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## The effect of digital marketing and sales information systems on customer's purchase intention for increasing the sales rate of digital shopping

**Abstract.** Today, with the development of technology, digital sales have become an important part of companies' sales. In such an atmosphere, the development of marketing and sales information systems can help to improve marketing and sales in the field of digital markets. Paying attention to information system and combining it with marketing in the digital space can lead to an understanding of how information system and customer behavior contributes to the purchase decision of a company's customers. In this regard, the current research has been carried out with the aim of discovering the model of the effect of information system on the consumer's purchase intention in the digital platform. In order to achieve the mentioned goal, firstly, based on the in-depth review of the subject literature, the conceptual model of the research has been developed. For the purchase intention, variables such as choosing a brand, intermediary or place of purchase, purchase amount, purchase time and payment method have been identified. Then, to measure the relationship between research variables, a research questionnaire was prepared and distributed among 250 customers who could be accessed. In this research, rank regression analysis method was used to analyze the data from the questionnaire. The results of this research show that information system and digital marketing directly affects the customer's purchase intention, also it is effective on the sales rate of digital shopping.

**Keywords:** Digital Market; Digital Shopping; Customer's Purchase Intention; Information System; Sales Rate  
**JEL Classifications:** B44; E24; E64; I19

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### 1. Introduction

Today, digital life is one of the aspects of all of our lives, and even if we accept that we can reduce the contribution of digital technology in our lives, it is almost impossible to eliminate technology from our lives. For this reason, many countries of the world have included strengthening technological

literacy and increasing digital literacy in educational programs. The digital environment allows consumers to search for information and purchase goods and services through direct communication with online stores. Digital shopping is not based on the actual experience of purchasing goods, but based on appearances such as shape, image, information and advertisements, so accepting and doing online shopping largely depends on consumer communication and how people interact with the digital space and information system. Behind every buying action lies an important decision-making and persuasion process that needs to be explored. The steps that the consumer goes through to decide what kind of product to buy and from which site, depends on the mental structure of the consumer and the stimuli that are applied to direct the consumer's mind to purchase.

Digital marketing means achieving marketing goals using the methods and tools of the world of digital technology (Agnihotri et al., 2017) with the advent of web technology and subsequently, social media, human interaction with global and local communities has found a new mode. Customer interaction with the material world has evolved with the advent of digital technology. Their purchasing patterns, product usage, and overall life experience have changed. In general, online and offline consumers (customers) are inextricably intertwined and have a more complex orientation with the environment and Social and commercial institutions have their own and evaluate them (Zhang, 2005). Facts have proven that customers trust the opinions and words of friends and acquaintances more than advertisements. Ease of communication. Through social media, mobile technology and other forms of digital technologies, it enhances the absorption, integration or acculturation beyond the internal community of users (Geng, et al., 2020).

The ever-increasing number of shopping channels has also influenced consumer behavior (Al-Wattar et al., 2019). Now, the use of mobile devices, shopping apps, location-based services, and mobile wallets affect the customer experience. As in traditional marketing, it is very important to identify the needs of users as well as their understanding and attitude towards different forms of messaging and communication. Lin et al. (2019) suggested that organizations, after identifying the needs of members of online communities, create special offers that respond to those needs and effectively communicate with members to increase the level of online satisfaction. Awareness of customer needs and the purchasing process in the space Digital and online is the basis of successful digital marketing. The requirement to satisfy customers is to fully satisfy their needs and to accurately identify their desires, expectations, desires, abilities and limitations in purchasing products. By obtaining such information, the factors influencing consumer behavior can be identified, recognized and used in making marketing decisions of companies (Bag et al., 2020) in a research regarding the role of digital media marketing and social marketing in customer behavior in the spaces of digital and social media marketing. Five issues have been identified:

1. Customer's digital culture;
2. Reactions to digital advertisements;
3. Effects of digital environments on customer behavior;
4. Mobile environments;
5. Online word of mouth.

These reviewed articles explain and reveal a collection of very different angles about the way of influencing the customer experience and the way that the customer experience is affected by the digital environments (in which they are part of their daily life).

In a research by Pellet (2006) are investigated the effect of electronic word-of-mouth advertising on customers' purchase intention, emphasizing the mediating role of consumer's mental conflict. The results of this study showed that electronic word-of-mouth advertising has a direct and significant effect on purchase intention. In general conclusion, it can be said that electronic word-of-mouth advertising by providing a large amount of information in a short time can have a great impact on people's knowledge of the product and the consumer's mental involvement and affect the purchase intention of customers. The emergence of targeted personalized advertising has led to increased consumer privacy concerns. Nuseir & Aljumah (2020) found that invasion, privacy control, perceived usefulness, and consumer innovativeness directly affect the customer's behavioral intention in relation to privacy concerns. Companies should consider privacy and consumer concerns. Providers should be sensitive when developing advertising strategies and creating long-term relationships with customers.

According to Agnihotri et al. (2017), with the increasing advancement of technology and its entry in to all fields, marketing management is not separate from this category and influence, and digital marketing provides variety, convenience, safety and ease of marketing for the online consumer under one umbrella and therefore, consumers are gradually accepting it and digital marketing tools have a great

impact on consumer buying behavior. In the research in the field of digital marketing, Desai (2019) focused on marketing through mobile phones, and it is very important because it can be used as a personalized and standard tool in the field of digital marketing by businesses, and on the other hand, with The use of mobile phones among people can affect the buying behavior of consumers.

## 2. Method

This research is a survey-practical type. In field research, the researcher examines the variable in the real scene. The general method of this article is descriptive-analytical. The tool used in this article is a questionnaire compiled by the researcher and collected from 250 customers (finally 150 ones selected) of digital markets in the first six months of 2022. The questionnaire consists of components that affect the amount of sales, the reliability of which was determined using the t test method.

«Information system» and «purchase decision» are the two main variables of the current research, and this article seeks to investigate the relationship between these two variables. In the current research, in order to explain the components of this variable, by presenting the consumer behavior model, while stating the effective factors in the consumer's purchase decision, the consumer's purchase decision has been well described. This model includes four parts of marketing drivers (such as price, location, etc.), macro drivers (economic, technological, political and cultural), buyer information (including individual characteristics and the buyer's decision-making process) and buyer decisions. In this model, it is stated that marketing stimuli and macro stimuli influence the buyer, and the buyer's decisions, such as product selection, brand selection, intermediary selection, purchase amount, and purchase timing, are influenced by the buyer's behavior (including individual characteristics and the buyer's decision-making process). The conceptual model of the research is shown in Figure 1.

Based on the conceptual framework presented in Figure 1, the research hypotheses are:

- H1 - The use of marketing and sales information technology is effective in increasing the sales of companies.
- H2 - The value of marketing and sales information systems is effective in increasing the sales of companies.
- H3 - Improving the quality of goods is effective in increasing the sales of companies.
- H4 - Using the right distribution system is effective in increasing the sales of companies.
- H5 - Appropriate promotional strategies usage is effective in increasing the sale rates.
- H6 - Appropriate pricing is effective in increasing sales of companies.

## 3. Results

Statistical indicators of mean, standard deviation, standard deviation error, range of changes, skewness and stretching of variables of marketing and sales information systems, use of marketing and sales information technologies, value of marketing and sales information systems,

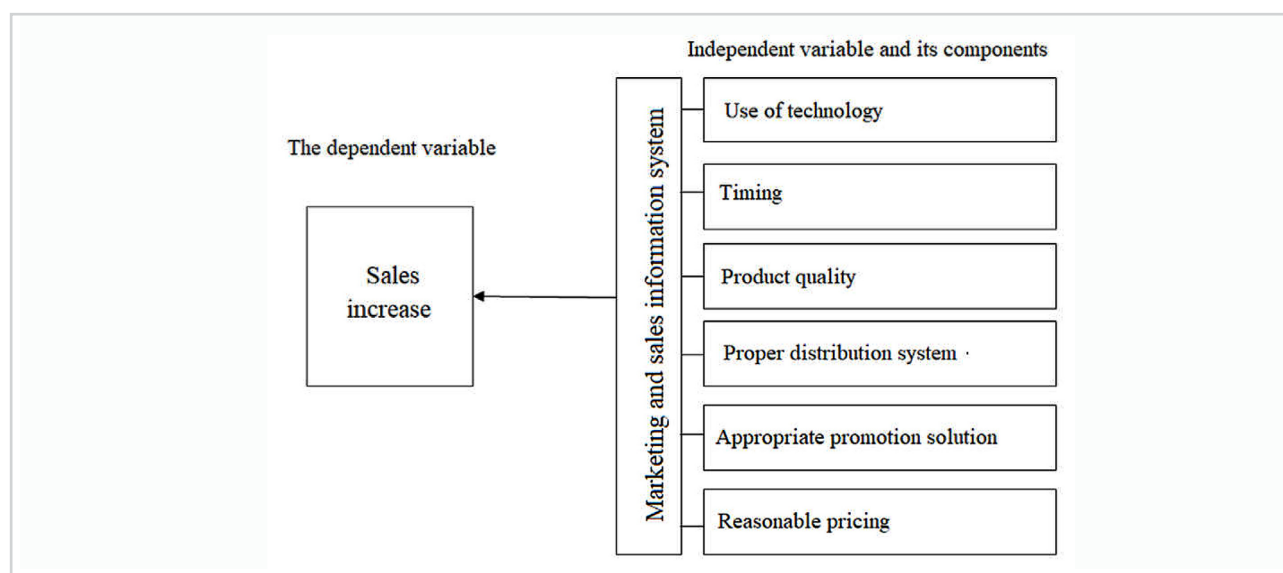


Figure 1:  
**Conceptual model of the research**  
Source: Compiled by the author

improvement of product quality, use of appropriate distribution system, use of solutions Appropriate promotion, appropriate pricing has been found, and then Kolmogorov Smirnov test was used to test the normality of the desired variables, and in the second part, research hypotheses were tested using one sample t-test.

### Marketing and sales information systems

Table 1 shows the statistical indicators related to marketing and sales information systems, Use of technology, Timing, Improve product quality, distribution system, Applying appropriate promotional strategies, and Reasonable pricing. The average indicators, range of changes, standard deviation, skewness and kurtosis of marketing and sales information systems are given in Table 1.

Table 1:  
Descriptive indicators related to marketing and sales information systems

Variable indicators	Kurtosis	Skewness	Variation	Mean SE	SD	Mean	No
Information systems	0.936	-0.617	3.5	0.81256	0.81258	3.9204	150
Use of technology	0.910	-0.609	3.5	0.092358	0.90014	3.9014	150
Timing	0.093	-0.297	3.5	0.09877	0.95258	3.7995	150
Improve product quality	-0.076	-0.308	3.4	0.09001	0.90041	3.9995	150
Use of distribution system	0.764	-0.801	3.4	0.08142	0.83036	4.0001	150
Appropriate promotional strategies	0.069	-0.767	3.4	0.09485	0.92123	3.9058	150
Reasonable pricing	0.245	-0.662	4	0.09225	0.89256	3.8925	94

Source: Compiled by the author

In order to check the normality of research variables, Kolmogorov-Smirnov test was used. As can be seen in Table 2, the significance level in each of the variables is 0.305 for marketing and sales information systems, 0.115 for the use of marketing and sales information technologies, and for timing is equal to 0.223, improvement of product quality is equal to 0.055 and use of appropriate distribution system is 0.221, use of appropriate promotional strategies is equal to 0.223 and appropriate pricing is equal to 0.209 and all are greater than 0.05, so with confidence 95% of these variables can be considered as a normal distribution.

Table 2:  
Kolmogorov-Smirnov test for the goodness of fit of the normal distribution

Variables	Information systems	Technology	Timing	Product quality	Distribution system	Distribution system	Reasonable pricing
Amara Kolmogorov-Smirnov	1.001	1.231	0.998	1.345	0.066	1.123	1.101
Significance Level	0.305	0.115	0.223	0.055	0.221	0.223	0.209
No	150	150	150	150	150	150	150

Source: Compiled by the author

### Research hypotheses

To investigate the effect of marketing and sales information systems, technology, Timing, product quality, distribution system, applying appropriate promotional strategies, and Reasonable pricing, on increasing the sales of companies, a one sample *t*-test was used, the results of which can be seen in Table 3. As can be seen, the significance level of the test is 0.000 and below 0.05, which can be said with 95% confidence that the null hypothesis of the test means that hypotheses have direct impact on increasing the sales of companies. In other words, the main assumption of the research is confirmed.

Table 3:  
Test related to the effect of marketing and sales information systems on increasing sales

Variable	Confidence level - 0.95		Significance level	DoF	Mean	T-test
	Upper	Lower				
Information systems	4.1045	3.7522	0.000	92	3.9125	46.325
Use of technology	4.2012	3.7654	0.000	92	3.9525	42.388
Timing	3.9958	3.6112	0.000	92	3.7952	37.558
Product quality	4.1924	3.8214	0.000	92	4.1256	44.998
Distribution system	4.0982	3.8025	0.000	92	4.0011	45.892
Appropriate promotional strategies	4.1001	3.7012	0.000	92	3.8825	41.005
Reasonable pricing	3.9998	3.7082	0.000	92	3.8858	41.752

Source: Compiled by the author

The results show that the four information systems, technology application, product quality, distribution system hypotheses have the greatest effect on increasing the online sales of the company, while the timing and improvement strategies have the least effect on the amount of online sales. However, it should be noted that in order to maintain customer satisfaction and increase customer loyalty, in digital shopping and in the discussion of competition with other companies, the strategy of improving service delivery and quality can have a significant impact.

#### 4. Conclusion

In the past years, with the advancement of technology, especially in the field of marketing, many marketers have influenced their systems. Digital marketing is among these features that are available for use in most industries and businesses today. According to the results of this article, we found that digital content marketing has a direct effect on consumer trust and the customer's decision to buy, but this effect has a lesser effect on the growth of participation and consumer value. Therefore, companies should make sufficient efforts to maximize consumer participation and consumer value in future plans with components such as using appropriate promotional strategies to increase the sales of the companies concerned and also try to increase the consumer's trust. It is acceptable to keep it at the same level and sometimes put programs on the agenda to increase the trust variable of customers. A more practical look at the current research can include the following suggestions for businesses selling clothes in the digital domain:

- 1) It is recommended for the development of digital businesses, the government should consider measures to formulate and develop educational programs in order to strengthen the information skills and information literacy of different sections of the society, especially the deprived areas of the society.
- 2) Considering that the conclusion was reached that information literacy is effective in choosing a place (site) to buy clothes, it is better for businesses to consider issues such as user-friendliness, accessibility, site aesthetics, etc. in their website design. People with less information literacy buy from sites that are more user-friendly. Site security is another issue that businesses should pay attention to when designing their website, and this feature can attract the attention of people with more information literacy to buy.

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