

**A STUDY ON SEARCH ENGINE OPTIMISATION IN MODIFYING
THE BUYING BEHAVIOUR OF CUSTOMERS**

submitted in partial fulfilment of the requirements for the award of

MASTER OF BUSINESS ADMINISTRATION

BY

SOUVITH KUMAR SINGH S

42410199



**DEPARTMENT OF BUSINESS ADMINISTRATION
SCHOOL OF MANAGEMENT STUDIES**

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

**ACCREDITED WITH GRADE “A++” BY NAAC
JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI- 600119**

DECEMBER – 2023



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CATEGORY - 1 UNIVERSITY BY UGC

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **SOUVITH KUMAR SINGH S (42410199)** who has done the Project work entitled “**A STUDY ON SEARCH ENGINE OPTIMISATION IN MODIFYING THE BUYING BEHAVIOUR OF CUSTOMERS**” under my Supervision from October 2023 to December 2023.

(Dr. Blessie Pathmu)

Internal Guide

External Guide

Dr. BHUVANESWARI. G, MBA., Ph.D.

Dean - School of Management Studies

Submitted for Viva voice Examination held on_____.

Internal Examiner

(Name in capital letter
with signature)

External Examiner

(Name with capital letter
with signature)

DECLARATION

I am **SOUVITH KUMAR SINGH S (42410199)** hereby declare that the project entitled "**A STUDY ON SEARCH ENGINE OPTIMISATION IN MODIFYING THE BUYING BEHAVIOUR OF CUSTOMERS**" done by me under the guidance of **Dr. BLESSI PATHMU** is submitted in partial Fulfilment of the requirements award of MASTER OF BUSINESS ADMINISTRATION.

DATE:

PLACE:

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to Board of Management of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey my sincere thanks to **Dr. G. Bhuvaneswari, MBA., Ph.D., Dean - School of Management Studies** and **Dr. A. Palani, M.Com., M.Phil., M.B.A., Ph.D., - Head - School of Management Studies** for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense+ of gratitude to my Project Guide **Dr. Blessie Pathmu** for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the **School of Management Studies** who were helpful in many ways for the completion of the project.

SOUVITH KUMAR SINGH S

TABLE OF CONTENT

CHAPTER NO.	TITLE	PAGE NO.
	ABSTRACT	i
	LIST OF TABLES	ii
	LIST OF CHARTS	iv
1	INTRODUCTION	1
	1.1 Introduction	1
	1.2 Objectives of Study	9
	1.3 Need for the Study	9
	1.4 Scope of the Study	9
	1.5 Significance of the Study	10
2	REVIEW OF LITERATURE	11
	2.1 Review of Literature	11-19
3	RESEARCH METHODOLOGY	20
	3.1 Research Methodology	20
	3.2 Research Design	20
	3.3 Sampling Size	21
	3.4 Sampling Technique	21
	3.5 Methods of data collection	21
	3.6 Statement of Hypothesis	23

	3.7 Data Analysis	24
	3.8 Statistical Tools used	24
4	DATA ANALYSIS AND INTERPRETATION	27
	4.1 Percentage Analysis	27-48
	4.2. Hypothesis testing	49-50
5	FINDINGS, SUGGESTIONS AND CONCLUSION	51
	5.1 Findings	51
	5.2 Suggestions	52
	5.3 Limitations of the study	53
	5.4 Conclusion	54
	REFERENCES	55-56
	ANNEXURE 1 – QUESTIONNAIRE	57-62

Abstract:

This study explores the influence of Search Engine Optimization (SEO) advertisements on customer behaviour and purchasing decisions. SEO is a strategic approach to enhance website visibility in search engine results, and its advertisements, often targeted and personalized, play a crucial role in shaping consumer actions. The research aims to understand the behavioural aspects of customers exposed to SEO ads, evaluate the impact on purchasing power, examine reactions to different types of SEO ads, and identify dimensions of the buying process influenced by SEO ads. The scope covers audience reach, engagement, conversion, and customer retention. The study's significance lies in contributing insights for businesses, the government, and consumers regarding economic stability, self-awareness, and product preferences. The objectives include assessing the behavioral aspect, measuring the level of influence on purchasing decisions, and understanding the dimensions influenced by SEO ads. The conceptual framework discusses targeted advertising through various channels, including search engine marketing, social media targeting, and behavioral targeting. The literature review examines previous research on SEO, online advertising, and consumer behavior, revealing gaps in understanding the evolving landscape of digital marketing. The research contributes to a comprehensive understanding of how SEO advertisements impact customer behavior in the dynamic online marketplace.

LIST OF TABLES

Table no.	Tilte	Page no.
4.1.1	Gender of the respondent	27
4.1.2	Age of respondent.	28
4.1.3	Location of respondent.	29
4.1.4	Educational level of respondent	30
4.1.5	Employment status of respondents	31
4.1.6	Average hours spent on internet per day by the respondent.	32
4.1.7	Analysis of attention on online ads	33
4.1.8	Analysis on how do they find such ads.	34
4.1.9	Analysis of how much influence do they feel ads have over buying behaviour	35
4.1.10	Analysis of how often do they use search engines like google to find information or products online.	36
4.1.11	Analysis on have they ever clicked on a search engine results or advertisement	37
4.1.12	Analysis on how often do they get ads on your preference	38
4.1.13	Analysis on how do the respondent feel on types of seo ads.	39
4.1.14	Analysis on the credibility of products or services advertised through seo.	41
4.1.15	Analysis on the position of website or advertisement influences the perception of the respondents	42
4.1.16	Analysis on the importance on the relevance of the content on the landing page.	43
4.1.17	Analysis on unplanned purchases done by respondents in terms of seo	44
4.1.18	Analysis on how often do you research products before making a purchase.	45

4.1.19	Analysis on feeling of misleading by an advertisement	46
4.1.20	Analysis on decision taken by the respondents after being tricked.	47
4.1.21	Analysis on overall impact of popup ads on browser experience.	48
4.2.1	Anova analysis for hypothesis-1	49
4.2.2	T test analysis for hypothesis-2	49
4.2.3	Anova analysis for hypothesis-3	50

LIST OF CHARTS

Figure no.	Title	Page no.
4.1.1	Gender of the respondent	27
4.1.2	Age of respondent.	28
4.1.3	Location of respondent.	29
4.1.4	Educational level of respondent	30
4.1.5	Employment status of respondents	31
4.1.6	Average hours spent on internet per day by the respondent.	32
4.1.7	Analysis of attention on online ads	33
4.1.8	Analysis on how do they find such ads.	34
4.1.9	Analysis of how much influence do they feel ads have over buying behaviour	35
4.1.10	Analysis of how often do they use search engines like google to find information or products online.	36
4.1.11	Analysis on have they ever clicked on a search engine results or advertisement	37
4.1.12	Analysis on how often do they get ads on your preference	38
4.1.13	Analysis on how do the respondent feel on types of seo ads.	39
4.1.14	Analysis on the credibility of products or services advertised through seo.	41
4.1.15	Analysis on the position of website or advertisement influences the perception of the respondents	42

4.1.16	Analysis on the importance on the relevance of the content on the landing page.	43
4.1.17	Analysis on unplanned purchases done by respondents in terms of seo	44
4.1.18	Analysis on how often do you research products before making a purchase.	45
4.1.19	Analysis on feeling of misleading by an advertisement	46
4.1.20	Analysis on decision taken by the respondents after being tricked.	47
4.1.21	Analysis on overall impact of popup ads on browser experience.	48

CHAPTER-1

1.1 INTRODUCTION

SEO is short for **S**earch **E**ngine **O**ptimization. Search engine optimization is a methodology of strategies, techniques and tactics used to increase the number of visitors (traffic) to a website by obtaining a high-ranking placement in the search results page of a search engine including Google, Bing, Yahoo and other search engines. Generally, people get ads based on the search history and their preferences and wants, so the information gathered by an individual and displaying ads on their window based on their preference is SEO advertisements, this advertisement comes in various forms like pop-in ads, and usually these appear in the social feeds and before any video plays in YOUTUBE. These advertisements are also called as Targeted advertising, it is a form of advertising, including online that is directed towards audiences with certain traits, based on the product or person the advertiser is promoting. These traits can either be demographic which are focused on race, economic status, sex, age, generation, the level of education, income level, and employment or they can be psychographic focused which are based on the consumer's values, personality, attitudes, opinions, lifestyles and interests. They can also be behavioural variables, such as browser history, purchase history and other recent activity. Targeted advertising is focused on some traits and the consumers who are likely to have a strong preference will get the



message instead of those who have no interest and whose preferences do not match a product's attribute. This eliminates waste.

A recent study from comScore showed that U.S. Internet users are 49 percent more likely to visit an advertiser's site if they have previously been exposed to display ads. Of these Internet users, it was found that viewers are 40 percent more likely to conduct a search query on an advertiser trademark after seeing a display advertisement. The irresistible conclusion of this study is the important value of the view in addition to the click through. To quote: "display advertising, despite a lack of clicks, can have a significant positive impact on consumer behaviour.

SEO is significant because it makes your website more visible, and that means more traffic and more opportunities to convert prospects into customers beyond that, it is also a valuable tool for brand awareness, building relationships with prospects, and positioning yourself as an authoritative and trustworthy expert in your field. Content is a vital part of SEO because it's the vehicle you use to reach and engage audiences. For instance, if you owned a nursery and wanted to increase your visibility, you might publish a series of blogs about gardening, choosing the right species of plants, growing tips, and more. When a person who wanted to know about gardening went looking for that information, your blog would come up, and you'd be able to build a relationship with that prospect by providing valuable information. When the time came for that prospect to buy a plant, for instance, you'd be the first nursery that came to mind. Today's content must be educational, but also interesting, relevant, engaging, and shareable.

As you can see, SEO is a complex undertaking that involves many different techniques, tactics, and best practices. Moreover, these best practices are always evolving as consumer and web-user behaviour change, as new technologies emerge, and as search engines change their algorithms. That being said, SEO is still of the utmost importance for any business that wants to be visible online, so your efforts are well worth it. so, this study will show how much SEO advertisements affects the behaviour of customers.

CONCEPTUAL FRAMEWORK

Targeted advertising is a type of advertising, which includes online that is directed towards audiences with certain things, related to the product or person the advertiser is promoting. These traits can either be demographic which is focused on various factors like race, economic status, sex, age, generation, the level of

education, income level, and employment or they can be psychographic focused which are based on the consumer's values, personality, attitudes, opinions, lifestyles and interests. They can also be behavioural variables, such as browser history, purchase history and other recent activity. This focuses on certain traits and the consumers who are likely to have a strong preference will receive the message instead of those who have no interest and whose preferences do not match a product's attribute. This eliminates waste.



Traditional forms of advertising, which includes billboards, newspapers, magazines and radio, are progressively becoming replaced by online advertisements. Information and communication technology (ICT) space has transformed over recent years, resulting in targeted advertising to spread across all ICT technologies, such as web, IPTV, and mobile environments. In next generation advertising, the importance of targeted advertisements will radically increase, as it spreads across numerous ICT channels cohesively.

The development of new online channels, the demand for targeted advertising is rising because companies aim to reduce wasted advertising by ways of information technology. Most targeted new media advertising currently uses second-order proxies for targets, such as tracking online or mobile web activities of consumers, associating historical web page consumer demographics with new consumer web page access, using a search word as the basis for implied interest, or contextual advertising.

Search engine marketing

Search engine marketing uses search engines to reach target audiences. For example, Google's Remarketing Campaigns are a type of targeted advertising where websites use the IP Address of computers that have visited their websites to remarket their ad specifically to the user who has already been on their website as they use websites that are a part of the Google display network, or when searching for keywords related to a product or service on the google search engine. Dynamic remarketing can improve the targeted advertising as the ads are able to include the products or services that the consumers have already viewed on the advertisers' website within the ads.



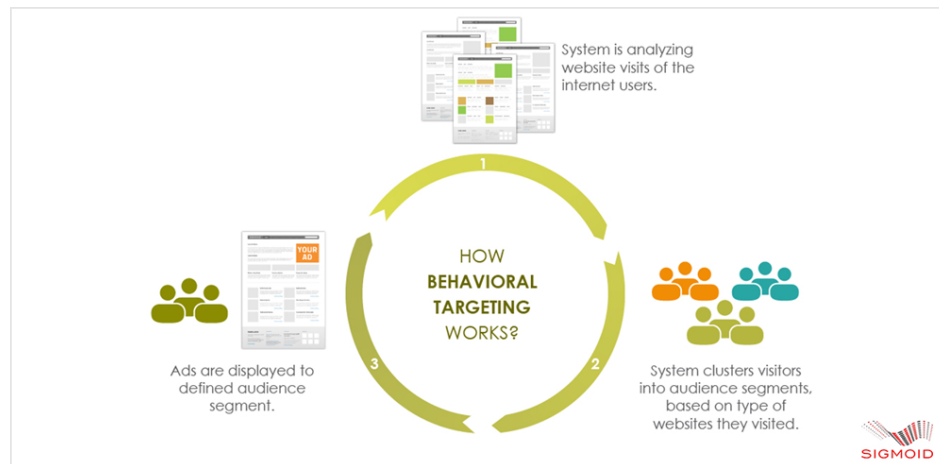
Google AdWords have various platforms how the ads appear. The Search Network displays the ads on google search other Google sites such as Maps and Shopping, and hundreds of non- Google search partner websites that show AdWords ads matched to search results. The Display Network includes a collection of Google websites (like google finance, g-mail, blogger and YouTube) partner sites, and mobile sites and apps that show AdWords ads matched to the content on a given page. These two kinds of Advertising networks can be beneficial for each specific goal of the company, or type of company. For example, the search network can benefit a company with the goal of reaching consumers searching for a particular product or service.

Other ways Advertising campaigns are able to target the user is to use browser history and search history, for example, if the user typed in promotional pens in a search engine, such as Google; ads for promotional pens will appear at the top of the page above the organic pages, these ads will be targeted to the area of the users IP address, showing the product or service in the local area or surrounding regions, the higher ad position is a benefit of the ad having a higher quality score. The ad quality is affected by the 5 components of the quality score:

- The ad's expected click-through rate
- The quality of the landing page
- The ad/search relevance
- Geographic performance
- The targeted devices

When ranked based on these criteria, it will affect the advertiser by improving ad auction eligibility, actual cost per click (CPC), ad position, and ad position bid estimates; to summarise, the better the quality score, the better ad position, and lower costs.

Google uses its display network to track what users are looking at and to gather information about them. When a user goes onto a website that uses the google display network it will send a cookie to Google, showing information on the user, what he or she searched, where they are from, found by the IP address, and then builds a profile around them, allowing google to easily target ads to the user more specifically. For example, if a user went onto promotional companies' websites often, that sell promotional pens, Google will gather data from the user such as age, gender, location, and other demographic information as well as information on the websites visited, the user will then be put into a category of promotional products, allowing Google to easily display ads on websites the user visits relating to promotional products. these types of adverts are also called behavioural advertisements as they track the website behaviour of the user and displays ads based on previous pages or searched terms.



Social media targeting is a form of targeted advertising, that uses general targeting attributes such as geotargeting behavioural targeting, socio-psychographic targeting, and gathers the information that consumers have provided on each social media platform. According to the media users' view history, customers who are interested in the stuff will be automatically targeted by the advertisements of certain products or service. For example, on Facebook, if a consumer has liked clothing pages, they will receive ads based on those page likes and the area they have said they live in, this allows advertisers to target very specific consumers as they can specify cities and interests to their needs. Social media also creates profiles of the consumer and only needs to look at one place, one the users' profile to find all interests and 'likes'.

E.g. Facebook lets advertisers target using broad characteristics like Gender, Age, and Location. Furthermore, they allow more narrow targeting based on Demographics, Behaviour, and Interests

Advertisements can be targeted to specific consumers watching digital cable or over-the-top video. Targeting can be done according to age, gender, location, or personal interests in films, etc. Cable box addresses can be cross-referenced with information from data brokers like [Acxiom](#), [Equifax](#), and [Experian](#), including information about marriage, education, criminal record, and credit history. Political campaigns may also match against public records such as party affiliation and which elections and party primaries the view has voted in.

Mobile devices Since the early 2000s, advertising has been pervasive online and more recently in the mobile setting. Targeted advertising based on mobile devices allows more information about the consumer to be transmitted, not just their interests, but their information about their location and time. This allows advertisers to produce advertisements that could cater to their schedule and a more specific changing environment.

Content and contextual targeting The most straightforward method of targeting is content/contextual targeting. This is when advertisers put ads in a specific place, based on the relative content present. Another name used is content-oriented advertising, as it is corresponding to the context being consumed. This targeting method can be used across different mediums, for example in an article online, purchasing homes would have an advert associated with this context, like an insurance ad. This is usually achieved through an ad matching system which analyses the contents on a page or finds keywords and presents a relevant advert, sometimes through pop-ups. Though sometimes the ad matching system can fail, as it can neglect to tell the difference between positive and negative correlations. This can result in placing contradictory adverts, which are not appropriate to the content.

Technical targeting This is based on the user's own software or hardware status. The advertisement is changed depending on the user's available network bandwidth, for example, if a user is on their mobile phone that has limited connection, the ad delivery system will display a version of the ad that is smaller for a faster data transfer rate.

Time targeting According to the journal of marketing, more than 1.8 billion clients spent a minimum of 118 minutes daily- via web-based networking media in 2016. Nearly 77% of these clients interact with the content through likes, commenting, and clicking on links related to content. With this astounding buyer trend, it is important for advertisers to choose the right time to schedule content, in order to maximize advertising efficiency. To accurately determine what time of day is most effective for scheduling content. It is essential to know when the brain is most effective at retaining memory

Sociodemographic targeting Sociodemographic targeting focuses on the characteristics of consumers, including their age, generation, gender, salary and nationality. The idea is to target users specifically, using this data about them collected, for example, targeting a male in the age bracket of 18–24. Facebook uses this form of targeting by showing advertisements relevant to the user's individual demographic on their account, this can show up in forms of banner ads, or commercial video.

Geographical and location-based targeting This type of advertising involves targeting different users based on their geographic location. IP addresses can signal the location of a user and can usually transfer the location through ZIP codes. Locations are then stored for users in static profiles; thus, advertisers can easily target these individuals based on their geographic location.



Behavioural targeting Behavioural targeting is centred around the activity/actions of users and is more easily achieved on web pages. Information from browsing websites can be collected from data mining, which finds patterns in users search history. Advertisers using this method believe it produces ads that will be more relevant to users, thus leading consumers be more likely influenced by them. If a consumer was frequently searching for plane ticket prices, the targeting system would recognise this and start showing related adverts across unrelated websites, such as airfare deals on Facebook. Its advantage is that it can target individual's interests, rather than target groups of people whose interests may vary. When a consumer visits a web site, the pages they visit, the amount of time they view each page, the links they click on, the searches they make, and the things that they interact with, allow sites to collect that data, and other factors, to create a profile that

links to that visitor's web browser. As a result, site publishers can use this data to create defined audience segments based upon visitors that have similar profiles.

When visitors return to a specific site or a network of sites using the same web browser, those profiles can be used to allow marketers and advertisers to position their online ads and messaging in front of those visitors who exhibit a greater level of interest and intent for the products and services being offered. Behavioural targeting has emerged as one of the main technologies used to increase the efficiency and profits of digital marketing and advertisements, as media providers are able to provide individual users with highly relevant advertisements. On the theory that properly targeted ads and messaging will fetch more consumer interest, publishers can charge a premium for behaviourally targeted ads and marketers can achieve

Behavioural marketing can be used on its own or in conjunction with other forms of targeting, many practitioners also refer to this process as "audience targeting".

Major advantages of Behavioural marketing are that it will help in reaching surfers with affinity, reach surfers that were not exposed to a media campaign, contact surfers close to conversion and in reconnecting with prospects or customers.

1.2 OBJECTIVE OF THE STUDY

- To find out the behavioural aspect of customers by usage of SEO ads.
- To find out the level of influences it has on the customers to purchase the items in terms of SEO.
- To identify impact of buying dimensions SEO ads have on online advertisement.

1.3 NEED FOR STUDY

- To know the behavioural aspect of customers in terms of SEO advertisements.

- To find out how much SEO ads influences the purchasing power of customers.
- To study on how customer, react on the different types of SEO ads
- Provide a deep understanding of how SEO ads influence customer behaviour.
- Determine the extent to which SEO ads influence customers in their purchasing decisions.
- Identify specific dimensions of the buying process influenced by SEO ads.

1.4 SCOPE OF THE STUDY

- Reach the audience and encourage engagement.
- Establish a loyal following that ups the value against the competitor
- Converts followers into customers.
- Retain customers and encourage them to spend more.

1.5 SIGNIFICANCE OF THE STUDY

➤ Significance for the government

There will be economic stability will be maintained as adequate buying and selling happens

➤ Significance for the people:

People will be self-aware of the products which they prefer and will know about the launches of products they want.

CHAPTER 2

REVIEW OF LITERATURE

2.1 OVERVIEW OF REVIEW OF LITERATURE:

This chapter reviews the related available literature that will include all the articles related to the study of Search engine optimisation in modifying the buying behaviour of customers, and how it affects their purchasing behaviour.

The important reviews from the literature are:

Al-Azzam and Al-Mizeed (2021) in people's buying behaviour in Jordan, the results demonstrated that digital marketing, such as social media marketing and mobile marketing, has a profound impact on consumer purchasing decisions based on empirical study. Furthermore, findings implied that businesses developing strategies to harness the digital world and technology, as well as raise brand recognition through digital platforms, to remain competitive in today's market. In the case of an online company, Ugonna et al. online marketing, effective communication, and on-time delivery on the regularity of visits that online marketing is a viable marketing communication channel that has a substantial impact on the frequency of online store visits and consumer patronage.

Edrina Emini and Hatibe Deari Zekjiri (2021). This paper tries to examine the dynamic changes within marketing practice and the impact of digital marketing on the buying behaviour of consumers in North Macedonia. A structured questionnaire is used to collect primary data with a sample size of 211 respondents. The data are analysed with SPSS software statistical tool. The results of the paper suggest that there is a significant impact of digital marketing on consumer buying behaviour, but the empirical findings also suggest that there is no statistical difference between consumer behaviour and the type of digital channels consumers use. Furthermore, based on the results there is no statistically significant difference between consumer's monthly income and the level of buying through digital channels. This paper provides some theoretical overview of digital marketing, and the empirical findings contribute to the existing literature on the impact of digital marketing on consumer behaviour in North Macedonia. Finally, this research is limited by the

small number of respondents, and a larger sample size might contribute to more representation of consumer buying behaviour in North Macedonia.

Ai-Yun Hsieh, Shao-Kang Lo, Yu-Ping Chiu & Ting Lie (2021) This study examines the timing of pop-up advertising appearance and its effect on perceived intrusiveness, advertising irritation and advertising avoidance. Experiment was designed to build a virtual Internet environment (including the main content on the webpage and a pop-up ad) and to manipulate the timing of the pop-up advertising appearance. Participants were invited to participate in two experiments, and then assigned to a specific target browsing task; their advertising browsing activities during the task were measured. In order to measure their cognitive advertising avoidance, an eye-tracking device was utilised to gain objective and accurate psychological information. Results showed that earlier pop-up advertising appearances are associated with a lower consumer fixation count and fixation length; in contrast, pop-up advertising that appears later is associated with a higher fixation count and fixation length. This study attempts to gain more objective and accurate psychological data by using an eye-tracking device to collect information about eye movements associated with the appearance of pop-up advertising to better analyse consumer behaviours towards them. These results offer insights to Internet advertisers and Internet platform companies on how to provide more efficient Internet advertising.

Chiu, Y.-P., & CHANG, S.-C. (2020) This study used spillover effects and reversal theory to examine the influence of banner advertising on the attitude of the host website. A total of 146 volunteers were recruited for an experiment. A computer program and an eye-tracking device were used to record and analyze participants' eye movements, and a psychological scale was used to measure the participants' attitudes. The results showed that the negative attitudes generated by banner advertising do spill over to the host websites, which in turn negatively affects the website. When viewers have negative attitudes toward the host websites, their fixation time and revisit intention of the websites will be significantly reduced. These findings encourage advertisers to plan advertising strategies and provide valuable implications for banner advertising and websites.

Gujrati, R., & Uygun, H. (2020) examined how digitalization has altered consumer behaviour and shifted consumer perspective from one of fear to one of acceptance.

Consumer behaviour has shifted as a result of smartphones and the internet. Not only can people conduct online shopping, but they also access services from anywhere via the internet. Digitalization has played an important role, and it is gradually transforming the consumer's shopping habits from mall to mobile and to buy a product without wasting time or money.

Pohjanen, Riikka (2019) This study concentrates on search engine visibility and the benefits of search engine optimization (SEO) in Google for businesses. It seems that search engine visibility has undeniably an important role in business. Most of the people use internet, more than half of Internet traffic begins with search engines and majority of users search for information about goods and services on a regular basis. Google has the largest market share of all search engines. SEO has been studied since 1998 when Google was founded. In earlier studies the topics varied from the basics of SEO to the SEO process in practice and finally to the benefits of SEO. Only a limited number of information systems theory (IS) studies focus on the role of organic listing in search engine visibility. That is why some of the references in this literature review represent also general business research.

Tomomichi Amano, Andrew Rhodes, and Stephan Seiler, September (2018)

Many online markets are characterized by sellers that stock large numbers of products and sell each product infrequently. At the same time, consumer browsing information is typically tracked by online retailers and is much more abundant than purchase data. We propose a demand model that caters to this type of setting. The approach of the author is on which is based on search and purchase data, is computationally light and allows for flexible substitution patterns. They had applied the model to a data set containing browsing and purchase information from a retailer stocking over 500 products, recover the elasticity matrix, and solved for optimal prices for the entire assortment.

Ghazie and Dolah (2018) explored the attitudes regarding digital marketing of Malaysian consumers' and discovered the brand of the product supports the high return through online banking. According to the survey, most today's youth have access to digital media, but they are unaware of how to make the most use of it.

Arokia R. Terrance, Shruti Shrivastava, Asmita Kumari (2018) Object tracking is one of the vital fields of computer vision that detects the moving object from a

video sequence. Internet has changed the world to global village. Due to improved connectivity and increase in data usage, any new or existing products or services can reach the consumer easily through digital marketing. Apart from creating a content rich website for a product, it is highly important that the website is at the top of the Search Engine Result Pages (SERPS) of a Search Engine. The technical aspect of Search Engine Marketing Management (SEMM) of the website can be substantially improved by carrying out Search Engine Optimization (SEO) analysis of the website. The SEO tool can be utilized for increasing the website traffic and consequently increasing the sales revenue. This paper focuses on the interlinkage of Search Engine Marketing and Search Engine Optimization. The paper also provides the impact of Keyword analysis and the other SEO friendly techniques that positively affects the digital marketing.

Dina Gerdeman, September (2017) In this research the author has found out that majority of respondents said that they have not been able to show the impact of social media on their businesses. After all, it can be tough to pinpoint a direct connection between a social media chat about a product with the actual purchase of that product. The author says that the biggest challenge right now is that all this money is shifting into digital marketing, but there are still a lot of questions about return on investment. Social media has proven itself a valuable tool for helping companies create consumer perceptions about particular brand and has even sparked. More recently, it has allowed companies to reap creative ideas on product improvements directly from their customers and it has also managed to get brands into trouble. The author states that the brands should instead look to create a conversation with a broader message that connects with consumers. Brands should react to social media negativity the same way firefighters manage forest fires, particularly when they're not sure where the next spark will come from and brands can make consumers feel empowered by giving them opportunities to share ideas.

John A. Deighton, July (2017) The author's view is that a better work is done when the organisations bring people of varying disciplines and cultures and nationalities together. But the people who lead the verticals, do not do this many a time. they are more protective of their name. The other thing is, as they move up the pyramid, they get more resistance to coordination because there's more to protect. Now the leaders of verticals have changed enormously. Ten or 15 years ago, they were much

more protective of their name. Today, they understand. They see that if you don't work together, if you don't get creative to work with media and data, the offer that they make is more difficult to differentiate and more difficult to implement as a result.

(Mrs. K.R. Mahalaxmi, 2016) Let us begin the study with understanding the concept and having a clear picture about how there is dissimilarity between the two, the traditional and the digitized markets and how have these influenced the customer buying behaviour. Earlier marketing was tough and growth in sales even tougher and slower, as a result businesses took time in growing and even used to fail in majority of the cases. Marketers had to hustle to reach to their target markets, to search proper geographical locations to set up their businesses. The reason behind all this being lack of technology. The enterprise's prototype was rather a universal expression then. Almost every business had the same outline. Marketer, at that time, to make his probable consumers conscious of his products, took help of billboards, yellow pages (pamphlets), newspapers, magazines, televisions, radios etc.

Khraim, H. S. (2015).Search Engine Optimization (SEO) is an Internet marketing strategy that used widely for improving the volume and quality of customer traffic to a company website through search engines. This research aims to explore the importance and benefits of SEO in marketing as well as to examine the impact of SEO dimensions on online ad-vertisement. A questionnaire was distributed personally on 121 companies in Jordan. Out of 121, only 102 companies completed and returned the questionnaire, which give 72% response rate. Factor Analysis provided four dimensions which were used later in Multiple Regression. Those factors were named as; SEO connectivity, SEO competitiveness, SEO experience and SEO techniques. Results show that SEO connectivity was not significant, while the remaining three dimensions were all significant.

Lamba et al., (2015) explained that how consumer behaviour and demands are changing, and will continue to do so. It is possible to outstrip rivals, and even upcoming competition, if brands are able to understand these changes. Other intangible factors, such as experience and word of mouth, do not only play a role in customers' purchasing decisions. There is a decline in consumer tolerance. Influencers or friends and followers lead them with their social opinions. Due to the ease of switching brands, they are less loyal. Data is collected through secondary

sources. Digital technology has increased people's awareness and informed themselves. As a result, the study emphasizes that the digital lifestyle has created a profound impact on how people behave in traditional ways in a more rational manner.

Courbet, D., M. P. Fourquet-Courbet, R. Kazan, and J. Intartaglia (2014). Faced with an abundance of advertising messages, Internet users allocate only minimal cognitive resources to advertising. What are the effects of pop-up ads for a new brand viewed at low-level attention, and then measured when the Internet users have forgotten having seen them? In the theoretical context of processing fluency and implicit memory, the experiment (n = 398) studied the effects of repeated brief exposure to different types of content (words/image) in pop-up ads 7 days and 3 months after exposure. The results show the overall positive effects of the pop-ups, the superiority of the image over words for effects on attitude toward the brand and the purchase intentions; but the words produce more semantic effects than the image.

Journal (2014) concluded that in response to increased communication avenues, consumers have adapted to and responded in a distinctive way. Several social media tactics have been taken into account in order to change consumer behaviour. Online customer reviews were one way to use word of mouth - word of mouth was taken as a tactic. Through social media, people could use online recommendations to make purchases. As a matter of attention and interaction, consumer engagement helps a brand stay competitive as an endorsement.

Gulati & Pal (2014) examined that in rural India, which was supposed to be media dark and devoid of basic infrastructure and technology, mobile marketing has created a revolution of sorts. Due to frequent power cuts, rural Indians rely heavily on their mobile phones for entertainment. By attracting these rural consumers to their mobile phones, HUL created a masterpiece by finding an opportunity. Mobile phones became more popular due to the entertainment provided by the radio station. Descriptive research design has been used and data has been collected through secondary sources.

Lamba et al., (2014) in their study social media marketing practices are perceived positively by customers. Therefore, since it relies on websites, publications, and

recommendations, it has become an integral part of everyone's life. In addition to allowing consumers to express their opinions in an open and honest manner, social media networks have become a valuable tool in our everyday lives as their content has spread quickly. Data is collected through secondary sources and descriptive statistics has been used.

Singh (2014) in his study smartphone usage has led to a change in the way people shop and make purchase decisions, since the use of smart phones and feature phones have become more prevalent. Over half of the digital time that consumers spend on their cell devices is spent on tablets, iPads and smart phones, etc., which are known as mobile devices. Users demand great experiences on their devices, and they value great experiences very highly. As per Google, of the consumers who visited mobile sites, more than half are more likely to make a purchase if they had a positive experience, but some would leave if they were not able to find what they wanted right away.

Kadian et al., (2013) described that how Dove's video/web film transformed how people viewed themselves when it came to their perception of beauty and beauty - as well as how the brand connection led to a high recall value for Dove and increased affinity towards them. After a month since its release, the campaign and More than 114 million people have watched the video, making it the most popular ever.

Sivasankaran (2013) examined the perception of digital marketing among youths in the customer-oriented market environment approach and found that the current generation is more interested in internet shopping than traditional purchasing. Moreover, due to the pressure of the younger generation's purchasing habits, marketers are pushed to create a novel marketing technique because youth's buying behaviour and on purchasing behaviour.

Niko Sullihan, (2013) This paper focuses on the optimising the ranking outcome of the organics result in Search Engine through the important ways of optimising techniques. The researcher talks about the SERP (search engine result page), and also on the way in which the users can increase their research rank, but he also states that even though the Search Engine Optimisation can increase the viability of the market, the advertisements that are generated through the organisation often

creates a unpleasant feeling to the customers and thus the way in which the advertisements could be posted would definitely reduce the demand of the product.

Hooda & Aggarwal (2012) noted that there is a considerable variation in age and online trading qualities. Still, it has nothing to do with gender because of security concerns, the majority of respondents are unwilling to purchase products over the internet. Most respondents, regardless of gender or age group (particularly those between the ages of 18 and 30), found e-shopping more convenient time saving and favour credit cards as a convenient means of payment.

Carmen Nobel, October (2011) The author in this research paper notes that it's just as easy for viewers to tune out the 15- or 30-second ads preceding online videos by simply turning away, opening another browser window, or chatting with someone. He states that a viewer's attention cannot be purchased by an advertiser but must be gained by the ad. The results showed that the key to success in grabbing and holding the attention of viewers lies in evoking a carefully timed mixture of surprise and joy.

Yet M. Lim & Tech – Chai Lau – September (2011) The aim of this research is to answer the question like, the significant of the measures of advertising effectiveness in terms of (1) attitude towards the ad, (2) ad recall, and (3) click- through rates in explaining online purchase decision. All the three measures of advertising effectiveness were found to be significant predictors, with the ability to recall online ads being the most important predictor, followed by the frequency of clicking online ads and attitudes toward online advertising. The findings suggest that online advertising may be a powerful marketing tool in the context of online environment. The research findings also imply that marketers should include online advertising in their advertising media mix as online advertising promotes online buying or online shopping.

Sarah Jane Gilbert, July (2009) Purchase decisions are influenced differently in social networks than in the brick-and-mortar world, says the author of the paper. The key is marketers should tap into the networking aspect of sites such as Facebook. Key concepts include, some social network users are influenced by the purchases of their friends. Of these users, 40 percent show a strong "keeping up with the Joneses" behaviour, increasing sales by 5 percent. "High-status" users are

more likely to not purchase something that others have bought. On social networks, viral campaigns may work better than advertising

RESEARCH GAP:

Based on these papers on SEO ads, this shows how search engine marketing affects customers and are their willingness to share they personal info, and how they react to such advertisements are been studied. This research significantly shows not only the behavioural aspect of customers in terms of SEO advertisements but also how the purchasing behaviour changes, to what extend people get affected by this and whether it creates a negative or a positive impact.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The following chapter will discuss the methodology to be adopted, research design, research instruments employed, and the research procedures followed for the analysis of the collected data. Research is an art of scientific investigation. The advanced learner's dictionary of current English lays down the meaning of research as "a careful investigation or inquiry specially through search for new facts in any branch of knowledge". The search for knowledge through objective and systematic method of finding solutions to a problem is termed as research.

3.2 RESEARCH DESIGN

The research design is the conceptual structure within research is conducted; it constitutes the blueprint for the collection, measurement, and analysis of data. As such the design includes an outline of what the research will do from writing the hypothesis and its operational implications to the final analysis of data. Research design stands for advance planning of the method to be adopted for collecting the relevant data and the techniques to be used in their analysis, keeping in view the objective of the research design should be done with great care as any error in it may upset the entire project.

The research design implemented in this study is as follows:

➤ **DISCRIPTIVE RESEARCH:**

Descriptive research studies are those studies which are concerned with describing the characteristics of a individual, or of a group. Descriptive research design is a scientific method which involves observing and describing the behaviour of a subject without influencing it in any way. The method used in this study is survey method which brings out the outlook of the respondents on the study.

➤ **ANALYTICAL RESEARCH:**

Analytical research is a specific type of research that involves critical thinking skills and the evaluation of facts and information relative to the research being conducted.

➤ **CROSS-SECTIONAL STUDY:**

Cross section study is a type of observation study that analyses data collected from a population or a representative at a specific point in time that is cross sectional data. The data is collected at a point of time and so long trends do not come under the roof of this method of study.

3.3 SAMPLE SIZE

Sample size determination is the act of choosing the number of observations or replicates that include in a statistical sample. The sample size is an important feature of any empirical study in which the goal is to make inferences about a population sample. The sample size for this particular study includes both men and women and it consist of 100 from different age groups.

3.4 SAMPLING TECHNIQUE

The sampling technique devised in this study is convenience sampling, the most common type of non-probability sampling done without any restrictions is convenience sampling. Respondents become a part of the sample because they happen to be at the right time and at the right place.

ADVANTAGES OF CONVENIENCE SAMPLING:

- It is economical
- It takes less time to complete the process of data collection
- This method is adopted as it is easily accessible.

DISADVANTAGES OF CONVENIENCE SAMPLING:

- It can sometimes result in biased results.
- It lacks proper representation of population relating to the study.
- The credibility for this sampling technique is low compared to other techniques.

3.5 METHOD OF DATA COLLECTION

Data collection is the method of obtaining the required information from various sources in relation to the study conducted. There are two different types of data collection methods

They are

- Primary data
- Secondary data

PRIMARY DATA:

The primary data are those which are collected afresh and for the first time, and thus happen to be original in character. Primary data is obtained either through observation or through direct communication with respondents in one form or another or through personal interviews. It is the data that has been collected first hand by the researcher specially addressing the research problem at hand. The most common methods of collecting primary data are conducting questionnaires, surveys, interview, observations, case studies, focus groups and examining documents and records.

PRIMARY DATA COLLECTION:

The primary data was collected from 100 respondents from different age groups different societal backgrounds. The data was collected in and around the city of Chennai with the help of E-questionnaire by using convenience sampling method which is a nonprobability method of sampling. As this method was applied, the respondents were selected because of their accessibility and proximity to the researcher.

SECONDARY DATA:

Secondary data means data that are already available i.e., it refers to the data which have already been collected and analysed by someone else. When the researcher utilises secondary data, then various sources from where he can obtain them should be given importance. Secondary data may either be published data or unpublished data. Researcher must be very careful in using secondary data because it is possible that the secondary data may be unsuitable or may be inadequate in the context of the problem which the researcher wants to study.

The various sources of secondary data are as follows:

- Various publications of the central, state and local governments.

- Various publications of foreign governments or of international bodies and their subsidiary organisation.
- Technical and trade journals.
- Books, magazines and newspapers.
- Reports prepared by research scholars, universities, economists, etc. in different fields
- Public records and statistics, historical documents, and other sources of published information
- Reports and publications of various associations connected with business and industry.

SECONDARY DATA COLLECTION:

The secondary data relating to the study was collected from the review of various literatures of the past, the journals relating to the research problem, the books containing certain definitions for the terms relating to the study, various websites in the internet which hold a large amount of information about the study.

3.6 STATEMENT OF HYPOTHESIS

Hypothesis is a formal question that the researcher intends to resolve. A research hypothesis is a predictive statement, capable of being tested by scientific methods, that relates the independent variable to some dependent variable. It is a proposition or a set of propositions put forth as an explanation for the occurrence of some specified group of phenomena.

HYPOTHESIS:

- **Hypothesis-1:**

Ho: There is no significance difference among age on the behavioural aspect of SEO ads.

H1: There is a significance difference among age on the behavioural aspect of SEO ads.

- **Hypothesis-2:**

Ho: There is no significance relationship between utility on types of ads and the behavioural aspect of SEO ads.

H1: There is a significance relationship between utility on types of ads and the behavioural aspect of SEO ads.

▪ **Hypothesis-3:**

Ho: There is no significance difference among education qualification on the utility of the type of ads.

H1: There is a significance difference among education qualification on the utility of the type of ads.

3.7 DATA ANALYSIS

Data analysis is a process of inspecting, cleansing, transforming and modelling data with the goal of discovering useful information, informing conclusion and supporting to make decisions. In this study the data collected from the respondents were coded, tabulated and analysed using factor analysis in **SPSS software**

3.8 STATISTICAL TOOL USED

Statistical methods are used for the purpose of presenting the analysed data in a simple form for the easy interpretation of information by the readers. Mostly, it is in the form of graphical representations. The statistical methods used in the study are pie diagrams and charts.

The statistical tools used in the study are:

- Descriptives- percentage analysis and graphical representations.
- ANOVA
- T-test analysis

DESCRIPTIVES PERCENTAGE ANALYSIS

Percentage analysis is the method to represent raw streams of data as a percentage (a part in 100 – percent) for better understanding of collected data. Percentage analysis is applied to create a contingency table from the frequency distribution and represent the collected data for better understanding.

GRAPHICAL REPRESENTATION:

The data is presented in the form of bar graphs and pie charts for the easy interpretation and understanding the results.

CHI-SQUARE ANALYSIS

Chi-square is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance. As a non-parametric test, it can be used to determine if categorical data shows dependency or the two classifications are independent. It can also be used to make comparisons between theoretical populations and actual data when categories are used.

ANOVA – ANALYSIS OF VARIANCE

The basic principle of ANOVA is to test for differences among the means of population by examining the number of variables within each of these samples, relative to the number of variables between the samples. In terms of variation within given population, it is assumed that the values are of differ from the means of this population only because of random effects i.e., there are influences on which are unexplainable, whereas in examining differences between population we assume that the difference between the mean of the nth population and the grand mean is attributable to what is called a 'specific factor' or what is technically described as treatment effect.

Thus, while using ANOVA, we assume that each of the samples is drawn from a normal population and that each of these population has the same variance. We assume the absence of many factors that might affect our conclusions concerning the factors to be studied. In short, we have to make two estimates for population variance viz., one based on between samples variance and other based on within samples variance.

Then said two estimated of population variance are compared with F-test, wherein we work out.

$$F = \frac{\text{Estimation of population variance based on between samples variance}}{\text{Estimation of population variance based on within samples variance}}$$

T-TEST ANALYSIS

A t-test is a type of inferential static used to determine if there is a significant difference between the means of two groups, which may be related in certain features. It is mostly used when the data sets, like the data set recorded as the outcome from flipping a coin 100 times, would follow a normal distribution and may have unknown variances. A t-test is used as a hypothesis testing tool, which allows testing of an assumption applicable to a population.

A t-test looks at the t-statistic, the t- distribution values, and the degrees of freedom to determine the statistical significance. To conduct a test with three or more means, one must use an analysis of variance.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION:

PERCENTAGE ANALYSIS:

4.1.1 GENDER OF THE RESPONDENT.

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FeMale	36	36.0	36.0	36.0
	Male	64	64.0	64.0	100.0
	Total	100	100.0	100.0	

Table 4.1.1 gender of respondent

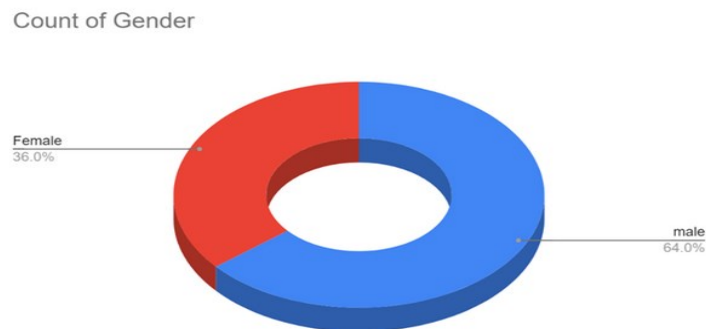


Fig. 4.1.1 gender of respondent.

INTERPRETATION:

From the above chart it reveals that from 100 respondents, 64% of respondents are male, 36% of respondents are female.

so, we conclude that, majority of respondents are male.

4.1.2 AGE OF RESPONDENT.

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-27	83	83.0	83.0	83.0
	28-37	13	13.0	13.0	96.0
	38-47	1	1.0	1.0	97.0
	48-57	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

Table 4.1.2. Age of respondent.

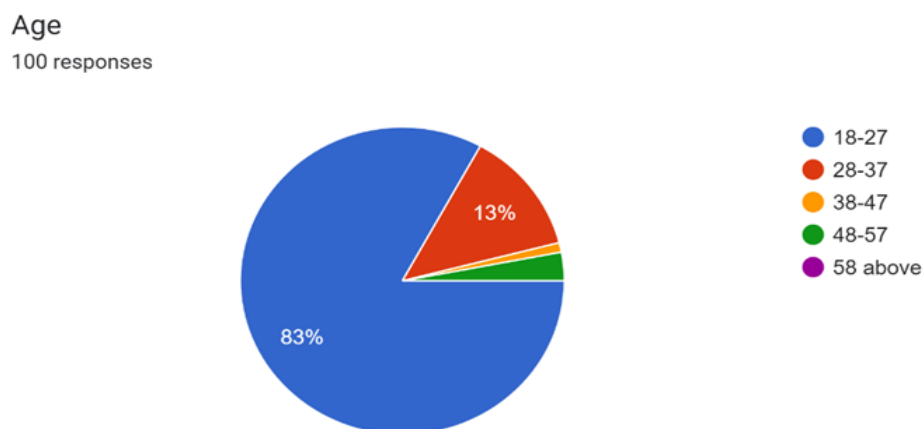


Fig 4.1.2. Age of respondent.

INTERPRETATION:

From the above chart it reveals that from 100 respondents.83% of respondents are in between 18-27 age,13% of respondents are between 28-37 age group,3% of respondents are between 48-57 age group and 1% of respondents are in between 38-47 age group.

so, we conclude that, the majority of respondents are belonging to 18-27 age group.

4.1.3 LOCATION OF RESPONDENT.

		Location			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rural	12	12.0	12.0	12.0
	Suburban	12	12.0	12.0	24.0
	Urban	76	76.0	76.0	100.0
	Total	100	100.0	100.0	

Table.4.1.3 location of respondent.

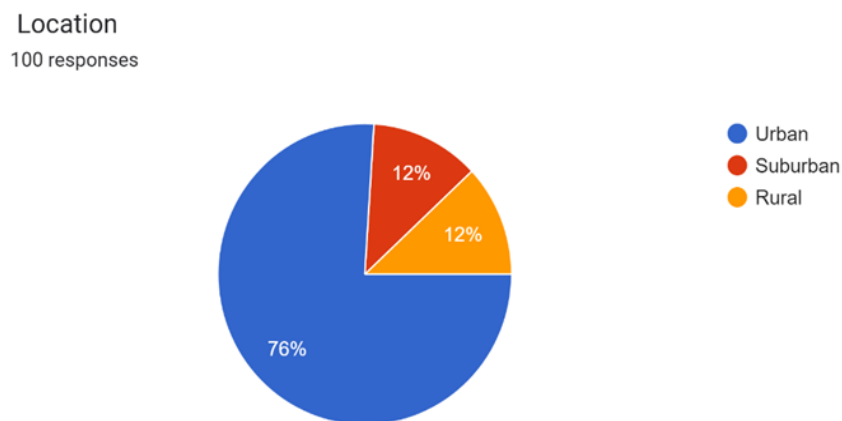


Fig.4.1.3 location of respondent.

INTERPRETATION:

From the above chart it reveals that from 100 respondents 76% of respondents from urban location, 12% of respondents are from sub urban and 12% of respondents are from rural location.

So, we conclude that, the majority of the 76% respondents are living in urban location.

4.1.4 EDUCATIONAL LEVEL OF RESPONDENT

		Education Level			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor's Degree	32	32.0	32.0	32.0
	High School or Less	17	17.0	17.0	49.0
	Postgraduate Degree	40	40.0	40.0	89.0
	Some College	11	11.0	11.0	100.0
	Total	100	100.0	100.0	

Table.4.1.4 Educational Level of respondent

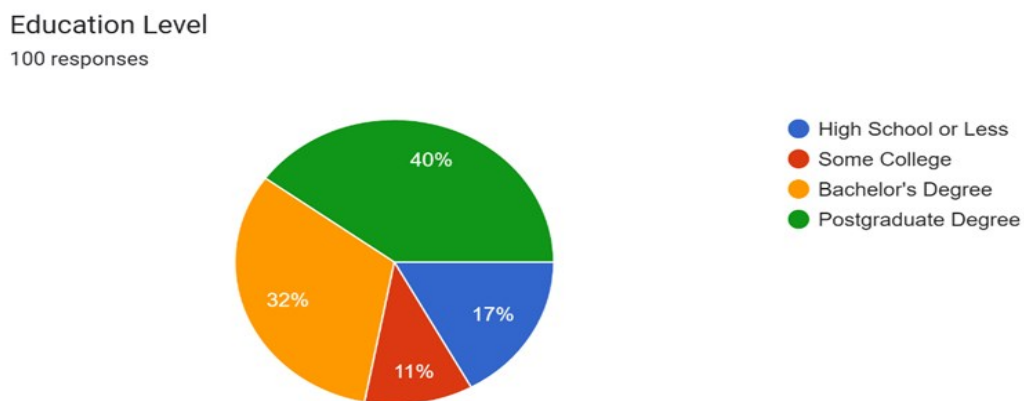


Fig.4.1.4 Educational Level of respondent.

INTERPRETATION:

From the above graph it reveals that from 100 respondents 40% of respondents are belongs to post graduate degree, 32% of respondents are belongs to bachelor's degree, 17 % of respondents are belongs to high school or less and 11% of respondents are belongs to some college group.

so, we conclude that the majority 40% of respondents are belongs to post graduate degree group.

4.1.5 EMPLOYMENT STATUS OF RESPONDENT.

Employment Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed Full-Time	30	30.0	30.0	30.0
	Employed Part-Time	7	7.0	7.0	37.0
	Student	53	53.0	53.0	90.0
	Unemployed	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

Table.4.1.5. Employment status of respondents

Employment Status
100 responses

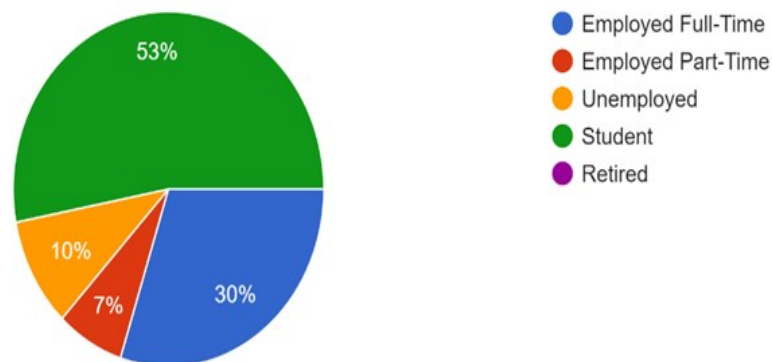


Fig.4.1.5. Employment status of respondents

INTERPRETATION:

From the above graph it reveals that from 100 respondents 30%of respondents are student, 30%of respondents are employed full time, 10%of respondents are belongs to unemployed group and 7%of respondents are belongs to employed part time group.

so, we conclude that the majority 30%of respondents are belongs to student group.

4.1.6. AVERAGE HOURS SPENT ON INTERNET PER DAY BY THE RESPONDENT.

1. On a average how many hours do you spend on the internet per day?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-2 hour	17	17.0	17.0	17.0
	2-3 hours	19	19.0	19.0	36.0
	3-4 hours	14	14.0	14.0	50.0
	less than a hour	17	17.0	17.0	67.0
	more than 4	33	33.0	33.0	100.0
	Total	100	100.0	100.0	

Table .4.1.6. average hours spent on internet per day by the respondent.

1. On a average how many hours do you spend on the internet per day?
100 responses

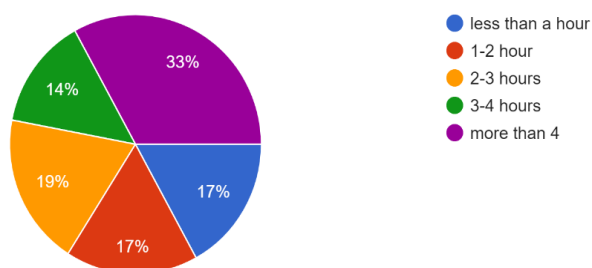


Fig.4.1.6. average hours spent on internet per day by the respondent.

INTERPRETATION:

From the above graph it reveals that from 100 respondents 33% of respondents are spend more than 4 hours on the internet, 19%of respondents are spend 2-3 hours on the internet, 17%of respondents spend 1-2 hours on the internet, 17%of respondents spend less than a hour and 14%of respondents are belongs to 3-4 hours.

So, we conclude that the majority 33%of the respondents are spend more than 4 hours on the internet.

4.1.7. ANALYSIS OF ATTENTION ON ONLINE ADS

2. Do you pay attention on online ads?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Maybe	16	16.0	16.0	16.0
	No	32	32.0	32.0	48.0
	Yes	52	52.0	52.0	100.0
	Total	100	100.0	100.0	

Table 4.1.7. analysis of attention on online ads

2. Do you pay attention on online ads?
100 responses

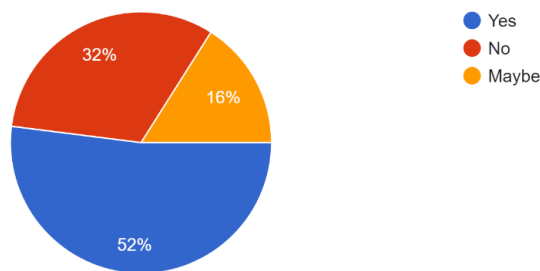


Fig 4.1.7. analysis of attention on online ads

INTERPRETATION

From the above graph it reveals that from 100 respondents 52% of respondents said yes that they pay attention to the online ads, 32% of respondents said no, that they don't pay attention to the online ads and 16% of respondents said maybe they give pay attention to online ads.

So, we conclude that the majority 52% of the respondents are said yes.

4.1.8 ANALYSIS ON HOW DO THEY FIND SUCH ADS.

3. How do you find such ads?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Creates awareness	25	25.0	25.0	25.0
	Informative	40	40.0	40.0	65.0
	Irritating	23	23.0	23.0	88.0
	Waste of time	12	12.0	12.0	100.0
	Total	100	100.0	100.0	

Table 4.1.8 Analysis on how do they find such ads.

3. How do you find such ads?
100 responses

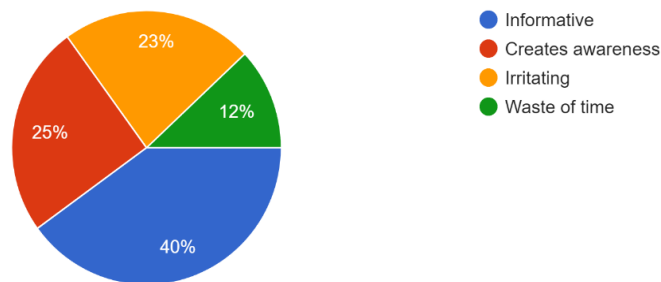


Fig 4.1.8 Analysis on how do they find such ads.

INTERPRETATION:

from the above graph it reveals that from 100 respondents 40%of respondents find ads are informative, 25%of respondents find they are create awareness , 23%of respondents said that they are irritating and 12%of respondents said that adds are waste of time.

So, we conclude that the majority 40%of the respondents see the online ads are informative.

4.1.9 ANALYSIS OF HOW MUCH INFLUENCE DO THEY FEEL ADS HAVE OVER BUYING BEHAVIOUR

4. How much influence do you feel ads have over our buying behavior?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Good	51	51.0	51.0	51.0
	Not bad	39	39.0	39.0	90.0
	Worse	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

Table 4.1.9 analysis of how much influence do they feel ads have over buying behaviour

4. How much influence do you feel ads have over our buying behavior?
100 responses

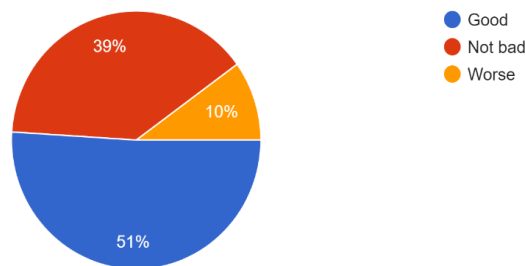


Fig 4.1.9 analysis of how much influence do they feel ads have over buying behaviour

INTERPRETATION:

From the above graph it reveals that from 100 respondents 51% of respondents feel good that ads influence their buying behaviour, 39% of respondents belong to not bad group and 10% of respondents belongs to worse group.

so, we conclude that the majority 51% of respondents are feeling good.

4.1.10 ANALYSIS OF HOW OFTEN DO THEY USE SEARCH ENGINES LIKE GOOGLE TO FIND INFORMATION OR PRODUCTS ONLINE.

5. How often do you use search engines like Google to find information or products online?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	42	42.0	42.0	42.0
	Monthly	14	14.0	14.0	56.0
	Never	2	2.0	2.0	58.0
	Rarely	18	18.0	18.0	76.0
	Weekly	24	24.0	24.0	100.0
	Total	100	100.0	100.0	

Table 4.1.10 Analysis of how often do they use search engines like google to find information or products online.

5. How often do you use search engines like Google to find information or products online?

100 responses

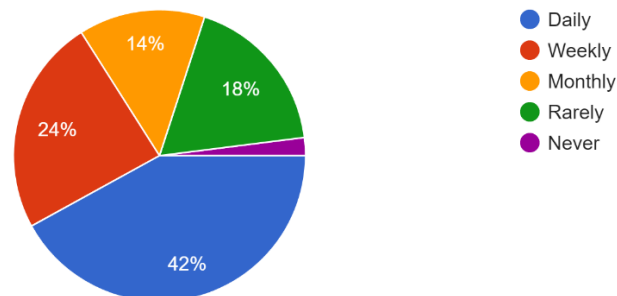


Fig 4.1.10 Analysis of how often do they use search engines like google to find information or products online.

INTERPRETATION:

from the above graph it reveals that from 100 respondents 42%of respondent's daily use search engine to find information or products, 24%of respondents belong to weekly group, 18%of respondents are belongs to rarely group, 14%of respondents are belongs to monthly group and 18%of respondents are never use the search engines. So, we conclude that the majority 42%of respondents daily use the search engines to find information or products online.

4.1.11 ANALYSIS ON HAVE THEY EVER CLICKED ON A SEARCH ENGINE RESULTS OR ADVERTISEMENT

6. Have you ever clicked on a search engine result or advertisement (sponsored link) while looking for a product or service online?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Maybe	13	13.0	13.0	13.0
	No	21	21.0	21.0	34.0
	Yes	66	66.0	66.0	100.0
	Total	100	100.0	100.0	

Table 4.1.11 Analysis on have they ever clicked on a search engine results or advertisement

6. Have you ever clicked on a search engine result or advertisement (sponsored link) while looking for a product or service online?

100 responses

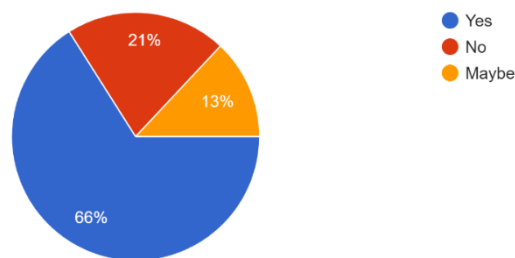


Fig 4.1.11 Analysis on have they ever clicked on a search engine results or advertisement

INTERPRETATION:

From the above graph it reveals that from 100 respondents 66%of respondents said yes, 21%of respondents said no and 13%of respondents belongs to may be group. So we conclude that the majority 66%of respondents were said yes that they clicked on a search engine result or sponsored link while looking for a product or service online.

4.1.12 ANALYSIS ON HOW OFTEN DO THEY GET ADS ON YOUR PREFERENCE

7. How often do you get ads based on your preference and search history?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All the time	41	41.0	41.0	41.0
	Often	20	20.0	20.0	61.0
	Rarely	7	7.0	7.0	68.0
	Sometimes	32	32.0	32.0	100.0
	Total	100	100.0	100.0	

Table 4.1.12 Analysis on how often do they get ads on your preference

7. How often do you get ads based on your preference and search history?
100 responses

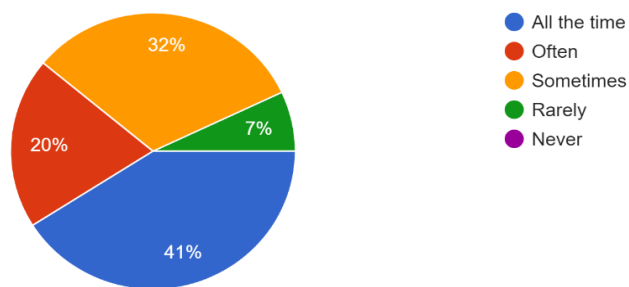


Fig 4.1.12 Analysis on how often do they get ads on your preference

INTERPRETATION:

From the above graph it reveals that from 100 respondents 41% of respondents said all the time, 32% of respondents said sometimes, 20% of respondents said often, 7% of respondents belong to rarely group. So we conclude that the majority 41% of the respondents said all the time they get ads based on their preference and search history.

4.1.13 ANALYSIS ON HOW DO THE RESPONDENT FEEL ON TYPES OF SEO ADS.

8. How do you feel about the following ads? [Background video with sound]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	maybe	18	18.0	18.0	18.0
	not useful	23	23.0	23.0	41.0
	useful	22	22.0	22.0	63.0
	very useful	25	25.0	25.0	88.0
	waste of time	12	12.0	12.0	100.0
	Total	100	100.0	100.0	

Table 4.1.13.1 Analysis on how do the respondent feel on types of SEO ads.

8. How do you feel about the following ads? [Small pop in ads]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	maybe	20	20.0	20.0	20.0
	not useful	17	17.0	17.0	37.0
	useful	38	38.0	38.0	75.0
	very useful	7	7.0	7.0	82.0
	waste of tim	18	18.0	18.0	100.0
	Total	100	100.0	100.0	

Table 4.1.13.2 Analysis on how do the respondent feel on types of SEO ads.

8. How do you feel about the following ads? [Background video without sound]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	maybe	18	18.0	18.0	18.0
	not useful	16	16.0	16.0	34.0
	useful	26	26.0	26.0	60.0
	very useful	16	16.0	16.0	76.0
	waste of time	24	24.0	24.0	100.0
	Total	100	100.0	100.0	

Table 4.1.13.3 Analysis on how do the respondent feel on types of SEO ads.

8. How do you feel about the following ads?

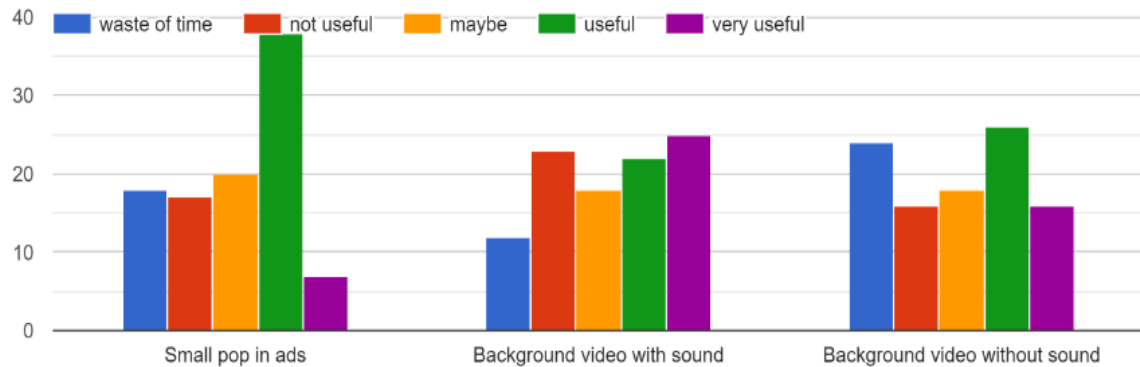


Fig 4.1.13.1 Analysis on how do the respondent feel on types of SEO ads.

INTERPRETATION:

from the above graph it reveals that from 100 respondents 38%of respondents said the small pop in ads is useful,20%of respondents says may be,18%of respondents said waste of time, 17%of respondents said not useful and 7%of respondents said very useful.

25%of respondents said background videos with sound is very useful, 23%of respondents belongs to not useful group, 22%of respondents said useful,18%of respondents said may be and 12%of respondents said waste of time.

26%of respondents said back ground video without sound is useful, 24% of respondents said that waste of time, 18% of respondents belongs to may be group, and 16% of respondents said that not useful. From the above three charts it concludes that the majority of the respondents said the small pop in ads is useful.

4.1.14 ANALYSIS ON THE CREDIBILITY OF PRODUCTS OR SERVICES ADVERTISED THROUGH SEO.

10. How do you feel about the credibility of products or services advertised through SEO?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly credible	34	34.0	34.0	34.0
	Highly untrustworthy	4	4.0	4.0	38.0
	Neutral	28	28.0	28.0	66.0
	Somewhat credible	25	25.0	25.0	91.0
	Somewhat untrustworthy	9	9.0	9.0	100.0
	Total	100	100.0	100.0	

Table 4.1.14 analysis on the credibility of products or services advertised through SEO.

10. How do you feel about the credibility of products or services advertised through SEO?
100 responses

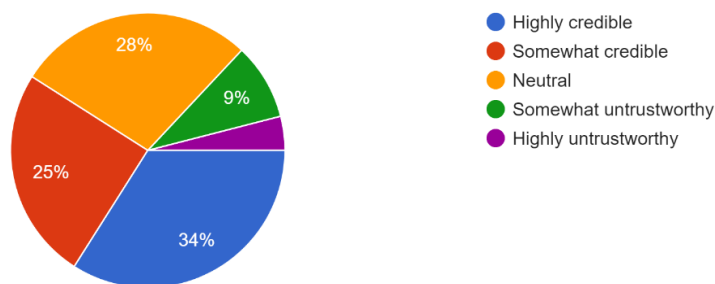


Fig 4.1.14 analysis on the credibility of products or services advertised through SEO.

INTERPRETATION:

From the above graph it reveals that from 100 respondents 34%of respondents said the product advertised through SEO is highly credible, 28%of respondents said neutral, 25%of respondents said somewhat credible, 9%of respondents said somewhat untrustworthy and 4%of respondents said highly untrustworthy.so we conclude that the majority34% of the respondents said that its highly that products or services advertised through SEO.

4.1.15 ANALYSIS ON THE POSITION OF WEBSITE OR ADVERTISEMENT INFLUENCES THE PERCEPTION OF THE RESPONDENTS

11. Do you think that the position of a website or advertisement on a search engine results page (e.g., being listed at the top) influences your perception of the product or service's quality or reliability?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Maybe	16	16.0	16.0	16.0
	No	17	17.0	17.0	33.0
	Yes	67	67.0	67.0	100.0
	Total	100	100.0	100.0	

Table 4.1.15 Analysis on the position of website or advertisement influences the perception of the respondents

11. Do you think that the position of a website or advertisement on a search engine results page (e.g., being listed at the top) influences your perception of the product or service's quality or reliability?
100 responses

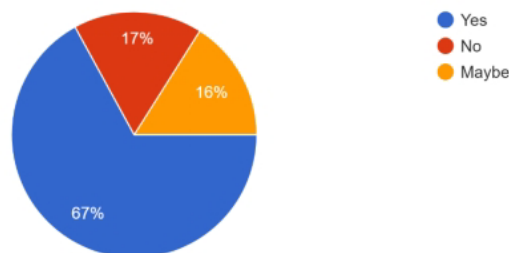


Fig 4.1.15 Analysis on the position of website or advertisement influences the perception of the respondents

INTERPRETATION

From the above graph it reveals that from 100 respondents 67%of respondents said yes, 17%of respondents said no and 16%of respondents said may be. so we conclude that the majority 67%of the respondents said yes that the that the position of a website or advertisement on a search engine results page (e.g., being listed at the top) influences your perception of the product or service's quality or reliability.

4.1.16 ANALYSIS ON THE IMPORTANCE ON THE RELEVANCE OF THE CONTENT ON THE LANDING PAGE.

12. When considering a purchase after clicking on an SEO result, how important is the relevance of the content on the landing page to your decision?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely important	31	31.0	31.0	31.0
	Moderately important	23	23.0	23.0	54.0
	Not important at all	3	3.0	3.0	57.0
	Slightly important	16	16.0	16.0	73.0
	Very important	27	27.0	27.0	100.0
	Total	100	100.0	100.0	

Table 4.1.16 analysis on the importance on the relevance of the content on the landing page.

12. When considering a purchase after clicking on an SEO result, how important is the relevance of the content on the landing page to your decision?

100 responses

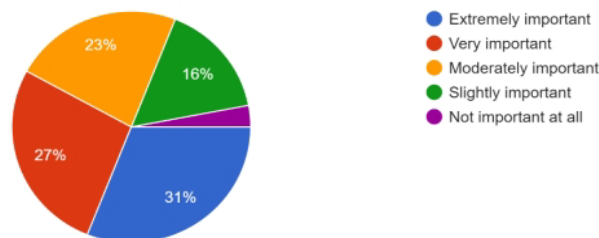


Fig 4.1.16 analysis on the importance on the relevance of the content on the landing page.

INTERPRETATION:

from the above graph it reveals that from 100 respondents 31%of respondents said the relevance of the content is extremely important, 27%of respondents said very important, 23%of respondents said moderately important,16%of respondents said slightly important and 3%of respondents said not important at all. So we conclude that the majority 31%of the respondents said it's extremely important that a purchase after clicking on an SEO result, how important is the relevance of the content on the landing page to your decision.

4.1.17 ANALYSIS ON UNPLANNED PURCHASES DONE BY RESPONDENTS IN TERMS OF SEO

13. Has SEO advertising ever prompted you to make a purchase you had not initially planned?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Maybe	20	20.0	20.0	20.0
	No	22	22.0	22.0	42.0
	Yes	58	58.0	58.0	100.0
	Total	100	100.0	100.0	

Table 4.1.17 analysis on unplanned purchases done by respondents in terms of SEO

13. Has SEO advertising ever prompted you to make a purchase you had not initially planned?
100 responses

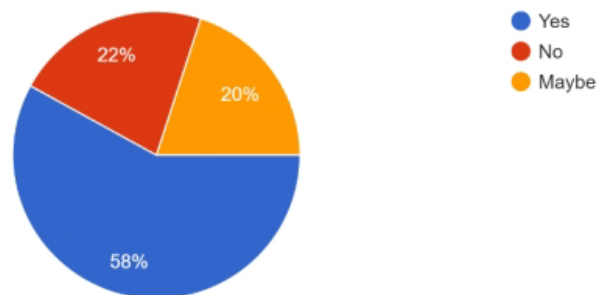


Fig 4.1.17 analysis on unplanned purchases done by respondents in terms of SEO

INTERPRETATION:

From the above graph it reveals that from 100 respondents 58% of respondents said yes that SEO make them to purchase that they had not initially planned, 22% of respondents said no and 20% of respondents said may be, so we conclude that the majority 58% of the respondents said yes that SEO make them to purchase that they had not initially planned

4.1.18 ANALYSIS ON HOW OFTEN DO YOU RESEARCH PRODUCTS BEFORE MAKING A PURCHASE.

14. How often do you research products or services online before making a purchase?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	40	40.0	40.0	40.0
	Never	2	2.0	2.0	42.0
	Occasionally	25	25.0	25.0	67.0
	Often	21	21.0	21.0	88.0
	Rarely	12	12.0	12.0	100.0
	Total	100	100.0	100.0	

Table 4.1.18 analysis on how often do you research products before making a purchase.

14. How often do you research products or services online before making a purchase?
100 responses

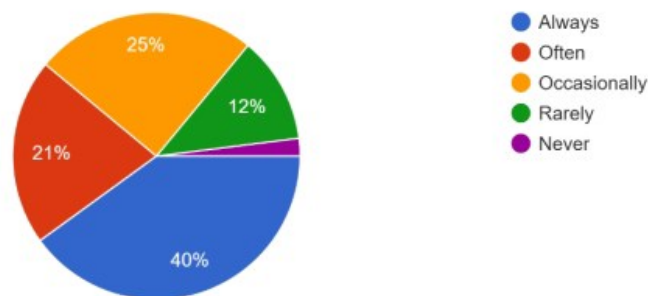


Fig 4.1.18 analysis on how often do you research products before making a purchases

INTERPRETATION:

From the above graph it reveals that from 100 respondents 40%of respondents said always they research products or services online before making a purchase,25%of respondents said occasionally, 21%of respondents said often,12%of respondents said rarely and 2%of respondents belongs to never group.

so we conclude that the majority 40%of the respondents said always they research products or services online before making a purchase.

4.1.19 ANALYSIS ON FEELING OF MISLEADING BY AN ADVERTISEMENT

16. Have you ever been tricked into clicking on an advert, do you ever feel like you have been particularly misled by an advert?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Maybe	18	18.0	18.0	18.0
	No	19	19.0	19.0	37.0
	Yes	63	63.0	63.0	100.0
	Total	100	100.0	100.0	

Table 4.1.19 analysis on feeling of misleading by an advertisement

16. Have you ever been tricked into clicking on an advert, do you ever feel like you have been particularly misled by an advert?

100 responses

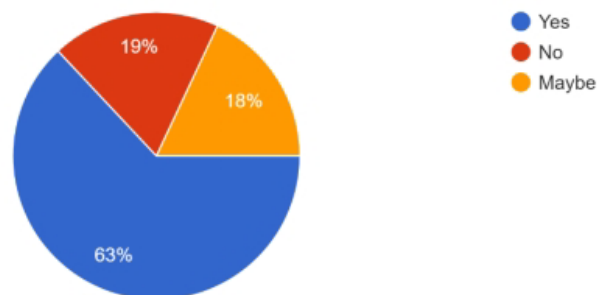


Fig 4.1.19 analysis on feeling of misleading by an advertisement.

INTERPRETAION:

From the above graph it reveals that from 100 respondents 63%of respondents said yes that they been tricked into clicking on an advert, like you they been particularly misled by an advert, 19%of respondent said no and 18%of respondents said may be.

so, we conclude that the majority 63%of the respondents said yes that they been tricked into clicking on an advert, like you they been particularly misled by an advert.

4.1.20 ANALYSIS ON DECISION TAKEN BY THE RESPONDENTS AFTER BEING TRICKED.

17. After being tricked by the advert did you consciously decided that you wouldn't buy whatever the advert was trying to sell?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Maybe	17	17.0	17.0	17.0
	No	21	21.0	21.0	38.0
	Yes	62	62.0	62.0	100.0
	Total	100	100.0	100.0	

Table 4.1.20 analysis on decision taken by the respondents after being tricked.

17. After being tricked by the advert did you consciously decided that you wouldn't buy whatever the advert was trying to sell?

100 responses

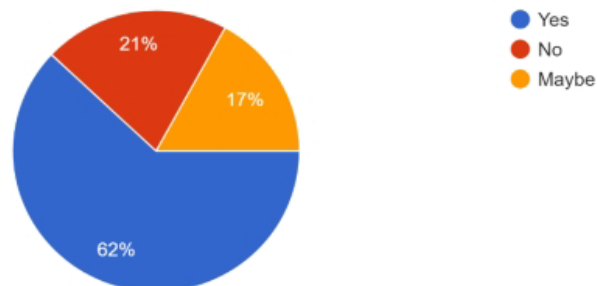


Fig 4.1.20 analysis on decision taken by the respondents after being tricked.

INTERPRETATION:

From the above graph it reveals that from 100 respondents 62% of respondents said yes that they after being tricked by the advert, they consciously decided that they wouldn't buy whatever the advert was trying to sell, 21% of respondents said no, 17% of respondents said maybe. so we conclude that the majority 62% of the respondents said yes that they after being tricked by the advert, they consciously decided that they wouldn't buy whatever the advert was trying to sell.

4.1.21 ANALYSIS ON OVERALL IMPACT OF POPUP ADS ON BROWSER EXPERIENCE.

18. Overall, do you think pop up ads have a positive or a negative impact on your online browsing experience.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Negative	17	17.0	17.0	17.0
	Neutral	35	35.0	35.0	52.0
	Positive	48	48.0	48.0	100.0
	Total	100	100.0	100.0	

Table 4.1.21 analysis on overall impact of popup ads on browser experience.

18. Overall, do you think pop up ads have a positive or a negative impact on your online browsing experience.
100 responses

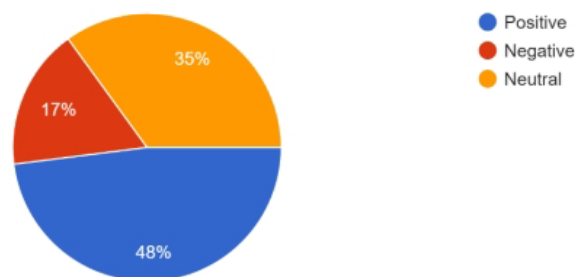


Fig 4.1.21 analysis on overall impact of popup ads on browser experience.

INTERPRETATION:

from the above graph it reveals that from 100 respondents 48%of respondents said that pop up ads have positive impact on their browsing experience,17%of respondents said that they have negative impact and 35% of respondents belongs to neutral.so we conclude that the majority 48% of the respondents said that pop up ads have positive impact on their browsing experience.

4.2.HYPOTHESIS TESTING ANALYSIS.

4.2.1 ANOVA ANALYSIS FOR HYPOTHESIS-1

HYPOTHESIS 1

ANOVA					
3. How do you find such ads?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.572	3	1.524	1.381	.253
Within Groups	105.938	96	1.104		
Total	110.510	99			

Table 4.2.1 ANOVA ANALYSIS FOR HYPOTHESIS-1

INTERPRETATION:

The result in the above table shows that there is a significant difference among age on the behavioural aspects of SEO ads at $F=1.381$ and $p<0.05$. This finding supports the hypothesis and so a significant difference among age on the behavioural aspects of SEO ads.

4.2.2.T TEST ANALYSIS FOR HYPOTHESIS-2

HYPOTHESIS 2

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
4. How much influence do you feel ads have over our buying behavior?	Equal variances assumed	3.4	.075	2.117	37	.021	.041	.416	.196	.018	.814
	Equal variances not assumed			2.106	34.93	.021	.042	.416	.197	.015	.817

Table 4.2.2. T TEST ANALYSIS FOR HYPOTHESIS-2

INTERPRETATION:

The result in the above table shows that there is significant relationship between utility of types of ads and aspects of SEO ads at $t = 2.117$ as $p = 0.021$ which is less than 0.05. This finding supports the hypothesis and so there is significant relationship between utility on types of ads and the behavioral aspects of SEO ads.

4.2.3 ANOVA ANALYSIS FOR HYPOTHESIS-3

HYPOTHESIS 3

ANOVA					
9. How do you feel about the following ads? [Adsthatplay before a video starts]					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	38.739	3	12.913	8.904	<.001
Within Groups	139.221	96	1.450		
Total	177.960	99			

Table 4.2.3.ANOVA ANALYSIS FOR HYPOTHESIS-3

INTERPRETATION:

The result in the above table shows that there is no significant difference among educational groups on Utility of type in SEO Ads at $F = 8.904$ and $p < 0.01$. This finding's does not support the hypothesis. So, there is no significant difference among Educational Qualification and Utility of type in SEO Ads.

CHAPTER 5

5.1 FINDINGS

5.1.1 percentage analysis reveals the following.

- **HOURS SPEND:** From the above graph it reveals that from 100 respondents 33% of respondents are spend more than 4 hours on the internet, 19%of respondents are spend 2-3 hours on the internet, 17%of respondents spend 1-2 hours on the internet, 17%of respondents spend less than a hour and 14%of respondents are belongs to 3-4 hours.so we conclude that the majority 33%of the respondents are spend more than 4 hours on the internet.
- **AGE:** From the above chart it reveals that from 100 respondents.83% of respondents are in between 18-27 age,13% of respondents are between 28-37 age group,3% of respondents are between 48-57 age group and 1% of respondents are in between 38-47 age group .so, we conclude that, the majority of respondents are belongs to 18-27 age group.
- **EDUCATION QUALIFICATION:** From the above graph it reveals that from 100 respondents 40% of respondents are belongs to post graduate degree,32% of respondents are belongs to bachelor's degree,17 % of respondents are belongs to high school or less and 11% of respondents are belongs to some college group.so, we conclude that the majority 40%of respondents are belongs to post graduate degree group.
- **GENDER:** From the above chart it reveals that from 100 respondents,64% of respondent are male ,36% of respondents are female.so, we conclude that, majority of respondents are male.
- **EMPLOYMENT STATUS:** From the above graph it reveals that from 100 respondents 30%of respondents are student, 30%of respondents are employed full time, 10%of respondents are belongs to unemployed group and 7%of respondents are belongs to employed part time groups. So, we conclude that the majority 30%of respondents are belongs to student group.

5.1.2 HYPOTHESIS TESTING:

INDEPENDENT T-TEST REVEALS THE FOLLOWING

- The result in the above table shows that there is significant relationship between utility of types of ads and aspects of SEO ads at $t = 2.117$ as $p = 0.021$ which is less than 0.05. This finding supports the hypothesis and so there is significant relationship between utility on types of ads and the behavioural aspects of SEO ads.

ANOVA ANALYSIS REVEALS THE FOLLOWING

- The result in the above table shows that there is significant difference among age on the behavioural aspects of SEO ads at $F = 1.381$ and $p > 0.05$. This finding supports the hypothesis and so a significant difference among age on the behavioral aspects of SEO ads.
- The result in the above table shows that there is significant difference among educational groups on Utility of type in SEO Ads at $F = 1.381$ and $p < 0.05$. This finding's support the hypothesis and also there is significant difference among Educational Qualification and Utility of type in SEO Ads.

5.2 SUGGESTIONS:

- Firstly, customers feel that they are been distracted by SEO ads and they feel they get indulge in purchasing practices which are unnecessary for them. In order to avoid this, I feel the marketers should find a way to reduce the pop-in ads and display them only when required.
- Another factor which makes the customers to have a negative impact on SEO ads are because of the preferences of customers might change often, when they get ads based on their previous preferences, they get irritated so in order to reduce it the marketers should be well aware of the changing trend in the behavioral aspects of customers.
- Recognizing that 33% of respondents spend more than 4 hours on the internet, consider tailoring your SEO ads to cater to this group. Explore

customization options such as interactive content, longer-form advertisements, or campaigns designed to capture and maintain the attention of users engaged in extended online sessions.

- Since 83% of respondents fall into the 18-27 age group, it's crucial to create diverse SEO ad campaigns that resonate with the interests and preferences of this demographic. Use a mix of visually appealing content, trendy language, and culturally relevant references to keep this age group engaged.
- With 40% of respondents holding post-graduate degrees, develop SEO ads that showcase in-depth knowledge, expertise, and sophistication. Consider content that educates and adds value to this well-educated audience. Use language and visuals that align with a higher educational background.
- Given that 64% of respondents are male, consider tailoring your SEO ads to cater specifically to male interests and preferences. Conduct market research to understand what resonates with this demographic, and create content that aligns with their expectations and needs.
- Acknowledging that 30% of respondents are students and 30% are employed full time, design SEO ad campaigns that cater to both segments. Create flexible ad schedules and formats to reach both students and full-time employees effectively. Consider addressing the unique challenges and interests of each group in your campaigns.

5.3. LIMITATIONS OF THE STUDY

- The customers may become inconsistent with the preferences
- Consumers sometimes are much less involved in a purchase decision.
- Customer are influenced externally by social relate.
- The results of the study are subject to the Primary Data Collected.
- The primary data is collected from 100 users which can only showcase their responses and does not subject to the clearer and common result in general.
- The analysis based on some statistical tools which as it is own limitation.

- The secondary data that are collected from various sources may vary in upcoming future due to name change of the organization or any legal and financial reasons.

5.4 CONCLUSION:

- The study investigates the relationship between internet usage patterns, demographics, and responses to SEO ads among 100 respondents.
- The ultimate reason SEO is essential is that it can help you achieve many of your business goals. SEO can help you build better relationships with the audience, improve the customer experience, increase your authority, drive more people to site, give an edge over the competition, and increase conversions, which means more sales, more loyal customers, and more growth for your business.
- But when it comes the customers behaviour towards this, one side there seem to be positive impact like customers feel that they are getting updated plus it reminds them to purchase what was required for them but on the other hand majority of people feel it was distracting and irritating for them. As overall study customers behavioural aspect shows a negative impact in such kinds of Search engine advertisements.
- The study provides actionable insights for targeted and effective SEO ad campaigns, emphasizing customization based on internet habits, demographics, and education levels for optimal engagement.

REFERENCE

- Al-Azzam, A. F., & Al-Mizeed, K.. The effect of digital marketing on purchasing decisions: A case study in Jordan. 8(5), (2021) 455-463.
- Ghazie, D. A., & Dolah, J. How digital marketing affects consumer behavior (2018). (Vol. 48).
- Ai-Yun Hsieh, Shao-Kang Lo, Yu-Ping Chiu & Ting Lie Do not allow pop-up ads to appear too early: Internet users' browsing behaviour to pop-up ads, *Behaviour & Information Technology*, 40:16, 1796-1805 (2021).
- Edrina Emini and Hatibe Deari Zekjiri An empirical analysis of digital marketing impact on consumer buying behaviour - the case of North Macedonia. (2021).
- Alexander, L. (n.d.). What Is Digital Marketing? Retrieved April 25, 2019, from
- Badenhorst, M. (2015). Digital Consumer Behaviour | Marketing Strategy | Media vision. Retrieved November 10, 2018,
- Chiu, Y.-P., & CHANG, S.-C. Using Eye-Tracking to Measure the Influence of Banner Ads' Browsing Behavior and Attitude on Host Websites. *Contemporary Management Research*, 16(1), 35–54. (2020).
- Denis, K. Three UX Hacks For Better Customer Personalization. (2018).
- Pohjanen, Riikka-The benefits of search engine optimization in Google for businesses (2019-10-10)
- Gulati, V., & Pal, P. A. Survey on Various Change Detection Techniques for Hyper Spectral Images. *International Journal of Advanced Research in Computer Science and Software Engineering*, 4(8), 2277 (2014).. Retrieved from
- Investopedia. (n.d.). Social Media Marketing (SMM) Definition | Investopedia. Retrieved November 9, 2018,
- Arokia R. Terrance, Shruti Shrivastava, Asmita Kumari Proceedings of the First International Conference on Information Technology and Knowledge Management pp. 155–158 ISSN 2300-5963 ACSIS, Vol. 14 (2018)
- Journal, I., Technological, F., Lamba, A., Singh, S., Dutta, N., Sai, S., ... Islands, C. (2014a). A Role of Data Mining Analysis to Identify Suspicious. 2(3), 5814–5825.
- Khraim, H. S. (2015). The Impact of Search Engine Optimization on Online Advertisement: The Case of Companies using E-Marketing in Jordan. *American Journal of Business and Management*, 4(2), 76–84.

- Kemp, S. (2018). Digital in 2018- We Are Social. Retrieved November 10, 2018,
- Kotler, P. & Keller, K. A Framework for Marketing Management. 5th Edition. Pearson Education. (2012).
- Osman, M-How Digital Marketing is Changing the Way We Do Business | Mabbly. (2017).
- Shrish, S., & Gajraj Singh, An Online Shopping-Changing Behaviour in Digital Era. Kaav International Journal of Economics, Commerce & Business Management, 3(3), A18. (2016).
- Niko Solihin -Search Engine Optimization: A Survey of Current Best Practices (2013)
- William, M., & David, C."Technology and the changing marketing world", Marketing Intelligence & Planning, Vol. 17 Issue: 7, pp.329-332,
- Heitzman, A. How Digital Marketing Transformed the Consumer Buying Process (2017).
- Mrs. K.R. Mahalaxmi, P. R. A Study on Impact of Digital Marketing in consumer purchase decision in Trichy. IJRST –International Journal for Innovative Research in Science & Technology. (2016).
- Nidhi Tandon, S. K. Conference: National Conference on People, Planet and Profit in Sustainable Development & contribution in IT, Media and Management. Research gate. (2018).
- Rai, M. K. A Study of Efficacy of Digital Marketing on Consumer Purchase Behavior in Allahabad District. International Journal for Research in Applied Science & Engineering Technology (IJRASET). (2018).
- Sathya, P. A Study of Digital Marketing and its Impact. (2015).
- Courbet, D., M. P. Fourquet-Courbet, R. Kazan, and J. Intartaglia.. "The Long-Term Effects of E-Advertising: The Influence of Internet Pop-ups Viewed at a Low Level of Attention in Implicit Memory." *Journal of Computer-Mediated Communication* 274–293 (2014).
- Siddique, R. Effect of Digital Media on Consumer Purchase Decision. (2017).
- Sivasankaran, D. S. Digital Marketing and Its Impact on Buying Behaviour of Youth. International Journal of Research in Management. (2017).

ANNEXURE 1

QUESTIONNAIRE:

1. Name

2. Gender

- Female
- Male
- Other:

3. Age

- 18-27
- 28-37
- 38-47
- 48-57
- 58 above

4. Location

- Urban
- Suburban
- Rural

5. Education Level

- High School or Less
- Some College
- Bachelor's Degree
- Postgraduate Degree

6. Employment Status

- Employed Full-Time
- Employed Part-Time
- Unemployed
- Student
- Retired
- Other:

1. On an average how many hours do you spend on the internet per day?

- less than an hour
- 1-2 hours
- 2-3 hours
- 3-4 hours
- more than 4

2. Do you pay attention to online ads?

- Yes
- No
- Maybe

3. How do you find such ads?

- Informative
- Creates awareness
- Irritating
- Waste of time

4. How much influence do you feel ads have over our buying behavior?

- Good
- Not bad
- Worse

5. How often do you use search engines like Google to find information or products online?

- Daily
- Weekly
- Monthly
- Rarely
- Never

6. Have you ever clicked on a search engine result or advertisement (sponsored link) while looking for a product or service online?

- Yes
- No
- Maybe

7. How often do you get ads based on your preference and search history?

- All the time
- Often
- Sometimes
- Rarely
- Never

8. How do you feel about the following ads?

	Waste of Time	Not useful	maybe	Useful	Very useful
Small pop in ads					
Background video with sound					
Background video without sound					

9. How do you feel about the adverts?

	Waste of time	Not useful	Maybe	Useful	Very useful
Ads that play before a video starts					
Ads that appear in feeds					
Ads that appear along the side Websites					
Simple text ads					

10. How do you feel about the credibility of products or services advertised through SEO?

- Highly credible
- Somewhat credible
- Neutral
- Somewhat untrustworthy
- Highly untrustworthy

11. Do you think that the position of a website or advertisement on a search engine results page (e.g., being listed at the top) influences your perception of the product or service's quality or reliability?

- Yes
- No
- Maybe

12. When considering a purchase after clicking on an SEO result, how important is the relevance of the content on the landing page to your decision?

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not important at all

13. Has SEO advertising ever prompted you to make a purchase you had not initially planned?

- Yes
- No
- Maybe

14. How often do you research products or services online before making a purchase?

- Always
- Often
- Occasionally
- Rarely
- Never

15. When you're in a website and you get pop up ads about the products you've seen earlier would you go and click into it?

- Yes
- No
- Not sure

16. Have you ever been tricked into clicking on an advert, do you ever feel like you have been particularly misled by an advert?

- Yes
- No
- Maybe

17. After being tricked by the advert did you consciously decided that you wouldn't buy whatever the advert was trying to sell?

- Yes
- No
- Maybe

18. Overall, do you think pop up ads have a positive or a negative impact on your online browsing experience.

- Positive
- Negative
- Neutral