

# The Impact of Social Networks on E-Commerce

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## Abstract

Today, with the expansion of e-commerce, businesses have gone out of the traditional mode, and the use of social networks by the public and their positive and tremendous impact on e-commerce and businesses has caused the success of businesses. Hence, Investigating social media advertising and the effective factors in them that affect e-commerce is of great importance. This study was conducted with the aim of investigating the factors that can increase the effectiveness of social media advertising on the customer's online purchase. In this study, these results have found that 6 factors in social media advertising, including interactivity, seductiveness, enjoyment, functional expectation, perceived connection, and habit, have had an effect on the customer's online shopping behavior. In addition, it has been determined that the trust factor Created in e-commerce websites and advertising in social networks is very important.

**Keywords:** Social networks; e-commerce; Electronic marketing; hoping behavior.

## 1. Introduction

Social networks are increasingly used as a platform for marketing and advertising activities. Organizations have spent a lot of time, money, and resources on advertising in social networks. However, there is always the challenge of how organizations can design social media advertising to attract customer success and motivate them to buy their brands. In addition, turn these advertisements into social networks in a more efficient and attractive way.

E-commerce has grown very significantly in the past years. This means that in all the countries of the world and even countries that have not made significant progress in terms of industry, people are moving towards buying and selling.

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Have brought online and electronic exchanges. In the meantime, the effect of social networks and advertisements on it should not be ignored in the increasing development of electronic commerce [3].

Today, the use of social networks and advertising in them has created suitable opportunities for electronic commerce in such a way that the increase in the number of users in social networks and the ability to attract more audiences and suitable electronic tools available in them make these networks an opportunity. It has become suitable for advertising and e-commerce. Organizations, whether small or big, have slowly moved in this direction and have allocated budgets for marketing in social networks and advertising.

How do consumers understand advertising in social networks? What is the attitude toward this type of advertising in social networks? Has a social network had an effect on e-commerce and what factors can increase the effectiveness of advertising on social networks on the online purchase of customers? In this study, we seek to answer these questions

In this article, we will show the effect of social networks on e-commerce through theoretical concepts about the behavior of online customers towards social network advertisements along with the influencing factors in their purchase choice, and then through useful statistics of how social network advertisements grow. It will be shown that it has been very impressive in the last decade.

Therefore, this study tries to predict, identify and examine the main factors that can determine the customer's purchase intention for products that are advertised using social media advertising. In addition, this study tries to answer the following questions.

What are the main factors related to advertising in social networks that can predict the customer's purchase intention?

Investigated factors in social media

Functional expectancy (PE)

Regarding social networks and advertising, people are involved in using new systems if they think that the systems are more efficient and practical and can cause less time and effort [11]. In addition, about media advertising. Socially, if people are more motivated to use that site or buy the product that is introduced in the advertisement, they find the targeted advertisement more useful and valuable [18].

Hedonic motivation (HM)

One of the other effective factors is the role of pleasurable motivation. Social media platforms are widely reported as a new place for people to find entertainment

Especially, customers are more attracted to them because of creativity and attractiveness in social media advertising [20].

### 3 Habit (HB)

Habit can be defined as follows: a way that people are willing to do automatically. Based on their daily interactions with social networking platforms, people usually have habitual behavior towards these platforms and most marketing activities can be based on it [20, 21] This makes the level of skills and knowledge of customers related to These activities will become richer because they have a daily connection with social networks.

### 4 Interactivity (INTER)

Interactivity is one of the most important aspects of online sites and social media platforms. In fact, interactivity develops people's perception of advertisements and their ability to consciously process more information [22]. For example, interactivity changes the communication process and the way of information exchange between all the people involved in the online domain.

### Informative (provider of information) (INF)

Education is defined as follows: the degree and extent to which the organization can provide appropriate information based on which customers can make a better purchase decision. Education is considered a cognitive structure that is measured using the self-expression scale. [24] In fact, this factor is more related to the ability of social media advertising to logically attract the customer, and give the customer power. To buy. Evaluating the use of information and messages provided in the field of social media shows that there is a direct relationship between education and customer tendencies. In addition, education is effective on the customer's reaction to social media advertisements and mobile advertisements, and as a result, it increases their willingness to buy the products presented in social media advertisements. In addition, there is a strong positive relationship between the quality of the information available on the website and the customer's desire for electronic loyalty.

When we consider all things, the level of education in social media advertising can empower customers to make better purchases and thus increase their willingness to buy. Therefore, the following hypothesis is proposed

Perceived Relationship (PRR)

By using social network platforms, advertisers can adjust the messages and content that are posted based on user preferences. In fact, it has been shown that if customers understand the level of the message and content expressed, they are more satisfied and loyal. They stay Relevance is defined as "the extent to which customers consider something relevant to them or find it somehow useful to achieve their goals and values". In social media advertising, he uses this definition that says "the extent to which customers relate personalized advertising to themselves and find it somehow useful to achieve their goals and values".[22]

If the posted content is closer to the needs and preferences of the customers, they will understand it better. For example, Pavlou and Stewart show the effect of personal aspects on the customer's willingness to buy as well as their trust and satisfaction. They also see that customers will be more interested in advertisements if they see these advertisements as more relevant to their personal preferences. [28]. Based on the above discussion, it can

be argued that when customers see advertisements closer to their goals and preferences, they value social media advertisements positively and become more dependent on this type of advertisement. Therefore, the following hypothesis is stated:

### **1.1 Objectives**

In this article, we will show the effect of social networks on e-commerce through theoretical concepts about the behavior of online customers towards social network advertisements along with the influencing factors in their purchase choice, and then by useful statistics of how social network advertisements grow. It will be shown that it has been very impressive in the last decade.

Therefore, this study tries to predict, identify and examine the main factors that can determine the customer's purchase intention for products that are advertised using social media advertising. In addition, this study tries to answer the following questions.

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## **2. Literature Review**

Social networks are increasingly used as a platform for marketing and advertising activities. Organizations have spent a lot of time, money, and resources on advertising in social networks. However, there is always the challenge of how organizations can design social media advertising to attract customer success and motivate them to buy their brands. In addition, turn these advertisements into social networks in a more efficient and attractive way.

E-commerce has grown very significantly in the past years. This means that in all the countries of the world and even countries that have not made significant progress in terms of industry, people are moving towards buying and selling. Have brought online and electronic exchanges. In the meantime, the effect of social networks and advertisements in it should not be ignored in the increasing development of electronic commerce.[3]

Today, the use of social networks and advertising in them has created suitable opportunities for electronic commerce in such a way that the increase in the number of users in social networks and the ability to attract more audiences and suitable electronic tools available in them make these networks an opportunity. It has become suitable for advertising and e-commerce. Organizations, whether small or big, have slowly moved towards this direction and have allocated budgets for marketing in social networks and advertising.

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- Bai and colleagues (2015) examined the factors affecting online shopping. This research is applied in terms of purpose and descriptive-survey in terms of data collection. The data collection tool was also a questionnaire, which was compiled from library and field studies. The results showed that newsletters and social perception have a negative effect on customers' buying behavior through mediating variables of product uncertainty and lack of confidence in sellers. In addition, social support directly affects the use of e-commerce[24].

8- Sanchez-Torres and colleagues (2018) investigated the effect of trust in social networks on e-commerce and shopping behavior with regard to the mediating role of purchase intention.

This research is applied in terms of purpose and descriptive-survey in terms of data collection. The data collection tool was also a questionnaire, which was compiled from library and field studies. To measure trust, the variables of information quality, perceived security, and perceived personalization were used, and to measure purchase intention, the dimensions of expectation of performance, expectation of effort, and government support were used.

The results of using structural equation modeling in the PLS Smart software environment showed a positive and significant impact of trust and its dimensions on the buying behavior of customers. In addition, the variables of the number of friends and users in social networks had an effect on the satisfaction and loyalty of electronic customers through the mediating variable of e-commerce[26].

3-Han and colleagues (2018) investigated the effect of friends and social network users on e-commerce in online shopping by customers in South Korea. This research is applied in terms of purpose and descriptive-survey in terms of data collection. The data collection tool was also a questionnaire, which was compiled from library and field studies.

The results of applying the regression test and structural equation modeling in the AMOS software environment showed the significant effect of friends and users in social networks in electronic commerce on their online purchase intention. In addition, the self-efficacy variable also played a mediating role in the influence of trust in e-commerce on purchase intention[25].

In this article, we will show the effect of social networks on e-commerce through theoretical concepts about the behavior of online customers towards social network advertisements along with the influencing factors in their purchase choice, and then through useful statistics of how social network advertisements grow. It will be shown that it has been very impressive in the last decade.

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### 3. Methods

In this research, we will use SPSS 23 software and frequency, mean, and standard deviation for data analysis in the descriptive section, and structural equation modeling method and SmartPLS 3 software will be used in the analytical (inferential) statistics section. This research is descriptive-correlative in terms of practical purpose and in terms of method.

### 4. Data Collection

A questionnaire was collected from Jordanian customers who used social media platforms to collect the required data. The data was collected using a questionnaire from 437 participants. In full detail, the required data was collected in the period of July 2012 to October 2012 from four major cities of Jordan (Amman, Zarqa, Irbid, and Balqa). Respondents received the questionnaire at their workplaces (i.e. universities, colleges, private companies, and the public sector). With the help of undergraduate and associate degree students at Al-Balqa University of Applied Sciences, the questionnaire was also presented to students' friends and acquaintances who had profiles on social media platforms. The main constructs of learning expectancy, hedonic motivation, habit, and the main items for interactivity and perceived learning and communication were examined (see Appendix A). A seven-point scale from strongly agree to strongly disagree has been used to measure the main items of the questionnaire. Because this study was conducted in Jordan and because the main language there is Arabic, the current questionnaire was translated into Arabic. For information on the appropriate level of validity and reliability before conducting the main survey, the researcher conducted a pilot study with 03 undergraduate and graduate students. Most of these students reported that the language was clear and simple and the length of the questionnaire was logical. All the factors were able to have an acceptable value of Cronbach's alpha above 70.0.

### 5. Results and Discussion

Descriptive statistical indices including mean, standard deviation, skewness, and elongation are presented in table (1). One important assumption in structural equation modeling must be considered is that the data have a normal distribution. The non-normality of the data distribution can be identified by examining the skewness and skewness of the distribution shape

**Table 2:** Descriptive indices of research variables.

variable	mean	standard deviation	Stretching,	skewness
MP	3.69	0.1	0.881	0.570
HM	3.368	0.80	0.845	0.198
INTER	3.64	0.83	0.775	0.468
PE	3.80	1.10	0.942	0.541
HB	3.79	1.21	0.897	0.651
PRR	3.45	1.78	0.765	0.871
INF	3.34	1.24	0.871	0.675

Examining the reliability test of the model because in measurement models a set of the observable variables-reflective variable-hidden variable is unique, the condition of homogeneity and monotony of that model must be

established. For this purpose, at the application level of the software, there are three indicators or criteria for evaluating the reliability of a reflective measurement model: 1) reliability of each of the observable variables (reliability of indicators or measurement of factor loadings) 2) Cronbach's alpha 3) composite reliability. Confirmatory factor analysis is done for the reason that it examines whether the questions of each variable (manifest variables) are related to the related construct (latent variable) or not. The strength of the relationship between the factor (latent variable) and the observable variable is shown by factor loading. Considering that Cronbach's alpha coefficient provides a stricter estimate of the internal reliability of hidden variables, another criterion called composite reliability be used in PLS path models. This criterion takes into account different loads of indicators.

In order to evaluate the validity of the measurement model, the convergent validity index was used. Table (2) shows the values of factor loadings of the items, Cronbach's alpha, composite reliability, and mean standard deviation.

**Table 2:** Findings of confirmatory factor analysis, Cronbach's alpha, composite reliability, and AVE.

Electronic purchase intention	MP	0.768	0.585	0.847	0.752
	HM	0.920			
	INTER	0.727			
	PE	0.602			
	HB	0.541			
	PRR	0.789			
	INF	0.678			

Experimental data is research. The structural model test criteria include:

- 1) The determination coefficient index ( $2R$ ); 2) the Predictive correlation index ( $Q$ ); 3) the path coefficients ( $\beta$ ) and their significance. The coefficient index indicates how many percent of changes in the dependent variable are made by the independent variable. With values of 0.326 and 0.257 for variables in the structural path model, the independent latent variable is described as moderate and significant, but if the dependent latent variable is under the influence of a few (one or two) independent variables, the average values of the coefficient of determination are also acceptable. The values of the coefficient of determination are shown in Table 3.

**Table 3:** Determination coefficient values.

Variable	Value of $R^2$
Electronic purchase intention	0.753

The path should be calculated by the t value of each path. If the obtained value is considered at the reliable level, the relationship is confirmed. Figure (1) shows the research model along with path coefficients. Figure (2) also shows the research model without the presence of the modifying variable. Direct coefficients show that existing relationships are confirmed at the significance level of 0.50.

## 5.2 Graphical Results (11 font)

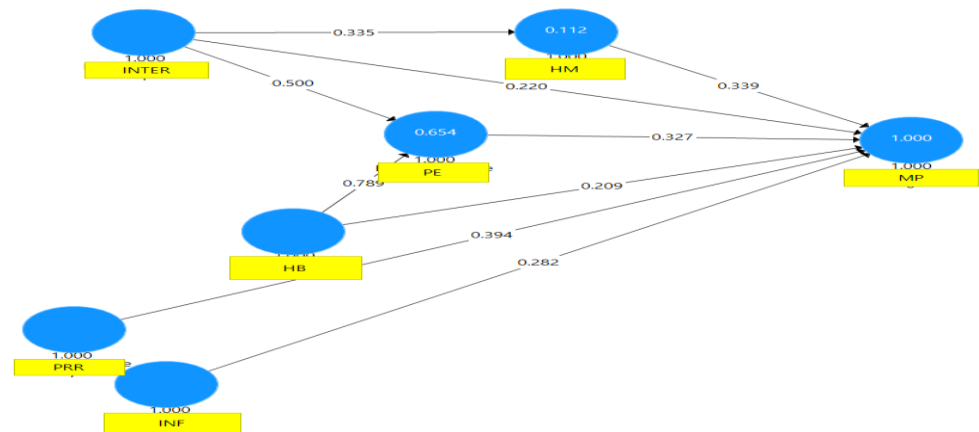


Figure 1

## 6. Conclusion

Social media advertising can be designed and organized in such a way that it takes into account all the important and important factors of customers. Therefore, a careful examination of the main body of research in the field related to marketing advertising and social media leads to the discovery of six factors in this study (functional expectation, pleasurable motivation, habit, interactivity, informativeness, and perceived communication) that are key predictors of purchase intention. Are. Based on the main statistical results obtained, interactivity has had the most impact on the customer's buying behavior and the habit has had the least impact on buying products online.

As it was studied, interactivity is the most important predictor of buying intention. In addition, interactivity was very important in pleasurable motivation and performance expectations. This shows that if a customer sees a level of interactivity in a social media advertisement, they will find it more useful and entertaining to follow that advertisement and, therefore, will have more motivation to buy the products and services provided in this advertisement.

In fact, customers are now interested in two-way communication, not just receivers of sending messages.

More importantly, being interactive with the possibility of providing feedback and talking about the understanding and experience of advertising gives more importance to the customer's views.

In informativeness was also the second most powerful factor related to customers' purchase intention. In addition, in informativeness could significantly predict performance expectations. This means that when social media advertising is considered a valuable source of information, the motivation to buy products increases among customers. In fact, customers see social networking platforms as an important source of information about a variety of products and services. In addition, the appropriate level of content produced by the customer is due to the high level of interaction in electronic shopping sites. This makes social media advertising a richer



source of information than other more traditional media tools. In addition, social media advertising can easily provide timely, comprehensive, and up-to-date information. Therefore, customers can save time, effort, and money in the information research process

### Limitation

There will be certain limitations in conducting any research due to its special nature during this research, the researcher faced some limitations. These restrictions can affect the work process and even affect the results of the study to some extent. Below is a number of the limitations and obstacles that the researcher encountered during the research process have been mentioned:

- Lack of empirical research on the topic of research inside the country to make a better comparison

The results of this research and their results.

- Limitations of measuring tools and quantifying qualitative points related to research questions.

Another limitation of the research is the degree of generalizability of the findings or the proposed model.

What extent can these findings be generalized at the level of the statistical population?

- The effect of the perceptual difference between the subjects on the concepts of the questionnaire in their answers.

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