

Some Solutions for Marketing in Social Networks to Increase the Apparel Sales in E-Commerce



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Received: December 7, 2017; Revised: December 15, 2017; Accepted: December 18, 2017

Abstract : In current era, internet has become a strategic feature for corporations. It is an important attribute for corporations to have effective communication with customers. Most businesses would consider websites as a communication tool. With the emergence of the social networks, the communications have become more extensive and it can have a more effective role in e-commerce due to the easy installation of social network applications on cell phones. The main purpose of this research is to prove some solutions for marketing in social networks to increase the apparel sales in e-commerce. This research is functional from objective perspective, and is quantitative from data type point of view and it is descriptive- survey from the perspective of data gathering method. Some people are selected as a sample among people who use social networks, through random sampling method and then a questionnaire is distributed among them. The design of the questionnaire of this research, in the part relating to the independent variable of marketing activities (customer satisfaction: rendering services and support) as well as the independent variable of trust, have been done based on 3S+2C+2P marketing formula. Using Cochran formula, the minimum sample size was calculated as 384 due to the population of Tehran, even though more people (558) were investigated in this research. Cronbach's alpha was used to determine the validity and reliability, and Kolmogorov-smirnov test was used to determine the normality of the society. The Pearson correlation and regression methods were used for data analysis. The results of the research, using the regression analysis is that all features have a meaningful relationship with the apparel sales promotion and improvement of customer attraction.

Keywords: Apparel sales promotion, E-commerce, Increasing customer attraction, Marketing, Social networks

Introduction

Early humans due to their needs started to produce the apparels, shoes and clothes from the tree leaves and then they turned to animal skin, which were the first human handmade production. Then after years, humans started commodity exchanges for resolving their needs, however, the advertisement requirements for selling their productions and the resulting products was as much as the society requirement due to the restriction of the human societies, thus the commodity exchanges were easily made. However, with the rise of the population and its subsequent increase in producers, more attention was paid to the issue of advertisement and customer attraction because customers buying from other suppliers are considered as a victory for rival organizations and a failure for the organizations of interest. Thus advertisement is vital for the survival of the organization and its subsequent sale promotion and this need has caused the new communication technologies such as taking advantage from social networks help the advertisements, so in modern era they are important for the competition in sales market place (Taravati, 2014).

One of the established ways in the context of internet is the effective communication to establish a relationship between manufactures and the consumers through mass communication instruments and networks. Marketing

instruments of the social networks and their importance in different areas are growing rapidly and they include several areas (Even-Dar & Shapirab, 2011). Using the analysis of correlations which exist between the organizations and consumer networks, we can help the corporations attract customers who are not identifiable through the traditional methods. The social networks are not limited to the physical and face to face communications due to the advancements of the technologies in the area of information technology but the online social networks have become the emerging solutions for mouth to mouth marketing. Although the verbal mouth to mouth strategy has more impacts on customers' decisions to buy, in recent years with the growth of internet and the virtual communities, the word of mouth strategy has become more popular in online channels and it has been used more frequently (Mak, 2008).

Media such as Twitter, My Space, Face book, You Tube, Instagram, Telegram, Viber and LinkedIn etc. are examples of the rapidly growing social networks through which the communications are established and they are used by most adolescents and youths as a part of their daily lives. This usage is both for introducing themselves and giving personal information, and for the advantage of recognition of others. Social networks marketing is a mutual communication which tends to communicate with

young customers to establish an emotional relationship and feel connected and in sympathy with youth as well as establishing the same relationship with older age groups. We know that the social networks have been spread in the world thus one of the best events which have occurred is trading in social networks, which is also called social commerce and it has some advantages for both businesses and sales promotions, and for customers because the social commerce has been modelled based on social networks in which every sales centre and every customer, in turn, are considered as a node in the network (Pir-Kiani *et al.*, 2013).

Considering above mentioned issues, the main purpose of the research is to recognize and investigate the role of advertisements and marketing in apparels sales promotion in social networks because social media are a powerful tool which can make the corporations able to persuade the customers of interest to buy more, thus the apparel products would be sold faster and in larger quantities and the results can be effective for more sales and for modification of sales methods and online advertisements.

Thus in the research we will investigate this question of what the appropriate solutions are for marketing in social networks to increase apparel sales in e-commerce.

Literature review and the literature background

Internet and a look at its emergence

Internet and its architecture have evolved significantly since its emergence (it was a primitive and weak plan rather than a huge scenario) (Carpenter, 1996). Internet innovation in a manner which was built in 1960's by Advanced Research Project Agency (ARPA) scientists, relates to the packet switching technology. Before ARPANET was created, most experts claimed that the packet switching would never be successful (Roberts, 1999). In 1965 when the first network experience happened and the packets were used for exchanging between computers, the scientist could not imagine the various applications of this technology in the society. Kleinrock, who was the inventor of the packet switching, clearly suggested that he could not predict the powerful social role of internet and its impact on all aspects of the society (Kleinrock, 2008). Extending this network and its focus on flexibility, decentralization and cooperation led to formation of the internet in a way that we know it today. At the first steps, US government undertook the responsibility of promoting and providing the internet funding rather than its design. Providing the possibility of growing freely and without any limitation for educational research networks, selection of TCP/IP for NSnet and other networks and subsequently personalizing NSFNET network are among the most important decisions made for the growth and evolution of the internet (Cohen-almagor, 2011).

The design of internet was new and unprecedented because it was considered as a neutral, open and decentralized network consisting of several networks. Open architecture of internet makes it possible to access protocols freely from

any point in the world and is able to accept nearly all computers and networks which tend to join it. The specific architecture of the network would not dictate the selection of individual network technologies; however, a provider can select those technologies for free and make them have interstitial interaction with other networks through the architecture of high level internet communication. This open architecture would lead to the formation of more network applications. Internet is neutral between text, audio and video soft-wares. This leads to the growth of the new and better applications (such as email, world-wide web and peer to peer technology), and the replacement of older applications (Goldsmith and Wu, 2006).

Internet features

Internet, specifically social networks have changed the way of communication between marketers and the consumers. Internet has distinctive features such as:

- The ability of storing a large amount of information in different virtual locations which is not that much costly
- Accessibility of powerful and cheap tools for searching, organization and distribution of this information
- Interaction and the ability of presentation of the required information
- The ability of service rendering as an exchange broker
- The ability of service rendering as a physical intermediate of distribution for specific products such as software of relatively low costs of entrance and establishment for vendors (Peterson *et al.*, 1997).

One of the advantages of internet is to provide the possibility of accessing consumers from all over the world, thus the customers can evaluate, select and buy the products and services from businesses across the world (Al-Kailani and Kumar, 2011).

Specifically, peer communication through social networks, which is a new form of customers social interactions have a great impact on customers decision making and subsequently on marketing strategies (Cohen-almagor, 2011).

Website as a distribution channel

Website is essentially the distribution channel in internet context which has been used considering information and web content and other features such as ordering method, debate of website safety, online service quality and sales support and is important because as researchers claim there is a positive relationship between system quality, information quality, service quality and online shopping (Ahn *et al.*, 2004).

System quality and information quality

Evaluating quality of the website which is responsible for information processing is very important in the system quality. A website must be in a high technical level, including its appearance and operational efficiency which are among system quality characteristics. Also the quality of information presented in websites is evaluated through considering website content and its reports quality. In other words, system quality includes the speed of vendors' web sites, creation of a search section within the website, easy accessibility and the like, and information quality refers to adequacy of information relating to products and easy finding of this information in internet which leads to easy accessibility of intended shop. (Ahn *et al.*, 2004).

Service quality

Since in online shopping, the relationship between the buyer and the seller is virtual, thus the service quality is very important and it refers to this fact that the structure of website must be designed in a way that it can create variety of goods, arrangement of the goods to better presenting the products as well as responding to customer needs and creating the sense of trust in customers in establishing system safety for purchasing from online shops (Ahn *et al.*, 2004).

Information and interactive websites and their applications impacts

The organizations provide customers with information through their website and most of them have made online purchase possible. Generally a website can be designed in both forms of information and interaction. The first group includes websites which provide customers just with business information and are called "information websites". The second group is the websites, which besides presenting business information would create the possibility and permission of online shopping which are called interaction websites. However, in second group- interactive websites it is not necessary to present the business information and the website can just sell products online without providing business information (Van Nierop *et al.*, 2011).

The features of a website can lead to the impact of a customer's buying behaviour in such a way that it can either increase or decrease the level of searching by customers. Two cases related to the impact of interaction internet channels application on customers buying behaviour have been discussed as the following based on the conducted researches on customers:

- Customers can be directed toward a specific channel with marketing efforts
- To connect to an internet channel, customers will use different means

As stated above, adding an interactive internet channel can influence customers buying behaviour and lead to either increasing or decreasing customers buying behaviour so it

can influence both the channel selection for customer and increasing purchases by multi-channels customers. However, the impact of information websites is in such a way that leads to the investment on these kinds of websites by businesses in order to positively influence the customer knowledge, brands understanding or buying behaviour. However the businesses would accept the negative impacts resulted from the risk of delay between buying behaviour and customer inquiry time using information websites. When information resources are low, customers with high motivation would naturally select the product based on their motivation rather than understanding the product, therefore, giving information about the product to the customer can be effective in increasing the understanding about that product for customers with incentive to buy and would satisfy them. On the other hand, the interaction items can be added to the information sites, in other words, information sites could be upgraded to interactive websites or it can be possible to communicate with interactive websites through the information websites with a link and make online shopping possible in this way. However, these conditions would be functional when customers tend to buy online and the negative effects of online interactive channels are less than the negative effects of the information sites, and the good can be sold in a cost-effective manner (Van Nierop *et al.*, 2011)

Data analysis methods

Required data is gathered using a questionnaire, then it is coded and entered into the computer and finally is analysed using SPSS software in order to determine the relationship between the variables and formulate the accurate and appropriate solutions. It is worth noting that the Pearson correlation test has been used in this research to test the hypotheses.

First, Kolmogorov-Smirnov test (K-S) is used in inferential statistics to determine the normality or abnormality of the case distribution. In the case of normality of distribution, the regression method will be used through SPSS software, otherwise the binomial method will be used.

Regression

To determine the regression, the following formula will be used:

$$Y = a + b_1x_1 + b_2x_2 + \dots + b_nx_n + u_t \quad (3-3)$$

In above formula Y is the dependant variable; a is width from source; X_1, X_2, \dots, X_n are all variables used in this research; b_1, b_2, \dots, b_n are the regression coefficients obtained from all variables in this research; U_t includes the error terms.

The normality test of the variables (Kolmogorov-Smirnov):

If the amount of calculated sig is lower than =05%, the H0 hypothesis will be rejected and H1 will be accepted. And if

the amount of the calculated sig is bigger than =05%, the H1 hypothesis will be rejected and the H0 hypothesis will be accepted. It means that the data is normal.

Pearson correlation test

The Pearson correlation coefficient is used in this research to test the above hypotheses. Correlation coefficient (also referred to as the Pearson product-moment correlation coefficient) is generally shown with R and is the precise amount for measurement of the type of relation between variables and its amount would represent both the direction (positive or negative) and the correlation power between two variables. The correlation coefficient would always fall between the two variables in the defined interval in table 1.

Table -1. Interpretation of Pearson correlation coefficient (Kalantari, 2017)

Amount	Conclusion
0 to 0.25	Weak direct correlation
0.25 to 0.50	Semi-weak direct correlation
0.50 to 0.75	Strong direct correlation
0.75 to 1.0	Super strong direct correlation
0	No correlation
0 to -0.25	Weak inverse correlation
-0.25 to -0.50	Semi-weak inverse correlation
-0.50 to -0.75	Strong inverse correlation
-0.75 to -1.0	Super strong inverse correlation

Statistical analysis

Normality test

In this section, we first investigate the normality of variables.

Null hypothesis of the test (H0): the normality of variables distribution

If the significance level is lower than 0.05, the null hypothesis will be rejected and it can be said that the data distribution is not normal with 95% confidence.

Based on table 2, since the significance level of normality test of variables is more than 0.05, the variables distribution is normal, thus the Pearson correlation tests

and regression can be used.

The research hypotheses will be tested in following sections.

Hypotheses

H1. There is a significant relationship between advertising marketing method (customers satisfaction: service rendering, support) and increase in apparel sales

H2. There is a meaningful relationship between commercials in social networks and increase in apparel sales

H3. There is a significant relationship between the usage of attractive colours and designs in social network advertisements and increasing the customer attraction

H4. There is a meaningful relationship between the usage of symbols and icons of the countries in marketing of social network advertisements.

The first hypothesis test

H1. There is a significant relationship between marketing activities of advertisement (customers satisfaction: service rendering, support) and apparel sales increase.

Pearson correlation

The first hypothesis

There is a significant relationship between marketing activities of advertisements (customers satisfaction: service rendering, support) and apparel sales increase.

H0. There is not a meaningful relationship between marketing activities of advertisements (customers satisfaction: service rendering, support) and apparel sales increase.

H1. There is a significant relationship between marketing activities of advertisements (customers satisfaction: service rendering, support) and apparel sales increase.

In this hypothesis, the Pearson correlation coefficient has been used first to estimate the relationship between marketing activities of advertisements (customers satisfaction: service rendering, support) in social networks

Table - 2. Evaluation of the normality of variable distribution

variable	Most Extreme Differences			k.s	sig Significance level
	Absolute amount	positive	negative		
Advertising marketing activities (customer satisfaction: rendering services, support)	0.036	0.024	-0.036	0.036	0.09
Commercials	0.029	0.029	-0.029	0.029	0.20
Attractive colours and designs in advertisements	0.031	0.023	-0.031	0.031	0.20
Symbols of the countries	0.029	0.022	-0.029	0.029	0.20
The scenes and people with beautiful face and body	0.032	0.032	-0.025	0.032	0.20
Famous people (in the areas such as science, sport, acting...)	0.027	0.018	-0.027	0.027	0.20
Customer trust	0.031	0.014	-0.031	0.031	0.20
Apparel sales promotion	0.028	0.024	-0.028	0.028	0.20

and apparel sales increase and its impact of intensity and direction, and then this relationship will be analysed.

In table 3, the relationship of marketing activities of advertisements (customer satisfaction: service rendering, support) and apparel sales increase has been measured considering the opinions of sample respondents. Evidently, based on the amount of Pearson statistics (0.864) and resulted error level which is lower than 0.05, it can be acknowledged that the relationship between above variables is meaningful in confidence level of 0.99. In other words, the null hypothesis is rejected and the hypothesis of the researcher is accepted. Thus there is a meaningful relationship between marketing activities of advertisements (customer satisfaction: service rendering, support) and apparel sales increase. Also the Pearson correlation coefficient between two variables shows that the intensity of the relationship between two variables of interest is very strong and its direction is direct and positive.

Regression test

In this hypothesis, the regression method is used to estimate the relationship. The regression is a statistical analysis method in which the changes of a dependant variable is predicted and determined against one or more independent variables. To investigate the effects of the independent variables and to detect the fitted model, the regression method has been used. One of conditions for the usage of the regression analysis is the lack of correlation of errors with each other. In other words, if the hypothesis of error independence is rejected and the errors have correlation with each other, it is not possible to use the regression. To determine this, Durbin-Watson test can be applied in which error independence (the difference between the real amount and the predicted amount by regression equation) is differentiated from each other so we'll have as shown in table 4.

Durbin-Watson test statistics must fall within the range of 1.5 to 2.5. Here the value is 1.606 thus the hypothesis of error independence is not rejected and it can be possible to use the regression test. Also in table 5, the remaining statistics of regression i.e. the difference between the perceived value of dependant variable and the predicted value by the model has been estimated.

Table 5 shows the remainders and the predicted values. In overall the remainders are the estimation of accurate errors in the model. It means that if the model is appropriate for data, the residuals should follow a normal distribution. Also the predicted standard values and the residual standard values should have the average of 0 and the standard deviation of 1 which is true for the above case.

In above mentioned model, all variables enter the model simultaneously and without any certain ordering or grouping and then they will be analysed.

Coefficient of determination in table 7 shows that 74.7% of

Table - 3. Pearson test for the first hypothesis

variable	The amount of Pearson statistics	p-value
Marketing activities of advertisements (customer satisfaction: service rendering, support) and apparel sales increase	0.864	0.000

Table - 4. Durbin-Watson test of the first hypothesis

Durbin- Watson statistics	
Model	1.606

Table - 5. The rest regression statistics of the first hypothesis

	The least	The most	average	Standard deviation	number
The predicted amount	1.285	4.721	2.949	0.578	558
The remainder amount	-1.608	1.633	0.000	0.336	55

Table - 6. Inputs and outputs of the first hypothesis

Input	Output	Regression method
All variables	-	ENTER

changes of the dependent variable relate to the variable and the rest relate to the other independent variables. Adjusted R2 considers the degree of freedom as well. The relation between the marketing activities of advertisements (customer satisfaction: service rendering, support) and apparel sales increase is 0.864 due to the correlation coefficient (R).

Based on the values of F statistics as well as the significance level which is lower than 0.05 (sig < 0.05) we can conclude that the relationship is meaningful at the confidence level of 99%. In other words the independent variable (the marketing activities of advertisement (customer satisfaction: service rendering, support)) is influential in predicting the dependent variable (apparel sales increase).

In table 9 the weighting factor values of each variable over the dependent variable (s) have been considered with the classification of standardized or non-standardized perceived error level of each variable against the dependent variable. According to the results we will have:

$$Y = 0.866_{x_1} + 0.393$$

Where Y is the apparel sales increase; X1 is the marketing activities of advertisements (customer satisfaction: service rendering, support).

The second hypothesis test

H2. There is a meaningful relationship between commercials of the social networks and the apparel sales increase.

Pearson correlation

The relation between commercials in the social networks and the apparel sales increase has been measured based on

the opinions of sample respondents. As it is obvious, according to Pearson value statistics (0.369) and the resulted error level which is lower than 0.05 (P-value <0.05), it can be acknowledged that the relationship between above mentioned variables is meaningful at the confidence level of 0.99. In other words, the null hypothesis is rejected and the researcher's hypothesis is accepted. Thus there is a significant relationship between commercials in the social networks and the apparel sales increase in social networks. Also the Pearson correlation coefficient between two variables implies that the intensity of the relationship between these two variables is semi-strong and has a direct and positive orientation. In other words the commercials in social networks are influential in increasing customer attraction in social networks by up to 37%.

Regression test

In this hypothesis, Durbin-Watson statistics is obtained equal to 1.665, thus the hypothesis of the error independence is not rejected and the regression test can be applied.

The coefficient of determination in table 10 shows that 13.6% of the changes of the dependent variable relate to the variable and the rest relates to the other independent variables. The adjusted R² would consider the degree of freedom. The relationship between the commercials in social networks and the apparel sales increase is 0.369 due to the correlation coefficient (R).

Considering the values of F statistics as well as the significance level smaller than 0.05 (sig<0.05) in table 10, we can conclude that the relationship is meaningful at the confidence level of 99%. In other words the independent variable (commercials in social networks) is effective in predicting the dependent variable (the apparel sales increase in social networks).

In table 11 the weighting factor values of each variable over each variable over the dependent variable (s) have been considered with the classification of standardized or non-standardized perceived error level of each variable against the dependent variable. According to the results we will have:

$$Y = 0.348_{x_2} + 1.964$$

Where Y is the apparel sales increase in social networks; X₂ is the commercials in social networks.

The third hypothesis test

H3. There is a significant relationship between the usage of attractive colours and designs in social networks advertisements and the apparel sales increase.

Pearson correlation

The relationship between the usage of attractive colours and designs in social network advertisements and the apparel sales increase has been measured regarding the

opinions of the sample respondents. As it is obvious, due to the Pearson value statistics (0.577) and the resulted error level smaller than 0.05 (P-Value<0.05), it can be acknowledged that the relationship between above mentioned variables is significant at the confidence level of 0.99. In other words the null hypothesis is rejected and the researcher's hypothesis is accepted. Thus there is a meaningful relationship between the usage of attractive colours and designs in social network advertisements and the apparel sales increase. Also the Pearson correlation coefficient between two variables implies that the intensity of the relationship between these two variables is strong and has a direct and positive orientation. In other words the level of usage of attractive colours and designs in social network advertisements is influential in increasing the customer attraction by up to 58%.

Regression analysis

The Durbin- Watson statistics is equal to 1.629 so the hypothesis of the error independence is not rejected and the regression test can be applied.

The coefficient of determination in table 13 shows that 32.2% of the changes of the dependent variable relate to this variable and the rest relates to the other independent variables. The adjusted R² would consider the degree of freedom. The relationship between the usage of attractive colours and designs and the apparel sales increase is equal to 0.577 considering the correlation coefficient (R).

In table 13, according to F statistics values and the significance level smaller than 0.05 (sig<0.05) we can conclude that the relationship is significant at the confidence level of 99%. In other words the independent variable (the usage of attractive colours and designs in social network advertisements) is influential in predicting the dependent variable (apparel sales increase).

In table 14 the weighting factor values of each variable over the dependent variable (s) have been considered with the classification of standardized or non-standardized perceived error level of each variable against the dependent variable. Thus considering these coefficients, we can express the regression equation of the apparel sales increase variable based on the independent variable and the constant factor value. According to the results we will have:

$$Y = 0.665_{x_3} + 0.925$$

Where Y is the apparel sales increase and X₃ represents the usage of attractive colours and designs in social network advertisements.

The fourth hypothesis test

H4. There is a significant relationship between the use of symbols and icons of countries in marketing of social network advertisements and the apparel sales increase.

Pearson correlation

The relationship between the usage of symbols of the countries in marketing of social network advertisements and the apparel sales increase has been measured regarding the opinions of the sample respondents. Due to the Pearson value statistics (0.650) and the resulted error level smaller than 0.05 (P-Value<0.05) it can be acknowledged that the relationship between above mentioned variables is meaningful at the confidence level of 0.99. In other words, the null hypothesis is rejected and the researcher's hypothesis is accepted. Thus there is a significant relationship between the usage of symbols of countries in marketing of social network advertisements and the apparel sales increase. Also the Pearson correlation coefficient between two variables implies that the intensity of the relationship between these two variables is strong and has a direct and positive orientation.

Regression test

Durbin-Watson test statistics is equal to 1.768. So the hypothesis of error independence is not rejected and the regression test can be applied.

The coefficient of determination in table 16 shows that 42.2% of the changes of the dependent variable relate to the variable and the rest relates to the other independent variables. The adjusted R² would consider the degree of freedom as well. The relationship between the usage of symbols and icons of countries and the apparel sales increase is equal to 0.650 considering the correlation coefficient (R).

Considering F statistics values as well as the significance level smaller than 0.05 (sig<0.05) in table 17, we can conclude that the relationship is significant at the confidence level of 99%. In other words the independent variable (the usage of symbols and icons of countries in marketing of social network advertisements) is influential in predicting the dependent variable (the apparel sales increase).

In table 17 the weight factor values of each variable over the dependent variable (s) have been considered with the classification of standardized or non-standardized perceived error level of each variable against the dependent variable. According to the results we will have:

$$Y = 0.649_{x4} + 1.036$$

Where Y is the apparel sales increase and X4 is the usage of symbols and icons of the countries in marketing of social network advertisements.

Results

To fulfil the first sub-goal of the research, "investigating the role of marketing in social networks for apparel sales increase in e-commerce", the following hypothesis was expressed and then analysed statistically. According to the findings we have:

H1. There is a significant relationship between the marketing activities of advertisements (customer

satisfaction: service rendering, support) and the apparel sales increase.

According to the Pearson statistics value (0.864) and the resulted error level smaller than 0.05 (P-Value < 0.05) it can be acknowledged that the relationship between above mentioned variables is significant at the confidence level of 0.99. In other words the null hypothesis is rejected and the researcher's hypothesis is accepted. Therefore, there is a significant relationship between customer satisfaction (service rendering and support in marketing activities) and the apparel sales increase. Also the Pearson correlation coefficient between two variables implies that the intensity of the relationship between these two variables is strong and has a direct and positive orientation.

To fulfil the second sub-goal of the research, "familiarity with social networks and their applications in advertisements and marketing, the following hypothesis was expressed. According to the findings we have:

H2. There is significant relationship between commercials of social networks and the apparel sales increase in social networks.

Considering the Pearson statistics value (0.369) and the resulted error level smaller than 0.05 (P-Value < 0.05) it can be acknowledged that the relationship between above mentioned variables is significant at the confidence level of 0.99. In other words the null hypothesis is rejected and the researcher's hypothesis is accepted. Therefore, there is a significant relationship between commercials of social networks and increasing customer attraction in social networks. Also the Pearson correlation coefficient between two variables implies that the intensity of the relationship between these two variables is semi- strong and has a direct and positive orientation. In other words the commercials of social networks are influential in increasing customer attraction in social networks by up to 37%.

To meet the third sub-goal of the research, "the usage of social networks for advertisements to increase customer attraction versus the traditional methods, the following hypotheses were expressed. According to the findings we have:

H3. There is a significant relationship between the usage of attractive colours and designs and the apparel sales promotion.

Considering the Pearson statistics value (0.577) and the resulted error level smaller than 0.05 (P-Value < 0.05) it can be acknowledged that the relationship between above mentioned variables is significant at the confidence level of 0.99. In other words the null hypothesis is rejected and the researcher's hypothesis is accepted. Therefore, there is a significant relationship between the usage of attractive colours and designs in social network advertisements and sales increase. Also the Pearson correlation coefficient between two variables implies that the intensity of the relationship between these two variables is strong and has a

direct and positive orientation. In other words the usage of attractive colours and designs in social network advertisements is influential in sales increase by up to 58%.

H4. There is a significant relationship between the use of symbols of countries in marketing of social networks and the apparel sales increase.

Considering the Pearson statistics value (0.650) and the resulted error level smaller than 0.05 (P-Value < 0.05) it can be acknowledged that the relationship between above

mentioned variables is significant at the confidence level of 0.99. In other words the null hypothesis is rejected and the researcher's hypothesis is accepted. Therefore, there is a significant relationship between the usage of symbols of countries in marketing of social network advertisements and sales increase. Also the Pearson correlation coefficient between two variables implies that the intensity of the relationship between these two variables is strong and has a direct and positive orientation.

Table - 7. Estimation of the summary of the regression model of the first hypothesis

Correlation coefficient	R2 (coefficient of determination)	adjusted R2
0.864	0.747	0.747

Table - 8. Variance analysis of H1

Model	Sum of squares	Degree of freedom	Mean squares	F statistics	sig
Determined (regression)	186.63	1	186.639	1643.12	0.000
residual	63.155	556	0.114		
total	249.794	557			

Table - 9. Regression weighted coefficients of H1

Model factors	Non - standard B	Standard B	t-value	sig
Constant factor	0.393	-	6.029	0.000
marketing activities of advertisements (customer satisfaction: service rendering, support)	0.866	0.864	40.762	0.000

Table - 10. Estimation of summary of the regression model of H2

Correlation coefficient	Coefficient of determination	Adjusted R2
0.369	0.136	0.135

Table - 11. Variance analysis of H2

Model	Sum of squares	Degree of freedom	Mean squares	F Statistics	sig
Determined (regression)	34.367	1	34.367	87.821	0.000
Remainder	215.77	556	0.388		
Total	249.137	557			

Table - 12. The regression weight factor of H2

Model factors	Non-standard B	Standard B	t-value	sig
Constant factor	1.964	-	18.105	0.000
Commercials in social networks	0.348	0.369	9.371	0.000

Table - 13. Estimation of the summary of regression model of H3

Correlation coefficient	Coefficient of determination (R ²)	Adjusted R ²
0.577	0.333	0.332

Table - 14. Variance analysis of H3

Model	Sum of squares	Degree of freedom	Mean squares	F Statistics	sig
Determined (regression)	83.291	1	83.291	278.134	0.000
Remainder	166.912	556	0.299		
Total	249.847	557			

Table - 15. The regression weight factor

Model factors	Non-standard B	Standard B	t-value	sig
Constant factor	0.925	-	7.482	0.000
The usage of attractive colours and designs in social network advertisements	0.665	0.577	16.677	0.000

Table - 16. The estimation of summary of the regression model

Correlation coefficient	Coefficient of determination (R ²)	Adjusted R ²
0.650	0.422	0.421

Table - 17. Variance analysis of H5

Model	Sum of squares	Degree of freedom	Mean squares	F Statistics	sig
Determined (regression)	105.430	1	105.43	406.772	0.000
remainder	144.45	556	0.259		
total	249.88	557			

Table - 18. The regression weight factor

Model factors	Non-standard B	Standard B	t-value	sig
Constant factor	1.036	-	10.653	0.000
The usage of symbols of countries in marketing of social network advertisements	0.649	0.650	20.169	0.000

Reference

- Ahn, T., Ryn. S. and Han I. (2004): The impact of the online and offline features on the user acceptance of internet shopping malls. *Electronic Commerce Research and Applications*, 3, 405-420
- Al-Kailani, M. and Kumar R. (2011): Investigating Uncertainty Avoidance and Perceived Risk for Impacting Internet Buying: A Study in Three National Cultures. *International Journal of Business and Management*, 6(5), pp.76-92.
- Carpenter. B. (1996): The architectural principles of the Internet. Retrieved from <http://www.ietf.org/rfc/rfc1958.txt>.
- Cohen-almagor, R. (2011): "Internet History" *International Journal of Technoethics* 2 (2); 19-39.
- Even-Dar E. And Shapirab A. (2011): A note on maximizing the spread of influence in social networks. *Information Processing Letters*, 111, 184-187.
- Goldsmith J. And Wu T. (2006): *Who controls the Internet? Illusions of a borderless world*. New York, NY: Oxford University Press.
- Kalantari Kh. (2017) : Data processing and analysis in social economic research Farhang-e-saba publication, 7th edition 338
- Kleinrock, L. (2008): History of the Internet and its flexible future. *IEEE Wireless Communications*, 15(1), 818.
- Mak, V. (2008): The influence of opinion leaders. Working paper. Available at SSRN : <http://ssrn.com/abstract=1081528>
- Peterson, R. A., Balasubramanian S. And Bronnenberg B. J. (1997): Exploring the Implications of the Internet for Consumer Marketing. *Academy of Marketing Science*, 25 (4), 329-346.
- Pir-Kiani, R., Mohammadi Sh. And Hoseini, M. (2013): The role of social commerce on behaviour and customers' buying decision. The specialized congress of exploring the social network features (Tehran:Jahad- Daneshgahi, information technology institute).
- Roberts, L.G. (1999): Internet chronology. Retrieved from <http://www.ziplink.net/users/lroberts/InternetChronology.html>.
- Taravati, P. (2014): Evaluating the role of Facebook on publishing advertisements to attract customers. Master's thesis, Faculty of Human and Social Sciences, The Science and Research Unit of Islamic Azad University.
- Van Nierop, J.E.M., Leeftang, P.S.H., Teerling, M.L. and Huizingh, K.R.E. (2011): The impact of the

introduction and use of an informational website on offline customer buying behavior. *International Journal of Research in Marketing*, 28 (2) 155-165.