A study on the customer behaviour with regard to online advertising in Kochi, India

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# Abstract

This research has been done to study the impact of online advertisements on the buying behaviour of the customer in Kochi, India. This research was done using the data collected from 109 respondents between the age of 15 to 60 from Kochi, India. With the growth of technology, the internet has become an inseparable part of modern day. With the vast usage of internet there is a huge potential for internet advertisements. In this study we take a look at how internet advertisements influence respondents buying behaviour, demographic factors that affect internet advertisements, pros and cons of internet advertising and identify what aspect of internet advertising attract customers. The required data is collected via Google Forms which is distributed through social media platforms such as WhatsApp. The collected data is then analysed using MS Excel and SAS studio.

Contents

[Abstract 2](#_Toc102726764)

[1. Introduction 5](#_Toc102726765)

[2. Problem Framing 5](#_Toc102726766)

[2.1 Understanding the problem 5](#_Toc102726767)

[2.2 Sample for the study 6](#_Toc102726768)

[2.3 Research Questions 6](#_Toc102726769)

[3. Literature Review 7](#_Toc102726770)

[3.1 Introduction 7](#_Toc102726771)

[3.2 Different type of internet advertisements 7](#_Toc102726772)

[3.3 Pros and cons of online advertising to the internet uses 8](#_Toc102726773)

[3.3.1 Advantages of Digital advertisements 8](#_Toc102726774)

[3.3.2 Disadvantages of Digital advertisements 8](#_Toc102726775)

[3.4 Customers’ Attitude towards Internet advertising 9](#_Toc102726776)

[3.5 Impact of Internet Advertisements on Customer purchase behaviour 10](#_Toc102726777)

[3.6 Various factors related to internet advertisements that influence customer purchase behaviour 11](#_Toc102726778)

[3.7 Impact of personalised advertisements on customer purchase behaviour 13](#_Toc102726779)

[3.8 Impact of Demographic factors on customer purchase behaviour (Gender, age, education occupation differences in customer purchase behaviour) 13](#_Toc102726780)

[3.9 Summary 14](#_Toc102726781)

[4.Methodology and Research Design 15](#_Toc102726782)

[4.1 Introduction 15](#_Toc102726783)

[4.2 Research Philosophy and Approach 15](#_Toc102726784)

[4.2.1 Research Philosophy 15](#_Toc102726785)

[4.2.2 Research Approach 16](#_Toc102726786)

[4.3 Research Strategy 16](#_Toc102726787)

[4.4 Research Methods 16](#_Toc102726788)

[4.5 Primary Data Collection 16](#_Toc102726789)

[4.5.1 Materials 17](#_Toc102726790)

[4.5.2 Source and Sampling 17](#_Toc102726791)

[4.5.3 Pilot Study 18](#_Toc102726792)

[4.5.4 Access and Ethical Issues 18](#_Toc102726793)

[4.6 Approaches to Data Analysis 18](#_Toc102726794)

[4.6.1 Hypothesis 18](#_Toc102726795)

[5. Research and evaluation 18](#_Toc102726796)

[5.1 Findings 18](#_Toc102726797)

[5.2 Analysis 30](#_Toc102726798)

[5.2.1 Consumers’ attitude towards online advertisements 30](#_Toc102726799)

[5.2.2 Demographics factors affecting online advertisements 34](#_Toc102726800)

[5.2.3 Pros and cons of online advertisements 36](#_Toc102726801)

[5.2.4 Online advertising strategies that attract customers 38](#_Toc102726802)

[6. Critical Review 40](#_Toc102726803)

[6.1 Reliability and Validity 40](#_Toc102726804)

[6.2 Research Limitations 40](#_Toc102726805)

[7.Conclusion 40](#_Toc102726806)

[7.1 Research question evaluation 40](#_Toc102726807)

[References 41](#_Toc102726808)

[Appendices 44](#_Toc102726809)

[Ethics application form 44](#_Toc102726810)

[Terms of Reference 49](#_Toc102726811)

[**Research Objectives** 49](#_Toc102726812)

[Appendices 51](#_Toc102726813)

[Progress Forms: 51](#_Toc102726814)

[SAS CODE: 60](#_Toc102726815)

[Survey data collection proof: 66](#_Toc102726816)

# 1. Introduction

The study of how individual customers, groups, or organisations pick, buy, use, and dispose of ideas, commodities, and services to meet their needs and wants is known as consumer behaviour. It refers to the consumer's actions in the marketplace and the motivations behind those actions. This study helps marketers understand what a customer wants which can help marketers decide what to offer and what to remove in a particular market. Marketers will be able to offer commodities to consumers by understanding want motivates the consumers to acquire certain goods and services. In this study we assume consumers as the actors in a marketplace who will play many different decision-making roles, starting from seeing an online advertisement to the point of purchase.

According to Engel, Blackwell, and Mansard, ‘consumer behaviour is the actions and decision processes of people who purchase goods and services for personal consumption’.

Advertising is a type of communication that is used to encourage a certain set of individuals to do something new. It is usually a paid form of promotional material distributed by a sponsor via various media such as television, newspapers, and internet. With the rapid growth of technology and the masses have access to internet, the significance of online advertisements is on the rise. The use of the Internet to obtain website traffic and target and distribute marketing messages to the correct clients is known as online advertising. The goal of online advertising is to define markets through innovative and useful apps.

Since the early 1990s, the rise of online advertising has been exponential, and it has become a norm for both small and large businesses. Online advertising is sometimes referred to as digital advertising or Internet advertising. Today's scenario is full of current, urgent needs of the future, which are becoming a technically inextricable part of our lives. The size and scope of online advertising is rapidly expanding. Businesses are spending more money on online advertising than they were previously. It's critical to comprehend the aspects that influence the efficacy of web advertisements. Many prominent marketers have been waiting for an internet broadcast model. They want to make online advertising look more like television commercials. In fact, they want to make it better than traditional television advertising by combining the visual impact of traditional broadcast with the added value of interaction. Advertisers strive to make their advertisements more engaging. Customers become more involved with interactive advertising because they are the ones who initiate the majority of the action. Brand attitudes will be shaped by the experiences you have during this engagement.

# 2. Problem Framing

## 2.1 Understanding the problem

Advertising is seen as a critical and necessary component of a marketer's and business's economic growth. In today's world, businesses are increasingly relying on digital advertising. Most large, local, and multinational organisations are now engaged in full-fledged digital marketing, with social media and mobile advertising having surpassed television advertising.

Advertising's primary goal is to influence purchasing decisions. In the literary study of the impact of advertising on its efficacy, consumers' purchasing behaviour has always been given a lot of weight and space. The majority of the time, customer purchasing behaviour is determined by the buyer's fondness or dislike of the marketed goods. A high-quality advertisement is more likely to persuade customers to buy the goods, but a low-quality advertisement will have the reverse effect.

Previous research on the effectiveness of advertising and the impact of advertising on consumer purchasing behaviour has found positive results. The digital marketing trend is just starting to take off in Kochi. The impact of online or digital advertising, which is reaching its pinnacle in the digital environment in the twenty-first century, is examined in this study. With a focus on Kochi, this article tries to investigate the impact of online advertising on consumer purchasing behaviour. Another goal of this research is to examine different types of online advertising and see how they influence consumers' purchasing decisions.

## 2.2 Sample for the study

Customers' perceptions of internet advertisements and their impact on consumer purchasing decisions are the focus of this study. It's critical to choose a sample size with a diverse range of responders for such a large study. The scope is limited to Kochi city, which is one of Kerala's most developed cities and a metropolis. Kochi has a diverse population profile. The purchase behaviour of various groups of citizens, such as students, employees, employers, and homemakers, can be studied in detail, and a near-acute data analysis and interpretation can be performed, as it demonstrates how quality, availability, product price, offers, and advertisement features such as design influence consumer purchase decisions.

## 2.3 Research Questions

1. To analyse consumer's attitude towards internet advertising and the degree to which it affects their purchase behaviour.
2. To identify whether demographic factors influence the buying behaviour.
3. To analyse the pros and cons of online advertising to the internet uses.
4. To identify the different online advertising strategies that attract the consumers.

# 3. Literature Review

## 3.1 Introduction

This section focuses on previously done works to find an answer to the research questions. The researcher has considered the following to summarize and provide structure to the analysis of this research.

## 3.2 Different type of internet advertisements

1. From the book **“Digital Advertising: Theory and Research”** done by **Rodgers, S. and Thorson, E. (2017)** we can see an in-depth study on digital advertisements. In the chapter “DIGITAL ADVERTISING IN A NEW AGE” we can see how capable digital advertisements are in the modern day. The chapter also investigates how the concept of telepresence, or presence, in which media users overlook or misperceive the role of technology in their experience, offers a valuable framework for the study and practice of advertising today and in the future. Some aspects of modern-day advertisements such as Interactivity, personalization of advertisements, engagement which are also discussed. Also, the chapter “Evaluating Digital Advertising” investigates on the effects of digital advertisements internationally. Some features like consumer privacy, trust, cultural impact on consumer response is also addressed.
2. **Kumar Shubhangam, Manisha Srivastava, Ritesh Ravi, & Ravinjit Singh. (2020).** did research on **“INFLUENCE OF SOCIAL MEDIA ADVERTISEMENT ON CUSTOMER'S PURCHASE DECISION: A LITERATURE REVIEW”** where the influence of social media advertisements on consumer’s purchase decisions was analysed with the help of several literature reviews. In this study they’ve found that social media advertising is only effective if it can generate an immediate and large amount of response from the consumers.

Diagram

Description automatically generated

1. **Bisaria, G. and Ahmad, F. (2014).**did research on **“A COMPARATIVE STUDY OF TV AND INTERNET ADVERTISING IN THE CONTEXT OF EMOTIONS PARAMETER”.** The study was done to understand the ability of television and internet advertisements to emotionally involve the consumer in making a purchase decision. Students in a private school in Aligarh was involved in this research. After the study (using the chi square test), it was discovered that the new age medium, the internet, is giving television a run for its money, with the results indicating that the internet is a more effective medium for disseminating information than television. This highlights the opportunities that exist for advertisers online, as well as the need to rethink their advertising strategies in order to maximise their use of the internet.
2. **Dar, N., Ahmed, M., Muzaffar, M., Nawaz, K. and Zahid, Z. (2014).** studied on **“Facebook verses Television: Advertising Value Perception among Students”** to identify the perception of value of advertisement on television and Facebook in both female and male students at university of Gujrat. The study was done with a sample size of 300 students. Structural equation modelling was used in this study. The findings show that Ducoffe’s Ad Value was not fit for both Facebook and television.

## 3.3 Pros and cons of online advertising to the internet uses

**Sadeghpour, S. and Vlajic, N. (2021).** did a study on **“Click Fraud in Digital Advertising: A Comprehensive Survey”** to find the usage and impact of bots in performing click fraud in the space of digital advertisements. This study digs deep into categories of web-bots along with their malicious activities and associated threats. The study found that because of the large-scale and automated nature of click-bot actions, fraud via click bots (i.e., click-botnet) is not only the most common, but also the most difficult to protect against. Furthermore, recent click-botnets exhibit advanced human-like interaction characteristics, such as replicating random mouse movement in click-path patterns, and traditional interaction-based user behaviour analysis is likely to result in a significant number of false positives when detecting these bots.

### 3.3.1 Advantages of Digital advertisements

With the technological advancements in hardware and software over the years, the world wide web has also seen a lot of improvements. With more and more people being able to access the internet the digital advertisement space has also grown significantly. Digital advertisements generate more value in consumers compared to other mediums at a fraction of the cost. Some advantages of digital advertisements are:

**1. Measurable:** It's a lot easier to track and quantify online marketing. Online analytics tools can assist you see what's working and what isn't, allowing you to better target your marketing budget. It can also provide invaluable information on your ideal customer's appearance, helping you to better target your advertising to the most profitable demographics. The possibilities are truly endless.

**2. Targeted:** Flyers, television, billboards, and direct mail are all examples of traditional media that don't allow you to narrow down your target demographic. Your advertising budget is spent on reaching as many people as possible with your message in the hopes that a few would notice it and respond. We have a lot more control over online advertising. Based on their profiles and search history, websites like Facebook and Google can inform us who to target. This enables us to send crucial messages to the folks who are most likely to make a purchase. Thus, it is easier to target audience through online advertisements.

**3. Cost effective:** One of the most significant advantages of online advertising is that it is significantly less expensive than other traditional advertising approaches. Even on a tight budget, entrepreneurs may reach out to a large audience and stretch their marketing budgets further.

### 3.3.2 Disadvantages of Digital advertisements

**1. Ignoring Ads:** Consumers have developed a negligence towards all forms of advertising after becoming accustomed to seeing advertisements on television, hearing radio commercials, and scrolling through adverts in periodicals. This is also true of online advertising, where customers can avoid clicking banner ads, skipping adverts in online movies they watch, and closing pop-up ads as soon as they appear on their screens. Customers choose the advertising messages they want to reply to and click on.

**2. Many Options:** Companies can place adverts on a variety of websites on the Internet. Small business owners, in particular, may find this a burden. It's challenging to narrow down the selections to the websites that will attract the most potential clients and sales with so many options. After a firm chooses a website, it is offered with a number of options for promoting its products or services on the site, including banner ads, video marketing, and sponsoring a post. Businesses must figure out which sort of advertisement gets the most response from their target markets.

**3. Getting Distracted:** Customers usually have a specific aim in mind when they visit a website, whether it's to read the latest celebrity gossip, read the news, communicate with friends, download music, or purchase for a specific item. Customers are presented with a variety of options on websites, which can quickly distract them and divert their focus away from your online adverts.

**4. Technical problems:** Website downtime, pauses in website or video loading, and browser issues can affect the number of times and how well customers see online advertisements. When technological problems arise, businesses lose the ability to broadcast advertisements for their products and services, potentially resulting in lost revenue. Reading issues can arise as a result of website issues, or if a customer is viewing a website on a smartphone or other mobile device, has a slow connection speed, or does not have the appropriate applications and programmes loaded on his computer for proper viewing.

## 3.4 Customers’ Attitude towards Internet advertising

1. **Chinchanachokchai, S. and de Gregorio, F. (2020)** studied on the topic **“A consumer socialization approach to understanding advertising avoidance on social media”.** The objective was to find out about the advertising on social media platforms (SMPs) which has grown rapidly during the last five years. An online survey of 693 U.S. people was used to evaluate predictors of advertisement avoidance on SMPs (Facebook, Twitter, and Instagram) using the consumer socialisation paradigm. The results suggest that attitudes regarding social media advertising in general mediate the effects of SMP usage, susceptibility to social media influence, and susceptibility to peer influence on SMP ad avoidance. SMP advertising attitudes are favourably connected to SMP usage and susceptibility to social media influence, but peer influence susceptibility is negatively related. There are no demographic variations in avoidance or attitudes, according to the statistics. All demographic characteristics were used as independent variables in regression models. The findings of the analysis found that none of the demographic variables were linked to attitudes toward SMP advertising or avoidance of SMP advertising, either on a global or platform-by-platform basis. The demographic groupings exhibited no significant differences in multi-group analysis.
2. **Bilal, M. (2012).**conducted a study on **“Valuable Internet Advertising and Customer Satisfaction Cycle (VIACSC)”**. This study was done to find out the latent needs of the consumer through ads and inform him/her about the product on offer that might be valuable for the consumer. This research report finds that internet advertising is valuable when it recognises a customer's latent need and dealing with the customer's privacy concern appears to be the key proponent in driving a new advertising concept. Apart from the points, the fundamental goal of valuable advertising is to promote a product or service by identifying and satisfying client needs. We determined that the internet is a better means of advertising a product or service than television after comparing the two electronic modes of advertising.
3. **Malik, M.E., Ghafoor, M.M., Iqbal, H.K., Ali, Q., Hunbal, H., Noman, M. and Ahmad, B. (2013).** studied on the **“Impact of Brand Image and Advertisement on Consumer Buying Behaviour”.** The study was conducted with a total of 200 respondents. This study was done to find out why the brand image and advertisement are critical in boosting any business's performance because brand image is an implied tool that can positively influence people's purchasing behaviours, and advertisement is acting as a driving force for any business because it's an effective way to convey your message and stay in the minds of customers. The study found that the brand image has a significant impact on the consumers’ buying behaviour which can be leveraged positively to influence people in buying certain products. As more people are getting aware of the brands brand image plays a vital role in advertising.

## 3.5 Impact of Internet Advertisements on Customer purchase behaviour

1. **Ziyadin, S., Doszhan, R., Borodin, A., Omarova, A. and Ilyas, A. (2019)** examined **“The role of social media marketing in consumer behaviour”**. The article takes a look into consumer digital culture, responses to digital advertising, the impact of social media on consumer behaviour, mobile environments, and online rumours (WOM). The article investigates how consumers interact with, are impacted by, and are influenced by the digital environment in which they live. The study found out that despite of all the short comings social media ads has great potential to increase brand loyalty and it helps interact directly with potential consumers. It also allows companies to reach out to a larger number of consumers.
2. **Raghubansie, A. D. & EL-Gohary, H. O. A. S. (2021)** studied on **“Digital Advertising Creative Processes and Innovation in UK SME Advertising Agencies: An Empirical Investigation of Viral Advertising”** where they investigated the different innovations introduced into the advertising creative design and development process by UK advertising agency managers. The research mainly focuses on the creation of viral adverts. The study adopts an interpretivism paradigm employing a qualitative approach. The data was collected using semi-structured interviews with UK based SME advertising agencies. The study found that the sender-receiver connection has changed dramatically, especially since the advent of the internet and the widespread use of social media. Social media offer greater flexibility across the whole planning process with built in unpredictability to allow for interactivity, future creative content, and broader audience appeal.
3. **Zhang, P. (2011).** did research on **“What consumers think, feel, and do towards Digital ads: A multiple-phased study”**. The study was conducted in 3 phases on a total of 497 consumers to understand the attitude of consumers towards digital ads. The study shows that people frequently watch digital ads online and the majority of them use ad blockers to prevent them. Consumers perceive informational, interactive, and creative elements in email marketing, while privacy is strongly perceived when compared to sponsor-linked commercials, according to the study. According to the researcher, digital advertisement designers must create ads that attract consumers' attention.

Modern firms, especially those that conduct business outside of their local neighbourhood rely on Internet advertisements. Consumers, like radio, television, magazines, and newspapers, utilise the Internet for more than just amusement or information. Consumers utilise the Internet to help them in almost every aspect of their lives, giving a verity of options for advertisers to provide relevant, tailored messages. Because of the Internet's tremendous reach, advertisers can reach far more people for a fraction of the expense of traditional advertising media. Businesses having a national or international target market and large-scale distribution capability will benefit from Internet advertising. Internet advertising can also be more targeted than traditional media, ensuring that the most relevant audiences see the messages.

## 3.6 Various factors related to internet advertisements that influence customer purchase behaviour

1. **Alalwan, A.A. (2018).** Studied on the **“Investigating the impact of social media advertising features on customer purchase intention”.** The research focuses on the impact of social media advertising on customers purchase intentions. Social media is becoming more and more popular as a medium for marketing and promotion. Organizations have invested a significant amount of time, money, and resources in social media advertisements. However, how firms can develop social media advertising to successfully attract clients and persuade them to purchase their brands is always a difficulty. The study aims to identify and test the main factors related to social media advertising that could predict purchase intention. Researchers and practitioners in the marketing field have been increasingly focused on the associated concerns of social media advertising. As a result, this research was carried out to improve current knowledge of the key components of social media ads and their impact on client buy intent. A closer review of the related literature leads to the identification of six main factors (performance expectancy, hedonic motivation, habit, interactivity, informativeness, and perceived relevance) as key predictors of purchase intention.
2. **Sharma, A., Bhosle, A. and Chaudhary, B. (2012).** did research on **“Consumer Perception and Attitude towards the Visual Elements in Social Campaign Advertisement”.** This research article aimed to investigate and describe the attitudes and perceptions of consumers about visual aspects in social advertising campaigns. The review focuses on essential aspects of consumer behaviour, such as the role of perception in communication and the impact of various image contents and elements in social advertising. To collect and analyse people's feedback and observations about visual advertisements, we employed a semi-structured questionnaire and two focus groups. According to the study, women were sensitive to nudity in advertising. Female respondents, on the other hand, were less knowledgeable about the purpose of such commercials than male respondents. The study indicated that images used in social advertising must be properly selected in order to capture the attention of viewers as soon as they realise, they will be exposed to such promotions.

The decision-making processes and actions of people who buy and use things are referred to as buying behaviour. Natural processes and decisions that influence a customer's purchase are referred to as "consumer behaviour." The study of people, groups, or organisations, as well as all actions involved with the purchase, use, and disposal of goods and services, including the consumer's emotional, mental, and behavioural responses that precede or follow these activities, is known as consumer behaviour. Consumer behaviour emerged as a distinct sub-discipline of marketing in the 1940s and 1950s. For marketers, understanding purchasing and consumption behaviour is a major challenge. Consumer behaviour, in its broadest meaning, is concerned with determining how people make purchases as well as how they consume or experience products or services. Consumers are active participants in the decision-making process. They make purchasing decisions based on their disposable income or budget. They may alter their tastes as a result of their budget and a variety of other considerations. Consumer behaviour is studied by researchers, firms, and marketers to learn what drives a consumer's buying habits and product choices. Consumer behaviour is influenced by a variety of psychological, social, personal, and cultural aspects. Economic status, views and values, polish, personality, age, and education are some of the sub-categories of these elements. Consumer behaviour research is concerned with all elements of purchasing behaviour, from pre-purchase activities to post-purchase consumption, appraisal, and disposal. Consumer behaviour findings are used to create ways and products that improve corporate performance and gross revenue. Customers are getting more powerful, intelligent, and sophisticated, and businesses are increasingly relying on research into modern consumer behaviour. Attitude is a motivation, emotion, perception, and long-term cognitive process that deals with characteristics of one's surroundings. It is concerned with the customer's perceptions of online advertising on the Internet and their projected behavioural tendency toward the purchase of electronic gadgets through the Internet. Advertising to attract customers, as well as delivering a better atmosphere, product, services, and policies, are all critical components of improving today's consumer experience and maintaining customers. This research aims to explain and reconcile the success of online advertising in eliciting customer response. Some of the advantages of studying consumer behaviour are:

1. **1. Behavioural advertising:** Behavioural advertising, as the name implies, tracks clients' actions as they navigate from one Web page or site to the another. Companies that use this advertising approach target adverts to specific persons based on their previous surfing behaviour. Because behavioural advertising analyses customers' interests, there's a better chance they'll want the offered goods or service and be inspired to click on an ad. Customers do not view the same adverts on the same Web page while using this strategy. People can identify an ad that will benefit them based on a number of characteristics. These variable aspects must be sufficiently motivating for people to act on the knowledge.
2. **2. Creative Attraction:** Although customer perception of this type of advertising is highly subjective, innovative attraction advertising is trending in the right direction. Customer’s sense and intuitively take in the information presented in an ad with unique images and content. Customers' desired next steps are reflected in creative content. It allows people to react and feel before they begin to think and make decisions.
3. **3. Contextual approaches:** Customers move through task flows on websites to achieve their goals, and they do it in a setting that allows them to do so. Ads in this context can help customers get closer to their goals faster, get a better sense of what they can achieve, and understand the context more clearly. Customers have the option of processing data centrally or peripherally. Customers process information more centrally using the context approach to advertising, therefore the effect of acting on it is stronger because the information they're processing is already within the context of need.
4. **4. Information:** The most crucial component moving customers through their chores is information. Customers desire to know more when an advertisement gives useful information. It tickles their attention. It allows people to think and feel while also encouraging them to make decisions.
5. **5. Interactivity:** Customers become captivated in interactive advertisements. Depending on the context and substance of the advertisement, it then directs them in the proper route. When you offer interactive material to clients, they want a reason to continue.
6. **6. Content Lures:** In order to catch clients' attention, one effective strategy is to attract them with fascinating information. Appealing to people's emotions is one approach to do this. Arousing emotions such as love, worry, anxiety, stress, want, happiness, bliss, or contentment makes potential customers feel more connected to the company or product depicted in an advertisement.
7. **7. Geography:** When businesses target the right audience in the right place with the right message, their understanding of cultural variations may help customers make the right decisions online. Customers are more likely to be receptive to and absorb information presented in advertisements that are culturally significant to them. They are likely to move in a favourable direction as they progress to the next level of perceiving and intuition.

## 3.7 Impact of personalised advertisements on customer purchase behaviour

1. **Rodgers, W. and Nguyen, T. (2022)** did research on **“Advertising Benefits from Ethical Artificial Intelligence Algorithmic Purchase Decision Pathways”.** With the rapid growth of technology AI are getting more powerful. This paper discusses six dominant algorithmic purchase decision pathways that align with ethical philosophies for online customers when buying a product/goods. This study sheds light on the drivers of intelligent advertising in the AI era, such as intelligence modelling. The study first looked at the impact of AI and related technologies such as machine learning, deep learning, and neural networks on advertising. Second, this article laid the groundwork for incorporating ethical factors into customers' algorithmic purchase decision paths.
2. Research was conducted by **Deng, S., Tan, C.-W., Wang, W. and Pan, Y. (2019)** to understand the effect of artificial intelligence on online advertisements**.** This journal explores the tremendous opportunity of artificial intelligence in programmatic advertisements (i.e., online advertisements). This journal also advances a smart generation system of personalized advertising copy (SGS-PAC) that can automatically personalize advertising content to align with the needs of individual consumers. The Analytical results from a user experiment involving about 80 subjects underscore that personalized advertising copies generated by SGS-PAC can bolster click rate in online advertising platforms.

## 3.8 Impact of Demographic factors on customer purchase behaviour (Gender, age, education occupation differences in customer purchase behaviour)

1. **Lubis, A. N. (2018).** Studied on “EVALUATING THE CUSTOMER PREFERENCES OF ONLINE SHOPPING: DEMOGRAPHIC FACTORS AND ONLINE SHOP APPLICATION ISSUE”. Year after year, the internet market, both from vendors and online shopping fans, continues to rise. Traditional and online, consumer buying preferences are critical to successful transactions. When selecting whether to expand into the online market or stay in the traditional market, sellers must consider their target consumer profile. To conduct this research 200 respondents of Medan City, North Sumatera Province participated. The findings of this study show that an individual's online and conventional purchasing preferences are influenced by the demographic and proprietary features of an online shopping app. Males prefer to shop online more than females, according to the study. Furthermore, the study shows that the higher income respondents are more likely to shop online. Those who have an online store application are more likely to shop online.
2. **Azar, Dr.K., Tahereh, N. and Zahra, G.T. (2012).** investigated the **Effects of Perceived Value on Users View toward Internet Advertisements Considering Moderating Effect of Gender** in a sample size of 252 people selected using g Cochran formula and classified random sampling. In this study they found that the perceived value of entertainment had a significant effect on the attitude towards digital ads. They’ve also found that informativeness also adds significant value to ads. Also focusing on the consumers’ real needs can also improve the effectiveness of the online ad. Finally, the findings of this study broaden people's understanding of the importance of gender in judging web advertising.

## 3.9 Summary

From the insights obtained from studying the above works are as follows:

* Investigated on works that relate to internet advertisements and its impact on customer buying behaviour. With the growth of technology internet is accessible to the majority of the population around the world. This has opened up a huge space for internet advertisements. The analysed works conclude that there is an impact of internet advertisements on the buying behaviour of the customer
* In a section we have identified the demographic factors that affect the buying behaviour of customers. In one of the works, we found that female respondents tend to get offended by internet advertisements more often than male. We also saw the impact of visual elements in internet advertisements
* In a section we have discussed about the advantages and disadvantages of internet advertising. We have also considered a literature on click frauds.
* The above referred works have helped the research identify certain strategies that the consumers come across such as visual appeal, interactivity, information on the adverts, offers and discounts.

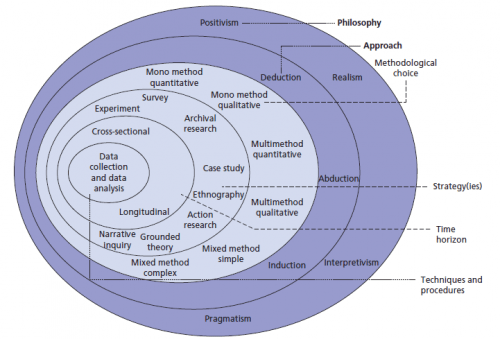
# 4.Methodology and Research Design

## 4.1 Introduction

The research was performed to understand the attitude of consumers towards digital advertisements in Kochi city. In this chapter discusses the stages that are involved in carrying out the research in detailed manner and present different process that are involved in this research.

## 4.2 Research Philosophy and Approach

Research philosophy is a particular way of developing knowledge that defines the philosophical paradigm. This development and understanding of knowledge depend on certain assumptions based on our perspective of the world, i.e., the practical considerations while selecting a topic of research **(Holden & Lynch, 2004; Saunders, Lewis, & Thornhill, 2009).**

Fig: Saunders onion Model

### 4.2.1 Research Philosophy

The positivist research philosophy provides an objective view of the social reality of a research concept **(Collins, 2017).** The positivist philosophy was considered suitable in this research. It strived to offer an objective outlook on the impact of digital advertisements in the buying behaviour of consumers in Kochi, India by analysing the various facts related to the research topic on breaking into smaller components for detailed scientific analysis. The researcher remained independent in the research and the social reality of the research phenomena was identified.

Epistemology philosophy is also concerned with the social reality in relation with the mind. As per this philosophy, evidence, reliability, reasons and knowledge need to be considered to answer research questions **(Jackson, Sørensen and Møller, 2019).** This philosophy matches with the positivism philosophy based on the consideration of social reality in research. This research has considered the relationship between digital advertisements and buying behaviour of consumers as the social reality. Thus, epistemology and positivism philosophies were considered as the suitable philosophies. The study can offer a generalised view on the effect of digital advertisements on the buying behaviour of consumers in Kochi, India.

### 4.2.2 Research Approach

In this research a deductive research approach was used. Existing research studies analysed earlier have shown the impact of online advertisements on consumer behaviour. During previous literature review, researchers such as **Rodgers, S. and Thorson, E. (2017)** have studied about the role of digital advertising in the new age, and they have also evaluated all the benefits digital advertising can offer such as audio-visual adverts with the added features of interactivity. There are a few shortcomings for digital advertisements as well. In the study conducted by **Shadi Sadeghpour, Natalija Vlajic (2021)** on click frauds. The acceptance or rejection of the research hypotheses have been instrumental in arriving at a new and specific theory to explain the impact of digital advertisements on consumer buying behaviour.

## 4.3 Research Strategy

Case study, surveys, experiments, archival analyses and histories are the different research strategies **(Loenen, 2021)**. This research considered survey research strategy to analyse the impact of online advertisements on consumer buying behaviour. Face to face interviews were not considered because the target audience was from Kochi, India also due to the corona pandemic situation and the lack of time to conduct interviews. A web-based survey using Google Forms was used. Web based surveys provide lots of advantages such as low cost of implementation and it can be distributed across the world easily. This survey research was useful to gather data in such a short period of time from people in Kochi, India since the survey link can easily be shared through social media groups.

## 4.4 Research Methods

The quantitative research method provides objective research results through statistical analysis of research data **(Leavy, 2017).** The research uses the quantitative research method. It enabled in analysing the research data that is quantitative in nature through different statistical tests. In this research Microsoft Excel is used to achieve charts and create tables to study the attitude of consumers towards digital advertisements. The data obtained from Google Forms is used to create an excel sheet with values and later represented in charts to get a visual understanding of the result. This helped in offering conclusive evidence on the effect of digital advertisements on consumer buying behaviour.

## 4.5 Primary Data Collection

In the primary data collection method, raw data is collected from the research participants on a specific research topic through experiment, observation, interview or survey methods (Neelankavil, 2015). Primary data was acquired for this study utilising a survey method and questionnaires using Google Forms. The study's secondary data came from websites, reports, the internet, journals, and other research sources.

### 4.5.1 Materials

The attitude of consumers towards digital advertisements in Kochi city was obtained through online survey carried out with the help of structured questionnaire using Google Forms. This was prepared by the researchers specifically for performing this research. The questionnaire consisted of set of questions based on the attitude of consumers towards digital advertisements, what medium of advertisements they preferred and why they avoided advertisements. The online survey was beneficial in the speedy and time saving collection of primary data for this research from the research participants. The survey link was distributed within the residents of Kochi, India.

The survey involved different set of questions whose results will answer the research questions. The following questions will be asked:

1. Please select an age Group.
2. Sex?
3. Do you pay attention to online advertisements?
4. Have you ever bought a product seeing online advertisements?
5. How often do you click advertisements seen in social media platforms?
6. What type of advertisements would you be tempted to click?
7. Do you think advertisements are personalized according to your previous searches?
8. Have you ever been tricked into clicking advertisements?
9. After being tricked, what did you decide to do?
10. How much influence do you think online advertisements have over your buying behaviour?
11. Which online advertisement is the most influential on your buying behaviour?
12. What do you think are the advantages of online advertisements?
13. What do think are the disadvantages of online advertisements?
14. Overall, do you think online advertisements have a positive or negative impact on your browsing experience?
15. What do you think is the most important to draw your attention towards an online advertisement?

### 4.5.2 Source and Sampling

The simple random sampling method was used when choosing a sample for this research. The sample selected was from Kochi, India. This city was taken because it is one of the most technologically developed cities in the state of Kerala and majority of people are exposed to digital advertisements. The survey link was only distributed to the residents of this city. It was mainly distributed to people between the ages 15 to 60. This age group was focused because people who come under this age group are exposed to digital advertisements. The research sample contained 109 respondents who were aware of digital advertisements from Kochi city. The researcher first approached certain people from his prior studies who were familiar to digital advertisements. They were requested to provide references to other potential research participants, so the desired number of responses was obtained.

### 4.5.3 Pilot Study

A pilot study was undertaken on 9 research participants chosen from the research sample. This helped in testing the efficacy of the research questionnaire in meeting the research objectives. It necessitated improvement of the questionnaire through inclusion, exclusion and modification of certain questions.

### 4.5.4 Access and Ethical Issues

The researcher used social media platform to circulate the survey questionnaire. Thus, there are no major accessibility issues faced by the researcher. However, this research has considered all the necessary ethical practices to overcome ethical issues. This study was carried out only on those research participants who gave voluntary consent to this research. They were informed that the research holds only academic purpose for the researcher. The research participants were assured that this research will not inflict any harm on them, and they can withdraw from the research at any time. The research participants were treated as anonymous to ensure their privacy. The data and results of the research were stored on a MS Excel sheet that was password secured on the laptop of the researcher. The filled-in questionnaire was digitally destroyed for data protection.

## 4.6 Approaches to Data Analysis

The descriptive data analysis offers generalisation of the characteristics of a group of people through analysis of the research data (Best and Kahn, 2016). The data analysis method applied for this research was the descriptive data analysis method. It aided in clearly offering detailed and accurate description of the research topic of the impact of digital advertisements on consumer buying behaviour in Kochi city. The data analysis method involved the application of various statistical tests such as the descriptive statistics to help offer insights on the impact of digital advertisements in consumer buying behaviour in Kochi City.

### 4.6.1 Hypothesis

The final aim of this research is to find out if there is any significant impact of digital advertisements on the buying behaviour of the customer. The following hypothesis is considered as the base of this research:

H1: There is no significant impact of digital advertisements on consumer buying behaviour

H2: There is significant impact of digital advertisements on consumer buying behaviou

# 5. Research and evaluation

## 5.1 Findings

In this section the data collected through questionnaire of respondents from Kochi City is analysed and presented. A total of 109 response was obtained from the residents of Kochi. The questionnaire was created using Google Forms and distributed via WhatsApp and other social media platforms.

**Table 4.1: showing age group of the respondents**

|  |  |  |
| --- | --- | --- |
| Age Group | No: of responses | Percentage |
| 15 – 20 | 22 | 20 |
| 20 – 25 | 36 | 33 |
| 25 – 30 | 24 | 22 |
| 30 – 35 | 7 | 7 |
| 35 and above | 20 | 18 |
| Total | 109 | 100 |

**Chart 4.1: showing age group of the respondents**

From the above pie chart, we can see that the majority of the responses were received from respondents with age 20-25 who contributed 33% of the total respondents followed by age group 25-30 with 22%, then comes age group 15-20 with 20%, 18% respondents were 35 and above and finally 7% of respondents were in age group 30-35. The majority of the respondents are my peers during my previous studies who are currently aged between 20-30. The rest of the respondents are the family members of my peers.

**Table 4.2: showing sex of respondents**

|  |  |  |
| --- | --- | --- |
| Sex | No: of responses | Percentage |
| Male | 55 | 50 |
| Female | 53 | 49 |
| Prefer not to say | 1 | 1 |
| Total | 109 | 100 |

**Chart 4.2: showing sex of respondents**

From the total responses obtained there was 55 male respondents,53 female respondents and 1 respondent preferred not to reveal his gender.

**Table 4.3: showing whether the respondents pay attention to online advertisements**

|  |  |  |
| --- | --- | --- |
| Pay attention/ not | No: of responses | Percentage |
| Often | 20 | 18 |
| Sometimes | 59 | 54 |
| Rarely | 26 | 24 |
| Never | 4 | 4 |
| Total | 109 | 100 |

**Chart 4.3: showing whether the respondents pay attention to online advertisements**

The above chart shows how the respondents’ attitude towards online advertisements. From the pie chart we can see that 54% of the respondent’s pay attention to online advertisements sometimes. This may be due to the fact that personalized adverts have been used and an internet user is most likely to be monitored and only relevant adverts are shown to the particular user.

We can also see that 24% of the respondents rarely pay attention to online adverts and 18% people often pay attention to online adverts. Lastly, we can see that 4% of the respondents never pay attention to the online adverts.

**Table 4.4 showing whether the respondents have brought any product seeing the online advertisement**

|  |  |  |
| --- | --- | --- |
| Bought the product or not | No: of responses | Percentage |
| Yes | 74 | 68 |
| No | 35 | 32 |
| Total | 109 | 100 |

**Chart 4.4 showing whether the respondents have brought any product seeing the online advertisement**

Surprisingly enough 74 respondents (which is 68%) have bought the product after seeing online advertisements. With the development of personalized adverts these days a users’ online activity is monitored, and most relevant adverts are displayed which increases the sale rate. We can also see that 32% of the people have chosen not to buy even after seeing such adverts.

**Table 4.5: showing how often respondents click on advertisements seen in social media platforms**

|  |  |  |
| --- | --- | --- |
| How often advertisements are clicked | No: of responses | Percentage |
| Often | 12 | 11 |
| Sometimes | 50 | 46 |
| Rarely | 40 | 37 |
| Never | 7 | 6 |
| Total | 109 | 100 |

**Chart 4.5: showing how often respondents click on advertisements seen in social media platforms**

This pie chart has also produced similar results to Table 4.3. The charts tells that the majority of the respondents (i.e. 46%) only click on online adverts sometimes, while 37% of them rarely click on online adverts. 6% of the respondents never click on online adverts and 11% often click on online adverts. The sheer number of respondents seems not interested in clicking on online adverts. This could be because of many reasons which will need separate research to obtain the answer to “why people avoid online adverts”

**Table 4.6 showing what type of advertisements the respondents are tempted to click**

|  |  |  |
| --- | --- | --- |
| Temptations | No: of responses | Percentage |
| Offers and discounts | 38 | 35 |
| Fascinating products | 29 | 27 |
| Relevant ads | 42 | 38 |
| Total | 109 | 100 |

**Chart 4.6 showing what type of advertisements the respondents are tempted to click**

The above pie chart shows the reason why the respondents clicked the online advertisements. We can see that 38% of the people have clicked the adverts because the adverts were relevant to them. 35% of the people clicked the adverts because of the offers and discounts that were displayed and the rest 27% clicked because of fascinating products.

**Table 4.7: showing whether the respondents think advertisements are personalised according to their previous searches**

|  |  |  |
| --- | --- | --- |
| Personalised ads | No: of responses | Percentage |
| Yes | 97 | 89 |
| No | 12 | 11 |
| Total | 109 | 100 |

**Chart 4.7: showing whether the respondents think advertisements are personalised according to their previous searches**

This chart shows the acceptance of personalized adverts among respondents. The results are quite surprising as 89% of the respondents prefer personalized adverts. This might be because they are not aware that their actions in the internet is being monitored to give respondents personalized adverts or even though they are aware but still doesn’t mind their actions being tracked. 11% of the respondents do not prefer personalized adverts, this may be because of their privacy concerns.

**Table 4.8: showing whether respondents have been tricked into clicked into clicking advertisements**

|  |  |  |
| --- | --- | --- |
| Tricked or not | No: of responses | Percentage |
| Tricked | 51 | 47 |
| Not Tricked | 58 | 53 |
| Total | 109 | 100 |

**Chart 4.8: showing whether respondents have been tricked into clicked into clicking advertisements**

The above chart depicts the percentage of people who have been tricked into clicking online advertisements. From the pie chart we can see that there is a slight majority of respondents (i.e. 53%) have not been tricked into clicking online adverts, but the rest 47% have been tricked into clicking online adverts. There are adverts that display false information to deceive consumers into clicking adverts, which in turn reduces the morality of online advertisements.

**Table 4.9: showing what the tricked respondents decide to do**

|  |  |  |
| --- | --- | --- |
| Decision | No: of responses | Percentage |
| Bought the product | 46 | 6 |
| Didn’t buy the product | 7 | 42 |
| Never been tricked | 56 | 52 |
| Total | 109 | 100 |

**Chart 4.9: showing what the tricked respondents decide to do**

The above pie chart depicts the decision taken by the respondents after being tricked into clicking an online advertisement. The chart depicts a predictable result. 42% of the respondents who were tricked into clicking an advertisement chose not to buy the product. This tells us that by tricking a consumer into clicking an advertisement can have a negative impact on a sale decision. Being tricked into doing something creates a sense of insecurity in consumers’ minds which in turn makes them walk away from the product. Surprisingly though 6% of the respondents chose to buy the product even after being tricked.

**Table 4.10: showing how much influence the respondents think online advertisements have on their buying behaviour**

|  |  |  |
| --- | --- | --- |
| Influence on buying behaviour | No: of responses | Percentage |
| High Influence | 29 | 26 |
| Partly Influence | 41 | 38 |
| Less influence | 25 | 23 |
| No Influence | 14 | 13 |
| Total | 109 | 100 |

**Chart 4.10: showing how much influence the respondents think online advertisements have on their buying behaviour**

This table and chart represent how much of an influence does online advertisements have in the buying behaviour of the respondent. From the chart we can see that 38% of the respondents believe that online adverts have partly influenced their buying behaviour and 26% believe that it has a high influence in their buying behaviour. Also 23% of the respondents believe that the advertisements have less influence in their behaviour and only 13% of the respondents believe that online advertisements have no influence in their buying behaviour. From this we can see that online advertisements really do influence consumers in buying a certain product.

**Table 4.11: showing which type of online advertisement is most influential in respondents buying behaviour**

|  |  |  |
| --- | --- | --- |
| Type of ad | No: of responses | Percentage |
| Google ads | 15 | 14 |
| Facebook ads | 24 | 22 |
| YouTube ads | 32 | 29 |
| Instagram ads | 38 | 35 |
| Total | 109 | 100 |

**Chart 4.11: showing which type of online advertisement is most influential in respondents buying behaviour**

The above pie chart shows which is the most influential online advertisements. According to the chart 35% of the respondents think that Instagram adverts are the most influential advertisements followed by YouTube and Facebook advertisements respectively. Only 14% of the respondents believe Google adverts influence them. Most Instagram adverts are pictorial and have the ability to give more information to the consumer. This may also be true in the case of YouTube adverts, but they are more intrusive compared to Instagram advertisement.

**Table 4.12: showing what the respondents think are the advantages of online advertisements**

|  |  |  |
| --- | --- | --- |
| Advantages of online ads | No: of responses | Percentage |
| Saves Time | 23 | 21 |
| Creates personalised experience | 38 | 35 |
| Helps in Comparison | 24 | 22 |
| Informative | 22 | 20 |
| Creates an awareness of brand | 2 | 2 |
| Total | 109 | 100 |

**Chart 4.12: showing what the respondents think are the advantages of online advertisements**

The above bar chart represents on what the respondents think are the advantages of online advertisements. The main advantage of online advertisements is that it creates a personalized adverts for a particular user. Thus, the consumer is only shown advertisements that are specific to his needs. Another important aspect of online advertisement is that it helps consumers compare different products in the market. Respondents also believe that online advertisements also save time. Genuine advertisements also help in consumers in getting a good understanding of the product. 2% of the respondents also believe that online advertisement creates brand awareness.

**Table 4.13: showing what the respondents think are the disadvantages of online advertisements**

|  |  |  |
| --- | --- | --- |
| Disadvantages of online ads | No: of responses | Percentage |
| Distractive | 35 | 32 |
| Not true to claims | 25 | 23 |
| Manipulates to buy products | 34 | 31 |
| Privacy concerns | 15 | 14 |
| Total | 109 | 100 |

**Chart 4.13: showing what the respondents think are the disadvantages of online advertisements**

The above bar chart represents the disadvantages of online advertisements. From the collected data we can see that the majority of the respondents (i.e., 32%) believe that online advertisements are distractive. This is true because nowadays we can see websites have more advertisements compared to its original content. Also 31% of the respondents believe that online advertisements manipulate them to buy products. There are many advertisements that deceive consumers into clicking it, this is what 23% of the respondents believe. 14% of the respondents have privacy concerns with online advertisements.

**Table 4.14 showing what impact online advertisements have on their browsing experience**

|  |  |  |
| --- | --- | --- |
| Impact | No: of responses | Percentage |
| Positive | 60 | 55 |
| Negative | 49 | 45 |
| Total | 109 | 100 |

**Chart 4.14 showing what impact online advertisements have on their browsing experience**

The above pie chart represents the way people feel about online advertisements in their daily browsing experience. Surprisingly enough 55% of the respondents feel that online advertisements have a positive effect in their browsing experience. This could be because good online advertisements are informative and helps consumers get a brief understanding of the product. Also 45% of the respondents believe it has a negative impact. This may be because online adverts are intrusive, manipulative and not true to its claims.

**Table 4.15 showing what the respondents think is most important factor to draw their attention towards online advertisement**

|  |  |  |
| --- | --- | --- |
| Factor | No: of responses | Percentage |
| Visual Design | 40 | 37 |
| Information seen in the ad | 30 | 27 |
| The product itself | 38 | 35 |
| Relevance of the ad | 1 | 1 |
| Total | 109 | 100 |

**Chart 4.15 showing what the respondents think is most important factor to draw their attention towards online advertisement**

The above chart shows what drew the attention of the respondents to the online advertisements. The majority of the respondents (i.e., 37% of the respondents) felt that the visual design of the advertisements attracts them. This can be confirmed as most of the respondents thought Instagram advertisements were the best. 35% of the respondents believe that the product seen in the adverts is what attracts them to the advertisements meanwhile 27% believe the information seen in the adverts attracts them most. Only 1% of the respondents believe that relevant products attract them to the advertisements.

## 5.2 Analysis

For the analysis of the collected data from the section 5.2, the researcher has used SAS studio to obtain useful insights and draw conclusions. The code used to perform the necessary steps is given in the appendix. The following analysis were done using SAS:

### 5.2.1 Consumers’ attitude towards online advertisements

#### 5.2.1.1 Does the respondents pay attention to online advertisements

In this section we analyse a few questions from the findings which will help us get a better understanding of how the respondents’ feel about online advertisements.

Chart, bar chart

Description automatically generated

The above table and chart show if the respondents pay attention to online advertisements. From the chart we can see that only 4% of the respondents don’t pay attention to online advertisements. We can also see that 55% of the people pay attention to online advertisements sometimes, 23% notices rarely and 19% of the sample pay attention to online advertisements often. Hence, we can conclude that the majority of the collected sample tend to observe online advertisements.

#### 5.2.1.2 Have the respondents purchased a product after seeing an online advertisement

Table

Description automatically generated

From the above table we can see that 68% of the respondents have purchased a product after seeing an online advertisement. This signifies online advertisements influence people to buy stuff.

Table

Description automatically generated

Chart, bar chart

Description automatically generated

The above table and the chart help how the different gender in the sample respond to online advertisements. From the table we can see that 49.07 % of the respondents are female and 50.93% of the respondents are male. The table also tells us that 28.70% of the female respondents have bought products under the influence of online advertisements and 20.37% have not. Similarly, 39.81% of the male respondents have bought products under the influence of online advertisements and 11.11% have not. This shows us that the majority of the male and female of the sample have purchased product under the influence of online advertisements.

#### 5.2.1.3 What impact did digital advertisements have on both genders

Table

Description automatically generated

Chart, bar chart

Description automatically generated

The above table shows the results of chi-squared test to find out the impact of online advertisements in both genders. From the table we can see that majority of the female respondents (i.e., 58.49%) had a negative impact from online advertisements. A total of 31 female respondents had a negative impact which was not close to the expected value of chi-squared test (which is 23.556). Only 41.51% of the female had a positive impact towards online advertisements. This could be because some digital adverts are too vulgar, and people can get offended by this.

On the other hand, the excepted chi-squared values in male respondents follow the same pattern as the obtained values. From the table we can see that more male respondents have a positive impact (i.e., 69.09%) towards online advertisements, and only 30.91% of the male respondents have a negative impact from online advertisements.

#### 5.2.1.4 Summary

From section 5.2.1.1 we can see that the majority of the respondents pay attention to online advertisements. In section 5.2.1.2 we can see 68.52% of the respondents have brought product under the influence of online advertisements and from section 5.2.1.3 we can see 55.56% of the respondents had a positive impact from online advertisements. Hence, we can conclude that online advertisements have an effect in the buying behaviour of consumers. We can also conclude that hypothesis “H2: There is significant impact of digital advertisements on consumer buying behaviour” from section 4.6.1 is true.

### 5.2.2 Demographics factors affecting online advertisements

#### 5.2.2.1 What tempted the respondents to click on online advertisements

Chart, bar chart

Description automatically generated

The above table shows on what type of adverts the respondents are tempted to click. Majority of the respondents have selected “relevant ads”. Now a days most adverts are personalized and most adverts that are being displayed will relate to previous searches. This indicates that the collected sample prefers personalized advertisements. 35% of the respondents are also attracted towards offers and discounts. Only 27% are attracted towards products.

Chart, bar chart

Description automatically generated

The above table shows which type of online advertisements influence consumers most. From the chart we can see that 35% of respondents prefer Instagram adverts, 30% prefer YouTube Ads and 21% prefer Facebook ads which are visually appealing. On the other hand, only 14% prefer Google ads which are not that visually appealing. This indicates that the majority of the respondents prefer adverts that are visually appealing.

#### 5.2.2.2 Summary

From section 5.2.2.1 we can see that the demographic factors affecting the sample are personalized advertisements and visually appealing adverts.

### 5.2.3 Pros and cons of online advertisements

#### 5.2.3.1 Pros of online advertisements

Chart, bar chart

Description automatically generated

The above table and chart show the respondents’ taught on ‘what are the advantages of online advertisement’. From the chart above we can see that 35% of the respondents believe personalized adverts is a major advantage of online advertisements. Other advantages are online adverts saves time and helps in comparison shopping. Some people thing online adverts creates brand awareness, and some people find it annoying. Also, from the above chart and from section 5.2.2 we can clearly see that the respondents have a positive attitude towards personalized advertisements.

#### 5.2.3.2 Cons of online advertisements

Chart, bar chart

Description automatically generated

The above table and chart show the disadvantages of online advertisements according to the respondents. The main disadvantage of all forms of advertisements is that they are distractive, which is the case here as well. 32% of the respondents think that online adverts are distractive. One of the other major disadvantages of online adverts are they manipulate consumers to by products. Another disadvantage is that many ads are not true to its claims. In the selected sample only 13% of the respondents are concerned about privacy which also explains why the respondents prefer personalized adverts in the previous sections.

#### 5.2.3.3 Summary

From section 5.2.3.1 we can summarize the advantages of online advertisements as:

1. Creates personalized experience
2. Saves time
3. Helps in comparison shopping
4. Informative
5. Creates awareness of brands

From section 5.2.3.2 we can summarize the disadvantages of online advertisements as:

1. They are distractive
2. Manipulates consumers to buy products
3. Being not true to claims
4. Privacy concerns

### 5.2.4 Online advertising strategies that attract customers

#### 5.2.4.1 Factors that draw attention of consumers towards online adverts

Chart, bar chart

Description automatically generated

From the above table and chart, we can see what are all the online advertising strategies that the consumer come across. The respondents in this case are more drawn towards the visual aspects of the advert. This is true because in the earlier sections we had found out that the majority of the respondents are influenced by Instagram and YouTube ads. Also 34% of the respondents are attracted by the product itself, this could be because nowadays most online adverts are personalized. Respondents also prefer to see information seen in the adverts as this can help them make the right purchase decisions.

Chart, bar chart

Description automatically generated

The above charts show some of the factors that attracted respondents towards online advertisements. Some of the things are:

* Relevant adverts
* Offers and discounts
* Fascinating products

#### 5.2.4.2 Summary

From section 5.2.4.1 the strategies that drew the respondent’s attention were:

* Visual design
* Information seen in the advertisement
* The product itself
* Relevance of the advert
* Offers and discounts

# 6. Critical Review

## 6.1 Reliability and Validity

The research is deemed to be highly reliable and valid. This is attributed to the fact that the current research was carried out exclusively on the actual respondents who had previously interacted with digital advertisements in Kochi city to determine their views on the influence of digital advertisements on their buying behaviour. The primary data will be collected through the survey technique to generate credible and empirical evidence on the research topic.

## 6.2 Research Limitations

1. The answers given by the respondents need not be accurate

2. The sample of 109 people is taken due to the time limitations which will limit the scope of the study

3. The sample is taken form Kochi city, so it cannot be generalized.

4. There might be an overdependence on secondary data due to lack of time

# 7.Conclusion

The researcher has concluded the result based on the analysis of the primary data collected through the survey and the secondary data from journals and articles. With reference to section 5.2.1.4 we can conclude that there is an impact on customers with the use of internet advertisements in Kochi, India. Section 5.2.2.2 identifies the demographic factors affecting the buying behaviour of respondents, section 5.2.3.3 elaborates on the pros and cons of internet advertisements from the view of the respondents and section 5.2.4.2 explains what all strategies used in internet advertising attracted the respondents. The literature review has been also helpful in deriving a conclusive answer for the research questions.

## Research question evaluation

Q1. To analyse consumer's attitude towards internet advertising and the degree to which it affects their purchase behaviour.

A1. From section 5.2.1.4 the researcher has found out that there is a significant role internet advertisement in the customer behaviour.

Q2. To identify whether demographic factors influence the buying behaviour.

A2. From section 5.2.2.2 & 5.2.1.4 some of the demographic factors that were identified was the effect of internet advertisement in gender and types of advertisements.

Q3. To analyse the pros and cons of online advertising to the internet uses.

A3. In section 5.2.3.3 the pros and cons identified by the respondents is summarized and in section 3.3 the pros and cons identified from the previous works is summarised.

Q5. To identify the different online advertising strategies that attract the consumers.

A4. From section 5.2.4.2 the researcher has identified the type of online strategies that attracted the respondents of the survey. Also, in section 3.6 the researcher has identified certain aspects of internet advertisements that draws customers attention.

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# Appendices

## Ethics application form

**Faculty of Computing, Engineering and Media (CEM)  
Application to Gain Ethical Approval  
Taught Masters’ Degree Student**

*NOTE: If your research involves using human tissue or fluid samples or animals please DO NOT use this form. You should seek guidance from the Chair of the Faculty Research Ethics Committee (FREC) before starting your project.*

All Taught Masters that include a research project or dissertation require ethical approval. Students must complete this form and discuss the likely outcome with their project supervisor. There are four possible outcomes:

1. No interaction with human beings is planned and no identifiable data on or from individuals is used.
2. Students interview individuals, carry out surveys, observe, and participate with adults who understand the research and are aware they can withdraw their participation at any time. Supervisors must ensure that the appropriate boxes in section 2 are ticked and that the student knows how to address the ethical concerns.

*For projects which fall under outcome 1 or 2, this ethical application form should be signed by the student and the project supervisor. Nothing further is required; the form does not need to go to the FREC.*

1. The research is with vulnerable people who may not understand the research and their role (eg children, hospital patients, people with mental health issues, subordinates in power relationships, etc). This also applies to research into illegal activities or research that could produce a risk of injury to anybody. The student / researcher must find ways to address these problems and the supervisor must be confident that these have been addressed satisfactorily.

*For projects which fall under outcome 3, the ethical application form should be signed by the student and project supervisor and a copy of the review form sent to the FREC (via* [*amsmith@dmu.ac.uk*](mailto:amsmith@dmu.ac.uk)*). Once the FREC accepts the review form, the student and supervisor will be notified and the student may start work on the project.*

1. The research is ethically problematic.

*For projects which fall under outcome 4, this ethical application form should be signed by the student and project supervisor and a copy of the review form submitted to the FREC (via* [*amsmith@dmu.ac.uk*](mailto:amsmith@dmu.ac.uk)*) for resolution. Once resolved, the student and supervisor will be notified and the student may start work on the project.*

**All outcomes**

Once approved, the form should be submitted by the student to the relevant Blackboard Dissertation shell. A copy of the form and, *where relevant*, the following supporting documents, must be included in the project report (dissertation) as appendices when it is submitted for assessment.

Supporting documents (may apply to outcome 2, 3 or 4):

* Information that will be provided to the study participants
* Participant consent form
* Other documentation as advised by the supervisory team

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Applicant | | | |
| Surname | Chandrasekhar | First Name | Kaushik |
| DMU Email Address | [P2656623@my365.dmu.ac.uk](mailto:P2656623@my365.dmu.ac.uk) | Student ID Number | P2656623 |
| Working title of the proposed investigation: *(Abbreviations must not be used):*  A study on the customer behaviour with regard to online advertising in Kochi | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2. Delete ‘Yes’ or ‘No as appropriate in table below. If you answer any of the following questions with ‘Yes’, then specific ethical issues WILL be raised that MUST be addressed. You will need to explain in detail in section 3 how you will address these ethical issues, and consult your supervisor.**  Has your research proposal identified any of the following research activities?   |  |  | | --- | --- | | Gathering information from or/and about human beings through: interviewing, surveying, questionnaires, observation of human behaviour | Yes | | Using archived data in which individuals are identifiable | No | | Researching into illegal activities, or activities at the margins of the law | No | | Researching into activities that have a risk of personal injury anybody. | No | | Research that might impact on human behaviour, for example on autonomous vehicles. | No | | Researching topics that are concerned with the following ‘sensitive research’ areas: access to web sites normally prohibited on university servers, or extremism and radicalisation, criminal activities, etc. | No |   For more information about whether your research should be classified as sensitive see: <http://www.dmu.ac.uk/research/ethics-and-governance/sensitive-research.aspx> ). |
| **Are there additional factors that could give rise to ethical concerns eg communication difficulties?** |
| N/A |

|  |
| --- |
| 3. How will the issues you have raised in response to questions 2 be addressed? |
| N/A |

*Note: you should consider the following:*

* *Providing participants with the full details of the objectives of the research*
* *Providing information appropriate for those whose first language is not English*
* *Voluntary participation with informed consent (through the provision of a consent form)*
* *Written description of involvement*
* *Freedom to withdraw*
* *Keeping appropriate records*
* *Signed acknowledgement and understanding by participants*
* *Relevant codes of conduct / guidelines*

|  |
| --- |
| 4. To which ethical codes of conduct have you referred? |
| N/A |

*Note: For the CEM Faculty these codes typically include those published by the BCS, ACM, IEEE or other applicable codes such as the code of the Social Research Association or specific funding bodies, such as the ESRC. Links to some of these codes are available on the CEM Faculty FHREC website.* [*http://www.dmu.ac.uk/research/ethics-and-governance/dmu-policies-and-external-requirements-.aspx*](http://www.dmu.ac.uk/research/ethics-and-governance/dmu-policies-and-external-requirements-.aspx)

**Please note, if the methodology changes in relation to ethical considerations after submission, you can submit a new form, following the same procedure.**

**AUTHORISATION**

|  |  |  |  |
| --- | --- | --- | --- |
| Signature of Applicant | | | |
|  | | | |
| Signed | Kaushik Chandrasekhar | Date | 22/03/2022 |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Approval signature of Supervisor | | | |
|  | | | |
| Signed |  | Date |  |
| *Outcome [circle number] ( 1 2 3 4 )*  Name of Supervisor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| *Where necessary*, authorising signature (FREC Chair) | | | |
|  | | | |
| Signed |  | Date |  |
| *Outcome [circle number] ( 1 2 3 4 )*  Name of FREC chair \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |

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| --- |
| **Conditions** |
|  |

|  |  |  |  |
| --- | --- | --- | --- |
| *Where necessary*, full approval - authorising signature (FREC Chair) | | | |
|  | | | |
| Signed | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date | \_\_\_\_\_\_\_\_\_\_\_\_ |

**NOTES FOR GUIDANCE:**

1. Participants cooperation in a research project is entirely voluntary at all stages. They must not be misled when being asked for co-operation.
2. Participant anonymity must be strictly preserved. If the Participant, on request from the Researcher, has given permission for data to be passed on in a form which allows that Participant to be personally identified:  
   (a) the Participant must first have been told to whom the information would be supplied and the purpose for which it will be used  
   (b) the Researcher must ensure that the information will not be used for any non-research purpose and that the recipient of the information has agreed to conform to the requirements of any relevant Code of Practice.
3. The Researcher must take all reasonable precautions to ensure that the Participant is in no way directly harmed or adversely affected as a result of their involvement in a research project.
4. The Researcher must take special care when interviewing vulnerable people – for example children or the elderly. The Faculty ethics representative will give advice on gaining consent for studies involving vulnerable people.
5. Participants must be told (normally at the beginning of the interview) if observation techniques and/or recording equipment are used, except where these are used in a public place. If a respondent so wishes, the record or relevant section of it must be destroyed or deleted. Participant anonymity must not be infringed by the use of such methods.
6. Participants must be enabled to check, without difficulty, the identity and bona fides of the Researcher.
7. Researchers should ensure data is held securely, and follow university and legal requirements regarding data protection and data storage.

## Terms of Reference

**IMAT5314 Project Terms of Reference (ToR)**

**Student Name:** Kaushik Chandrasekhar

**P-number:** P2656623

**Programme:** MSc Data Analytics

**Email address:** p2656623@my365.dmu.ac.uk

**Project Title:** A study on the customer behaviour with regard to online advertising in Kochi

Supervisor: Dulari Bhatt

**Email:** dulari.bhatt@dmu.ac.uk

**Introduction**

Consumer behavior is the study of how individual customers, groups or organizations select, buy, use, and dispose ideas, goods, and services to satisfy their needs and wants. It refers to the actions of the consumers in the marketplace and the underlying motives for those actions. Marketers expect that by understanding what causes the consumers to buy goods and services, they will be able to determine which products are needed in the marketplace, and how best to present the goods to the consumers. The study of consumer behavior assumes that the consumers are actors in the marketplace. Starting from the information provider, from the user to the payer and to the disposer, consumers play these roles in the decision process. Thus, its important to understand customer behavior to roll out an effective digital advertisement.

**Project Background**

The size and range of online advertisement is increasing dramatically. Businesses are spending more on online advertisement than before. Understanding the factors that influence online advertisements’ effectiveness is crucial. Advertisers want to make Internet advertising more like television advertising. They want to make it better than television advertising: all visual impact of traditional broadcast with the additional value of interactivity. The goal of advertisers is to make their ads more involving. Interactive advertising allows customers to become more involved because they initiate most of the action. Experiences during this interaction will drive brand attitudes. Thus, advertisers will benefit from a model on how to get the most out of their advertisements.

**Aim/Objectives**

**Aim**

To study the customer behaviour with regard to online advertising in Kochi.

## **Research Objectives**

1. To analyse consumer's attitude towards internet advertising and the degree to which it affects their purchase behaviour.
2. To identify whether demographic factors influence the buying behaviour.
3. To analyse the pros and cons of online advertising to the internet uses.
4. To identify the different online advertising strategies that the consumers come across.

**Hypothesis or** **Research Questions**

1. How online advertisements are more effective compared to television advertisements?
2. What is the customer’s perception towards online advertisement and their influence in consumer purchase decisions?
3. How to streamline online advertisements so that the advertiser can target the right audience?

**Resources**

Google Scholar, ResearchGate and other online resources

**Constraints**

1. The findings are based on Kochi city and cannot be generalized.
2. There may have to be taken from online resources due to lack of time.
3. The sample can only be taken from few respondents which may limit the scope of the study.

**Sources of Information**

The information will be collected from the residents of Kochi, as it is one of the most developed cities in Kerala and a metropolitan city. Kochi has a variety in demographic factors. The purchase behaviour of different categories of people such as students, employees, employers, homemakers can be precisely studied, and data analysis and interpretation can be done.

**Student** Kaushik Chandrasekhar **Date** 22/03/2022

**Supervisor** 22/03/2022

# Appendices

## Progress Forms:

**MSc PROJECT PROGRESS ASSESSMENT - STUDENT'S REPORT**

Programme Title: IMAT5314

Name: Kaushik Chandrasekhar

Project Title: Not decided

Assessment Period: February 2022 to May 2022 Report Number:1

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Objectives for Period (refer to previous report):

* Scoping my project
* Selecting the topic
* Developing research questions

Summary of Progress for Period (identify evidence of progress):

Researched on several potential topics and came up with some. Few of them were

* Analysis of disabled passengers in air travel
* E bikes: an easy way into recreational cycling

Problem Areas and Suggested Solutions:

* Selecting topic was a major concern as many things such as availability of data, relevant research and time had to be considered

Date of Next Review:22/2/2022

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor’s Signature: 8/02/2022 Date:8/02/2022

**MSc PROJECT PROGRESS ASSESSMENT - STUDENT'S REPORT**

Programme Title: IMAT5314

Name: Kaushik Chandrasekhar

Project Title: Not decided

Assessment Period: February 2022 to May 2022 Report Number:2

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Objectives for Period (refer to previous report):

* Discussed about Terms of reference and Ethical review form
* Selecting the topic

Summary of Progress for Period (identify evidence of progress):

Researched on several potential topics and came up with some. Few of them were

* Sales analysis of high-performance biking in Hope Tech
* Consumer behaviours towards online advertisements
* Analysis of disabled passengers in air travel
* E bikes: a easy way into recreational cycling

Problem Areas and Suggested Solutions:

* Still uncertain of the project topic
* Unable to gather information required for certain topics due to shortage of data and small size of certain industries

Date of Next Review:01/3/2022

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor’s Signature: 22/02/2022 Date:22/02/2022

**MSc PROJECT PROGRESS ASSESSMENT - STUDENT'S REPORT**

Programme Title: IMAT5314

Name: Kaushik Chandrasekhar

Project Title: “Challenges and communication issues faced by disabled air travellers across UK”

Assessment Period: February 2022 to May 2022 Report Number:3

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Objectives for Period (refer to previous report):

* Considered the topic: “Challenges and communication issues faced by disabled air travellers across UK”
* Submitted Terms of reference for review

Summary of Progress for Period (identify evidence of progress):

* Selected a topic and submitted the Terms of reference for review.
* Gathered required data for the topic

Problem Areas and Suggested Solutions:

* Lack of information in secondary data sources

Date of Next Review:15/3/2022

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor’s Signature: 01/03/2022 Date:01/03/2022

**MSc PROJECT PROGRESS ASSESSMENT - STUDENT'S REPORT**

Programme Title: IMAT5314

Name: Kaushik Chandrasekhar

Project Title: “A study on costumer behaviour with regard to online advertising in Kochi City”

Assessment Period: February 2022 to May 2022 Report Number:4

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Objectives for Period (refer to previous report):

* Changed the project topic to “ A study on costumer behaviour with regard to online advertising in Kochi City” due to lack of data in the previous topic.
* Create new Terms of reference and ethics review form.

Summary of Progress for Period (identify evidence of progress):

* New Terms of reference and ethics review form submitted.

Problem Areas and Suggested Solutions:

* Lack of information in secondary data sources for the previous topic

Date of Next Review:29/3/2022

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Supervisor’s Signature: 15/03/2022 Date:15/03/2022

**MSc PROJECT PROGRESS ASSESSMENT - STUDENT'S REPORT**

Programme Title: IMAT5314

Name: Kaushik Chandrasekhar

Project Title: “A study on costumer behaviour with regard to online advertising in Kochi City”

Assessment Period: February 2022 to May 2022 Report Number:5

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Objectives for Period (refer to previous report):

* Terms of reference and Introduction needed to be amended
* Development of objectives
* Start researching articles for Literature review

Summary of Progress for Period (identify evidence of progress):

* Final Terms of reference was submitted

Problem Areas and Suggested Solutions:

* Finding the right articles for literature review

Date of Next Review:05/4/2022

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**MSc PROJECT PROGRESS ASSESSMENT - STUDENT'S REPORT**

Programme Title: IMAT5314

Name: Kaushik Chandrasekhar

Project Title: “A study on costumer behaviour with regard to online advertising in Kochi City”

Assessment Period: February 2022 to May 2022 Report Number:6

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Objectives for Period (refer to previous report):

* Structuring the Report with reference to the marking grid
* Developing questions for questionnaire
* Researching articles for literature review

Summary of Progress for Period (identify evidence of progress):

* Shortlisted articles necessary for literature review
* Developed 10 sample questions

Problem Areas and Suggested Solutions:

* Matching questions to answer the research question

Date of Next Review:12/4/2022

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Supervisor’s Signature: 05/04/2022 Date:05/04/2022

**MSc PROJECT PROGRESS ASSESSMENT - STUDENT'S REPORT**

Programme Title: IMAT5314

Name: Kaushik Chandrasekhar

Project Title: “A study on costumer behaviour with regard to online advertising in Kochi City”

Assessment Period: February 2022 to May 2022 Report Number:7

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Objectives for Period (refer to previous report):

* Finalizing questions for survey
* Creating and distributing the survey
* Start writing the final report

Summary of Progress for Period (identify evidence of progress):

* Finalized questions for questionnaire
* Started with the final report

Problem Areas and Suggested Solutions:

* Developing the right questions

Date of Next Review:20/4/2022

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor’s Signature: 12/04/2022 Date:12/04/2022

**MSc PROJECT PROGRESS ASSESSMENT - STUDENT'S REPORT**

Programme Title: IMAT5314

Name: Kaushik Chandrasekhar

Project Title: “A study on costumer behaviour with regard to online advertising in Kochi City”

Assessment Period: February 2022 to May 2022 Report Number:8

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Objectives for Period (refer to previous report):

* Change old reviews in literature review (Select article from recent times)
* Work on Methodology
* Create and Distribute questionnaire using google forms

Summary of Progress for Period (identify evidence of progress):

* Started researching on relevant articles
* Started developing methodology
* Created and distributed the survey using social media platforms such as WhatsApp

Problem Areas and Suggested Solutions:

* Finding relevant articles
* Developing Methodology

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor’s Signature: 20/04/2022 Date:20/04/2022

**MSc PROJECT PROGRESS ASSESSMENT - STUDENT'S REPORT**

Programme Title: IMAT5314

Name: Kaushik Chandrasekhar

Project Title: “A study on costumer behaviour with regard to online advertising in Kochi City”

Assessment Period: February 2022 to May 2022 Report Number:9

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Objectives for Period (refer to previous report):

* Analysing the collected data
* Finalizing the report

Summary of Progress for Period (identify evidence of progress):

* Analysed the obtained data using SAS studio
* Report has been completed

Problem Areas and Suggested Solutions:

* Time was a major constraint throughout this period.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor’s Signature: 5/5/2022 5/5/2022

## SAS CODE:

/\* Importing File \*/

FILENAME REFFILE '/home/u57888155/my\_shared\_file\_links/u57888155/project/data.csv';

PROC IMPORT DATAFILE=REFFILE

DBMS=CSV

OUT=WORK.project;

GETNAMES=NO;

DATAROW=2;

RUN;

PROC CONTENTS DATA=WORK.project; RUN;

/\* Cleaning the data \*/

PROC SQL;

DELETE FROM work.projectt

WHERE var3="Prefer"

;

QUIT;

data work.project;

set work.project;

if var3 = "Prefer" then delete;

run;

proc format;

picture pctfmt (round) 0-high ='000%';

run;

/\* One \*/

/\* Do you pay attention to online advertisements? \*/

proc freq

data = work.project;

tables var4/ out=work.projectobs ;

run;

/\* Graph \*/

title1 h=15pt 'Do you pay attention to online advertisements' ;

proc sgplot data = work.projectobs;

vbar var4/ response=percent datalabel;

yaxis label='% of Responses';

xaxis label='Attitude';

format percent pctfmt.;

run;

quit;

/\*Have the respondents bought a product after viewing an online advertisements \*/

proc freq

data = work.project;

tables var5 / out=work.projectpref ;

run;

proc freq

data = work.project;

tables var3\*var5 / out=work.projectbuy ;

run;

proc freq

data = work.project;

tables var3\*var5 / chisq Expected ;

run;

/\* Graph \*/

title1 h=15pt 'Have respondents bought products with the influence of digital advertisements' ;

proc sgplot data = work.projectbuy;

vbar count/ response=percent datalabel;

yaxis label='% of Responses';

xaxis label='Female No: 22, Female Yes: 31, Male No: 12, Male Yes: 43';

format percent pctfmt.;

run;

quit;

/\*Impact of online advertisements on the respondents \*/

proc freq

data = work.project;

tables var3\*var15 / chisq Expected out= work.projectimpact;

run;

/\* Graph \*/

title1 h=15pt 'Impact Of Digital advertisements on respondents' ;

proc sgplot data = work.projectimpact;

vbar count/ response=percent datalabel;

yaxis label='% of Responses';

xaxis label='Female Negative: 31, Female Positive: 22, Male Negative: 17, Male Positive: 38';

format percent pctfmt.;

run;

quit;

/\* Two \*/

/\* What type of advertisements would you be tempted to click? \*/

proc freq data=work.project ORDER= FREQ;

tables var7/out=work.projecttype;

run;

/\* Graph \*/

title1 h=15pt 'What type of advertisements would you be tempted to click' ;

proc sgplot data = work.projecttype;

vbar var7/ response=percent datalabel;

yaxis label='% of Responses';

xaxis label='Type';

format percent pctfmt.;

run;

quit;

/\* Which Type of Ads influence the respondents the most \*/

proc freq data=work.project ORDER= FREQ;

tables var12/out=work.projectpersonal;

run;

/\* Graph \*/

title1 h=15pt 'Which Type of Ads influence the respondents the most' ;

proc sgplot data = work.projectpersonal;

vbar var12/ response=percent datalabel;

yaxis label='% of Responses';

xaxis label='Type of Ads';

format percent pctfmt.;

run;

quit;

/\* Three \*/

/\* What do you think are the advantages of online advertisements \*/

proc freq data=work.project ORDER= FREQ;

tables var13/out=work.projectadv;

run;

/\* Graph \*/

title1 h=15pt 'What respondents think are the advantages of online advertisements' ;

proc sgplot data = work.projectadv;

vbar var13/ response=percent datalabel;

yaxis label='% of Responses';

xaxis label='Advantages';

format percent pctfmt.;

run;

quit;

/\* What do you think are the disadvantages of online advertisements \*/

proc freq data=work.project ORDER= FREQ;

tables var14/out=work.projectdis;

run;

/\* Graph \*/

title1 h=15pt 'What respondents think are the disadvantages of online advertisements' ;

proc sgplot data = work.projectdis;

vbar var14/ response=percent datalabel;

yaxis label='% of Responses';

xaxis label='Disadvantages';

format percent pctfmt.;

run;

quit;

/\* Four \*/

/\* What do you think is the most important to draw your attention towards an online advertisement? \*/

proc freq data=work.project ORDER= FREQ;

tables var16/out=work.projectsta;

run;

/\* Graph \*/

title1 h=15pt 'Different advertising that the respondents have noticed' ;

proc sgplot data = work.projectsta;

vbar var16/ response=percent datalabel;

yaxis label='% of Responses';

xaxis label='Strategies';

format percent pctfmt.;

run;

quit;

/\* What type of advertisements would you be tempted to click? \*/

title1 h=15pt 'What type of advertisements would you be tempted to click' ;

proc sgplot data = work.projecttype;

vbar var7/ response=percent datalabel;

yaxis label='% of Responses';

xaxis label='Type';

format percent pctfmt.;

run;

quit;

## Survey data collection proof:

The survey was distributed to the residents of Kochi, India via WhatsApp messages and status. I had put up a status on WhatsApp for 2 days with the link to the survey and asking people to fill up the survey. The survey link was also shared in the researchers Undergraduate group. A total of 109 entries was obtained. Few of the screen shot of the on how the survey was distributed is given below:

A screenshot of a computer

Description automatically generated with low confidence A screenshot of a phone

Description automatically generated with medium confidence

A screenshot of a computer

Description automatically generated with medium confidence A screenshot of a phone

Description automatically generated with medium confidence

Graphical user interface, text, application, chat or text message

Description automatically generated A screenshot of a phone

Description automatically generated with medium confidence