The Effects of Social Media Marketing on Online Consumer Behavior

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Abstract

Social media allows customers and prospects to communicate directly to your brand representative or about your brand with their friends. However, the obvious question is: who are the people interacting online and how engaged are they in online activities? This paper aims to answer this question based on a study regarding the online activities of 236 social media users, by identifying different types of users, a segmentation of these users and a linear model to examine how different predictors related to social networking sites have a positive impact on the respondents' perception of online advertisements. The answer can help discover how to engage with different types of audiences in order to maximize the effect of the online marketing strategy.

Keywords: social media marketing, online consumer behavior, online segmentation, modeling online activities

1. Introduction

The Internet and especially social media have changed how consumers and marketers communicate. The Internet has distinct characteristics (Peterson et al., 1997), such as:

- The ability to inexpensively store vast amounts of information at different virtual locations
- The availability of powerful and inexpensive means of searching, organizing, and disseminating such information
- Interactivity and the ability to provide information on demand
- The ability to serve as a transaction medium
- The ability to serve as a physical distribution medium for certain goods (e.g. software)
- Relatively low entry and establishment costs for sellers.

One of the advantages of internet is that it enables businesses to reach a worldwide customer population, so that customers can survey, select, and purchase products and services from businesses around the world (Al Kailani & Kumar, 2011).

In particular, peer communication through social media, a new form of consumer socialization, has profound impacts on consumer decision making and thus marketing strategies.

Consumer socialization theory predicts that communication among consumers affects their cognitive, affective, and behavioral attitudes (Ward, 1974).

Social media, especially social networking sites, provide a virtual space for people to communicate through the Internet, which also might be an important agent of consumer socialization.

With this research we provide insights to the social media literature and online consumer behavior, in general, and online socializing and interacting activities users engage with on a virtual platform, which are interesting for both academics and online marketing practitioners.

This paper provides a literature review of the evolution of social media marketing and segmentation of social media users from proeminent papers, and continues with a primary research. The aim of this research is to empirically investigate what type of social media users appreciate and have a positive outlook regarding advertising on social networking websites. Particularly, we consider a segmentation of social media users regarding their perceived importance of using social media, and these social media users represent students of

"Lucian Blaga" University of Sibiu, Romania. The responses that will be further explored were gathered through field research, namely the information was collected directly from respondents via the internet, from September 17 to November 18, 2011. Finally, in the last section of the paper, we provide the contributions of the research, the managerial implications, and limitations of the research.

2. Literature Review

2.1 The Development of Social Media Marketing

In recent years, social networking sites and social media have increased in popularity, at a global level. For instance, Facebook is said to have more than a billion active users (as of 2012) since its beginning in 2004 (www.facebook.com). Social networking sites can be described as networks of friends for social or professional interactions (Trusov, Bucklin, & Pauwels, 2009). Indeed, online social networks have profoundly changed the propagation of information by making it incredibly easy to share and digest information on the internet (Akrimi & Khemakhem, 2012).

The unique aspects of social media and its immense popularity have revolutionized marketing practices such as advertising and promotion (Hanna, Rohm, & Crittenden, 2011). Social media has also influenced consumer behavior from information acquisition to post-purchase behavior such as dissatisfaction statements or behaviors (Mangold & Faulds, 2009) and patterns of Internet usage (Ross et al., 2009; Laroche et al., 2012).

Social media is "a group of internet based applications that builds on the ideological and technological foundations of Web 2.0, and it allows the creation and exchange of user-generated content" (Kaplan & Haenlein, 2010, p.61). Social media has many advantages as it helps connect businesses to consumers, develop relationships and foster those relationships in a timely manner and at a low cost as Kaplan and Haenlein discovered (2010).

Other functions of social media involve affecting and influencing perceptions, attitudes and end behavior (Williams & Cothrell, 2000), while bringing together different like-minded people (Hagel & Armstrong, 1997). In an online environment, Laroche (2012) pointed out that people like the idea of contributing, creating, and joining communities to fulfill needs of belongingness, being socially connected and recognized or simply enjoying interactions with other like-minded members.

The much higher level of efficiency of social media compared to other traditional communication channels prompted industry leaders to state that companies must participate in Facebook, Twitter, MySpace, and others, in order to succeed in online environments (Kaplan & Haenlein, 2010; Laroche et.al. 2012). Thus, more industries try to benefit from social media as they can be used to develop strategy, accept their roles in managing others' strategy or follow others' directions (Williams & Williams, 2008).

Social media websites provide an opportunity for companies to engage and interact with potential and current consumers, to encourage an increased sense of intimacy of the customer relationship, and build all important meaningful relationships with consumers (Mersey, Malthouse, & Calder 2010) especially in today's business environment when consumer loyalty can vanish at the smallest mistake, which can additionally have online propagation of their unfortunate encounter with a particular product, service, brand or company.

Some companies are beginning to take notice of the power of social media. A few corporate social networking websites already allow consumers to not only exchange information about products or services, but also engage in co-creating value in online experiences with offline outcomes, with both current and potential consumers.

2.2 Segmentation of Social Media Users

Following the general idea that segmentation can leverage a better understanding of consumers' behavior, and therefore a better targeting, in order to obtain the desired effect of any marketing activity, several studies have been employed to achieve a segmentation of consumers who interact online, particularly to examine their online shopping behavior.

Vellido et al. (1999) investigated consumers' opinion on online purchasing and online vendors that seem to consist of the underlying dimensions "control and convenience," "trust and security," "affordability," "ease of use," and "effort/responsiveness." Using these dimensions as a segmentation base discerns seven segments: "unconvinced," "security conscious," "undecided," "convinced," "complexity avoiders," "cost conscious," and "customer service wary."

Starting from consumers' motivations to use the Internet, McDonald (1996) segmented the Internet audience as "avid adventurers," "fact collectors," "entertainment seekers," and "social shoppers."

Also, Brengman et al. (2005) performed a cluster analysis based on seven factors, such as "Internet convenience",

"perceived self-inefficacy", "Internet logistics", "Internet distrust", "Internet offer", "Internet window-shopping".

3. Research Method

3.1 Research Context

The present research starts with the problem definition, and in this case, it refers to a detailed understanding of the customer's perception and customs regarding the usage of social media, namely how the students of "Lucian Blaga" University of Sibiu engage on social networking sites.

Furthermore, the main purpose, the objectives and the hypotheses were established, as follows:

- The main purpose: Determining the students' underlying characteristics in terms of social media engagement.
- Objective 1: Determining different types of respondents, based on their online activities.
- Hypothesis 1: At least three types of different users of social media will be identified.
- Objective 2: Determining different segments of respondents.
- Hypothesis 2: At least three clusters of different users of social media will be identified.
- Objective 3: Develop a linear model for studying the impact upon positive reaction to online advertisements
- Hypothesis 3: Social media user classification has a great impact in forming a favorable opinion for online ads.

3.2 Measurement and Research Instrument

Data collection was achieved by using an online consumer survey. The data was collected with an online survey targeted at the students of Lucian Blaga University of Sibiu studying for a Bachelor, Master or Ph.D. Degree. A short description of the survey and a link-address was posted on the discussion board of the University's website.

All measurement items were newly formed and were aimed at studying students' behavior and reactions on social media websites in order to provide a better understanding of their interactions in an online environment. Table 1 provides the psychometric properties of the measures.

Considering the fact that the scale items were newly compiled, we measured the reliability of the scales used to evaluate the internal consistency of the constructs. Reliability is identified by Cronbach's alpha with a minimum of 0.70 (Cronbach, 1970; Nunnally, 1978).

Dimension	Scale items	Measurement of scale	Cronbach's Alpha for the scale
General social media activities	Voting on various sites	1:::::::	.790
	Adding labels or tags to photos online (on Facebook)	9	
	Contributing to online forums and discussion groups		
	Using the RSS feeds service		
	Contributing or editing wiki articles		
	Posting of reviews and rating on various products/ services		
	Adding comments to various blog posts		
	Adding comments to other people's social media profiles		
	Uploading videos on YouTube, Vimeo, etc.		

Table 1. Reliability statistics for the construct measures

Social media activities	Watching a video online (YouTube, Vimeo, etc.)	1::_:_:_:_:_:_:_:	.860
performed on	Downloading music		
respondents' last	Reading blogs		
visit	Updating personal blog		
	Updating personal Twitter account		
	Updating profile on other social networks		
	Reading reviews and ratings for certain		
	products/services		
	Reading forums		
Trust in	Friends and connections	Very low trust level	.721
information	Family	1::::::::: 5	
from personal sources		Very high trust level	
Trust in	Community moderators	Very low trust level	.765
information	Brands' profiles	1:::::::: 5	
from foreign sources	Brands' profiles	Very high trust level	
Positive	The ads that appear on my profile are	Strongly Agree – Agree –	.801
reactions to	relevant for my personal interests and I	Indifferent – Disagree –	
online advertisements	enjoy seeing them.	Strongly Disagree	
auvertisements	Quite often I access the ads that I see on my social media profile.		
Experience	For how long have you been using social	1-6 months	NA*
using social	media websites?	6 months - 1 year	
media		1-2 years	
		2-3 years	
		More than 3 years	
Clicking the ad	How many times did you take action based	Often	NA*
	on an advert you saw on social media (in	A few times	
	terms of accessing the site or buying the product)?	Never	
Log in pattern	How would you describe your log in	Always connected	NA*
	pattern on social media sites?	Several times a day	
		Every three days	
		Once a week	
		Occasionally (Less than	
		once a week)	
Time spent per	On average, how much time do you spend	Less than 5 minutes	NA*
login session	per session on social media sites?	5 - 15 minutes	
		16 – 29 minutes	
		30-60 minutes	
		More than 61 minutes	
Concern for	I do experience concern regarding the	Strongly Agree – Agree –	NA*
privacy	confidentiality and privacy of my personal	Indifferent – Disagree –	
	information.	Strongly Disagree	
Importance of	How important do you think social media	Very important – Important –	NA*
social media	is for your social life?	Indifferent – Somewhat not	
		important – Not important at all	

*Cronbach's Alpha could not be computed because the variables are either nominal, ordinal or are formed of one single interval scale.

3.3 Data Collection and Sampling

This study implied a primary research which involved getting original data by conducting a field research. In this case, the information was collected directly from respondents via the internet, from September 17 to November 18, 2011, and the data analysis is quantitative (Dumitrescu, Stanciu, Tichindelean, & Vinerean, 2012).

Also, this paper is based on an exploratory research whose primary objective is to provide insights into a marketing phenomenon, namely students' pattern of using social media and social networking sites, and particularly in relation to their reaction to advertising in a medium where they decide and choose the information they engage with. The responses were collected from students from "Lucian Blaga" University of Sibiu, a higher education institution in Romania (Dumitrescu, Stanciu, Tichindelean, & Vinerean, 2012).

As a sampling technique, we used the convenience sampling technique which implies a non-probability sampling. The sample size was represented by students of the "Lucian Blaga" University of Sibiu, Romania in the following proportions: 26.69% (Bachelor degree, first year of study), 18.22% (Bachelor degree, second year of study), 31.36% (Bachelor degree, third year of study), 7.2% (Master degree, first year of study),15.25% (Master degree, second year of study), 0.42% (Ph.D. degree, first year of study) and 0.85% (Ph.D. degree, second year of study) (Dumitrescu, Tichindelean, & Vinerean, 2012; Dumitrescu, Stanciu, Tichindelean, & Vinerean, 2012).

The sample size was computed by the formula $n = z^2 * s^2 / e^2$, where z is a known tabular value for a specific level of significance, s represents the sample standard deviation of the selection variable (number of students by their year of study and study cycle) and e is the standard error. A confidence level of 95% was chosen, therefore the $z_{0.95}$ is 1.96 and the sample standard deviation is s = 28.65 students by their year of study and study cycle. The chosen sampling standard error is e = 3.66 students by their year of study and study cycle. By applying the formula, we have determined a sample size of n = 235.51 = 236 students. The sampling process was executed by applying an online questionnaire to 236 students (Dumitrescu, Tichindelean, & Vinerean, 2012; Dumitrescu, Stanciu, Tichindelean, & Vinerean, 2012).

4. Results

4.1 Factor Analysis

In the data analysis phase of the research, the data was collected via the Internet (FreeOnlineSurveys), and for the information's preparation and processing the researchers used the statistical analysis program SPSS (IBM SPSS, 2011) and firstly the Factor Analysis method.

Factor analysis represents a class of procedures primarily used for data reduction and summarization by identifying the latent variables. A factor is an underlying dimension that explains the correlations among a set of variables. As an extraction method, the researchers used the Principal Components method. In second step, the factors are rotated to ease interpretation. Varimax is the rotation method used most frequently with survey data, because it is a method of orthogonal rotation, which tries to load a smaller number of variables highly onto each factor resulting in a more interpretable and more relevant factors (Field, 2005, pp.630-636). As a clustering criterion, the Schwartz's Bayesian Criterion (BIC) was used.

Additionally, we used the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) in order to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate that the factor is relevant.

]	initial Eige	envalues	Extra		s of Squared	Rota		s of Squared	
Factor					Loadi	ngs		Loadi	ngs	KMO
	Total	% of	Cumulative %	Total	% of	Cumulative %	Total	% of	Cumulative %	
		Variance			Variance			Variance		
1	6.338	37.284	37.284	6.338	37.284	37.284	3.140	18.468	18.468	.884
2	1.603	9.431	46.715	1.603	9.431	46.715	3.129	18.405	36.874	
3	1.266	7.446	54.161	1.266	7.446	54.161	2.600	15.292	52.166	
4	1.041	6.122	60.283	1.041	6.122	60.283	1.380	8.117	60.283	
5 ^a	.972	5.717	66.000							
6 ^a	.771	4.534	70.533							

Table 2. Total variance explained for factor analysis

$\begin{array}{cccccccccccccccccccccccccccccccccccc$				
9^{a} .6353.73382.105 10^{a} .5803.41085.515 11^{a} .4552.67988.195 12^{a} .4172.45490.649 13^{a} .3712.18492.833 14^{a} .3632.13794.970 15^{a} .3271.92196.892 16^{a} .2741.61398.505	7 ^a	.672	3.951	74.485
10^{a} .5803.41085.515 11^{a} .4552.67988.195 12^{a} .4172.45490.649 13^{a} .3712.18492.833 14^{a} .3632.13794.970 15^{a} .3271.92196.892 16^{a} .2741.61398.505	8 ^a	.661	3.888	78.372
11^{a} .4552.67988.195 12^{a} .4172.45490.649 13^{a} .3712.18492.833 14^{a} .3632.13794.970 15^{a} .3271.92196.892 16^{a} .2741.61398.505	9 ^a	.635	3.733	82.105
12^{a} .4172.45490.649 13^{a} .3712.18492.833 14^{a} .3632.13794.970 15^{a} .3271.92196.892 16^{a} .2741.61398.505	10^{a}	.580	3.410	85.515
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11 ^a	.455	2.679	88.195
14^{a} .3632.13794.970 15^{a} .3271.92196.892 16^{a} .2741.61398.505	12 ^a	.417	2.454	90.649
15 ^a .327 1.921 96.892 16 ^a .274 1.613 98.505	13 ^a	.371	2.184	92.833
16 ^a .274 1.613 98.505	14 ^a	.363	2.137	94.970
	15 ^a	.327	1.921	96.892
17 ^a .254 1.495 100.000	16 ^a	.274	1.613	98.505
	17 ^a	.254	1.495	100.000

^a These factors are redundant.

Table 3. Rotated	component mat	rix of the new	y formed factors

]	Factors	
	F1 - Expressers and Informers	F2 - Engagers	F3 - Networkers	F4 - Watchers and Listeners
Watching a video online (YouTube, Vimeo, etc.)	.025	.023	.239	.772
Downloading music	.127	.153	038	.790
Reading blogs	.385	.523	.149	044
Updating personal blog	.703	.198	.170	.060
Updating personal Twitter account	.769	.048	.134	012
Updating profile on other social networks	.103	.097	.767	.095
Reading reviews and ratings for certain products/services	.149	.751	.231	.078
Reading forums	.135	.823	024	.257
Voting on various sites	.243	.533	.467	062
Adding labels or tags to photos online (on Facebook)	.190	.268	.772	.040
Contributing to online forums and discussion groups	.364	.621	.246	.108
Using the RSS feeds service	.698	.303	.090	.069
Contributing or editing wiki articles	.631	.371	036	.070
Posting of reviews and rating on various products/ services	.447	.559	.230	.012
Adding comments to various blog posts	.478	.462	.358	005
Adding comments to other people's social media profiles	.148	.125	.845	.122
Uploading videos on YouTube, Vimeo, etc	.526	.167	.228	.175

After undergoing the Factor Analysis, using the Principal Component Analysis and the Varimax Rotation Method with Kaiser Normalization, four factors emerged. These four factors represent the basis for an understanding of the students' activities on social media sites (Table 3).

The respondents that formed the first factor have been named Expressers and Informers. They get involved in

the online environment but they are mostly focused on them, on providing information about themselves through blogging, Twitter and uploading wiki articles. However, Expressers and Informers are individuals who stay current, particularly by using the RSS, and then by staying current with different sources of information.

The second factor is entitled *Engagers* because they seek and read different forums and reviews, but they also get involved by posting comments and reviews, rate sites, products and services. They always what to know more, but they also want to let others know about their opinions regarding different subjects.

The third factor has been entitled *Networkers or Socializers* because they are particularly involved in social media sites like Facebook, Myspace. The Networkers are very vocal and engage in actions like updating their profiles regularly, posting comments to their friends and tagging pictures.

The final factor has been named *Watchers and Listeners* because it consists of internet users who have a minimum activity online. They only choose to engage in online activity that are entertainment-driven, namely watching movies, TV shows, videos, listening to music, and download music or video.

Similarly, factor analysis (using the principal components and varimax rotation methods) was also performed for other variables (Table1., namely "Trust in information from personal sources", "Trust in information from foreign sources", "Positive reactions to online advertisements") included in the survey in order to observe the students' underlying attitude regarding reactions to online ads and trust in information provided on social media websites. Three new factors were obtained and the general information about these new variables is presented in Table 4.

		Initial Eigenva	lues	Extraction Sums of Squared Loadings KMO				
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	of Sampling Adequacy	
Positive reaction	ons to on	line ads					.657	
1	1.671	83.529	83.529	1.671	83.529	83.529		
2 ^a	.329	16.471	100.000					
Trust in inform	ation fro	m personal sour	ces				.703	
1	1.197	59.854	59.854	1.197	59.854	59.854		
2 ^a	.803	40.146	100.000					
Trust in inform	ation fro	m foreign sourc	es				.680	
1	1.511	75.566	75.566	1.511	75.566	75.566		
2 ^a	.489	24.434	100.000					

Table 4. Information regarding three new factors: positive reactions to online ads, trust in information from personal sources, and trust in information from foreign sources

^a These factors are redundant.

4.2 Cluster Analysis

The next stage involved using the TwoStep Cluster method in order to obtain segmentation, based on newly created factors. Clustering, or segmentation, is used in order to explore patterns of similarity or dissimilarity in different types of participants, i.e. to discover and describe groups of participants who may view particular forms of behavior in similar ways when considering different dimensions, which, eventually, concur to the quality of the higher education institution, "Lucian Blaga" University of Sibiu. We used the Two-Step Cluster procedure in SPSS (IBM SPSS, 2011), which incorporates statistical criteria to determine the optimal number of clusters, considering the number of observations from this database.

Also, the method allowed us to incorporate both continuous (the newly formed factors and the scales presented Table 3 and 4), and categorical variable (also, presented in Table 1). The results of the clustering procedure are presented in Table 5.

Variables	Cluster 1 – 36.9% (87 respondents)	Cluster 2 – 32.2% (76 respondents)	Cluster 3 – 30.9% (73 respondents)		
Clicking the ad	Most frequent response: Often – 89.7%	Most frequent response: A few times – 77.6%	Most frequent response: A few times – 76.7%		
Experience using social media	Most frequent response: More than 3 years – 41.4%	Most frequent response: $2-3$ years -55.3%	Most frequent response: More than 3 years - 76.7%		
Log in pattern	Most frequent response: Several times a day – 58.6%	Most frequent response: Several times a day – 48.7%	Most frequent response: Several times a day – 84.9%		
Time spent per login session		Most frequent response: 5 – 15 minutes / session – 43.4%			
Engagers	Mean: -0.09	Mean: -0.0	Mean: 0.12		
Expressers and Informers	Mean: -0.23	Mean: 0.15	Mean: 0.12		
Networkers	Mean: -0.14	Mean: -0.05	Mean: 0.23		
Watchers and Listeners	Mean: -0.13	Mean: -0.14	Mean: 0.30		
Trust in information from personal sources	Mean: -0.27	Mean: 0.18	Mean: 0.14		
Trust in information from foreign sources	Mean: -0.08	Mean: 0.03	Mean: 0.06		
Concern for privacy	Mean: 0.14	Mean: -0.14	Mean: -0.02		
Importance of social media	Mean: -0.29	Mean: -0.08	Mean: -0.31		
Positive reactions to online ads	Mean: 0.64	Mean: -0.44	Mean: - 0.31		

Table 5. Information that differentiate the clusters formed

The first cluster formed consists of 36.9% of the total respondents who do not really engage in social media activities, and have a negative reaction towards networking activities, expressing themselves or being a spectator online, perhaps due to their high level of privacy concern. Also, they have social media profiles for more than 3 years, they seem to log in several times a day and just browse around social media websites for 5 to 15 minutes. However, they have a positive outlook on online advertising and have frequently clicked on such advertisements with the intent to purchase or find out more information.

The students forming the second segment are Expressers and Informers on social media websites, who have been using for an average of two to three years, several times a day, for 5 to 15 minutes. They do not worry about confidentiality issues and they trust mostly their personal sources of information, such as friends and family in an online environment. The 32.2% of the total sample do not appreciate the intrusive online advertisements; however, they have clicked on profile targeted ads a few times.

The third cluster comprises the respondents who get involved in all sorts of social media activities, as they can be classified as Engagers, Expressers and Informers, Networkers, Watchers and Listeners. Similarly as the respondents from the previous clusters, they are using social media for more than 3 years and tend to log in several times a day, for an average of 5 - 15 minutes per session. Also, even though these respondents do not have a favorable perception regarding online advertising, they seem to have clicked on social media ads.

4.3 Automatic Linear Modeling

Furthermore, a SPSS specific procedure was used, namely Automatic Linear Modeling (ALM), in order to forecast and model a continuous target variable based on linear relationships between the target variable and its designated predictors. 8 continuous predictors and 4 categorical predictors were chosen in order to observe the impact on the target variable, namely, in this case, the positive reactions to online ads (Figure 1).

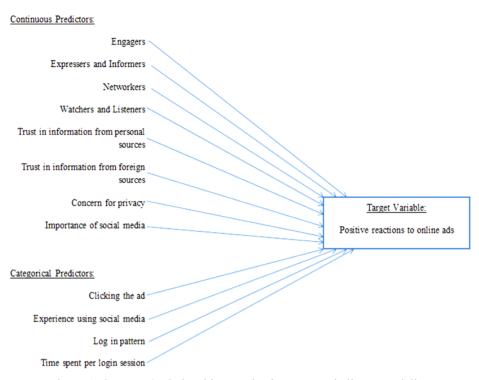


Figure 1. Concepts' relationship tested using automatic linear modeling

The model selection method used was Forward Stepwise, which starts with no effects and then adds and removes them at each step, based on the Information Criterion (AICC). Also, the preparation of the data was automatic. The accuracy value is 51% and it represents the adjusted R² multiplied by 100.

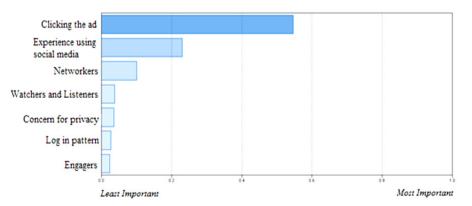


Figure 2. Predictor importance for the target variable in the automatic linear modeling procedure

Figure 2 shows the predictors in the final model and their assigned importance by the Automatic Linear Modeling procedure. The values are normalized so that the importance values sum one. The importance of a predictor represents the residual sum of squares with the predictor removed from the model (IBM SPSS, 2011). Hence, even though we included twelve predictors in order to study the target variable of positive reactions to social media advertising, the ALM procedure considered only seven variables: Clicking the ad, Experience using social media, Networkers, Watchers and Listeners, Concern for privacy, Log in pattern, Engagers.

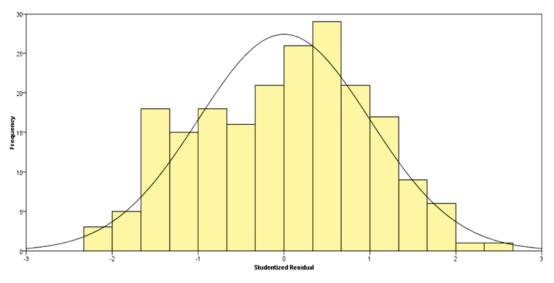


Figure 3. Studentized residuals for automatic linear modeling procedure

Figure 3 displays the histogram of Studentized residuals which compares the distribution of the residuals to a normal distribution.

Source	Sum of Squares	df	Mean Square	F	Sig.	Importance
Overall model	93.970	8	11.746	27.701	.000	
Clicking the ad	45.125	2	22.563	53.208	.000	0.547
Experience using social media	18.975	1	18.975	44.747	.000	0.230
Networkers	8.2885	1	8.285	19.539	.000	0.100
Watchers and Listeners	3.115	1	3.115	7.347	.007	0.038
Concern for privacy	2.902	1	2.902	6.844	.010	0.035
Log in pattern	2.177	1	2.177	5.135	.025	0.026
Engagers	1.937	1	1.937	4.569	.034	0.023
Residual	83.536		0.424			

Table 6. Analysis of variance for the proposed model

The analysis of variance table presents information about the whole model, by examining how the independent variables interact with each other and what effects these interactions have on the dependent variable. Table 6 presents only the variables that are statistically significant according to the F test and does not include some predicting variables that would be considered to be insignificant according to this calculated statistic. In the information criterion, the Automatic Linear Modeling procedure used reduction in order to determine which predictors to add and which ones to eliminate from the final model, in order to increase the model's overall significance.

Regarding the seven variables (Clicking the ad, Experience using social media, Networkers, Watchers and Listeners, Concern for privacy, Log in pattern, Engagers) included in the modeling procedure, we can conclude that there is significant interaction between them and the target variable that studies the respondents' positive reactions towards ads displayed on social media websites.

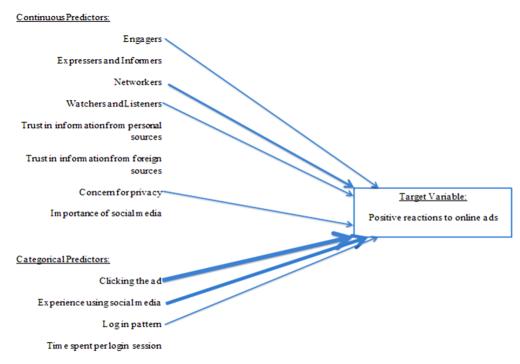


Figure 4. Effects exhibited for the proposed model in studying the target variable

Figure 4 represents the ANOVA table only in a graphic display. The predictor variables are ranked according to their assigned importance while the thickness of each connecting line represents the statistical significance of that particular effect on the positive reactions to ads, as a target variable.

Table 7 displays the estimates for parameters included in the overall model and their individual effects on the target variable (positive reactions to online ads). The column titled 'Coefficient' emphasizes the relationship each predictor has to the model's target variable. Moreover, the effects that are categorical predictors have multiple associated coefficients; one for each category except the category corresponding to the redundant parameter.

Model term	Coefficient	Std.	4	Sig.	95% Confidence Interval		Importonoo
Model term	Coefficient	Error	t	Sig.	Lower	Upper	Importance
Intercept	0.794	0.083	9.605	.000	0.631	0.957	
Clicking the ad - Often	1.406	0.159	-8.865	.000	-1.718	-1.093	0.547
Clicking the ad - A few times	-0.854	0.101	-8.468	.000	-1.053	-0.655	0.547
Clicking the ad - Never	0^{a}						0.547
Experience using social media – More than 3 years	0.880	0.132	-6.689	.000	-1.140	-0.621	0.230
Experience using social media – 2-3 years	0^{a}	0.049					0.230
Networkers	-0.215	0.047	-4.420	.000	-0.312	-0.119	0.100
Watchers and Listeners	0.127	0.049	2.711	.007	035	0.219	0.038
Concern for privacy	0.128	0.147	2.616	.010	0.032	0.225	0.035
Log in pattern - Several times a day	-0.333		-2.266	.025	-0.622	-0.043	0.026
Log in pattern – Once a week	0^{a}	0.046					0.026
Engagers	-0.999		-2.138	.034	-0.191	-0.008	0.023

Table 7. Coefficients determined for the influential predictors for the target variable

^a This coefficient is set to zero because it is redundant.

The coefficients show the relationship each predictor has with the target variable. Most notably, the students who actually often click on social media advertisements have a positive reaction to such marketing instruments. The model exhibits watchers and listeners who have a long experience with social networking sites, even though they have privacy issues.

5. Discussion

5.1 Theoretical Contribution

Nowadays, the analysis of consumer behavior is central for marketing success, especially since most potential consumers are using the internet and different online socializing tools. The online audience is a booming market worldwide, however giving its globalized nature a level of segmentation is needed cross-culturally. Regarding the academic implications, our results contribute to the study of the field of Internet marketing.

The conclusions obtained from our research have important implications for the academic research, derived principally from the analysis of four new types of social media consumers, namely Engagers, Expressers and Informers, Networkers, and Watchers and Listeners. We used this new classification, other newly formed variables (Positive reactions to online ads, Trust in information from personal sources, Trust in information from foreign sources), continuous variables (Concern for privacy, Importance of social media), and categorical variables (Experience using social media, Clicking the ad, Log in pattern, Time spent per login session) to achieve a segmentation of social media users and observe different patterns which could be targeted to improve the effectiveness and efficiency of online marketing activities. Therefore, this research presents new ways to classify online consumers, which served as a basis for psychographic segmentation, based on respondents' activities on different online platforms.

Also, this study contributes to the existing knowledge of customer behavior in an online environment, in general, and on social media websites, in particular, by providing insight through an examination of seven influential variables on developing positive reactions to online advertisements.

5.2 Implications for Managers

Today, any marketer or business owner understands the importance of internet marketing. Marketing a business on the web implies leveraging social media to create a lot of buzz in relation to a brand. Social media platforms offer immense possibilities for fostering relationships with consumers in an online environment. This study suggests different approaches for online marketers and managers looking to invest in advertising on social networking sites and hence improve their ads' performance regarding clicking the advert and generating positive reactions towards it. One approach implies understanding the sources of trust in online information provided by sources social media users may or may not know, and how their concern for privacy influences their reactions to online advertising.

Managers should be aware of the importance of social media sites in influencing online shopping by identifying and targeting different types of customers and taking initiatives to recognize and highlight customer interests.

In order to be successful in social media marketing, companies need to create a buyer persona and then develop and constantly adjust the online marketing strategy according to the interests of customers for long-term success. Figuring out what goes best for which particular audience leads to success. Regarding these aspects, companies can use online reputation systems in order to provide the right online incentives to the right online customers (Dellarocas, 2010).

True customer engagement means commitment-focused, not transaction-focused. The companies that master this aspect are the ones that are truly successful. They undergo continuous online marketing research and must be sensitive to changes in consumer behavior patterns and to identify new areas of consumer values and interest.

5.3 Limitations and Future Directions

Limitations of this study include those commonly associated with online questionnaires, including unsystematic sampling procedures and low response rates. While representativeness can always be improved, for the present research great efforts have been made in order to have a higher response rate for the sample.

This research is subject to some limitations which may provide fruitful avenues for future research. Firstly, certain limitations arise from the choice of the sample and the measurement of the variables used. Regarding the sample choice, this study presented responses gathered from students of Lucian Blaga University of Sibiu, Romania. The respondents do not, therefore, reflect customer attitudes and behaviors related to social media users in other countries. Moreover, given the sample, the research did not include in its analysis demographic variables, such as sex, age, social class, and ethnicity. Therefore, this is another area in which the research could

be improved and extended, perhaps using these demographic variables as mediation variables.

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