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# An empirical survey to measure the impact of different factors on the success of electronic marketing

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#### ARTICLEINFO

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#### ABSTRACT

Internet marketing plays an important role in today business enterprises. Today, many firms invest more and more to increase their abilities on providing better services on the internet. In this paper, we study the impact of five factors namely awareness from the site, site attractiveness, promotional effectiveness, effectiveness and shopping impacts and effectiveness and loyalty on the success of electronic marketing. We have distributed a questionnaire consists of various questions and distributed them among 984 people and received 595 in Likert scale. The Cronbach alphas for all five sets of questions were well above the minimum desired level. We implement a multi regression function and the results confirm that all five mentioned factors impact the sales of e-marketing, significantly.

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#### 1. Introduction

During the past few years, internet facilities have become popular among new generation and it has removed many physical borders. Online shopping is one of the most frequently implemented options used among various people in the world (Espejel et al., 2008; Voorveld et al., 2009; Wang & Wu, 2012). It helps people purchase goods and services very easily and virtually reduce unnecessary transportation to shopping centers. Today, there are many shopping centers jumped into e-businesses to reduce their costs and increase their sales. During the past few years, there have been many studies associated with the relationship between e-business and different factors such as customer loyalty. Athanassopoulou et al. (2004) performed an investigation on the effects of effective communication with lead customers in developing new banking products. The results presented in their studies identified that communication skills were associated with successful new service development. They studied nine UK-based commercial banks and realized that the most successful developers implement special skills for communicating with customers more specifically with "lead customers", throughout the development process.

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Sheng and Liu (2010) did a survey on the impact of e-service quality on online customer satisfaction and loyalty in China. They explained that efficiency and fulfillment had positive impacts on customer satisfaction, and fulfillment and privacy had positive influence on customer loyalty. There are other studies on finding barriers on reaching high quality e-business (Casaló et al., 2008; Setthasakko, 2009; Ghose, 2009; de Matos et al., 2009). Cheung et al. (2008) studied the impact of electronic word-of-mouth using the adoption of online opinions in online customer communities. They reported that comprehensiveness and relevance to be the most effective components of the argument quality construct of the research model, making them key influencers of information adoption.

Athanassopoulos et al. (2001) performed an investigation on the impact of customer satisfaction on customers' behavioral feedbacks. The results confirmed the notion of direct impacts of customer satisfaction on three criteria including decision to stay with the existing service provider, engagement in word-of-mouth communications, and intentions to switch service providers. Wang and Wu (2012) studied the impact of corporate image, perceived value, and switching expenditures on customer loyalty in customer/provider relationships of various length. Their results revealed that corporate image influences customer loyalty in both newer and older relationships. Whereas in newer relationships, corporate image has a cardinal impact on switching expenditures, in more-established relationships switching expenditures are impacted primarily by perceived value and in both cases, switching expenditures impact customer loyalty.

# 2. The proposed conceptual model

In this section, we present the proposed conceptual model to measure the efficiency and performance of e-commerce activities. In an internet based model, we first absorb the customer and create motivation among them to do search inside on eth website. We next encourage them to communicate with other participant and place some orders. The process must continue by increasing the number of customer and planning for good customer retention. There are also good attributes for evaluating suppliers in the market. Table 1 shows some of the criteria, which are important in the context of web based business models,

**Table 1**The summary of five important items on internet marketing

The summary of five important from on internet marketing				
Item	Calculation method			
Awareness from the site	Number of visitors, total numbers of internet users			
Site attractiveness	Number of information searched, number of site visitors			
Promotional	Number of communication, number of searching information			
Effectiveness				
Effectiveness and Shopping	Number of purchases, Number of negotiations			
impacts				
Effectiveness and loyalty	Total number of returning visitors, total amount of purchasing orders			

The criteria given in Table 1 are based on internet process, which starts from customer's awareness on a particular website and ends with repurchase from the same website. When a customer intends to repurchase from a website, it means that customer has become loyal to a particular service. In this survey we have designed a questionnaire consists of five groups of questions and all questions are arranged in Likert based scale from one to five. There are one main hypothesis and five subhypotheses. The first hypothesis is associated with the impact of internet sale on the success of the electronic marketing. The first sub-hypothesis is associated with the relationship between site awareness and success of electronic marketing. The second sub-hypothesis is associated with the relationship between site attractiveness and success of electronic marketing. The third sub-hypothesis is associated with the relationship between promotional sales and success of electronic marketing. The fourth sub-hypothesis is associated with the relationship between repurchase and shopping and

success of electronic marketing. Finally, the last sub-hypothesis is associated with the relationship between effectiveness of customer loyalty and success of electronic marketing. Cronbach alpha was calculated as 0.94, which is well above the minimum desirable level. We have used email service and send the questionnaire to 984 people and we received 595 questionnaire or 60% of the respondents. Table 2 shows details of Cronbach alpha for each category of questions of our survey.

Table 2
Cronbach alpha

Question	Website	Site	Promotional	Effectiveness	Shopping and
	Awareness	Attractiveness	Effectiveness	and loyalty	Effectiveness
Cronbach Alpha	0.768	0.779	0.908	0.708	0.812

Fig. 1 shows details of our survey on the number of people who participated in our survey. As we can observe, approximately, 45% are senor managers, 22% middle managers, 15% executive managers and 18% of them were project managers.

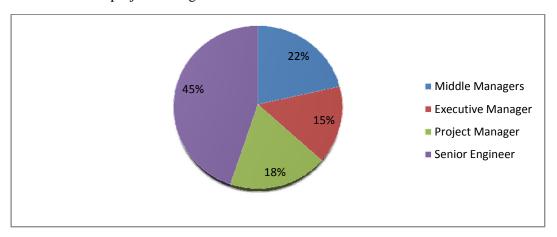


Fig. 1. The frequency of the survey participants in terms of their job positions

The proposed study of this paper performs a multi-variable regression analysis where the dependent variable is the success of electronic marketing  $(Y_i)$  and there are five independent variables, which are Effectiveness and loyalty  $(X_{1i})$ , Site attractiveness  $(X_{2i})$ , Promotional Effectiveness  $(X_{3i})$ , Effectiveness and shopping  $(X_{4i})$  and Website Awareness  $(X_{5i})$ . Therefore, we have,

$$Y_{i} = \beta_{i} + X_{1i} + X_{2i} + X_{3i} + X_{4i} + X_{5i} + \varepsilon_{i}. \tag{1}$$

Table 3 shows a summary of our regression analysis.

**Table 3**The summary of the results of regression analysis

Model	$\mathbb{R}^2$	Coefficient of determination	Adjusted R <sup>2</sup>	Error
1	.950	.970	.912	.130463

The first set of questions, Q1, Q3, Q6, Q14 and Q22, are associated with site awareness and they maintain an average of 3.192, which indicates that site awareness has an average impact on the success of electronic marketing. The second set of questions, Q2, Q8, Q11, Q17 and Q23, are associated with site attractiveness and they maintain an average of 4.074, which shows that site attractiveness positively influences on the success of electronic marketing. The third set of questions is associated with promotional attractiveness and questions 4, 12, 16 and 20 cover this item. They

maintain an average of 4.937, which indicates a high effect of this item on the success of electronic shopping. Another set of questions, Q7, Q10, Q15, Q19 and Q25 are associated with effectiveness and shopping where the mean of responses is 4.004 and it indicates that order size and negotiation play essential role on the success of electronic shopping. Finally, the last set of questions, Q5, Q13, Q18, Q21 and Q24, cover effectiveness and loyalty with an average of 3.901 which shows a relative importance of this factor on customer retention. In summary, effectiveness and shopping has the highest impact, followed by site attractiveness and effectiveness and shopping.

### 3. The results

In this section, we present details of our regression analysis between dependent variable which is the success of electronic marketing  $(Y_i)$  and five independent variables, which are Effectiveness and loyalty  $(X_{1i})$ , Site attractiveness  $(X_{2i})$ , Promotional Effectiveness  $(X_{3i})$ , Effectiveness and shopping  $(X_{4i})$  and Website Awareness  $(X_{5i})$ . Table 4 shows details of the results.

The summary of regression analysis

The summary of regression unarysis							
Model	Un standardized Coefficients	Standardized Coefficients	t	Sig.	Std.		
	В	Std. Error	Beta	В	Error		
Constant	.209	.811		1.79	.079		
Effectiveness and loyalty	2.07	.068	.092	2.46	.04		
Site attractiveness	3.12	0.27	.175	3.47	.030		
Promotional Effectiveness	5.06	.065	.251	3.15	.03		
Effectiveness and shopping	5.08	.071	.303	3.82	.029		
Website Awareness	3.10	.074	.175	2.39	.022		

# 3.1 Main hypothesis: Internet sales and electronic marketing

The first hypothesis is associated with the impact of internet sale on the success of the electronic marketing. As we have explained earlier, the null hypothesis is that there is no relationship between internet sales and success of electronic marketing. The Sig. value is 0.022 which means that we can reject the null hypothesis coming to conclusion that there is a meaningful relationship between internet sales and electronic marketing when the level of significance is five percent.

## 3.1.1. The impact of site awareness on the success of electronic marketing

The first sub-hypothesis is associated with the relationship between site awareness and success of electronic marketing and the null hypothesis is that there is no relationship between these two items. According to the results of Table 4, Sig value for this item is 0.04, which is well below 0.05 and we can reject the null hypothesis coming to conclusion that site awareness can significantly influence electronic marketing.

# 3.1.2. The impact of site attractiveness on the success of electronic marketing

The second sub-hypothesis is associated with the relationship between site attractiveness and success of electronic marketing and the null hypothesis is that there is no relationship between these two items. According to the results of Table 4, Sig value for this item is 0.022, which is well below 0.05 and we can reject the null hypothesis coming to conclusion that site attractiveness can significantly influence electronic marketing.

## 3.1.3. The impact of promotional sales on the success of electronic marketing

The third sub-hypothesis is associated with the relationship between promotional sales and success of electronic marketing and the null hypothesis is that there is no relationship between these two items.

According to the results of Table 4, Sig value for this item is 0.01, which is well below 0.05 and we can reject the null hypothesis coming to conclusion that promotional sales can significantly influence electronic marketing.

# 3.1.4. The impact of repurchase and shopping on the success of electronic marketing

The fourth sub-hypothesis is associated with the relationship between repurchase and shopping and success of electronic marketing and the null hypothesis is that there is no relationship between these two items. According to the results of Table 4, Sig value for this item is 0.022, which is well below 0.05 and we can reject the null hypothesis coming to conclusion that repurchase and shopping programs can significantly influence electronic marketing.

## 3.1.5. The impact of customer loyalty on the success of electronic marketing

The last sub-hypothesis is associated with the relationship between effectiveness of customer loyalty and success of electronic marketing and the null hypothesis is that there is no relationship between these two items. According to the results of Table 4, Sig value for this item is 0.04, which is well below 0.05 and we can reject the null hypothesis coming to conclusion that repurchase and customer loyalty can significantly influence electronic marketing.

In summary, we have realized that all five factors positively impact on the success of electronic marketing, significantly.

## 4. Conclusion

In this paper, we have presented an empirical study to measure the impact of five groups of factors including awareness from the site, site attractiveness, promotional effectiveness, effectiveness and Shopping impacts and effectiveness and loyalty on the success of electronic marketing. We have distributed a questionnaire consists of various questions and distributed them among 984 people and received 595 in Likert scale. The results of our study indicates that effectiveness and shopping has the highest impact, followed by site attractiveness and effectiveness and shopping. The results also indicate that all five items could impact the success of electronic marketing substantially.

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