Critical factors and advantage factors influencing the implementation of viral marketing by considering the mediating role of Islamic marketing; a conceptual approach

Navid Adelsarbanlar\textsuperscript{a}, Behnaz Khoshtinat\textsuperscript{a,}\textsuperscript{*}

\textsuperscript{a}Department of Management, Buin Zahra Branch, Islamic Azad University, Buin Zahra, Iran

Abstract

The aim of the study is to explore the effect of critical factors and advantage factors on the implementation of viral marketing. The study population consisted of all students of Islamic Azad University, Ardabil Branch during 2014-2015, and the sample of the study consisted of 262 students. A researcher-made questionnaire was used to collect data. For data analysis, a structural equation modelling and LISREL software program were utilized. The results of the analysis indicated that advantage factors and critical factors influence viral marketing. Additionally, Islamic marketing modifies the effect of advantage and critical factors in the course of viral marketing implementation. Likewise, the presented model had a goodness of fit. In the end, some suggestions are provided according to the results.

Keywords: viral marketing; critical factors; advantage factors; Islamic marketing

1. Statement of the problem

Marketers should bear in mind that 65\% of customers expose themselves to many advertising messages, i.e. about 60\% of them believe that the messages are fruitless. A body of evidence show that customers extremely tend to avoid traditional marketing instruments in the course of obtaining information about products and market; likewise, competitions rely on other personal and professional networks when inducing customers to make decision on purchase.

* Corresponding author. Tel.: +989111379097.
E-mail address: Behnaz.khoshtinat1@gmail.com

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Peer-review under responsibility of SCIJOUR-Scientific Journals Publisher
In the modern world, the use of almost obsolete traditional information channels, and organizations that exclusively pay attention to means of information providing (traditional information providing) are doomed to failure. For this reason, viral marketing has taken on special importance. Given the fact that one of the means of viral marketing is the internet and that viral marketing has often faced criticism, the reason why it is widely used is the spread of imethical and unconventional issues in the field of marketing. It is because heedlessness to customer and failure to comply with Islamic principles and foundations have sent market into turmoil. Many believe that Islam and religion are at odds with business and trade, while the idea is totally rejected in many hadiths and Islamic books. For this reason, according to determination sovereignty principle in Islamic economy, people have the right to act in a market as per their determination and tendency as a customer or consumer. The present research seeks influential factors in correct and principled viral marketing with the lowest deviation by considering the effect of Islamic doctrine in the form of Islamic marketing.

2. Research Conceptual model

Research Conceptual model illustrated in Fig 1.

![Research Conceptual model](image)

3. Research hypotheses

Hypothesis 1: advantage factors make a difference to the implementation of viral marketing.
Hypothesis 1a: speed of dissemination makes a difference to the implementation of viral marketing
Hypothesis 1b: financial resources make a difference to the implementation of viral marketing
Hypothesis 2: critical factors make a difference to the implementation of viral marketing
Hypothesis 2a: lack of control make a difference to the implementation of viral marketing.
Hypothesis 2b: lack of ethical standards make a difference to the implementation of viral marketing.
Hypothesis 3: Islamic marketing modifies the effect of critical factors on the implementation of viral marketing.
Hypothesis 3a: Islamic marketing modifies the effect of lack of control on the implementation of viral marketing.
Hypothesis 3b: Islamic marketing modifies the effect of lack of ethical standards on the implementation of viral marketing.

4. Study literature

4.1. Viral marketing

Viral marketing is a strategy based on the internet and takes advantage of the nature of information dissemination route on the internet (Scott, 2008). Like virus, this type of marketing reproduces itself and customers is its client disseminating it. As a an interesting idea, viral marketing can encourage customers to communicate with each other in order to offer product or brand under consideration. The most common method for conducting such marketing is the World Wide Web, which grows in significance every day as the number of the internet users increases. The commencement of an effective viral marketing requires one to come up with a cogent reason or motivation for individuals so that they are encouraged to send message or advertisement in question to friends and relatives. Therefore, in viral marketing, the key to success is eventually in the hands of marketers, because they have to provide individuals with necessary motivation for sending message to others by offering ideas and creative encouragement. As an incentive, an interesting idea can encourage customers to communicate with each other in order to recommend given product or brand name (Mirzaee, 2012). During the process of using viral marketing, there are a variety of influential factors; which are presented below:

Advantage factors: advantage factors include financial resources and speed of dissemination. Financial resource is one of the important advantages of viral marketing which comes with partially lower charges as against various forms of other advertisement and executive marketing programs. In viral marketing, in order to disseminate and spread the messages containing brand name, electronic communication is used (Mohammadi and Dehkordi, 2010). The speed of dissemination is another major benefit of viral marketing and associated with its positive features. In viral marketing, it is important to make messages available to receivers within a short time and to spread them with exponential speed. The rapid dissemination can considerably pick up the speed at which services or products can be marketed (Molkakhlaghi and Zomorodi, 2013).

Critical factors: critical factors include lack of control over dissemination of messages and lack of ethical standards. Lack of control over viral marketing programs is considered to be the greatest threat of the marketing technique, because organizations lack a means of controlling the spread of message and concept and even receptors of messages may find them to be spam (Kaikati, 2004). Another risk of implementing viral marketing programs is lack of ethical standards; in this respect, consumers may feel they have been exploited, abused, deceived, and they are likely to feel viral messages violate their privacy (Phelps et al, 2004).

Islamic marketing (intervening variable): Islamic marketing as a whole is recognized by four main dimensions; these dimensions are:

- Spirituality dimension: the dimension works as an umbrella term encompassing the entire concept of Islamic marketing. The quality suggests that all jobs should be run with a logical connection with the Qur’an and Sunnah. However, Islamic marketers should have full faith that Islamic law is an ultimate rule which should be used as a perfect guideline and flawless resource. As for Islamic marketing, strict obedience to God means that all aspects of marketing should be in accordance with Islamic teachings. According to Sola and Kartajia, Islamic soul has to be taken into consideration in all aspects of marketing ranging from planning to after-sale services. In other words, every marketing activity should be conducted within ethical domain set by Islamic teachings.
- Ethical dimension: improvement of spirituality in marketing; Islamic ethics shape commercial trade. Sola and Kartajian state that compliance with ethical principles are perceived to be the features of Islamic marketers. The ethical guidance should be pursued through the teachings of the Quran and Hadith. In Islamic marketing, marketers clear themselves of any moral pollution. For example, companies should teach marketers to conduct marketing activities within ethical standards of Islam.
- Realistic dimension: according to Islamic marketing, marketers should not be excessively strict in practicing Islamic marketing as long as Islamic law is not violated. The theme of the subject is more important that; nonetheless, realism does not mean that in every pressing matter Muslim marketers can do something violating
Islamic law. They should have the courage to differentiate between themselves and other marketers refusing to apply Islamic principles in business administration in part or in whole. Realism is a view that can be seen among individuals who fast during Ramadan. Fasting teaches Muslims to practice realism. From marketing point of view, being realistic suggests an opportunity for activity.

- Humanism: it means that Islam like any other religion is ready to teach values which are able to differentiate human from other creatures in the world. As a result, individual should put distance between himself and inhuman demands namely greed. Modern marketing implies the idea taken as marketing compatible with the environment (Jafari et al, 2012). Generally speaking, this kind of marketing is a concept attempting to make a balance between market demand and environment protection. This shows modern companies’ tendency toward society and more importantly the environment (Cutler et al, 2010).

5. Research background

According to Malekkhalgh and Zomorodi (2013), Jamaatzadeh (2013), David (2011), Wang (2011), Jasin and Jasin (2011), the results of the research generally indicate the effect of the factors; corresponding transfer, access to audience, potential negative result, consumer’s dependency and lack of control over viral marketing implementation. With regard to the subject of the research, problem statement and the significance and necessity of research, other factors can be influential in the present study namely the model variables; speed of dissemination, financial resource, lack of control, lack of ethical standards, and Islamic marketing. Apart from lack of control in the previous research, the factors received no attention; however, they are analyzed in the research model. In light of variables which received no attention in the literature, the present research set out to develop a relatively comprehensive model which can be considered rare and inventive in this respect.

6. Research method

The research method is an applied method by purpose and it is a descriptive-survey research in terms of method. The study population consisted of all students of Ardabil University, i.e. a number of almost 800 students with respect to the overall population of the study, and the sample size was 262 individuals. Sampling method aimed for the research is a cluster sampling. For this purpose, each college was regarded as a cluster and a class was randomly chosen out of each college. Considering the sample size which was 800 individuals, a number of 262 individuals were calculated using Morgan formula. To this end, 300 questionnaires were prepared and distributed, and a number of 262 questionnaires were ultimately analyzed. For data analysis, correlation tests and structural equation modelling were used. SPSS and LISREL software program were also used to analyze data.

7. Descriptive statistic

From a total of 262 respondents, approximately 40.5 were female and 59.5 were male, which shows that respondents are mostly male. 83.6 percent were in the group of 20-30 years of age, 13.7 percent 30-41 years of age, 2.3 percent 41-50 years of age, and 0.4 percent in the group age older than 50 years old, which suggests that the respondents are mostly in the group age 20-30 years old. As for education, about 18.3 percent of the subjects have diploma, 36.3 percent associate degree, 38.9 percent bachelor degree, 6.1 percent postgraduate degree, and 0.4 PhD degree, which indicates that the respondents have bachelor degree. Regarding familiarity with the internet and computer, the investigations show that 13.4 percent have experience of less than one year, 27.5 percent one year to three years, 22.1 three to five years, 37 percent more than five years from the beginning of acquaintance with computer and the internet, in that we can admit that almost all respondents have more than 5 years of experience working with the internet and computer. Moreover, studies indicated that one to two days in a week took up 30.2 percent of the whole response, three to five days in a week 29.8 percent, and about every day in a week 40.1 percent of responses, in that we can claim that approximately all respondents work with computer and the internet every day. Likewise, concerning level of knowledge, starter (9.9 percent), average knowledge (78.6 percent), and advanced knowledge 21.4 percent specified level of their skills; thus, it can be said that almost all respondents on average have acquaintance with computer and the internet.
8. Inferential statistics

The practices by which the characteristics of large groups are inferred based on the measurements of the same characteristics in small groups are called inferential statistics (Kiamanesh, 2004). Moreover, in this research, structural equation modelling was used to assess the validity of constructs, as well as research hypotheses test.

Table 1 indicates the results of structural model for research hypotheses test. With respect to the values of the table, a hypothesis is confirmed. The results show that all hypotheses developed based on structural equation models were confirmed.

Table 1. Standard coefficient and significance numbers for research hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Domain</th>
<th>P - value</th>
<th>Chi-square</th>
<th>Result RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td><strong>0.407</strong></td>
<td>0.000</td>
<td></td>
<td>confirmed</td>
</tr>
<tr>
<td>Hypothesis 1a</td>
<td></td>
<td>0.000</td>
<td></td>
<td>confirmed</td>
</tr>
<tr>
<td>Hypothesis 1b</td>
<td><strong>0.288</strong></td>
<td>0.000</td>
<td></td>
<td>confirmed</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td></td>
<td><strong>0.358</strong></td>
<td></td>
<td>confirmed</td>
</tr>
<tr>
<td>Hypothesis 2a</td>
<td><strong>0.410</strong></td>
<td>0.000</td>
<td></td>
<td>confirmed</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td><strong>0.328</strong></td>
<td>0.000</td>
<td></td>
<td>confirmed 0.088</td>
</tr>
<tr>
<td>Hypothesis 3a</td>
<td><strong>0.357</strong></td>
<td>0.000</td>
<td></td>
<td>confirmed 0.079</td>
</tr>
<tr>
<td>Hypothesis 3b</td>
<td></td>
<td>0.000</td>
<td>225.70</td>
<td>confirmed 0.081</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
<td>231.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
<td>276.29</td>
</tr>
</tbody>
</table>

9. Results of hypotheses test and their comparison with previous research

In this part, the results of the hypotheses tests and their comparison with previous research are explained in detail.

The confirmation of the first hypothesis means that all the procedures of advantage factors under consideration are influential during the implementation of viral marketing. The confirmation of hypothesis 1a suggests that all the procedures of advantage factors (speed of dissemination) under consideration are influential during the implementation of viral marketing. The conclusion is consistent with the results of Sardari, Shojae and Samizadeh (2011); the results of the present study indicate that there is a significant relationship between speed of dissemination and implementation of viral marketing. The confirmation of hypothesis 1b suggests that all the procedures of advantage factors (financial resource) under consideration are influential during the implementation of viral marketing process. The hypothesis indicates the relationship between financial resource and implementation of viral marketing, in the sense that many relevant studies received a lot of attention in recent decades. The conclusion is in agreement with the results of Eckler and Bowlsi (2011), and Double (2007); the present results indicate that there is a significant relationship between financial resource and implementation of viral marketing.

Confirmation of the second hypothesis means that all the procedures of critical factors under consideration in this study are influential during the implementation of viral marketing; the results of correlation test in the main hypothesis show that the obtained domain equal to 0.410 percent and significance level equal to 0.000 which is less than 0.005,
which indicates the confirmation of the relationship between the two variables, critical factors and implementation of viral marketing. The confirmation of hypothesis 2a means that all the procedures of critical factors (lack of control) under consideration in this study are influential during the implementation of viral marketing. The hypothesis suggests the relationship between lack of control and implementation of viral marketing, in the sense that many relevant studies in recent decades received a lot of attention. The conclusion is in line with the result of Vernedel (2008). The present results indicate that there is a significant relationship between lack of control and implementation of viral marketing. The confirmation of hypothesis 2b suggests that all the procedures of critical factors (lack of ethical standards) under consideration in the research are influential during the implementation of viral marketing, in the sense that many relevant studies have received a lot of attention in recent decades. The hypothesis confirms the relationship between lack of ethical standards and implementation of viral marketing, in the sense that many relevant studies have received a lot of attention in recent decades. The conclusion is consistent with the result of Vernedel (2008); the results of the present research show that there is a significant relationship between lack of ethical standards and implementation of marketing.

Confirmation of the third hypothesis suggests that Islamic marketing is influential in the relationship between critical factors and implementation of viral marketing. There is also a significant relationship between these variables. Confirmation of hypothesis 3a suggests that Islamic marketing has a special role in the relationship between lack of control and the implementation of viral marketing, in the sense that many relevant studies have received a lot of attention in recent decades. The conclusion is consistent with Tavanaee, Salenejad, and Heidarzadeh (2007). The results of the present research indicate that Islamic marketing takes on an influential role in the relationship between lack of control and implementation of viral marketing. Confirmation of hypothesis 3b suggests that Islamic marketing takes a more influential role in the relationship between ethical standards and implementation of viral marketing, in the sense that many relevant studies have received a lot of attention in recent decades. The conclusion is in agreement with the result of Jafari (2008). The results of the present study show that Islamic marketing has a more influential role in the relationship between lack of ethical standards and the implementation of viral marketing.

10. Suggestions based on research findings

Given hypothesis 1a which holds that speed of dissemination makes a difference to the implementation of viral marketing, the results of the hypothesis indicate that speed of dissemination is very important in the implementation of viral marketing, and also that viral marketing can serve as an important means of advertisement automatically. For this reason, it is recommended to use advertisement on social networks, associations and chat rooms in order to increase the speed of advertising messages speed, and also we can use creative, entertaining, and comprehensible messages for the sake of customer.

Considering hypothesis b1 which holds that financial resource and implementation of viral marketing are influential, the results of the hypothesis indicate that financial resource is very crucial to the implementation of viral marketing, and also that internet advertisement is the most expensive kind of advertisement among various types of advertisement. Since financial resource can be a condition for the success of viral marketing, so it is recommended to use viral marketing in order to reduce the costs of company, companies and organizations can utilize the technique in place of TV advertisement etc. with great expenses in order to provide company's profitability, considering the fact that viral marketing requires less financial resource.

Given hypothesis 2a which holds that lack of control over the implementation of viral marketing is influential, the results of the hypothesis indicate that lack of control over the spread of news, whether it be positive or negative, is linked with the spread of product which is a negative aspect; thus, the characteristic can be used as a resource versus competitors. Accordingly, it is recommended to run advertisement from a valid resource in order to achieve better control over individuals' personal judgments over delivered advertising messages. Furthermore, creative and entertaining messages can also be used in this regard. Therefore, in order to control and monitor message reception from customers, encouraging suggestions including replying email or spam on the part of customers can be effective; ultimately, in order to prevent customers' wrong selection, the use of simple and comprehensible sentences are recommended in delivering messages.

Given hypothesis 2b which holds that lack of ethical standards can be influential in the implementation of viral marketing, it is concluded that matter of morality is believed to be the main condition for a deal, so the spread of virus
which is considered an action contrary to Islamic obligations, i.e. inflicting damage to person, and consequently vile policies on making profit in this regard. Therefore, it is recommended to create a law by virtual space police at international and national level in order to comply with ethical and moral professional standards in spreading a message or advertisement, e.g. cybercrime law.

It is also recommended to build culture of ethical standards for marketing through mass media (technical magazine of each corporatism, and to present national and international awards every year (e.g. Green Management prize) for companies abided by ethical standards.

Given hypothesis 3a which holds that Islamic marketing modifies the effect of lack of control over the implementation of viral marketing, the following suggestions are provided in order to achieve better control over individual's personal judgment on delivered advertising messages.

- be honest and sincere in sending advertising messages, and pay attention to divine values in this regard.
- For better control over personal judgment on delivered advertising messages, it is recommended to pay attention to mutual productivity of client and company.
- For better control over personal judgment on delivered advertising messages, it is recommended to send need assessment messages for essential commodities and run advertisement accordingly.
- For better control over personal judgment on delivered advertising messages, it is recommended to pay attention to quality of goods including different standards for goods from valid national and international organizations and use of the standards for advertisement.

Considering hypothesis 3b which holds that Islamic marketing modifies lack of ethical standards for the implementation of viral marketing, and also that the results of the hypothesis show that lack of ethical standards which are a negative aspect of viral marketing, the following suggestions are presented:

- To set a rule by Islamic countries in order to determine ethical standards in cyberspace; the rule encompass divine-based foundation, e.g. crescent mark in food products and also lay emphasis on sincerity and honesty.
- Advertise products manufactured in order to serve Islamic society by considering productivity of clients and company and Islamic society.
- Each advertising message should concern about a product with a specified code, which is provided by a valid organization.

11. Overall conclusion

The present study could develop theories of marketing by means of integrating popular models and important and thinkable variables which were gone unnoticed in the literature on the part of researchers. Therefore, the aim of conducting the research model, based on variation in the relationship between variables including advantage factors (financial resource and speed of dissemination) and critical factors (lack of control and lack of ethical standards), was to identify influential factors better and more. Additionally, another important goal of the research was to test the proposed model. As a matter of fact, the study provides for a conceptual framework for the implementation of viral marketing, a topic considered as a coverage. The conceptual framework provides condition that covers the shortcoming of literature relating to viral marketing.

References

Molkakhlagh, A. Zomorodi, M. (2013). Integrated approach to viral marketing and neuro-marketing in creating a desire to spread the message of the recipients of advertising messages.