

*Full Length Research Paper*

# Impact of spam advertisement through e-mail: A study to assess the influence of the anti-spam on the e-mail marketing

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Several companies suffered from considering their e-mail advertisements as a spam. While others advertising those companies by employing spam technique to advertize the products, which makes an abusive use of the e-mails of users. In general, spam system classify the e-mails into wanted and unwanted messages, wanted messages are found in the inbox of the e-mails, while the unwanted messages are directed to the spam box. In many cases, anti-spams have several wrong estimations, although, the great roll of the anti-spam systems in term of privacy, security and protecting e-mails from any attacking cannot be ignored. From another view, spam cost the companies too much by assuming the advertisement messages as spam. Recently, most of the researchers are suffering from the spam false estimations; they tried to move toward approaches that minimizes the false positive estimations. In the literature, spam false estimations are considered as the main problem on e-mail marketing service (EMS). In this work we will illustrate the problems by investigating e-mail marketing service with many companies. In this paper also, we will describe the impact of the anti-spam on the e-mail marketing system by surveying the expert on the area of marketing. We analyze every single question with more than 70 specialists on marketing and their opinions have been recorded and analyzed in this paper. The analysis of the data shows anti-spam has directly affected the e-mail marketing services.

**Key words:** Anti-spam, e-mail marketing, false positive, spam, marketing, MIS.

## INTRODUCTION

The world economy is currently transitioning from a goods based economy to an economy in which value creation, employment, and economic wealth (Erbil and Akincitürk, 2010; Yass et al., 2010). Nowadays, Internet is not only a networking media, but also as a means of transaction for consumers at global market (Delafrooz et al., 2009). (Potluri, 2008) said "creating effective communication with customers is the most important aspect in service market". Within the global markets, the issues that a

business is encountering are getting more and more complicated and sophisticated (Hsu et al., 2010).

The word "Marketing" described as "analysis, planning, implementation and control of carefully formulated programs designed to bring about voluntary exchanges of value with target markets (Kotler and Fox, 1995; Beneke and Human, 2010). Businesses that market their own brands require effective marketing planning and activities (Wu and Fu, 2009).

The need to create new mediums for advertising has lead to the creation of new-age media such as: the internet, which includes electronic-mail (e-mail), websites and short messages service (SMS) (Waldt et al., 2009). Websites advertisements have many techniques, however,

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the use of the advertisement happened accidentally when the users open the website that has an advertisement (Alam, 2009). From another point of view, limited amount of money that could be generated from web advertising to advertisement companies, as readers are accustomed to access freely the content of web pages on the internet (Azmi and Kamarulzaman, 2010). SMS advertisements reach the users mobiles without searching; however, this kind of advertisement is costly.

Several companies suffered from considering those e-mails advertisements as a spam. While other advertising companies employed spam technique to advertize the products, which makes an abusive use of the e-mails of users. In the light of the generalization of this practice, the European Commission has provided a series of technical and regulatory measures with a view to avoiding spam (Delafrooz et al., 2009).

It is widely acknowledged that spam, or electronic junk mail, costs businesses large sums of money in terms of workforce productivity (Uys, 2009). Spam has many bad effects on the user privacy and researchers pay those attentions to security issues of the spam. According to (Azmi and Kamarulzaman, 2010) the issues, such as loss of valuable time, information privacy, glitches on the system's performance, if not strategically overcome, could be translated into risks to current and potential adopters of any system. Therefore, information privacy and information security play an important role (Hmood et al., 2010). According to (Alanazi et al., 2010; Hashim et al., 2010) privacy, copyright and security are very important issues, as the amount of products and services offered via the internet grows rapidly, consumers are more and more concerned about security and privacy issues.

E-mail marketing is one of the best ways of advertising business online. As the number of e-mail users is growing rapidly, more and more businesses are choosing e-mail marketing as their primary advertising campaign, because it's a great method of reaching global audience for their target market. E-mail marketing is cheap (if not free); easy to access, fast and most importantly, effective. It still works and brings good for internet marketers. If someone planning to start an internet business or if he/she already has one, it is a must to employ e-mail marketing into the overall process of web business promotion.

A well planned e-mail marketing campaign can bring tremendous success by boosting sales for on-line or off-line business. However some things should be considered before starting any e-mail marketing.

### Research questions

This research paper tries to answer the following questions:

What is the concept of e-mail marketing service?

What are the techniques of e-mail marketing?

Which technique is the most appreciated from the marketers?

What are the differences between opt-in and spam?

If the marketer wouldn't like to use opt-in, would his or her e-mails are not welcomed?

What are the other techniques available or can be created to be use on the e-mail marketing?

### OPT-IN CONCEPTIONAL FRAMEWORK

An opt-in message process involves obtaining permission before sending messages (e-mails) (Barnes and Scornavacca, 2004) (Figure 1). Sending e-mails without permission make the messages as unsocial (Sullivan and DeLeeuw, 2003). Meaning that, if the people have agreed to receive e-mails from the sender, the processing will be totally legal, unlike opt-in, spam is defined as sending messages to people without permission (Cranor and LaMacchia, 1998) (Figure 2). In a nutshell, sending message without permission will be either welcomed or not while opt-in can guarantee the acceptance of the messages since they agreed to receive it.

### OPT-IN VS. SPAM TECHNIQUE

Before starting e-mail marketing campaign, the marketers should clearly understand the difference between opt-in e-mail marketing and spam. If they fail to do that, they may hurt the business and their reputation for a long time. (Barnes and Scornavacca, 2004). Spam is a very unethical way of internet marketing. Simply stated, it means sending promotional e-mail messages to people who did not request for them. If the marketer tries to send unplanned e-mails or spam, the ISP (Internet Service Provider) may ban these e-mails and will never be able to send messages from your e-mail account again. Opt-in e-mail marketing is better than spamming. Opt-in is different from the spam; since it is permission based, which means that people have agreed to receive e-mails from you (Sullivan and DeLeeuw, 2003; Barnes and Scornavacca, 2004). In many businesses, marketers are preferred to market this way as it brings very good results (Alam, 2010). Some of the top marketers have achieved 40% response rates using opt-in e-mail marketing. An additional advantage of opt-in over spam technique is that:

1. Spam brings very low response rates
2. It is not targeted, which means that e-mail message goes to anybody, those who are interested in your offer and those who are not.

The greater part of the receivers would not even look at these e-mails and thus, reaching excellent response rates using spam advertisement seem impossible. On the

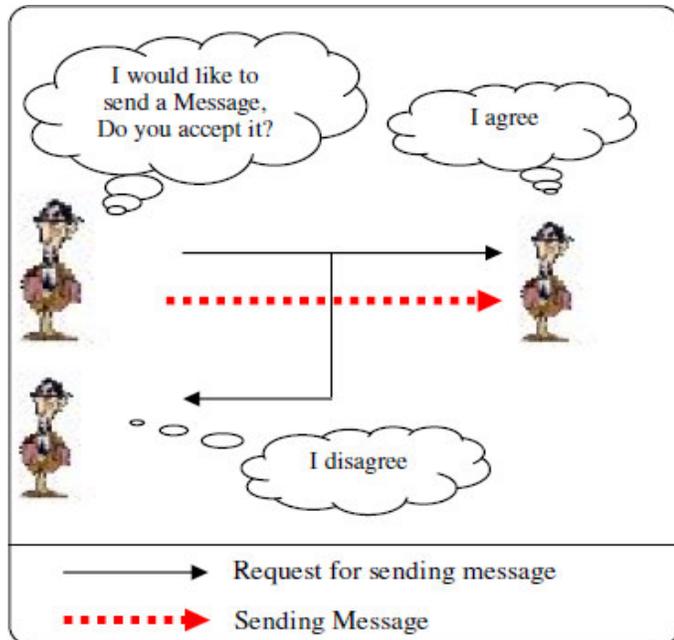


Figure 1. Opt-in framework.

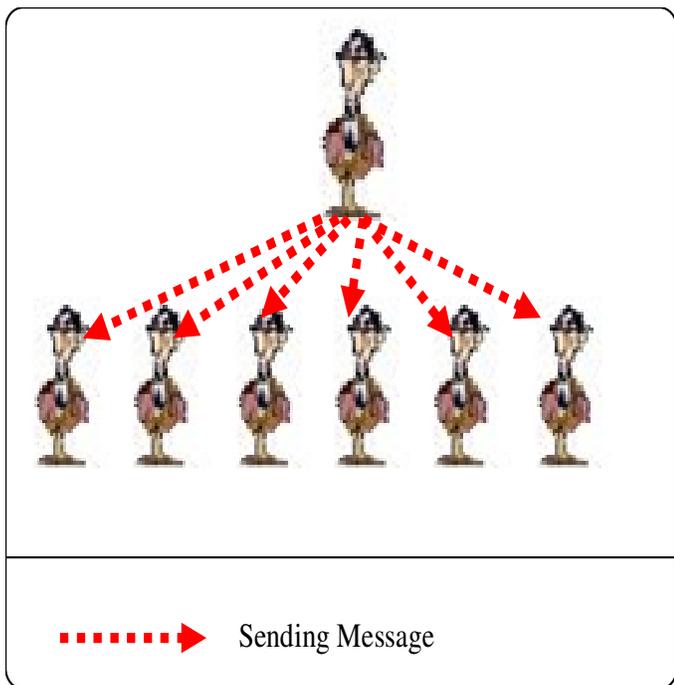


Figure 2. Sending unsocial message.

other side, opt-in technique is targeting the people who would like to receive the advertisements (that is, when the marketer sends a message to a list of e-mail addresses, he or she knows the list is interested in the offer).

## Problems and discussions

In the new investments and business revaluation, e-mail marketing service has played an important role on advertising the products; however, many challenges still face the usage of this service. For example, if the user has not used the Opt-in, the messages will be rejected and the e-mail address will be considered as a spammer address. On the other hand, the wrong estimations of the anti-spam to the text content or the subject of messages, make the message considered as a spam. In addition to that, some of the IP filters consider the sender as a spammer if he or she sends many e-mails within the same day. The objective of this research is to examine the influence of the e-mail-spam engine on the success of the e-mail marketing campaign.

From the security perspective, the acceptability of having false positive better than having false negative (that is suspects and considers the e-mail as unwanted or spam, better than accept the e-mail with the possibility of being spam) influence awfully the e-mail marketing system.

## RESEARCH METHODS

In the social science researches, there are two main methods: quantitative and qualitative methods. Thus, the researcher may choose one or both of these methods and that depends on the research. To justify and employ the method on the research, the researcher studied the some factors:

### Features of qualitative and quantitative methods

Qualitative method is a field that involves investigating and understanding in-depth, the human behavior and the reasons that govern human behavior. Qualitative research relies on reasons behind various characteristic, aspects and feature of behavior. In a nutshell, it investigates the why and how of decision making, not just when, where, and what (Alam, 2009b, Alam et al., 2010). Therefore, the need is to have smaller and focused samples rather than large and random samples. Quantitative method is the determination of the total or relative abundance (often expressed as a concentration of one, several or all particular substances present in a sample). Once the presence of certain substances in a sample is known, the study of their absolute or relative abundance may help in determining specific feature.

### Method choosing and justification

A clear strategy of the research to choose the method that will be applied in the particular study is very important. (Alam, et al., 2010b; Alam and Hoque, 2010), According to May (2001) "quantitative research intends to describe or explain the individuality or opinions of the population by using a representative sample". Thus the author needs to employ quantitative method, however qualitative research is associated with participant's observation and interviewing and is preferable when the data of examination are complex and cannot be quantified (Chappell, 1999; Amaratunga et al., 2001). In this case, the author needs to apply qualitative research as well. Quantitative and qualitative methods involve different research strategies and the decision about which strategy to employ depends on the research situation. (Yin, 2008). Quantitative

research generally entails more deductive approach to the relationship between theory and research in contrast with qualitative research that generally entails a more inductive approach. This means that, quantitative method takes the theory as the starting point of investigation and functions to produce experiential evidence to test that theory. However, qualitative intends to generate theory by examining or observing in depth a particular aspect of social life (Bryman, 1988).

### Questionnaire

The use of a questionnaire is the most appropriate method to collect the quantitative data which is a low-cost and fast way to gather data from an expected large number of respondents (Oppenheim, 1966). Therefore, comparing with the scheduled interviews, questionnaire is more convenient for responders because it offers them the freedom to complete it in less time and at the speed they want (Bryman, 2001).

### Questionnaire design

According to May (2001) there are three types of questionnaires: Mail or self-completion questionnaire, Telephone survey and Face-to-face interview schedule. The current survey was conducted by using self-completion questionnaires. Nevertheless the questionnaires were delivered via self-conduct and were completed with the guidance of the researcher. This method was selected because there is higher possibility the candidate responds to the survey and the researcher is able to ensure that the respondent has understood the question and the purpose of the research (Oppenheim, 1966). However, May (2001) notes that the presence of the researcher during the completion of the questionnaire may affect the answers that people give. Furthermore, the questionnaire is constituted by closed type questions. Questions of this kind offer the participant a choice of alternative replies that can be both simple alternatives such as "Yes" and "No" or something more complex such as a choice of five different answers. Close questions are cheaper to analyze and permit comparability between people's answers (Neuman, 2000). They are also easier and quicker for the responder to answer (Bryman, 2001). However, closed questions have the disadvantage that participant loses his spontaneity and expressiveness since he is forced to choose between some alternatives that might not have occurred to him (Neuman, 2000). Bryman (2001) claims that one solution to this problem is to include to the questionnaire an open question that generates the categories or provide other options for each question. Moreover, the questionnaire should be kept short and simple in order to motivate the participant to answer it (Oppenheim, 1966). Thus, instructions such as "If yes, go to question 5" provide useful guidance to the respondent and enable them to answer the questions without the assistance of the researcher. In addition, during the design of the questionnaire, several principles should be taken into account in terms of attractiveness, clear language, reliability, consistency and relevance to the research objective (Leedy and Ormrod, 2005).

### Ethical statement

Consent of the participant was obtained with detailed information given before commencement of the study. Data protection and confidentiality were maintained all through the study

### Data collection and analysis

The primary data used in the research is composed of data

gathered through questionnaires, the questionnaire has been distributed through a survey form; this form was designed and distributed to targeted employees and the companies whom used e-mail marketing system on their campaigns.

Besides the basic demographic questions, eleven other questions were asked pertaining to the problems faced by EMS. A total of 70 respondents participated in the questionnaire survey. The respondents (comprised of patrons) who used e-mail marketing system to advertise about those products were not happy with the spam problem, their clients and the employees were chosen because of their experience with the people. The focus of the survey questions was mainly "e-mail marketing system is not qualified anymore to be in the main plans of companies that want to do marketing or advertisements"

### Demographic features of the respondents

#### Part one

The survey respondents were asked their age groups. Table 1 shows the breakdown of the respondents in terms of age group, nationality and gender. As depicted in Table 1, the responses revealed 14.28% of the respondents are from the 17 – 23 category while 58.57% the respondents are from the 24 – 28 age category. In the more than 28 years of age category, 27.15 % of the respondents fall into this category. Twenty six out of seventy respondents are female users which shows that the majority of the users are male

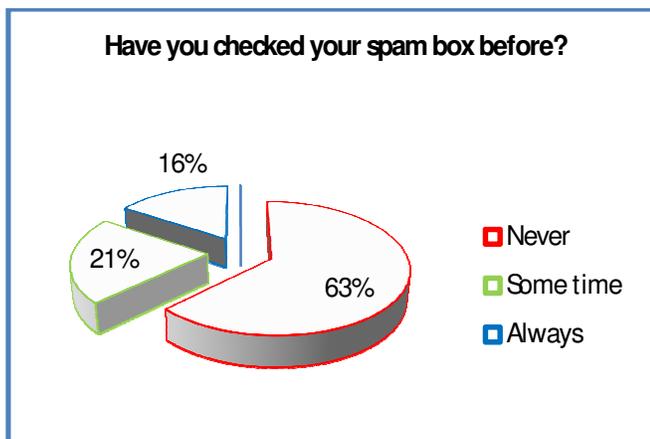
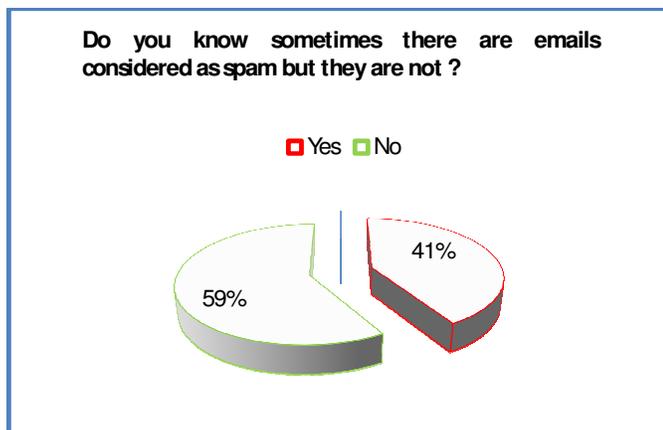
#### Part two

For the question one which is: How long have you been using the internet? 42.86% of respondents have used the internet between one to five years, 17 and 15 of whom were male and female respectively, their ages were: two from the age 17-23 category while 20 from the age 24-28 category and eight from the age >28 category. 50% have used it more than five years, 20 and 10 of whom were male and female respectively, their ages were: four from the age 17-23 category while 20 from the age 24-28 category and 11 from the age >28 category. Only 7.14% of the participants have experience less than one year of internet use, two and three of whom were male and female respectively, their ages were: four from the age 17-23 category while one from the age 24-28 category. Question two was: which of the following factors would make you more likely to pay attention to the e-mail? 3% of respondents have paid their attention to "very long messages", 43% have paid attention to "very short messages", 17% have paid attention to the messages written in a text format, 29% have paid attention to the messages in HTML format. Only 8% of the participants have said "I don't know"

In question three, "how often you check your e-mails"? the result was as follows: 47% checked the e-mail daily, 11% checked twice per day, while the second highest frequency were 39% which they check those e-mail every time. Only 3% they don't usually check those e-mails. The fact learned from the question is that, nowadays more than 97% of the people have e-mail ID's and those working in companies check their e-mails at least once per day. Question four and five focused on the impact of the spam on the e-mail marketing, the questions were sequentially: Have you checked your spam box before? Do you know that, some time there are e-mails considered as a spam and it is not a spam? The response to the first question was: 63% never, while 21% said some time we check. For the second question, 59% said "we don't know about the false estimation for the anti-spam". To avoid the risk of the spam 41% said we know but we are not willing to take the risk (Figures 3 and 4).

**Table 1.** Breakdown in terms of age, nationality and gender.

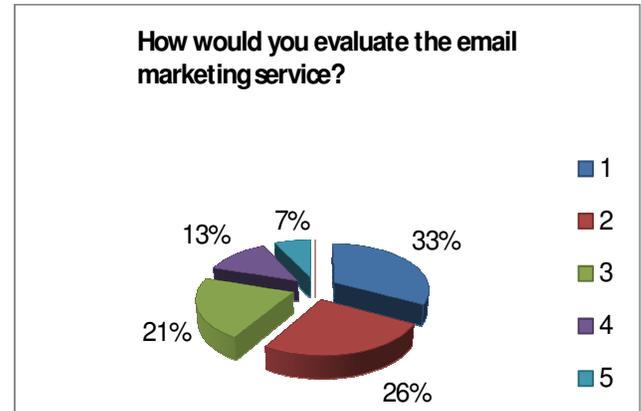
Age	Nationality	Gender
17-23	Local	Male
24-28	International	Female
>28		

**Figure 3.** The ratio of the people who check the spam box.**Figure 4.** The ratio of the people who do not know about the false positive estimations in the spam.

The final question of this survey is to evaluate e-mail marketing services, most of the responses do not trust e-mail marketing services, because they might be directed to spam box, 35, 26, 21, 13 and 7% were ranked one, two, three, four and five respectively (Figure 5).

## DISCUSSION

The summary of this vote or the survey was most of the people are interested in the e-mail marketing services.

**Figure 5.** E-mail marketing service evaluations.

However, they avoid it because e-mails marketing are always directed to the spam box. The findings leading to one fact, "advertisers or the marketers should establish a trusted channel to get the trust of the consumers. While globalize e-mail marketing service, might reduce the false estimations. The success factor of e-mail marketing is on convening people to read e-mail.

## RESEARCH LIMITATION

People are frustrated, using e-mail marketing as the main campaign method. Several Malaysian companies found their ways to the markets through other kind of marketing such as, media advertisements, SMS etc. Thus creating this research has faced a limitation on the data collection. In fact, by searching on 23 companies, the author could only find one company that uses e-mail marketing to advertise their products.

## Conclusion

Unlike SMS marketing or other marketing services, e-mail marketing service is cheap, might reach millions of end users, and however anti-spam has become a real challenge for this kind of marketing. Few researches provide a wide study to evaluate the influence of anti-spam systems on the e-mail marketing service. A study case to evaluate the drawback of anti-spam effect on the e-mail marketing service has been presented in this paper. A survey questions between 70 spiciest on the area of the marketing has been distributed. Data collection, gathering, summarizing and analyzing of the result has been obtained in this paper. In conclusion, using e-mail marketing service is risky; furthermore, it cannot give the expected result without a solution to the problem of spam, while using spam technique is not a appreciated way to advertize the products.

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