

The Influence of Social Networks on Consumer Behavior

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Abstract: In today's technology driven world, where the Internet is part of day-to-day life of the vast majority of the world population, a new form of interaction and communication is gaining more and more prominence. Online social networks have become an avenue where companies can extend their marketing strategies, directly connecting their brands to the customers, and where consumers can share their knowledge, opinions and experiences with each other. The aim of this research paper is to examine the influence of social networks on consumer behavior. It investigates the level of influence on each step of the purchasing decision-making process and tries to establish a model of the influence of trust, perceived usefulness, convenience and community, on consumer's intention to buy. It also reveals the correlation between the hours spent online, actively participating in the SN community and the level of influence that social network has on the purchasing decision. Finally, the current study gives insight into consumers' attitudes towards social networks as marketing tool and how they correlate to the impact of social network on purchase decision. For this purposes, quantitative research method was adopted. Empirical data, gathered by self-completion questionnaire, from a convenience sample of 120 social network users, were processed and analyzed in SPSS. The results show that consumers have positive attitudes toward social networks and reveal the positive correlation between these attitudes and the influence of social networks on consumers' purchase decision. This study highlights the role of credibility, perceived usefulness and convenience of social networks, consumers' involvement, communication and facilitated social interaction, presenting a valid and adequate model of the impact of these factors on buying decision. According to the results, Information Search and Evaluation of Alternatives are the stages of purchase decision-making process that are under the greatest influence of social networks. Linking these data with the theories from the theoretical framework, the author aims at providing a valuable insight for marketing managers and practitioners.

Keywords: social networks, consumer behavior, decision making process, influence

Introduction

"Informal conversation is probably the oldest mechanism by which opinions on products and brands are developed, expressed, and spread." – Johann Arndt

In recent years the online environment is viewed from a new perspective. The rapid growth of social media has revolutionized the way of communication and information sharing, redefining the priorities of business and marketers and creating a new place of interaction among people. Internet and virtual communities have transformed consumers, societies and corporations with wide spread access to information, better social networking, enhanced communication abilities (Kucuk and Krishnamurthy, 2007) and changed the way of how consumers and marketers communicate. Social media became the medium of consumer voices. Consumers are no longer passive receivers of marketing messages; instead, they are using Facebook, MySpace, YouTube, and Twitter to voice their opinions – both positive and negative (Sinclair & Vogus, 2011). As Wertime & Fenwick (2008) noted, last years, we have been witnessing the shift in the consumer behavior, from being consumers as viewers to consumers as participants.

The key business element of social media is that allows customers to evaluate products, make recommendations and link current to future purchases through status updates and feeds. Acting as a platform where consumers can share their ideas, opinions, experiences and knowledge, and providing a virtual space for connection, content finding and exchange, and even self-disclosure and self-representation, social networks might be an important agent of consumer socialization. Social media provide three conditions that encourage consumer socialization among peers online. First of all, they provide communication tools that make the socialization process easy and convenient (Muratore, 2008). Second, an increasing number of consumers visit social media websites to find information which will help them to make various buying decisions (Lueg et al., 2006). In the end, social media offer vast product information and evaluations quickly acting as a socialization agent between friends and peers, because they facilitate education and information (Gershoff & Johar, 2006). According to Wang, Yu and Wei (2012), online consumer socialization through peer communication also affects purchasing decision in two ways: directly through the conformity with peers, and indirectly by reinforcing product involvement. One of the main advantages of the social

networking is its ability to create and manage a diffuse network of weak ties. The information exchange happens between a larger and a broader group of actors and encourages collecting of as many contacts as possible, without deepening connections between the actors in order to gain business advantages. The extra utility that derives from the consumption of a good or a service when there is an increase in the network size of that good or service is called Network effect (Rassega et al., 2015). Growth in the size of the network, rises the value of the network to all of the users. It is more useful when more users join it. The network spreads, the information increases, consumers researching on the online community have more than sufficient amount of reviews, recommendations and suggestions to make their decisions. Social media platforms enable the two way flow of information and allow companies to reach targeted groups, influencing the entire decision - making process, from the phase of interpreting the message, to searching information and available alternatives, to acting right after the purchasing (Smith & Zook, 2011). Existing empirical studies on social influence show that people's behavior influences the behavior of others they communicate with and are connected to. For instance, many researchers have done studies on how peer's behavior influences the level of adoption of a product or service (Aral et al., 2009).

As noted in consumer behavior literature, information that consumers get from their interpersonal sources influences their decision to purchase a particular brand. Word of Mouth (WOM), an act of exchanging marketing information among different consumers, plays critical role in changing consumer behavior and attitude toward different products and services. This is mainly because interpersonal sources are seen as more credible and reliable than commercial, non-personal sources. Many studies have examined the way eWoM, in particular online reviews, ratings and recommendations of products and services, influence a wide range of overall outcomes, such as consumer choices, product sales, invests and decisions (Agarwal & Prasad, 2009). Social media can carry and spread word of mouth between millions of users, like none of the other channels has been able to do it until now.

The emergence of social media has drastically changed the marketing landscape and the relationship between companies and consumers, offering more possibilities to marketers to engage with their customers. The unique aspects of social networking and its immense popularity have completely revolutionized marketing practices. In the last few years a great presence of the companies on online networks can be noticed. Social

media offers them the key component they have struggled to collect for years: feedback from consumers. Businesses use the opportunity to engage and interact with their loyal, but also with the potential customers, to encourage an increased sense of intimacy, and build important and long term relationships. Social media put consumers in the center of the business world and provides marketers with a new set of tools to interact with their customers and to integrate them into the brands through innovative ways. The marketing area has thus evolved from a time when marketers had the power of influence, to today where consumers have a greater power of influence on their peers (Jaffe, 2010). That time of traditional marketing where marketers were pushing out messages toward customers using only one-way communication, is over. Marketers need to understand how social networks influence consumer behavior and businesses must learn how to use social media in a way that is consistent with their business plan.

The main purpose of this research paper is to examine the influence of social networks on consumer behavior. It investigates the level of influence on each step of the purchasing decision-making process and attempts to establish a model of the influence of trust, perceived usefulness, convenience and community, on consumer's purchase decision. The study also reveals the correlation between hours spent online, actively participating in the SN community and the level of influence that social network has on purchasing decision. Finally, the current study gives insight into consumers' attitudes toward social networks as marketing tool and shows if and how these attitudes are correlated with the impact of social networks on consumers' behavior.

Theoretical Background and Hypothesis Development

The current study of the influence of social networks on consumer behavior is guided by the theories of Symbolic and Hyper-symbolic Interactionism and is based on the following concepts.

1. Online Social Networks

Online social networks have become a major part of human communication and interaction life and influence in many different ways people's behavior and communication. They act as platforms where individuals as members, construct public profiles to share their knowledge and their experiences, to post information about themselves and have contact with

others who exchange and share similar interests (Cheung & Lee, 2010). Facebook, MySpace, Twitter, Instagram, YouTube, LinkedIn, etc provide user with facilities to interact with others and join virtual communities based on common interest and opinions. These networks have changed the way we think about marketing. Companies and consumers have direct interaction and relationship with one another (Solomon, et al, 2010) and the power shifted from companies to consumers. The growth of online participation and discussion has made consumers to have impact on products and brands (Riegner, 2007). Major roles of online social networks are: distributing information, opinions and influences among their members (Kempe, Kleinberg, & Tardos, 2003). Consumers' behavior can change once they interact with one another (Heinrichs, et al, 2011). Changes in behavior and actions usually happen as a result of social influences. Three types of social influences, which could have more or less power due to the circumstances, can affect consumer purchase decision: 1) compliance (subjective norms) occurs once individuals recognize that a social actor who owns the power wants them to perform a certain action or behavior, 2) internalization (group norm) when individuals want to adopt themselves to the idealized goals that are shared with others, and 3) identification (social identity) - once individuals accept the influence in order to establish relationship with another person or a group (Kelman, 1958). Since consumers enjoy the interaction and communication with each other and like to receive advice and share either positive or negative opinions about different products or services, virtual communities have an impact on consumers' purchasing decision (Evans, et al, 2009). Social networks help consumers to find information about specific company, product or service and have become more credible and relevant information source than direct information from companies (Bernoff & Li, 2008).

2. Consumer Behavior

Bennett (1989) defines consumer behavior as "a dynamic interaction of affect and cognition, behavior, and environmental events by which human beings conduct the exchange aspects of their lives". In Solomon, et al (2010) consumer behavior is defined "the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires." Consumers' physical and social environment have huge influences on consumers' purchase decision and can make a big difference in their desire and motives for product purchase (Blythe, 2008). The

communication situation where consumers receive information has an impact on their purchasing decision (Hawkins & Mothersbaugh, 2010). So, consumer behavior is not just summarized in making decision or the act of purchasing, but consumer interaction and the wide range of experiences associated with consuming, are part of consumer behavior as well (Schiffman, et al, 2008).

2.1 Purchasing Decision-Making Process

The central part of consumer behavior is consumer's purchasing decision - making process which involves several steps. Problem recognition is the first step of the process that may occur because consumer has a problem, need or desire to buy something new. Different factors can affect problem recognition step such as social and cultural factors, reference groups, and environmental factors. Once a problem is recognized, consumers begin the search of relevant information. There are two types of information sources - internal and external information search. Internal search involves the consumers' memory about the products, and external search includes word of mouth, stores visit, trial and online social networking and social media (Kardes, et al, 2011). Nowadays, online environment effectively involves in purchase decisions process and Internet has become an important tool for information search. The type of purchasing decision determines the level and direction of the search (Hawkins & Mothersbaugh, 2010). The next step of the process is evaluation of alternatives where consumers start to compare and evaluate several alternatives in terms of brands and products features and their desire and needs, searching the product that best fulfills their need. Once consumers have found their relevant alternatives and evaluated them, they should make their choice among the alternatives and choose the one to buy. So this is the step where final purchasing decision is made and only two things might change the decision of buying, which is what other peers think about the product and some unforeseen circumstances. The last stage of decision process happens after the purchase and this is where consumers start to compare their perceptions of the product with their expectations and are either satisfied or dissatisfied, so customers will spread either positive or negative feedback about the product.

3. The Impact of Online Social Networks on Consumer's Purchase Decision

Consumers belong to or admire different groups generally and those groups are able to change their

purchasing decisions behavior (Solomon, et al, 2010). They make their decisions within the environment around them such as family, friends, and coworkers and this, according to Evans et al (2009), is called joint decision-making. In traditional way, consumers made their purchase decisions based on information they received through mass media (e.g. advertising, newspaper, television comment), but nowadays, online social networks have power to affect consumers' purchase decision (East, et al, 2008). Different social network groups possess the power to influence consumers purchase decision:

1. Primary groups are characterized by the size and the close relationship within individuals (e.g. family members and friends)
2. Secondary groups are made up of more than one primary group (e.g. wider social system within organizations)
3. Informal groups are made up of individuals with common interests or cultures
4. Formal groups are organized with a more rigid structures
5. Virtual groups (communities) like online social networks

Reference groups are also part of social network groups that represent individuals or groups whose opinions or behavior are important to consumers and have an impact on their behavior. There are different types of reference groups: cultural figure, parents, large and formal organizations, small and informal groups. Small and informal groups have greater impact on consumers' purchase decision because they are a part of their day-to-day life (Evans, et al, 2009). Schiffman, et al (2008) categorized reference groups in several different categories and one of them is virtual communities. Different social networks groups are providing information for consumers to help them, to make the right purchase decisions. The exchange of knowledge, experiences, and opinions of each individual within different virtual communities can help the products or services either sell faster, succeed or fail.

All types of reference groups can influence consumer purchase decision in three ways: 1) Informational influence, seek information about different kinds of brands; 2) Utilitarian influence, consumer's purchase decision is relied on satisfaction of other in one's social groups; and 3) Value-expressive influence, the existing or desired image, impression, or perception that others have of the consumer becomes important for

him in order to choose particular brand (Solomon et al, 2010).

3.1 Online Word-Of-Mouth Communication

Many studies have shown that online social networks have become a new source of information and consumers rely on them and that online Word-Of-Mouth - recommendations from other consumers online, is powerful and valuable and could impact purchase decision. Word-Of-Mouth in traditional communication theory is considered as possessing powerful influence on consumer purchasing decision in every step of the process, especially information search, evaluation of alternatives, and product choice (Silverman, G, 2001). Word-Of-Mouth can be described as an engagement of consumers in positive or negative communication or an outcome of satisfaction or dissatisfaction experiences. WOM is person-to-person communication, regarding to brands, products, services, companies, and organizations that has an impact on consumer purchase decision (Evans, et al, 2009). This kind of social influences are able to change people's feelings, actions, opinions, or behaviors. This is mainly because interpersonal sources commonly are seen as more credible and reliable than non-personal, commercial sources.

Word-Of-Mouth's influence on consumer purchase decision is determined by: *tie strength* - a multidimensional construct that represents the strength of the dyadic interpersonal relationships in the context of social networks; *homophily (love of the same)*: members of a group are similar in terms of attributes; and *source credibility*: impact of source expertise and source bias on credibility of information (Brown, et al, 2007).

Social media is the relational connection that motivates consumers to participate and contribute User Generated Content, which becomes an essential digital asset for purchase decision-making and E-WOM marketing. E-Word-Of-Mouth communication is a main part of online communication where consumers exchange and share their knowledge, opinions and experiences and has an impact on consumers' purchasing decisions. As a marketing tool, online WOM communication is cheaper, faster, and more effective than the others (Dellarocas, 2003). Coming to E-WOM, many studies have examined the way online WOM, in particular online reviews and ratings of products and services, influence a wide range of overall outcomes such as consumer choices, product sales, and even invest and decisions (Agarwal & Prasad, 2009).

3.2 Consumers Interaction in Online Social Networks

Online social networks provide a place for consumers where they through social interaction can share recommendations, opinions and compare experiences with other consumers (Kim & Srivastava, 2007). According to Hennig-Thurau and Walsh (2003), there are five factors of interaction that influence consumers' behavior in terms of purchasing and communication: obtaining buying-related information which reduce risks; social orientation through information which means that consumers can evaluate and compare different products; community membership - consumers belong and admire different online social networks; remuneration which stresses consumer's love of prize and awards; and learning about new products' consumption. While consumers may sometimes not trust marketers, they do trust each other and each other's opinions through social media sharing (Diffley, 2011).

4. Symbolic Interactionism Theory

Mead's symbolic interactionism theory describes how humans form their identity and construct a reality of social norms through interactions with others. The methods of human interaction are changing over time but this theory is still applicable in modern world of digital age. Applying this theory to online networks, it can be postulated that online communities shape individual's identity and reality, and offer a gigantic sphere to establish correlations and create relationships. The theory of symbolic interactionism consists of three fundamental principles that narrate how people interact with each other through meaning, language and thought to create their "self". Interactions are central to the development of one's social identity and functioning according to shared norms and values (Tormey, 2007). So, the theory plays a vital role in formation of social network profiles and how users discover themselves by making online interaction. As humans interact with others, the "self" is constantly changing, evolving and adapting to shape their identities, which, Mead contends, are ultimately based on how others view their "self", so when people interact within an entire community, their self is created based on the expectations and responses of the community (Griffin, 2009). This "generalized other" is their guide to behavior when interacting with community members. It helps a person assign meaning to actions and to act based on the meaning one wants to assume within the community. Mead's concept of the "self" is an apt metaphor for the

process in which a Facebook profile is created and refined through communicative engagement with consumers in a digital marketplace.

5. Hyper-symbolic Interactionism Theory

Hyper-symbolic interactionism is a modified theory of symbolic interactionism for social media because early theories were constructed before the invention of the advent of Internet. According to Lynch & McConatha (2006), this theory explains the creation of a new type of reality based on symbols found digitally. The theory comprises the smallest symbols such as the I's and O's of computer language and the tiny pixels of digital imagery, as well as the complex contemporary imagery of advertisements and commercials produced daily. The larger symbols and imagery that these details create lead to new values and norms different than other non-digital communities. This digital community is filled with marketers and advertisers, which in turn affect the reality humans construct, including the norms and values people abide by, as well as the meaning they give to symbols. People socialize very differently in digital reality than they do in real life. Additionally, the increase in digital advertising causes them to perceive marketers and ads as reality. One can assume that the creation of online communities, which use different means of interaction, allows one's "self" to evolve even more than Mead ever thought one could. The generalized other that impacts one's self in the digital age is based more on consumerism than the generalized other described in the classic theory of symbolic interactionism (Lynch & McConatha, 2006).

Mead's theory of symbolic interactionism leads the author to believe that *social network communities will have an impact on consumer behavior*. As Mead states, communities influence people's actions and shape their identities, so online social media communities should have the same influence as offline communities (Griffin, 2009). Therefore, the main presumption that social networks have a significant influence on the consumer's attitudes, behavior and purchasing decision-making process. Taking in consideration the fact that consumers spend hours and hours daily interacting and communicating with other members of these online communities, the author assumed that:

H₁: There is a positive relationship between the hours that consumers spend online actively using the social network and the level of influence of the social network on consumers' purchasing decision.

In addition, the networking of individuals through social media provides *shared values* and *social*

interaction, leading to a positive impact on *trust* (Wu et al. 2010, Lu et al, 2010). With the incredible expansion of social networking sites, the study of consumer behavior on these platforms is a research agenda. SN members can become familiar with one another and this possible source of *trust*, can influence user's *intention to buy* (Hajli, 2014). *Perceived usefulness* as a construct of the technology acceptance model is the degree to which a person believes that using a particular system would enhance his performance. Ease and information quality have impact on perceived usefulness which influence consumer's purchasing decision. The concept of trust refers to risk and uncertainty reduction, so *credibility* and *benevolence* are the two main dimensions of *trust* (Hajli, 2014). In this context of social media communities, *trust in peers* and *trust in social networking sites* can facilitate the interaction and lead to a greater possibility of SN influence on consumer behavior. *Sociability* is one of the most significant functions of social media, and in particular, social networking sites. *Community* and *connectedness* represent this function the best. The subsequent effect of these virtual communities that share same interests and value is *eWOM* which is far more influential than offline WOM. The *credibility* of word-of-mouth information is evaluated by customers based on their *trust* in the SN site, their peers, and the *perceived value* of the information they retrieved (Broderick et al. 2007). A recent study related to the *connectedness* suggests that given the product risks, information provided by *strong ties* on the social network is more *trustworthy* and has *greater perceived value* for consumers than the information provided by *weak ties*. Funde and Mehta (2014) sustain that social media is most widely used information source for perceived *convenience*, *effectiveness* and *perceived credibility* and that social media reviews and opinions affect the consumer's purchase decision process.

H₂: Considering all this, the author proposes a research *model to examine the relationship between trust, perceived usefulness, convenience, community and purchase intention. So, according to the model all these factors have positive impact on consumer's purchase intention.*

Information search is the stage under the greatest influence of social networks. Consumers search information about products on the social network to reduce risk and uncertainty. This affects their decision-making process and leads them to a better purchase decision (Peterson & Merino, 2003). Consumers check other consumers' recommendations – *eWOM*, before making any purchasing decision, especially when it

comes to buying new products (Kim & Srivastava, 2007). Previous research has indicated that even a small amount of negative information from a few postings can have substantial impacts on consumer attitudes (Schlosser, 2005). Sharma and Rehman (2012) found that positive or negative information about a product on the social media has significant overall influence on consumer purchase behavior.

H₃: *Information search stage is the stage of the purchase decision-making process under the greatest influence of social networks.*

Pietro and Pantano (2012) find that enjoyment is a key determinant of social networks usage as tool for supporting the purchasing decision and suggest a *positive relationship between attitude of customers toward social media and consumer buying behavior*. Consumers' Sentiment toward Marketing is a factor consider by researchers to measure how well consumers will perceive social media marketing. CSM is defined as a concept which refers to the general feelings that consumers have for marketing and the marketplace (Mady, 2011).

H₄: *There is a positive relationship (correlation) between consumer's attitudes toward social networks and the influence of social networks on consumer's purchasing decision.*

Research Methods

Quantitative data collection from a convenience sample of 120 Facebook users lasted for a week. The survey was performed in the Republic of Macedonia. The 27 items-questionnaire was distributed online and offline. The items were adopted from previous research to increase the validity of the study. The first question referred to the hours that respondent spends online daily, actively using the social network. Next 15 items referred to the 5 variables used in the model. Trust has been investigated in many previous research papers. In this one, it measures the trust in peers, social network and the credibility of the information on SN. Community was measured with communication and social interaction between consumers, users of the SN and the online activity of respondents through posts, recommendations, reviews, likes and companies' official Fb pages visits. Perceived usefulness was measured in terms of SN effectiveness, helpfulness in better decision making and utility and benefit of recommendations and reviews received and shared. Convenience consisted of fast and easy access to any information; openness, accessibility and speed. Purchase intention was the dependent variable. Analysis showed satisfactory Cronbach's alpha level

for every variable. This part was followed by five items measured by 5-point Likert scale, each of them referring to one stage of the purchase decision-making process. The last part of the questionnaire was dedicated to respondent's attitudes toward social networks. Respondents were asked to indicate the level to which they agree with each of the seven items describing the positive aspects of social networks. In terms of measurement, Likert scale was adopted. Initial analysis showed satisfactory Cronbach's alpha level .747. Data analysis was conducted by the statistical software SPSS 20.0.

Findings

Positive relationship between the number of hours that consumers spend online, actively using the social network and the level of influence of the social network on purchasing decision was expected by H₁. But the bivariate analysis revealed no statistically significant correlation between consumer's time spent actively on SN (expressed in hours spent online daily) and the level of SN influence on his purchasing decision ($\rho = -.038$, $p = .682$).

Table 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.747	.754	7

Table 2: Correlations

		hours spent on Facebook daily	Fb influence on respondent's buying decision
Spearman's rho	hours spent on Fb daily	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	120
	Fb influence on respondent's buying decision	Correlation Coefficient	-.038
		Sig. (2-tailed)	.682
		N	120

Table 3: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	183.410			
Final	139.400	44.010	4	.000

Link function: Logit.

Table 4: Goodness-of-Fit

	Chi-Square	df	Sig.
Deviance	104.343	119	.829

Link function: Logit.

Table 5: Pseudo R-Square

Cox and Snell	.307
Nagelkerke	.348
McFadden	.171

Link function: Logit.

According to the proposed model the following factors: trust, perceived usefulness, convenience and community have positive impact on consumer's purchase decision. In order to test the model, Ordinal Regression procedure (PLUM) was adopted.

The statistically significant chi square statistics ($p < .0005$) indicated that the Final model gives a significant improvement over the baseline Intercept-only model. So, we can conclude that the model gives better predictions than if we just guessed based on the marginal probabilities of the outcome. The Deviance Goodness-of-Fit shows that the model has large

observed significance level ($p = .829$), so it appears that the proposed model fits.

R^2 statistics are used to measure the strength of the association between the dependent variable and the predictor variables. For this model pseudo R-square statistics are pretty large and indicate the proportion of variance in the outcome, in this case the purchase decision that can be accounted by the explanatory variables, in this model: trust, perceived usefulness, community and convenience. The Nagelkerke coefficient explains that 34.8% of the variance in the purchase decision can be explained by the predictor variables.

Table 6: Parameter Estimates

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[buying decision = 1]	4.432	1.145	14.991	1	.000	2.188	6.675
	[buying decision = 2]	7.659	1.321	33.616	1	.000	5.070	10.249
	[buying decision = 3]	10.823	1.551	48.704	1	.000	7.784	13.863
Location	community	.495	.213	5.393	1	.020	.077	.913
	trust	.775	.227	11.642	1	.001	.330	1.219
	perceived usefulness	1.382	.415	11.102	1	.001	.569	2.195
	convenience	.909	.432	4.432	1	.035	.063	1.755

Link function: Logit.

a. This parameter is set to zero because it is redundant.

Table 7: Test of Parallel Lines^a

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	139.400			
General	133.632 ^b	5.768 ^c	8	.673

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

a. Link function: Logit.

b. The log-likelihood value cannot be further increased after maximum number of step-halving.

c. The Chi-Square statistic is computed based on the log-likelihood value of the last iteration of the general model. Validity of the test is uncertain.

The table of Parameter Estimates shows the coefficients for the predictor variables and they are all positive as expected. This means that they are associated with higher level of influence of SN on purchasing decision. There is small observed level of significance for all of the predictors, $p < .05$, which means there is a significant positive relationship between predictor variables: community, trust, perceived usefulness and convenience, and the dependent variable: purchase decision. For any level of SN influence on purchase decision, the level of influence is higher, if trust, perceived usefulness, convenience and the sense of community are higher and stronger. This proves the validation of the proposed model.

The test of Parallel Lines shows if the assumption that the relationship between the independent variables and the logits are the same for all the logits. That means that the results are a set of parallel lines or planes – one for each category of the outcome

variable. Since the observed level of significance is large in this case ($p = .673$), it could be assumed that the parallel model is adequate.

H₃ stated that *Information search stage* is the stage of the purchase decision-making process under the greatest influence of social network. A repeated measures ANOVA with a Greenhouse-Geisser correction determined that the level of SN influence on consumer's purchase decision-making process differed statistically significantly between the five stages of the process ($F = 31.974$, $p < 0.005$). Post hoc tests using Bonferroni correction revealed significant difference between the Information Search and other stages of the process (3.8 vs. 2.2 vs. 3.0 vs. 2.3, $p < 0.005$), except with the Evaluation of Alternatives Stage where slight, but statistically insignificant difference was noticed (3.8 vs. 3.6, $p = 1.000$). The level of SN influence is high in the evaluation of alternatives stage of the process as much as it is in the information search stage.

Table 8: Tests of Within-Subjects Effects

Measure: SN influence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Greenhouse-Geisser	253.127	3.739	67.691	31.974	.000	.212

Table 9: Pairwise Comparisons

Measure: SN influence

(I) stages	(J) stages	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1.Problem/Need	2	-1.633*	.152	.000	-2.067	-1.200
	3	-1.392*	.184	.000	-1.919	-.865
	4	-.850*	.182	.000	-1.372	-.328
Recognition stage	5	-.150	.198	1.000	-.717	.417
	1	1.633*	.152	.000	1.200	2.067
2.Information Search stage	3	.242	.157	1.000	-.209	.692
	4	.783*	.176	.000	.281	1.286
	5	1.483*	.193	.000	.932	2.034
3.Evaluation of Alternatives stage	1	1.392*	.184	.000	.865	1.919
	2	-.242	.157	1.000	-.692	.209
	4	.542*	.177	.027	.036	1.047
	5	1.242*	.187	.000	.705	1.778
4.Purchase Decision stage	1	.850*	.182	.000	.328	1.372
	2	-.783*	.176	.000	-1.286	-.281
	3	-.542*	.177	.027	-1.047	-.036
	5	.700*	.203	.008	.119	1.281
5.Postpurchase Behavior stage	1	.150	.198	1.000	-.417	.717
	2	-1.483*	.193	.000	-2.034	-.932
	3	-1.242*	.187	.000	-1.778	-.705
	4	-.700*	.203	.008	-1.281	-.119

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

The fourth hypothesis stated that there is a positive relationship between consumer's attitudes toward social networks and the influence of social networks on consumer's purchasing decision. The following statements referring to the positive aspects of SN were tested on a 5-point Likert scale (from 1 = "totally disagree" to 5 = "totally agree").

1. SN are powerful and effective platforms where consumers communicate and share experiences (4.2)
2. SN are powerful and effective platforms of direct contact and two-way communication between companies and their consumers (4.0)
3. Information found on SN has greater credibility than information presented in mass media (3.4)

4. SN are helpful in buying decision making process (3.5)
5. SN are convenient, offering quick and easy access to any information (3.9)
6. SN are more interesting, interactive and informative marketing tool than mass media (4.2)
7. Companies that employ SN as a marketing tool are more innovative and build closer and stronger relationship with their customers (3.8)

The results showed highly positive overall attitude toward SN. A bivariate analysis revealed statistically significant correlation between consumers' attitudes toward SN and the level of SN influence on purchasing decision ($\rho=.182$, $p=.047$; $\rho=.204$, $p=.026$; $\rho=.381$, $p=.000$; $\rho=.270$, $p=.003$; $\rho=.181$, $p=.049$; $\rho=.306$, $p=.001$; $\rho=.271$, $p=.003$, respectively).

Table 10: Correlations

			SN- consumers	SN- directly communicate, share experiences	SN- communication greater credibility than mass media	SN - helpful in decision making process	SN convenient - quick, easy access to information	SN- interesting .interactive informative content	Companies build strong and closer relationship with customers through SN	
Spear-	SN	Correl	1.000	.182*	.204*	.381**	.270**	.181*	.306**	.271**
man's	influe	ation								
rho	n	Co								
	ce	fficient								
	on	ient								
	buyin	Sig. (2-								
	g	tailed)								
	decisi	N								
	on		120	120	120	120	120	120	120	120

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Discussion and Conclusion

“Traditional marketing is not dying – it’s dead!”
(Zyman, 1999)

The development of social networks has facilitated the interconnectivity of consumers and SN became the medium of consumers’ voices. Consumers have the tendency to relate much more with a company or brand after they read various reviews and comments of the consumers who have already purchased their products. Before making a purchase, consumers read what other people think about a particular product by logging in to an account on a social networking site. Social network users trust in opinions and recommendations that come from their friends, family, experts and even strangers on these networks. Very often they visit companies’ official and fan Fb pages for various information. Consumers consider the social networking sites as being valuable and a reliable source for researching products and services, and also as platforms where they can interact, communicate, share their opinions and experiences with each other, but also a place where companies can establish a two-way communication and build a stronger and closer relationship with their customers. The model proposed in this study showed that community (communication and interaction between customers and their online activity through posts, recommendations, reviews, like etc.), trust (expressed as a credibility of information found on SN, trust in peers, and trust in SN), perceived usefulness (in terms of utility of information found on SN, helpfulness in better purchase decision making and effectiveness of SN), and convenience (openness, accessibility and speed) have positive effect on consumers’ purchase decision. Although, consumers spend hours and hours online daily, actively participating in the social network community, the research revealed that there is no positive correlation between time spent on the SN, and the influence of the network on consumer behavior. As Pietro and Pantano in 2012 suggested, a positive relationship between attitudes of customers toward social networks and consumer buying behavior, was revealed in this research. The more positive consumers’ attitudes toward SNs are, the more influence on consumers’ purchase decision SNs exert. As in many other previous studies, the author assumed the Information Search stage of the purchase decision-making process, as the one under the greatest influence of SN. The results confirmed that assumption, showing a statistically significant difference between this and the other stages of the process, except for the Evaluation of Alternatives stage, since slight, but statistically insignificant

difference in level of influence was noticed. Therefore, this research showed that the influence of social networks on the Evaluation of Alternatives stage is as considerable as it is on the Information Search stage.

This study has several limitations. First of all, the survey was conducted on a convenience rather small sample, which cannot be seen as representative one, although it was sufficient for the presented findings. The study focuses on the influence of Facebook on its users in Macedonia. The literature and previous research studies in the field of social networks’ influence on consumer behavior, are insufficient. Furthermore, the proposed model, although a good fit, does not guarantee a true reflection of reality. The good model fit only indicates that based on the sample data, the relationship of different factors are well explained by that model. In reality, consumer behavior can be very complex and SNs influence on it may differ. So in summary, instead of fully relying on the results of any empirical test, it is better to treat them as useful insights and possible suggestions.

The study has many implications for marketers. It shows that consumers prefer SN as marketing tool rather than mass media, since they believe that information referring to different products, services and brands, found on social networks, has greater credibility than the information from traditional mass media. Consumers have positive attitudes towards SNs as powerful and effective platforms where companies can make a direct contact and two-way communication with the customers. They also believe that companies that use social networks as marketing tool, as part of their integrated marketing communications, are more innovative and are able to build closer and stronger relationship with their customers, giving them voice, appreciating their feedback and transforming them from viewers to participants. This positive attitude leads to positive changes in consumer’s behavior and purchase decisions. Social media put consumers in the center of the business world and provides marketers with a new set of tools to interact with their customers and to integrate them into the brands through innovative ways.

References

- Agarwal, R., A. Animesh, and K. Prasad, (2009) Social Interactions and the Digital Divide: Explaining Variations in Internet Use. *Information Systems Research*, Vol. 20, No. 2, June 2009, 277-294.
- Aral, S., Muchnik, L., & Sundararajan, A. (2009). Economic influence in massive online social networks. Paper presented at the Workshop on Information Systems Economics, Paris, France.

- Bennett, J., Owers, M., & Tucker, M. (2010). Workplace impact of social networking. *Property Management*, 28(3), 138-148. doi:10.1108/02637471011051282
- Bennett P., (1989). *Dictionary of Marketing Terms*. McGraw-Hill.
- Bernoff, J., & Li, C. (2008). Harnessing the Power of the Oh-So-Social Web. *MIT Sloan Management Review*, 49(3), 36-42.
- Blythe J. (2008). *Consumer Behavior*. THOMSON.
- Broderick, A. J., Brown, J., and and Nick Lee (2007). Word of Mouth Communication With in Online Communities: Conceptualizing the Online Social Network. *Journal of Interactive Marketing*, Vol. 21, Nr. 21, 2-20.
- Cheung Christy M.K., Lee Matthew K.O., Neil Rabjohn, (2008). The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, Vol. 18 Iss: 3, 229 – 247.
- Dellarocas, C. (2003). The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms. *Management Science*, 49(10), 1407-1424.
- Diffley, S., Kearns, J., Bennett, W., & Kawalek, P. (2011). *Consumer Behavior in Social Networking Sites: Implications for Marketers*. *Irish Journal of Management*, 30(2), 47-65.
- East R, Wright M, Vanhuele M, (2008). *Consumer Behavior: Applications in Marketing*. London: SAGE.
- Evans M, Jamal A, Foxall G, (2009). *Consumer Behavior*. 2nd ed., John Wiley & Sons Ltd.
- Forbes LP, Vespoli E (2013) Does Social Media Influence Consumer Buying Behavior? An Investigation of Recommendations and Purchases. *Journal of Business and Economics Research* 11: 107-113.
- Funde Y, Mehta Y (2014) Effects of Social Media on Purchase Decision. *Pacific Business Review International*.
- Gershoff, A. D. and G. V. Johar (2006), Do you Know Me? Consumer Calibration of Friends' Knowledge. *Journal of Consumer Research*, 32 (March). Vol. 32 March 0093-5301/2006/3204-000210.00
- Griffin, Em. (2009). *A First Look at Communication Theory*. New York, NY: McGraw-Hill.
- Hajli, M. Nick. (2014). A study of the impact of social media on consumers. *International Journal of Market Research*. Vol. 56(3), 387-404.
- Hawkins Del I., Mothersbaugh David L. (2010) *Consumer Behavior: Building Marketing Strategy*. 11th ed., New York: McGraw-Hill Irwin.
- Heinrichs J.H, Jeen-SU Lim, Kee Sook Lim (2011), Influence of social networking site and user access method on social media evaluation. *Journal of Consumer Behavior*, Vol. 10, 347-355.
- Hennig-Thurau, T., & Walsh, G. (2003). Electronic Word-of-Mouth: Motives for and Consequences of Reading Customer Articulations on the Internet. *International Journal of Electronic Commerce*, 8(2), 51-74.
- Jaffe, J. (2010) *Flip the funnel: how to use existing customers to gain new ones*. Hoboken, NJ: John Wiley & Sons, Ltd.
- Kardes F.R, Cronley M.L, Cline T.W, (2011). *Consumer Behavior*. South-Western.
- Kelman, H.C. (1958). Compliance, identification, and internalization: three processes of attitude change. *Journal of Conflict Resolution*. Vol. 2 Nr 1, P 51-60.
- Kempe, D., Kleinberg, J., & Tardos, É. (2003). Maximizing the spread of influence through a social network. Paper presented at the Proceedings of the ninth ACM SIGKDD international conference on Knowledge discovery and data mining. Retrieved 2017-02-03 from <http://dl.acm.org.bibl.proxy.hj.se/citation.cfm?id=956769>
- Kim, Y. A., & Srivastava, J. (2007). Impact of Social Influence in E-Commerce Decision Making. Paper presented at the Proceedings of the Ninth International Conference on Electronic Commerce. Retrieved from <http://dl.acm.org.bibl.proxy.hj.se/citation.cfm?id=1282157>
- Kotler P, Armstrong G (2010) *Principles of Marketing*. Pearson Education.
- Kucuk, S. Umit and Krishnamurthy, Sandeep (2007). An Analysis of Consumer Power on the Internet. *Technovation*, Vol.27 (1-2): 47-56.
- Li C, Bernoff J, Pflaum C, Glass S (2007) How consumers use social networks. Forrester Research, Inc.
- Lu, Y, Zhao, L. Sc Wang, B. (2010). From virtual community members to c2c e-commerce buyers: trust in virtual communities and its effect on consumers' purchase intention. *Electronic Commerce Research & Applications*, 9, 4, 346-360.
- Lueg, Jason E, Nicole Ponder R, Sharon EB, Michael LC (2006) Teenagers' Use of Alternative Shopping Channels: A Consumer Socialization Perspective. *Journal of Retailing*, 82: 137-53.
- Lynch, M. and McConatha, D., (2006). Hyper-Symbolic Interactionism: Prelude to a Refurbished Theory of Symbolic Interaction or Just Old Wine? *Sociological Viewpoints*. Spring, 2006, Vol. 22, 87-96.
- Mady, Tarek T. (2011). Sentiment toward marketing: Should we care about consumer alienation and readiness to use technology? *Journal of Consumer Behavior* 10: 192-204.
- Muratore I (2008) Teenagers, Blogs and Socialization: A Case Study of Young French Bloggers. *Young Consumers* 9: 131-42.
- Peterson, R. A and Merino, M. C. (2003), Consumer information search behavior and the Internet. *Psychology and Marketing*, 20: 99-121. doi:10.1002/mar.10062
- Pietro LD, Pantano E (2012). An empirical investigation of social network influence on consumer purchasing decision: The case of Facebook. *Journal of Direct, Data and Digital Marketing Practice* 14: 18-29.
- Rassega V, Troisi O, Torre C, Cucino V, Santoro A, Prudente N. (2015). Social Networks and the Buying Behavior of the Consumer. *J Glob Econ* 3:163, doi: 10.4172/2375-4389.1000163
- Riegner C, (2007). Word of mouth on the web: The impact of web 2.0 on consumer purchase decisions. *Journal of advertising research*. VOL 47(4). 436-447.
- Schiffman L.G, Kamk L.L, Hansen H. (2008). *Consumer Behavior: A European Outlook*. Prentice Hall.
- Schlosser A. E., (2005), Posting versus Lurking: Communicating in a Multiple Audience Context, *Journal of Consumer Research*, 32(2), 260–265.
- Shankar, Venkatesh, Jeffery Inman, Murali Mantrala, Eileen Kelley, and Ross Rizley. 2011. Innovations in Shopper Marketing: Current Insights and Future Research Issues.

- Journal of Retailing 1:s29-s42, doi:10.1016/j.jretai.2011.04.007.
- Sharma S, Asad R (2012) Assessing the Impact of Web 2.0 on Consumer Purchase Decisions: Indian Perspective. *International Journal of Marketing and Technology* 2: 125-139.
- Silverman, G. (2001). *The Secrets of Word-of-Mouth Marketing: How to Trigger Exponential Sales through Runaway Word-of-Mouth*. New York: American Marketing Association.
- Sinclair, Jollean K. and Clinton E. Vogus. 2011. Adoption of social networking sites: an exploratory adaptive structuration perspective for global organizations. *Information Technology Management* 12: 293-314, DOI 10.1007/s10799-011-0086-5.
- Smith, P. R., & Zook, Z. (2011). *Marketing communications: Integrating offline and online with social media*. London, UK: Kogan Page Ltd.
- Solomon, M., Bamossy, G., Askegaard, S., and Hogg, M. (2010). *Consumer Behavior: Buying: A European Perspective*. 4rd ed., Financial Times Press.
- Tormey, P. (2007). *The Thursday Speeches: How Coach Don James Used Words and Mental Images to Build a College Football Powerhouse*. (Unpublished doctoral dissertation). Gonzaga University, Spokane, WA.
- Wang, X., Yu, C. & Wei, Y. (2012) Social media peer communication and impacts on purchase intentions: A consumer socialization framework. *Journal of Interactive Marketing*, 26, 4,198-208.
- Wertime, Kent & Fenwick, Ian. (2008). *DigiMarketing: the essential guide to new media & digital marketing*. John Wiley & Sons (Asia), Singapore; Hoboken, NJ.
- Wu, J.-J., Chen, Y.-H. & Chung, Y.-S. (2010). Trust factors influencing virtual community members: a study of transaction communities. *Journal of Business Research*, 63, 9-10, 1025-1032.