

## **RECOGNIZING DIGITAL METHODS IN ELECTRONIC PRODUCTS MARKETING IN ORDER TO IMPROVE CUSTOMER ATTRACTION AND PRIORITIZATION**

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### **ABSTRACT**

Today digital world is dominated by advertisement and electronic marketing. So, all environments of virtual world are seen as the main tools of modern marketing. Nowadays, the majority of organizations apply any tool or means to achieve success in the highly competitive market. Internet is one of the most significant tools used by most organizations in this arena. The present research aims at identifying digital methods in electronic products marketing in order to attract and prioritize the customers. The population of this research includes customers purchasing from Digikala and 100000 people out of them were selected as sample. Also, 384 people were selected randomly from Digikala customers and some questionnaires were circulated among them. The obtained data were analyzed using SPSS software and prioritized by applying AHP and Expert Choice software. The achieved results have been presented in two categories: descriptive and inferential. The parameters of usefulness, being user-friendly and reliability were determined as the major objectives of management programs of the present research.

**Keywords:** *Digital Methods, Prioritization, Customer Attraction, Marketing, Electronic Products*

### **INTRODUCTION**

The emergence of digital world has transformed the world of media. Global online marketing and brand making are progressing rapidly in digital field and some advances such as networking social media have had huge impacts on people's interaction methods and brands. Internet, mobile, social networks and their application has transformed the communication routes of customers and the methods of doing business, because digital communication has facilitated accessibility to various customers to which getting connected used to be hard in the past, and geographical limitation are not a hindrance to communication anymore. Upon the emergence of digital media and due to their unique qualities, firms and organization strived for introducing their brands by these media.

One of the characteristics of digital media is that they allow people to communicate with millions of other people. It even enables them to post and share their photos and videos. These facilities are not accessible by traditional social media such as television. Moreover, digital media helps firms and organizations listen to their customers' demands, talk to them, recognize their demands and attract new customers in this way, as well as developing their customers' loyalty. Therefore, organizations and firms which do not accept digital media will undergo various troubles, since the customers and consumers have the freedom of choice in the present days and can benefit from research services to seek and find what they require. So, an online brand strategy is more important than an offline one in these days. Thus, the provided opportunities by digital media such as mobile, internet, etc. can act like an explosion for marketing (Temporal, 2012).

The market of electronic products is one of the areas which have the potential of stiff competition because of providing updated and diverse products. Electronic companies offer new products every day, more advanced than the previous ones in terms of technology and application. This high-speed advance and product diversity in competitive area of electronic products make the companies feel the necessity to use digital technologies for introducing their products and attracting their customers. In this view, the present research aims to identify the modern digital methods in electronic products marketing (Forouzandeh *et al.*, 2011).

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Electronic commerce is an apparent example in which Information Communication and Technology can participate in economic exchange. E-commerce facilitates the participation of developing countries in global economy, allows businesses and companies to become more competitive, and create new enterprises, and consequently wealth (Vazifeh, 2007).

Undoubtedly, proper usage of internet advertisement has a significant impact on the success level of organizations. Banner advertisement has been one of the most popular and prevalent methods of advertising so far. Almost every website has various types of banner advertisements. Banner advertisements can be highly efficient but meanwhile, they can produce adverse effects on the networks with unaware and unknowledgeable administrators (Mahmoud, 2012). In fact, designing advertising banners and video clips, selecting appropriate place for advertising the products and proper planning for advertisements follow-up, are types of services which electronic marketing group offer them in order to occupy a suitable place in digital marketing competition (Bashash, 2010).

One of the advantages of internet advertisements for attracting the customers is the accessibility of wide and unlimited information. By connecting to the internet and searching for the required product, the users can easily receive thorough information about that commodity and purchase it if they wish. The sales potential after publishing the advertisements of products have been increased and its market has been expanded. Moreover, online selling is more cost-effective for company owners due to lack of need for workforce. Another advantage is that a mutual relationship is established between advertiser and customer through which they can set forth their data feedback and ask their questions. The ability to target the customers is another advantage of this method. Internet advertisements apply various methods to target their customers in order to select, offer and display the ads in a static or dynamic way. This can bring useful consequences such as attracting customer's certain needs and demands. Generally, a limited and local market can be transformed into a widespread and global one using electronic marketing. It also enhances commercial interactions (Boghusian, 2009).

Chain marketing is another robust method of digital marketing. This method exercises the marketing by creating multiple links, including hundreds of website, to the customer's website. Actually, this option gives you the opportunity to guide people from different locations in virtual world to a certain website based on the needs and services that customer offers on his/her website. The most important point in chain marketing is that opposite to other digital marketing methods, you can pay only if you have achieved the desired objective. That is, you will lose nothing and implies that you have hundreds of marketers, without need to pay them a deposit.

Using email is a very effective method in digital marketing. This method is very cost-effective, flexible, and purposeful. More importantly, it has high profitability potential in case of proper implementation. In this sense, we can state that the most important capability of Email is the possibility of one-to-one marketing, because one-to-one marketing requires the capability of individual addressing. Using one-to-one Email, the seller can build a stable relationship with the customer as well as enhancing the rate of product purchase.

Also, it will be easier to communicate with the customer regarding his/her characteristics, interest and needs to consolidate the business relationship. The more information the marketer achieves about the customers, the easier the procedure of business will be regarding his/her conditions and needs. So, establishing firm relationship with customers and direct the marketing process through Email allows us to compete in the market more effectively (Gholizadeh, 2014).

Today search engines have provided effective opportunities for marketers and attracted the stream of million users toward them. These search engines are the optimal method for finding required products and information for users, and also the best way of advertising to attract customers by producers and service providers. Digital world is so vast and unlimited that one's business can be completely drowned in it. In order to introduce your business properly and achieve the ability of competition in wide digital network in virtual environment, your customers should be able to find you conveniently and in the least time possible. This will be realized only when the business has a high rank in search engines (Chaffey & Smith, 2012).

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Digital methods are divided to four categories: a) applied mixed electronic marketing model b) communication electronic marketing model c) PS4 mixed network electronic marketing model d) prediction model for the possibility of purchase by unknown customers.

Applied mixed electronic marketing model is an applied model for regulating designs and strategies of electronic marketing rather than being a conceptual model. The performances associated with digital marketing have different aspects such as: product, price, promotion, place, confidentiality, customer services, association, site, protection, sales promotion).

In prioritization of digital marketing model, customers are considered as the most important model. By creating an online profile for each customer we can find the proper strategy for establishing personal relationship with them, leading to profit increase. The second model is “the competitors” which shows digital marketing strategies. According to the prioritization, the next model is market in which political, economic, social, technical, legal and environmental factors are considered. Finally, the main competencies contribute to recognizing the weak points, strong points, chances and threats in order to identify the opportunities.

In the present research, we have studied digital methods in electronic products marketing to attract more customers. Considering this subject, the new methods are mentioned and prioritized in digital marketing. Proper usage of internet advertisements is considered as one of the most significant methods which will undoubtedly affect the success of marketing strategy. It is referred to as a channel and communication tools for making advertisements in web environment.

### **Literature Review**

In 2013, Fattahi and Rojani conducted several studies on “E-marketing”. The results indicated that in order to have a healthy society and economy, we need to solve the present problems and provide the ground for accepting new technologies. The main aim of this paper is to inform the readers on establishing E-marketing network, which is an effective factor in social networks and internet in E-marketing. Also, the search engines and researchers on some websites have been discussed in E-marketing field. The present research is conducted regarding the course of progress and the difficulties E-marketing faces. E-marketing has been set forth in Iran since 1996. We hope that solving some of these problems can contribute to our progress in this field in the future.

After conducting a study about “monitoring social media and its role in marketing”, Ahmadi and Panah (2011) concluded that the ever increasing enhancement of internet usage has led to development of social networks which have provided the capability for expressing opinions and feeling by members in these internet communities. This phenomenon has the potential for extending personal and social relationship without needing to make face to face contact. The publication of personal opinions can advertise various business units, but it may defame these enterprises by publishing untrue information. The managers of these units can improve their marketing departments by monitoring this type of information. This research is a review on the role of social media in marketing and the conducted efforts for monitoring such types of information.

In the present research, it was concluded that web has a significant role in individuals’ social life and includes information which are mostly based on users’ emotions and opinions, and this type of information are extracted from conducted researches. Analyzing this type of information can be effective in extracting information from business units, to the advantage or detriment of the company.

Foruzandeh *et al.*, (2011) conducted studies on “strategic affairs about using information technology and internet in marketing” concluded that the aim of this research is to utilize internet for marketing commodities and services as well as studying the effect of information technology and internet on marketing. Generally, the present paper studies the effect of information technology and internet on marketing, and particularly, it describes the development of web-based marketing as well as focusing on the relationship between infrastructural technologies and the transformation derived by E-marketing strategies. Moreover, ordinary facts and contexts of today marketing, that is, the rate of interactions as well as effects of personnel data storage in terms of personal information, privacy and consumers’ behavior on human society.

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In 2012, Erdogmus examined the impact of social media E-marketing on brand loyalty. The results show that brand loyalty by customers is positively influenced by these factors: brand offers profitable activities and content, the content offered by the brand is famous, also the brand can be present in various places and advertise its function using social media.

In 2011, Shuai *et al.*, evaluated the impact of E-marketing on performances of hotels using DEA method and grey entropy method. This research evaluated the websites of all hotels in Taiwan in terms of E-marketing. Content-related analysis was conducted for analysis and comparison on E-marketing. DEA and grey entropy analysis method were applied to analyze the effect of E-marketing on hotel performance. The results showed that E-marketing can affect the operative performance of tourism-oriented hotels. Hotel managers are required to adopt a more strategic approach to enhance the success of their business.

## **MATERIALS AND METHODS**

### **Research Methodology**

In the present research, we have used descriptive-field method in order to achieve the basic concept, theoretical principles and definitions. The questionnaire tool is used for collecting data. Population of the research includes the customers of Digikala and is estimated to be 100000 people. In this research, Cochran formula is used to estimate the sample size.

### **Hypothesis**

- There is a relationship between usefulness and selection of digital technology for marketing electronic products.
- There is a relationship between being user-friendly and selection of digital technology for marketing electronic products.
- There is a relationship between reliability and selection of digital technology for marketing electronic products.

### **The Tools of Data Collection**

Two methods are implemented in this research. In the first step, the theoretical principles of the research subject are discussed. In the next step, survey method and research-made questionnaire are being applied to collect data from research field. In order to evaluate the validity and reliability of the questionnaire, the formal reliability is applied and the experts' opinions are used regarding the reliability and validity of evaluation tool. In this research, the measuring tool is note taking (in library method) and questionnaire (in field study).

### **Data Analysis**

The obtained data from the questionnaire are prioritized using AHP and Expert Choice Software. Considering the subject and purpose the research is aiming, AHP method for decision making was recognized as the most appropriate data analysis method.

## **RESULTS AND DISCUSSION**

### **Inferential Findings**

In hypotheses testing or significance testing, the researcher rejects or confirms  $H_0$ . That is, if  $H_0$  is accepted, it is assumed that  $H_1$  is rejected, and if  $H_0$  is rejected, it implies that  $H_1$  is confirmed. To determine the statistical significance of a research study, the researchers should fix the probable level or level of significance in order to test  $H_0$  in comparison with it. If the results of probable study show a lower level than this, the researcher can reject  $H_0$ . If the research results are likely to be confirmed, the researcher should confirm  $H_0$ ; in fact, since  $H_0$  is not generally stated, confirmation or rejection is applied in "research" hypothesis, not in  $H_0$ .

In order to write the research hypotheses, research uses both comparison and induction. So, there are two potential resources for determining the hypotheses:

- a) General and comprehensive theories; these hypotheses use a string of specified comparisons, leading to predictions which will bring certain results under specified conditions.

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b) The results of previous conducted research projects; the purpose of these hypotheses is the induction of relationship between two or more variables currently.

### The Data Normality Test

In order to implement statistical methods and calculating the statistics, conducting a proper test and logical deduction about research questions, the primary action is to select the proper statistical research method.

To use statistical techniques, it should be first specified whether the collected data are normally distributed, because in case of distribution normality of collected data for hypothesis testing, parametric test can be applied, and in case of data abnormality, non-parametric test are utilized. For the purpose of research, the authentic Kolmogorov-Smirnov test is applied to study the normality of research data. This test discussed the data normality considering the following questions:

H0: the data have normal distribution.

H1: the data does not have normal distribution.

**Table 1: the results of variables distribution normality test**

Variable	Usefulness	Being user-friendly	Reliability
Z	0.430	0.214	0.326
Significance level	0.351	0.541	0.315

Considering the results of table above, since the significance level is over the error rate (0.05) for all components, we conclude that these variables are normally distributed and parametric tests can be used to examine them.

### Hypothesis Testing

#### First Hypothesis

There is a relationship between usefulness and selection of digital technology for electronic products marketing and customer attraction.

H0: there is not a relationship between usefulness and selection of digital technology for electronic products marketing and customer attraction.

H1: there is a relationship between usefulness and selection of digital technology for electronic products marketing and customer attraction.

If the mean of usefulness indicator to select digital technology for electronic products marketing and customer attraction is higher than average, we conclude that these purposes focus on usefulness indicator. One-sample t-test is used to study this subject.

**Table 2: Statistic of test**

N	Mean	Standard deviation
385	2.8917	0.36096

In one-sample t-test, the mean of usefulness index was estimated to be 2.8917 and the obtained results of the test ( $\text{sig} > 0.05$ ) indicate the significance of hypothesis. It means that selecting digital technology for electronic products marketing and customer attraction focuses on “usefulness indicator”.

**Table 3: The results of one-sample t-test of usefulness indicator**

T statistic	Degree of freedom	Significance	Mean difference	Confidence interval of 95%	
				High extreme	Low extreme
636467	384	0.000	-12.10833	12.1457	12.0709

#### Second Hypothesis

There is a relationship between being user-friendly and selection of digital technology for electronic products marketing and customer attraction.



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H0: there is not a relationship between being user-friendly and selection of digital technology for electronic products marketing and customer attraction.

H1: there is a relationship between being user-friendly and selection of digital technology for electronic products marketing and customer attraction.

If the mean of being user-friendly indicator to select digital technology for electronic products marketing and customer attraction is higher than average, we conclude that these purposes focus on user-friendliness indicator. One-sample t-test is used to study this subject.

**Table 3: Statistic of test**

N	Mean	Standard deviation
385	2.4444	0.63966

In one-sample t-test, the mean of user-friendliness was estimated to be 2.4444 and the obtained results from test ( $\text{sig} > 0.05$ ) indicate the significance of hypothesis. It means that selection digital technology focuses on “user-friendliness” for electronic products marketing and customer attraction.

**Table 4: the results of one-sample t-test for user-friendliness indicator**

T statistic	Degree of freedom	Significance	Mean difference	Confidence interval of 95%	
				High extreme	Low extreme
372.426	384	0.000	12.55556	12.6219	12.4893

### Third Hypothesis

There is a relationship between reliability and selection of digital technology for electronic products marketing and customer attraction.

H0: there is not a relationship between reliability and selection of digital technology for electronic products marketing and customer attraction.

H1: there is a relationship between reliability and selection of digital technology for electronic products marketing and customer attraction.

If the mean of reliability indicator to select digital technology for electronic products marketing and customer attraction is higher than average, we conclude that these purposes focus on reliability indicator. One-sample t-test is used to study this subject.

**Table 5: Statistic of test**

N	Mean	Standard deviation
385	2.1306	0.48044

In one-sample t-test, the mean of reliability was estimated to be 2.1306 and the obtained results from test ( $\text{sig} > 0.05$ ) indicate the significance of hypothesis. It means that selection digital technology focuses on “reliability” indicator for electronic products marketing and customer attraction.

**Table 6: The results of one-sample t-test for reliability indicator**

T statistic	Degree of freedom	Significance	Mean difference	Confidence interval of 95%	
				High extreme	Low extreme
152.814	384	0.000	3.86944	3.9192	3.8196

### Friedman Test

Here, Friedman test is applied to study and analyze the variance of variables. Friedman test is a non-parametric test equal to variance analysis with repetitive numbers which is used to compare the average of ranks among K variables (group). This test is utilized when we intend to study the opinions of a group on

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several contexts, and determine the priority of each item based on significant ranking according to the group members' opinions.

**Table 7: Results of ranks**

Rank	Indicator	Mean
1	Usefulness	4.55
2	Reliability	3.96
3	User-friendliness	3.50

According to the outcome of table above, it can be concluded that selecting digital technology focuses on “usefulness” more than other variables in order to market the electronic products and attract the customers. “Reliability” and “user-friendliness” are ranked second and third, respectively.

**Table 8: Friedman test results**

N	Chi-square	Df	Sig.
385	291.147	2	0.000

According to the test result and its significance rate (95% confidence), we can conclude that the difference between mean and variance of variable is significant. In other words, there is a significant relationship between “user-friendliness”, “reliability” and “usefulness” for selecting digital technology regarding electronic products marketing and customer attraction.

### Conclusion

In response to the first hypothesis, it should be noted that there is a relationship between usefulness and selection of digital technology for electronic products marketing and customer attraction. Since the mean of usefulness indicator was estimated to be 2.8917 and the obtained results from test ( $\text{sig} > 0.05$ ) indicated the significance of the hypothesis, this means that selecting digital technology focuses on “usefulness” indicator for marketing the electronic products and attracting the customers.

On the second hypothesis, there is a relationship between “user-friendliness” and selection of digital technology for electronic products marketing and customer attraction, because the mean of user-friendliness was estimated to be 2.4444 and the obtained results from the test ( $\text{sig} > 0.05$ ) indicate the significance of this hypothesis.

That is, selecting digital technology focuses on “user-friendliness” for marketing the electronic products and attracting the customers. The findings of this research on the third hypothesis state that there is a relationship between reliability and selecting digital technology for electronic products marketing and customer attraction.

In one-sample test, the mean of reliability indicator was estimated to be 2.1306 and the obtained test results ( $\text{sig} > 0.05$ ) indicated the significance of the third hypothesis. So, the selection of digital technology for electronic products marketing and customer attraction focuses on “reliability” indicator. Generally, considering the test results and its significance, we can conclude with 95% of confidence that the difference between mean and variables variance is significant. In other words, there is a significant difference among “user-friendliness”, “reliability” and usefulness” to select digital technology for marketing the electronic products and attracting the customers. As it was depicted in the tables, the importance of all effective elements in identifying digital methods in electronic products marketing is not distributed uniformly and some elements are more important than others. Considering the test output, we can conclude that selection of digital technology for electronic products marketing and customer attraction focuses mostly on “usefulness”, with “reliability” and “user-friendliness” being on the next ranks. The results showed that identifying and prioritizing the components and parameters of usefulness, user-friendliness and reliability are the major purposes of management plans of present research based on which we offer the preventive actions and management strategies regarding each effect and each component.

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