

## SEARCH ENGINE MARKETING A NEW WAY OF MARKETING IN DIGITAL AGE

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### ABSTRACT

Search engine has become very strong tool for digital marketers because of internet user habitual behaviours. Most of the users begin their surfing with search box of search engine. Therefore, digital marketers are putting efforts to pull target audience from search engine result page. This paper investigates the mediating role of website optimisation for successful search engine marketing. This papers has taken keyword search as an independent variable, website optimisation as mediating variable, and search engine marketing as dependent variable. The convenience sampling technique was used to interview 367 respondent of Punjab, India. This finding suggest that keyword search plays vital role in the success of search engine marketing however, if website optimisation is done properly with the help of popular keyword then the effectiveness of search engine marketing increases. SPSS AMOS was used to analyse collected data and to reach specific conclusion.

**Keyword:** Search Engine Marketing, Website Optimisation, Keyword Search, Digital Age

### 1. INTRODUCTION

The discovery of internet have changed the way of living style. Digital devices have made our life very easy. Today, almost everything we can do with the help of digital devices therefore, our dependency on such devices is increasing day by day. Digital gadgets have become our personal digital assistance (PDA) and these devices are also ready to solve our problems. Today, we do not remember phone numbers, website URLs, and many information though we may using them frequently. Today, for any information we assign this task to search engine and explore internet to explore it. The online searching and shopping is increasing day by day in

India and throughout the world. Marketers and ecommerce business are doing well through digital marketing. Therefore, the competition on digital platform is also increasing day by day. Everyone is trying to capture more market share and become market leader. Searching information through search engine has become very common. Many a time, we know complete URL of website even though we visit website through search engine links (Introna and Nissenbaum 2000; Telang et al. 2004). Searching information online is ubiquitous and critical task in ecommerce (Gefen and Straub 2000).

Online search activities is considered as one of the common activities performed by users therefore it is getting importance in ecommerce. Whenever a user try to search information about product or services they usually type a keyword and seek website where relevant information relating to that keyword is available. It is a great opportunities for marketers to make their presence in the search engine result page so that user can click on the web-link and redirected to company's website (Garside 2007). Search engine provides two separate space for search results: (i) organic search results (non-paid) and (ii) inorganic search results (paid) (Kumar and Benbasat 2004). First one is done through search engine optimization which is free, where an expert or consultant is hired to optimize website pages for a list of popular keywords (Evans 2007). Second one is done through search engine marketing which is paid form of promotion where payment is based on bidding process. Search engine optimization method is appropriate for popular brand and search engine marketing is suitable for unknown brands.

Search engine has become powerful tools for unknown marketers to market and sell their products and services (Lalisan 2007). Search engine marketing helps to display unknown brand web-link in the inorganic search results area of search engine research pages (SERPs). The payment to search engine service provider is made only if a user click on the available link. Therefore, both the way it is good for marketers because it make presence as well as the charges are imposed by search engine provider on cost per click (CPC) basis. Although search engine marketing is efficient and cost effective, it is difficult to decide whether one should go for website

optimization or search engine marketing. This papers will fill the gap of decision making elements which will help marketers to decide about search engine marketing. The paper find out the mediating role of website optimization to conduct successful search engine marketing.

## **2. LITERATURE REVIEWS**

Performing search actions is very common in the world of internet. This is an important activity performed by internet users to find information (Pavlou and Fygensen, 2006). This is the reason marketers try to divert appropriate protects to their website. The targeting of internet users are based on search keyword and user's behavioural data. Search engine marketing is a paid form of marketing tool where advertisers pay bidding amount to search engine provider based on cost-per-click (CPC). Internet users use particular set of keyword to search a particular nature of product on internet. Search engine service provider places advertiser web-link on the top of in organic area of search engine result page (Gori and Witten, 2005; Delaney, 2006).

### **2.1 Search Engine Marketing**

Overwhelming number of customer uses search engine for search information related to product and services on internet. Similarly, half of the internet traffic starts their session with search engine page (NetRatings, 2006). Search engine marketing is a direct response model where most of internet user clicks on the top web-link appear in the search engine result page and which is very natural (Wasserman, 2006). It helps advertisers to place their web-link on the top so that user will click on their web-link and visit their website. It a very common digital marketing practice in the field of digital marketing (Jones, 2006). Many advertisers also feel that ever, if an internet user doesn't click on the web-link even though it gives a positive branding experience. Through effective optimization of website, search engine marketing helps to place unknown brand in between renowned brands (Fusco, 2005).

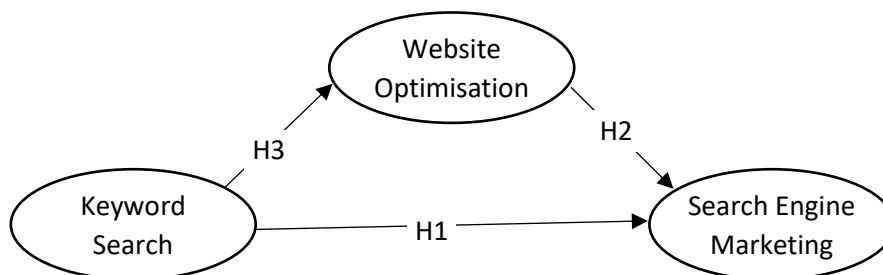
### **2.2 Website Optimisation**

Website optimisation is also known as search engine optimisation. The purpose of this activities to improve the website ranking for search engine. It helps in marketing the web-link listed on the top of organic search in the search engine result page (Malaga, 2008). Keywords and key phrases are most important elements of search engine algorithm (Colborn, 2005). The crawler searches the information which an internet user is will to get with the help of these keywords (Thurow 2003). The crawler ranks the website on various parameters wherein keyword has the highest weightage (Michael and Salter, 2007). Now, during the search engine marketing also search engine service providers charge to the advisor based on bidding amount. The website optimisation helps to reduce bidding price and also it helps to occupy first position in the search engine result page (Kisiel, 2010).

### 2.3 Keyword Search

Internet users type few words to search their query in the search box of search engine. The input which are type in to the search box is known as search keyword. Every business would like its web link to appear on the top of search engine research page because eighty percent of internet users stop at the first page of search engine result page (Nielsen, 2006). Similarly, most of the researchers only look at the top two results and go with either one (Granka, Joachims, and Gay, 2004; Dou et al., 2010). The search engine crawler checks the frequency heuristic measures of searched keyword availability in the website and decides the ranking of it. The ideal number of searched keyword on a webpage is 5-7 percent (Shenton, 2000).

Figure-1: Search Engine marketing and mediating role of website optimisation



Source: Author's Observation

The above figure-1 represents the relationship of independent and dependent variables, and hypotheses. The independent variable keyword search has direct impact on search engine marketing and website optimisation. It also represents the mediation impact of website optimisation on search engine marketing.

### 3. RESEARCH METHODOLOGY

The study is quantitative investigation on mediating role of website optimisation and search engine marketing. The independent variable keyword search, mediation variable website optimisation, and dependent variable search engine marketing is identified from various existing literatures. The study was conducted from March, 2020 to May, 2020. The convenience sampling technique was used to interview 367 digital marketers of Punjab, India. Questionnaire was used as an instrument to record responses of respondents which was circulated in the form of Google form through email and Whatsapp. The questionnaire was divided into four sections. First section consists of queries relating to socio-demographic profile of respondents and other three sections consists of queries relating to keyword search, website optimisation, and search engine marketing. SPSS Amos was used to analyses the empirical data and relationships of variables under this study.

### 4. DATA ANALYSIS AND INTERPRETATION

#### 4.1 Descriptive Analysis

Table-1: respondent socio-demographic profiles (N=367)

Age (yrs)	Count	Percent	Education	Count	Percent
21-30	107	29.16%	High School	101	27.52%
31-40	97	26.43%	Graduate	164	44.69%
41-50	80	21.80%	Post Graduate	102	27.79%
Above 50	83	22.62%			
Venture Type			Occupation		
Private	222	60.49%	Businessmen	147	39.2%
Partnership	47	12.81%	Salaried	210	56.0%
Proprietorship	98	26.70%	Others	18	4.8%

Source: Authors' Calculations

The above table-1 represent the frequency analysis of socio-demographic profiles of participants. The highest proportion of participants of age-group 21-30 and lowest proportion of participants are having age more than 50 years. Similarly, education-wise, the highest proportion of participants are graduate and almost equal amount of participants are high school pass out and post graduates. Meanwhile, the 60.49 percent of participants are working in private venture and 12.81 percent have private venture however, 26.70 percent of participants have their own proprietorship venture. Likewise, occupation-wise participation was highest from salaried, and lowed from others i.e. government officials, interns, etc.

#### 4.2 Measurement Model: Reliability and Validity

Table 2: Measurement Model Assessment

Latent Variables	Manifest Variables	Codes	Standardized		
			Factor loading	Mean	SD
Keyword Search	Popular Keywords	KS1	0.943	3.54	1.105
	Keyword Search Tools	KS2	0.930	3.70	1.216
	Length of keywords	KS3	0.913	3.74	1.315
	Local Keywords	KS4	0.920	3.64	1.329
			KS5	0.841	3.61
Website Optimisation	Using Backlinks	WO1	0.881	3.70	1.309
	Using Keyword in the page title	WO2	0.878	3.91	1.154
	Keyword as Videos name	WO3	0.897	3.81	1.225
	Keyword as Image name	WO4	0.903	3.75	1.240
	Incorporating keywords in site	WO5	0.870	3.80	1.234
Search Engine Marketing	History based SEM	SEM1	0.870	3.96	1.033
	Location based SEM	SEM2	0.906	3.82	0.95

Demography based SEM	SEM3	0.916	3.99	1.00
Behaviour based SEM	SEM4	0.892	3.94	0.98
Keyword based SEM	SEM5	0.884	3.93	1.00

Source: Authors' Calculations

The above table-2 represents measurement model assessment which includes standardised factor loading, mean scores, and standard deviation results. The standardised factor loading for all the items under this study are more than 0.70 which means all the items under this study have been retained. Similarly, the mean scores of all items are ranging from 3.54 to 3.99, and standard deviation scores are ranging from 0.952 to 1.329 which is an appropriated range. Therefore, this data can be considered for further analysis.

Table-3: Correlation Matrix and Quality criteria

	<b>Website Optimisation</b>	<b>Keyword Search</b>	<b>Search Engine Marketing</b>
<b>Website Optimisation</b>	1		
<b>Keyword Search</b>	0.449	1	
<b>Search Engine Marketing</b>	0.588	0.553	1
<b>Average Variance Extracted (AVE)</b>	0.785	0.828	0.799
<b>Composite Reliability (CR)</b>	0.938	0.940	0.942
<b>Cronbach Alpha</b>	0.959	0.948	0.952

Source: Authors' Calculations

The above table-3 represents correlation matrix and quality criteria of all the variables under this study. The correlation matrix shows that search engine marketing has strong correlation between website optimisation and keyword search whereas keyword search has moderate correlation with website optimisation. The correlations values in the table are not so much high therefore, the situation of multicollinearity may not happen. The average variance extracted values in the above table are more than 0.50 which indicates the mean squared loading for all the item associated with

variables are high. The convergent validity of all variables are also established as all variables expresses more than 50 percent variance of all items. Similarly, the shared variance of all variables are greater than their average variance extracted, this mean discriminant validity of all variables are also proven. The composite reliability of all variables ranges from 0.93 to 0.94 which fall between 0.70 and 0.95 therefore all variables internal consistency is also considered as ‘satisfactory to good’. The Cronbach Alpha values are more than 0.70 which indicated the reliability of data is also satisfactory.

Table 4: Model Fit Indices

<b>Fit Indices</b>	<b>Calculated Value</b>	<b>Threshold Range</b>	<b>Decision</b>
<b>GFI</b>	0.915	>0.90	Accepted
<b>CFI</b>	0.934	>0.90	Accepted
<b>NFI</b>	0.921	>0.90	Accepted
<b>RFI</b>	0.905	>0.90	Accepted
<b>IFI</b>	0.934	>0.90	Accepted
<b>TLI</b>	0.920	>0.90	Accepted
<b>RMSEA</b>	0.115	<0.10	Rejected
<b>CMIN/df</b>	4.826	Between 2 and 5	Accepted

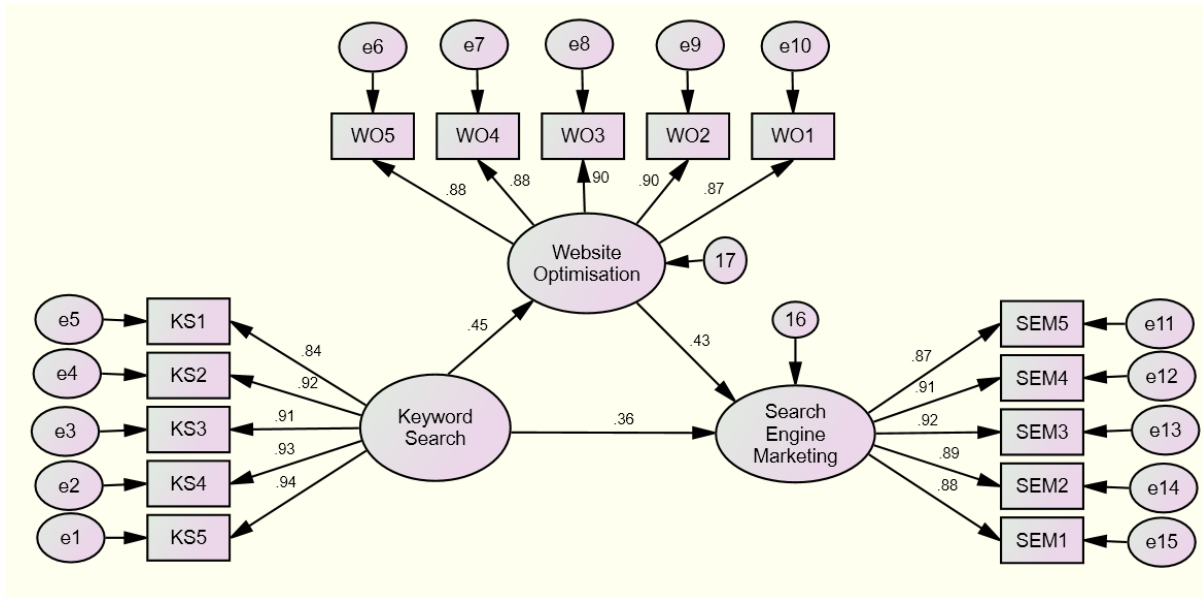
Source: Author's Calculations

The above table-4 shows various indices of model fit and hypotheses acceptance decision. The Goodness of Fit Index (GFI), Comparative Fix Index (CFI), Normed Fit Index (NFI), Relative Fit Index (RFI), Incremental Fit Index (IFI), and Tucker Levis Index (TLI) values are 0.915, 0.934, 0.921, 0.905, 0.934, and 0.92 respectively are within the acceptable range. Similarly, Root Mean Square Error of Approximation result is 0.115 which is rejected but very close to acceptable range. The Relative/Normed chi-square (CMIN/df) result is 4.82 which is within the range of 2-5. These all indices indicate the overall good model fit and also certify that the observed data validate theorised model fit with the help of confirmatory factor analysis.

### 4.3 Structural Equation Model

Figure 2: Path Diagram





Source: Authors' Calculations

The above figure-2 represents the path relationships between independent variable, mediating variable, and dependent variable. The direct impact of keyword search has less impact on search engine however, the mediating impact of website optimisation backed by keyword variable have more impact on search engine marketing. This indicates that improving the quality of website with the help of most searched keyword makes more successful search engine marketing.

Table 5: Structural Model Assessments

Hypothesis			Beta Estimate	S.E.	t-values	Final Decision
<b>H1</b>	Keyword Search	→ Website Optimisation	0.401	.046	8.750***	Accepted
<b>H2</b>	Keyword Search	→ Search Engine Marketing	0.259	.035	7.441***	Accepted
<b>H3</b>	Website Optimisation	→ Search Engine Marketing	0.341	.040	8.464***	Accepted

Source: Authors' Calculations \*\*\*p<0.001; \*\*p<0.05; \*p<0.10

The above table-5 indicates the structural model assessments and hypotheses acceptance decision. All the hypotheses under this study have

been accepted with the significance value  $p < 0.001$ . This denotes that keyword search has significant impact on website optimisation and search engine marketing. Similarly, it also indicates that website optimisation has significant impact on search engine marketing.

Table 6: Total Effects

Hypothesis	Specific Indirect Effects - Relationships	Beta Estimate	S.E.	t-values	Final Decision
H1	Keyword Search → Search Engine Marketing	0.326	.046	8.750***	Accepted
H2	Keyword Search → Website Optimisation → Search Engine Marketing	0.426	.035	7.441**	Accepted

Source: Authors' Calculations

\*\*\* $p < 0.001$ ; \*\* $p < 0.05$ ; \* $p < 0.10$

The above table-6 indicates the indirect total effects of independent variable with mediating variable on dependent variable. The result shows that the direct effect of keyword search has less impact on search engine marketing than the indirect effect. The indirect effect relationship accommodating mediating variable website optimisation has greater effect on search engine marketing. The both hypotheses have been accepted at significance level  $p < 0.001$ .

## 5. DISCUSSION ON FINDINGS

The objective of this study is to investigate the mediating role of website optimization to increase effectiveness of search engine marketing. From the finding it has been proved the keyword has important role search engine marketing however, it been also proved that if keyword search is mediated through website optimization the effectiveness of search engine marketing will increase. The identification of popular keywords is very easy nowadays because of various keyword analyzer tools. But optimisation of website is not easy as it requires web development knowledge as well as effective content development skills. Creating effective content helps in website optimisation by incorporating the popular keyword into web contents and meta-tags. Website optimisation helps to rank website in better position.

Search engine crawler gives more weightage to quality of content followed by keyword frequency. The bidding amount is calculated on the basis of website rank position. The top positioned website has to pay minimum bidding amount and also gets the top position in the inorganic area of search engine result page. Low bidding amount will help to reduce advertising amount and assist in running such campaign for longer period. If a campaign will run for longer, it will help to connect more number to target audience with the business.

## 6. IMPLICATIONS OF THIS STUDY

Providing a better way to digital marketers to conduct effective search engine marketing will help them to reduce their search engine marketing budget. It will help them to work more on website optimisation. It will also help them to identify effective keywords and increase their presence in the website content. It is also useful for digital marketer to conduct organic search marketing. Search engine optimisation will help to make the presence of web-link on the top of organic area of search engine result page.

## 7. CONCLUSION

Digital marketing has facilitated two most effective tools for marketer that are cost-effective and accountability. Whom an ad is targeted and how many of them have seen the ad analytics is easily provided by digital ad service providers. Therefore, marketers have to plan and organize their campaign in effective way to reach more customers with low budgets. Keyword planner easily provides popular keywords whose presence is must on the website. Quality web content helps to optimize website in better way. Thus, marketers need to place popular keyword in the web content and increase the effectiveness of search engine marketing.

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