

# A STUDY ON DIGITAL PENETRATION OVER TRADITIONAL ADVERTISING AT SOFTWARE COMPANIES

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#### ABSTRACT

These days, everyone is greatly influenced by web marketing. It has advanced to the point that buyers are more likely to check internet reviews of products before making a purchase than they ever were. Previously, people would buy any helpful goods if they found the commercial appealing or through word of mouth. Before, people would pay whatever the price was at the store, but now that e-commerce is growing in the nation, they are more likely to compare prices and buy the item that is less expensive. then became aware of this trend and realized that, to a certain extent, online marketing is affecting. Therefore, I thought it would be interesting to learn how online marketing is influencing other individuals in addition to myself, what its effects are, and how it may be helpful for other businesses in the city. This research was started to evaluate the efficiency of conventional marketing strategies used by software businesses. The study's findings will be useful to software company management in understanding, meeting, or exceeding the expectations of clients who have purchased website traffic building services. The study's main goal is to examine how traditional advertising services compare to digital advertising in software firms. The secondary goals are to examine customer interest in placing advertisements across traditional and digital media, comprehend the most popular social media platform, gauge customer satisfaction with software companies' traditional marketing services, and offer pertinent suggestions for enhancing the efficiency of traditional marketing services and raising customer satisfaction levels overall. In the research, the convenience sampling method was employed. To gather the opinions of 120 customers, multiple choice questions have been used. Karl Pearson's Correlation, the Chi-Square test, and the One-Way ANOVA test have all been used to analyse the acquired data. This study's numerous new discoveries have helped to provide a few ideas for how to enhance the traditional marketing services for its clients.

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#### **INTRODUCTION**

Digital marketing refers to the promotion of goods or brands through one or more electronic media platforms. For instance, promotional efforts conducted via the Internet, social media, mobile phones, and electronic billboards, as well as via digital, television, and radio channels, could be employed as part of a company's digital marketing plan. The Internet's widespread use and the efficiency of digital marketing channels in generating sales and brand awareness are the main causes of the industry's explosive expansion. Digital marketing provides more realistic expenses than traditional advertising (essential for small and medium-sized firms and start-ups), precise targeting, and superior reporting. This research examines the extent to which traditional advertising is becoming digitalized, as well as the techniques used by commercial organizations and the marketing dichotomy between traditional and non-traditional marketing strategies. The study examined how the two distinct strategic approaches used by business organizations to achieve the twin goals of generating revenue and profit and making sure that customers' needs and wants are adequately met are based on the dynamic nature of marketing. The research's main goal was to determine which of the two strategies and their respective methodologies would better achieve the aforementioned goals of business organizations. The impact of this study thesis on an organization's capacity to advertise its goods and services to clients is what makes it significant. By controlling marketing expenditures, which results in fewer overhead costs, corporate organizations can reap significant financial benefits.

#### **OBJECTIVES**

#### PRIMARY OBJECTIVE

• To study the digital penetration over traditional advertising services at Software companies

## SECONDARY OBJECTIVES

• To study the interest of customers to give ads in various traditional medium and digital medium

- To identify the awareness of customers on digital platform
- To understand the most preferred social media platform
- To assess the satisfaction level with Software companies on the traditional marketing

#### services

• To provide suitable suggestions for improving the effectiveness of traditional marketing services and improve the overall customer satisfaction.

#### **SCOPE OF THE STUDY**

This research examines the extent to which traditional advertising is becoming digitalized, as well as the techniques used by commercial organizations and the marketing dichotomy between traditional and non-traditional marketing strategies. The study examined how the two distinct strategic approaches used by business organizations to achieve the twin goals of generating revenue and profit and making sure that customers' needs and wants are adequately met are based on the dynamic nature of marketing. The research's main goal was to determine which of the two strategies and their respective methodologies would better achieve the aforementioned goals of business organizations. The impact of this study thesis on an organization's capacity to advertise its goods and services to clients is what makes it significant. The knowledge of which has significant financial advantages for commercial organizations by lowering administrative expenses and controlling marketing costs. Customers also stand to gain greatly from it because fewer marketing expenses translate into lower overhead costs that are passed on to customers in the form of lower prices for goods and services.

#### LIMITATION OF THE STUDY

For anything there should be some limitations like that my project also have certain limitations. The following are some limitations what I faced:

1. The information provided by majority of the respondents could also be biased or inaccurate. No independent verification of the data was possible.

2. Time is one major constraint, which limits the effective data collection.

3. non-availability of data collection from all the customer of Software companies

4. The sample size is only 120 customers so the sample may not be truly representative of the total population

5. Reliability and accuracy of the analysis depends on the respondents' openness and trueness towards each question in the questionnaire.

#### **REVIEW OF LITERATURE**

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SEO has been defined in different ways by authors to capture the dynamic nature of this concept. For example, Cheffey et al., (2006) defined SEO as a structured approach used to increase the position of a company or its products in search engine natural or organic results listings for selected keywords or phrase. Search engine optimization (SEO) is a set of techniques aimed at improving the ranking of a website in search engine listings, thereby making it more likely that the end user will choose to visit the site (Vryniotis, 2015). SEO gathers the techniques leading to a better indexing of one's site by one or several targeted search engines (Gandour and Regolini 2011). It is also defined as the process of identifying factors in a webpage which would impact search engine accessibility to it and fine-tuning the many elements of a website so it can achieve the highest possible visibility when a search engine responds to a relevant query (Zgang and Dimitroff, 2005).

Its role is to achieve the highest position or ranking on search engines, such as Google, Yahoo! and MSN Search and so on, after a specific combination of keywords or key phrase that is typed in. The final goal is for the site to be better ranked by one or several targeted search engines and therefore appearing higher in their results lists for specified requests (Gandour and Regolini 2011). Search engine optimization (SEO) is a systematic approach to improving the membership website on the Internet unpaid wage (Organic result), and focus on the number of visitors to the site and don't on the quality of the search engine, (Google, Search Engine Optimization Starter Guide, 2010).

SEO factors are notoriously difficult to enumerate, as search engines do not reveal the specific factors used when determining the ranking of a website (Lourdes and Paloma 2013). SEO factors can generally be categorized into two groups (Enge et al., 2009; Evans,2007 SEOmoz, 2009). The first group, known as on-page factors, includes those factors related to information that can be gathered directly from the pages of a website whose relevance is to be optimized, such as the existence and frequency of keywords. The second group, known as off-page factors, includes those factors related to information about the website being optimized that can be collected from other, external websites. This study will focus on on-page factors.

In addition to using Search Engine Optimization (SEO) techniques, Google recommends using a general sitemap for human visitors and an XML Sitemap to improve the visibility of pages to users and search engines. Navigation should be simple to follow and be made from text instead of Flash or JavaScript (Google, Search Engine Optimization Starter Guide, 2010). Also, Eur. Chem. Bull. 2023, 12(Special Issue 8),2509-2521 2512 Google recommends using the Robots.TXT file to let search engines know what should be shown in search results and what should be hidden. A site without a Robots.TXT file cannot grant search engines the permission needed to look at their pages or show search results to searchers (Google, Search Engine Optimization Starter Guide, 2010).The common elements that occur among different sources are the elements that were used in the instrument. The SEO component elements include these seven items: the H1 header tag, page titles, description meta tag, relevant keyword use, user friendly page address, Sitemap.XML file presence, and Robots.TXT file presence.

Research conducted worldwide on search engine optimization is considered very few. We can assume that this research is the first one to tackle this issue in Jordan and maybe in the Arab world as well. Most of the research focused on search engine in general (Ramaraj, 2013), search engine advertisement (Jafarzadeh, 2011), and search engine optimization in education (Gandour and Regolini 2011). Based on that, research that link SEO with online advertisement is considered very rare. In the following lines we will highlight some of previous studies focused on SEO and online advertisement.

The purpose of Evans (2007) paper was to identify the most popular techniques used to rank a web page highly in Google. The paper presents the results of a study into 50 highly optimized web pages that were created as part of a Search Engine Optimization competition. The study focuses on the most popular techniques that were used to rank highest in this competition, and includes an analysis on the use of PageRank, number of pages, number of in-links, domain age and the use of third party sites such as directories and social bookmarking sites. A separate study was made into 50 non-optimized web pages for comparison. The paper provides insight into the techniques that successful Search Engine Optimizers use to ensure a page ranks highly in Google.

While Singh et al., (2011) investigate the impact of Search Engine Optimization on Advertisement. The paper evaluates the impact of SEO on firms' advertisement in IT companies of north India. The study use quantitative and qualitative research methodology. The results of the study show that search engine optimization affects advertisement and sales. Most of the people use the search engines like Google, MSN, Altavista etc for searching for product or services and more than 90% people select the product from first page only and out of that 90% more than 80% select the product or services from first three or four. Eur. Chem. Bull. 2023, 12(Special Issue 8),2509-2521

The companies who are using the SEO for the purpose of advertisement are getting more new customer than the companies using the other methods. After applying the statistical tools, its shows that the objectives of the research is very much true and there is a visible effect of the SEO on the advertisement of companies and the companies using the SEO for the advertising are generating revenue than the other companies. Kaurin and Dragić, (2012) research aimed to determine the influence of Meta Tags usage on web rating within Search Engine Results Pages (SERP) by examining travel agencies in Serbia, as a relatively new but the large market, and their knowledge and right usage of available technologies of Meta Tags usage. Research covered a total of 66 travel agencies operating in Serbia. Companies are mostly from cities in the regional centers. The study used quantitative and qualitative research methodology. Research result shows that 41 of 66 companies (62%) are maintaining their own website, and that the rest (25 companies, 38%) don't have their internet presentation or are using other websites for their promotion. Because the research should provide the website positioning within SERP, we would be considering only those companies that have their own website presentation. Berman and Katonay (2012) study the impact of search engine optimization (SEO) on the competition between advertisers for organic and sponsored search results.

There is, however, a sizeable theoretical and empirical literature on search engines that focuses on the sponsored links that appear alongside the organic results. The theoretical literature has in particular focused on the auction mechanism behind these paid results (e.g., Edelman, Ostrovsky, and Schwarz, 2007; Varian, 2007). Earlier studies took user behavior as given; more recent work by Chen and He (2011) as well as Athey and Ellison (2012) take into account that users search optimally. White (2012) and Xu, Chen, and Whinston (2012) focus on trade-offs between organic and sponsored search results.

# **RESEARCH METHODOLOGY**

This study uses a quantitative research design that involves employing a standardised questionnaire to collect data from software company clients. Both primary and secondary data were used in this investigation. The data were gathered using a sampling method called convenience sampling. The collected data were evaluated experimentally using statistical methods like correlation, ANOVA, and Chi-Square analysis.

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# <u>CHI- SQUARE TEST I – $(\psi^2)$ </u>

Chi-square is the sum of the squared difference observed (o) and the expected (e) data (or the deviation, d), divided by the expected data in all possible categories.

# Null hypothesis (Ho):

There is no relationship between age classification and profession.

# Alternate hypothesis (H1):

There is relationship between age classification and profession.

Case Processing Summary							
	Cases						
	Va	lid	Mis	sing	Total		
	Ν	Percent	Ν	Percent	Ν	Percent	
AGE CLASSIFICATION * PROFESSION	120	100.0%	0	0.0%	120	100.0%	

AGE CLASSIFICATION * PROFESSION Crosstabulation								
				PROFESSION				
			Service	Profession	Business	Studen	Other	
				al	person	t		
		Count	21	14	0	0	0	35
Below 3	Polow 20	% within AGE CLASSIFICATION	60.0%	40.0%	0.0%	0.0%	0.0%	100.0 %
	Below 50	% within PROFESSION	100.0 %	42.4%	0.0%	0.0%	0.0%	29.2%
		% of Total	17.5%	11.7%	0.0%	0.0%	0.0%	29.2%
	21.40	Count	0	19	21	0	0	40
AGE CLASSIFICATIO		% within AGE CLASSIFICATION	0.0%	47.5%	52.5%	0.0%	0.0%	100.0 %
N 31-40	51-40	% within PROFESSION	0.0%	57.6%	40.4%	0.0%	0.0%	33.3%
		% of Total	0.0%	15.8%	17.5%	0.0%	0.0%	33.3%
41-50		Count	0	0	25	0	0	25
	% within AGE 41-50 CLASSIFICATION	0.0%	0.0%	100.0%	0.0%	0.0%	100.0 %	
		% within PROFESSION	0.0%	0.0%	48.1%	0.0%	0.0%	20.8%

		% of Total	0.0%	0.0%	20.8%	0.0%	0.0%	20.8%
			0	0	6	10	4	20
51 and		% within AGE CLASSIFICATION	0.0%	0.0%	30.0%	50.0%	20.0%	100.0 %
	above	% within PROFESSION	0.0%	0.0%	11.5%	100.0 %	100.0 %	16.7%
		% of Total	0.0%	0.0%	5.0%	8.3%	3.3%	16.7%
Total		Count	21	33	52	10	4	120
		% within AGE CLASSIFICATION	17.5%	27.5%	43.3%	8.3%	3.3%	100.0 %
		% within PROFESSION	100.0 %	100.0%	100.0%	100.0 %	100.0 %	100.0 %
		% of Total	17.5%	27.5%	43.3%	8.3%	3.3%	100.0 %

Chi-Square Tests							
	Value	df	Asymp. Sig. (2-				
			sided)				
Pearson Chi-Square	176.470 <sup>a</sup>	12	.000				
Likelihood Ratio	178.639	12	.000				
Linear-by-Linear Association	87.460	1	.000				
N of Valid Cases	120						
a. 10 cells (50.0%) have expected count less than 5. The minimum expected							
count is .67.							

## **INFERENCE:**

Since the calculated value is greater than the tabulated value, we accept the alternate hypothesis and hence there is a relationship between age classification and profession.

## **ONE-WAY ANOVA CLASSIFICATION**

## Null hypothesis (Ho):

There is a significance difference between awareness over traditional advertising and brouchers painting material.

## Alternate hypothesis (H1):

There is no significance difference between awareness over traditional advertising and brouchers painting material.

Descriptive								
AWARENESS OV	AWARENESS OVER TRADITIONAL ADVERTISING							
	Ν	Mean	Std.	Std. Error	95% Confiden	ice Interval for	Minimum	Maximum
			Deviation		Mean			
					Lower Bound	Upper Bound		
Like to use	34	1.47	.507	.087	1.29	1.65	1	2
Don't want to use	86	3.26	.814	.088	3.08	3.43	2	5
Total	120	2.75	1.094	.100	2.55	2.95	1	5

Test of Homogeneity of Variances							
AWARENESS OVER TRADITIONAL ADVERTISING							
Levene Statistic df1 df2 Sig.							
3.140 1 118 .07							

ANOVA							
AWARENESS OVER TRADITIONAL ADVERTISING							
	Sum of Squares	df	Mean Square	F	Sig.		
Between Groups	77.657	1	77.657	141.320	.000		
Within Groups	64.843	118	.550				
Total	142.500	119					

## **INFERENCE:**

Since the calculated value is greater than the tabulated value, we accept the alternate hypothesis and hence there is a relationship between awareness over traditional advertising and brouchers painting material.

## **ANALYSIS USING KARL PEARSON'S CORRELATION**

Correlation analysis is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables.

## Null hypothesis (H0):

There is positive relationship between television ads and television promotions.

#### Alternate hypothesis (H1):

There is negative relationship between television ads and television promotions

Correlations

		television ads	television promotions		
	Pearson Correlation	1	.689**		
television ads	Sig. (2-tailed)		.000		
	Ν	120	120		
	Pearson Correlation	.689**	1		
television promotions	Sig. (2-tailed)	.000			
	Ν	120	120		
**. Correlation is significant at the 0.01 level (2-tailed).					

#### **INFERENCE:**

Since r is positive, there is positive relationship between television ads and television promotions.

# **FINDINGS:**

- Most of the respondents are at the age 31-40.
- Most of the respondents are business person.
- Most of the respondents are having Facebook account.
- Most of the respondents are have awareness about telemarketing.
- Most of the respondents are have respondents are have awareness on Facebook.
- Most for the respondent say like to use outdoor advertisement for hoardings.
- Most for the respondent say like to use business cards as a painting material.
- Most for the respondent say like to use radio for public service announcement(psa).
- Most for the respondent say don't want to use telemarketing in marketing research.
- Most for the respondent say don't want to use promotions.
- Most for the respondent say like to use sweepstakes contests and giveaways.
- Most for the respondent say don't want to use seminar as a public event.
- Most for the respondent say don't want to use digital platform of blogs in media main streams.
- Most for the respondent say don't want to use digital platform of digital gallery in videos.
- Most for the respondent say like to use product as a digital platform of online stores.
- Most for the respondent say like to use twitter as a digital platform of social media.

- Most for the respondent say don't want to use digital platform online platforms in digital ads.
- Most for the respondent provide 1<sup>st</sup> rank for digital platform.
- Most for the respondent provide 1<sup>st</sup> rank for traditional platform.
- Most for the respondent provide 1<sup>st</sup> rank for survey.

# CONCLUSION

As previously stated, online marketing is a relatively new phenomenon in India. Beforehand, there was just physical marketing, and most people were unaware of what online marketing was. However, the pattern is now shifting, and internet usage is rising nationwide. India used to have a very low literacy rate and few people understood how to use a computer, but in more recent years, literacy rates have increased and even young children are being taught how to use computers in the classroom. Children are now educating their parents and others about the things that are advertised online thanks to this trend.

This study was conducted to better understand how traditional advertising is being replaced by digital advertising at software companies. Responses from the customers have been gathered and analysed for this purpose. A few important recommendations have been made to the management of software firms based on the research's findings in order to increase the general effectiveness of traditional marketing services for their clients.

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