Czech University of Life Sciences Prague

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Master Thesis

Change in Consumer Behaviour Post Covid-19 Pandemic with Reference to Healthcare Services

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

DIPLOMA THESIS ASSIGNMENT

Bc. KameshKumar Jitendra Modi

Business Administration

Thesis title

Change in Consumer Behaviour Post Covid-19 Pandemic with Reference to Healthcare Services

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Objectives of thesis

The main objective of the study is to examine the change in consumer behavior post covid-19 pandemic with special reference to Healthcare services in the selected geographic area. The research also aims to fulfill the below mentioned sub-objectives:To examine the digital transformation post Covid-19 in the field of Healthcare Industry; To examine the usage of Contact-less Services by the Consumer post Covid-19; To examine the Challenges faced by the Consumers while utilizing Contact-less Services by the consumers post Covid-19 Pandemic.

Methodology

The thesis will be divided into two sections. First section will concentrate on collecting secondary data with the help of the published literature that is currently accessible on the different aspects like Covid-19 Pandemic, Adoption of Innovative Healthcare Delivery System, Switch in Consumer Behaviour of Healthcare Industry, Usage of Contactless Services and their opportunities and challenges faced by the consumers.

Second section of the thesis will concentrate on the primary data. Primary data will be used to examine the change in consumer behavior post Covid-19 pandemic in regards to the usage of Contactless Services, Digital Healthcare Services used by them as well as the challenges faced by them while making use of these innovative services. Primary data regarding change in consumer behavior will be obtained using the questionnaire survey method, through a structured close ended questionnaire.The data collected will be analyzed using SPSS software and Microsoft office excel.

The proposed extent of the thesis

60 – 80 pages

Keywords

Marketing, Consumer, Consumer Behaviour, Covid-19 Pandemic, Healthcare Industry

Recommended information sources

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Expected date of thesis defence

2023/24 SS – PEF

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Declaration

I declare that I have worked on my thesis titled "Change in Consumer Behaviour Post Covid-19 Pandemic with Reference to Healthcare Services" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on date of submission   26/03/2024

Acknowledgement

I would like to express my gratitude to Ing. Tereza Balcarová, my supervisor, for all of her help and advice during this project. As a consultant, she helped me at every step, offering insightful advice. I am appreciative of the economics and management faculty's unwavering support. I was inspired to always give my best effort in my studies by my parents and I am grateful for my friends' support in keeping me motivated.

Change in Consumer Behaviour Post Covid-19 Pandemic with Reference to Healthcare Services

Abstract

Being an unusual issue, the COVID-19 pandemic prompted the implementation of both full and partial lockdowns as well as other steps to prevent the disease from spreading. Public health measures and lockdowns lead to economic instability in the countries, which suggests a shift in market dynamics because all aspects of the economy are closely linked. As people's knowledge of COVID-19 pandemic has grown, so too has the body of health literature as well as techniques for empowering people to take charge of their own personal wellness management. At the same time, there is evidence of rising demand for online consultations, the adoption of practical health technology that can be accessible from home, and positive changes to privacy laws.The drivers of market competitiveness, expansion, and economic integration are consumers in every market. Consumers are changing their behaviour in response to economic uncertainty, albeit it remains to be seen how much of the change brought about by the crisis will last. Therefore, the research aims to study the change in Consumer Behaviour post Covid-19 pandemic with reference to healthcare services. To accomplish the main objective of the study, primary and secondary data will be used. Secondary data will be used for the purpose of literature review so as to gain insights into the different concepts and terminologies relating to research. While, primary data for practical part will be collected from 180 respondents making use of a close-ended structured questionnaire generated with the help of google forms. The data gathered is then analysed and interpreted so as to derive meaningful conclusions from the study. For data analysis Microsoft Excel and SPSS will be used. For hypothesis testing Corelation technique and Chi-square test will be used.

Keywords: Covid-19 Pandemic, Consumer Behaviour, Healthcare Industry, Contactless Services, Digital Transformation, Telemedicine

Změna v chování spotřebitelů po pandemii Covid-19 s odkazem na zdravotnické služby

Abstrakt

Vzhledem k tomu, že pandemie COVID-19 je neobvyklý problém, podnítila zavedení úplných i částečných uzamčení a také další kroky k zabránění šíření nemoci. Opatření v oblasti veřejného zdraví a blokování vedou k ekonomické nestabilitě v zemích, což naznačuje posun v dynamice trhu, protože všechny aspekty ekonomiky jsou úzce propojeny. S tím, jak rostla znalost lidí o pandemii COVID-19, rostla také literatura o zdraví a také techniky, jak lidem umožnit, aby převzali odpovědnost za svůj vlastní osobní wellness management. Zároveň existují důkazy o rostoucí poptávce po on-line konzultacích, přijetí praktických zdravotnických technologií, které mohou být dostupné z domova, a pozitivních změnách zákonů na ochranu soukromí. Hnacím motorem tržní konkurenceschopnosti, expanze a ekonomické integrace jsou spotřebitelé trh. Spotřebitelé mění své chování v reakci na ekonomickou nejistotu, i když se teprve uvidí, jak velká část změn, které přinesla krize, potrvá. Cílem výzkumu je proto studovat změnu spotřebitelského chování po pandemii Covid-19 s odkazem na zdravotnické služby. K naplnění hlavního cíle studie budou použita primární a sekundární data. Sekundární data budou použita pro účely rešerše literatury, aby bylo možné získat náhled na různé koncepty a terminologie související s výzkumem. Primární data pro praktickou část budou sbírána od 180 respondentů pomocí uzavřeného strukturovaného dotazníku generovaného pomocí google formulářů. Shromážděná data jsou poté analyzována a interpretována tak, aby ze studie byly odvozeny smysluplné závěry. Pro analýzu dat bude použit Microsoft Excel a SPSS. Pro testování hypotéz bude použita korelační technika a Chí-kvadrát test.

Klíčová slova: Pandemie Covid-19, spotřebitelské chování, zdravotnický průmysl, bezkontaktní služby, digitální transformace, telemedicína

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1 Introduction

People's regular patterns of existence are disrupted by interruption in a number of ways. There have been notable shifts in health consciousness along with lifestyle throughout the covid-19 outbreak as well. The restrictions enforced by the government as well as the fear of contracting COVID-19 have caused a decrease in physical activity and movement, as well as changes in food and consumption patterns and sleep patterns. Additionally, COVID-19 has raised health concerns and awareness, which has had a major influence on the use of products related to health and wellness (Das, Sarkar and Debroy, 2022).

Behaviour, which is innate to all living things and is mediated by both their internal and exterior activity, is how consumers engage with their environment. Consequently, consumer behaviour refers to both the overt and covert reasons behind the acts that customers take in the marketplace. Marketers anticipate that by knowing what drives consumers to purchase certain kinds of products and services, they will eventually be able to identify which items are outmoded compared to what are necessary for the marketplace, as well as how best to display those things to customers. The analysis of consumer behaviour examines how people choose which consumption-related products to purchase with the money they have available.

The reality that every aspect of marketing begins and concludes concerning the customer has made clear just how important it is for marketing companies to shift to a customer-centric perspective in the context of today's global industry. Marketing actually began with the process of identifying the requirements of the consumer, creating strategies, goods, and services to satisfy those needs, and then making sure the client is satisfied. Current circumstances need a marketer to utilize their minds more like a psychologist. To find out how its customers will accept, interpret, and react to its product offers and other associated market activities, it becomes must to do consumer behaviour research. Following that, the psychological understanding of customer behaviour is applied to establish the marketing strategy, branding as well as the positioning of products, and consumer interaction plan. (Ramneek Kapoor and Madichie, 2012).

Therefore, the present research aims to study the change in consumer behaviour post covid-19 pandemic with reference to healthcare services. For the fulfillment of the objectives of the study the following methodology has been framed.

2 Objectives and Methodology

2.1 Objectives

The main objective of the study is to examine the change in consumer behaviour post covid-19 pandemic with special reference to Healthcare services. The research also aims to fulfil the below mentioned sub-objectives:

- To examine the digital transformation post Covid-19 in the field of Healthcare Industry.
- To examine the usage of Contactless Services by the Consumer post Covid-19.
- To examine the Challenges faced by the Consumers while utilizing Contactless Services by the consumers post Covid-19 Pandemic.

For the accomplishment of the above mentioned objectives following methodolody have been framed:

2.2 Methodology

The thesis will be divided into two sections. First section will concentrate on collecting secondary data with the help of the published literature that is currently accessible on the different aspects like Covid-19 Pandemic, Adoption of Innovative Healthcare Delivery System, Switch in Consumer Behaviour of Healthcare Industry, Usage of Contactless Services and their opportunities and challenges faced by the consumers. The literature review will provide a comprehensive picture of the current level of understanding on the present topic.

Second section of the thesis will concentrate on the primary data. Primary data will be used to examine the digital transformation in healthcare industry, change in consumer behaviour post Covid-19 pandemic in regards to the usage of contactless healthcare services and its usages by them, as well as the challenges faced by consumers while making use of these innovative services. Primary data regarding change in consumer behaviour will be obtained using the questionnaire survey method, through a structured close ended questionnaire via google forms. A link to the questionnaire will be circulated through the social media platforms like Whatsapp, Instagram, Facebook, Etc. Non-Probability Convenience sampling technique is used and a sample size of 180-200 respondents have been selected for the study purpose. The data collected will be analyzed using SPSS software and Microsoft office excel.

2.3 Research Design

The present research is descriptive in nature as it tries to study the change in consumer behaviour post covid-19 pandemic with special reference to healthcare services. The research will be conducted in Gujarat state in India, with the sample size of 180-200 respondents. Samples will be selected based on non-probability convenience sampling method. For the fulfilment of the research objective primary data will be collected with the help of survey method making use of questionnaire generated with the help of google forms. A close ended structured questionnaire will be created and link to the questionnaire will be circulated with the help of social media networking platforms like Whatsapp, Facebook, Instagram, etc. Questions based on Likert scale to measure the opinions and attitudes of the consumers towards Digital Healthcare Services. Gathered data will be analysed using descriptive statistics like frequency analysis and percentages to study the change in consumer behaviour due to covid-19 pandemic with reference to healthcare sector. For analysis purpose software like SPSS version 22 and Microsoft Excel will be used. While statistical tools i.e. Corelation and Chi-Square Test have been used. Corelation technique have been used to identify the Strength, Nature and Significance of associations between variables. Whereas, Chi-Square test have been used to identify the relationship between the two variables taken into consideration. Primary research with the help of questionnaire survey method will be carried out in the month of January 2024 in order to collect data from the respondents belonging to the Gujarat state a total of 180-200 responses will be gathered and analysed using statistical tools. The link to the Questionnaire can be found below in Appendix 1.

2.4 Corelation Technique

Corelation Techniques reveals the strength, nature and significance of linear relationship between two or more variables under study. It showcases as to how a change in one variable may cause a change in another variable. With a positive corelation both the variables move in the same direction. Whereas, in negative corelation both the variable move in the opposite direction. Corelation value of 1 signifies a perfect positive & a value of -1 signifies a perfect negative corelation amongst the variable. While value 0 denotes no corelation. The formula for calculating corelation is given below:

$$Corelation\ Coefficient = \frac{\sum(x_{i-\bar{x}})\,(y_{i-\bar{y}})}{\sqrt{\sum(x_{i-\bar{x}})^2\,\sum(y_{i-\bar{y}})^2}}$$

Where,

$x_1 =$ Values of X-variable in a sample

$\bar{x} =$ mean of the value of the x-variable

$y_1 =$ Values of Y-variable in a sample

$\bar{Y} =$ mean of the value of the x-variable

2.5 Chi-Square Test

A chi-square test is used to determine the relationship between the variables under study. It does so by comparing the observed results with expected results, if the difference between these two values is due to chance or if it is because of relationship between them. The formula for computing Chi-square is given below.

$$x^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where,

$x^2 =$ Chi-Squared

$O_i =$ Observed Value

$E_i =$ Expected Value

These formulas of Corelation and Chi-square test have been used for testing the hypothesis in SPSS software.

2.6 Hypothesis Testing

The following hypothesis have been framed and tested making use SPSS wherein statistical technique of Pearson Corelation and Chi-Square Test have been used to check the associations between the variable selected for the study.

2.6.1 Hypothesis 1

- H_0 – There is no association between Gender and Use of Contactless Healthcare Services.
- H_1- There is association between Gender and Use of Contactless Healthcare Services.

2.6.2 Hypothesis 2

- H_0 – There is no association between Age and Use of Contactless Healthcare Services.
- H_1- There is association between Age and Use of Contactless Healthcare Services.

2.6.3 Hypothesis 3

- H_0 – There is no association between Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective.
- H_1- There is association between Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective.

2.6.4 Hypothesis 4

- H_0 – There is no association between Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services.
- H_1- There is association between Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services.

2.6.5 Hypothesis 5

- H_0 – There is no significant relationship between Gender & Satisfaction with contactless healthcare services.
- H_1- There is significant relationship between Gender & Satisfaction with contactless healthcare services.

For the above all mentioned hypothesis, the significance level i.e. p-value<0.05 istaken into consideration so as to minimise the probability of an event to occur by chance.

2.7 Limitations

The present research suffers from the following limitations:

- The study suffers from the geographic limitations of Gujarat State.
- The study is limited to a sample survey of 180-200 respondents, where primary data collected from the respondents maybe prone to their biases.
- The study is limited only to the digitalisation of healthcare services.

3 Literature Review

The present literature review helps to gain insights into the concepts and topics which are related to the present study. It the understanding of the concepts like Consumer Behaviour, its importance, types of consumer behaviour, factors influencing consumer behaviour, Covid-19 Pandemic, Effect of Covid-19 pandemic on healthcare services, digitalisation of healthcare services, type of digital healthcare services being offered. The present literature review is collected from the sources like books, magazines, articles, blogs, websites, research papers, etc.

3.1 Consumer Behaviour

Within the realm of marketing, the term "consumer" encompasses not just the act of making a purchase, but also patterns of combined buying that involve both pre- and post-purchase actions. Pre-purchase activities might include being more conscious of a need or want, as well as looking for and assessing information about the brands and items that could meet those needs or wants. The assessment of the acquired item in use and the alleviation of any tension that comes with buying pricey and occasionally purchased products are examples of post-purchase activities. Each of these has consequences for both initial and subsequent purchases, and there are varying degrees to which marketers may affect them (Foxall, 1995).

A customer is a person or organization that buys products or services from another business. Consumers are vital because they generate income. Businesses cannot grow or exist without them. Every firm fights with other businesses to draw in clients by promoting their goods aggressively, cutting costs to reach a wider audience, or creating distinctive goods and experiences that clients like (Kenton, 2023).

Consumers purchase goods for their meanings rather than their functions. This idea, which is among the most essential tenets of the contemporary study of consumer behaviour, suggests that the roles that goods and services play in the lives of individuals go far beyond the purposes that they accomplish. It does not, however, imply that the basic functions of products are insignificant. If all else is equal, consumers select the brand whose image most closely matches the actual wants and needs plus the overall perception of themselves. There is a lot of territory covered in the topic of consumer behaviour (Solomon and Russell, 2024).

Customers come in many different shapes and sizes. They might be 10-year-olds pleading with their parents for a smartphone or executives in major corporations involved in

the decision-making process for computer systems costing millions of dollars. The procedure by which a customer gives up cash or makes use of a credit card and then obtains an item or service is a dynamic example of consumer behaviour (Solomon and Russell, 2024).

The term "consumption" encompasses all aspects of the consumer behaviour process, such as the means by which consumers pick and acquire goods, how consumers convey their uniqueness and sense of self in society, as well as how they watch and interpret the environment around them (Solomon and Russell, 2024).

Egen (2007) offers yet another persuasive argument about the significance of comprehending customer behaviour. The author claims that increased understanding of customer purchasing patterns benefits the nation's economy. The author goes on to say that in nations where consumer purchasing behaviour is widely recognized, the level of quality of products and services is extraordinarily high. Consequently, this enhanced competitiveness of the goods and services on the global market, augmenting the nation's export capacity.

Meanwhile, (Kotler and Keller, 2012) emphasize how crucial it is for manufacturers and service providers to comprehend customer purchasing behaviour and how consumers select the goods and services they use. Doing so gives them a competitive edge over rivals in a number of areas. For instance, companies can base their plans on the knowledge gleaned by analysing client purchasing patterns in order to efficiently cater to the requirements and desires of the appropriate customer base by providing the appropriate goods and services.

3.1.1 Definition of Consumer Behaviour

"Consumer behavior studies how individuals, groups, and organizations select, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and desires."- (Kotler, 2000)

"Consumer behaviour is the actions and decision processes of people who purchase goods and services for personal consumption"- (Blackwell, Miniard and Engel, 2006)

"The behavior that consumers display in searching for, purchasing, using, evaluating and disposing of products, services and ideas"- (Schiffman et al., 2010)

"It is the study of the processes involved when individuals or groups select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires and to define and express their identities"- (Solomon and Russell, 2024)

"Consumer behavior refers to the study of how customers (individuals and organizations) satisfy their needs and wants by choosing, purchasing, using, and disposing of goods, ideas, and service." - (American Marketing Association, 2023)

Consumer behaviour can be thought of as the actions, reactions, and consequences that take place as the consumer goes through a decision-making process, reaches a decision, and then puts the product to use.- (Babin and Harris, 2012)

[C]onsumer behaviour is dened as (1) the mental and physical acts of (2) individuals, households or other decision-making units concerned with ultimate consumption involving (3) the acquisition, own production, use and, in some cases, the dispossession of products and services.- (Arndt, 1986)

Despite the differences in the definitions provided above, they all lead to the common understanding that consumer buying behaviour is the process of choosing, acquiring, and discarding products and services in accordance with the requirements and desires of the consumers. Nonetheless, researchers and academics generally agree that this process is dynamic and prone to change over time as customers' needs—both psychological and physical—alter and influence the features of their purchases (Dudovskiy, 2013).

3.1.2   Types of Consumer Buying Behaviour

Consumer buying behaviour is the process by which people choose, pay for, and use products and services to fulfil their desires. The behaviour of consumers is influenced by several mechanisms. Numerous elements, traits, and qualities shape a person's identity and affect consumers' decision-making processes, shopping routines, buying habits, brands they choose to purchase, and stores they frequent. Every single one of these criteria influences a buying choice. The customer looks for goods at first that he would want to consume, later he chooses just those that offer more utility. The customer estimates the amount of money he has available to spend after choosing the goods. Finally, the consumer determines which

goods he should purchase by examining the current commodity prices. (Ramya and Ali, 2016).

As per (Kotler and Armstrong, 2018) the way people purchase a new automobile, a smartphone, financial services, and a tube of toothpaste varies significantly. More buyers participate in and often deliberate over more difficult purchases. Based on the level of brand differentiation and buyer participation, Figure 1 illustrates the four forms of consumer buying behaviour:

Figure 1 Types of Consumer Buying Behaviour
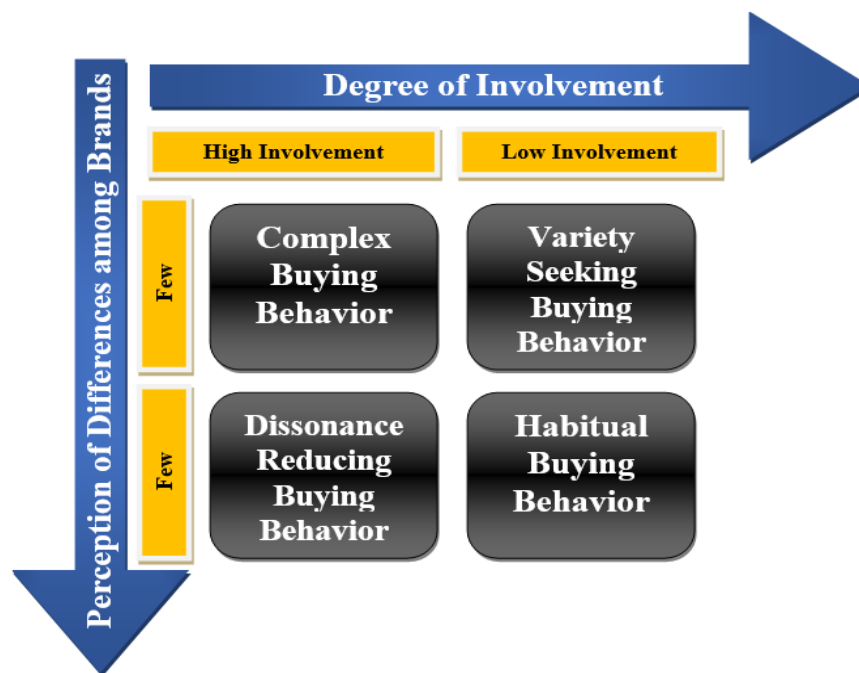
Source: (Kotler and Armstrong, 2018)

Complex Buying Behaviour

When a customer feels strongly about a purchase and recognizes notable distinctions between brands, they engage in complicated buying behaviour. When a product is costly, hazardous, seldom purchased, as well as highly expressive, consumers may become extremely engaged. In most cases, there is a lot for the consumer to discover regarding the category of products. For instance, a person purchasing a new automobile might not be aware of the models, features, and accessories to look for or the pricing range. This customer will go through a process of learning, forming attitudes, beliefs, and finally making a well-considered purchase. Marketers of products with high levels of participation need to comprehend how these customers get information and assess it. They must assist consumers in understanding the relative significance of the characteristics that make up a product class.

Companies must set their brand apart from the competition, maybe by outlining and showcasing the advantages of the brand in printed advertising materials or in-depth web content and videos. To have an impact on the buyer's final brand decision, they need to inspire shop sales personnel plus the buyer's acquaintances (Kotler and Armstrong, 2018).

Dissonance Reducing Buying Behaviour

When customers feel strongly about a costly, rare, or dangerous purchase yet don't see many differences between brands, they engage in dissonance-reducing buying behaviour. For instance, because carpeting is costly and very expressive, choosing a carpet may need a significant amount of thought and consideration from the client. However, consumers may believe that all carpet brands fall into the same category within a specific price range. In this instance, consumers may shop around to see what is available but make a decision really fast because perceived brand distinctions are not very great. A decent price or ease of buying may be the main factors influencing them. Consumers may suffer from post purchase dissonance (also known as after-sale pain) if they discover specific drawbacks with the carpet brand they just bought or learn positive things about brands they did not buy. Marketers can use proof and support in their post-purchase interactions to make consumers feel positive regarding their brand decisions in order to offset this dissonance (Kotler and Armstrong, 2018).

Habitual Buying Behaviour

Habitual purchasing happens when there is little to no meaningful brand distinction and limited customer participation. Consider table salt, for instance. Customers hardly interact with this product category; they just visit the store and select a brand. If people consistently reach for the exact same brand, it is not due to an intense sense of brand loyalty, but simply habit. Customers don't seem to be very involved with the majority of inexpensive things that they routinely buy. In these situations, consumer behaviour does not follow the typical path of belief, attitude, and conduct. Customers do not do in-depth research on brands, assess brand attributes, or make critical purchasing decisions based on brand preference. Consumers may not assess their choice even after making a purchase since they are not very connected with the goods. Hence, brand perceptions developed by passive learning are the first step in the purchasing process. Purchase behaviour comes next, and assessment may or may not come after that. In order to get consumers to purchase low-commitment items with no brand differentiation, marketers frequently employ pricing and sales incentives. This is because consumers are not strong brand loyalists. Or, in order to set

their businesses apart from the competition and increase engagement, they might include new features or improvements into their products (Kotler and Armstrong, 2018).

Variety Seeking Buying Behaviour

When there is minimal customer participation but a substantial perceived difference across brands, consumers engage in variety-seeking purchase behaviour. Customers swap brands frequently in these situations. A buyer may, for instance, have certain preconceived notions when purchasing cookies, select a cookie brand without giving it much thought, and then assess that brand after eating it. But the following time, the buyer can choose another brand due to curiosity or just to give it a try. Rather than as a result of discontent, brand switching happens for variety's sake. The leading brand in certain product categories and smaller businesses may use different marketing approaches. The market leader will make an effort to promote recurring purchases by controlling store space, maintaining well-stocked shelves, and distributing regular reminder advertisements. In order to promote variety seeking, challenger companies will provide reduced costs, exclusive offers, discounts, free samples, and advertisements that encourage experimenting with new things (Kotler and Armstrong, 2018).

3.1.3   Importance of Consumer Behaviour

Before introducing a product, every business must have a thorough understanding of consumer behaviour. If the targeted population is not well researched and analysed, the product will fail and the organization will suffer losses. Consumer behaviour is extremely complicated since it encompasses a wide range of characteristics, ways of thinking, preferences, and attitudes toward the acquisition, use, and disposal of goods.

For marketers, studying consumer behaviour is crucial since it provides them with a detailed understanding of the target audience's cognitive processes. It facilitates effective product or service positioning and marketing. Studying consumer behaviour also aids in pivoting since it gives marketers the ability to spot shift brought about by a variety of connected variables. Following are the reasons highlighting the importance of the study of consumer behaviour for marketers:

Understanding Buying Behaviour of Consumer

Staying Relevant in the Market

Creating & Retaining Customers

Innovating New Products

For Improving Sales Person Expertise & Persuasive Skills

Improve Customer Service

Understanding Factors Influencing Consumer Behaviour

Understanding the Rationale Behind Disposal of Goods

For Developing Target Market Strategies and Optimising Sales

*Source: Researcher's Compilation based on (*Kentrix, 2023; *McFee, 2022; Hampasagar, 2021; mbaknol, 2015; Jaideep, 2015)*

Understanding Buying Behaviour of Consumer

Marketers may identify and predict consumer behaviour during product purchases with the use of consumer behaviour research. Marketers may gain insight not just into what consumers buy, but also into why they buy it, by studying customer behaviour. In addition, answers are provided to other queries about the where, how, and when of the purchase. Marketers are better able to understand the product they are marketing when they are aware of how it is consumed and why it is disposed of. Studies on consumer behaviour can assist marketers in comprehending the behaviour of customers after making a purchase. As a result, marketers have complete awareness of all stages of the consuming process, including pre-, during-, and post-purchase behaviour. Numerous previous studies have demonstrated that every client reacts to a product differently, paying a variety of prices, using it in various

ways, and developing distinct emotional connections with it (Kentrix, 2023; mbaknol, 2015; Jaideep, 2015).

Staying Relevant in the Market

One of the Organization's main challenges at the moment is maintaining its relevance in the market, given the fast changes that are occurring in the current environment. The ongoing shift in consumer behaviour is a major contributing factor to this fast development. In order to address this problem, it is crucial to constantly analyze consumer behaviour in order to identify shifts in customer characteristics and remain competitive in the market. Today's consumers have access to a vast amount of information, which causes them to choose different products, companies, etc. quickly (McFee, 2022; Hampasagar, 2021; Jaideep, 2015).

Creating & Retaining Customers

Prof. Theodore Levitt says that attracting and keeping consumers is one of the primary goals of consumer behaviour. Customers will repurchase the same product if they are happy with it. Hence, an organization's marketing strategy for the product should persuade a consumer to purchase it. Marketing professionals may learn from consumer behaviour what makes a customer buy a product or service for the initial time and what keeps them buying it for subsequent purchases (mbaknol, 2015). These may be achieved by comprehending and closely observing how consumers behave while making decisions about purchases or making product purchases in the marketplace. Furthermore, a lot of the information posted on the websites affects how customers behave while making purchases. Such information from reputable sources encourages customers to purchase goods or services. Additionally, updating this data can encourage customers to stick with a product or give it another chance if it doesn't meet their needs (McFee, 2022; Hampasagar, 2021; Jaideep, 2015).

Innovating New Products

An organization's ongoing efforts to increase its success rate are mostly dependent on how innovative its range of goods and services is. Understanding consumer behaviour is essential for making accurate predictions and excelling at innovation. Investigating the same allows for the creation of new goods and services that meet customer demands and preferences as well as the modification of current offers to meet those requirements and desires (McFee, 2022; Hampasagar, 2021).

For improving Sales person expertise and Persuasive Skills

The way that customers behave and react to products and services is the central focus of all marketing campaigns. Delivering the correct goods to the right people may be aided by salespeople who sell it effectively. Understanding what customers need, want, and what products and services are available to meet those demands is the subject of consumer behaviour. Consequently, consumer behaviour focuses specifically on the actions of individuals, or consumers. To effectively convey the advantages of the product to customers, a salesperson must have a thorough understanding of their needs. Furthermore, the salesperson may offer products which have the closest association to the needs and demands of the customer by understanding their want and needs. The salesperson should be proficient in spoken language in addition to knowing how customers behave. This is so that any misunderstanding won't damage the reputation of the brand. In addition, sales goals may not be reached if customers know more regarding what is being sold than the representative who sells it. For salespeople to effectively promote items, it is crucial to analyze the behaviour and understanding of consumers. To assist customers in getting what they want and feeling satisfied, salespeople need to have a thorough understanding of how customers behave in various contexts (mbaknol, 2015).

Improve Customer Service

A thorough and in-depth analysis of consumer behaviour is necessary to comprehend the unique differences in demands that every single consumer will have with regard to customer care. It will aid in both segmenting various customer kinds and assisting in the targeting of each group using various approaches (McFee, 2022; Hampasagar, 2021).

Understanding Factors influencing Consumer Behaviour

Before venturing into a new market, marketers should carefully evaluate the elements influencing customer purchasing behaviour. There are several variables that might affect a consumer's choice to buy, including social, cultural, psychological, and individual effects. Knowing these elements enables marketers to target the correct customers with the product at the right moment. Marketers must consider cultural factors, including religion, the beliefs and customs of the targeted population or society, as well as the lifestyle of the intended consumer base. Various tactics might be suggested by marketers to persuade the intended audience to purchase advertised goods or services. (mbaknol, 2015).

Understanding the Rationale Behind Disposal of Goods

Throwing away goods is the act of disposing of them by customers. Because of how intricate this customer behaviour is, marketers need to give it greater attention. By gaining

insight into the habits and disposition of customers, marketers and corporations may strategically position themselves to curtail such behaviour. Customers discard products or services that do not meet their expectations or requirements. In order to determine the cause of the product's failure, some marketers monitor customer follow-ups. Also, some marketers or businesses provide services to consumers, such as product exchanges and money-back guarantees, in an effort to keep them as clients. That being said, these technologies can benefit customers in some way after they make a purchase (mbaknol, 2015).

**For Developing Target Market Strategies and Optimising Sales**

Marketers may maximize revenue and develop effective marketing strategies by utilizing the ideas as well as concepts of consumer behaviour. Additionally, these theories give marketers insights into how consumers behave when spending money, as well as probable reasons why they would spend an additional amount on a product. With this knowledge, marketers can better plan their strategies and increase the likelihood that a product will be successfully marketed. Understanding the many decisions that customers make when selecting a product is made easier by studying several theories of consumer behaviour. In order for marketers to improve sales and create winning marketing strategies, there are a few things that they must carefully analyse. (McFee, 2022; mbaknol, 2015; Jaideep, 2015).

3.2   Factors Affecting Consumer Behaviour

When consumers choose, acquire, and use products and services to fulfil their desires, this is referred to as their buying behaviour. Consumer behaviour is the result of several processes. Numerous elements, quirks, and traits shape a person's identity and affect how a consumer makes decisions, behaves when making purchases, and chooses which brands or stores to visit. Each and every one of these elements influences a purchasing choice. The customer searches for goods he wants to buy first, then narrows his options to those that offer the most value. The customer estimates the amount of money he has available to spend after choosing the goods. Finally, the consumer determines which goods he should purchase by examining the current commodity prices. In the meanwhile, a number of additional factors, including social, cultural, economic, personal, and psychological ones, influence customer purchases (Ramya and Ali, 2016).

Figure 3 Factors Influencing Consumer Behaviour
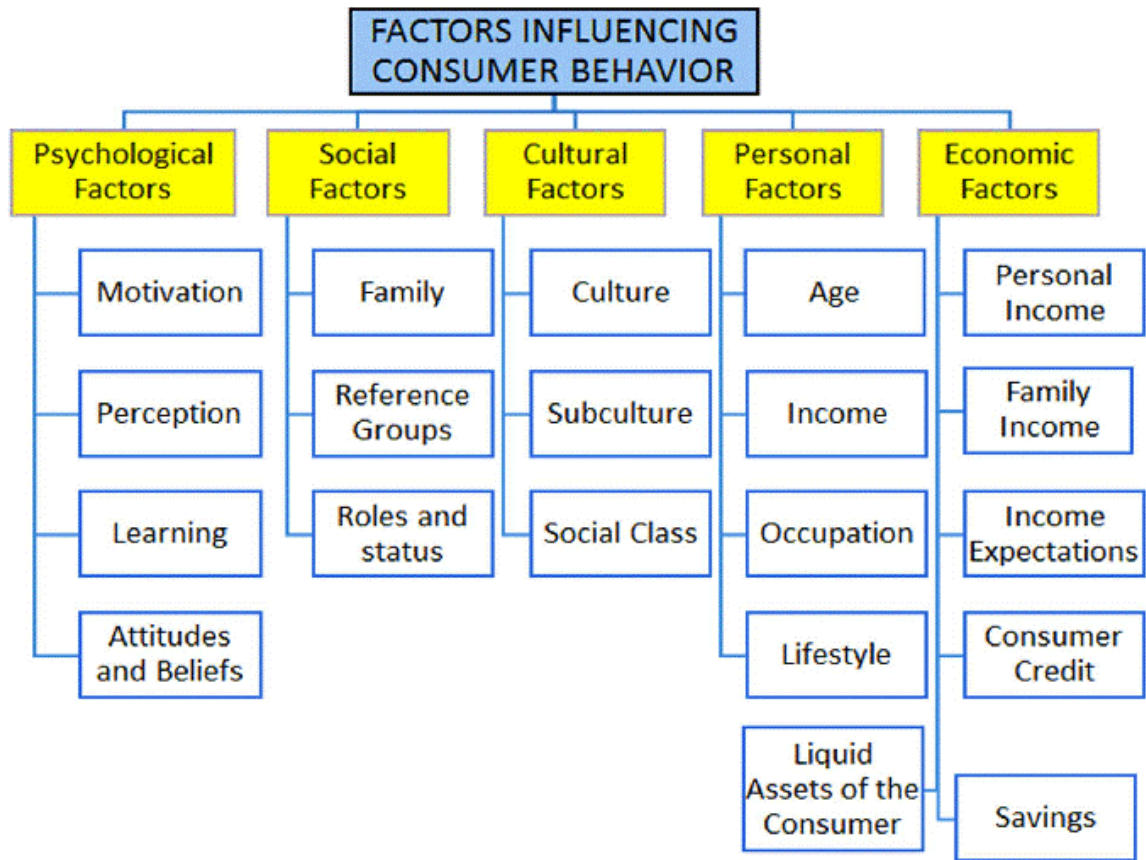
Source: (Minh Duc and Trong Cang, 2018)

3.2.1 Psychological Factors

Four main psychological factors—motivation, perception, learning, and beliefs and attitudes—have a significant impact on an individual's purchasing decisions (Kotler and Armstrong, 2018).

Motivation

A person is always in need of various things. Certain sensations stem from physiological conditions like hunger, thirst, or pain. Others are psychological in nature, stemming from a need for acceptance, respect, or inclusion. When a need is sufficiently awakened, it transforms into a motivator. A sufficiently urgent need that leads someone to pursue fulfilment is known as a motivation, or drive. Sigmund Freud made the assumption that most individuals are unaware of the true psychological factors influencing their actions. According to his view, purchasing decisions are influenced by unconscious factors that even the consumer may not completely comprehend. Customers frequently lack the understanding or ability to articulate the reasons behind their actions. Because of this, a lot of businesses

hire groups of anthropologists, psychologists, and other social scientists to do motivation research, which looks at the underlying motives behind customers' feelings and actions toward brands. To learn more about the inner workings of its clients, one advertising firm often conducts therapy-style one-on-one conversations. Another business invites customers to characterize their preferred brands as either vehicles or animals (Kotler and Armstrong, 2018).

Abraham Maslow aimed to provide an explanation for why individuals are motivated by specific wants at specific times. First, one attempts to satiate the most pressing need. Following the satisfaction of that need, the individual will no longer use it as motivation and will instead attempt to meet the subsequent most pressing need. Individuals who are famished, for instance, have little stake in the newest developments in the artistic world (self-actualization wants), as to how other individuals see or value them (social or esteem requirements), and maybe even if they are breathing clean air (safety needs). However, the next most pressing requirement will surface once each critical need has been met (Kotler and Armstrong, 2018).

Perception

One who is driven is prepared to take action. An individual's perspective of the circumstances shapes their behaviour. People choose, arrange, and interpret data to create a meaningful image of the world through the process of perception. Selective attention, selective distortion, as well as selective retention are the three perceptual mechanisms that allow people to create diverse perceptions of the same experience (Kotler and Armstrong, 2018).

Individuals encounter several stimuli on a daily basis. It is impossible for people to focus on every conflicting stimulus in their environment. Because of selective attention, which refers to people's propensity to ignore the majority of the data that they are provided with to, marketers need to work extra hard to get consumers' attention. Not every stimulus that is observed is perceived in the intended manner. Every individual integrates new knowledge into their own perspective. People's propensity to perceive information in a way that supports their own beliefs is known as selective distortion. Additionally, a lot of what people learn will be forgotten. Anything that supports their ideas and beliefs is more likely to stick with them. Selective retention refers to the tendency of customers to forget positive remarks made about rival products while recalling positive remarks given regarding a brand they prefer.

Due to selective attention, distortion, as well as retention, marketers have to put in a lot of effort merely to reach their target audience (Kotler and Armstrong, 2018).

Learning

People learn up knowledge by doing. The term "learning" refers to behavioural modifications brought about by experience. According to learning theorists, most human behaviour is learnt. Drives, stimuli, signals, reactions, and reinforcement interact to produce learning. A drive is an intense need within that demands to be expressed. A drive turns into a motive when it is focused on a certain stimulus item. Small inputs called cues control an individual's response in terms of timing, location, and style. If the customer had a positive experience, they will likely use the product more and more, and their feedback will be supported (Kotler and Armstrong, 2018).

Beliefs & Attitudes

People learn and form opinions and attitudes by acting. They then have an impact on their purchasing decisions. A belief is a descriptive idea that an individual has on a certain subject. Beliefs may or may not be emotionally charged and can be founded in actual knowledge, opinion, or faith. Because people's perceptions of certain brands and goods shape their purchasing decisions, marketers are interested in the ideas that consumers have about them. could there are misconceptions that hinder purchases, the marketer could initiate an initiative to dispel them (Kotler and Armstrong, 2018).

Individuals have opinions about practically everything, including cuisine, music, clothing, politics, religion, and fashion. An individual's generally constant opinions, sentiments, and inclinations about a thing or concept are referred to as their attitude. People's attitudes determine whether they go either towards or away from things, like them or not. Changes in attitudes are hard to come by. An individual's attitudes follow a pattern, thus altering one might need making challenging changes to several other attitudes. Therefore, rather of attempting to modify attitudes, a corporation should typically strive to fit its products into preexisting attitude patterns. There are, of course, exceptions. Changing attitudes are necessary when repositioning or expanding a brand (Kotler and Armstrong, 2018).

3.2.2 Social Factors

Social elements, including the consumer's family, social networks, small groups, and social positions and status, all have an impact on their behaviour (Kotler and Armstrong, 2018).

Group & Social Networks

An individual's conduct is influenced by several little groups. Membership groups are organizations to which an individual belongs and has a direct impact. On the other hand, reference groups can be used as direct, in-person encounters or indirect sources of comparison or reference for shaping an individual's behaviour or views. Individuals are frequently impacted by reference groups they do not identify with. Marketers endeavor to ascertain the reference groups that comprise their intended markets. Reference groups expose members to various lifestyles and habits, shape their views and self-concept, and put pressure on them to fit in. These factors may have an impact on the members' decisions on which products and brands to buy. Group influence has differing degrees of significance for different brands and goods. It usually works best when the goods is exposed to other people that the customer. Word-of-mouth marketing has the potential to significantly affect customer purchasing decisions. In general, suggestions and remarks from reliable friends, family, business partners, and other customers are more reliable than those from commercial sources like salesmen or commercials (Kotler and Armstrong, 2018).

Reaching opinion leaders—members of a reference group who, due to unique abilities, expertise, traits, or other attributes, influence others socially—is a challenge for marketers of brands that are heavily influenced by other groups. This group is known by some analysts as the leading adopters or influentials. People pay attention to what these powerful people have to say. Brand ambassadors are sought after by marketers who aim to target these individuals with their campaigns. Online social networking has become a hugely popular new form of social connection in the last several years. Online social networks are online groups where members interact and share knowledge and viewpoints. Social media platforms, blogs, message boards, and even joint retail websites like Etsy and Amazon.com are examples of social networking groups. These internet channels of communication between businesses and consumers as well as between consumers have significant marketing ramifications. In an effort to promote their goods and forge tighter bonds with their customers, marketers are trying to make the most out of these emerging social media platforms and other "word-of-web" chances. They want to employ digital, mobile, and social

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media to become an engaging part of customers' discussions and lives, as opposed to continuing to bombard them with one-way commercial messaging. (Kotler and Armstrong, 2018).

Family

Family members have a big impact on consumer behaviour. The family, which has been the subject of much investigation, is the most significant consumer buying organization in society. Marketers are curious about the roles that spouses, kids, and parents play in influencing consumers' decisions to buy various goods and services. Husband-wife participation varies greatly depending on the type of goods and stage of the purchasing process. Roles in buying shift as consumer habits change. These changing positions point to a new reality in marketing. Marketers in sectors of the economy that have historically catered primarily to men or women—from automobiles and consumer electronics to groceries and personal care items—are increasingly consciously focusing on the other sex. Families' purchasing decisions are also greatly influenced by their children (Kotler and Armstrong, 2018). According to a worldwide poll, children—from infants to teenagers—have a special say in how their parents spend their money and leisure time (71% & 70%), where they travel on vacation (64%), how often they dine out (58%), and where they reside (43%). Additionally, most parents said that their children had a greater effect on family purchasing than they did while they were growing up (FacebookIQ 2016).

Roles & Status

Family, clubs, organizations, and online communities are just a few of the groups to which an individual belongs. Role and status definitions can be used to determine an individual's place in each group. A role is the set of tasks that individuals are expected to complete based on the expectations of others around them. Every function has a status that corresponds to the overall respect society accords it. Consumers typically select goods based on the positions and status they have (Kotler and Armstrong, 2018).

3.2.3 Cultural Factors

Cultural elements have a significant and wide-ranging impact on consumer behaviour. Marketers must comprehend the influence that the socioeconomic class, culture, and subculture of their target audience have (Kotler and Armstrong, 2018).

Culture

People's desires and behaviours stem mostly from their culture. People learn most of their behaviours. A kid grows up in a culture where significant institutions such as his or her family teach them fundamental beliefs, values, desires, and actions. Cultural impacts on purchasing behaviour can differ significantly between counties and countries, as each group or community has its own distinct culture. In order to identify novel items that consumers could find appealing; marketers are always looking for signs of cultural change. For instance, the growing concern for health and fitness in society has led to the growth of a sizable market for organic foods, a range of diets, exercise gear, and services (Kotler and Armstrong, 2018).

Sub-Culture

Every culture has smaller subcultures, or communities of individuals with similar life events and circumstances that form their shared value systems. Subcultures comprise racial groupings, nations, religions, and geographical areas. Marketers frequently create goods and marketing campaigns that are specifically catered to the demands of the several subcultures that comprise significant market groups (Kotler and Armstrong, 2018). A lot of marketers these days use a total market approach, which incorporates cross-cultural viewpoints as well as ethnic themes into mainstream advertising. Rather of focusing on contrasts, a complete market approach appeals to customer commonalities across subcultural groupings (Boykiv 2014). A growing number of marketers are discovering that their wider markets may be impacted by information obtained from ethnic customer niches (Kotler and Armstrong, 2018).

Social Class

Social classes are a feature of almost every civilization. Shared ideals, interests, and behaviours characterize social classes, which are comparatively stable and well-organized divisions within society. A number of aspects, such as money, education, occupation, along with additional variables, are taken into account when measuring social class; income does not constitute the only influential element. Individuals belonging to particular social classes are socially fixed in certain systems because they are raised to play specific roles. It is possible for someone to transfer from one social class to another in the United States; the boundaries between them are not strict and unchangeable. People in a specific social class typically have comparable purchasing habits, which is why marketers have an interest in social class (Kotler and Armstrong, 2018).

3.2.4 Personal Factors

A buyer's decisions are also impacted by personal traits including their employment, age and stage of life, financial status, way of life, personality, and sense of self (Kotler and Armstrong, 2018).

Occupation

The products and services a person purchases are influenced by their work. Marketers endeavour to pinpoint the professional categories exhibiting above-average inclination towards their offerings. Even more, a business might focus on producing goods required by a certain occupational group (Kotler and Armstrong, 2018).

Age & Life Stage

Over the course of their lives, people purchase different items and services. Age-related preferences exist for food, clothing, furnishings, and leisure activities. The stage of the family life cycle—the phases that a family may go through as they get older—also influences buying decisions. Demographic shifts and life-altering experiences, such as marriage, parenthood, home ownership, divorce, college attendance for children, personal income fluctuations, moving out of the home, and retirement, are often the cause of life-stage changes. Marketers frequently use life cycle stages to identify their target audiences, and they create goods and marketing strategies that are tailored to each period. For marketers in all sectors, life-stage segmentation offers a potent tool for better locating, comprehending, and interacting with customers. With information on the characteristics of consumer life phases at their disposal, marketers can design customized, targeted campaigns that take into account the ways in which consumers engage with and consume brands as well as their surroundings (Kotler and Armstrong, 2018).

Economic Situation

As per (Kotler and Armstrong, 2018) one's selections for stores and products are influenced by their financial circumstances. Sales, personal income, savings, and interest rate movements are all closely observed by marketers. Most businesses have redesigned, repositioned, and renegotiated the prices of their goods and services in an effort to increase consumer value in these increasingly value-conscious times. Consider the premium discounter Target, which has prioritized the "Expect More" aspect of its brand in recent years: "Pay Less." positioning pledge of "Pay Less."

Lifestyle

Even among those belonging to the same socioeconomic class, career, and subculture, lifestyles can vary significantly. The way someone lives is reflected in their psychographics and is referred to as their lifestyle. It entails gauging the main AIO characteristics of customers, including their interests in cuisine, fashion, family, recreation, and activities, hobbies, shopping, sports, and social events; as well as their attitudes on businesses, goods, societal issues, and themselves. Beyond a person's socioeconomic status or personality, their lifestyle conveys more. It provides an overall picture of how someone behaves and interacts with others. With appropriate application, the lifestyle notion may aid marketers in comprehending evolving consumer values and their impact on customer behaviour. Customers purchase not simply goods but also the lives and ideals that those goods represent. Marketers search for lifestyle groups whose requirements may be satisfied by certain goods or strategies. These categories might be based on anything from dietary habits to outdoor pursuits or familial traits (Kotler and Armstrong, 2018).

Personality & Self-Concept

A person's purchasing habit is influenced by their unique personality. The term "personality" describes the distinct psychological traits that set an individual or group apart. Generally speaking, personality is defined in terms of characteristics like aggression, defensiveness, adaptability, friendliness, dominance, and self-assurance. Analyzing customer behaviour for specific product or brand decisions might benefit from personality insights (Kotler and Armstrong, 2018).

According to the theory, people are more inclined to select companies that share their personality than those that don't. The unique combination of human characteristics that may be linked to a certain brand is known as its "brand personality." Five brand personality qualities were found by one researcher to be honesty, enthusiasm, competence, sophistication, and ruggedness.

"Your personality determines what you consume, what TV shows you watch, what products you buy, and [most] other decisions you make," as per (Aaker, 1997)

A person's self-concept, often known as their self-image, is a notion that many marketers utilize in relation to personality. It is believed that a person's belongings both shape and reflect who they are; in other words, "we are what we consume." Therefore, marketers need to comprehend the connection between consumer belongings and self-concept before they can comprehend customer behaviour (Kotler and Armstrong, 2018).

3.2.5   Economic Factors

The fifth element that influences customer purchasing behaviour is the economic component. Consumers' purchase decisions and selection of a particular brand or product are influenced by their financial situation. Businesses have the ability to research customer spending and saving patterns. Samsung provides smartphones that are priced expensive and affordable, for example. The following are some examples of economic elements: savings, consumer credit, income expectations, personal and family income, and other economic factors (Ramya and Ali, 2016).

Personal Income

An individual's purchasing behaviour is determined by his or her personal income. Discretionary as well as disposable income make to an individual's gross personal income. The real money left over after taxes and mandatory deductions from gross income is referred to as disposable personal income. Increasing disposable income causes spending on a variety of goods to rise. Conversely, a decrease in disposable income results in a decrease in spending on a range of goods. The amount left over after fundamental necessities are covered is referred to as discretionary personal income. One may buy shopping items, durable products, and luxury with this money. An individual's quality of living is raised when their discretionary income rises and they spend more on luxury items, shopping, and other things. (Ramya and Ali, 2016).

Family Income

The total revenue earned by all family members is referred to as family income. A family's purchasing habits are influenced by its income. The extra money that the family has after paying for their essential necessities is used to purchase indulgences, durable products, and shopping items (Ramya and Ali, 2016).

Income Expectations

One of the key factors influencing a person's purchasing behaviour is their anticipation of income. He is prone to overspending on luxury items, durable products, plus shopping supplies if he anticipates a rise in his income. Conversely, if he anticipates a decline in his income in the future, he will cut back on frills and luxury spending and limit his spending to the absolute needs (Ramya and Ali, 2016).

Savings

A person's purchasing habits are also influenced by their savings. A person's spending changes in response to changes in their savings balance. One is going to devote

less on comforts as well as pleasures if they choose to set aside a larger portion of their current income for savings (Ramya and Ali, 2016).

Liquid Assets

Goods that may be swiftly and profitably turned into cash are referred to as liquid assets. Liquid assets comprise tradable securities, bank balances, cash on hand, and so on. A person who is better off financially will purchase luxury items and comforts. Conversely, he cannot purchase extra pleasures as well as comforts since he has fewer assets that are liquid (Ramya and Ali, 2016).

Consumer Credit

The credit option offered to customers who want to buy luxury and long-lasting comforts is referred to as consumer credit. The sellers provide it, either directly or indirectly, via banks and various other financial organizations. Customers can obtain credit through a variety of methods, including direct bank loans, hire purchase, instalment purchases, and more. Customer behaviour is influenced by credit. Increased spending on comforts and pleasures results from the availability of more liberal terms of credit, which encourages customers to buy these items and improve their level of life (Ramya and Ali, 2016).

3.3 Covid-19 Pandemic

The coronavirus illness (COVID-19) first appeared in December 2019 and had a significant negative impact on the emotional, physical, social, as well as economic facets of health. Social and physical distance-keeping regulations, such as the closure of places of employment, recreation, and education during the early stages of the epidemic, were essential in preventing further spread. With no or very little information regarding the COVID-19 outbreak was known, using such non-pharmacological and public health precautions was the sole option. The effects of COVID-19 have not been felt equally by all members of society; on the contrary, they have increased already-present structural and social disparities. The terrible impacts of Covid-19 fall disproportionately on children, elderly people, people of colour, people with impairments, and employees who are crucial to society (Sharma and Batra, 2022).

These impacts were long-lasting and had a significant influence on people's lives and general wellbeing, as opposed to being short-term. For instance, the abrupt switch to online instruction along with the interruption in education caused serious problems for student learning and educational quality. A substantial number of employees were laid off as a result

of COVID-19's economic collapse, which also left them in difficult financial circumstances. When there was little to no knowledge about the COVID-19 outbreak, there were few job prospects accessible in the market resort. The effects of COVID-19 have not been felt equally by all members of society; on the contrary, they have increased already-present structural and social disparities. The terrible impacts of Covid-19 fall disproportionately on children, elderly people, people of colour, people with impairments, and employees who are crucial to society (Sharma and Batra, 2022).

3.3.1 Effect of Covid-19 Pandemic on Healthcare Sector

By the end of 2019 or the beginning of 2020, Covid-19 struck the entire globe, gradually putting an end to life in various ways and to varying degrees of intensity. Most nations suffered economic harm, which continues today, lost jobs, and most crucially, there were fatalities. And although the epidemic hit various industries, one that has been particularly impacted and likely permanently altered is the segment of health care. The majority of countries' health systems underwent a complete shakeup and rapid change that no one could have predicted. The immense number of patients with COVID-19 suspicion that the medical staff at the hospital experienced in the initial stages of the disease left them feeling overwhelmed. The testing system was only beginning to take hold. Unfortunately, there were inadequate testing supplies, testers, or facilities to facilitate the testing of a large number of patients (Bhambere et al., 2021).

The whole supply chain was experiencing disruptions. The medical staffs were becoming contaminated with COVID-19, and there were never enough medical units in the healthcare facility for patients. Most hospitals in industrialised nations like the United States, let alone those in underdeveloped countries, lacked sufficient ventilation. Patients who also had other ailments or co-morbid conditions suffered greatly. The healthcare systems have developed the necessary coping mechanisms through a period of time especially in the situation of the pandemic, only a few short months. Since the beginning of COVID-19, and for good cause, the flaws in our healthcare systems have been exposed. However, they should be praised for the incredibly quick turnaround that the hospitals started and for how they responded to the necessity to embrace modern strategies for managing the healthcare systems (Bhambere et al., 2021).

3.4   Healthcare Services in India

There are significant regional and national differences in the organization as well as framework of healthcare systems. In certain nations, the government is in charge of delivering healthcare services to the general people, and this system is primarily public. Some nations have systems of healthcare that are mostly run by private institutions, providing healthcare services. High-quality healthcare services are provided to the public via an efficient healthcare system, which should also be long-lasting, reasonably priced, and easily accessible (Basu, Andrews, Kishore, Panjabi and Stuckler, 2012).

With 1.4 billion people living there, the Indian healthcare system is a multifaceted and intricate system that includes private as well as public organizations that offer an extensive spectrum of medical services. Numerous initiatives have been launched by the Indian government to enhance the healthcare system. The National Health Mission increases access to medical supplies plus equipment. Additionally, it encourages involvement and engagement of communities in healthcare decisions as well as service delivery. Numerous innovations associated with healthcare are also being seen in the Indian healthcare system, from creative ways to offer treatment through inexpensive medical technologies. The nation's healthcare regulations are changing to guarantee patient security, encourage superior treatment, and keep expenses under control. In addition, India has become a top medical tourism destination because of its highly qualified medical workforce, state-of-the-art medical facilities, and reasonably priced medical procedures. India's medical tourism sector is expanding due to a number of factors including low-cost treatment, cutting-edge technology, a variety of specializations, alternative medicine, fluency in English, and convenience of travel (Kumar, 2023). Following is the definition of good healthcare quality:

"providing patients with appropriate services in a technically competent manner, with good communication, shared decision making and cultural sensitivity"- (Schuster, McGlynn and Brook, 1998)

The government of India acknowledges that the private healthcare industry is essential to the achievement of universal health coverage. India is a popular destination for foreign patients looking for high-quality care at reasonable pricing due to its relatively inexpensive healthcare offerings. Access to healthcare, specialized services, infrastructure, and technology have all advanced significantly in the private healthcare industry. Advanced

medical technology-equipped contemporary hospitals, clinics, and diagnostic facilities are the result of investments made by private healthcare providers. To enhance patient care, they have adopted digital advances including telemedicine, health apps, electronic medical records, as well as remote monitoring systems. Accessibility to private healthcare services has been made easier by increased coverage for health insurance, as a result of health insurance firms working with private health care providers and hospitals (Kumar, 2023).

Due to its favorable image, availability of cutting-edge medical treatments at comparatively cheaper rates, availability of highly qualified medical professionals and cutting-edge technology in private hospitals that contribute to foreign exchange profits, and availability of these factors, India has grown in popularity. In recent years, India has become a well-liked medical tourism destination, drawing patients from all over the world. The medical tourism business in India is seeing growth due to several factors such as affordable treatment, highly qualified medical staff, modern technology, a diverse variety of specializations, alternative medicine, fluency in English, and convenience of travel. Because of COVID-19 Healthcare delivery is changing in India as a result of the country's move towards digital healthcare, especially in rural regions. To increase the effectiveness as well as the quality of healthcare services, telemedicine, digital health records, and mobile health applications are all being utilized. (Kumar, 2023).

3.4.1 Digitalization of Healthcare services

The unquestionable acceptance of digital technology in India and around the world is the largest development that COVID-19 has brought about. When the epidemic first broke out, everything had to be shut down, including all of the tangible services we had grown accustomed to. Some leisure activities that people once engaged in may be put on hold as circumstances improve. However, some aspects of our everyday lives are really necessary, and these things just couldn't be ignored or left unattended to. These have to be done in other methods immediately. Beginning with the first few months of COVID-19, there has been a sharp increase in the usage of digital technology in the banking system, retail purchasing, everyday food, and employment activities. In comparison to the decades before to the pandemic, the use of smartphone apps for meetings, remote employment, and shopping has increased significantly. The human race discovered that there exist far more efficient ways to do tasks using digital technology.

Healthcare was the industry that adopted digital technologies the fastest during this epidemic. For decades, health technology has been improving to meet our healthcare demands. However, it was never a primary choice or a substitute for the work that healthcare providers could do via the use of physical resources. The epidemic succeeded in elevating digital health to the foreground. This update was required for COVID-19 testing, contact tracking, and other diagnostic programmes (Bhambere et al., 2021).

3.4.2 Types of Digital Healthcare Services

A broad spectrum of applications and technologies are used in digital healthcare services to enhance patient care, healthcare delivery, and health outcomes. Following are a few typical categories of digital healthcare services:

Artificial Intelligence in Public Health and Medical Education

Computers imitating human intellect or cognitive processes are referred to as "artificial intelligence" (AI) (Chen et al., 2020). The potential uses of AI in numerous sectors and businesses are practically limitless. Utilising AI and machine learning skills in healthcare, including the detection and treatment of a variety of disorders, is one of the promising and quickly expanding contemporary trends (Rong et al., 2020). The major uses of artificial intelligence (AI) in medicine include imaging, drug research, surgical procedures, remote assistance, healthcare statistics, personalised therapy, and health monitoring (Amisha et al., 2019).

AI is also incredibly helpful in primary care, in addition to radiology. It includes using AI platforms to enhance clinical decision-making, practise management, diagnosis, and training of primary care providers. The predictive modelling capabilities of AI in predicting hospital mortality, unexpected readmission, unnecessarily extended hospital stays, and therapeutic cost-effectiveness have been demonstrated (Lin et al., 2019). The AI-based technologies showed the capacity to enhance and optimise cardiologists' job. It has been demonstrated that cutting-edge mobile sensors can assist cardiologists in monitoring, interpreting, analysing, and responding to requests based on biological data automatically and remotely obtained from the patient (Johnson et al., 2018).

Block Chain Technology for Healthcare

Block-chain technology is built on a peer-to-peer network that offers the chance for safekeeping the data on a vast number of computers. In a decentralised and open network,

this data may be utilised as well as shared concurrently. The user finds it challenging to modify or control it when this strategy is used. Decentralisation, transparency, and anonymity are just a few of the distinctive qualities of blockchain technology that have made it popular in the healthcare industry. In a survey conducted by IBM, 70% of healthcare executives believe that the benefits of blockchain technology for healthcare will include more regulatory compliance, better clinical trial administration, and a decentralised system for exchanging electronic medical information (Hasselgren et al., 2020).

The block-chain technology is the most secure since it can offer dependable and decentralised storage for all patient data. Additionally, the block-chain enables patient identification to be concealed with the use of intricate secure codes that can safeguard medical information. The technology's decentralised structure also makes it possible for patients, physicians, and other healthcare professionals to securely and swiftly exchange the same information (Agbo and Mahmoud, 2020).

Smart Devices

The use of the earliest smart gadget generations proved that they may be very useful for monitoring and diagnosing bodily functioning (Chung et al., 2019). New technologies, like radio frequency identification (RFID) readers as well as Near Field Communication (NFC) gadgets, can be used in medical treatment as mediums for communication as well as for data collection (Dash et al., 2019). Such devices are the primary source of enormous data sets since they may generate an uninterrupted information flow while keeping track of their users' health (Liu et al., 2018). Intelligent platforms can link multiple gadgets together to create a "internet of things" that can deliver dependable, effective, and individualised medical care. Medical professionals may remotely check a number of health factors using smart as well as wearable gadgets.

Despite the commonality in how smart devices are used for tracking fitness and health, there are fundamental differences in the manufacture, methodology, and ethical considerations (Kaewkannate and Kim, 2016). To begin with, wearable fitness gadgets are mostly made for individual usage (monitoring cardiac functions, etc.). Users can make adjustments to and improve their physical activity using this information (Steinert et al., 2017). Medical smart gadgets are being developed at the same time to assist doctors in keeping track of the patient's vital signs and other data. The effectiveness of a diagnosis and the pace of therapy can both be directly impacted by this information. In addition, the use of medical wearable devices in clinics is complicated by ethical concerns about the safety and

confidentiality of patient data. Over the past 10 years, smart gadgets have also been explored and heavily employed for medical education in addition to health monitoring.

Telemedicine

Using communication technology, telemedicine enables medical professionals to assess, identify, and treat patients in distant places (Loomba et al., 2019). The capacity to gather, preserve, and transmit medical data is one benefit of telemedicine (Molfenter et al., 2018). Additionally, telemedicine enables patient mobility tracking, distant learning, better healthcare administration as well as management, incorporating health data systems, and monitoring of patients remotely (Acharibasam and Wynn, 2018). In reality, there are several opportunities to use telemedicine in different fields.

Additionally, it gives medical professionals the chance to communicate with quarantined individuals or patients remotely, preventing having direct contact with a potentially infectious person. For the immediate transfer of data on the body's vital signs, such as temperature and heart rate, patients should ideally wear smart gadgets. In light of the current COVID-19 epidemic that has affected the whole planet, this function is now in great demand (Senbekov et al., 2020).

Providing rural and distant residents with the opportunity to utilise health services is one of the main challenges in rural healthcare (Metelmann et al., 2020). In this situation, telemedicine can assist in resolving these issues by giving patients a means of receiving high-quality medical care wherever they may be. Real-time video conferencing or specialised online services can be used to accomplish this. The use of wearable technology along with medical technology combined with television enables doctors to consult with patients and offer guidance (Griffiths et al., 2020).

Virtual Clinical Trails

Virtual clinical trials represent a different emerging and prospective field of medical research (Miseta, 2019). Tablets, smartphone applications, and wearable sensors are examples of technology utilised for remote patient healthcare data retrieval. Virtual clinical trials, decentralised trials, distant trials, patient-specific trials, and hybrid trials are among terms used to characterise these systems (Miseta, 2019). The procedure entails recruiting patients, gaining their permission, and collecting data. A virtual clinical trial is a method that eliminates the need for physical venues and direct connection with patients (Persky, 2020).

In actuality, there are a number of benefits to virtual clinical trials over the conventional design. The latter involves a number of research locations and multiple visits

from patients in order to carry out the study procedure. Virtual clinical trials are focused on the patient staying at home, as opposed to field studies that need regular visits, so individuals with mobility issues, such as elderly patients or patients living in remote regions, can also participate in a test (Birckhead et al., 2019). This is particularly important when there are pandemics and natural or man-made catastrophes.

E-Health

The E-heath allows the patient to have unrestricted accessibility to the following data: clinical reports, medical histories, details regarding treatment, vaccination, medications that were prescribed, allergic response symptoms, medical condition, and findings from diagnostic studies. Electronic documentation systems can compile details concerning the patient over the course of their lifetime. Additionally, the implementation of e-health systems will make it possible for physicians to draught and transmit electronic prescriptions immediately to the pharmacy network, thereby reducing the issue of patient lines in clinics and administrative burden (Senbekov et al., 2020).

E-health platforms make it possible to obtain and analyse medical data, enabling the provision of secure, equitable, high-quality, and long-lasting healthcare services centred on the requirements of the patients. The Electronic Health Passport is now being introduced and standardised by the top health organisations in the world to improve basic healthcare. In addition to lessening necessary paperwork for a medical practitioner, it makes it easier to enhance and optimise the quality of medical service. To guarantee the seamless integration of the electronic health passport, digital medical records, and other types of e-health systems, standardisation is required (Senbekov et al., 2020).

4 Practical Part

4.1 Demographic Profile of Respondents

The demographic profile helps to describe about the distribution of characteristics amongst the population regarding their age, gender, location for their proper understanding and for making predictions and developing policies as per the demographics of the respondents.

4.1.1 Age

Table 1 Age of Respondents

Table No. Age		
Age	**Frequency**	**Percent**
18-24	17	9.4
25-34	89	49.2
35-44	50	27.6
45-54	18	9.9
55-64	5	2.8
65 or over	2	1.1
Total	**181**	**100.0**

Source: Researcher's own results

The frequency distribution of the age of the respondents is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 4 Respondents Age
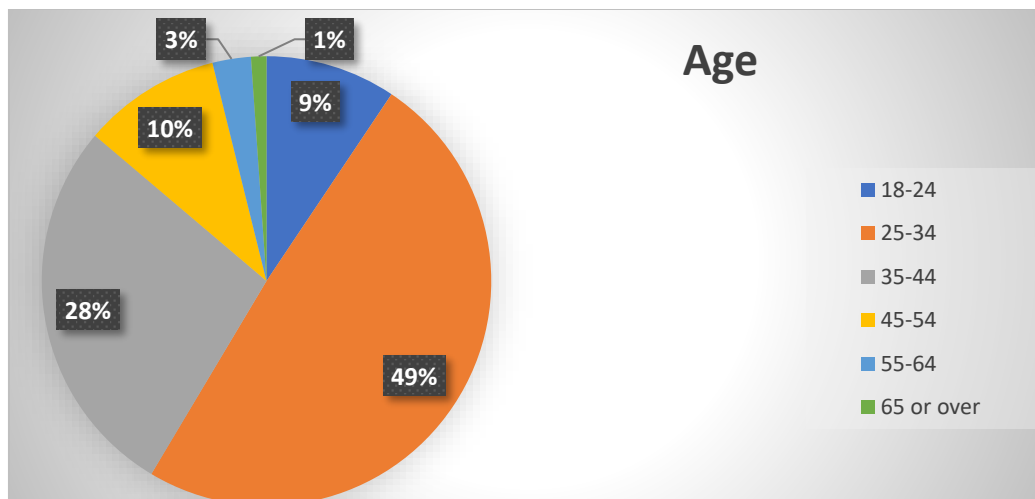
From the above fig. it can be observed that majority of the respondents i.e. 49% respondents fall within the age group of 25-34years. While, 28% respondents fall within the age group of 35-44years and 10% respondents fall within the age group of 45-54years. It is also seen that 9% of the respondents belong to the age group of 18-24years. While only 3% of the respondents fall within the age group of 55-64years and only 1% of the respondents are above 65years. Thus, it can be concluded that majority of the respondents fall within the mid-range group of age contributing to the research.
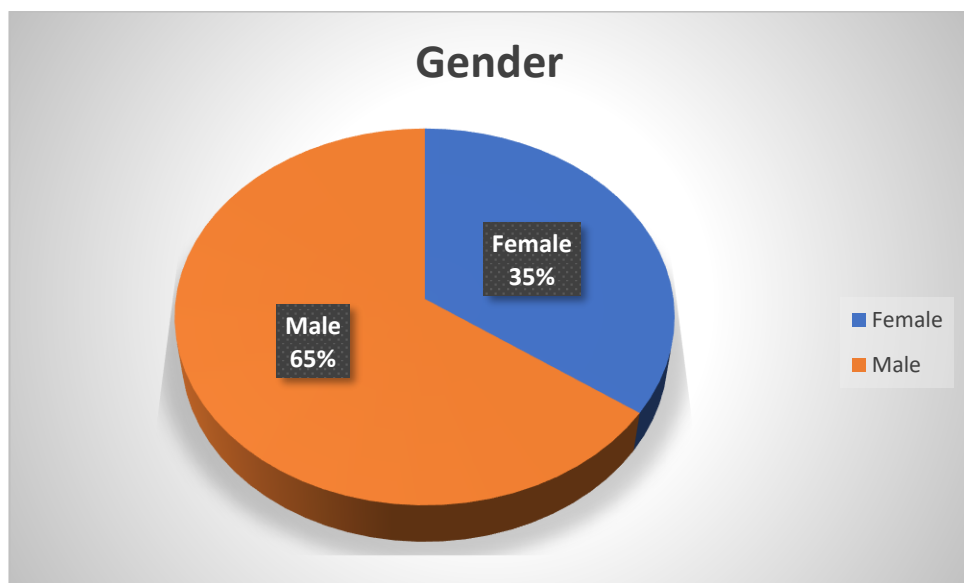
4.1.2 Gender

Table 2 Respondent's Gender

Gender		
	Frequency	**Percent**
Female	63	34.8
Male	118	65.2
Total	181	100.0

Source: Researcher's own results

The frequency distribution of the gender of the respondents is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 5 Respondents Gender

From the above fig it can be observed that 65% of the respondents are belonging to the category male. Only 35% of the respondents are belonging to female category. Thus, it can be concluded that majority of the respondents are male.

4.1.3 Location

Location		
City	**Frequency**	**Percent**
Ahmedabad	40	22.1
Amreli	4	2.2
Bhavnagar	13	7.2
Gandhinagar	8	4.4
Jamnagar	14	7.7
Junagadh	6	3.3
Rajkot	23	12.7
Surat	30	16.6
Surendranagar	20	11.0
Vadodara	22	12.2
Veraval	1	0.6
Total	181	100.0

Source: Researcher's own results

The frequency distribution of the location of the respondents belonging to different cities of Gujarat state is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 6 Respondents Location

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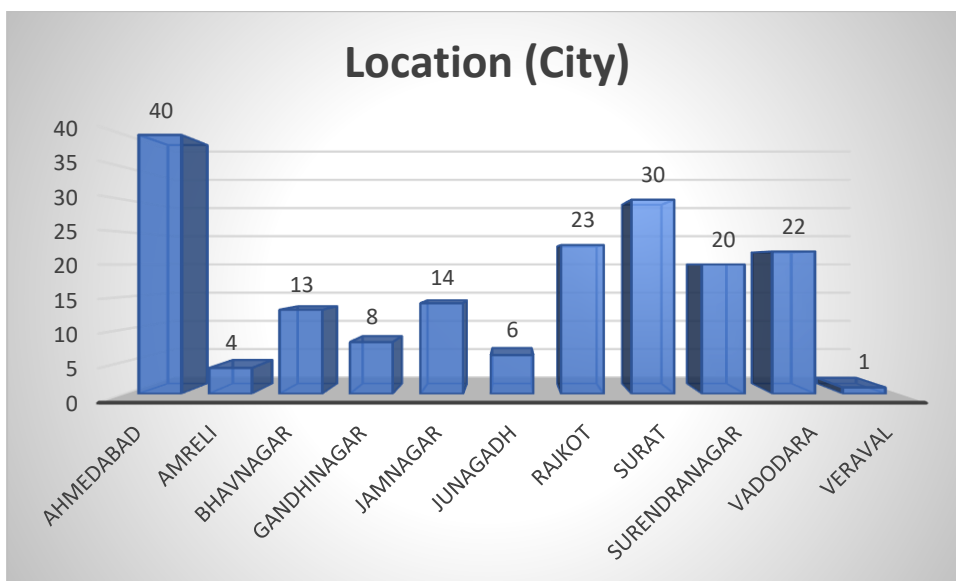
From the above fig. it can be observed that majority of the respondents i.e. 22.1% are belonging from the city Ahmedabad, 16.6% of the respondents are belonging from the city Surat, 12.7% respondents belonging from the city Rajkot, 12.2% of the respondents are belonging to Vadodara, 11% of the respondents belonging to Surrendranagar, 7.7% belonging to Jamnagar, 7.2% respondents belonging to Bhavnagar city, 4.4% respondents from Gandhinagar, 3.3% respondents from Junagadh, 2.2% respondents from Amreli and only 0.6% respondent from Veraval city have participated in the survey by giving their response.

4.2 Change in Consumer Behaviour Post Covid-19

The change in consumer behaviour pertaining to making use of healthcare services post covid-19 have been studied in the questionnaire with the help of the following information collected from the respondents.
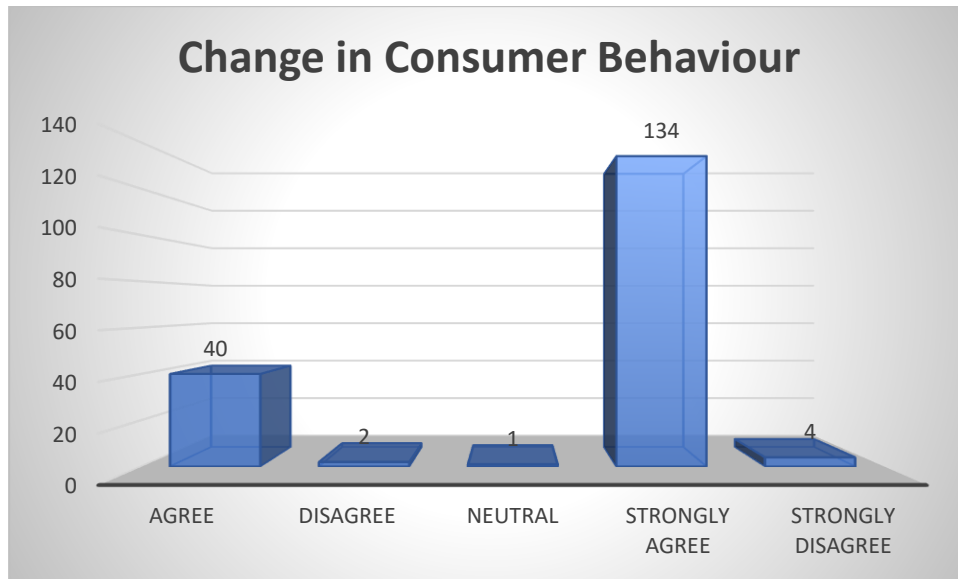
4.2.1 Change in Consumer Behaviour Due to Covid-19

Table 4 Change in Consumer Behaviour due to COVID-19

Change in Consumer Behaviour due to Covid-19		
	Frequency	**Percent**
Agree	40	22.1
Disagree	2	1.1
Neutral	1	0.6
Strongly agree	134	74.0
Strongly disagree	4	2.2
Total	181	100.0

The frequency distribution of Change in Consumer Behaviour pertaining to making use of healthcare services due to Covid-19 is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 7 Change in Consumer Behaviour

From the above fig. it can be observed that majority of the respondents i.e. 74% have strongly agreed that there is a change in consumer behaviour due to Covid-19 pandemic pertaining to making use of healthcare services. While 22.1% respondents have agreed for the same that there is a change in behaviour. Only 2.2% respondents have dis-agreed that there is a change pertaining to utilising healthcare services and 1.1% respondents disagree for the same. Only 0.6% respondents are neutral about there being a change in consumer behaviour pertaining to making use of healthcare services.

4.3 Digital Transformation in Healthcare

The information regarding digital transformation in healthcare services due to Covid-19 has been collected with the help of the questionnaire as below:
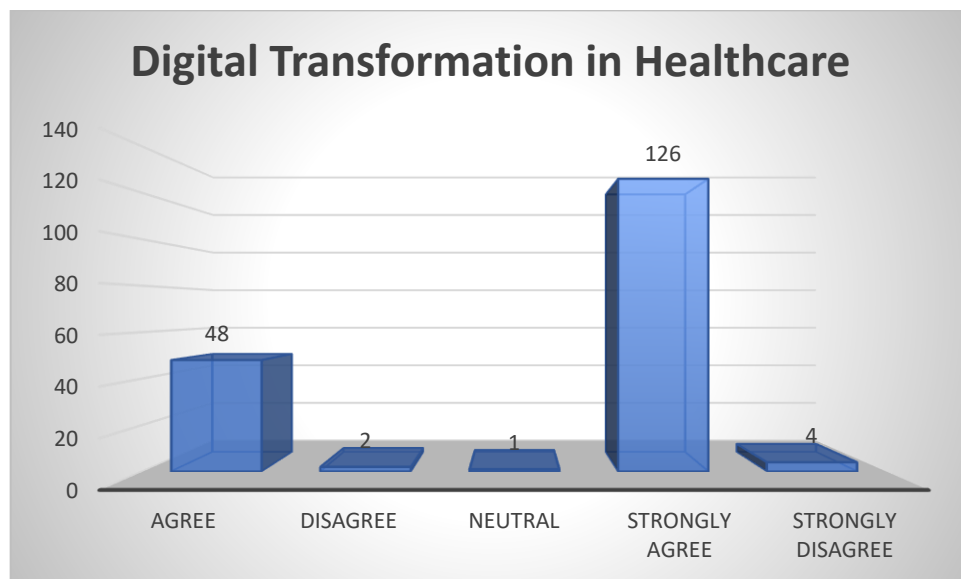
4.3.1 Digital Transformation Due to Covid-19

Table 5 Digital Transformation Due to Covid-19 in Healthcare Services

Digital Transformation Due to Covid-19 in Healthcare Services		
	Frequency	**Percent**
Agree	48	26.5
Disagree	2	1.1
Neutral	1	0.6
Strongly Agree	126	69.6
Strongly Disagree	4	2.2
Total	181	100.0

The frequency distribution of Digital Transformation in Healthcare services due to Covid-19 is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 8 Digital Transformation in Healthcare

From the above fig it can be observed that majority of the respondents i.e. 69.6% have strongly agreed that there is a digital transformation in healthcare due to Covid-19. Whereas, 26.5% of the respondents have agreed for the same. Only 2.2% respondents have have strongly dis-agreed and 1.1% respondents have disagreed with digital transformation in healthcare due to Covid-19. There is only 1 respondent who is neutral about there being a digital change in healthcare due to Covid-19. Thus, it can be inferred that there has been a digital change in healthcare services due to Covid-19.
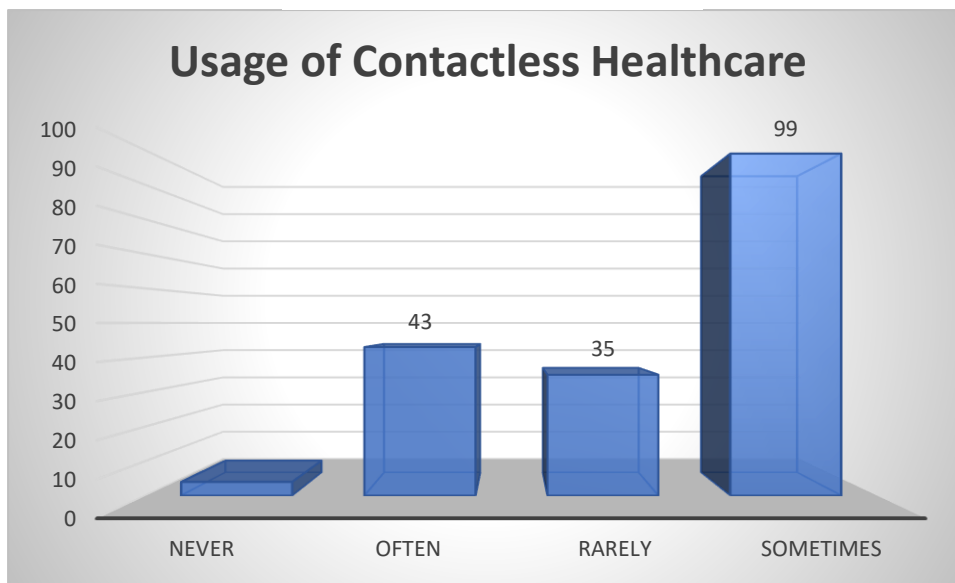
4.3.2   Usage of Contactless Healthcare Services Since Covid-19

Table 6 Usage of Contactless Healthcare Services

Usage of Contactless Healthcare Services		
	Frequency	**Percent**
Never	4	2.2
Often	43	23.8
Rarely	35	19.3
Sometimes	99	54.7
Total	181	100.0

The frequency distribution of usage of Digital Healthcare services is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 9 Usage of Contactless Healthcare

From the above fig. it can be seen that majority of the respondents i.e. 54.7% have reported that they have made use of contactless healthcare services sometimes. While 23.8% respondents have reported that they have made often use of contactless healthcare services. Also 19.3% of the respondents have rarely made use of the contactless healthcare services. Only 2.2% of the respondents have reported that they have never made use of contactless healthcare services. Thus, it can be inferred that due to Covid-19 there has been use of Contactless services.

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4.3.3 Specific Contactless Healthcare Services Used

Table 7 Contactless Healthcare Services Used

Contactless Healthcare Services Used		
Services	**Frequency**	**Percent**
Telemedicine (video/phoneconsultations)	176	97.20%
Online appointment scheduling	155	85.60%
Mobile health apps (e.g., forprescription refills, monitoring)	88	48.60%
Virtual consultations with specialists	77	42.50%
Remote health monitoring devices (e.g., wearable fitness trackers)	116	64.10%
None	4	2.20%

The frequency distribution of usage of specific contactless healthcare services is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 10 Contactless Healthcare Services Used
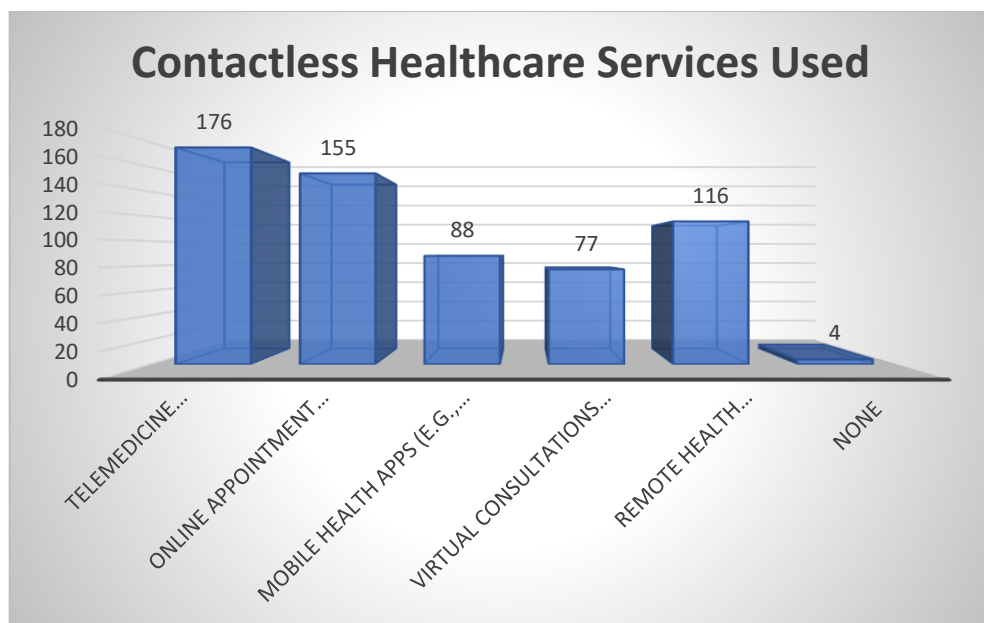
From the above fig. it can be observed that majority of the respondents i.e. 97.20% have reported that they have made use of Telemedicine and 85.60% of the respondents have reported that they have scheduled online appointment with the healthcare service provider. It is also seen that 64.10% of the respondents have made use of remote health monitoring devices and 48.60% of the respondents have made use of mobile health apps for prescription

refills and for health monitoring. While 42.50% of the respondents make use of virtual consultations with specialists. Only 2.2% of the respondents have reported that they have not made use of any of the contactless healthcare services. Thus, it can be inferred that majority of the respondents have made use of contactless healthcare services.
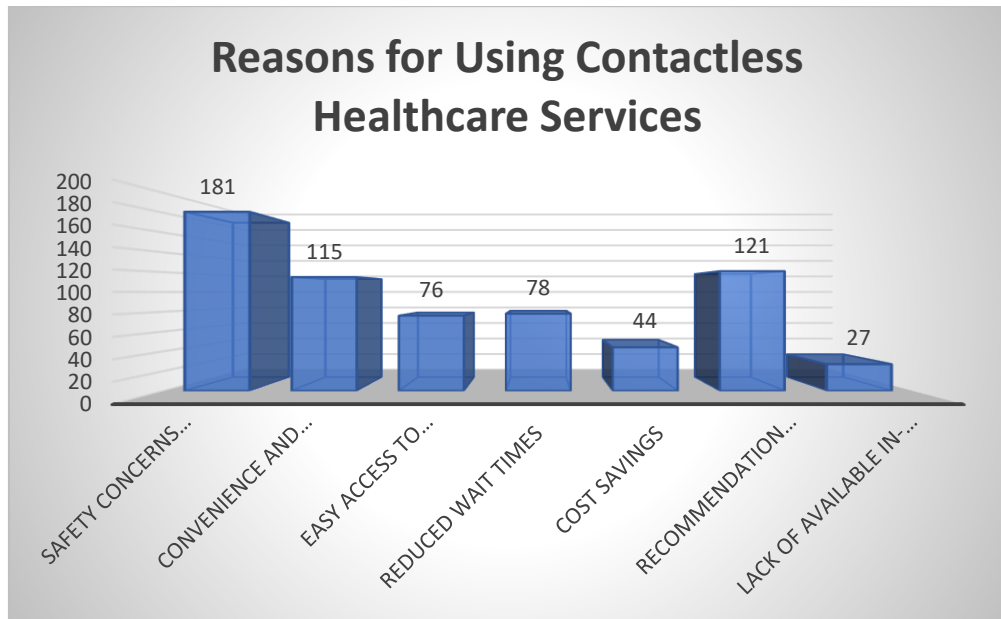
4.3.4   Primary Reasons for using Contactless Healthcare Services

Table 8 Reasons for Using Contactless Healthcare Services

Reasons for Using Contactless Healthcare Services		
Reasons	Frequency	Percent
Safety concerns related to in-person visits	181	100%
Convenience and time-saving	115	63.50%
Easy access to healthcare professionals	76	42%
Reduced wait times	78	43.10%
Cost savings	44	24.30%
Recommendation from healthcare provider	121	66.90%
Lack of available in-person appointments	27	14.90%

The frequency distribution of reason for using contactless healthcare services is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 11 Reasons for Using Contactless Healthcare Services

From the above figure it can be observed that 100% of the respondents have reported that the reason for using contactless healthcare services is because of the safety concerns related to in-person visits during the time of covid-19. While, 66.9% of the respondents have reported that they have made use of contactless healthcare services as it was recommended from the healthcare provider. It is also observed that 63.5% of the respondents have reported that as contactless healthcare services are convenient and time saving due to which they have made use of it. Whereas, 43.1% of the respondents have reported that by using contactless healthcare services the wait times have reduced due to which they have made use of it and 42% of the respondents have reported that due to easy access to healthcare professionals they make use of contactless healthcare services. It is also seen that 24.3% of the respondents have reported due to cost saving advantage they make use of contactless healthcare services and 14.9% have reported that due to lack of availability of in-person appointments during covid-19 pandemic, have made them utilize contactless healthcare services.

4.3.5 Sustainability and Effectiveness of Digital Healthcare Services

Table 9 Sustainability and Effectiveness of Digital Healthcare Services

Sustainability and Effectiveness of Digital Healthcare Services		
	Frequency	**Percent**
Agree	66	36.5
Disagree	6	3.3
Neutral	4	2.2
Strongly Agree	101	55.8
Strongly Disagree	4	2.2
Total	181	100.0

The frequency distribution of sustainability and effectiveness of Digital Healthcare services is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 12 Sustainability and Effectiveness
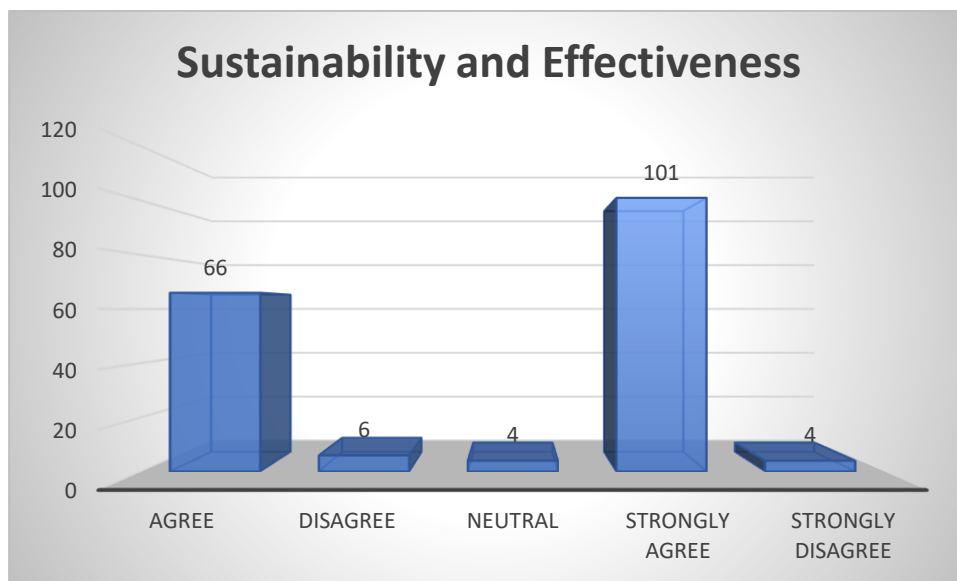
From the above fig. it can be seen that majority of the respondents i.e. 55.8% have strongly agreed that digital healthcare services are sustainable and effective. While 36.5% respondents have agreed for the same that digital healthcare services are sustainable and effective. Only 3.3% of the respondents disagree with digital healthcare services being sustainable and effective and 2.2% of the respondents strongly disagree with same. While 2.2% respondents are neutral in their opinion for digital services being sustainable and

effective. Thus, it can be inferred that, majority of the respondents have strongly agreed and agreed with digital healthcare services being sustainable and effective.

4.4 Challenges Faced by Consumers

The challenges faced by the consumers while making use of digital healthcare services have been gathered with the help of the following information with the help of questionnaire:
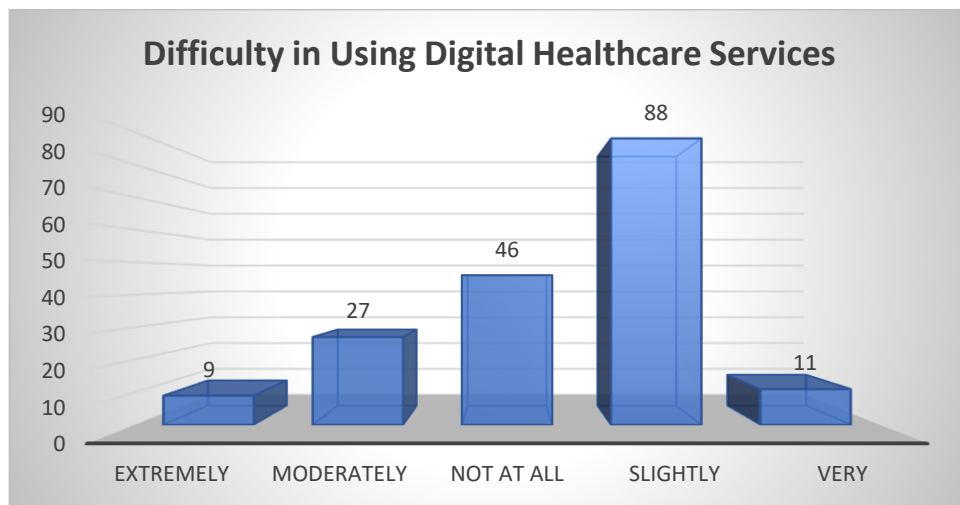
4.4.1 Difficulty in using Contactless Healthcare Services

Table 10 Difficulty in Using Digital Healthcare Services

Difficulty in Using Digital Healthcare Services		
	Frequency	Percent
Extremely	9	5.0
Moderately	27	14.9
Not at all	46	25.4
Slightly	88	48.6
Very	11	6.1
Total	181	100.0

The frequency distribution of difficulty faced as to making use of digital healthcare services is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 13 Difficulty in Using Digital Healthcare Services

Difficulty in Using Digital Healthcare Services

From the above fig. it can be seen that majority of the respondents i.e. 48.6% have reported that they have faced slight difficulty in making use of contactless healthcare services. While 25.4% respondents have reported that they have not faced difficulty at all while making use of contactless healthcare services. It is also observed that 14.9% of the respondents have moderately faced difficulty while making use of the contactless healthcare services. Only 6.1% of the respondents faced very difficult and 5% of the respondents have faced extreme difficulty while making use of contactless healthcare services. Thus, it can be inferred that the respondents have faced slight difficulty while making use of digital healthcare services.
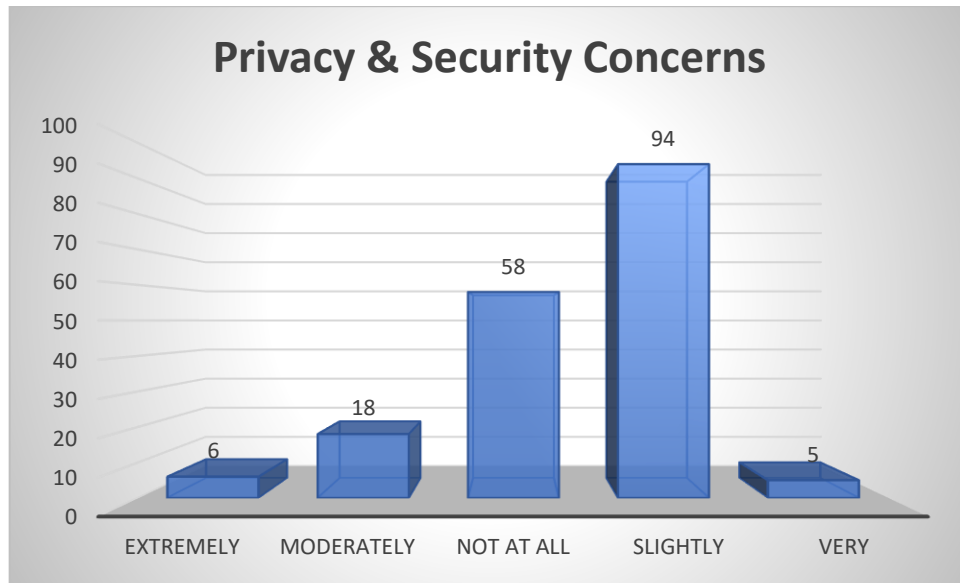
4.4.2 Concerns about Privacy and Security

Table 11 Privacy & Security

Privacy & Security		
	Frequency	Percent
Extremely	6	3.3
Moderately	18	9.9
Not at all	58	32.0
Slightly	94	51.9
Very	5	2.8
Total	181	100.0

The frequency distribution of difficulty faced as to privacy and security with contactless healthcare services is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 14 Privacy & Security Concerns

Figure 14 Privacy & Security Concerns

From the above fig. it can be seen that majority of the respondents i.e. 51.9% have reported that they have concerns regarding privacy and security while making use of contactless healthcare services. While 32% respondents have reported that they do not have concerns regarding privacy and security while making use of contactless healthcare services. It is also observed that 9.9% of the respondents have moderate concerns regarding privacy and security while making use of contactless healthcare. Only 3.3% of the respondents have extreme security and privacy concerns and 2.8% respondents were very concerned about the privacy and security while making use of contactless healthcare services. Thus, it can be inferred that the respondents were slightly concerned relating to privacy and security while making use of digital healthcare services.
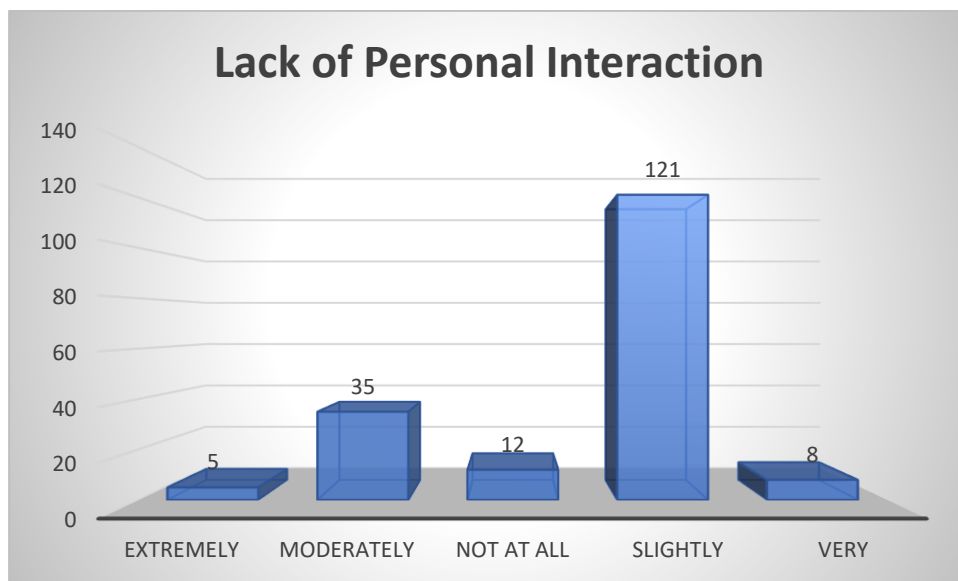
4.4.3 Lack of Personal Interaction

Table 12 Lack of Personal Interaction

Lack of Personal Interaction		
	Frequency	Percent
Extremely	5	2.8
Moderately	35	19.3
Not at all	12	6.6
Slightly	121	66.9
Very	8	4.4
Total	181	100.0

The frequency distribution of difficulty faced as to lack of personal interaction with healthcare service provider is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 15 Lack of Personal Intraction

From the above fig. it can be seen that majority of the respondents i.e. 66.9% have slightly faced lack of personal interaction while making use of contactless healthcare services. While 19.3% respondents have moderately lacked personal interaction while making use of contactless healthcare services. Also 6.6% of the respondents did not lack personal interaction while making use of the contactless healthcare services. Only 4.4% of the respondents have faced very lack of personal interaction and 2.8% have faced extreme

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lack of personal interaction while making use of contactless healthcare services. Thus, it can be concluded that there is slight lack of personal interaction in utilising contactless healthcare services.
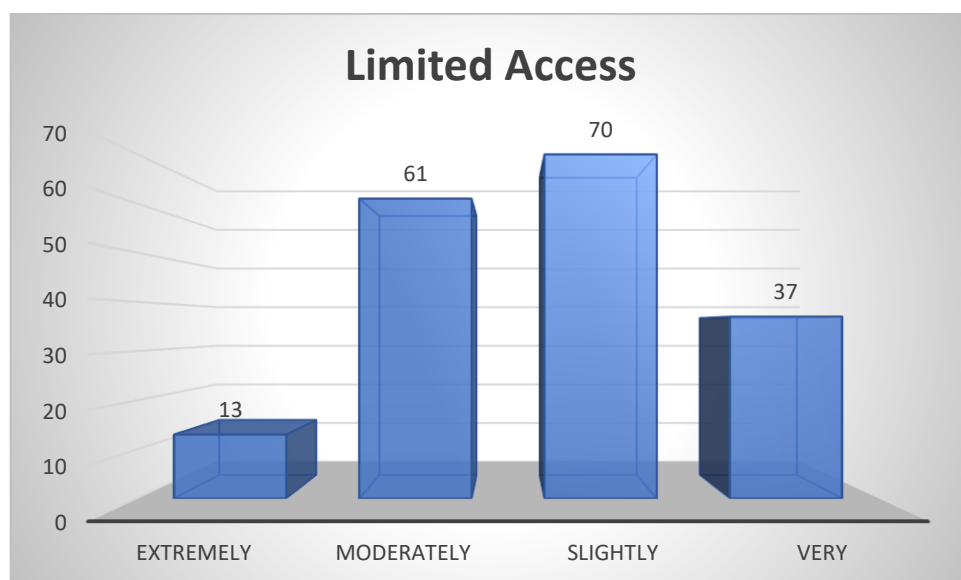
4.4.4 Limited Access

Table 13 Limited Access

Limited Access		
	Frequency	Percent
Extremely	13	7.2
Moderately	61	33.7
Slightly	70	38.7
Very	37	20.4
Total	181	100.0

The frequency distribution of difficulty faced as to Limited access of contactless healthcare services is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 16Limited Access

From the above fig. it can be seen that majority of the respondents i.e. 38.7% have slightly agreed that there is limited access to healthcare services while making use of contactless healthcare services. While 33.7% respondents have agreed moderately that there

is limited access to healthcare services while making use of contactless healthcare services. Also 20.4% of the respondents are moderate in their opinion of limited access to healthcare services while making use of contactless healthcare services. Only 7.2% of the respondents have reported extreme limited access to healthcare services while making use of contactless healthcare services. Thus, it can be inferred that Contactless healthcare services have limited accessibility.

4.5 Satisfaction Level and Post Pandemic use of Contactless Healthcare services by Consumers

The satisfaction level of the consumers of utilising digital healthcare services and its post pandemic use have been studied with the help of the following information:

4.5.1 Satisfaction level

Table 14 Satisfaction Level

Satisfaction Level		
	Frequency	Percent
1	5	2.8
2	17	9.4
3	54	29.8
4	85	47.0
5	20	11.0
Total	181	100.0

The frequency distribution of satisfaction level of contactless healthcare services is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 17 Satisfaction Level

Satisfaction Level

From the above fig. it can be observed that majority of the respondents i.e.47% respondents have reported that they are satisfied with the usage of contactless healthcare services. While 11% of the respondents have reported that they are highly satisfied with the same. It can be found that 29.8% respondents are neutral regarding their satisfaction level with contactless healthcare services. While 9.4% respondents have disagreed and only 2.8% respondents have strongly disagreed with their satisfaction level for contactless healthcare services.
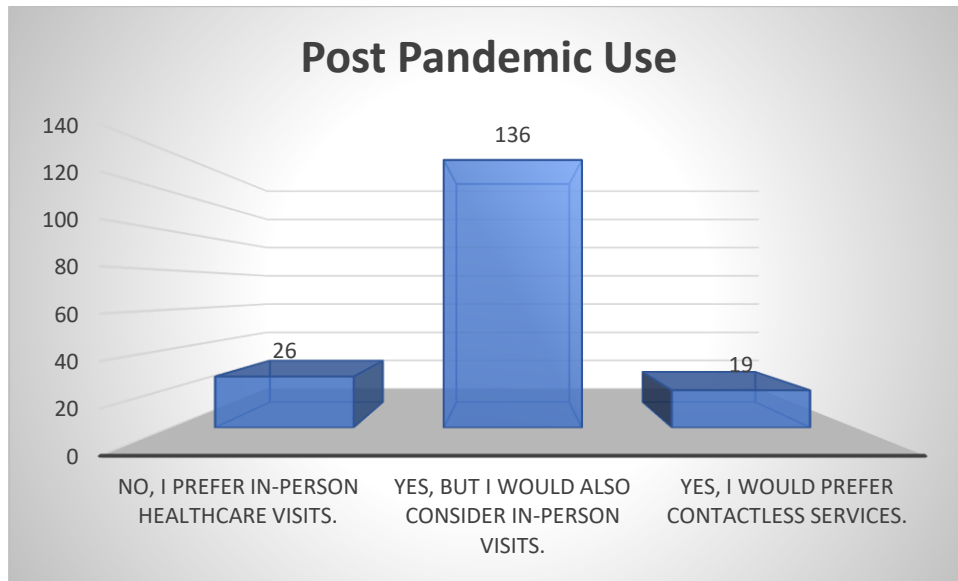
4.5.2 Post Pandemic use of Contactless Healthcare Services

Table 15 Post Pandemic Use

Post Pandemic Use		
	Frequency	Percent
No, I prefer in-person healthcare visits.	26	14.4
Yes, but I would also consider in-person visits.	136	75.1
Yes, I would prefer contactless services.	19	10.5
Total	181	100.0

The frequency distribution of post pandemic use of contactless healthcare services is given in the above table. The graphical presentation for the same is given below with the help of a bar graph.

Figure 18 Post Pandemic Use

From the above fig. it can be observed that majority of the respondents i.e.75.1% respondents have reported that they would continue to make use of contactless healthcare services post pandemic but would also consider in person visit with the healthcare service provider. While 14.4% respondents have reported that they would prefer only in person healthcare visits. Only 10.5% respondents have agreed that they would prefer contactless services without depending upon in person visits with their healthcare service provider. Thus it can be conclude that majority of the respondents prefer to use services digitally alongwith in-person visits.

4.6 Hypothesis Testing

Following hypothesis have been framed and tested with the help of Pearson's corelation analysis so as to study the strength, nature and significance of association of one variable with another variable of the study:

4.6.1 Hypothesis 1

The following hypothesis have been framed to check the associations between Gender and Use of Contactless Healthcare Services.

H_0 – There is no association between Gender and Use of Contactless Healthcare Services.

H_1- There is association between Gender and Use of Contactless Healthcare Services.

From the following table we can observe the association of Gender and Use of Contactless Healthcare Services.

Table 16 Hypothesis 1

Correlations		Gender	Usage of Contactless Healthcare Services
Gender	Pearson Correlation	1	-.418[**]
	Sig. (2-tailed)		0.000
	N	181	181
Usage of Contactless Healthcare Services	Pearson Correlation	-.418[**]	1
	Sig. (2-tailed)	0.000	
	N	181	181
**. Correlation is significant at the 0.01 level (2-tailed).			

From the above table it can be observed that the Pearson's corelation value is -0.418 which shows that there is low & negative corelation between Gender and Use of Contactless Healthcare Services. It is also observed that the p-value is 0.000 which is lesser than the p-value of 0.05, from this it can be inferred that there is significant association between Gender and Use of Contactless Healthcare Services. Therefore, null hypothesis is rejected.

4.6.2   Hypothesis 2

The following hypothesis have been framed to check the associations between Age and Use of Contactless Healthcare Services.

H_0 – There is no association between Age and Use of Contactless Healthcare Services.

H_1- There is association between Age and Use of Contactless Healthcare Services.

From the following table we can observe the association of Age and Use of Contactless Healthcare Services.

Table 17 Hypothesis 2

Correlations			Age	used contactless healthcare services
Age	Pearson Correlation		1	-0.108
	Sig. (2-tailed)			0.149
	N		181	181
used contactless healthcare services	Pearson Correlation		-0.108	1
	Sig. (2-tailed)		0.149	
	N		181	181

From the above table it can be observed that the Pearson's corelation value is -0.108 which shows that there is negligible negative corelation between Age & Use of Contactless Healthcare Services. It is also observed that the p-value is 0.149 which is greater than the p-value of 0.05, from this it can be inferred that there is no significant association between age and Use of Contactless Healthcare Services. Therefore, null hypothesis cannot be rejected.

4.6.3 Hypothesis 3

The following hypothesis have been framed to check the associations between Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective.

H_0 – There is no association between Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective.

H_1 - There is association between Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective.

From the following table we can observe the association of Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective.

Table 18 Hypothesis 3

Correlations		believe contactless healthcare services are a sustainable & effective	used contactless healthcare services
believe contactless healthcare services are a sustainable & effective	Pearson Correlation	1	.443[**]
	Sig. (2-tailed)		0.000
	N	181	181
used contactless healthcare services	Pearson Correlation	.443[**]	1
	Sig. (2-tailed)	0.000	
	N	181	181
**. Correlation is significant at the 0.01 level (2-tailed).			

From the above table it can be observed that the Pearson's corelation value is 0.443 which shows that there is low & positive corelation between Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective. It is also observed that the p-value is 0.000 which is lesser than the p-value of 0.05, from this it can be inferred that there is significant association between Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective. Therefore, null hypothesis is rejected.

4.6.4   Hypothesis 4.

The following hypothesis have been framed to check the associations between Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services.

H_0 – There is no association between Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services.

H_1- There is association between Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services.

From the following table we can observe the association of Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services.

Correlations			
		noticed a significant digital transformation in the healthcare industry	consumer behavior pertaining to making use of healthcare services has changed
noticed a significant digital transformation in the healthcare industry	Pearson Correlation	1	.911**
	Sig. (2-tailed)		0.000
	N	181	181
consumer behavior pertaining to making use of healthcare services has changed	Pearson Correlation	.911**	1
	Sig. (2-tailed)	0.000	
	N	181	181
**. Correlation is significant at the 0.01 level (2-tailed).			

From the above table it can be observed that the Pearson's corelation value is 0.911 which shows that there is very high & positive corelation between Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services. It is also observed that the p-value is 0.000 which is lesser than the p-value of 0.05, from this it can be inferred that there is significant association between Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services. Therefore, null hypothesis is rejected.

4.6.5 Hypothesis 5

The following hypothesis have been framed to check the relationship between Gender & Satisfaction with contactless healthcare services.

H_0 – There is no significant relationship between Gender & Satisfaction with contactless healthcare services.

H_1- There is relationship between Gender & Satisfaction with contactless healthcare services.

From the following table we can observe the relationship between Gender & Satisfaction with contactless healthcare services.

Table 20 Hypothesis 5

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	30.590[a]	4	0.000
Likelihood Ratio	31.344	4	0.000
Linear-by-Linear Association	18.554	1	0.000
N of Valid Cases	181		
a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.74.			

From the above table it can be observed that the p-value is 0.000 which is lesser than the chosen significance level of 0.050 hence, we reject the null hypothesis. Thus, we can conclude that there is significant relationship between Gender & Satisfaction with contactless healthcare services.

5 Findings and Suggestions

5.1 Findings

From the research it is found that majority of the respondents are male i.e. 65.2% and majority of the respondents i.e. 49.2% of them belong to the age group of 25-34years. It is also found from the study that majority of the respondents are belonging to city Ahmedabad, Surat, Rajkot and Vadodara. It is observed from the study that 74% of the respondents have strongly agreed that there is a change in consumer behaviour due to Covid-19 pandemic. It is only 2.2% of the respondents who strongly disagree with the same. While it is also found in the study that 69.6% of the respondents have reported that there has been a digital transformation in healthcare services due to Covid-19 Pandemic. Whereas, only 2.2% of the respondents have strongly disagreed with the same.

It is found from the study that majority i.e. 97.8% of the respondents have made use of contactless healthcare services and only 2.2% of the respondent have reported that they haven't made use of it. Telemedicine (97.2%) and Online Appointment Scheduling (85.6%) are the two most used contactless healthcare services. Whereas, Virtual Consultation with Specialists (42.5%) being the least one. The study also made it clear that the primary reason for using contactless healthcare services was Safety concerns relating to in-person visits (100%) and Recommendation from healthcare provider (66.9%).

Respondents belief regarding sustainability and effectiveness of Digital healthcare services revealed that 87.3% of the respondent believe it to be sustainable and effective while 5.5% disagree regarding the same. From the study it can be found that majority of the respondents i.e. 48.6% have faced slight difficulty in using digital healthcare services. Whereas, 5% have reported that they have faced extreme difficulty. It is also found that 51.9% of the respondents have reported slight concerns about privacy and security with contactless healthcare services and 66.9% of the respondents face slight lack of personal interaction.

The study also revealed that 38.7% of the respondents have faced slight difficulty of limited access to contactless healthcare services and 7.2% have faced extreme difficulty to access. It is observed from the study that majority i.e. 47% of the respondents rather than

being highly satisfied they are satisfied with contactless healthcare services and 2.8% of the respondents are strongly dissatisfied. Moreover, it is also found from the study that 75.1% of the respondents have reported that they would make use of contactless healthcare services post pandemic but would also consider in-person visits. Whilst 14.4% of the respondents have not preferred to use contactless healthcare services rather, they prefer in-person healthcare visits.

5.1.1 Findings from Hypothesis Testing

From the hypothesis testing making use of corelation statistics, it is found that there is significant association between Gender and Use of Contactless Healthcare Services (p-value = 0.000). Also, it revealed that there is no significant association between age and Use of Contactless Healthcare Services (p-value = 0.149). From the third hypothesis, it is inferred that there is significant association between Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective (p-value is 0.000). From the hypothesis fourth, it is found that there is significant association between Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services (p-value is 0.000). It is found from the fifth hypothesis there is significant relationship between Gender & Satisfaction with contactless healthcare services (p-value is 0.000).

5.2 Suggestions

From the findings it is recommended by changing the belief of the people regarding digital healthcare services the usage can be increased, also it is recommended to the provider of healthcare services that, they should ideally guide the development of strategies, keeping convenience, efficacy, and security in mind while implementing pertinent technology. It can be suggested to provide discounts, offers and coupons of benefits for repeat usage of contatcless healthcare services so as to motivate new users making it more acceptable and increasing its reach. It is also recommended to improve the quality and to eliminate gap between online and offline treatment.

Also, there is need to make contactless healthcare services speedier and more responsive. Moreover, there needs be collaboration between hospitals, doctors, staffs and patients so as to make the real time availability of information promoting easy accessibility

through digitalisation. Implementation of chatbots in regional language may also prove to be way for success. Proper training and education regarding various contactless healthcare services may also help for its wide acceptance by the population. Also, measures should be taken to make contactless healthcare services available at global level so as to remove geographical barriers in availing these services.

Customised contactless healthcare services by strengthening partnerships with different organisations like pharmaceutical, insurances companies and healthcare devices to be offered to the patients so that they resort to digital way of availing these healthcare services. It is also recommended from the study to implement more and more ICT enabled devices and applications in healthcare sector so as to cover a wide array of services and to get prepared for future uncertainties if any.

6 Conclusion

The COVID-19 pandemic has exerted a significant influence on the healthcare sector, requiring significant adjustments such delaying non-urgent medical treatments and embracing telemedicine in order to be prepared for the eventuality of a pandemic. Patients have encountered trouble getting to the medical center in ambulances, individuals with chronic illnesses were inclined to put off their follow-up appointments, hospital activities for outpatients were restricted to emergency situations, and all planned events were canceled. In order to maintain contact with patients, messenger services as well as consultations over the phone were used. Therefore, the aim of the research was to study the change in consumer behaviour post covid-19 pandemic with special reference to healthcare services. In order to accomplish the primary objective, sub-objectives were framed which aimed to examine the digital transformation post covid-19 in the field of healthcare industry, the usage of contactless healthcare services by the consumers and the challenegs faced by them.

For the fulfillment of the main and sub-objectives, the study comprises of 2 sections, the literature review part being the theoretical section. Whereas, the analytical part being the practical section. For the theoretical section i.e. literature review secondary data is utilised from various sources like websites, journals, blogs, articles, research papers, reference books, etc. Secondary data relating to the concept of Consumer Behaviour, it types and importance, factors affecting consumer behaviour, Covid-19 pandemic, effect of Covid-19 pandemic on healthcare services, secenerio of healthcare services in India, Digitalization and Types of Digital Healthcare services have been studied.

While the practical part totally focuses on the primary data gathered from the respondents through survey method via google form with the help of close-ended structured questionnaire. The link to the questionnaire was made available through social media networking platforms like WhatsApp, Instagram, Facebook, etc. The questionnaire consisted of 5 point likert scale questions recording the opinions and attitudes of the respondents regarding the usage of digitalisation of healthcare services, usage of these services, challenges faced by them while using these services and their satisfaction with these contactless services. Total of 181 responses have been gathered and analysed making use of tables, graphs, percentages through Microsoft Excel and hypothesis have been tested

utilising SPSS. Whereby, statistical technique of Corelation is used to examine the strength, nature and significance of corelation between the variable under considersation. Chi-square test is used to study the significance in relationship between the selected variables.

The study tried to examine the digital transformation in healthcare industry and it is concluded from the study that majority of the respondents have reported that that there has been a digital transformation in healthcare services due to Covid-19 Pandemic. It also aimed to examine the usage of contactless healthcare services and it can be concluded from the findings of the study that except few, majority of the respondents have made use of contactless healthcare services. It can be concluded that Telemedicine, Online Appointment Scheduling are amongst the top most utilised contactless healthcare services as reported by the respondents. It can also be concluded from the study that the primary reason behind making use of contactless healthcare services was Safety concerns relating to in-person visits and also as these contactless healthcare services were recommended by their healthcare provider. The study concluded that majority of the respondents believe these contactless healthcare services to be sustainable and effective.

It can be inferred from the study that no matter there has been a wide acceptance of digital healthcare services, majority of the respondents have faced slight difficulty in making use of these services were few of them have faced extreme difficulty. Also, limited accessibility to these services have posed a challenge alongwith privacy and security concern and lack of personal interaction. It can be inferred from the study that majority of the respondents would continue to make use of contactless healthcare services post pandemic but would also consider in-person visits.

From the hypothesis testing it can be concluded that there exists significant association between Gender and Use of Contactless Healthcare Services. While there is no significant association between age and Use of Contactless Healthcare Services. From the third hypothesis it can be inferred that significant association exists between Use of Contactless Healthcare Services & Belief of Contactless Healthcare Services being Sustainable & Effective. It is also inferred from the fourth hypothesis that that there is significant association between Digital transformation in the healthcare industry & Consumer Behaviour making use of healthcare services. While from the fifth hypothesis it can be

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concluded that there is significant relationship between Gender & Satisfaction with contactless healthcare services.

Thus, from the study it can be finally concluded that there has been a change in consumer behaviour pertaining to healthcare services caused by Covid-19. Despites of being challenges faced by the respondents in contactless healthcare services, they are found to be satisfied with the services and have reported that they would continue to utilize them as being sustainable and effective for future use. Moreover, it was inferred that they would prefer in-person visit as well. So, it gives way for the policy makers to enable more and more ICT in developing customised offerings to the consumers in healthcare sector so as to cover a wide array of services and to get equipped for forthcoming uncertainties if any.

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8 List of pictures, tables, graphs and abbreviations

8.1 List of Figures

8.2 List of tables

9 Appendix

9.1 Google Form Link

Link to the Google Form Questionnaire: https://forms.gle/wZR37oAiZfvG8qA9A

9.2 Questionnaire

Hi, I am Kameshkumar Modi. I hope this message finds you well. I am conducting a survey to understand how consumer behavior in healthcare has changed since the COVID-19 pandemic and the role of digital transformation in shaping healthcare services. Your input is invaluable to me, and I would greatly appreciate your participation in my brief questionnaire. It will take only a few minutes of your time. Your responses will remain confidential and will contribute to important insights that could enhance healthcare services in the future. Thank you sincerely for your time and contribution.

Section 1: Demographic Information

1. **Age:**
   - Under 18
   - 18-24
   - 25-34
   - 35-44
   - 45-54
   - 55-64
   - 65 or over

2. **Gender:**
   - Male
   - Female

3. **Location (City/Country):**

Section 2: Change in Consumer Behavior Post-COVID-19

4. **To what extent do you agree or disagree that your consumer behavior pertaining to making use of healthcare services has changed since the COVID-19 pandemic?**
   - Strongly Disagree
   - Disagree
   - Neutral

- Agree
- Strongly Agree

Section 3: Digital Transformation in Healthcare

5. **Please indicate your level of agreement with the following statement: "I have noticed a significant digital transformation in the healthcare industry since the COVID-19 pandemic."**
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

6. **Have you used contactless healthcare services (e.g., telemedicine, online appointments, virtual consultations) since the COVID-19 pandemic?**
   - Never
   - Rarely
   - Sometimes
   - Often
   - Always

7. **Which specific contactless healthcare services have you used? (Select all that apply)**
   - Telemedicine (video/phone consultations)
   - Online appointment scheduling
   - Mobile health apps (e.g., for prescription refills, monitoring)
   - Virtual consultations with specialists
   - Remote health monitoring devices (e.g., wearable fitness trackers)
   - None
   - Other (please specify)

8. **What were the primary reasons for using contactless healthcare services during and after the COVID-19 pandemic? (Select all that apply)**
   - Safety concerns related to in-person visits
   - Convenience and time-saving
   - Easy access to healthcare professionals

- Reduced wait times

- Cost savings

- Recommendation from healthcare provider

- Lack of available in-person appointments

- Other (please specify)

9. **Do you believe contactless healthcare services are a sustainable and effective way to receive medical care in the long term, even beyond the COVID-19 pandemic?**

- Strongly Disagree

- Disagree

- Neutral

- Agree

- Strongly Agree

Section 5: Challenges Faced by Consumers

10. **(a) If you have used contactless healthcare services, please indicate the extent to which you encountered the following challenges: a. Difficulty in understanding or using the technology:**

- Not at all

- Slightly

- Moderately

- Very

- Extremely

10 (b). Concerns about the privacy and security of your health data:

- Not at all

- Slightly

- Moderately

- Very

- Extremely

10 c. Lack of personal interaction with healthcare providers:

- Not at all

- Slightly

- Moderately

- Very
- Extremely

d. Limited access to necessary healthcare services:

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

11. On a scale of 1 to 5, how satisfied are you with the contactless healthcare services you have used, where 1 is very dissatisfied and 5 is very satisfied?

- 1
- 2
- 3
- 4
- 5

12. Would you continue to use contactless healthcare services even after the COVID-19 pandemic subsides?

- Yes, I would prefer contactless services.
- Yes, but I would also consider in-person visits.
- No, I prefer in-person healthcare visits.
- Not sure