific factors on user's travel purchase intention and attitude in Social Media. Data collected from Social Media users to measure the relationship between the above factors of Social Media and user attitude on travel purchase intention with the Structural Equation Model. The primary purpose of the research is to explore whether the following Social Media factors are positively related to user attitude and travel purchase intention. The factors are source credibility, information reliability, user pleasure, and perceived value in travel services information. The findings of the research showed that there is a positive relationship between pleasure, attitude, and travel purchase intention, a positive relationship between reliability and customer attitude, and a positive relationship between perceived value and travel purchase intention. We also found that there is no relationship among credibility, user attitude, and travel purchase intention and an additional factor concerning atmospherics, positively affecting the perceived value and user pleasure. Finally, we found that customer attitude plays a vital role in mediating the relationship between credibility, pleasure, reliability, value, and travelers' purchase intention.

Keywords-Social media; customer attitude; purchase intention; source credibility; pleasure; information reliability; perceived value; web atmospherics; SEM.

I. INTRODUCTION

The impact of social media on user's travel purchase intention through advertising from tour operators, social friends, and influencers, is more than ever timely [1][2]. Social Media (SM) users outran 2.70 billion in 2019, globally. Facebook was the most popular social network, with 2.38 billion active users per month in the first quarter of 2019. In 2018, daily Internet users spent 136 minutes on Social Media. In 2019, 96 percent of the active Facebook users per month, accessed via mobile devices [3].

Currently, Information Technology has reinforced Social Media, and the words "connecting" and "exchanging" have been replaced by the words "searching" and "selling" [4]–[6]. Tourist industry and hospitality has also become an essential tool for accessing different sources of tourism [5][6]. Users trust the Internet to obtain information. Studies have shown that usefulness and loyalty play a decisive role in user behavior, as far as understanding the information is concerned. Also, the usability of travel services has a positive influence on the consumer's loyalty and integrity [9]. The Internet has conquered the travel industry. Younger

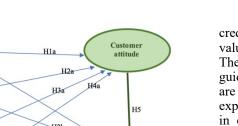
generations, especially Gen Y, are much more active in planning trips; they send and receive information via a variety of sources, including mobile devices (e.g., videos, Social Media). They make online reservations and plan potential destinations to visit. Users seek to be part of a wide range of travel experiences, and they are more responsive to online advertising. Social Media and mobile devices support these new ways of expression.

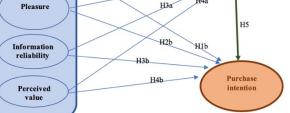
The purpose of the research is to study the interaction of the characteristics of source reliability, information reliability, perceived value, and user pleasure to purchase travel services. We are investigating the effect of source credibility features, information credibility, perceived value, and user pleasure, while browsing on social media to understand the attitude of the user when searching for travel destinations.

The paper is structured as follows: Section II presents the research background. Section III presents the research methodology and hypotheses. Section IV contains the conclusion of our research study.

II. RESEARCH BACKGROUND

Today SM networks, like Facebook and Instagram, allow people from different locations to interact and develop relationships or share travel experiences (e.g., posting photos and videos, sharing context) [10]. This information can be beneficial to potential travelers and can be personalized [11]. Most users install SM apps on their smart devices, and they use it as a tool for finding more travel information, with search engines providing direct access [12]. Researchers, [13] found that purchase intention is one dimension of customer behavior. Behavior is assessed through purchase intention, and consumers' behavioral patterns are examined [14]. Behavior is correlated to purchase intention [11][12], and this relationship has been empirically tested on the tourist industry [13][14], showing that customers' information reliability and satisfaction constitute an essential factor of ebehavioral intentions. Website design and information quality are essential for user satisfaction. There are many theories about value, such as consumption value, service value, consumer value, and perceived value [18]-[21]. When we talk about the perceived value [18][22], we refer to consumers' perception, price, and quality of a product, evaluating cost and benefit factors. To proceed with the conceptual research model presented in Figure 1, via Structural Equation Model (SEM), we measured the following four variables: source credibility, pleasure,





Source credibility

Figure 1. Theoretical framework and hypotheses

information reliability, and perceived value, in interaction with users' traveling attitude and purchase intention.

In order to confirm our Research Model, we used SEM, which incorporates the confirmatory approach, needed to justify our hypotheses. SEM uses confirmatory analysis rather than exploratory analysis for data. Confirmatory Factor Analysis (CFA) assess the measurement model validity, which compares the theoretical measurement with an actual model. SEM provides precise estimates of the errors in our parameters. As a first step, we are going to find which elements of each factor play an important role in user attitude and travel intention by using exploratory factor analysis (EFA), reliability analysis, and linear regression. However, the linear regression ignores mistakes and could lead us to severe inaccuracies, especially if mistakes are significant. Such methods are avoided by using SEM. SEM can incorporate both measurable and obscure variables. SEM method is preferred because it estimates the multiple and interrelated dependency in a single analysis.

The "state of the art" in this research is that investigates the role of credibility, pleasure, reliability, and value on customer attitude when browsing on social media searching for travel information, covering a gap in the field of tourism industry. This research wants to be a useful guide for tour operators, web developers, and advertising companies to design better platforms and creating more attractive travel products or services.

III. RESEARCH METHODOLOGY AND HYPOTHESES

Our study examines the factors that affect travelers' purchase intention and attitude in SM networks, [23]–[25]. In mental accounting theory, travel information mainly examines the context of SM use, rather than users' technology knowledge [15][16]. Based on the perceived value and the usage of SM in the tourism sector, we developed our research model, Figure 1. In this context, perceptual value is defined in terms of quality and price-performance or cost-benefit. Variables are categorized as source credibility, information reliability, pleasure, and perceived value. Also, perceived value leads to the usage of SM to search for travel information as a consequence of value perception.

Travelers' purchase intention defined in terms of credibility, pleasure, information reliability, and perceived value as a trade-off between costs and benefits [15][16][23]. The confirmation of our model, Figure 1, will be a useful guide for tour operators knowing the online factors, which are crucial to the user's travel decision. In this way, we are expanding previous researches on the use of SM by travelers in order to enhance our understanding of how travelers choose travel destinations through SM and in which way these four essential variables affect traveler purchase intention and interact with customer attitude [27].

A. Source credibility

Source credibility is defined as the factor upon which information is perceived as believable and trustworthy by users [28]. Source credibility constitutes an essential factor in decision-making procedures and involves high levels of risk [29]. Thus, source credibility is relevant to the context and the information acquired following computer and user interaction [28]. Researchers have found that users used SM before traveling [30]. Users are looking for information and ideas in SM for their travel, accommodation, and activities [30][31]. Therefore, SM provides travelers with all the information they need to make their travel dreams come true, thus reducing the risks it may pose [32]. Findings have shown that travelers use SM to obtain information from other users [33]. In word of mouth communication (WOM), reliability, and trust are essential factors for the consumer to accept the receiving message [34][35]. Recent researches have shown that the credibility of a source plays a vital role in making a piece of information reliable [36], [37]. The research of [38] showed a weak or insignificant relationship between source trust and intention to use user-generated travel content. Social Media requires users to create profiles and therefore provide personal information. Besides, most SM and especially those related to tourism (TripAdvisor), provide rating systems so that each user can submit his / her positive or negative reviews [39]. Moreover, TripAdvisor provides a distinct evaluation system for each service, thus enabling the user to get more detailed and specific information about the tourist service [40].

Researches have shown that source credibility has a significant impact on user attitude as an external factor because it affects human judgment [41]. Source credibility influences persuasion when evidence is fuzzy. In this case, hands-on processing can partially become cognitive processing [42]. For example, celebrities are one type of exogenous factor, which may enhance source credibility by influencing users' judgment [41].

H1a. Source credibility has a positive influence on customer attitude

H1b. Source credibility has a positive influence on purchase intention

B. Pleasure

Pleasure has a significant effect on technology admittance that enforces the meaning of usefulness [43] and internal motivation that enhances the feeling of using a computer because it is enjoyable. [43] referred to enjoyment as the "extent to which the activity of using the computer is perceived to be enjoyable in its own right." When people use technology and feel pleased or joyful, they perceive technology as a contributory value, and they are willing to use it again and again. [44][26] stated that the meaning of perceived value incorporates two different values (utilitarian and hedonic). The hedonic value explained the entertainment and emotional value of shopping. Researchers have shown that pleasure positively affects perceived value [15][17] and the intention of using hedonic information [45]. The pleasure as a feeling derives from emotions such as love, joy, and enjoyment [46]. Users receive satisfaction from experiences and feelings and seek pleasure from the process experienced during browsing [47][48].

Web atmospherics are playing a significant role in user satisfaction and pleasure. Elements like design, simplicity, layout, colors, video, are playing a substantial role in making the user feel pleasant and affect him in his purchase decision [49]. According to [49], designers must use beautiful and nice-looking pictures, and animations and colors, which are distinctive, visually appealing, and thus, design features should be separated from information contents [50]. Emotional is linked to web atmospherics but also is related to the decision process of the consumer on tour operators' websites [51]. According to [49], graphic design contributes to pleasing and arousing customers when they are engaged in searching for information and purchasing products or services provided by online stores.

The feelings of pleasure created by using SM apps encourage travelers not only to look up information on travel destinations but also to interact with other users. Travelers interact with each other by sharing photos or videos [8]. We, therefore, assume the following:

H2a. Pleasure has a positive influence on customer attitude

H2b. Pleasure has a positive influence on purchase intention

C. Information reliability

Studies on marketing have shown that consumer preferences are driven by value. Consumers are people of essence who seek to maximize usage [26]. The Internet provides travelers with various choices of many possible destinations to visit and make users pursue information reliability through a strenuous information search [52]. Direct access to alternative sources of information through SM builds trust between electronic word-of-mouth (eWOM) users and expert travel agents. The combination of convenient search and information reliability helps travelers to search, and evaluate a destination, and study new experiences related to a trip. The reliability of information is considered to be a significant factor for the traveler to perceive value when using SM [8].

Travelers prefer searching for reliable and credible information provided by the interaction between users of SM rather than obtaining the information through travel websites [8]. Travelers use SM networks like Facebook or Instagram, which are connected to User Created Contents (UCC) travel destinations, to share their experiences (e.g., photos, videos). By doing so, some travelers evaluate this reliable and credible information about a trip, thus reflecting their desire to engage online — users study reviews to decide on their travel destinations. We should not forget that the choice of a travel destination is complicated, as it involves factors such as accommodation, transport, restaurants, attractions, and many more. The diversity of each traveler and their different needs have not been included in these factors. Therefore, SM should be able to provide information relevant to the different needs of each user. When it comes to information reliability, we mean it is free of advertisements and hotel promotion as it is based on real user experience [39]. Therefore, if travelers find that the information is reliable and useful, they trust SM more because they are confident, they come from real customers rather than from biased sources of information.

The structure of information reliability is akin to the source information concept of information quality [53], which constitutes the output characteristics of the accuracy, timeliness, and completeness offered by the source of information. Quality of information of a travel destination has become a driving force on user decision making [54] assuming that the reliability of information influences purchase intention, hypothesizing the following:

H3a. Information reliability has a positive influence on customer attitude

H3b. Information reliability has a positive influence on purchase intention

D. Perceived value

The perceived value theory has also been adopted in travel destinations and shows high levels of influence on the intention of travelers to discover new or similar destinations, [55][56] showing that, in cruise travel services, emotional factors are essential in the perceived value. Cruise vacationers' behavior is influenced by the factors of hedonics or pleasure within the perceived value. The perceptual value in the tourism industry has been the subject of interest among many researchers. Some researchers have studied the perceived value of the received benefits and the sacrifices made by consumers [57][58]. Tourism and consumer decisions are associated with desires, fantasies, and emotions. The estimated value is subjective and varies among different tourists and cultures, also taking the emotional reactions of consumers into account [59]-[62]. Another finding on the perceptual value of [56] is about the pleasure and emotional reactions that cruise travelers get out of cruising.

Travelers evaluate the travel information in SM based on their perceptions of what they are willing to achieve and what to sacrifice. Perceived value involves a balance between costs and benefits and interaction between customer and service [63][43]. Analyzing the cost-benefit theory, the discrimination of perceived ease of use and perceived usefulness is similar between product performance and the effort of using the product. In high levels of perceived value in Social Media, travelers are likely to use a travel information search whereas, in the low levels of the perceived value, travelers show higher resistance toward travel information searches in SM [54]. When travelers search for information, they are more likely to select or to reject it based on the perceived benefits and the associated sacrifices of use, according to [43].

H4a. Perceived value in travel services information from Social Media has a positive influence on customer attitude

H4b. Perceived value in travel services information from Social Media has a positive influence on purchase intention

E. Customer Attitude

Consumer behavior is an integral part of marketing a successful business [64][65]. It has shown a positive relationship between consumer behavior and purchase intention [66][67]. The positive attitude of the consumer towards a product or service can positively contribute to purchase intention, especially on social networks [68]. According to all the above, we have the following hypothesis:

H5. Customer attitude has a positive influence on purchase intention

F. Data collection

The data for this study has been collected through a convenient sample e-survey from SM users. The e-survey was sent via a Facebook link to over 500 user profiles. The number of responders was 404 users. The age range of the responders was between 18 and over 54. The sample was primarily composed of individuals aged 18-44 years (98.1% of the sample) from European countries, mainly from Greece. Research [69] showed that over 70% in Greece of this age group (18-44) navigate on social media; therefore, it cannot be considered as a limitation (Table I).

The e-survey was divided into three sections. The first section outlines users' habits on SM and aims to discover the most important criteria for purchasing products or services for them. The second section outlines the factors that influence user travel purchase decisions. In order to complete the survey, the third section collected data for classification and statistical processing.

TABLE I.	SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE
	RESPONDENTS

Dimension	Items	Percentage	
Gender	F	23.8	
	М	76.2	
Age	18-24	84.7	
-	25-34	10.9	
	35-44	2.5	
	45-54	1.5	
	54>	0.5	
Income	0-500	61.9	
	501-1000	18.8	
	1001-2000	2.5	
	2000>	0.5	
	No answer	16.3	

G. Data analysis

This research study adopted Structural Equation Modeling (SEM) to test the hypotheses. By using SEM, we want to evaluate our proposed model, analyze and explain the collected data [70]. All variables can be directly observed and thus qualify as manifest variables, called path analysis. In SEM terms, y, as in (1), (2), (3), (customer attitude and purchase intention), encloses the endogenous variables and χ (credibility, pleasure, reliability, and value) encloses the exogenous variables [71]. Variables that are influenced by other variables in a model are called endogenous variables. Variables that are not influenced by other variables in a model are called exogenous variables. Covariances, such as the one between χ_1 , χ_2 , χ_3 , and χ_4 , as in (1), (2), are represented by two-way arrows, Figure 2. One-way arrows represent paths acting as a cause. Each effect of source credibility, pleasure, information reliability, and the perceived value can be separated and are said to be related to customer attitude and purchase intention (Table II). The structural equations for this model are:

$$y_1 = \gamma_{11} \chi_1 + \gamma_{12} \chi_2 + \gamma_{13} \chi_3 + \gamma_{14} \chi_4 + e_1$$
 (1)

$$y_2 = \gamma_{21} \chi_1 + \gamma_{22} \chi_2 + \gamma_{23} \chi_3 + \gamma_{24} \chi_4 + e_2$$
 (2)

$$y_2 = \psi_{21} y_1 + e_3$$
 (3)

In our proposed research, we can see a model with two y variables and four χ variables. The multiple dependent variables, covariances, and variances of the exogenous factors x's are given and estimated by the values of the sample. As a result, it is complicated for the model to be falsified. Freedom degrees of our model counts the elements in the Φ matrix containing four values of γ and one of ψ .

Thus, there are precisely as many free parameters as there are data points. The parameters create transformations of the data. In our SEM analysis, we include all individual items that load their relationships, variances, disturbance, or errors onto the observation variables.

In our research, the metrics were designed after taking into consideration studies for our four manifest variables, source credibility, information reliability, pleasure, and perceived value. For the manifest variable of credibility, we used ten measurement scales [72][73][74]. For the manifest variable of pleasure, we used sixteen (including items for the

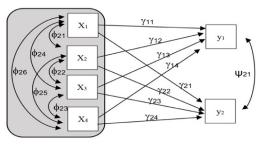


Figure 2. SEM research model

web atmospherics of the Social Media platforms) measurement scales [75][76][77]. For the manifest variable of information reliability, we used twelve measurement scales [33][78], and finally, for the manifest variable of the perceived value, we used nine measurement scales [15][16]. For every single item, we use multi-measurement items to overcome the limitations.

Because every single item has a high rate of measurement errors, we usually aim to capture all the attributes of a structure. All of these 47 items were measured on 5-point Likert scales, ranging from strongly disagree (1) to strongly agree (5).

The factor analysis drives us to erase some of the 47 items because either they load in many factors or their loading values are very low. Next, we noticed that the items of the factor pleasure split into two different factors. As a

TABLE II.	MODEL	VARIABLES	DESCRIPTION

Variables	Description
\mathbf{x}_1	Credibility
x ₂	Pleasure
X ₃	Reliability
X4	Value
y ₁	Intention to Purchase
y ₂	Customer Purchase attitude

result of this, we named the new variable web atmospherics. The first important step in factor analysis is the normality of the data, which has been tested with the measurement of Kaiser-Meyer-Olkin, providing a value of 0.903, indicating a great fit of our model [79]. In factor analysis, the pattern matrix loads five factors, credibility, atmospherics, pleasure, reliability, and value. The variable credibility loads seven items, and the variable pleasure loads four items, the variable reliability loads four items, the variable value loads three items, and the variable web atmospherics loads eight items. Also, in the results, the variable pleasure was divided into two factors: pleasure and the new factor named web atmospherics (Table III). The first five factors together account for 72.66% of the total variance.

In linear regression, the model summary showed that R^2 is explained by 56.8% of the population when the role of dependent value played by purchase intention and the predictors are the items of credibility, pleasure, reliability, value, and atmospherics. For the dependent value customer attitude with the same predictors as the above, the R^2 explained by 49.3% of the population.

In reliability analysis, we found that Cronbach's alpha, for each one of the five factors, is very high, supporting the importance of each factor for our model (Table IV). In correlation analysis, findings give us α potential rendition of

TABLE III. THE LOADING FACTORS

CredibilityThe buying process must be clear0.945Payment/debit methods must be clear0.936All the steps to the purchase should be simple0.920	2	Factors 3	4	5
CredibilityThe buying process must be clear0.945Payment/debit methods must be clear0.936	2	3	4	5
The buying process must be clear0.945Payment/debit methods must be clear0.936				
Payment/debit methods must be clear 0.936				
All the steps to the purchase should be simple 0.920				
Product or service instructions must be clear before purchase 0.865				
The perceived service is significant 0.849				
The buying process should be quick 0.830				
The process should inspire confidence 0.789				
Web atmospherics				
Fonts in social media are significant	0.916			
Special effects in social media are significant	0.861			
The unique design of social media platforms is significant.	0.858			
The layout of social media is significant.	0.850			
The colors in social media are significant	0.805			
The pleasant design of social media is significant.	0.794			
Videos in social media are significant.	0.742			
The simplicity of designing social media platforms is essential	0.697			
Pleasure				
Searching for information on social media is enjoyable.		0.916		
Searching for travel information on social networks is fun.		0.903		
Searching for travel information through social media is fascinating.		0.819		
Searching for travel information through social media is a pleasant experience.		0.792		
Reliability				
The authors of travel information in social media is usually trustworthy			0.939	
The authors of travel information in social media is usually reliable.			0.914	
Professionals usually write travel information on social media for travel			0.775	
destinations.				
Travel information in social media is usually written by someone who knows well			0.739	
the destinations				
Value				
The perceived value of a product or service influences the purchase decision.				0.805
The price of the products or services influences the purchase decision				0.694
The quality/variety of the products or services influences the purchase decision				0.651

the impact of some social factors on user attitude while searching for travel experiences (Table V).

In this research, we test and estimate our model through SEM. Two different approaches used for testing our research hypotheses. The first approach is exploratory factor analysis (EFA), with linear regression and reliability analysis. After the validation of the factors, we use the SEM to test the validity of the proposed model and hypotheses (Table VI). For the validity of our model, we tested the goodness-of-fit, [80], assisted by the goodness-of-fit index (GFI) [81], adjusted goodness-of-fit index (AGFI) [80], comparative fit index (CFI) [82], and root mean square error of approximation RMSEA [83].

After running many different models and taking into account all those parameters, improving our model, and eliminating all the possible errors, we found the following results, Figure 3. The GFI, AGFI, and CFI have values between 0.893 and 0.951, indicating an absolute fitting model. Also, the RMSEA with a value 0.073 is supporting the excellent fit of our model (Table VII) [45][46].

TABLE VI. THE LITERATURE SUPPORT FOR THE RESPECTIVE FITNESS INDEX

Index	Index full name	Literature
Chi-Square	Discrepancy Chi-Square	[86]
RMSEA	Root Mean Square of Error Approximation	[87]
GFI	Goodness of Fit Index	[88]
AGFI	Adjusted Goodness of Fit	[89]
CFI	Comparative Fit Index	[90]
TLI	Tucker-Lewis Index	[82]
NFI	Normed Fit Index	[91]
Chisq/df	Chi-Square/Degrees of Freedom	[92]

TABLE V. CORRELATIONS

		Customer Attitude
Second media information halms	Pearson Correlation	.847
Social media information helps	Sig. (2-tailed)	.000
me in my travel decision	Ν	404
	Pearson Correlation	.782
Social media could change my first decision	Sig. (2-tailed)	.000
hist decision	Ν	404
Information and a formation	Pearson Correlation	.660
Information and advertising	Sig. (2-tailed)	.000
help me to decide to book a trip	N	404
Product or service usability,	Pearson Correlation	.641
time and energy I need to spend	Sig. (2-tailed)	.000
for my travel decision is important	Ν	404
My social friends travel	Pearson Correlation	.629
suggestions affect my buying	Sig. (2-tailed)	.000
decision	N	404
An influencer can affect my	Pearson Correlation	.609
attitude about a travel service or	Sig. (2-tailed)	.000
product	N	404
The provided information	Pearson Correlation	.599
through social media affect me	Sig. (2-tailed)	.000
on about a travel service or product	N	404
Social media comments affect	Pearson Correlation	.590
me in my decision for a travel	Sig. (2-tailed)	.000
service or product	N	404

The overall model fit was measured using the chi-square, yielding a value of $x^2/df=3.156$ [93], the chi-squared value was 533.392, and all factor loadings were statistically significant (p=0.000).

 TABLE IV.
 The Reliability Statistics for each Factor

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Credibility	.957	.958	7
Pleasure	.927	.928	4
Reliability	.910	.910	4
Value	.821	.824	3
Atmospherics	.943	.943	8

In the confirmed research model (Figure 3), we observe that the factor of credibility does not interact with the intention and attitude variables, the factor of pleasure interacts with the travel purchase intention and customer attitude variables, the factor of reliability interacts only with the variable attitude, and the factor of value does not interact with the travel purchase intention and customer attitude variables. We also find that the factor of web atmospherics plays a significant role in customer attitude, interacting with the pleasure and value variables. The credibility variable does not interact with the main variables. Travel purchase Intention and customer attitude play an essential role in the way the other variables behave.

IV. CONCLUSIONS

This article aimed to create a model by which we could interpret the effect that specific SM factors have on user purchase intention, as far as travel services are concerned. Studying the theoretical background, we noticed a research gap that led us to our hypotheses, which we elaborate on in the article. We analyzed the collected data from the e-survey, and we tested our research model validity by detecting the factors that influence the user purchase intention when traveling, after using Social Media. Linear regression, factor analysis, Correlation, and reliability analysis used to test the validity of our variables (Tables III, IV, V).

The results gave us a good fit for our Conceptual model, allowed us to go one step further and confirmed our model through SEM. SEM enabled us to check our assumptions and confirm our model. Using the SEM data analysis, we

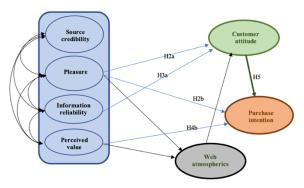


Figure 3. The confirmed research model

determined the critical factors concerning the customers' attitude towards travel purchase intention.

Furthermore, the SEM method showed us that the variable web atmospherics influences purchase intention in SM platforms, playing the role of a moderator. Also, findings confirmed that the following factors are related to the travel service purchase intention and customer attitude. Source credibility has no positive relationship with travel purchase intention and customer attitude (H1a, H1b, not confirmed). The factor of pleasure has a positive relationship with travel purchase intention and customer attitude (H2a, H2b confirmed). The reliability variable has a positive relationship only with customer attitude (H3a confirmed, H3b not confirmed), whereas the factor of value has a positive relationship with travel purchase intention (H4a not confirmed, H4b confirmed). Finally, the travel purchase intention variable, interacts with the customer attitude variable positively (H5 confirmed), Table VIII.

Thus, we can state that the pleasure, value, and reliability variables, play a critical role in customer attitude and purchase intention, when choosing a travel destination. Also, the credibility factor plays a significant role in positively interacting with the factors pleasure, reliability, and value, means that all the steps in the booking procedure must be simple, clear, and make you feel confident when you want to

TABLE VII. MODEL FIT AND THE LEVEL OF ACCEPTANCE

	Index	Level of acceptance
Absolute fit	Chi-Square	P-value<0.001
	RMSEA	0.073
	GFI	0.893
	AGFI	0.854
	CFI	0.951
	TLI	0.939
	NFI	0.930
	Chisq/df	3.156

TABLE VIII.	FINAL RESULTS OF OUR HYPOTHESES

	Hypotheses	Confirmed or Not
Source credibility	H1a. Source credibility has a positive influence on customer attitude	No
	H1b. Source credibility has a positive influence on purchase intention	No
Pleasure	H2a. Pleasure has a positive influence on customer attitude	Yes
	H2b. Pleasure has a positive influence on purchase intention	Yes
Reliability	H3a. Information reliability has a positive influence on customer attitude	Yes
	H3b. Information reliability has a positive influence on purchase intention	No
Value	H4a. Perceived value in travel services information from Social Media has a positive influence on customer attitude	No
	H4b. Perceived value in travel services information from Social Media has a positive influence on purchase intention	Yes
Attitude	H5. Customer attitude has a positive influence on purchase intention	Yes

book a trip. The new variable, that is web aesthetics, has emerged, as it plays an essential role in traveling users' decision making, interacting with the pleasure and value variables, meaning that it plays the role of moderator in customer attitude.

Correlation findings help us to understand the vital role of travel product or service information in advertising. Also, customer attitude is highly correlated with the provided travel information from social media platforms. Furthermore, social media information could change the first opinion or attitude of the user about a travel product or service. User attitude, on travel information, can be affected by the comments of their social media friends or a social influencer. The findings from correlation analysis is a useful guide for tour operators or marketers in order to focus on the travel information they provide, targeting the social friends or influencers of the Accordingly, potential customers. marketers are recommended to target users who like searching or booking trips through social media, interact with, and are influenced by their social friends.

Also, the findings suggest that designers and tour operators should concentrate on adapting, factors such as pleasure, reliability, which are playing a significant role in customer attitude and purchase intention to their platforms. The factor pleasure in terms of making the user feel good, enjoyable, and pleasant when searching for travel information, must be adapted from web developers, advertising companies, and tour operators in order to increase the visibility, the interaction, and the possibility of a user's purchasing a trip. That could be achieved it, targeted advertising on social media for travel service purchased and user intention to purchase such services. Furthermore, the factors, reliability, and value, make the user feel that the platform is trustworthy and improves the perception of the price and the quality of the product or service that the platform provides.

As future research could be the investigation of more variables on SM (esp. Instagram), playing a significant role in user travel decisions. Furthermore, possible correlations between users who want to present themselves in an idealized way, designed to impress or their desire to impress social friends on travel service purchase decisions, could be investigated. Future studies similar to the current study should incorporate social media user behavior, such as purchase attitude as a dependent variable. Finally, future studies will benefit from investigating the present model in more diverse cultural contexts and lead us to deepen our understanding of user behavior in social media coming from different cultures and will lead the marketers and tour operators to the creation of more personalized products and services.

References

- S. D. Kaperonis, "The Impact of Social Media on user's Travel Purchase Intention," *Data analytics 2018, the Seventh International Conference on Data Analytics*, Athens, Greece: IARIA, The International Academy, Research and Industry Association, pp. 50–54.
- [2] S. Bhulai, D. Kardaras, and I.Semanjski, Eds., "Data analytics 2018, the Seventh International Conference on Data Analytics" IARIA, The Internation Academy, Research and Industry Association, Wilmington,

USA, 2018.

- [3] "Global time spent on social media daily 2017 | Statista," Statista, 2018. [Online]. Available: https://www.statista.com/statistics/433871/daily-social-media-usageworldwide/. [Accessed: 19-Jul-2019].
- [4] S. Choi, "An empirical study of social network service (SNS) continuance: incorporating the customer value-satisfaction-loyalty model into the IS continuance model," *Asia Pacific J. Inf. Syst.*, vol. 23, no. 4, pp. 1–28, 2013.
- [5] N. Chung, H. J. Han, and C. Koo, "Mediating roles of attachment for information sharing in social media: social capital theory perspective," *Asia Pacific J. Inf. Syst.*, vol. 22, no. 4, pp. 101–123, 2012.
- [6] C. Koo, Y. Wati, and J. J. Jung, "Examination of how social aspects moderate the relationship between task characteristics and usage of social communication technologies (SCTs) in organizations," *Int. J. Inf. Manage.*, vol. 31, no. 5, pp. 445–459, 2011.
- [7] R. Law, R. Leung, and D. Buhalis, "Information technology applications in hospitality and tourism: a review of publications from 2005 to 2007," *J. Travel Tour. Mark.*, vol. 26, no. 5–6, pp. 599–623, 2009.
- [8] M. Sigala, E. Christou, and U. Gretzel, "Social Media in Travel," *Tour. Hosp. Theory, Pract. Cases*, 2012.
- [9] A. Bilgihan, A. Barreda, F. Okumus, and K. Nusair, "Consumer perception of knowledge-sharing in travel-related online social networks," *Tour. Manag.*, vol. 52, pp. 287–296, 2016.
- [10] E. Parra-López, J. Bulchand-Gidumal, D. Gutiérrez-Taño, and R. Díaz-Armas, "Intentions to use social media in organizing and taking vacation trips," *Comput. Human Behav.*, vol. 27, no. 2, pp. 640–654, 2011.
- [11] D. K. Kardaras, S. Kaperonis, S. Barbounaki, I. Petrounias, and K. Bithas, "An Approach to Modelling User Interests Using TF-IDF and Fuzzy Sets Qualitative Comparative Analysis," in *IFIP International Conference on Artificial Intelligence Applications and Innovations*, 2018, pp. 606–615.
- [12] Z. Xiang and U. Gretzel, "Role of social media in online travel information search," *Tour. Manag.*, vol. 31, no. 2, pp. 179–188, 2010.
- [13] V. A. Zeithaml, L. L. Berry, and A. Parasuraman, "The behavioral consequences of service quality," J. Mark., pp. 31–46, 1996.
- [14] I. Ajzen and M. Fishbein, "Understanding attitudes and predicting social behaviour," 1980.
- [15] R. L. Oliver and W. O. Bearden, "Disconfirmation processes and consumer evaluations in product usage," *J. Bus. Res.*, vol. 13, no. 3, pp. 235–246, 1985.
- [16] F. Buttle and B. Bok, "Hotel marketing strategy and the theory of reasoned action," *Int. J. Contemp. Hosp. Manag.*, vol. 8, no. 3, pp. 5– 10, 1996.
- [17] I. Ajzen and B. L. Driver, "Application of the theory of planned behavior to leisure choice," J. Leis. Res., vol. 24, no. 3, pp. 207–224, 1992.
- [18] H.-W. Kim, H. C. Chan, and S. Gupta, "Value-based adoption of mobile internet: an empirical investigation," *Decis. Support Syst.*, vol. 43, no. 1, pp. 111–126, 2007.
- [19] H.-W. Kim, Y. Xu, and S. Gupta, "Which is more important in Internet shopping, perceived price or trust?," *Electron. Commer. Res. Appl.*, vol. 11, no. 3, pp. 241–252, 2012.
- [20] S. Gupta and H. Kim, "Value-driven Internet shopping: The mental accounting theory perspective," *Psychol. Mark.*, vol. 27, no. 1, pp. 13– 35, 2010.
- [21] S. Kim, S. Holland, and H. Han, "A structural model for examining how destination image, perceived value, and service quality affect destination loyalty: A case study of Orlando," *Int. J. Tour. Res.*, vol. 15, no. 4, pp. 313–328, 2013.
- [22] V. A. Zeithaml, "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence," J. Mark., pp. 2–22, 1988.
- [23] R. H. Thaler, "Mental accounting and consumer choice," *Mark. Sci.*, vol. 27, no. 1, pp. 15–25, 2008.

- [24] R. Thaler, "Mental accounting and consumer choice," Mark. Sci., vol. 4, no. 3, pp. 199–214, 1985.
- [25] R. Thaler, "Toward a positive theory of consumer choice," J. Econ. Behav. Organ., vol. 1, no. 1, pp. 39–60, 1980.
- [26] R. Sánchez-Fernández and M. Á. Iniesta-Bonillo, "The concept of perceived value: a systematic review of the research," *Mark. theory*, vol. 7, no. 4, pp. 427–451, 2007.
- [27] S. Kaperonis, "Virtual networks: Why do students use Instagram?," http://dx.doi.org/10.12681/homvir.20193, vol. 2, no. 1, pp. 43–49, 2019.
- [28] S. W. Sussman and W. S. Siegal, "Informational influence in organizations: An integrated approach to knowledge adoption," *Inf. Syst. Res.*, vol. 14, no. 1, pp. 47–65, 2003.
- [29] B. Mak and K. Lyytinen, "A model to assess the behavioral impacts of consultative knowledge based systems," *Inf. Process. Manag.*, vol. 33, no. 4, pp. 539–550, 1997.
- [30] C. Cox, S. Burgess, C. Sellitto, and J. Buultjens, "The role of usergenerated content in tourists' travel planning behavior," *J. Hosp. Mark. Manag.*, vol. 18, no. 8, pp. 743–764, 2009.
- [31] J. N. Fotis, D. Buhalis, and N. Rossides, Social media use and impact during the holiday travel planning process. Springer-Verlag, 2012.
- [32] U. Gretzel and K. H. Yoo, "Use and impact of online travel reviews," *Inf. Commun. Technol. Tour. 2008*, pp. 35–46, 2008.
- [33] A. Simms, "Online user-generated content for travel planning-different for different kinds of trips?," 2012.
- [34] E. McGinnies and C. D. Ward, "Better liked than right: Trustworthiness and expertise as factors in credibility," *Personal. Soc. Psychol. Bull.*, vol. 6, no. 3, pp. 467–472, 1980.
- [35] C. I. Hovland, I. L. Janis, and H. H. Kelley, Communication and persuasion: Psychological studies of opinion change. Yale University Press, 1953.
- [36] L. M. Willemsen, P. C. Neijens, F. Bronner, and J. A. De Ridder, "Highly recommended!' The content characteristics and perceived usefulness of online consumer reviews," *J. Comput. Commun.*, vol. 17, no. 1, pp. 19–38, 2011.
- [37] C. M. K. Cheung, M. K. O. Lee, and N. Rabjohn, "The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities," *Internet Res.*, vol. 18, no. 3, pp. 229–247, 2008.
- [38] J. K. Ayeh, N. Au, and R. Law, "Do we believe in TripAdvisor?" Examining credibility perceptions and online travelers' attitude toward using user-generated content," *J. Travel Res.*, vol. 52, no. 4, pp. 437– 452, 2013.
- [39] M. Y. Cheung, C. Luo, C. L. Sia, and H. Chen, "Credibility of electronic word-of-mouth: Informational and normative determinants of on-line consumer recommendations," *Int. J. Electron. Commer.*, vol. 13, no. 4, pp. 9–38, 2009.
- [40] R. Filieri, S. Alguezaui, and F. McLeay, "Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth," *Tour. Manag.*, vol. 51, pp. 174–185, 2015.
- [41] A. Bhattacherjee and C. Sanford, "Influence processes for information technology acceptance: An elaboration likelihood model," *MIS Q.*, pp. 805–825, 2006.
- [42] S. Chaiken and D. Maheswaran, "Heuristic processing can bias systematic processing: effects of source credibility, argument ambiguity, and task importance on attitude judgment.," J. Pers. Soc. Psychol., vol. 66, no. 3, p. 460, 1994.
- [43] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," MIS Q., pp. 319–340, 1989.
- [44] F. D. Davis, R. P. Bagozzi, and P. R. Warshaw, "Extrinsic and intrinsic motivation to use computers in the workplace 1," J. Appl. Soc. Psychol., vol. 22, no. 14, pp. 1111–1132, 1992.
- [45] H. Van der Heijden, "User acceptance of hedonic information systems," MIS Q., pp. 695–704, 2004.

- [46] M. B. Holbrook and E. C. Hirschman, "The experiential aspects of consumption: Consumer fantasies, feelings, and fun," *J. Consum. Res.*, vol. 9, no. 2, pp. 132–140, 1982.
- [47] P. Mikalef, M. Giannakos, and A. Pateli, "Shopping and word-ofmouth intentions on social media," J. Theor. Appl. Electron. Commer. Res., vol. 8, no. 1, pp. 17–34, 2013.
- [48] B. J. Babin, W. R. Darden, and M. Griffin, "Work and/or fun: measuring hedonic and utilitarian shopping value," *J. Consum. Res.*, vol. 20, no. 4, pp. 644–656, 1994.
- [49] D.-M. Koo and S.-H. Ju, "The interactional effects of atmospherics and perceptual curiosity on emotions and online shopping intention," *Comput. Human Behav.*, vol. 26, no. 3, pp. 377–388, 2010.
- [50] C.-S. Wu, F.-F. Cheng, and D. C. Yen, "The atmospheric factors of online storefront environment design: An empirical experiment in Taiwan," *Inf. Manag.*, vol. 45, no. 7, pp. 493–498, 2008.
- [51] P. Björk, "Atmospherics on tour operators' websites: Website features that stimulate emotional response," *J. Vacat. Mark.*, vol. 16, no. 4, pp. 283–296, 2010.
- [52] Y.-H. Hwang and D. R. Fesenmaier, "Unplanned tourist attraction visits by travellers," *Tour. Geogr.*, vol. 13, no. 3, pp. 398–416, 2011.
- [53] W. H. DeLone and E. R. McLean, "Information systems success: The quest for the dependent variable," *Inf. Syst. Res.*, vol. 3, no. 1, pp. 60– 95, 1992.
- [54] N. Chung and C. Koo, "The use of social media in travel information search," *Telemat. Informatics*, vol. 32, no. 2, pp. 215–229, 2015.
- [55] A. S. Lo and C. Y. S. Lee, "Motivations and perceived value of volunteer tourists from Hong Kong," *Tour. Manag.*, vol. 32, no. 2, pp. 326–334, 2011.
- [56] T. Duman and A. S. Mattila, "The role of affective factors on perceived cruise vacation value," *Tour. Manag.*, vol. 26, no. 3, pp. 311–323, 2005.
- [57] J. Sanchez, L. Callarisa, R. M. Rodriguez, and M. A. Moliner, "Perceived value of the purchase of a tourism product," *Tour. Manag.*, vol. 27, no. 3, pp. 394–409, 2006.
- [58] J. E. Bigné, L. Andreu, I. Küster, and A. Blesa, "Quality market orientation: tourist agencies' perceived effects," *Ann. Tour. Res.*, vol. 32, no. 4, pp. 1022–1038, 2005.
- [59] J. C. Sweeney and G. N. Soutar, "Consumer perceived value: The development of a multiple item scale," *J. Retail.*, vol. 77, no. 2, pp. 203–220, 2001.
- [60] N. K. Prebensen, E. Woo, J. S. Chen, and M. Uysal, "Motivation and involvement as antecedents of the perceived value of the destination experience," *J. Travel Res.*, vol. 52, no. 2, pp. 253–264, 2013.
- [61] R. N. Bolton and J. H. Drew, "A multistage model of customers' assessments of service quality and value," *J. Consum. Res.*, vol. 17, no. 4, pp. 375–384, 1991.
- [62] W. J. Havlena and M. B. Holbrook, "The varieties of consumption experience: comparing two typologies of emotion in consumer behavior," J. Consum. Res., vol. 13, no. 3, pp. 394–404, 1986.
- [63] A. Payne and S. Holt, "Diagnosing customer value: integrating the value process and relationship marketing," *Br. J. Manag.*, vol. 12, no. 2, pp. 159–182, 2001.
- [64] G. J. Bamossy and M. R. Solomon, Consumer behaviour: A European perspective. Pearson Education, 2016.
- [65] M. Hogg, S. Askegaard, G. Bamossy, and M. Solomon, Consumer behaviour: a European perspective. Prentice Hall, 2006.
- [66] H. Ting, E. C. de Run, and R. Thurasamy, "Young adults' attitude towards advertising: A multi-group analysis by ethnicity," *Rev. Bras. Gestão Negócios*, vol. 17, no. 54, pp. 769–787, 2015.
- [67] H. Ting, W. W. P. Ming, E. C. de Run, and S. L. Y. Choo, "Beliefs about the use of Instagram: An exploratory study," *Int. J. Bus. Innov.*, vol. 2, no. 2, pp. 15–31, 2015.
- [68] M.-F. Chen, "Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: Moderating effects of food-related personality traits," *Food Qual. Prefer.*, vol. 18, no. 7, pp. 1008–1021,

2007.

- [69] "Social media users in Greece 2019." [Online]. Available: https://napoleoncat.com/stats/social-media-users-in-greece/2019/10. [Accessed: 14-Nov-2019].
- [70] J. F. Hair, W. C. Black, B. J. Babin, R. E. Anderson, and R. L. Tatham, "Multivariate data analysis (Vol. 6)." Upper Saddle River, NJ: Pearson Prentice Hall, 2006.
- [71] R. B. Kline, "Promise and pitfalls of structural equation modeling in gifted research.," 2010.
- [72] S. Ha and J. Ahn, "Why are you sharing others' tweets?: The impact of argument quality and source credibility on information sharing behavior," 2011.
- [73] M. Kang, "Measuring social media credibility: A study on a Measure of Blog Credibility," *Inst. Public Relations*, pp. 59–68, 2010.
- [74] K. P. Hocevar, A. J. Flanagin, and M. J. Metzger, "Social media selfefficacy and information evaluation online," *Comput. Human Behav.*, vol. 39, pp. 254–262, 2014.
- [75] J.-J. Wu and Y.-S. Chang, "Towards understanding members" interactivity, trust, and flow in online travel community," *Ind. Manag. Data Syst.*, vol. 105, no. 7, pp. 937–954, 2005.
- [76] N. Chung, C. K.-T. and Informatics, and undefined 2015, "The use of social media in travel information search," *Elsevier*.
- [77] J. Y. Kim, J. P. Shim, and K. M. Ahn, "Social networking service: Motivation, pleasure, and behavioral intention to use," *J. Comput. Inf. Syst.*, vol. 51, no. 4, pp. 92–101, 2011.
- [78] M. J. Metzger, "Making sense of credibility on the Web: Models for evaluating online information and recommendations for future research," *J. Am. Soc. Inf. Sci. Technol.*, vol. 58, no. 13, pp. 2078–2091, 2007.
- [79] J. F. Hair, W. C. Black, B. J. Babin, and R. E. Anderson, *Multivariate data analysis: Pearson new international edition*. Pearson Higher Ed, 2013.
- [80] K. G. Jöreskog and D. Sörbom, LISREL 8: Structural equation modeling with the SIMPLIS command language. Scientific Software International, 1993.
- [81] L.-T. Hu, P. M. Bentler, and R. H. Hoyle, "Structural equation modeling: Concepts, issues, and applications," *Eval. Model fit*, pp. 76– 99, 1995.
- [82] P. M. Bentler and D. G. Bonett, "Significance tests and goodness of fit in the analysis of covariance structures.," *Psychol. Bull.*, vol. 88, no. 3, p. 588, 1980.
- [83] J. H. Steiger, A. Shapiro, and M. W. Browne, "On the multivariate asymptotic distribution of sequential chi-square statistics," *Psychometrika*, vol. 50, no. 3, pp. 253–263, 1985.
- [84] A. Diamantopoulos and J. A. Siguaw, "Introducing LISREL: A guide for the uninitiated," *London ua*, 2000.
- [85] B. M. Byrne, "Structural equation modeling with LISREL," *Prelis, and Simplis*, pp. 196–199, 1998.
- [86] B. Wheaton, B. Muthen, D. F. Alwin, and G. F. Summers, "Assessing reliability and stability in panel models," *Sociol. Methodol.*, vol. 8, pp. 84–136, 1977.
- [87] M. W. Browne and R. Cudeck, "Alternative ways of assessing model fit," *Sage Focus Ed.*, vol. 154, p. 136, 1993.
- [88] K. G. Joreskog and D. Sorbom, "LISREL VI: Analysis of linear structural relationships by the method of maximum likelihood. Mooresville, IN: Scientific Software." Inc, 1984.
- [89] J. S. Tanaka and G. J. Huba, "A fit index for covariance structure models under arbitrary GLS estimation," *Br. J. Math. Stat. Psychol.*, vol. 38, no. 2, pp. 197–201, 1985.
- [90] P. M. Bentler, "Comparative fit indexes in structural models.," *Psychol. Bull.*, vol. 107, no. 2, p. 238, 1990.
- [91] K. A. Bollen, "(1989b). Structural equations with latent variables. New York: John Wiley," 1989.
- [92] H. W. Marsh and D. Hocevar, "Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor

models and their invariance across groups.," *Psychol. Bull.*, vol. 97, no. 3, p. 562, 1985.

[93] R. B. Kline, *Principles and practice of structural equation modeling*. Guilford publications, 2015.