"SERVICING OF SERVICES: A STUDY OF ONLINE FOOD SERVICES IN DELHI-NCR"

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By

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Transforming Education Transforming India

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2023

DECLARATION

I, hereby declared that the presented work in the thesis entitled **"Servicing of Services: A Study of Online Food Services in Delhi-NCR"** in fulfilment of degree of **Doctor of Philosophy (Ph. D.)** is outcome of research work carried out by me under the supervision of Dr Shamily Jaggi, working as Professor in General Marketing, Mittal School of Business of Lovely Professional University, Punjab, India. In keeping with general practice of reporting scientific observations, due acknowledgements have been made whenever work described here has been based on findings of other investigator. This work has not been submitted in part or full to any other University or Institute for the award of any degree.

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Date: October 2023

CERTIFICATE

This is to certify that the work reported in the Ph. D. thesis entitled **"Servicing of Services: A Study of Online Food Services in Delhi-NCR"** submitted in fulfillment of the requirement for the reward of degree of **Doctor of Philosophy (Ph.D.)** in the Mittal School of Business, is a research work carried out by Narinder Kaur, (Registration No. 41800140), is bonafide record of his/her original work carried out under my supervision and that no part of thesis has been submitted for any other degree, diploma or equivalent course.
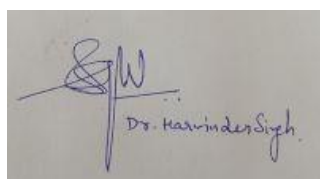
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ABSTRACT

Due to changing lifestyles and widespread internet and mobile phone use, online food service providers are becoming more prevalent in India as a result of the rising popularity of these services. Given the recent development of food delivery services, there isn't much knowledge about what motivates customers to use them. Understanding the elements that impact customers' intentions to use and actual use of online food services is therefore crucial. The customer perspective was investigated in order to achieve a better comprehend of the factors that can affect behavioural intention towards online food services, with the belief that behavioural intention would drive actual usage behaviour. Most research studies have focused only on the technology aspects of mobile apps, ignoring various aspects of online food services from the point of way of consumers behaviour and adoption. To fullfill this research gap, this work offered an integrative framework of UTAUT2 with the additional attributes of online food services and health concerns during a pandemic situation that influence their decision-making processes in terms of willingness to use food delivery services.

In this research, a descriptive design is used. Based on a review of the literature, several hypotheses were developed on the characteristics that affect the behavioural intention and employment of online food services in Delhi-NCR. In the study, a theoretical model was created and purposive sampling methodology was applied. In the pilot phase, 80 replies were gathered, and 750 in the final phase. SPSS and AMOS were used to analyse the data that had been gathered.

Outcomes of the demographic research, young respondents preferred to order from food apps available online, and 75% of the consumers are under the age of 35. The numbers of consumers of online food delivery firms are students and employees. Both men and women prefer online meal services. The outcomes of the research showed that around 43% of the respondents used multiple food delivery apps. The results of the frequency of usage of online food services showed that 264 respondents, or 35%, reported using it once every week. The average order value reported by most respondents (51.1%) is between Rs. 101 and 500, with 33.1% of users reporting orders between Rs. 501 and 1000.

It has been discovered that the attributes—performance expectancy, habit, price value, social influence, online promotion, and facilitating condition—significantly and favourably influence behavioural intention. Additionally found to impact of behavioural intention towards online

food services include traceability, personal innovativeness, hedonic motivation, and effort expectation. Additionally demonstrated is the relation between behaviour intention and actual usage behaviour. It has been demonstrated that perceived health risks can somewhat mediate the relationship between actual usage behaviours and these risks. The mediating variable has demonstrated a favourable impact on consumer behaviour while using online meal delivery services. There is not a noticeable distinction between male and female behaviour intention when gender is the moderating variable. Furthermore, while age is a moderator, there is a significant difference among all age range when considering the variables, i.e., online promotion, personal innovativeness, traceability, and behavioural intentions.

The study will assist managers and business owners in comprehending the effects of many aspects that impact behavioural intention and actual usage behaviour. As a result of the researcher's outcomes regarding the significance of performance expectancy, online promotions, peer influence, and facilitating conditions, marketers should place an emphasis on offering customers good deals, convenience, and enjoyable online experiences, as well as taking care of their real time traceability. The study confirmed that the performance expectancy of online food services predicts consumers 'behavioural intentions to employ online food services. Service developers should therefore highlight the essential characteristics of the ordering process and create designs that take use of those characteristics. Ordering interfaces, for instance, ought to be created with clear information and devoid of pointless dialogue boxes that prompt users to choose at every stage or screen of the transaction.

In conclusion, constraints and implications for theory and practises were developed based on the results.

Keywords: Online food services, Behavioural intention, Customer behaviour Food aggregators, Food Industry

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"When we tackle obstacles, we find hidden reserves of courage and resilience we did not know we had. And it is only when we are faced with failure do we realise that these resources were always there within us. We only need to find them and move on with our lives" **– A.P.J. Abdul Kalam**

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(NARINDER KAUR)

PREFACE

The primary goal of this study is to understand the attributes that affect decision-makers' behavioural intentions and actual use of online food services in Delhi-NCR. To analyse the associations, a framework was proposed. Chapter 1 describes the background of the study, the scenario of the service industry, and online food services in India. Chapter 2 presents the review of literature, provides background on the topic, and identifies the need for the study. In particular, the literature on the constructs of UTAUT2 and additional constructs such as online promotions, personal innovativeness, traceability, and perceived health risk. The study's methodology is the subject of Chapter 3. It includes a description of the steps used to develop the research instrument as well as the research design. In this chapter, the data analysis methods used in the current investigation and a sample profile are described. Chapter 4 explains the procedure used for validating and measuring various constructs. The demographic profile of the respondents is presented in the first portion of the chapter, while the influence of independent factors on dependent variables is measured and tested in the second section. also examined the mediating and moderating impacts among the constructs. Results, implications, limitations, and conclusions are presented in Chapter 5. It also covers the range of potential future research.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION TO THE STUDY

The importance of the service sector continues to rise as a result of its crucial contribution to the growth of the global economy. It took hundreds of years for the global economy to transition from agriculture to industry, but the emergence of the service sector has been enthralling and quick. The largest portion of global GDP is contributed by the service sector. The service sector has had the world's fastest growth throughout the years, and it is anticipated that this pattern will persist in the upcoming years. The output, gross value added, investment inflows, widespread employment, and major contribution to international exports have all been led by the service industry.

Three traditional sectors make up any economy. Agribusiness and related activities fall within the primary sector. Manufacturing and associated activities are included in the secondary sector. The third sector, known as the tertiary sector or the service sector, offers services to both individuals and organisations. Services are described as economic activities that do not lead to ownership. This separates services from products and is often referred to as intangible goods. It is challenging to store or stock services due to their intangibility, inseparability, and inconsistent nature. The hotel, telecommunications, educational, healthcare, financial, and information technology sectors all fall under the category of services. In nations like the USA, UK, China, and India, the tertiary sector has grown to be the most significant sector of the economy.

1.2 SERVICE INDUSTRY IN INDIA

Among rising countries, India's service sector is one of the fastest-growing. It contributes significantly to India's economy. The Indian economy was always thought of as being agrarian, but in the present, the development rate of the service sector has overtaken that of both industrial and agricultural industries. Since the post-liberalisation era, the service sector has played a remarkably large part in the Indian economy. Information technology, telecommunications, hospitality, and banking sectors are examples of service industries whose growth has outpaced the economy. Hotels, restaurants, banking, real estate, telecom,

information technology, and education make up the majority of the service sector in India's GDP.

Figure 1.1 - Service Sector GVA as a Percentage of Total GVA
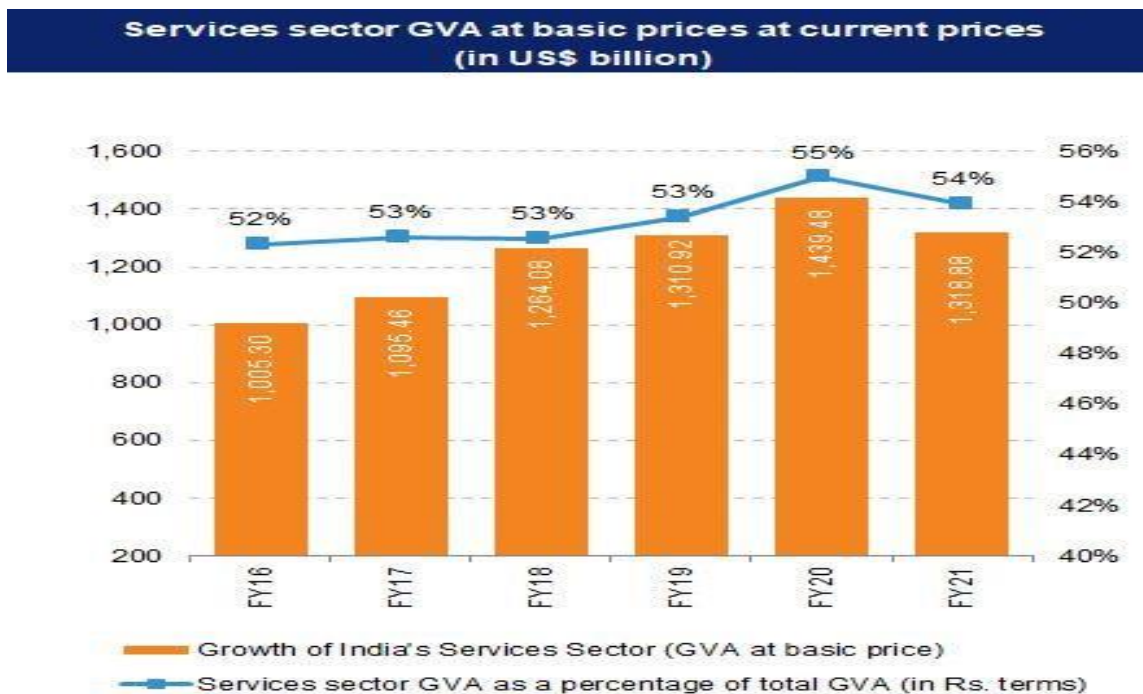
Source- India Brand Equity Foundation, service sector report, November 2022

Indian service sector, which remains the primary engine of the country's economic expansion, generated 53% of the GDP at current prices in FY21–22 (according to advance projections). At a compound yearly growth rate of 11.43%, India's GVA in the services industry climbed from Rs. 68.81 trillion to Rs. 101.47 trillion (US$ 1,439.48 billion) in FY20. Financial, real estate, and professional services saw growth between FY16 and FY20 at a CAGR of 11.68% (in rupee terms), whereas trade, hospitality, transportation, communication, and broadcasting-related services saw growth at a CAGR of 10.98%. (In Rs. terms).

1.3 E- SERVICES IN INDIA

Electronic services, or e-services, are those that leverage information and communication technology (ICT). The three main elements of electronic services are: the service recipient, the service provider, and the service delivery channel (i.e., technology). E-commerce has altered how people conduct business in India. It is projected that the Indian e-commerce sector will reach $111.40 billion by 2025, up from $46.2 billion in 2020. By 2030, it is projected to reach US$350 billion. From US$ 52.57 billion in 2020 to US$ 67–84 billion in 2021, total e-

commerce revenues are expected to rise. India's digital commerce is sector predicted to reach a valuation of US$ 200 billion by 2026, up from US$ 111 billion in 2024. The main factor pushing the industry's expansion has been the increase in web and smartphone usage. In July 2021, there were 784.59 million internet connections in India, a substantial rise due to the 'Digital India' initiative. In metropolitan regions, 61% of all web connections were made, and 97% of those connections were wireless (IBEF, 2021).

1.4 ONLINE FOOD SERVICES IN INDIA

The introduction of the smart phone, in particular, has had a tremendous impact on global eating culture and habits. One of the quickest growths in the e-commerce world has been online food delivery. Food has becoming more viewed differently by people as a result of this industry since customers may now choose from a wide variety of cuisines from numerous restaurants that are listed online, anywhere at any time. All client groups now enjoy greater ease thanks to customer flexibility, as it offers a number of payment methods, such as digital wallets, internet banking, and pay on delivery, along with no minimum transaction amount. Growing urbanisation and easy availability to smartphones have encouraged to the growth of meal delivery services. In the past, restaurants that let users place online meal orders were the only establishments that could do so. The aggregator business model,which offers a single online window for customers to purchase meals from a variety of eateries listed on the portal, revolutionised all of this. After taking care of the actual delivery service, the aggregator receives a certain margin from the restaurant's order. But as the business model for the food delivery sector evolved, aggregators began to provide food delivery, which disrupted the market. Technology was completely sidelined in favour of logistics, which are the main causes of cost (Televisory, 2018).

According to Renub Research, the Indian market for online food delivery will grow at a CAGR of 33% between 2022 and 2028. The food business has not been impacted by changes in the nation's social, economic, and demographic variables as consumers seek ease and convenience in today's fast-paced environment. After a hard day at work, ordering great food via an app and having it delivered to your residence in 30 minutes is no longer regarded as a luxury. Smartphones, simple internet connections, nuclear families, rising disposable income, and job pressure are a few of the factors boosting India's online meal delivery sector. The Indian online

meal delivery business therefore reached a value of around US$ 5.30 billion in 2022 (Renub Research, 2022).

Figure 1.2 –Indian Online Food Delivery Market
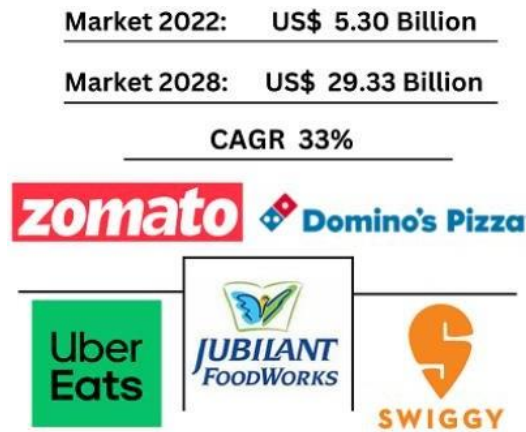
Source: Renub Research 2022(Renub Research, 2022)

1.5 HISTORY AND EVOLUTION OF FOOD DELIVERY SERVICES

1.5.1 Pizza

The earliest meal delivery in recorded history is thought to have happened in Naples, Italy, in 1889. King Umberto I and Queen Margherita of Savoy were in Naples to sample the cuisine, namely the delectable pizzas made by Rafaele Esposito. Esposito personally brought it because it was not anticipated that the King or Queen would go to the pizzeria. This was the first recordeddelivery (Grubhtech, 2021).

1.5.2 Dabbawalas

Under British rule in India, a meal delivery system known as dabbawala, or one who delivers the box, emerged in the 1890s. A Parsi banker wanted home-cooked food served at the office about 125 years ago. He appointed the first Dabbawala to this position. Thanks to the inspirational work of Mahadeo Havaji Bachche, who identified an opportunity and launched the lunch delivery business, this idea gained ground and the concept began to gain popularity. Rather than having employees travel home for lunch or leave their places of employment in search of food, the dabbawalas deliver freshly prepared lunches to their workplaces in boxes that are collected from them. The Mumbai-based service Dabbawala has since expanded to

other cities. Dabbawala has evolved to be relevant in the modern world, even if the fundamental idea has not altered. Nowadays, people can use an app or an SMS to order meals (Jackson, 2021).

1.5.3 1950: Food delivery from restaurants is gaining popularity.

The 1950s saw the widespread popularisation of television, which contributed significantly to the post-war surge in restaurant meal delivery. The concept of eating restaurant food at home originated with the increasing number of televisions in homes. After a tough workday, families might have dinner delivered so they can enjoy it while watching their favourite shows. As the popularity of cities and car ownership grew, this was very advantageous for a lot of families. With the advent of cars, people could live farther away from their favourite restaurants and delivery became more convenient. In an attempt to capitalise on the trend, numerous eateries developed television dinner menus (Jackson, 2021).

1.5.4 1950: Focused on delivery speed

In the 1960s, delivery times shortened, partly because more cars became available. Leading the charge in this development were the people who created Domino's pizza. They came up with a guarantee that customers would get their pizza in no more than thirty minutes. This guarantee would later result in legal action being taken against the company. The company was allegedly encouraging reckless driving by offering a 30-minute delivery window, according to the accusations.

1.5.5 1994: Pizza Hut web-based food delivery sites

In 1994, Pizza Hut introduced one of the earliest online meal delivery services. Pizza Net didn't work across the nation; it was only accessible in Santa Cruz, California. Either way, it functioned as a computerised meal delivery prototype. It was also among the first websites on the internet that was open to the public. Therefore, it's possible that among the first goods bought and sold online was pizza.

1.5.6 2000: Online Food Services is becoming more popular

In the 2000s, food delivery gained enormous popularity. As cellphones gained popularity, so did food delivery applications, eventually taking over the delivery industry. Those who made the decision not to cook after work could place food orders from their phones without getting up from their desks, and those who made the same decision could set up dinner with a few taps

on their phones. There have been frequent releases of innovative meal delivery applications since the early 2000s.

1.6 ADOPTION OF OFFLINE TO ONLINE FOOD SERVICES

Smartphones are gaining popularity all around the world and are becoming highly significant. With the growth of smartphones throughout the world, it has been noted that people are increasingly turning to mobile applications for entertainment. People's lives are becoming simpler and easier to manage as a result of mobile applications. Now, entrepreneurs are focused on incorporating app technology into their businesses in order to gain global recognition. If we consider the app's presence, we may imagine a scenario where there is now an app for that. Why should the food sector lag behind in today's world, when every industry is exploring? Food industry operators are also adopting app technology to expand their businesses abroad (Agileinfoways, 2016). Mobile applications are a fairly recent and quickest growing segment of the worldwide ICT industry. The smartphone or tablet has a broad variety of applications due to its vast performance, which includes messaging, calling, web browsing, chatting, networking communication, audio, video, and games, among others. Mobile apps are affordable, simple to use, accessible for download, and work with the majority of mobile phones—including beginner and inexpensive models (Islam, Islam, & Mazumder, 2010). An application designed primarily for use in the food delivery sector is the Online Food Ordering App. By reducing labour expenses, this method will allow hotels and restaurants to increase the range of services they offer. With a few buttons clicks, customers may quickly and easily explore and place orders from an online menu thanks to technology. Then, administrative staff members effectively manage these orders through a user-friendly graphical interface (Gurav, Jathar, Lavhare, & Khadul,2021).

1.6.1 Revolution in Demand for Food Delivery Services

The quick delivery concept used by pizza shops in India was another innovative food delivery method that acquired a sizable consumer base. Pizza delivery has become a popular business concept in India. Moreover, McDonald's, which had begun its first-ever home delivery operations in India in 2004, refuelled its financing in 2007 and forecasted an increase of between 30 and 40 percent in the amount of business conducted through home delivery at the

time. Food Trends Service in India (2013) reports that a popular pizza brand in India during the late 2010s generated between 40% and 65% of its income through the delivery model of business. Hence, the pizza shops' main source of income continues to be pizza delivery. As a result of the model's success, other restaurants have begun employing meal delivery as a significant method of product delivery. With Pizza Hut and Domino's' strong revenue generation and consumer approval of their delivery services, Technopak's 2013 research on Indian Food Service Trends (*India Food Services Trends*, 2013) stated as much. The organised sector of the restaurants had also embraced meal delivery as a crucial entry point for their industry. Restaurants have been enticed to invest more of their resources in order to increase their profits by using the delivery model of a fully concentrated takeaway or delivery format. As a result, it has been noted that a large number of restaurants in this style have opened and are currently functioning to serve consumers who order food online. Some eateries operate in confined spaces or away from the bustling market. Some quick-service restaurants stay open late to fulfil late-night orders, which is not a normal protocol in the traditional restaurant industry. In accordance with the figure, 1.3 more restaurants in several cities and towns now provide food delivery as a service. Of these, more structured restaurants in Mumbai included delivery service as a component of their everyday operations. Mumbai had the highest penetration rate (78%), followed by Delhi/NCR (61%), Pune (58%), and Chennai (57%). 6006 restaurants in Delhi/NCR, or 61% of all restaurants, offered food delivery as a means of attracting additional consumers. We noticed that a distinct channel of service counters had been built to serve the food delivery service provider in Delhi/NCR after the development of food delivery aggregators in the area. There has never been as much talk about an online food delivery business as there is right now. Restaurants use the internet to break even, even during slow business days and seasons.

Figure 1.3: Food delivery service in India

City	No. of Food Service Outlets	Food Service Outlets with Delivery Service	% of Total number of outlets
Ahmedabad	2163	727	34%
Bengaluru	5457	2608	48%
Chandigarh	1169	549	47%
Chennai	3804	2187	57%
Delhi/NCR	9790	6006	61%
Hyderabad	3458	1301	38%
Indore	834	312	37%
Jaipur	1135	372	33%
Kolkata	2701	1313	49%
Lucknow	847	265	31%
Ludhiana	579	194	34%
Mumbai	9972	7783	78%
Pune	3726	2179	58%

Source: Technopak, Indian Food service trends, 2019

1.6.2 Technology in food service industry

The food sector was affected by the arrival of food technocrats in India in late 2000. The technocrats established an online platform for restaurant ordering, reservations, reviews, and delivery. Up before the arrival of Zomato in 2007 as an online meal review and table reservation system for restaurants, technology had altered how the food business operated.

Table 1.1 Online food platform companies in India

Restaurant finder Portal	B2B Food Delivery Service Providers	B2C Food Delivery Service Providers	Web Restaurants	Restaurant Booking Portals	Multinational Food Technology Corporations
Zomato	Food Panda	Food Panda	Hola	Wow Tables	Yelp
Group Table	Runnr	Swiggy		Eazydiners	Eazy diner
	Shadow Fax	Zomato		dine Out	
	Grab	Uber Eats			
		Faasos			
		Runnr			
		Scootsy			

Source: 2019 India food services study from NRAI Technopak (NRAI, 2019)

The introduction of these technology-based food enterprises has altered how the food industry in India operates. The study from Foodzania 2018 states that with the introduction of online-based ordering and the usage of AI and IoT in ordering, technology is disrupting the food market (FICCI, 2018). With speedier food availability at home or the workplace, these advancements revolutionised home delivery. The conventional concept of how restaurants operated included takeout and delivery through phone orders. Formerly, consumers could only order meals for delivery from one restaurant, but, with the advent of smartphones, this has changed. Customers may order from multiple restaurants whenever they want, and it will be delivered easily and conveniently to their location, thanks to mobile websites and applications. The form of food delivery that is now in trend is the aggregator model.

1.7 ONLINE FOOD AGGREGATOR

Food aggregators simplify ordering and offer customer service. By providing access to numerous foods via a particular website or mobile application, they serve as intermediaries between customers and surrounding restaurants (Sufi & Ahmed, 2021). Using an internet platform, these aggregators do their business. The mobile application, and website are all used by the online food aggregators. Food delivery and ordering through websites have been the beginning of it. As the number of smart phones increased, users began using them to access through app for placing food orders. The applications were built using a user-friendly framework to cater to those who visit the site via smartphones.

The Indian food tech sector got its start when businesses like Zomato tried to make it simpler to discover a good restaurant by utilising an internet platform. The issues with food ordering were addressed in the next stage by businesses like Foodpanda, which acted as a restaurant aggregator to provide a single location for placing food orders. Here, the meal ordering and delivery aggregator model got its start in India (Nitheesh et al., 2018). Both domestic and foreign players had expressed interest in the food delivery. The well-known companies in India are Swiggy, Zomato, Food Panda, and Uber Eats. In addition, they are the winners despite their market share and growth. Several startups had stopped operating because they couldn't handle the strain of the market. Just 58 out of the 105 start-ups that were created up until 2019 are still active (Smith, 2022).

1.8 ONLINE FOOD SERVICE PROVIDERS

Many small and large companies that offer online food ordering and delivery services do business in Delhi-NCR. The most well-known brands among them in terms of market share were Zomato, Swiggy, Uber Eats, and Food Panda. Zomato and Swiggy led the market with around 70% each, based on the findings of an inquiry on Indian food ordering apps done by Rakuten Insight in August 2021.Uber Eats and Food Panda were two more applications used by consumers (Statista, 2022).

1.8.1 Zomato

Deepinder Goyal and Pankaj Chaddah are the founders of Zomato, a well-known food delivery and technology firm. When they were working in Delhi, they discovered a gap in the restaurant menus' non-availability for people wishing to place phone orders or visit the specific restaurants. In order to close this gap, they launched Foodie Bay, an online site that included restaurant menus for the area. Their website saw a rush of visitors as a result of this, their first success. Prior to being made available to the general public, it was once only available to their colleagues and close friends. The foodie bay's popularity spread to additional cities like Mumbai and Kolkata. The services given by the foodie bay have penetrated successfully into the market due to their unique nature and appropriately detected need in the industry.

The number of customers using their service was growing annually. This helped them establish a plan for their position in the worldwide market. Foodie Bay switched to Zomato in order to compete on the international market and differentiate itself from eBay. Zomato became the company's official name in 2010. At present, Zomato provides services in more than 1000 cities in India, as of 2022, With the exception of India and the United Arab Emirates, Zomato discontinued its services in all nations in November 2021. In terms of revenue, India is Zomato's largest market, followed by the UAE (Bhalla, 2021). In 2022, a new intercity food delivery service named Intercity Legends is being launched by Zomato. Users of the service able to order well-known dishes from renowned restaurants in other cities; however, delivery in certain circumstances may take more than a day. Zomato is now only allowing residents of Gurgaon and South Delhi to use the delivery option; therefore, only those who live in these regions will be allowed to place intercity orders.

Table 1.2: Zomato Quarterly Financial Statement, Nov 2021

Markets	July to September 2020	July to September 2021
India	Rs 389.7 crore	Rs 981 crore
UAE	Rs 25 crore	Rs 33 crore
ROW	Rs 11 crore	Rs 9.7 crore

Source: Zomato financial statement (Bhalla, 2021)

Note: Rest of the World (ROW) (such as Australia, New Zealand, Philippines, Indonesia, Malaysia, USA, Lebanon, Turkey, Czech, Slovakia, Poland, Qatar, Ireland)

1.8.2 Swiggy

Swiggy, another significant participant in the food delivery sector, was established by the team in 2014. Prior to Swiggy's success, they founded Bundl, a business that connected courier services all across India. They decided to convert to food delivery after realising the potential market there. After a year of its introduction, Swiggy has persuaded a number of eateries to collaborate with the platform, despite their prior reservations about online delivery. Their effort in creating a suitable logistics network with a sizable fleet of its own delivery guys set them apart from rival firms. As it placed a strong emphasis on the customer experience, their clients didn't object when they began to charge for delivery.

Table 1.3: Swiggy Timeline

Year	Event
2014	• Company founded in August 2014 by 'Sriharsha Majety, Nandan Reddy, and Rahul Jaimini" • Began with 6 delivery men delivering food from 25 restaurants.

2015	• Started services in Gurugram and Delhi • Received first funding of Rs 2 million by ACCEL and SAIF Partners
2016	• Handled 1.5 million delivers per month august 2016
2017	• Started operations in Faridabad, Noida Expressway and Greater Noida. • Providing late night services till 2 am in selected cities including Gurugram and Delhi • Started cloud kitchen chain the Bowl company
2018	• Acquired Scootsy in order to expand its business segments • Started Swiggy One and Swiggy Super membership package • Reached 14 million monthly deliveries
2019	• Acquired the artificial intelligence firm Kint.io. • Handling 1.4 million orders per day with 130,000+ Partner restaurants • Covered 325+ cities across India
2020	• Launch of Swiggy genie • Swiggy was worth around $3.6 billion in April 2020.

2021	• The 2021 recipient of the 11th annual Aegis Graham Bell Award for Innovation • Swiggy launches trial drone deliveries
2022	• Best High Value Startup for 2022 • Swiggy acquired a dine out company on May 2022 • Swiggy has begun its $23 million ESOP stock ownership option or ESOP liquidity programme.
2023	• Providing services in 500+ cities across India • By the end of 2023, Swiggy expects its delivery partners to expand by 10-15%.

Source: Planify research report swiggy (*Swiggy Unlisted Shares*, 2022)

1.8.3 Uber Eats

Uber Eats is a meal delivery and ordering platform that was first launched in the United States in 2014. Its headquarters are mostly in San Francisco, California. Uber Eats started operations in India in May 2017. In India, Uber Eats was a popular online meal ordering service with branches in big cities including Chennai, Bengaluru, Hyderabad, and Delhi. This is a project of Uber Technologies, which also runs a well-known taxi service globally. There are around 1,000 big cities and several nations where Uber Eats is accessible. The software enables users to choose their preferred items from nearby restaurants, and the product is delivered to the desired location in a shorter amount of time. Uber quickly established itself as a strong rival to emerging market giants like Swiggy and Zomoto. They chose to shut down its Indian operations two years after it was launched since they were wasting a lot of money without yielding any profits. Zomato said on January 21, 2020, that it could buy UberEats' entire Indian inventory. As part of the transaction, Uber were own a 9.99 percent stake in Zomato, and all Indian Uber Eats consumers were switch to Zomato (Techcrunch, 2020).

Figure 1.4: Popular online food service platforms across India ,2021
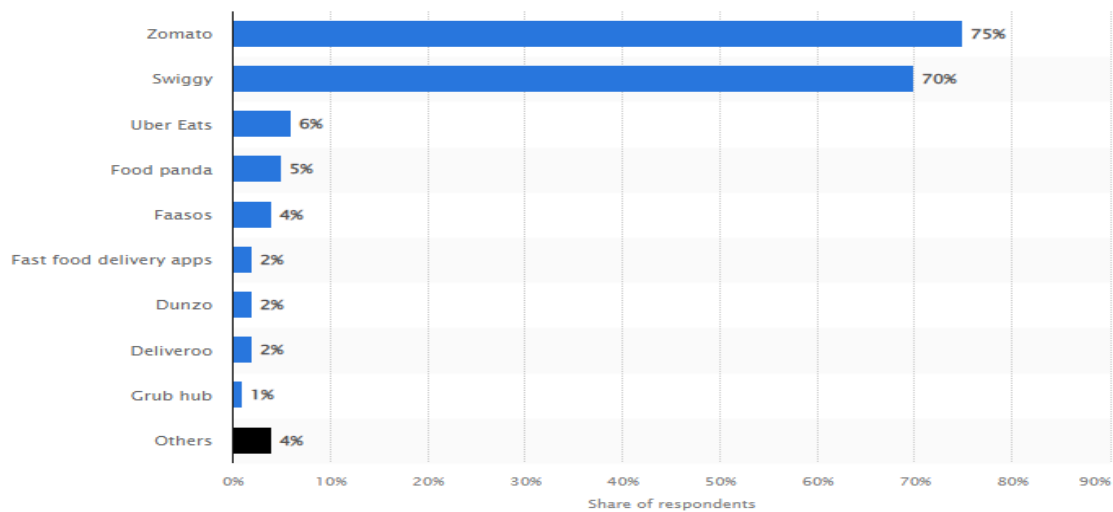
Source: Statista 2022, Most popular food delivery apps India 2021

1.9 REASONS OF ORDERING THROUGH MOBILE APPLICATIONS

The smartphone market's expansion, the smartphone application market's exponential development, and its prominence as a separate market outside its parent market. The number of people who play a supporting role has increased. The term app is an acronym for application, which refers to any programme that runs on a computer. The programmes that users want to use can be selected, downloaded, and used on their mobile devices. The development of social media networks like Facebook, Instagram, and Twitter has made it easier to communicate with customers. As a result, smartphone-based marketing is becoming very important in the food service sector. Consumers use apps to collect information about food service providers, and businesses use apps to market their brands and connect with consumers (Lee & Namkung, 2014). Applications for meal delivery allow users to choose a store, select a menu, and place an order. Customers may now easily and swiftly get their favourite meals delivered thanks to the advent of delivery apps (Pigatto et al, 2018). Food delivery businesses, such as Mumbai dabba Walla's, have been in existence in India since the 1890s. However, the development of vendors such as Zomato, and others in the 2010s accelerated the rise of different online meal delivery systems in India. In other regions of the world, such services debuted in the 2000s.

The supply and demand drivers for online food services are reviewed here.

1.9.1 Drivers of Demand

Demographics That Encourage

As one of the biggest consumer markets, India is home to more than 1.4 billion people. Moreover, India is among the youngest countries in the world because half of its adult population is under 35. Fast food is most popular among people age range 18 to 40. Furthermore, the Indian middle-class population is predicted to reach 550 million by 2025. One of the main drivers of demand in the food and beverage industry is young people's hunger.

Earnings and spending levels that are encouraging

Young Indians are becoming more and more well-off and have larger wallets as a result of their employment in lucrative industries like IT services. Per capita income has risen by 50% since 2006, according to the World Bank. Indian cuisine establishments are expanding as a result of the country's shifting urban social climate. For other subcategories of food products, having more disposable money is also crucial.

Good lifestyle adaptations

Parents bring home their bacon as dual-income families become more prevalent in urban India, drastically changing people's routines, lives, and food habits. The want for instant access to food at reasonable prices is increasing. Time constraints and an increasing desire to spend good time have led to 92 percent of families opting for ready to eat food or takeout to save time and energy spent on prepared a food at home every day of the week.

The number of employed women is increasing.

The number of employed women has increased dramatically. Employed women spend the majority of their productive hours on travelling and at work, leaving little time at home to prepare full-fledged meals on their own. Working women usually eat out or order takeaway with a large amount of their discretionary budget. This is another important demand driver for India's food and beverage sector.

1.9.2 Drivers of Supply

Increasing the number of cuisines available

The whole food business has seen a huge influence as more eateries offer international cuisines. Customers' favourite dishes include chicken biryani, burgers, butter chicken, pizza, and Hakka noodles. Northen food is the most popular, but Chinese, Italian, and South Indian food, as well as diet meal, are also in trend. Indians in town will eat out more frequently the more open they are to trying novel dishes.

The emergence of delivery service providers

It's not simply true in the burgeoning e- market, where parcel and delivery services are in high demand. There are other suppliers for the food business, such as Radhakrishna Foodland, a local partner who provides supply chain services to global giants like McDonald's and Pizza Hut in India.

Dedicated Formats: Expanding Delivery

A delivery-focused structure requires a far smaller initial investment to begin than, say, a restaurant or even fast-food business. Investments include things like rent, furnishings, and interior design. More operators are prepared to devote their time, resources, and money to models that deliver meals right to consumers' doorsteps because of the cost reductions.

Expansion of existing restaurants' delivery services

Restaurants are increasingly attempting to increase their revenue by providing food delivery services. This allows them to rationalise their current fixed expenditures while also maintaining the profitability of their businesses. This format is incomplete without home delivery. It's a surprise that eateries large and small are competing for this pie. Furthermore, compared to the traditional model, which will miss consumers during working hours, this format can handle a larger number of customers. Customer loyalty is also sustained via the delivery format.

1.9.3 New Innovations in the Delivery Industry

At this moment, the importance of mobile applications and web-based food ordering systems cannot be overstated. With the increased use of smart phones, literacy, and Internet connections, the wealth expected to be harvested from the doorstep delivery industry are just a mouse click. Over 50,000 pizzas will be shipped daily by Domino's, with 15,000 of the orders coming from online orders. Another well-known restaurant, Fassos, processes more than 60,000 orders daily, all of which are placed via their smartphone app. These figures are anticipated to triplein the next years, now that Domino's and other businesses have partnered with Zomato, Swiggy, and FoodPanda, for delivery service.

1.9.4 Websites specialised for delivery

While multinational food companies and QSRs such as McDonald's and Pizza Hut have their own web portals from which you can order meals, other businesses that wish to get into the food delivery game use websites like Swiggy and Zomato. Many more are emerging with similar meal delivery formats and their own coupon and discount systems to attract more clients, such as Just Eat and TastyKhana, which have only recently entered the market. Customers gain because they can access a variety of food websites products in one place, get offers and unique deals, and get the most out of their orders placed through mobile apps or online. One of the most widely used apps, Zomato, not only lets users order food from a range of restaurant chains, but also includes a rating star and an exclusive phone number for making restaurant reservations. Their benefit is that they have access to call logs, which they use to improve their procedures. It's not a surprise that they've received $163 million investment for company growth.

1.10 The Impact of Food delivery Services on the Indian Restaurant Industry

Food ordering & delivery is becoming important to the restaurant sector. Online ordering has revolutionised the restaurant industry and will undoubtedly replace phone ordering in the near future. By giving restaurants access to a wider audience, online meal delivery services have increased their consumer base. Including those in remote places, restaurants may reach customers who might not have previously dined at their physical location. Higher sales can result from improved consumer convenience, particularly for restaurants that previously only offered dine-in or takeout options. The exposure and brand familiarity of a restaurant can be

improved by being listed on well-known meal delivery apps. The commission costs that are frequently associated with food delivery app partners might reduce a restaurant's profitabilit y. For the increasing number of delivery orders, restaurants may also need to put money in staff and packaging. Online food delivery services make life easier but because users can quickly choose between other options, they may also make people less loyal to certain restaurants. Restaurants may use data collected by food delivery apps to better understand consumer preferences and adjust their menus and marketing strategies as necessary. Due to a lack of dine-in choices, the COVID-19 epidemic hastened the introduction of food delivery services online. For their survival, numerous restaurants had to rely on takeaway and delivery services. Online food delivery services have a mixed record of effects on the restaurant industry. They provide chances for more exposure and sales, but they also bring with them problems relating to cost, competition, and shifting consumer trends.

1.11 Pandemic and the Online Food Market

The widespread of COVID has completely overtaken the world's restaurant business. Online deliveries increased while dine-in establishments continued to close as a result of public health warnings. Even though the industry has suffered large losses, the market for online restaurant food delivery is leading the rebound. This is demonstrated by the fact that Zomato's yearly income increased by 2x in 2020 compared to 2019 (Statista, 2021).

The earliest phases of the pandemic outbreak and the strict lockdown that followed had a negative impact on Indian online food delivery firms, which were mostly suffered by Zomato and Swiggy. Customers have avoided buying food online because of concerns about safety and a general desire for home-made meals. But things started to pick up soon, and the recovery has been quicker. Experts believe the epidemic has aided businesses in increasing unit economics and consumer base growth as eating out has become less frequent. Covid has functioned as a catalyst, helping high adoption in new users with low customer acquisition cost and hence likely to remain longer, analysts at BofA Securities stated in a research paper on January 13th, 2021. With fewer eating out and the Christmas season as catalysts, the food-tech business has recovered from the initial lockout period more quickly, with volumes returning to pre-Covid levels by October 20., the brokerage business continued. 69% of consumers in our Sept. 2020 study expressed fear about dining out (Livemint, 2021).

Zomato and Swiggy, two food delivery platforms, started offering digital solutions to show concern for their clients, including: (1) disclosing delivery workers' live temperatures with the workers' profiles in the app; (2) make mandatory the use of the contentious contact tracing app Aarogya Setu for the people involved; (3) tracking workers' use of masks through selfierequests; and (4) sharing specific worker vaccinations and contactless delivery (Singh & Park,2022).

1.12 Service Quality in Online Food Services

Service quality covers the assessment of service expectations with perceived performance. A distinction among perceptions and expectations on items reflecting the areas of competence specific to a service is the definition of service quality. Customers evaluate expected service with perceived service and if former falls short of latter the customers are satisfied. It is a significant aspect that helps service companies to act robustly in a competitive world. Service organizations that are providing quality services have gained more viable benefits. This depiction that magnitude of service quality is necessity in service organizations. A well-known methodology for evaluating service quality in several industries, including online food service industry, is SERVQUAL. It consists of five parts: tangibles, assurance, responsiveness, consistency, and empathy. The assurance factor is highly important when discussing online food services. Following points shows the significance of assurance's function: In the case of online food services, assurance is about assuring customers feel comfortable and trust the service. Assurance refers to the capacity of service providers to buildconfidence and trust in their customers. It covers components such as competence, courtesy, credibility, and security.

Reliability and Consistency: Assurance requires consistency in the quality of the services provided. This refers to constantly fulfilling food orders correctly and on schedule in the area of online food services. Every time a customer places an order, they should have confidence that their food will come as promised.

Security and Data Privacy: Customers expect online food service providers to handle their personal and financial information securely, given the growing concerns about data breaches and privacy. In this sense, assurance refers to strong security procedures to safeguard consumer information.

Communication Quality: Clear communication is essential for reassuring customers. Online food service providers must give customers clear and frequent information on the status of their orders, expected arrival windows, and any potential problems.

Quality of Staff: When it comes to online food delivery systems that use drivers or delivery people, the conduct of these people may have a big influence on customer confidence. The whole customer experience may be improved by courteous and skilled delivery staff.

Transparency: Part of assurance is being open and honest with consumers. This entails offering comprehensive details about the menu items, ingredients, price, delivery costs, and any potential delays. Customer confidence might be damaged by unanticipated expenses or hidden costs.

Feedback Mechanisms: By giving consumers simple means to give feedback and handle any issues they might have; assurance can be increased. Customer service channels that are responsive are crucial in this regard.

Brand Reputation: Developing a strong brand reputation is crucial. Customer confidence in the service may be increased by favourable reviews and referrals from others.

Service Guarantees: Providing guarantees or reimbursements in the event of service failures (such as late delivery or wrong purchases) can further increase certainty. This demonstrates the business' dedication to providing a high-quality service.

Legal Compliance: It's essential for establishing customer confidence and assurance that the service conforms with all pertinent laws and regulations, such as food safety standards and delivery licencing.

Assurance is an important SERVQUAL factor and is crucial to online food delivery businesses. Building and sustaining confidence in customers, guaranteeing security, offering reliable and consistent service, and encouraging open communication are all crucial aspects of assurance in this situation. Online food services that perform well in these areas are more likely to attract loyal customers and flourish in an extremely competitive sector.

1.13 Sustainability in Online Food services

In recent years, as demand for food delivery and online ordering has risen, sustainability in online food services has grown in importance as a problem. In this business, sustainable practices include a wide variety of issues, from sourcing ingredients to packaging and delivery techniques. Managing the food waste, use of ecofriendly packaging and efficient delivery routes are few aspects of sustainability in online food services. Sustainability in online food delivery services is crucial for both mitigating environmental damage and satisfying the rising demand from customers who care about the environment. Adopting sustainable practises may reduce costs, enhance brand perception, and promote a healthier world. Online food services that place a high priority on sustainability are anticipated to acquire a competitive edge in the market as customer knowledge and concern about sustainability continue to rise**.**

Online food service providers can also play important role to achieving the sustainable development goals 2 "Zero Hunger" which seeks to eradicate hunger, ensure improved nutrition and food security, and support sustainable agriculture. As part of a worldwide mobilisation to eradicate poverty, safeguard the environment, and provide prosperity for all by 2030, the UN members endorsed a set of 17 global objectives known as the Sustainable Development Goals (SDGs) in 2015. The second one of these objectives is "zero hunger." By enhancing food availability, minimising food waste, and supporting sustainable food practices, online food providers can help to achieve "Zero Hunger". Online food services aggregators can support Goal 2 in the following ways:

Easy access to food: For those who may not have easy access to grocery shops or restaurants, online food services can offer convenient access to a range of food alternatives, including nutritious meals.

 Lowering Food Waste: To reduce food waste, several online meal delivery services have put safeguards in place. They can manage inventories more effectively, plan better delivery routes, and give extra food to charities.

 Eco-Friendly and Sustainable Food Practices: Some online food delivery firms collaborate with regional farmers and sustainable food producers.

Reducing Food Insecurity: Significantly, during times of crisis, online food delivery businesses might help reduce food insecurity by providing discounts, meal donation programmes, or subsidised meal alternatives.

Food Safety and Quality: Food safety and quality regulations may be strictly enforced by online meal delivery services to guarantee that the food served to clients is safe and healthy.

Food Education: Online food delivery services may also instruct customers on how to choose nutritious foods, practice sustainable eating habits, and emphasize the value of food security and responsible consumption.

Tech Innovation: The application of technology in the delivery of food online can result in supply chain management improvements that reduce food losses and increase overall food industry efficiency.

While online food delivery services can significantly contribute to the SDG Zero Hunger, it's important to remember that achieving this goal also calls for a coordinated effort between governments, non-profits, and communities in order to address the causes of hunger, enhance food distribution systems, and guarantee equitable access to food resources.

1.14 Research Question

1. Does the factor affect the decision-maker's behavioural intention for online food services?
2. Does the intention of consumers to use online food services influence their actual use of such services?
3. Does the perceived health risk of the consumer impact his or her decision to use online food services?

1.15 Research Problem

Restaurants have little choice but to pursue other revenue-generating solutions due to rising retail space rental and other running costs, as well as diminishing sales and budgetary restraints. As a result, most businesses and restaurants have begun to utilise the Internet to save money on retail space and marketing, as well as to increase their competitiveness by attracting a wider spectrum of customers. Although the online food aggregator's model is one of the answers for

the restaurant industry, it is essential for restaurants to know the new prospects and challenges connected with it in the present market. The goal of this study would be to fill in the knowledge gaps in this area and shed light on the possibilities of online food services. The goal of this study was to determine the potential of online food services in India as well as their acceptance. To do so, it's essential to know the attributes that affect a user's behavioural intention towards online food services, as well as how health risks influence a user's actual usage behaviour towards online food services.

CHAPTER 2

REVIEW OF LITERATURE

This section includes a survey of the enquiry in the field of online food services, which provides a general knowledge of the topic as well as explanations for the concepts and jargon employed in this research. The review of literature in this subject of interest sheds light on beliefs of behavioral intentions, which contribute towards the development of the theoretical foundation. The survey of previous work also aids in the development of the current study's methodological framework.

2.1 REVIEWS ON CONSUMER BEHAVIOURAL INTENTION TOWARDS ONLINE FOOD SERVICES

In spite of the fact that online food delivery is a well-known service in the restaurant industry, formal research in this field is still lacking, particularly in India. Online meal delivery services are a new concept that needs to be thoroughly investigated in order to anticipate consumer acceptability and intent to use.

Existing research in this area has been done from the consumer's view. In one of the first theoretical studies on online food ordering, researchers employed characteristics including perceived ease of use and usefulness to analyze attitudes and trust, with innovativeness as a mediating variable, in the design of the Technology Acceptance framework. These elements were found to have a considerable influence on attitudes toward online food delivery in a Turkish study (Alagoz and Hekimoglu, 2012). Similarly, a study that looked at the connections between the variables influencing consumers' use of food delivery websites discovered that system quality, firm-generated information, and the perceived value of user-generated content all had a big impact. Perceived utility was further enhanced by a strong correlation between structure and design excellence and perceived ease of use. Perceived utility and usability, in turn, impacted opinions towards the use of mobile applications (Lee, 2017), e- filing services (Tahar *et al.*, 2020), online guidance application (Islami and Asdar, 2021), online shopping in era of pandemic (Iriani and Andjarwati, 2020), e-learning (Huang, Teo and Scherer, 2022).

(H. L. Huang, 2023) explored the association between attitude and intention towards OFD services, as well as the moderating effect of perceived government reaction to the COVID-19 epidemic. The study's findings suggested that respondents' attitudes towards contactless OFD

services were favourably impacted by their sense of self-efficacy and the benefits they felt. Their perception of these services was negatively impacted by health consciousness. The respondents' behavioural intentions towards such services are favourably correlated with their attitudes towards contactless OFD services. Respondents' attitudes and behavioural intentions towards contactless OFD services were affected by how they perceived the government's response to COVID-19.

(Chowdhury, 2023) suggested an expanded theory of the technological acceptance model that takes into account perceived security, ease of use, and quality of service, as well as their interactions, to examine their impact on the dependent factor's behavioural intention towards food delivery websites and the mediator's attitude. 306 individuals' data were gathered. The data analysis was performed using Smart-PLS. The findings demonstrated that attitudes and behavioural intentions were significantly impacted by both convenience and service quality. For security's sake, though, no such connection was discovered.

(Hong et al., 2023), built on the universal concept of technology acceptance and use, customers purchasing intentions towards online meal delivery services are investigated. To further understand the thought processes of regular and infrequent consumers, furthermore investigated is the moderating influence of usage frequency across determinants and buy intention. The results of this study, which gathered up to 392 answers, show that performance goals, trust, and peer influence all have a beneficial impact on consumers' purchase intentions for online meal delivery services. Positive correlations between the drivers of effort and performance expectation, social influence and performance expectancy, the considerable effect of trust on effort expectancy, and the sense of fear associated with food safety are also found. Additionally, the connections among the determinants and purchase intention are substantially moderated by usage frequency.

(Shahzad et al., 2023) Determine the crucial elements of the task technology fit paradigm that influence the attitude and intention of the end user over time. Users of the MFDA provided the necessary data, which was then gathered and subjected to structural equation modelling analysis using Amos & SPSS. The results show that meal tracking, customer evaluation, navigational structure, and user self-efficacy all have favourable effects on TTF. Moreover, self-efficacy favourably moderates the relationships among food monitoring, visual design, navigational design and task technology fit. Traceability provided by blockchain technology (BT) effectively moderates the link between task tech fit, attitudes, and the ongoing

willingness to use MFDAs in a positive way. TTF also favourably supports attitude and continuing intention. Attitude additionally influences continued intention.

(Varese et al., 2023) investigated, through quantitative research, the influence of the pandemic on online food delivery in Italy and Poland, as well as whether or not respondents believe that such a method has an impact on the environment and on food waste from the perspective of consumers. The computer-assisted web interview approach was used to perform an empirical survey of customers at Italian and Polish universities. Despite the fact that the research sample did not fully understand these changes, the findings show that the COVID-19 pandemic altered consumer behaviour in both Italy and Poland. The study also demonstrated that food waste and the environment were significantly impacted by online meal delivery.

(Yen, 2023) to investigate how perceived value in food delivery platform (FDP) services influences channel integration's impact on usage intention. Additionally, it looks at how human creativity and experience affect the relationships in the model. According to the study, perceived utility, enjoyment, and price all had an impact on usage intention through channel integration. Also important in the model were the moderating effects of personal innovation and experience.

(W. S. Lee et al., 2023) examined the variables that determine the utility, simplicity of use, and intent to use a food delivery app service. It also examined how users of these apps perceive technological acceptance models. There were 484 valid observations for statistical analysis in this study, which used Amazon Mechanical Turk to gather its data. Using a framework of structural equations, the hypothesis was tested. The Delivery time frame, quarantine, quality feedback and convenience of use all had a good impact on usefulness, according to the data. Easy registration and payment processes also had a favourable effect on usability. Finally, this study has shown that both usefulness and intention to use are favourably influenced by ease of use and that usefulness is positively correlated with intention to use.

(Julfikar Ali *et al.*, 2023) attempted to look into the variable that influence Bangladeshi customers'behavioural intentions to utilise food delivery applications. The necessary data was computed using MS Excel and SPSS. With a 92% response rate, the total sample size is 368. A Google Forms web survey was used to collect the responses from the respondents. The quantitative and exploratory purposeful sampling approaches were used due to the characteristics of the study object. The results show that customers' intents to use meal

delivery applications are significantly influenced by peer pressure, trustworthiness, perceived safety, performance expectation, and effort expectations. The study also discovered that, out of the five intention predictors, perceived trust was the most effective in predicting usage intention.

(Buettner et al., 2023) explain the use of meal delivery apps among young individuals and look at the associated factors. The data are based on responses to an online survey from a panel of 1,576 young adults (18 to 25 years old) in the United States between January and April 2022. Age, race, ethnicity, sex, food insecurity, housing situation, financial responsibility, and status as a full-time student were all investigated in connection to the usage of meal delivery apps. About twice a week, young adults used meal delivery apps. Apps for meal delivery were used more frequently by individuals who founds as non-Hispanic Black, Hispanic and then by participants who identified as white. There was a significant correlation found between higher perceived subjective social standing, food insecurity, monetary responsibility, and regular student enrollment in school and the likelihood of using meal delivery apps more frequently.

(An, Eck and Yim, 2023) examined the elements of perceived usefulness, ease of use, trust, and desire to use such apps by employed the comprehensive technology acceptance framework. Data from Koreans with experience with mobile food delivery services was gathered starting on May 10th, 2022, over a two-week period using Google Forms. In order to test the hypothesis, 296 answers were collected. According to the results, personal innovativeness had a favourable impact on perceived usability. The perception of utility and usability was found to be favourably influenced by trust. Applications for ordering meals were substantially more likely to be used if their ease of use and usefulness were high.

(Koay et al., 2022) investigated the relationship among customer satisfaction and food delivery (OFD) service quality. Through PLS structural equation modelling, 307 usable data sets that were gathered from online food service customers in Malaysia were utilised to confirm the given assumptions. The PLS results demonstrate the importance of five aspects of OFD quality services to customer intention, including assurance, conservation of food quality and cleanliness, dependability, system performance and security. It was discovered that traceability had no discernible effect on customer intention.

(Mohammad et al., 2022) investigated the impacts of three primary factors—technological, marketing, and behavioural—on the preference for online meal delivery. One hundred and fifty-four responses were collected and analysed using IBM SPSS and AMOS software as

part of a cross-sectional survey of users of online meal delivery programmes, which was utilised as a quantitative technique to meet the study's purpose. The results showed that the model was accurate, and it was determined that behavioural, technological, and marketing factors could all successfully predict an individual's preference for ordering meals online.

(Habib et al., 2022) applied the uses and gratifications theory to examine the factors influencing platform preference and online engagement with customers in the foodservice industry while taking into account the limiting impact of peer influence. During the COVID Pandemic shutdown, 322 FDA users in China provided the data, which was then gathered and analysed using partial least-squares structural equation modelling (PLS-SEM). The OCE and platform choice are influenced by platform interaction and customer self-concept, according to PLS-SEM data. The association between platform interaction, self-concept, and platform choice is also mediated by OCE. Furthermore, the association between OCE and platform preference is strongly moderated by peer pressure.

(Allah Pitchay *et al.*, 2022) examined the UTAUT theory, which takes into account a number of variables while deciding whether or not to use applications, including price-saving orientation, time-saving orientation, social pressure, expectation of performance, and task expectancy. A new variable, attitude towards online meal delivery services, has also been added to this study model. The intention to use smartphone apps for online meal delivery is influenced by this metric. There were 256 responders to the quantitatively-oriented survey. Convenience sampling was used to distribute the questionnaires, and partial least squares was employed to evaluate the data. The outcomes demonstrate a favourable association between attitudes towards online meal delivery services and their intentions. Social influence, the calibre of the information, the desire to save money, and the need to save time all had a big impact on them.

(Wen et al., 2022) develop and evaluate a research model that takes into account all the variables that influence users' intentions to continue using food delivery applications. 316 genuine replies to a poll that was conducted online were gathered. The structural equation modelling partial least squares technique was used to create and evaluate a measurement model. Trust, attitude, perceived behavioural regulation, and subjective standards are the four main tenets of the planned behaviour paradigm—were found to be favourable predictors of consumers' intentions to stick with meal delivery applications. The determinants of these four basic constructs—perceived creativity, hedonic and utility motives, perceived

usefulness, perceived ease of use, and perceived of risk to meals safety were also identified.

(Keeble et al., 2022) determine the experiences of customers who use online meal delivery services to determine their motivations for doing so, as well as any benefits and disadvantages. According to research, these services were perceived as providing easy access to food that matched social norms. Participants stated that while this ease is frequently advantageous, it may also be a disadvantage. Participants were willing to cover the cost of delivery even if they were price-sensitive in order to have the opportunity to do tasks while waiting for the delivery. Participants also valued price discounts and came to the conclusion that getting them justifiedusing an food delivery service. Despite eating takeout, participants thought that home cuisine was unbeatable.

(Saewanee & Khamwon, 2022) review the causes and effects of brand innovation in online meal delivery businesses. 562 users of meal ordering apps in Bangkok and other Thai metropolises used the questionnaire to gather data. SEM, was used to examine the measurements and structural models. The study's findings showed that brand equity was the product of brand innovation, with brand image and the quality of the consumer experience being categorised as its antecedents.

(Christian et al., 2022) seek to determine the factors impact the spending patterns of OFS users as well as the distribution of the presence of Indonesian OFS. A questionnaire was used to survey 219 OFS users from Jakarta's Generation Z. SMART PLS 3.0 and structural equation modelling were used to analyse the data and found that the rate of an OFS's launch did not affect users' intentions to use it. Additionally, this study demonstrates that cost savings, time orientation, and prior service consumption all had a substantial impact on purchasing patterns. The saving variable's moderating influence on time and cost was not demonstrated. It concludes that impulsivity is not the basis for Generation Z's purchasing habits.

(Burlea-Schiopoiu et al., 2022) With the pandemic's effects on consumer behaviour, think about how mobile applications for food delivery affect those behaviours. The structural equation modelling method was used to investigate the data set. The findings suggest that food delivery businesses should introduce customer loyalty programmes as there is a considerable perceived risk of clients switching online food suppliers. Customers' high amount of exposure to food delivery services positively affects their empathy and loyalty. The pricing approach and time saving associated with employing these kinds of applications also have an impact on customer loyalty. The importance of integrity and accessibility, which speak the interests of

both customers and organisations, indicates even more how effective the tactics were in reducing perceived hazards during the COVID-19 outbreak.

(Yoopetch et al., 2022) examined crucial success factors in the food ordering and delivery sector, including menu diversity, food quality, delivery effectiveness, and the user's overall opinion of the application's value. The data was gathered from knowledgeable customers of well-known meal delivery services. The study consists of a sample of 411 respondents. The results showed that perceived value, followed by delivery service effectiveness, menu diversity, and food quality, had the biggest impact on satisfaction.

(Jaroenwanit, Abbasi and Hongthong, 2022) examines how people behaved while the COVID-19 outbreak was going on. A data of 400 Thai people who ordered food online were questioned using a questionnaire. Three phases of statistical analysis were used to examine the collected data: CFA, path analysis, and SEM. During the COVID-19 pandemic, Thai customers used internet platforms for food delivery more and more. The study found additional elements that influenced consumers' future use of meal delivery service, including platform accessibility, food delivery service fee, offers or privileges, and safety of payments. The charges associated with using fooddelivery services are the main deciding factor.

(Wu, Lu and Huang, 2022) determine how delivery fees and other variables affect customers' propensity to choose an OFD service. A logistic regression model was created in this study using data from 391 questionnaire records from China. Age, employment, monthly income, city tier of residency, location and time period of usage, and delivery prices were factors that affected the likelihood that customers would use the service, with delivery charges having the most influence.

(Gani et al., 2021) examined how consumers used applications (apps) to access online food services during the pandemic and the moderating effect that their perceived trust in the information had on their usage of the services. 246 users' email addresses were utilised to collect data, which was then analysed using structural equation modelling using PLS-3. We discovered that information and food service characteristics affect how valuable respondents believe OFS to be and, as a result, how likely they are to utilise it. The use of OFS is significantly influenced by behavioural intention towards OFS and perceived trust. This study sheds light on the pandemic's effects on the market for meal delivery and demonstrates the

dynamic interrelationships between different types of information and restaurant-related characteristics that influence actual utilisation.

(Jun et al., 2021) determine the variables impacted consumers' desire to use meal ordering services using the technology acceptance framework. The results showed that customers' attitudes for meal delivery services are influenced by a number of factors, including perceived usefulness, enjoyment, and trust. Additionally, there is a positive correlation between customers' attitudes and social influence, and customers' attitudes and behavioural intentions in the setting of food delivery services. Finally, customers' attitudes and behavioural intentions are positively correlated with the use of online food delivery services.

The behavioural goals associated with the use of online meal delivery services were explored by the researcher. They conducted multiple regressions on 385 respondents and employed exploratory factor analysis. The secondary and primary sources of this information mostly consist of questionnaires. The usage behaviour level and purchase intention had a favourable relationship, according to their analysis. They also discovered that a number of elements, including convenience, meal quality, restaurant ratings, and quicker delivery, have an impact on the magnitude of purchase intention (Vinish *et al.*, 2021).

(Chotigo and Kadono, 2021) investigated what led people to order meals prior to and during COVID-19. 250 users were used throughout the pandemic, while 220 users were used prior to COVID-19. SEM was employed in the data evaluation. The study found that a number of variables, including trust, pricing, convenience, social influence, and app quality before and after the epidemic, had an impact on consumers intentions to use apps.

This study looked at the factors that affect consumers' decisions when they place online food orders. The goal was to look into consumer behaviour in Bangladesh, an emerging economy in the burgeoning online meal delivery business. Through the collection of information from 177 respondents, the article took a qualitative and exploratory approach. The variables important to customers when buying food online through online food

delivery intermediaries were determined by statistical analyses of the obtained data using parametric t tests and factor analysis. It's interesting to see from the review that delivery speed, level of service, pricing, and the state of the food supplied were the primary aspect regarded to bedirectly impacting the success of online food delivery and delivery monitoring service, menu, number and diversity of restaurants, delivery personnel, and delivery tracking

system was found to be the second, or indirect, influence (Saad, 2021).

(Gupta and Duggal, 2021) discussed the consumer behavior towards online food services in India. Researched examined risk and benefit perception, attitude, behavioral intention with word of mouth & re use intention. The findings demonstrated that in addition to perceived risk and benefit factors, consumers' general attitudinal and behavioural variations also have an impact on their usage and selection behaviour in regard to food ordering services. A reduction in fear perception or an increase in value perception was also found to have a favourable impact on consumers' attitudes towards using online meal delivery services.

(Dsouza and Sharma, 2021) seeks to get a deeper understanding of consumer behaviour in regard to online meal delivery services, which is particularly important now that COVID-19 has changed consumer attitudes and is imperative for all market players to meet their profit targets. The current perception was examined and investigated in order to comprehend the tendencies. Consequently, the quality of food, safety precautions, e-services, customer pleasure, and customer loyalty were among the criteria that this study looked at the correlations between. Food quality has a direct impact on CL through improving customer happiness, according to the research. The safety precautions taken by restaurants and delivery services will also help them maintain their clientele, guaranteeing loyalty.

This study used the frameworks of planned conduct and technological acceptance to investigate the primary factors influencing consumers' desire to utilise meal delivery applications. This article's objective was to examine consumers' inclination to use food delivery services by extending the factors of the models to encompass food choices, trust, comfort, and other variables. The impact of anticipated hazards associated with the coronavirus disease pandemic of 2019 (COVID-19) as one of factors. The study's conclusions show that behaviour intention is more influenced by subjective norms than by personal attitude, and that perceptions of COVID-19 risk and trustworthiness have different effects (Troise *et al.*, 2021).

The study which was conducted in Italy focused on the theory of technological readiness, which was examine the influence of traits like comfort, uncertainty, inventiveness, and optimism on consumers' preferences to use online meal delivery services. Furthermore, the role of situational elements COVID-19 in determining this kind of online behaviour was examined in this study. Through the use of survey methodology and an online survey, 439 valid

responses in total were gathered. The data were examined using multigroup analysis and partial least squares techniques. The findings regarding the use of online meal services indicated that while insecurity and discomfort had a negative influence on adoption intentions, optimism and inventiveness had a positive effect. It was also discovered that situational factors, including the COVID-19 epidemic, had a moderating influence. Additionally, the PLS-MGA results demonstrate that the effects of optimism and innovativeness are stronger in relation to basic attributes like youth, masculinity, high income, high education, and so on. Those who are elderly, female, low-income, and have little education, however, were more affected by unease and uncomfortable (Ali., 2021).

Belarmino, 2021 in their study contrasted the antecedents of pleasure prior to quarantine with the antecedents during quarantine. The researchers discovered through multiple regression analyses that sharing economy principles, price-value, and quality of food did not significantly affect usage behaviour during quarantine, but food quality, service speed, convenience of use, and reinforcement of beliefs were significant.

The research was conducted to look at the variables impact consumers decisions to use food delivery services during the epidemic in Bangkok. The impact of exogenous factors on endogenous variables was assessed using quantitative methods incorporating the structural equation model (SEM). People who had installed and utilised FDAs provided the primary data that was gathered. The findings demonstrated that factors such as performance expectations, effort expectations, social influence, promptness, task technology fit, confidence level, and perceived safety have a significant impact on behaviour intentions to use delivery apps while the pandemic (Muangmee *et al.*, 2021).

In a few selected cities in Karnataka, India, researchers conducted a study to investigate the usage pattern and the reasons of uses of online food ordering. A standardised questionnaire was used to obtain the data from 385 respondents through telephone and postal surveys. Multiple regression and exploratory factor analysis were used to analyse the replies. The study's findings showed a strong correlation between the notions of "buying intention," "aggregator attractiveness," and customer satisfaction. The ease of ordering, the quality of the meals, the accessibility of restaurant chains and food feedback, offers and rebate, quicker doorstep delivery, and the broad selection of restaurants available on the aggregator's website are all major contributors to the variance in purchase intention (P *et al.*, 2021).

(San, Business and 2021, 2021) in their study examined the influence of important variables on a user's propensity to order food for delivery, including service quality, perceived benefit,

and brand familiarity. 304 individuals who use apps for OFD and are based in the Klang Valley region of Malaysia were surveyed for the quantitative study using convenience sampling. Next, using IBM SPSS AMOS 24.0, the data was put through a confirmatory factor assessment, validity assessment, normalcy and validity evaluation, and modelling of structural equations. The study results indicated that purchase intention is strongly and favourably impacted by perceived benefits, brand awareness and level of service quality. Perceived benefits had the most impact on purchase intention, reputation and service quality comes next.

Using a comprehensive model that incorporates UTAUT, ECM, and TTF with the trust factor, the study conducted in China assesses the desire of 532 legal FDA users to continue using FDAs during the COVID-19 epidemic. The statistical results indicated that the most significant factor is satisfaction. Additionally, users' intention of keeping using FDAs during the COVID-19 pandemic is positively impacted, either directly or indirectly, by perceived task-technology fit, trust, performance expectancy, peer pressure, and confirmation (Zhao and Bacao, 2020).

Online review, online rating, online tracking used with existing UTAUT's model. This study aimed to enhance the awareness of the variables that affect consumer satisfaction and the want to utilize food delivery applications in Jordan. The study found that three additional components introduced to the conceptual design, online feedback, e- rating, and e- tracking, had a significant impact (Alalwan, 2020)

(Hwang, Park and Kim, 2020) conducted research to learn more about how driven consumer innovation works in a robotic restaurant. The study discovered that the general perception and word-of-mouth of a robotic restaurant were positively impacted by four sub-dimensions of motivated consumer innovativeness: functionally, hedonistically, cognitively, and socially pushed consumer innovativeness. The results demonstrated that motivated consumer innovativeness, with the exception of socially driven innovativeness, had a positive effect on overall image, which in response had a positive effect on word-of-mouth intentions.

In Australia, Canada, Mexico, the United Kingdom, and the United States, researchers examined number of times online food delivery service used and consumer sociodemographic factors. Utilizing modified logistic regression, researchers examined at what the probabilities of using any online food delivery service in the previous 10 days altered based on sociodemographic factors. Overall, 15% of respondents (n = 2929) said they have used an online meal delivery service, with Mexico (n = 839, or 26%) having the highest usage. The median number of

meals ordered through this way of order was two, while online food delivery services were most commonly utilized once. Researcher finds more variable of online food delivery services on diet and health will require more investigation (Keeble *et al.*, 2020).

By assessing customer satisfaction, meal quality, and food delivery service quality, Annaraud and Rezzina's study looked at customers' intents to use OFD services. Perceived control, service convenience, customer service, and service fulfilment were the e-SELFQUAL criteria that were used to evaluate the quality of the meal delivery service. The poll indicates that customer satisfaction with online meal delivery services is influenced by food quality, control, customer service, and service fulfilment. OFD usage intentions were significantly positively impacted by customer satisfaction

An investigation was carried out on the Indonesian Go-Food application with the aim of assessing the influence of convenience motivation, post-usage utility, and several other factors on the beliefs and intentions regarding the behaviour of online meal delivery services. The results of this study show that attitudes and behavioural intentions towards the Go-Food application are determined by perceptions of the app's utility, whereas external factors such hedonic reasons and time-saving orientation have an impact on the app's usefulness (Prabowo and Nugroho, 2019).

This study focused on consumers' perceptions of online food delivery services, which are drastically changing the Indian food retail market. This study identifies a research model with two dependent variables and seven independent factors. The independent criteria were Pleasure, Controlling, Credibility, Comfort, Ease of Information, Tech Anxiety, and Need for Interaction. The dependent variables were consumer intentions and satisfaction. A partial least-squares analysis was carried out using Smart PLS software in order to evaluate the importance of this model. Accordingly, the study discovers that Consumer Satisfaction, which in turn had a big impact on Consumer Intentions, was related to Convenience, Controlling, Tech Anxiety, and Ease of Information. Convenience itself also had a substantial impact on Consumer Intentions (Panse *et al.*, 2019).

Researchers have examined mobile apps in various travel and hospitality services, such as hotel booking and payment, using a variety of theories(Khalilzadeh *et al.*, 2017; Gupta, Dogra and George, 2018), based on UTAUT model, perceived risk and innovativeness in restaurant industry(Jeon *et al.*, 2020), rural tourism services(Martín, Management and 2012, 2012), purchasing flights from low-cost carrier phone applications(Escobar-Rodríguez, 2014).(Chao,

2019a) determined the customer intention in using m- learning through mobile application. Perceived pleasure, mobile self-assurance, satisfaction, trust, and perceived risk moderators were added to the UTAUT components by the researchers, who used partial least square analysis. There appears to be a dearth of research on mobile app usage in relation to smartphone food ordering apps, suggesting that more investigation is required in this area.

(Cho, Bonn and Li, 2019) studied the perception between single and multi-person household towards online food applications. The study showed that single person prefers quality attributes like choice of food, price and trustworthiness, whereas multi person household give their preference to convenience, design and trustworthiness (Suhartanto *et al.*, 2019) study showed that the influence of e services and food quality towards food delivery services. The research discovered that while electronic service quality was unaffected by food quality, online loyalty was directly impacted by it. Additionally, this research shown that the link between food quality, e-service quality, and web-based loyalty to online meal delivery services is partially mediated by customer experience and consumer e-satisfaction.

Ray, 2019 employed U&G theory to comprehend how customers behave towards websites and applications related to online meals. Eight main reasons for adopting online food applications were identified by the study using the U&G theory: convenience, social pressure, customer experience, shipping experience, restaurant search, quality control, listing, and ease of use. Major antecedents of intentions to use online food applications were found to include customer experience, eatery search, simplicity of use, and listing.

(Lau and Ng, 2019) studied Malaysian urban online meal delivery businesses. The goal of the study was to create an integrated model that would investigate the association between Malaysian city inhabitants' behavioural intention towards online food delivery and multiple antecedents, including the appearance of simplicity of use, the need for convenience, time savings, privacy, and security. The findings showed that online meal service behavioural intention was positively impacted by time-saving focus, convenience factor, security and privacy considerations, and all three.

The study examined how internet scraping techniques, which gather restaurant locations and customer reviews from Facebook, affect key performance indicators of online meal delivery services based on traffic conditions as indicated by the Google Maps API. The findings demonstrated that traffic conditions had no discernible effect on the volume of purchases or the fulfilment of delivery times for 4296 customers based on a total of 19,934 possible routes between the real-world locations of 787 online vendors and 4296 customers in Bogotá city; however, early deliveries did not significantly correlate with the quantity of recommendations customers left after receiving their orders at home. (Correa *et al.*, 2019).

Roh and Park study shows majority of studies on O2O services had concentrated primarily on the technological benefits of mobile applications, ignoring the importance of people's value systems. This study, examines how people's value systems impact their decision to use meal delivery apps. It claims, in particular, that people's moral obligations in meal preparation might influence the way they think about adoption. Moral responsibility, in this case, was considered to prevent people from acting on their fundamental convenience orientation when it comes to meal preparation. The findings indicated that married individuals with a high moral obligation are less likely than single individuals with a low moral requirement to change their basic inclinations for convenience-seeking into a sincere desire to adopt a technology.

(Chandrasekhar, Gupta and Nanda, 2019) study conducted in India discusses consumer perception and decision-making process of consumers towards online food services. The purpose of the survey was to find out how customers felt about meal delivery services available online, such as Swiggy, Foodpanda, Zomato, and others. The study only used first-hand information. Four elements were created in a standardised questionnaire: preference, reliability, consistency, and preference choice. There were 169 participants in all for the study. Grey analysis was the method of data analysis that was utilised to interpret the findings of the data collection. According to the study, consumers favour originality in terms of cost, quality, and delivery. Foodpanda, Swiggy, Zomato, and other online meal delivery businesses did not receive the top rating.

The study was conducted on generation Y satisfaction with food delivery services, using e-service quality, food quality, and perceived value as factors and behavioral intention as a consequence. In Indonesia, 332 millennials answered a self-administered survey for this study.

This study was used Partial Least Square model to examine the relationships between satisfaction and its drivers and consequences. The findings demonstrated that youth satisfaction with online meal delivery services is directly impacted by both food quality and e-service quality. This study also shows that through perceived value, e-service and food standards have an indirect effect on satisfaction. Also, if young people were satisfied, they were more likely to recommend products to others, make additional purchases, and do so at a higher price (Suhartanto, Dean and Leo, 2019).

(Daud and Min Yoong, 2019) study was used hypothesis testing to know how two factors, time and price, influence a person's decision to adopt an online food delivery intermediary service. A survey was conducted with convenience sampling, with 106 questionnaires obtained. Multiple linear regression method was used to test the study model. The interaction between time, price, and time was studied using regression analysis. According to the research, online consumers regard time savings to be significant, but price savings were not considered while adopting food delivery services.

(Mensah, 2019) The desire of foreign students studying in China to buy food online was examined through the use of the UTAUT model, which encompassed perceived service quality and cultural factors such as language. The results showed that the desire of international students to purchase meals online was significantly predicted by performance expectations, effort expectations, culture (language), and perceived service quality. Furthermore, it was found that while placing an online meal order, culture (language) affects how well people perceive the quality of the service, how much effort they expect, and how well they perform. It was shown that significant factors influencing how well a service was viewed included performance and effort expectations.

(Liu, 2019) In Bangkok, researchers looked at how social media sites, hedonic incentives, price- and time-saving orientations, prior online shopping experiences, convenience motivation, usability, and novel experiences affected consumers' happiness with online meal delivery services. The researcher discovered that new experiences and hedonic factors had a beneficial influence on customers' satisfaction with online food delivery services in Bangkok and its surroundings. However, there was no sign of a relationship between customers' happiness with online meal delivery services in Bangkok and variables including cost, time savings, prior online buying experience, convenience incentive, usability, and social media impact.

(Pattnaik, 2019) study was to determine how Generation Z evaluates the quality of food delivery services and if they are pleased with the services provided to them in Delhi NCR using the SERVQUAL model. In conclusion, based on the findings, customers view service quality to be low in all areas, implying that their expectations are not met by food delivery service providers. There was a negative gap between expected and perceived service across all dimensions, indicating that food delivery service providers must improve across the board in order to narrow gaps that might lead to increased customer satisfaction.

(Lee, Sung and Jeon, 2019a) The aspects influencing users' intentions to use food delivery apps regularly were examined in this study using an improved Unified Theory of Acceptance and Use of Technology 2 model that considers quality of information. The analysis was generated using data from 340 respondents who had ordered or purchased meals using delivery apps. Consistency, performance standards, and social influence were found to have the strongest impacts on the intention to continue using a product. Additionally, through performance expectations, information quality indirectly affected the intention to keep utilising it. Accordingly, our study confirms the significance of data quality, performance expectancy, habit, and social impact in influencing users' desire to use food delivery apps persistently.

(Salunkhe *et al.*, 2018) consider the variables Attitude and behavioral intentions, as well as their influence on purchase decisions through technology acceptance model (TAM).(Maimaiti *et al.*, 2018) highlighted the opportunities and constraints that the Chinese food delivery industry faces. They highlighted the significance of technology innovation in a rational society, as well as the enhancement of the dining experience by utilizing an offline to online food delivery network. This study provided a unique insight on the opportunities and constraints that the new industry faced, as well as the health implications of associated behavioral and social change.

The study conducted by (Okumus *et al.*, 2018) analyzed the psychological factors to understand the intention of consumer to use diet application while ordering food with unified theory of acceptance and use of technology construct along with personal innovativeness.

In order to determine how the mobile app qualities of online food aggregators affect a consumer's purchase option and, consequently, conversion, a study concerning online food aggregators was conducted in India. This was done by creating and testing an attribute-conversion model through experimentation. A mix of methods was employed for this

investigation, and pilot research including (n=350) respondents was carried out. The study analyses the most essential mobile app qualities when choosing an online food aggregator in India, focusing on four major attributes: visual, navigational, information, and collaboration design. Kapoor and Vij, 2018 study results showed Visual design, information design, and navigational design all have an impact on conversion for a food aggregator and they should create a visually appealing and well-structured mobile app that will impact a customer's purchase choice and lead to conversion.

(Yeo et al., ,2017) had investigated the behavioural intentions and attitudes of consumers towards OFD services. Numerous factors were taken into account, including customer attitude, behavioural intention, price-saving orientation, time-saving orientation, hedonic incentive, convenience motivation, post-usage usefulness, and past online purchase experience.

2.2 THEORETICAL BACKGROUND OF ADOPTION OF TECHNOLOGY IN ONLINE SHOPPING

Researchers frequently use the Theory of Reasoned Action, Technology Acceptance Model, Theory of Planned Behavior, Technology Acceptance Model 2, and Unified Theory of Acceptance and Use of Technology when studying adoption. These hypotheses are discussed in this section. Since the 1960s, technology adoption theories have been constantly researched and used, with the Theory of Reasoned Action and the Technology Acceptance Model being the foundational and basic theories of adoption. The first two ideas were used in the 1990s, when smartphones were first becoming popular. The Theory of Planned Behavior was then applied to the next generation of smartphones. Technology Acceptance Model2 and the Unified Theory of Acceptance and Use of Technology were used in the 2000s, and the Unified Theory of Acceptance and Use of Technology were eventually enhanced and used at large scale in current scenario in academic as well as in industry research.

Venkatesh developed the Unified Theory of Acceptance and Use, a paradigm for assessing technology acceptance. The goal of the UTAUT is to characterise users' intended and actual use of an information system. The hypothesis states that there are four main parts: Expectations for performance, effort, social influence, and enabling circumstances are the first four. Although the fourth predicts user behaviour, the first three provide unambiguous signals of usage intention and behaviour. The four primary categories' effects on usage intention and conduct are believed to be influenced by age, gender, experience, and

voluntariness of use. A review of eight prior models, including the diffusion of innovations theory, social cognitive theory, theory of planned behaviour, theory of reasoned action, motivational model, theory of planned behaviour, and a combined theory of planned behavior/technology acceptance model, was conducted, and the models' constructs were then combined to create the new theory. (Venkatesh *et al.*, 2003) found that in longitudinal research, UTAUT explained about 50% of the difference in actual use and 70% of the difference in behavioural intention to use (BI). (Almaiah, Alamri and Al-Rahmi, 2019) to understand the students' adoption of mobile learning apps in higher education. Perceived connectivity, perceived confidence, perceived awareness, perceived availability of resources, self-efficacy, and perceived security are the main drivers of students' embrace of mobile learning systems, according to the findings. (Rahi *et al.*, 2019) adopt UTAUT model to understand the intention of consumer towards internet banking with e- service quality.
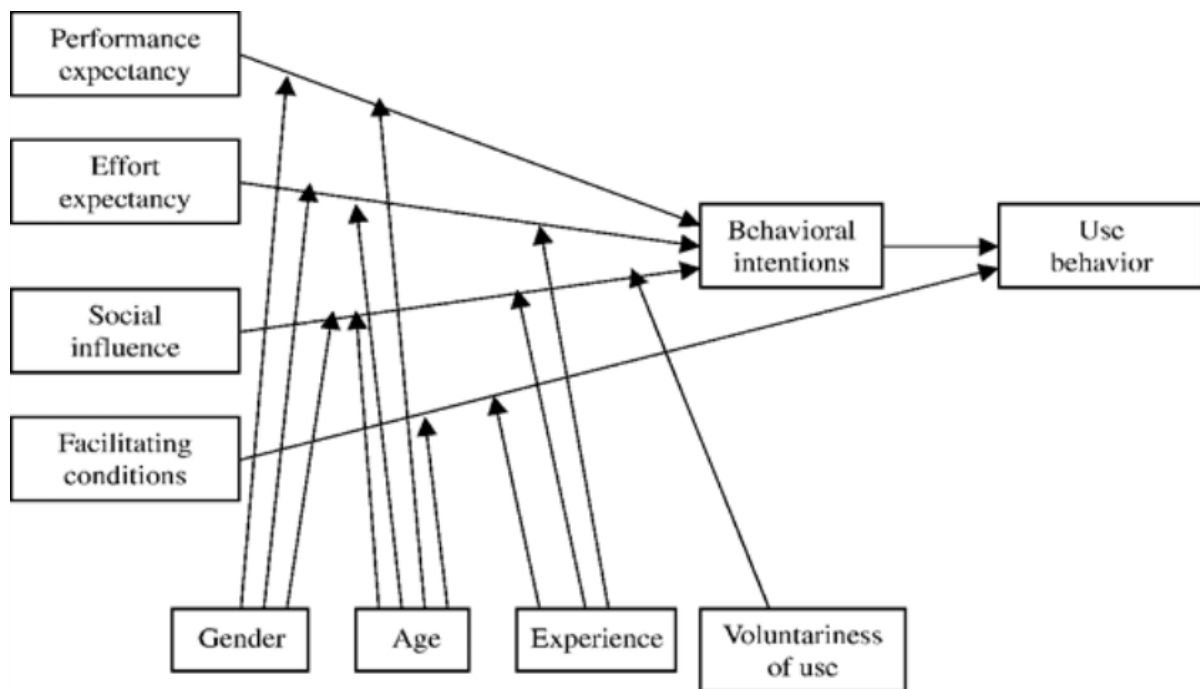
Figure 2.1 Unified Theory of Acceptance and Use of Technology

Source:(Venkatesh *et al.*, 2003)

UTAUT2 adds the following constructs to it: hedonic motivation, price value, and habit by Venkatesh. These components are included with the assumption that hedonic motivation, such as enjoyment, is extremely important in consumer product and/or technology usage, and that incorporating it complements UTAUT's strong prediction.

UTAUT2 has also been validated in a variety of contexts, including e-government

Services (Kalamatianou and Malamateniou, 2017); tourist smartphone adoption (Gupta, Dogra and George, 2018), where facilitating conditions and hedonic expectancy were significant predictors of behavioral intention; and mobile app base shopping (Sharma and Bansal, 2013). As a conclusion, we combined the UTAUT and UTAUT2 models with additional constructs and applied the newly proposed model to online food services.
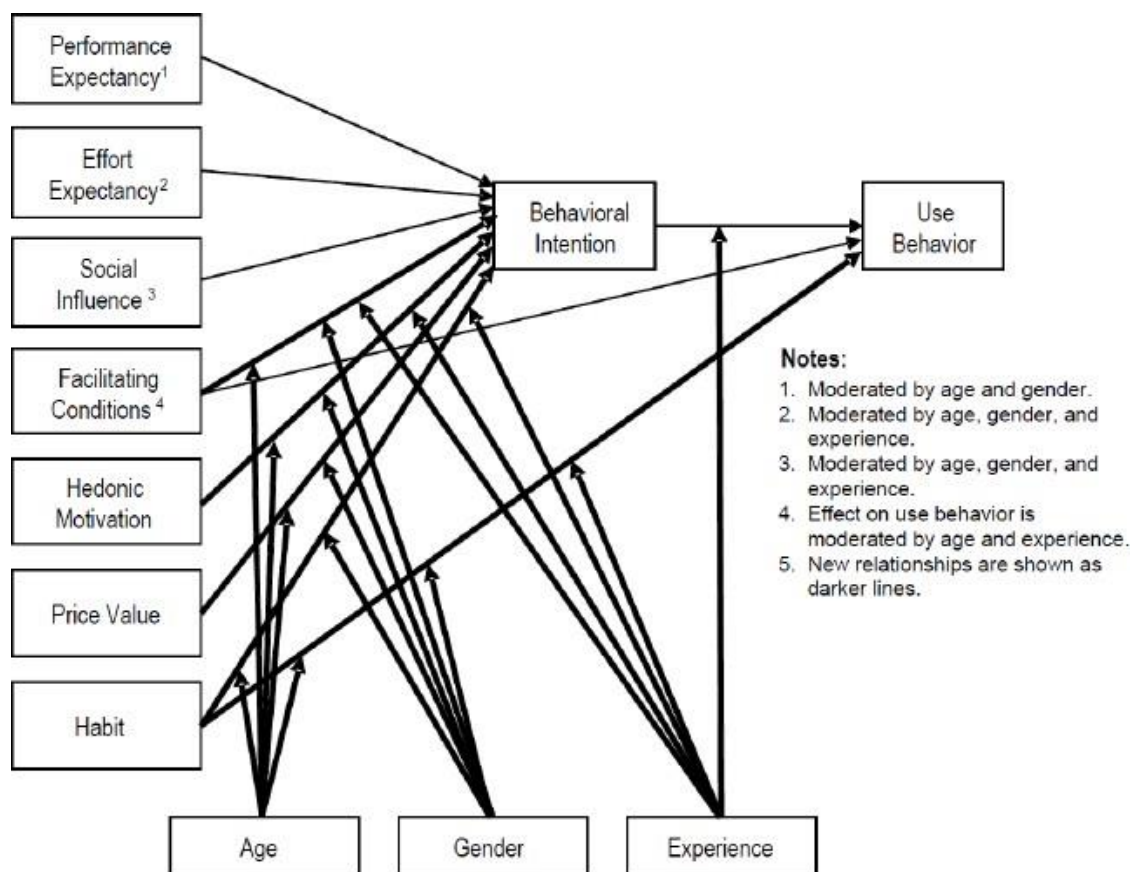
Figure 2.2 Unified Theory of Acceptance and Use of Technology

Source: (Venkatesh, Thong and Xu, 2012)

The technology acceptance model was used to determine customer opinions concerning digital food ordering systems (Alagoz and Hekimoglu, 2012). In addition, the study included other dimensions such as trust, innovativeness, and external factors. This study used the UTAUT2 model in identifying the factors that helped the use online food services apps-. As may be seen, the UTAUT2 model has been analyzed by a large number of researchers all around the world. UTAUT2 model is more reliable than other theories in predicting technological intention to use (Venkatesh, Thong and Xu, 2012). The key parameters of UTAUT2 were employed in

the study presented in this thesis. This model was created during the age of mobile app development. As a result, this model was considered essential and used in the present research. Extrinsic motives are used to encourage online food services in addition to instrumental beliefs like performance expectancy. We expanded the UTAUT2 model by including online food service app qualities such as online promotions, personal innovativeness and traceability, as well as a mediator perceived health risk.

2.3 RESEARCH GAP

1. Extensive review of literature states that lot of research studies have already been undertaken in the field of online food services worldwide (Yeo, Goh and Rezaei, 2017b; Lee, Sung and Jeon, 2019b; Belanche, Flavián and Pérez-Rueda, 2020). In the Indian context, very few studies have focused on online food service and factors influencing the Indian customers behavioural intention for online food services (Abbas Bhotvawala *et al.*, 2016; Bagla and Khan, 2017; Saxena, 2019) despite of having a potential to flourish online industry in Indian context.

2. With exhaustive changes in the population of India, many people stay in different cities for the purpose of studies and bread & butter. Due to busy routine of family members, the demand for food ordering & delivery have been increased and The Indian the web food services business has shown remarkable growth over the past few years, making it a few of the most lucrative sectors (Bhotvawala et al.,2016; Saxena,2019).

3. There is so much competition in restaurant industry due to the online food delivery system. In such a competition some restaurants are not so much competent of delivering quality services and lose the competition. Hence it is very essential to know the factors which affect the behavioural intention for online food services, so that restaurants owners plan service accordingly (Bolden, 2017a; See-Kwong and Soo-Ryue, 2017).

4. The impact of various construct (online promotions, traceability, personal innovativeness) on behavioral intention not explored with respect to online food services (Marchante,2013; Faryabi,2015; Thakur,2015).

5. The epidemic has introduced a fresh risk to the food delivery industry, one that may have an impact on the industry. National media reporting has proven that there is a reasonable risk of virus transmission when ordering food online (The Times of India, 2020a). This observation indicates that the perceived risk of contracting with virus is high through OFDs, which could have an impact on the respondent's choice to buy (Mehrolia,Alagarsamy and Solaikutty, 2021).

6. The mediating role of perceived heath risk among behavioral intention and actual use behavior is not explored with respect to services (Ahadzadeh et al ,2015; Mehrolia, Alagarsamyand Solaikutty, 2021).

2.4 CONCEPTUAL FRAMEWORK OF THE RESEARCH

The conceptual framework establishes the context for outlining the particular research question that informs the study and is based on the problem description. The backdrop and concerns that caused the researcher to undertake the study are described in the problem statement of a thesis (McGaghie. william, Bordage.Georges, 2001). The conceptual framework is part of a bigger framework known as the theoretical framework. The latter gets its justification from tried-and-true theories that encapsulate the conclusions of numerous studies regarding the causes and mechanisms of a given occurrence.

(Ivey, 2015) The conceptual structure is an account of a phenomenon that emerges from the researcher's integration of extant literature. Taking into account his existing knowledge of other researchers' viewpoints and observations on the subject of inquiry, it lays out the actions that must be taken throughout the investigation. In other words, the conceptual structure is the researcher's understanding of the connections between the variables in his investigation. It therefore delineates the components that the research endeavour must encompass. It serves as the investigator's guide for carrying out the research.

Based on expanding the UTAUT2 model, this study built a conceptual framework to determine the actual usage behavior of online food service applications. For the measuring of intention to use technology, the UTAUT2 theory describes the key components of performance expectancy, effort expectancy, facilitating conditions, social influence, hedonic motivation, price value, and habit. It tries to validate the conceptual design by focusing at the main factors that determine whether or not people would utilize meal delivery applications. The UTAUT2 model is employed in this study, along with extension factors such as online promotions, personal innovativeness, and traceability for e- food services.

In this investigation, the mediating influence of a construct, namely, Perceived health risk (Chao, 2019b) was examined. The construct was used as mediators between behavioural intention anduse behaviour towards online food services.

Figure 2.3 Conceptual Design of the study
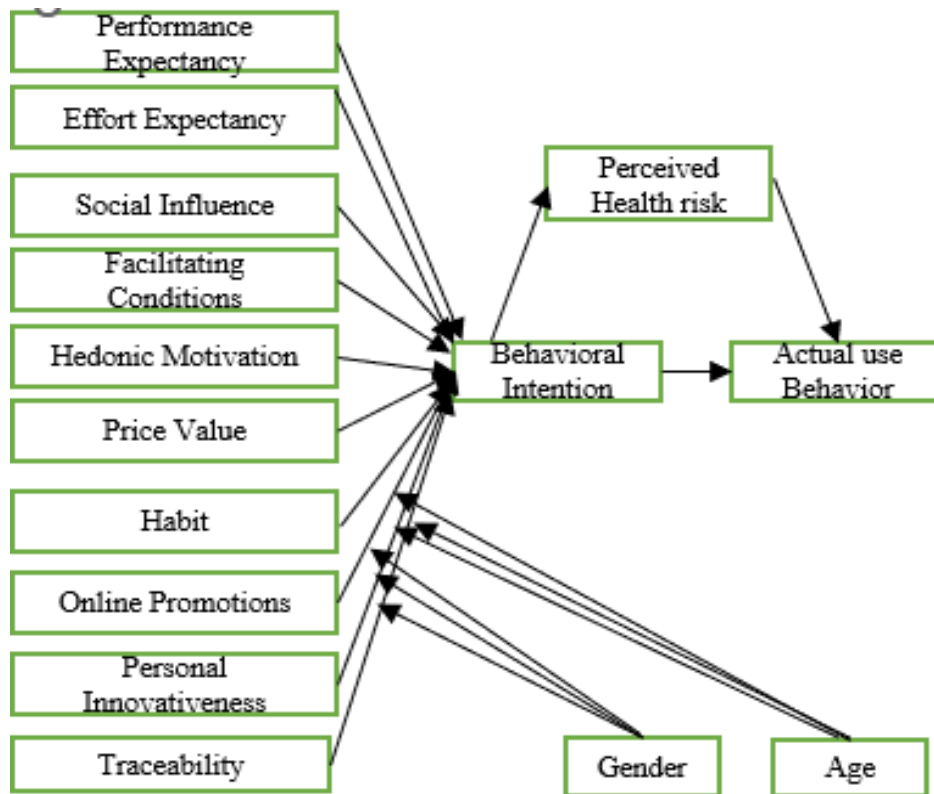
2.5 HYPOTHESIS OF THE STUDY

A hypothesis is a declaration of your expectations regarding the investigation's findings. It's a speculative, untested answer to your research query. A hypothesis shouldn't just be a conjecture; it should be supported by ideas and knowledge that already exist. Additionally, it needs to be testable, meaning that it can be verified or refuted using methods from scientific study (McCombes, 2019). Based on the conceptual framework, the few hypotheses are made.

Performance Expectancy (PE)

The degree to which a person believes that putting a system in place would improve his or her performance at work is known as performance expectation. The perception that using a certain technology will benefit or improve an individual's performance (Venkatesh *et al.*, 2003). Performance expectancy is identified as significant predictor of technology usage intention towards ordering from restaurant (Okumus *et al.*, 2018). The customer pays attention to technology positively, when a new technology saves time and effort in comparison to traditional ones (Chua *et al.*, 2018). For example, a consumer may order meals almost at any

time and from any location, and there is a wide range of foods to choose from. Various researchers have examined how customers react to new technologies on a number of occasions. Performance expectancy is used in context to male – female technology adoption for on demand food services (Yapp *et al.*, 2018). During the COVID-19 pandemic, performance expectancy appeared as statistically significant antecedents of online food services desire to continue using the services (Zhao and Bacao, 2020). Performance expectation provides strong support to the intention to adopt new technology, as has been statistically proven in previous research. As a result, the following hypothesis has been proposed:

H1: Performance expectancy has a significant impact on behavioural intention for online food services**.**

Effort Expectancy (EE)

Venkatesh, define effort expectation as the degree of ease with which technologycan be used. This means that effort expectation relates to the time and effort required utilizing atechnology, regardless of how simple or complex it is. (Catherine *et al.*, 2017) Users may readily accept and employ technology that is user-friendly. The majorities of people prefer technology that offers them flexibility, utility, and ease of use. (Sair and Danish, 2018) effort expectations have a considerable impact on behavioral intentions to adopt mobile commerce. There are researches that show how important this factor is in technological adoption (Fairus, 2016; Beza *et al.*, 2018; Farah, Hasni and Abbas, 2018). The finding showed that effort expectation and behavioral intention to use online food delivery services had a significant connection (Baabdullah *et al.*, 2017). As a result, the following hypothesis has been proposed:

H2: Effort expectancy has a significant impact on behavioural intention for online food services.

Social Influence (SI)

Social influence defines as degree to which an individual believes that key individuals (such as family, friends, and colleagues) perceive that he or she should utilize the new technology. Subjective norms, social conditions, and image can bea social influence. Image refers to the improvement of a single image or class in social structure using the apparently proposed platform (Venkatesh, Thong and Xu, 2012). Social influences only have a limited impact on behavioral intention, but they do have a direct impact on use behavior of technology (Bozan, Parker and Davey, 2016). Social influence has a

significant influence on employees to adopt the e- government (Alraja, 2016). Social influence is importantfactor in mobile banking adoption (Sharma *et al.*, 2017). Injunctive norms, social norms, and group relations were all shown to be positively connected to continuing usage intention (Wang and Chou, 2016). Social influence has the biggest impact on trust (0.41), followed by the impact of performance expectancy on behavioral intention (0.29) (Baabdullah, 2018). The impact of social influence on the behavior intention to accept new technology has been proven by various researchers (Confente and Vigolo, 2018; Patel and Patel, 2018; Hu *et al.*, 2019; Singh, Sinha and Liébana-Cabanillas, 2020). Users' intentions to use food delivery applications are influenced by social influences (Lee, Sung and Jeon, 2019a). As a result, the following hypothesis has been proposed:

H3: Social Influence has a significant impact on behavioural intention for online food services.

Facilitating Conditions (FC)

The degree to which a person believes that the technological and organisational infrastructure is in place to make the system easier to use is known as the "facilitating conditions." (Venkatesh *et al.*, 2003). The findings reveal that the primary elements influencing e-government adoption are influence, offered facilitating conditions, and available facilitating conditions (Gupta, Singh and Bhaskar,2016). E-learning research indicate that the intention to utilise information technology in the classroom is influenced by facilitating conditions (Ayranci, 2010). The study evaluated the "Facilitating Conditions" (FC) that enable Nurses' Acceptance of HEIMS in Ghana (Zhou *et al.*, 2019). In terms of technology, ordering food online needs a 4G Internet connection and a smartphone. Customers must feel at ease when employing applications and online food aggregators should try to improve the quality of their pages on a regular basis (Li *et al.*, 2019). Number of studies added to the evidence that facilitating conditions have an influence on the adoption of new technologies (Hsu *et al.*, 2017; Tarhini *et al.*, 2017; Rahi *et al.*, 2018). The intention of users to continue use of online meal delivery services is measured. The findings of the study show that facilitating conditions have a considerable influence on user behavioural intention (Lee, Sung and Jeon, 2019a). So, on the basis above evidence proposed a hypothesis:

H4: Facilitating Conditions has a significant impact on behavioural intention for online food services.

Hedonic Motivation (HM)

Hedonic Motivation refers to enjoyment or pleasure received from the use of a technological device or an individual's perceived satisfaction when utilizing technology (Venkatesh, Thong and Xu, 2012). It was discovered that the hedonic motivation significantly affected behavioural intentions about the use of online banking (Alalwan *et al.*, 2015; Sharif and Raza, 2017). Hedonic motivation is associated with celebrity-based intention to engage in live streaming shopping (Cai *et al.*, 2018). The findings confirm the theory that hedonic value promotes online impulsive buying tendencies (IBT). While three aspects of hedonic purchasing motivation (adventure, relaxation, and value) have a beneficial impact on online impulsive buying tendencies IBT (Ozen and Engizek, 2014). In terms of hedonic website visits, a user's desire to visit a website is mostly influenced by how joyful the experience is. When the actual state is compared to the desired and optimal states, this is confirmed. The user is happy with the website if it fulfils their expectations of the expected and/or desired condition (Alavi *et al.*, 2016). Most research focuses on the hedonic elements of recreational activities such as sports and shopping. Some choose to focus on the hedonistic elements of consuming tangible goods like CDs, beer, and sparkling wine. (Neeley, Min and Kennett-Hensel, 2010). Hedonic motivation is an important indicator that has a modestly favorable relationship with attitude. This implies that those who have higher levels of hedonic drive perceive online food services more favourably, which increases their willingness to use them. If users think that using online food services could be enjoyable and pleasurable, they are more likely to have a positive attitude and use them (Yeo, Goh and Rezaei, 2017a). Because of this, it is presumed that a user experiences hedonic motivation when they are able to use OFD services, taking into account the previously mentioned factors. Consequently, the theory is put forth.

H5: Hedonic motivation has a significant impact on behavioural intention for online food services.

Price Value (PV)

The concept of pricing value emerged from perceived value, which is commonly considered a crucial determinant of purchasing behaviour and, thus, a factor affecting a firm's competitive edge (Chang and Tseng, 2013). Zeithaml's definition of pricing value has historically involved a trade-off between costs and gains. Price value has been emphasised recently by researchers in the information technology industries and by marketers of consumer

electronics goods. This method was used to study how users adopted emerging technology or smart mobile devices. Based on the research, attracting clients requires the price-value concept (Kuo, Wu and Deng, 2009). The price-saving mindset focused not only the savings in money but also the expense of not having to pay extra when making a purchase or using a service (Escobar-Rodríguez and Carvajal-Trujillo, 2014).

Customers can visit multiple websites to compare prices; the business offering the lowest price will be viewed as having a more advantageous website. Price comparison on the Internet makes it possible for customers to buy items at a lower cost (Chiu *et al.*, 2014). Online shopping has a relative advantage of being able to offer both decreased costs and time savings when comparing retail outlets with online purchasing, as empirical evidence has shown. This makes online shopping significantly more convenient (Akroush and Al-Debei, 2015). Customers will be concerned about costs and possible discounts when they purchase online specifically towards OFD services, according to (Yeo, Goh and Rezaei, 2017a).

The previous studies have shown the relationship between price value and behavioral intention. As a result, the hypothesis is proposed.

H6: Price value has a significant impact on behavioural intention for online food services.

Habit (HB)

Habit refers extent to which persons are likely to performing activities automatically as a result of their learning (Limayem, Hirt and Cheung, 2007). Numerous disciplines, including psychology, consumer behaviour, education, health research, and management, have given the habit construct a great deal of attention (Triandis, 1979). Consumers' behavioural intends to continue using a B2C website are influenced by all three primary drivers: perceived utility, trust, and habit, according to the findings (Liao, Palvia and Lin, 2006). In e-government services adoption habit is one of important factor was identified by (Rey-Moreno and Medina-Molina, 2017). According to (Limayem, Hirt and Cheung, 2007) study support habit as moderating factor between intention and continue use of technology. Different degrees of habit formation may arise from varying degrees of involvement and familiarity with a target technology. The empirical results on the impact of habit in technology usage have identified a variety of underlying mechanisms that drive technology use by Venkatesh. The involuntary action of using technology for any task is referred to as a habit. Users who are habituated to purchasing online will explore online retailers as a normal part of their routine. Both the

intention to use and the action of using can be influenced by habit (Singh and Matsui,2017). Prior usage habits were significant determinant of smartphone app usage intention (Gupta, Dogra and George, 2018). Routes based on habits while adopting information technology, HA- BI and HA-UB emerged as the second and third strongest pathways in UTAUT2 paths (Tamilmani, Rana and Dwivedi, 2021). The sole variable that shows statistical significance across all samples is HB, which is the most crucial component of BI for users, the second most crucial component for new adopters (Droogenbroeck and Van Hove, 2021). Consumers' intention to use mobile banking is impacted by habit (Merhi, Hone and Tarhini, 2019). Individual experience refers toa user's collection of experiences derived from their established regular practices, norms, and habits when utilizing technological devices. Such experiences reduced the need for discussion,coordination, or lengthy decision-making (Limayem, Hirt and Cheung, 2007). The habit is a powerful predictor of technological usages in fostering behavioural changes, as per studies on habitual intentions and habitual usage behaviours (Webb, Sheeran and Luszczynska, 2009; Wang and Wang, 2010). HB is important factor in continuous intention of food delivery apps (Lee, Sung and Jeon, 2019a). So, on the basis of above discussion hypothesis is proposed:

H7: Habit value has a significant impact on behavioural intention for online food services.

Online Promotion (OP)

Online promotion, sometimes referred to as online sales promotion or online marketing, is a kind of advertising and marketing that uses the Internet to give customers promotional marketing messages (Yurovskiy, 2014). Online promotion significantly influenced consumers' perceived value and behavioural intention towards online shopping (Park and Lennon, 2009). Perceived Price Promotion Temptation, Perceived Category Richness of Promotion, and Perceived Fun of Promotion Activities were found to have a substantial and favourable impact on customer Participation Intention (Chen and Li, 2020). As per (Lichtenstein, Netemeyer and Burton, 1990) suggests that offer proneness indicates a psychological desire to buy rather than the actual purchase of products on sale. Customers that are prone to promotional deals are more likely to move to app-based buying, as these applications provide a variety of attractive shopping deals throughout the year. In their study (Lichtenstein, Netemeyer and Burton, 1995) divided promotions into three categories: (1) the broadest level, which includes a wide range of promotional deals; (2) the deal-specific promotion level, It makes the assumption that a certain domain—like a coupon, rebate, or price discount—is deal-prone; and (3) an intermediary level, which makes the assumption that

promotion is exclusive to transactions involving active as well as a passive attitude. Above discussion revealed that there is a positive association between promo adoption and awareness gained through sales promotions. As a result, the following hypothesis is proposed:

H8: Online promotion has a significant impact on behavioural intention for online food services

Personal innovativeness (PI)

(Midgley and Dowling, 1978) the extent to which a person is relatively earlier in embracing new technologies than other persons of his system, relatively earlier, we don't mean that the person believes he accepted the technology more recently than others in his system; rather, we mean earlier in terms of the actual moment of adoption. This is essentially an operational definition because it is directly related to the assessment of personal innovativeness, namely the time it takes for a person to accept new technology. It is believed that an individual's level of personal innovation in the field of information technology might moderate the influences on the factors that precede and result in their assessment of new technology (Agarwal and Prasad, 1998). Customer innovation plays a significant role in determining the intention of consumers to adopt online shopping both directly and indirectly by reducing their views of the risk involved in using the internet to purchase physical items (Thakur and Srivastava,2015). According to (Mahat *et al.*, 2012) respondents exhibited a high level of personal innovativeness and mobile readiness for mobile learning (Elango, Dowpiset and Chantawaranurak, 2019) found Personal innovativeness (PI) has a considerable influence on perceived ease of use (PEOU), and personal innovativeness (PI) and perceived ease of use (PEOU) have a considerable impact on the perceived utility (PU) of on-demand food delivery services. Number of researches proves positive relationship between personal innovativeness and behavioural intention towards technology (Parveen and Sulaiman, 2008; Han, Kang and Moon, 2013). So, on the basis of above review of literature hypothesis is proposed:

H9: Personal innovativeness has a significant impact on behavioural intention for online food services

Traceability (TR)

(Mishra *et al.*, 2015) The capacity to use registered identification to follow an entity's location, application, or history across the supply chain is known as traceability.Traceability is frequently described as a two-step process:

1. Track: The ability to find objects or items physically within a facility, either to a specific area or to identify articles.

2. Trace: The ability to explore historical data for manufacturing methods, ingredient or component sources.

Tracking and tracing systems are the industry standard for providing services to its customers, giving Logistics Service Providers a significant advantage (Shamsuzzoha *et al.*, 2013). Manufacturing businesses in Finland rely on tracking and tracing services to manage their logistics networks since tracking and tracing allow them to identify delivery locations and provide consumers early notification (Shamsuzzoha and Helo, 2011). Customers' post-purchase shipping and tracking behaviors have a significant influence (Cao, Ajjan and Hong, 2018). Order tracking is one of high rated factor in online store loyalty (Gauri, Bhatnagar and Rao, 2008). Various studies already conducted in traceability in different field like Understanding the spatial behavior of tourists: GPS tracking as a tool for long-term destination management (Edwards and Griffin, 2013), online shopping (Singh, 2002; Aldrich, 2011; Tandon, Kiran and Sah, 2017), food supply chain management (Xiaojun and Dong, 2006; Kelepouris, Pramatari and Doukidis, 2007; Aung and Chang, 2014; Dabbene, Gay and Tortia, 2014). Common traceability features include friend finder, route guidance, location directory services, navigation bar, payment status, tracking map, and purchase progress tracking (Bolden, 2017). Jordanian consumers who have used MFOAs were particularly interested in online tracking. The statistical findings revealed that online tracking considerably impacts e-satisfaction and customers' willingness to reuse Online food services (Alalwan, 2020). Therefore, the inclusion of such cutting-edge capabilities in food delivery applications might encourage users to download them in the future. As a result, the following hypothesis is proposed:

H10: Traceability has a significant impact on behavioural intention for online food services.

Behavioural Intention (BI)

The TRA/TPB defines intentions as "the amount of effort one is prepared to expend to achieve a goal."(Ajzen, 1991). The motivational elements that impact a particular activity are referred to as behavioural intentions, and the stronger the intention to carry out the behaviour, the more probable it is to be carried out. The outcomes of a customer's previous engagement and experience can impact his or her perceptions and attitudes, which forecasts his or her desire to act in the same way (Azen and Fishbein, 2005). Consumers' behavioural intention toward the online retailer was significantly and strongly predicted by their purpose to search for product

information via the online shop and their perceived online trust (Hahn and Kim, 2009).

In keeping with agency theory, the theory of planned action, and research on perceived risk and trust, behavioural intention to engage in online intermediated buying is directly positively correlated with perceived advantage, subjective norms, and perceived behavioural control (Zhang *et al.*, 2015). Customer Behavioural Intentions for shopping in an online grocery store and evaluate the significant influence of time-saving, product quality, and service quality (Zhu and Semeijn, 2015). In the survey, consumers' attitudes and behavioural intentions regarding online food delivery services were shown to be positive (Yeo, Goh and Rezaei, 2017a). As a result, consumers who want to use online meal delivery applications are encouraged to do so if their first experience is pleasant. As a result, the hypothesis has been proposed.

H11: Behavioural intention has a significant impact on actual use behaviour for online food services.

Perceived Health Risk (PR)

Researchers utilize the Health Belief Model (HBM) in an effort to forecast behaviours related to health. It was originally developed in the 1950s and further improved in the 1980s. The method is based on the notion that an individual's willingness to change their health-related behaviours is mostly dictated by how they view their health (Laranjo, 2016). Individual perceptions about health problems are the focus of the HBM's aspects, which are used to predict individual health-related behaviour. The model identifies the most important elements that impact health-related behaviour. These include a person's perceived risk of sickness (susceptibility), belief in the potential severity, potential positive advantages of action (benefits), perceived barriers to action, and exposure to events that inspire action cues to action (Jones *et al.*, 2015). According to a number of academic evaluations, perceived threat is the most important factor and crucial element in understanding the adoption of various preventive health behaviours. As per the Health Behaviour Model (HBM), perceived danger pertains to an individual's assessment of the gravity of a disease and their vulnerability to it. (Weitkunat *et al.*, 2003; Carpenter, 2010). In this study, perceived susceptibility refers to a person's subjective assessment of the risk for certain diseases. Perceived severity, sometimes called perceived seriousness, refers to the unfavourable consequences that a person associates with an occurrence or result. These results could be connected to something that will happen in the future or something that is happening right now, like a health issue that is underlying. (Centers for Disease Control and Prevention, 2020). Customers' decisions to buy food are heavily

influenced by their perceptions of severity.Customers who face a greater risk to their health are more likely to acquire and pay a higher price for safer items or services (Sharma, Sneed and Beattie, 2012). Customers are more cautious when purchasing groceries or food online than they are when purchasing them offline because they didn't know freshness of the food (Chatzis and Panagiotopoulos, 2014). As pandemic situation is spreading in whole world, the probability of COVID-19 transmission is highly prevalent through online meal delivery, as national news reports have verified (The Times of India, 2020). The perceived threat of COVID-19 infection through OFDs is significant, as evidenced by this note, which may impact the respondent's purchasing choice. So, on the above discussion hypothesis is proposed:

H12: Perceived health risk mediates the relationship between behavioural intention and actual use behaviour for online food services

Demographics factors (Gender & age)

There are differences between how men and women make decisions, hence a number of technology-acceptance models, including UTAUT and UTAUT2 included gender as a moderator variable**.** Gender is a key factor in determining user behaviour in information systems, according to previous studies (Fang *et al.*, no date; Venkatesh *et al.*, 2003; Luk, Sharma and Chen, 2013; Laukkanen, 2015; Ansari and Farooqi, 2017; Merhi *et al.*, 2020; Janavi *et al.*, 2021)

One demographic factor that affects a person's perspective, attitude, and behaviour is their age (Nosek, Banaji and Greenwald, 2002). According to (Venkatesh *et al.*, 2003), the explanatory power of the theory of planned behaviour increased to 47% once age was added as a moderator.

H13 Gender moderate the relationship between online promotion and behavioural intention for online food services

H14 Gender moderate the relationship between personal innovativeness and behavioural intention for online food services

H15 Gender moderate the relationship between traceability and behavioural intention for online food services

H16 Age moderate the relationship between online promotion and behavioural intention for online food services

H17 Age moderate the relationship between personal innovativeness and behavioural intention for online food services

H18 Age moderate the relationship between traceability and behavioural intention for online food services

CHAPTER 3

RESEARCH METHODOLOGY

The research methodology consists of a series of clearly defined stages, as listed below.

2.1 Identification of Research Problems and Objective of Research

The research problems or objectives are referred to as statements that the research project will attempt to achieve during a particular time period. The goal of this study is to look into the characteristics of online food services in Delhi-NCR and their impact on consumer behavioural intention and actual use of these services. As a result, a descriptive study was chosen to offer fresh information about mobile food ordering apps, with a focus on online food services. When studying the actual use of online food services, it's important to consider the user's perspective and intent to utilise these services. The study's objectives are to address a research gap identified by a thorough literature survey and to build a conceptual framework for online food services in Delhi-NCR using UTAUT2 .There are four research objectives in this study. These objectives are listed as follows:

1. To investigate whether performance expectancy (PE), effort expectancy (EE), social influence (SI), facilitating conditions (FC), hedonic motivation (HM), price value (PV), and habit (HB) affect the decision maker's behavioural intention for online food services.

2. To analyse the impact of online promotion (OP), personal innovativeness (PI), and traceability (TR) on decision makers' behavioural intentions for online food service.

3. To examine the moderating role of demographics (gender and age) in the relationships between online promotion (OP), personal innovativeness (PI), traceability (TR), and behavioural intention.

4. To study the mediating role of perceived health risk in the relationship between behavioural intention and actual use behaviour.

Figure 3.1 Conceptual Framework of the study
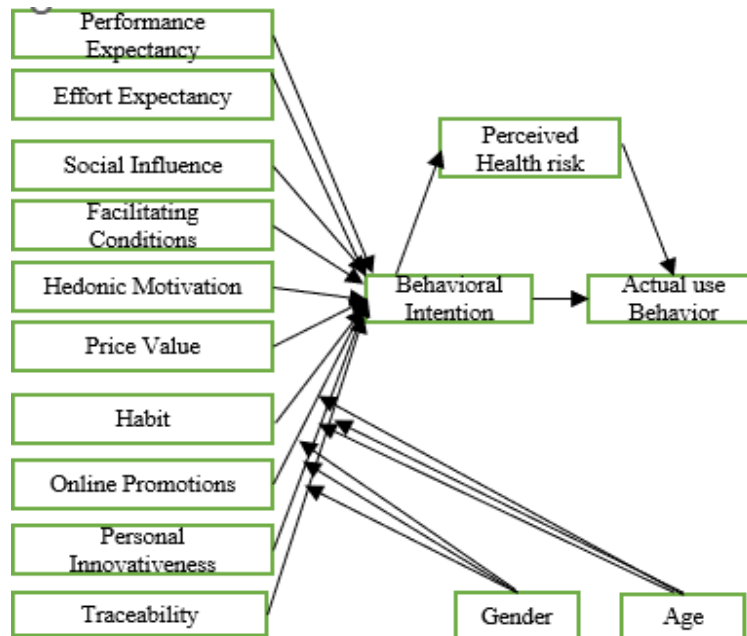
2.2 Scope and Need of the Study

In step with global technological advancements, the restaurant industry has advanced and improved its consumer services both physically and virtually through the use of on-demand food delivery platforms. The goal of this study was to examine consumer intentions towards online food services. The customer perspective was investigated in order to gain a better understanding of the factors that can influence behavioural intention towards online food services, with the belief that behavioural intention would drive actual usage behaviour. Most research studies were focused solely on the technology aspects of mobile applications, ignoring various aspects of online food services from the perspective of consumers behaviour and adoption. To fill this research gap, this study offered an integrative model of UTAUT2 with the additional attributes of online food services and health concerns during a pandemic situation that influence their decision-making processes when it comes to the adoption of online food services. The findings of this study offer a better understanding of the dynamic e-commerce world, allowing online food service providers to make smarter decisions while servicing the

consumer and also throwing light on users' health concerns when using online food services in this pandemic situation.

2.3 Research Design

The blueprint for data collection, measurement, and analysis is known as the research design (Schindler & Cooper, 2104). The study would be descriptive in nature. Descriptive studies describe an audience's characteristics or behaviours. The goal of descriptive research is to explain, describe, or verify a number of research hypothesis or objectives. Observation, case study, and survey are the three basic methodologies used in descriptive research. Descriptive studies are designed to discover "what is," hence survey methods are usually employed to gather descriptive data (Schindler & Cooper, 2104). Descriptive research is distinct in that it enables a large number of variables to be used in the study. This method can also be used to describe the relationship between various variables of a customer's behavioural intention. As a result, the descriptive method is useful in examining the behaviours of online food service users. As a result, the study used a descriptive approach to investigate consumers' behavioural intentions towards online food services.

2.4 Framework for the Sampling Design Process

The purpose of marketing research is to collect information on population characteristics or to estimate population parameters using a representative sample from a population. The study's sampling design procedure includes several steps for selecting a representative sample from the population (Malhotra, 2010). The following steps make up the sampling design procedure employed in the descriptive section of the study:

Identifying the Ideal Population

The target population can be defined in terms of elements, sampling units, extent, and duration by translating the research topic into explicit statements indicating who should and should not be included in the sample (Malhotra, 2010). The study's target population is Delhi-NCR consumers who use online food services. The object about or from which information is needed is referred to as the element. Elements are male or female customers who have been frequent users of online food services for at least six months and reside in urban Delhi-NCR. Those who had placed at least three orders for online meal delivery services in the preceding six months were considered frequent users for the purposes of our study. We felt that participants

would be in a good position to share their experiences with this format of purchase given the level of use. In order to ascertain if respondents had placed at least three online meal orders from platforms within the six months preceding to the study, a screening question was included to the questionnaire. Respondents who did not order food at least 3 times within the last 6 months were excluded.

Area of Study

The present study was focused on online food service users in Delhi-NCR. Specifically, the study was based on only urban areas in Delhi-NCR. The sample data for the study were collected from the population of Delhi-NCR, including Delhi, Noida, Sonipat, Gurugram, and Faridabad. The reasons for choosing Delhi-NCR as a research location were based on various data, such as the fact that NCR, at 20%, has the second-greatest number of customers of online food services after Bangalore (32%) (Televisory, 2018; Renub Research, 2022).

Table 3.1 lists of the cities that were investigated for the study

S. No.	Name of the city	Profile
1.	**DELHI**	The city of Delhi, which is in northern India, has a population of 1.68 crore (16,787,941), with 8,987,326 men and 7,800,615 women (Census, 2011).The projected population for 2023 is 32,941,000(*Delhi, India Metro Area Population 1950-2023 / MacroTrends*, 2023). Being the capital of India, it benefits from flourishing trade and commerce as well as excellent employment opportunities, drawing people from all over the nation and reflecting the distinctive features of various regions while also admirably displaying the wealth and diversity of India. The highest per capita income among all states, according to the Delhi Economic Survey conducted in 2023, was INR 4,44,768 in Delhi (*Higher than national average, city's per capita income up by 14.18%*, 2023).

2.	**GURUGRAM**	The Indian city of Gurgaon, officially referred to as Gurugram, is located in the Indian state of Haryana and is a component of the country's National Capital Region. It is about 10 kilometres from Delhi's Indira Gandhi International Airport and 32 kilometres southwest of New Delhi. With a total area of 738.8 square kilometres, it is the southernmost district in Haryana. About 250, or 50% of the Fortune 500 corporations, are present in Gurugram, which is also referred to as Millennium City. Gurugram had 876,824 residents as of the 2011 Census, and 1,209,000 are expected by 2023 (Census, 2011). Gurugram, which has seen rapid urbanisation, has developed into a significant financial and industrial centre with India's third-highest per capita income (Hindustan Times, 2020).
3.	**NOIDA**	The city of New Okhla Industrial Development Authority, often known as NOIDA, is located in the state of Uttar Pradesh in northern India. According to the 2011 Census, with a population of 642,381 people, including 352,577 men and 289,804 women, and an estimated population of 877,000 in 2023, it is an essential component of the NCR. It is a well-designed, interconnected metropolis, renowned for its cutting-edge, first-rate infrastructure and modern way of life. Its proximity to the national capital, New Delhi—14 km away—has made it a popular choice for both business and residential uses. Noida's annual per capita income is 6.71 lakh per annum (Times of India, 2020).
4.	**FARIDABAD**	In the Faridabad district of the northern Indian state of Haryana, Faridabad is the state's oldest, biggest, and most populated city. Being the most populated city, it had a population of 1,404,653 people, of which 750,446 were male and 654,207 were female, with a projected population of 2,410,000 by 2023(Census, 2011). It is a significant industrial hub that is located 34 kilometres from New Delhi in the National Capital Region, which borders the Indian capital. Given that Faridabad and Gurgaon account for 50% of Haryana's income tax revenue, Faridabad is also a significant

		industrial centre for the state. Tractors, motorbikes, switch gears, refrigerators, shoes, and tyres are among the items that make up the city's main industries, and it is well known for its henna production in the field of agriculture.
5.	**SONIPAT**	Sonipat, commonly known as Sonepat, is a town and municipal corporation in the Indian state of Haryana. It belongs to the National Capital Region and is around 20 kilometres from Delhi. Sonepat district has a total area of 2,260 square kilometres and a population of 1,450,001, of which 781,299 were men and 668,702 were women. The population is expected to reach 1,630,000 by the year 2023. With the introduction of Atlas Cycle, the city's industrial boom began in the 1950s. Since that time, the area has seen the establishment of several small and large enterprises. It contains four industrial areas: Sonipat, Kundli, Rai, and Bari, all of which are home to a large number of small and medium-sized businesses.

Source: Census 2011 India, GOI.

Sampling Technique and Sample Size

The purposive sampling technique was used for selecting the samples from the study population. This was the most prevalent sampling approach, often known as purposeful sampling. To answer the research question, the researcher actively selects the most productive sample (Byrne, 2001).

(Tull & Hawkins, 1993) proposed that the statistical method chosen to measure the model's defined connections should be taken into consideration when determining the sample size for a research study. In this research investigation, structural equation modelling was the statistical method employed. The rule of ten was used in SEM to calculate sample size. This rule stipulates that each question on the used questionnaire must have at least 10 instances (Garson, 2008; Kunce et al., 1975; Nunnally, 1978; Velicer & Fava, 1998). A minimum sample size of

420 were needed for the current investigation because the final questionnaire had a total of 42 measurement items.

The total number of correctly completed and returned questionnaires were referred to as the chosen sample size. There has been a total of 750 consumers included in the sample. The resulting sample size of 750 met the criteria for critical size and the rule of 10 that were previously mentioned

Table 3.2 Sample Distribution

S.No.	City	Respondents	Break-up
1.	DELHI	150	North Campus of Delhi University, Kamla Nagar
			City center Rohini
			Connaught place
			Laxmi Nagar (New India assurance company LTD)
			Hindu College (NCT North campus Delhi Univ.)
			SAKET (HDFC Bank)
			South Delhi (Okhla Industrial Phase 1 Wipro)
			DAIKIN Ac (Okhla Industrial Phase 3)
			Lajpat Nagar
			Shahdara
			DLF Sarojini Nagar,
			South west Delhi -Dwarka (VEGAS MALL)
			M2K Multiplex, Pitampura
			D-Mall, Netaji Subhash Place
			Talkatora , North East Delhi ,(Talkatora stadium, garden)
2.	GURUGRAM	150	MGF Mega city Mall (DLF PHASE 1)
			BIMT (GURUGRAM) Brij Mohan Institute of Mgt &Tech
			Cyber Hub, DLF Cyber City
			DLF Cyber City (PVR, BAIN & COMPANY India Pvt Ltd (Management

			Consultancy), Bpo services India Pvt ltd (Bpo Kpo)
			Sahara Mall
3.	**NOIDA**	**150**	GL Bajaj institute of mgmt. & research, Greater Noida
			DLF Mall of India
			TGIP Mall
4.	**FARIDABAD**	**150**	IMT Industrial Area
			YMCA, JC BOSE UNIV.
			Crown Interiorz Mall
5.	**SONEPAT**	**150**	Eminent City Mall
			OP Jindal Global UNIV.
			Rodeo drive mall
Total		**750**	

Sampling Process Execution

The many steps involved in the sampling design process with respect to target population, sampling unit, sampling technique, and sample size are used to execute the sampling process.

2.5 METHODS FOR COLLECTING DATA

Both primary and secondary sources were used to gather the data. The primary data approach was used because the study was more of an investigation of the consumers' present behaviour towards online food services in Delhi-NCR, and data directly from the consumers was required to analyse the behaviour. Secondary data, such as literature reviews, were needed to gain an initial understanding and develop the conceptual framework. Regarding the processes of problem formulation, literature review, conceptual development, method development, and dialogue, secondary data such as journal articles, conference publications, white papers, and newspaper mail were employed.

2.6 SCALE AND MEASUREMENT

A five-point Likert scale, that ranges from strongly disagree (1) to strongly agree (5), was used to evaluate the research tool. All of the items were created using literature as a source, with small changes to reflect the content-specific factors of online food services. The construction measures are presented in the next section, along with operational definitions.

On the basis of the preceding chapter's review of the relevant literature, research gaps in the chosen field of study were identified. Performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, habit, online promotion, personal innovativeness, and traceability all influenced behavioural intentions and were used as direct antecedents of online food services. The model was a collection of attributes that determine the actual usage of online food services. Additionally, the mediating variable, perceived health risk, was used to examine the effects of perceived health risk on actual use of online food services. The sources from which the items in the questionnaire were adapted and utilised are listed below.

The items in the inventory were adapted from the domain-specific UTAUT2 scale created and validated by (Venkatesh et al., 2003, 2012) to evaluate customer behavioural intention towards online food services.

First construct Performance expectation refers to (Venkatesh et al., 2003) the degree to which a person belief that employing the system will help him or her achieve improvement in work performance, according to performance expectation. Thus, Venkatesh established a concept to evaluate performance expectations, and four items were used to measure the construct.

The degree to which a person expects utilising a system to be effortless is known as their effort expectation. Food ordering and delivery apps based on phone applications are known as online food services. The simplicity of use of such apps will determine their popularity. As indicated by (Venkatesh et al., 2003)., four factors were used to measure the effort expectation of online food services.

Social influence refers to the extent to which a person thinks influential people think they should use the new system. To measure this construct, three items were used, as suggested by (Venkatesh et al., 2003).

Facilitating condition refers to the extent to which a person believes that the system's technological and organisational infrastructure is in place to make use of it easier. Three items were utilised to measure this construct, as recommended by (Venkatesh et al., 2003).

Hedonic motivation is referring as the desire to perform something because of internal enjoyment. Three items were used to measure this construct, as suggested by (Venkatesh et al., 2012).

Price value is the term used to describe how consumers weigh the monetary costs of using online meal services against the perceived benefits of apps. Three items were used to measure this construct, as given by (Venkatesh et al., 2012).

The term habit refers as degree to which consumers have learned to do technology or technology product behaviours automatically is known as habit. Four items were used to measure this construct, as suggested by (Venkatesh et al., 2012).

Online promotion entails the use of the Internet to advertise a company and create awareness about its new plans and offers. The evaluation, analysis, explanation, and promotion processes are regularly used in online promotion, which helps to develop a better brand-customer relationship, as well as successfully identify consumer attitudes and attract attention (Negoiță et al., 2019). Three items were used to measure this construct given by (Kapoor & Vij, 2018; Prasetyo et al., 2021)

Personal innovativeness is defined as individual's desire to try out any new information technology. Three items were utilised to measure this construct, as suggested by (Dhiman & Dogra, 2019)

The ability to monitor the delivery's position and progress during the shipping process is referred to as traceability (Cheng et al., 2021). Three items were utilised to measure this construct, as suggested by (Cao et al., 2018)

A person's willingness to engage in a particular activity is referred to as their behavioural intention. It is expected to be the primary cause of the actions (Ajzen, 2002). The scale items given by (Venkatesh et al., 2012) were used to assess behaviour intention in this study.

Actual use behaviour is defined as the physical and mental actions involved in incorporating newly acquired knowledge into a person's existing knowledge base (Venkatesh et al., 2003). The scale was used to assess user behaviour in terms of adoption of technology, as given by (Venkatesh et al., 2003). As a result, the scale was adopted and changed in accordance with the current research.

Perceived health risk was defined as the subjective possibility of a negative health event occurring for a person or group of people over a particular time period (Menon et al., 2006). The scale was adopted to measure the perception of health risk towards the usage of online food services, as suggested by (Mehrolia, Alagarsamy and Solaikutty, 2021; Prasetyo *et al.*, 2021). The following sections make up the whole questionnaire:

Part A: The first section of the questionnaire had nine dichotomous and multiple-choice questions about the demographic profile and usage profile of online food service consumers.

Part B: The second question in this section consists of 42 items based on a five-point Likert scale from strongly disagree to strongly agree to assess customers' intentions to use online food services in Delhi-NCR and their perceptions of the health risks associated with doing so.

2.7 HYPOTHESIS OF STUDY

H1: Performance expectancy has a significant impact on behavioural intention for online food services**.**

H2: Effort expectancy has a significant impact on behavioural intention for online food services.

H3: Social Influence has a significant impact on behavioural intention for online food services.

H4: Facilitating Conditions has a significant impact on behavioural intention for online food services.

H5: Hedonic motivation has a significant impact on behavioural intention for online food services.

H6: Price value has a significant impact on behavioural intention for online food services.

H7: Habit value has a significant impact on behavioural intention for online food services.

H8: Online promotion has a significant impact on behavioural intention for online food services.

H9: Personal innovativeness has a significant impact on behavioural intention for online food services

H10: Traceability has a significant impact on behavioural intention for online food services

H11: Behavioural intention has a significant impact on actual use behaviour for online food services.

H12: Perceived health risk mediates the relationship between behavioural intention and actual use behaviour for online food services.

H13 Gender moderate the relationship between online promotion and behavioural intention for online food services.

H14 Gender moderate the relationship between personal innovativeness and behavioural intention for online food services.

H15 Gender moderate the relationship between traceability and behavioural intention for online food services.

H16 Age moderate the relationship between online promotion and behavioural intention for online food services.

H17 Age moderate the relationship between personal innovativeness and behavioural intention for online food services.

H18 Age moderate the relationship between traceability and behavioural intention for online food services.

2.8 PILOT STUDY

The next phase in the research process was to assess the validity of the questionnaire. In order to increase the questionnaire's reliability, a pilot study was carried out. 80 respondents were used in the pilot study, which was used to understand and clarify any discrepancies in the questionnaire. The pilot study can be carried out using at least 10% of the sample size(Baker, 1994) .

2.9 CONTENT VALIDITY

The evaluation of a multi-item scale used in research is required to assure accuracy and usefulness with the purpose of eliminating measurement error, which is defined as the difference between the information sought by the researcher and the information generated by the measurement procedure. As a result, construct validity and reliability have been examined to assure the instrument's measurement accuracy. The instrument's content or face validity had been verified by three academicians to see if the scale items appropriately cover the complete domain of construct being measured, and three industry experts were given a copy of the questionnaire for the current study before it was sent to the final respondents, and they provided feedback on its substance. The experts' suggestions for the questionnaire's improvement were taken into consideration.

Following were the experts who had conducted content validation and gave valuable suggestions:

- Prof. Dr. Dheeraj Nim- Oriental University, Indore
- Dr. Shampy Kamboj- NIT, Hamirpur
- Dr. Sarika Makol- Sagar Institute of Research & Technology (Bhopal)
- Yogita Sharma, Marketing Executive (Zomato)
- Jang Sher Singh, Sr Manager (McDonald's)
- Nikita Saraf- Marketing TL (Swiggy)

2.10 RELIABILITY TESTING

Prior to starting the data collection, the instrument's validity was assessed by running a sample of 80 respondents through the Cronbach alpha test. SPSS 23.0 software was used to determine Cronbach alpha. Reliability testing had been done to see if the scale gives consistent results in repeated measures. Internal consistency reliability was calculated by averaging all possible split-half coefficients coming from different scale item using statistical software and calculating coefficient alpha or Cronbach's alpha. For most situations, the rule of thumb is >0.9 (great), >0.8 (good), >0.7 (acceptable), >0.6 (questionable), >0.5 (bad), and 0.5 is undesirable for examining the instrument's reliability. Cronbach's alpha as a measure of internal consistency for several constructs employed in the instrument was determined using the statistical software SPSS. Because Cronbach's alpha scores for all of the constructs vary from

0.9 to 0.6, the questionnaire's construct reliability had been tested and can be used for further study. As a result, all types of validity and reliability had been carefully collected to ensure that measuring scales are accurate.

Table 3.3 Cronbach's alpha Measures

S No	Constructs	No. of Items	Cronbach's Alpha
1	Performance Expectancy	4	.821
2	Effort Expectancy	4	.874
3	Facilitating Conditions	3	.768
4	Social Influence	3	.793
5	Hedonic Motivation	3	.845
6	Price Value	3	.804
7	Habit	4	.904
8	Online Promotions	3	.813
9	Personal Innovativeness	3	.835
10	Traceability	3	.776
11	Behaviour Intention	3	.786
12	Actual use behaviour	3	.831
13	Perceived Health Risk	3	.836

3.11 DATA ANALYSIS TECHNIQUES

Descriptive analysis: With the use of specific descriptors like central tendency (mean, percentage), dispersion (standard deviation), and tabular representation, the descriptive analysis has been utilised to summarise the data. Frequency tables are used to display the customer demographic information from Part-A of the questionnaire as well as the way in which online meal delivery services were used.

Inferential Analysis: Inferential analysis was employed in this study to test a specific hypothesis in order to generalise the findings for the population being studied.

The initial goal was to examine how decision makers' behavioural intentions for online meal services are influenced by the UTAUT2 constructs of performance expectation (PE), effort expectation (EE), social influence (SI), facilitating conditions (FC), hedonic motivation (HM), price value (PV), and habit (HB). This will be carried out to ascertain how these elements impact the behavioural intentions of consumers. SEM, Analysis of moment structure (AMOS) was used and multiple regression analysis was used to confirm the findings. Multiple regression is a statistical method that is used to improve a self-weighting estimating equation that estimates values for the dependent variable from the values of independent variables, tests and explains a causal theory, and controls elements to better evaluate the role of other variables.

The second objective was to analyse the impact of online promotion (OP), personal innovativeness (PI), and traceability (TR) on decision-makers' behavioural intentions for online food service in Delhi-NCR. The factors impacting behavioural intention and actual use of online food services were investigated using structural equation modelling, analysis of moment structure (AMOS), and verifying the results with multiple regression analysis. To predict the values of dependent variables, regression equations was be utilised. The regression coefficient is a measure of the strength of the association between a dependent variable and an independent variable.

The third objective was examining the moderating role of demographics (gender and age) in the relationships between online promotion (OP), personal innovativeness (PI), traceability (TR), and behavioural intention. This was accomplished by multi-group analysis using SEM

and one-way ANOVA. The moderators—gender and age—were used to test moderation analysis between exogenous and endogenous components in this study.

The fourth objective looked at the mediating impact of perceived health risks on behavioural intention and consumers' decisions to use online food services. This was done through the bootstrapping method in AMOS. The mediator, perceived health risk, was used to test mediation analysis between exogenous and endogenous components in this study.

CHAPTER 4

DATA ANALYSIS & INTERPRETATION

Based on an analysis of the data, this portion offers the findings and their interpretation. Six sections make up this chapter. Frequency and percentages were used in the first section to illustrate the demographic profile of the respondents, In the subsequent section, however, the mean and standard deviation are used to illustrate the descriptive analysis of the data. In section four, the structural equation model was utilised to do hypothesis testing, whereas in section three, the data normalcy evaluation was provided. An analysis of moment structures (AMOS) is used to examine model fit, route analysis, and the direct and indirect impacts of constructs on each other.Creating a measurement model, sometimes referred to as confirmatory factor analysis, is the first stage in utilising SEM. The findings of a multi-group analysis utilising a structural equation model and a one-way ANOVA to understand the moderating effects of age and gender are presented in the fifth section of the study.The mediation analysis of perceived health risks between behavioural intentions and actual use behaviour is the subject of the sixth section of the chapter. Version 23 of the Statistical Package for Social Science (SPSS) and (AMOS) were used to analyse the data.

4.1 Demographic Profile of the Survey Participants

Gender, age, marital status, educational attainment, and employment status were among the demographic factors taken into account during data collection. The following table 4.1 demostrates the findings for the demographic variables:

Table 4.1 Demographic profile of survey participants

SR. NO.	Demographic Profile		Frequency	%
1	Gender	Male	352	46.9
		Female	398	53.1
2	Age	18-25	301	40.1
		26-35	260	34.7

		36-45	114	15.2
		46-55	54	7.2
		Above 55	21	2.8
3	Marital Status	Married	335	44.7
		Single	415	55.3
4	Education	Up to HSC	140	18.7
		Graduate	332	44.3
		Post Graduate	273	36.4
		Others	5	.7
5	Occupation	Student	285	38
		Home maker	83	11.1
		Self- employed	168	22.4
		Salaried	214	28.5

Source: Survey

4.1.1 Interpretation of the Survey's Demographic Profile

1. The study involved both males and females. 53.1% of people were female and 46.9% of men. Women now work and have less time to prepare meals for themselves, they make up a large portion of the population, whereas male still played a great role in both offline and online models as food consumers.

2. The survey included participants aged 18 and over who are graduating students as well as senior residents of the city. Users between the ages of 18 - 25 make up 40.1% of all

users, followed by those between 26 - 35 (34.7%) and those between 36 - 45 (15.2%). The research demonstrates that college students actively use online food delivery services to place food orders. Young people therefore have a significant role in online food ordering decisions.

3. The survey took both single and married people into account. In the study, 55.3% of participants were single, and 44.7% were married. While analysing the demographic profile of the respondents, their marital status was taken into consideration. Due to changes in the customers' lifestyles, responsibilities, and obligations after marriage, there is a noticeable change in their choices and preferences.

4. Almost 38% of survey participants who used an online meal delivery service were students, according to their occupation status. Likewise, 28.5% of people worked for a company, while 22.4% were self-employed. Only 11.1% of meal delivery applications were used by both men and women who were not worked. There were plenty of housewives who didn't use food apps but still had an impact on people's purchasing decisions, either directly or indirectly. It was fascinating to see that mostly housewives and senior citizens in their retirement years were the non-working individuals who didn't use the app for deliveryservice.

4.2 ONLINE FOOD SERVICES USAGE PROFILE OF RESPONDENTS

4.2.1 Most preferred app

Figure: 4.1 Most preferred app
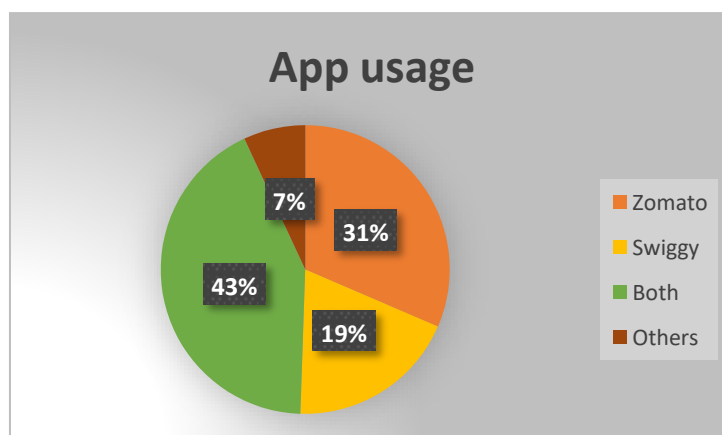
According to the survey, 31% of respondents favour Zomato, while 19% prefer Swiggy. Swiggy and Zomato are both preferred by 43% of respondents. According to the survey participants, Zomato is their favourite app. According to 31% of respondents, Zomato is one of the most well-liked and useful apps that offers all the advantages of Swiggy or even other apps. The data makes it very evident that Zomato has advantages over Swiggy, and as a result, customers choose it with greater frequency.

4.2.2 Duration of Usage of online food services

Table 4.2 Duration of usage of online food services

Customers' experiences with food apps and the length of time they spend using them vary.

Years	Frequency	Percent
6 – 12 months	114	15.2
1-2 year	211	28.1
2-3 year	280	37.3
Above 3 years	145	19.3

Source: Survey

Respondents who had spent over six months using an app for online meal ordering with minimum three orders placed in previous 6 months were identified by the survey. The quality of the replies to the research would improve if users less than three orders placed in previous six months were removed. The study used the presumption that anyone who did not enjoy the app would not have used it for more than six months. In addition, no one who hadn't used the app in the previous six months was included in the research. The responders who had used for more than six months were evaluated for their behaviour from intention to actual use.

Users with 2-3 years of experience made up 37.3% of the responses. Between 1-2 years received the most responses (28.1%), followed by 3 years or more (19.3%). Therefore, there is a range of customers—from six months to above three years —whose behavioural intentions and actual usage can be monitored and who therefore reflect the sentiments of the whole market regarding online food services.

4.2.3 Frequency of online food services taken using food apps

The users have used the food ordering app on a weekly, monthly, and daily basis. This depends on their preferences, requirements, and wants, as well as how connected they are to the delivery platform.

Table 4.3 Frequency of online Food services Taken Using food App

Usage frequency	Frequency	Percent
Once per month	178	23.7
2-3 times per month	118	15.7
Once per week	264	35.2
2-3 times per week	108	14.4
Daily	82	10.9

Source: Survey

In terms of how often they use food delivery apps, 35.2% of respondents say they do so once a week, 23.7% say they use them just once a month, and 15.7% say they do so twice or three times a month. Only 10.9% of respondents said they use a mobile meal delivery app daily.

The consumers had not used the food app on a regular basis. Therefore, customers approached the food app not as a tool for daily life but rather as a tool for certain occasions, with weekends being the most popular.

4.2.4 Average monetary value spent on per order using food app

Table 4.4 Average monetary value spent on per order using food app

Monetary value (Rs)	Frequency	Percent

Less than 100	92	12.3
101-500	383	51.1
501-1000	248	33.1
Above 1000	27	3.6

The average order value reported by most respondents (51.1%) is between Rs. 101 - Rs. 500, with 33.1% of users reporting orders over Rs. 500. It should be noted that many restaurants provide free or reduced delivery for orders over a certain amount. Therefore, users may be persuaded to place an order at a higher cost in order to get benefit of discounts and free shipping. According to a survey on fast food consumption in India in 2021, consumers will spend, on average, Rs 500 to 1,000 per order.

4.3 Descriptive Statistics

In order to make complicated data easier to understand, descriptive statistics refers to the concise quantitative presentation of outcomes. Descriptive statistics can be seen in two different ways. They are measurements of variability and core slope. For the current investigation of variables for every construct, the mean and standard deviations were determined. To thoroughly examine each component, the mean and standard deviation were assessed. In order to gain further insight into each of the unobserved variables, the mean and standard deviation were also separately assessed.

Table 4.5 Performance expectancy descriptive statistics

Item no.	No. of Size	Mean	S.D.
PE1	750	3.787	.9243
PE2	750	3.787	.9358
PE3	750	**3.796**	.9228
PE4	750	3.713	.9982

Total Valid N	750		

The average scores for each statement of performance expectancy are more than 3 but less than 4. It reveals a fair amount of agreement with each of these four propositions. The highest mean statement, PE3, has a mean value of 3.79. According to this research, respondents seem to feel that using online food delivery services allows them to carry through on their meal plans faster than using traditional dine-in restaurants.

Table 4.6 Effort expectancy descriptive statistics

Item no.	No. of Size	Mean	S.D.
EE1	750	3.727	1.0431
EE2	750	3.725	.9989
EE3	750	3.780	.9798
EE4	750	3.704	1.0220
Total Valid N	750		

All of the statements of effort expectancy have average scores that are greater than 3 but less than 4. It reveals a fair amount of agreement with each of these four propositions. The greatest mean value, 3.78, belongs to the statement EE3. This trend and consistency in mean scores are a reflection of people's widespread usage of smart phones in everyday life and, consequently, of their familiarity with using online meal services.

Table 4.7 Facilitating condition descriptive statistics

Item no.	No. of Size	Mean	S.D.
FC1	750	3.644	1.0257
FC2	750	3.755	.9673

Item no.	No. of Size	Mean	S.D.
FC3	750	3.647	1.0082
Total Valid N	750		

All statements in the facilitating condition have average scores that are higher than 3 but lower than 4. Regarding all three of these claims, it demonstrates a modest level of agreement. The most significant mean value is 3.75 for the statement FC2. This development is also directly related to the widespread usage of the Internet and smartphones by the general populace for a variety of daily tasks, including shopping, paying bills, booking trips, etc.

Table 4.8 Social Influence descriptive statistics

Item no.	No. of Size	Mean	S.D.
SI1	750	3.684	.9940
SI2	750	3.631	1.0011
SI3	750	3.672	.9676
Total Valid N	750		

All of the statements about social influence have average ratings that are above 3 but below 4. It demonstrates a fair amount of agreement with all three of these claims. The greatest mean value, 3.68, is assigned to the statement SI1.

Table 4.9 Hedonic motivation descriptive statistics

Item no.	No. of Size	Mean	S.D.
HM1	750	3.554	1.0044
HM2	750	3.551	.9977
HM3	750	3.531	1.0327
Total Valid N	750		

The average hedonic motivation score for each statement is higher than 3 but lower than 4. It reveals a fair amount of agreement with each of these three propositions. The mean value of 3.554 for the statement HM1 is the highest. This pattern and stability in mean scores are a reflection of people's extensive use of smartphones in daily life, and as a result, the entertaining aspects of online food services draw consumers through more enjoyable interactions.

Table 4.10 Price value descriptive statistics

Item no.	No. of Size	Mean	S.D.
PV1	750	3.637	1.0395
PV2	750	3.679	1.0306
PV3	750	3.591	1.0279
Total	750		

The average scores for each statement of price value are greater than 3 but less than 4. It reveals a fair amount of agreement with each of these three propositions. The greatest mean value, 3.67, belongs to the statement PV2. Having particular discounts or specials may also draw in price-sensitive customers, as they are likely to pick the channel that offers them the most value for their money, according to this pattern and consistency in mean scores.

Table 4.11 Habit descriptive statistics

Item no.	No. of Size	Mean	S.D.
HB1	750	3.592	1.0107
HB2	750	3.493	1.1176
HB3	750	3.581	1.0428
HB4	750	**3.621**	1.0129
Total	750		

The average scores for each statement of habit are greater than 3 but less than 4. It reveals a fair amount of agreement with all four of these propositions. The statement HB4 has the greatest mean value (3.62). The respondents seem to think that utilising food services online is becoming a part of their lives and is natural to them.

Table 4.12 Online promotion descriptive statistics

Item no.	No. of Size	Mean	S.D.
OP1	750	3.805	.9991
OP2	750	3.779	1.0394
OP3	750	3.779	.9948
Total Valid N	750		

All online promotion statements have average ratings that are above 3 but below 4. It reveals a fair amount of agreement with each of these three propositions. The greatest mean value, 3.80, belongs to the statement OP1. The consideration of online promotions as a crucial element in consumer towards online food purchases.

Table 4.13 Personal Innovativeness descriptive statistics

Item no.	No. of Size	Mean	S.D.
PI1	750	3.793	.9660
PI2	750	3.825	.9245
PI3	750	3.916	.9125
Total	750		

All of the personal innovativeness claims have average scores that are greater than 3. It demonstrates a strong degree of agreement with each of these three propositions. With a mean of 3.91, the statement PI3 has the highest average. According to the statistics, users liked the innovative features of the food delivery services that they had used.

Table 4.14 Traceability descriptive statistics

Item no.	No. of Size	Mean	S.D.
TR1	750	3.708	1.0609
TR2	750	3.813	1.0652
TR3	750	3.693	1.1104
Total	750		

All of the statements of traceability have average scores that are higher than 3. It demonstrates a strong level of agreement with all three of these claims. With a mean of 3.81, the statement TR2 has the highest mean. Since technology makes it possible to follow orders in real time, traceability is considered a crucial component of online food purchases.

Table 4.15 Behavioural Intention descriptive statistics

Item no.	No. of Size	Mean	S.D.
BI1	750	3.932	1.0004
BI2	750	3.809	1.0739
BI3	750	3.799	1.0057
Total Valid N	750		

The mean values obtained from each behavioural intention assertion are higher than 3 or very near. It demonstrates a strong degree of agreement with all three claims. The assertion has the highest mean score, 3.91. This research reveals that pleased consumers had favourable

behavioural intentions to return, had favourable word of mouth, and intended to utilise online food services in the future as well.

Table 4.16 Perceived health risk descriptive statistics

Item no.	No. of Size	Mean	S.D.
PR1	750	3.925	1.0098
PR2	750	3.929	1.0161
PR3	750	4.012	1.0119
Total Valid N	750		

All of the statements of perceived health risk have mean values that are higher than 4 or very near to 4. It demonstrates strong support for each of the three propositions. The highest mean value, 4.01, belongs to the statement PR3. Given their concern about pandemics, customers place a high value on safety when ordering food online.

Table 4.17 Actual use behaviour descriptive statistics

Item no.	No. of Size	Mean	S.D.
AB1	750	3.833	.9751
AB2	750	3.789	1.0011
AB3	750	3.825	.9954
Total Valid N	750		

All statements about actual usage behaviours have mean scores that are higher than 3 but lower than 4. All three of these claims are supported by a fair amount of agreement. The most significant mean value is 3.83 for the statement AB1. According to this information, consumers who use online meal delivery services are inclined to keep using them.

4.4 Analysis of normality

It is necessary to confirm the results' normality before performing a multivariate analysis. It describes how closely a collection of data complies with a normal distribution. Additionally, one of the key presumptions of parametric research is that the data are normal. The two most widely used ways for determining if data is normal are numerical and graphical approaches. A box plot, histogram, P-P plot are a few examples of graphical techniques used to verify if data is normal. However, these methods require knowledge and expertise with complicated data sets for studying normalcy. Histograms, skewness, and kurtosis are more reliable methods to assess the normalacy of data with high sample sizes, i.e., N> 300. Skewness and kurtosis test results were assessed in the current investigation to confirm data normalcy. Skewness is the propensity for one direction's mean deviations to be larger than the other. Kurtosis is a mathematical term that describes how flat or peaks are in the region around a frequency distribution curve's mode. The scores of skewness and kurtosis must both fall within the permissible range of -2 and +2 in order to be considered normal (George & Mallery, 2010).

Table 4.18 Mean, SD, Skewness and Kurtosis

Constructs	N	Mean	Std. Deviation	Skewness	Kurtosis
PE	750	3.77	.028	-1.368	1.72
EE	750	3.71	.027	-1.019	1.56
FC	750	3.68	.026	-.759	.701
SI	750	3.66	.031	-.798	.513
HM	750	3.54	.028	-.628	.414
PV	750	3.63	.028	-.751	.693
HB	750	3.57	.032	-.763	.246
OP	750	3.78	.032	-.762	.500
PI	750	3.84	.027	-.883	1.38

TR	750	3.74	.030	-.725	.449
BI	750	3.84	.032	-1.153	1.038
PR	750	3.93	.032	-1.099	.983
AB	750	3.81	.031	-1.262	1.49

All of the variables' values for skewness and kurtosis are found to be within the permitted range. It was discovered that each construct had normal values between -2 and +2. So, executing the further analysis was not problematic.

4.5 CFA

Confirmatory factor analysis focuses on how much the underlying factors are responsible for producing the observable variables. A confirmatory test of the measuring theory is offered by the CFA. The logical and methodical way that measured variables represent the concepts found in a theoretical model is described by a measurement theory (Hair et al., 2010b). The data fit to a proposed model is evaluated using the estimation of the measurement model. The relationships among latent and observable factors are of interest to the measurement model. The validity of the observable variables that were used to assess the latent components can be tested using the measurement model. Specifically, within the context of structural equation modelling, link between observable and latent variables is the main emphasis of CFA (SEM). CFA was performed using IBM AMOS 23 software. The fit of a model with a data set was often assessed using the following fit indices, which proved the validity of the model.

The goodness-of-fit index, is among the most often used indicators of how well a model fits its data. GFI is a measurement of how much of the sample data's variance and covariance the proposed model can explain collectively (Byrne, 2013). A good match is defined as a number nearing 1 in the index range of 0 to 1. The sample size may have an excessive impact on GFI. An expansion of the Goodness-of-Fit Index, the Adjusted Goodness-of-Fit Index accounts for the number of degrees of freedom in the given model. The value can also be between 0 and 1, with values near unity considered to be a good match.

The variance-covariance grid of the test data is fitted to the variance-covariance grid of the model that's suggested to get the mean residual value, or RMR. The standardised RMR (SRMR), which ranges from 0 to 1, is the average value of all standardised residuals. The value must be low to be deemed a well-fitting model, normally below than 0.05.

Fit Index of Bentler and Bonett NFI or TLI: This index provides a reliable indication of the questionnaire's convergent validity. A scale's good convergent validity is shown by TLI scores of 0.9 or above.

The Comparative Fit Index (CFI), which employs a Chi-square distribution, measures the overall goodness of fit. A perfect fit is indicated with a value of 1, which is in the range of 0 to 1. It's well known that values above 0.90 imply a good match.

The Root Mean Square Error of Approximation (RMSEA) is used to account for the approximation error of the population. A satisfactory match was shown by values lower than 0.05.

4.5.1 Validation Tests

The degree to which changes in observed scale scores relate to actual differences between objects on the feature under examination as opposed to systematic or random error is known as a scale's validity. Validity is the degree to which a measuring tool looks at what it is intended to measure. (Carmines & 'Zeller, 1979).

Content Validity

The subjective but methodical assessment of how well the scale's content corresponds with the current measurement goal is known as content validity. The degree to which an inventory adequately represents the conceptual area that it is intended to cover is referred to as its content validity (Hair et al., 2010b). The supporting evidence for content validity is illogical and subjective rather than statistical. This is known as face validity and may be proved by having subject- matter experts assess the questionnaire. Academicians and subject-matter specialists reviewed the questionnaire, and some of the satements were reworded to improve face validity.

Construct validity

The construct or quality the scale is measuring is addressed by construct validity. It is how closely a group of measured items really corresponds to the theoretical latent construct that group of things is intended to test (Hair et al., 2010b). Convergent and discriminant validity are both parts of construct validity.

Convergent validity

The degree of fair agreement between the scale and other measures of the same construct is known as convergent validity. It evaluates the degree of correlation between two measures of the same topic. Factor loadings, average variance extracted (AVE), and construct reliability are the three metrics used to gauge convergent validity. The term AVE refers to the average variation in variables that are indicators that the concept may account for. The standardised factor loadings must be at least 0.5 and ideally 0.7 in order to have acceptable convergent validity.

Table 4.19 Measurement model Validity and Reliability

Factors	Statements	Std. Loadings	CR	α	AVE
PE	PE1	.752	.847	.821	.580
	PE2	.782			
	PE3	.778			
	PE4	.733			
EE	EE1	.812	.875	.874	.637
	EE2	.726			
	EE3	.816			
	EE4	.835			
FC	FC1	.762	.795	.768	.564
	FC2	.749			
	FC3	.742			
SI	SI1	.781	.838	.793	.633
	SI2	.798			
	SI3	.808			

HM	HM1	.856	.860	.845	.671
	HM2	.798			
	HM3	.803			
PV	PV1	.713	.789	.804	.555
	PV2	.707			
	PV3	.811			
HB	HB1	.831	.872	.904	.631
	HB2	.807			
	HB3	.789			
	HB4	.749			
OP	OP1	.808	.839	.813	.634
	OP2	.779			
	OP3	.802			
PI	PI1	.874	.854	.835	.663
	PI2	.863			
	PI3	.692			
TR	TR1	.802	.804	.776	.579
	TR2	.804			
	TR3	.668			
BI	BI1	.758	.824	.786	.610
	BI2	.778			
	BI3	.806			
AB	AB1	.781	.836	.831	.629
	AB2	.779			
	AB3	.819			
PR	PR1	.805	.850	.836	.653
	PR2	.799			
	PR3	.821			

The table presents the findings for validity, standardised loads, Cronbach's alpha, and average variance extracted for each element of online food services. When the Cronbachalpha value is greater than .7, it is asumed that the data is reliable. All of the constructs of online food services were determined to have fair internal consistency in the current study. Cronbach's alpha score for perceived health risk is .836, while it is .821 for performance expectancy, .875 for effort expectancy, .768 for facilitating conditions, .793 for social influence, .845 for hedonic motivation, .804 for price value, .904 for habit, .813 for online promotions, .835 for personal innovativeness, .776 for traceability, .786 for behavioural intention, and .831 for actual behaviour.

According to the CFA results, the values of the standardised factor loading for each statement of the latent variable in the model are higher than 0.7, which is a sign of good composite reliability. When the standardised factor loading exceeds 0.70, convergent validity is taken into consideration. With the exception of the PI3 and TR3 statements, all of the dimension's elements, however, have high factor loadings near 1.

For each latent construct in the model, the average variance extracted (AVE) should be calculated, and its value should be more than 0.5 for each latent variable (Fornell & Larcker, 1981). For each latent variable, AVE is determined as the total of the squared standardised factor loads divided by the number of items. The values for CR and AVE are listed in Table 4.6. The tools are deemed to meet convergent validity when all AVE values are determined to be more than 0.5 and CR greater than 0.7.

Discriminant validity

The degree of inconsistency between a measure and the other variables it is meant to distinguish between is known as discriminant validity. In other words, it measures how different two notions with comparable logical bases are (Hair et al., 2010b). To confirm discriminant validity, a sufficient average variance extracted (AVE) analysis must be performed. To determine whether there is a considerably greater association between any two latent constructs, the square root of each AVE value linked to each latent construct is examined.

The AVE comparison is displayed in Table 4.20. The table shows that the co-relation of every other pair of latent variables is smaller than the square root of the AVE (in bold form in the table) of each latent construct. Consequently, the validity of the discriminant has been established.

Table 4.20 Analysis of discriminant validity

	AVE	OP	PE	EE	FC	SI	HM	PV	HB	TR	PR	BI	AB	PI
OP	.634	**0.796**												
PE	.580	0.600	**0.762**											
EE	.637	0.527	0.404	**0.798**										
FC	.564	0.439	0.539	0.641	**0.751**									
SI	.633	0.531	0.472	0.597	0.474	**0.796**								
HM	.671	0.521	0.403	0.369	0.394	0.532	**0.819**							
PV	.555	0.369	0.473	0.461	0.376	0.335	0.505	**0.745**						
HB	.631	0.522	0.678	0.407	0.476	0.463	0.485	0.471	**0.795**					
TR	.663	0.544	0.416	0.588	0.516	0.459	0.231	0.378	0.382	**0.761**				
PR	.579	0.305	0.347	0.509	0.405	0.335	0.272	0.406	0.387	0.333	**0.808**			
BI	.610	0.401	0.429	0.527	0.316	0.485	0.394	0.391	0.299	0.404	0.388	**0.781**		
AB	.629	0.682	0.607	0.524	0.532	0.462	0.446	0.252	0.376	0.581	0.502	0.474	**0.793**	
PI	.653	0.507	0.605	0.535	0.429	0.536	0.435	0.493	0.447	0.403	0.366	0.653	0.621	**0.814**

Abbreviations used*: PE-Performance Expectancy, EE-Effort Expectancy, SI-Social Influence, FC-Facilitating Conditions, HM-Hedonic Motivation, PV-Price Value, HB-Habit, OP-Online Promotion, PI-Personal Innovativeness, TR-Traceability, BI-Behavioural Intention, AB-Actual Use Behaviour, PR-Perceived Health Risk*

Each variance extracted (AVE) estimate is higher than the matching squared construct correlation estimate (SIC) in the table above. This indicates that the indicators are more similar to the construct to which they are linked than they are to other constructs. Thus, the constructs of the confirmatory factor analysis model exhibit discriminant validity.

4.5.2 Measurement Model Fitness

Testing the initial model fit involved confirmatory factor analysis. The fit indices normed chi-square, comparative fit index, normed fit index, and root mean square error of approximation (RMSEA) were adopted.

Table 4.21 Indexes of the measurement model's fit

FIT Index	Values	Sources
Chi-square/DF	1.767	< 5.00 (Hair et al. 2006)
Comparative Fit Index (CFI)	.960	> 0.90 (Daire et al. 2008)
Goodness of Fit Index (GFI)	.914	> 0.90 (Hu and Bentler, 1999)
Adjusted Goodness of Fit Index (AGFI)	.901	> 0.90 (Hair et al. 2006)
Normed Fit Index (NFI)	.923	> 0.90 (Hu and Bentler, 1999)
Standardized Root Mean Squared Residual (SRMR)	.0293	< 0.08 (Hair et al. 2006)
Root Mean Square Error of Approximation (RMSEA)	.036	< 0.08 (Hair et al. 2006)

The measurement framework can be considered a good fit model because the fit indices values are close to 1, indicating a good fit.

4.6 STRUCTURAL EQUATION MODEL (SEM)

A multivariate statistical method is structural equation modelling. It combines multiple regression analysis and factor analysis. The main objective of structural equation modelling is to comprehend the causal connection between the structures. Additionally, it assesses the research model. The structural framework, to put it simply, looks into the association between independent and dependent variables. Structural equation modelling is used in two parts, as suggested by Anderson & Gerbing (1988). To determine how closely connected the measured variables are to one another in order to describe the theory, a measurement model with multidimensional constructs was initially evaluated.

4.6.1 The structure equation framework uses the following factors:

I observed endogenous variables (dependent variables).

1. **Behavioural Intention (BI**
2. **Actual Use Behaviour (AB)**

II Observed, Exogenous Variables (Independent Variable)

1. **Performance Expectancy (PE)**
2. **Effort expectancy (EE)**
3. **Facilitating Conditions (FC)**
4. **Social Influence (SI)**
5. **Hedonic Motivation (HM)**
6. **Price Value (PV)**
7. **Habit (HB)**
8. **Online Promotion (OP)**
9. **Personal Innovativeness**
10. **Traceability (TR)**

Figure 4.2: Structural equation model proposed with non-standard values
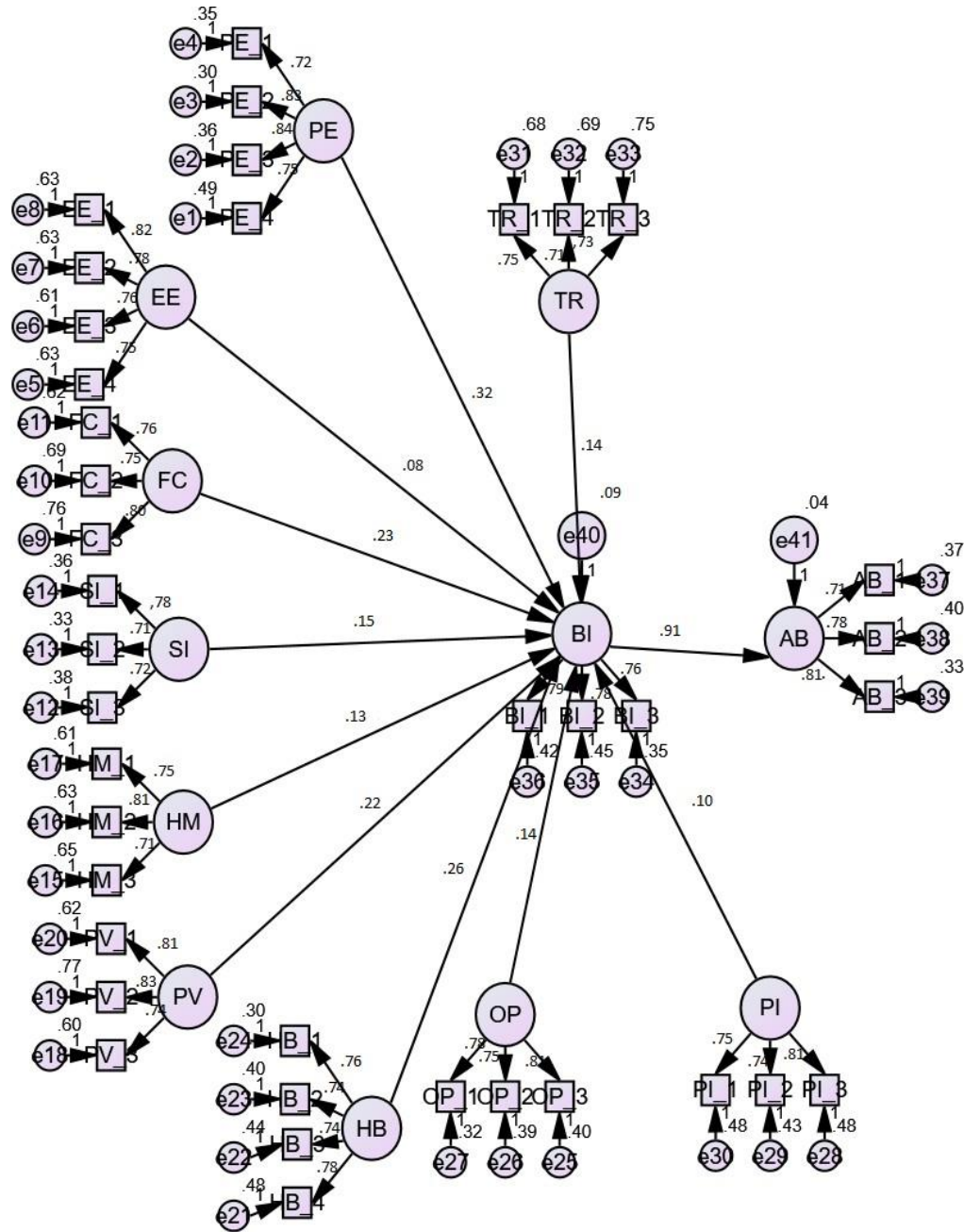
4.6.2 Model fit of the SEM

The Goodness of Fit Index (GFI) number (0.993) in the table above is greater than 0.9, indicating a good fit. Perfect fit is shown by the determined Normed Fit Index (NFI) value of 0.998 and the Comparative Fit Index (CFI) value of 0.999. A good fit is also indicated

by a Root Mean Square Error of Approximation (RMSEA) score of 0.017, which is less than 0.08.

Table 4.22 Summary of the structural equation model's fit

Index metrics	Value	Suggested Value
CMIN	11.014	
CMIN/DF	1.224	≤ 3 (Kline, 1998)
GFI	.993	>0.90 (Hu and Bentler, 1999)
NFI	.998	> 0.90 (Hu and Bentler, 1999)
CFI	.999	>0.90 (Daire Hooper et al.2008)
RMSEA	.017	< 0.08 (Hair et al. 2006)

4.6.3 Path model testing

Regression or path values between the hypothetical components in structural equation modelling was employ to indicate how the constructs are related to one another. Using single- headed arrows, the underlying cause-and-effect relationship is depicted. Paths, directionaleffects, and factor loadings are other terms used to describe regression effects.

Table 4.23 Testing hypothesis and path model

	Unstandardised Coefficient (B)	S.E of B	Standardised Coefficient (Beta)	t value	P value
BI<---PE	.320	.032	.441	10.098	***
BI<---EE	.085	.031	.107	2.736	**.006**
BI<---FC	.226	.028	.226	4.657	*******
BI<---SI	.154	.049	.228	6.073	***
BI<---HM	.131	.025	.168	3.960	***
BI<---PV	.219	.035	.293	6.306	***
BI<---HB	.260	.028	.382	9.364	***
BI<---OP	.138	.025	.209	5.614	***
BI<---PI	.104	.033	.122	3.125	**.002**
BI<---TR	.137	.032	.182	4.286	***
AB<---BI	.907	.070	.923	12.980	***

The aforementioned table indicates that the unstandardized coefficient of performance expectancy on behavioural intention, which holds the other path variables constant, is 0.320, which showsthe partial impact of performance expectancy on behavioural intention. According to the projected positive sign, this impact is favourable, and behavioural intention would rise by

0.320 for every unit increase in performance expectancy. At the 1% significance level, this coefficient value is noticeable.

According to the above table, the unstandardized coeffi. of effort expectation on behavioural intention is 0.085, which, while leaving the other path variables constant, shows the partial impact of effort expectancy on behavioural intention. This influence would be good, and behavioural intentions would increase by.085 for each unit rise in effort

anticipation, based on the projected positive sign; this coefficient figure is substantial at the 5% level.

Holding other path factors constant, the unstandardized coefficient of facilitating conditions on behavioural intention of .226 shows the partial influence of facilitating conditions on behavioural intention. According to the projected positive sign, the effect would be positive, and for each unit improvement in enabling conditions, behavioural intention would increase by 0.226; this coefficient figure is substantial at the 1% level.

Considering that the other path factors are held constant, the unstandardized coefficient of social influence on behavioural intention, which is 0.154, shows the partial impact of social influence on behavioural intention. According to the projected positive sign, this impact is positive, and for every unit increase in social impact, behavioural intention would increase by 0.154; this coefficient figure is substantial at the 1% level.

The partial impact of hedonic motivation on behavioural intention is represented by the unstandardized coefficient of hedonic motivation on behavioural intention of 0.131 from the above table, maintaining the other route variables constant. According to the anticipated positive sign, this impact would be favourable, and behavioural intention would rise by 0.131 for every increase of one unit in hedonic motivation. This coefficient value is significant at the 1% level.

The partial impact of price value on behavioural intention is represented by the unstandardized coefficient of price value on behavioural intention of 0.219 from the aforementioned table, maintaining the other path variables constant. This effect is good, as indicated by the expected positive sign, and behavioural intention would increase by .219 for each unit increase in price value; at the 1% level, this coefficient figure is significant.

According to the above table, the unstandardized coefficient of habit on behavioural intention, which holds the other route factors constant, is 0.260, and it shows the partial influence of habit on behavioural intention. According to the projected positive sign, this impact would be positive, and For every increase in habitual conduct, behavioural intention would increase by 0.260; this coefficient figure is significant at the 1% level.

The partial influence of online promotion on behavioural intention is evidenced by the unstandardized coefficient of online promotion on behavioural intention of .138 from the aforementioned table, maintaining the other route factors constant. The expected positive sign indicates that behavioural intention would increase by 0.138 with a one-unit increase in online promotion; this coefficient figure is significant at the 1% level.

According to the above table, the unstandardized coefficient of personal innovativeness on behavioural intention, which holds the other route factors constant, is .104, which demostrate the partial influence of personal innovativeness on behavioural intention. This effect is good, as indicated by the expected positive sign, and behavioural intention would increase by 0.104 for every unit increase in personal ingenuity. At the 5% level, this coefficient ratio is important.

Assuming that the other factors constant, the unstandardized coefficient of traceability on behavioural intention, which is 0.137, shows the partial influence of traceability on behavioural intention. Behavioural intention would rise by 0.137 for every unit increase in traceability, according to the projected positive sign, which is substantial at a 1% level.

Based on the table above, the unstandardized coefficient of behavioural intention on actual use behaviour, which holds the other path factors constant, is .907, and it shows the partial impact of behavioural intention on actual use behaviour. For each increase in behavioural intention, actual usage activity would increase by .907, as the effect is projected to be positive; this coefficient figure is significant at the 1% level.

The SEM model's actual usage behaviour (0.907) and performance expectation are the two factors that have the greatest influence on behavioural intention (0.320).

4.7 HYPOTHESIS TESTING RESULTS

The hypothesis of this research is discussed in this part in table 4.24

Table: 4.24 Hypothesis Results

(H1):	Performance expectancy has a significant impact on behavioural intention for online food services.	H1 is confirmed

(H2):	Effort expectancy has a significant impact on behavioural intention for online food services.	H2 is confirmed
(H3):	Social Influence has a significant influence on behavioural intention for online food services	H2 is confirmed
(H4):	Facilitating Conditions has a significant influence on behavioural intention for online food services.	H2 is confirmed
(H5):	Hedonic motivation has a significant influence on behavioural intention for online food services	H2 is confirmed
(H6):	Price value has a significant influence on behavioural intention for online food services.	H2 is confirmed
(H7):	Habit value has a significant influence on behavioural intention for online food services.	H7 is confirmed
(H8):	Online promotion has a significant influence on behavioural intention for online food services	H8 is confirmed
(H9):	Personal innovativeness has a significant influence on behavioural intention for online food services	H9 is confirmed
(H10):	Traceability has a significant influence on behavioural intention for online food services	H10 is confirmed
(H11):	Behavioural intention has a significant influence on actual use behaviour towards online food services.	H11 is confirmed

4.8 MULTIPLE REGRESSION ANALYSIS

Regression analysis is a statistical approach used to determine the kind and strength of connections between a single dependent variable (often represented by Y) and a number of independent variables (X1, X2, Xn). Multiple regression analysis can be used to predict a variable's value by analysing its observations of multiple additional variables.

The empirical foundation for investigating the possible impact on behavioural intention and actual use behaviour of online food services is covered in this chapter. For online food service measurements, the hypothesis and analyses of the direct impacts of variables impacting behavioural intention and actual usage behaviour are provided. The numerous analyses used in this study suggest that the chosen factors have a considerable impact on the outcome variables.

4.8.1 Factors impacting decision-makers Behavioural intention for fooddelivery services

In this study, the independent factors include performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, habit, price value, online promotion, personal innovativeness, and traceability. The dependent variable is behavioural intention.

Dependent Variable: Behavioural Intention (Y)

Independent Variables:

Performance Expectancy: (X1)
Effort Expectancy: (X2)
Social Influence: (X3)
Facilitating Conditions: (X4)
Hedonic Motivation: (X5)
Habit: (X6)
Price Value: (X7)
Online Promotion: (X8)
Personal innovativeness: (X9)
10.Traceability: (X10)

R value	0.828
R Square value	0.685
P value	<0.000**

Table 4.25 Elements of the Multiple Regression Model

Variables	Unstandardized co-efficient	SE of B	Standardized co-efficient	t value	P value	Hypothesis accepted or not
(Constant)	.384	.121		3.173	.002	
PE (x1)	.269	.037	.238	7.216	.000	Accepted
EE (x2)	.076	.032	.064	2.355	.019	Accepted
FC (x3)	.099	.032	.096	3.066	.002	Accepted
SC (x4)	.146	.036	.121	4.100	.000	Accepted
HM (x5)	.089	.032	.079	2.780	.006	Accepted
PV (x6)	.149	.034	.133	4.341	.000	Accepted
HB (x7)	.197	.031	.198	6.404	.000	Accepted
OP (x8)	.110	.029	.110	3.820	.000	Accepted
PI (x9)	.079	.030	.071	2.647	.008	Accepted
TR (x10)	.084	.031	.075	2.712	.007	Accepted

The multidimensional correlation coefficient, which is .828; indicates the degree of relationship between the expected outcomes of the behavioural intention and the actual values. A linear function was used to get the predicted values, therefore

Combining performance expectancy (X1), effort expectancy (X2), facilitating conditions (X3), social influence (X4), hedonic motivation (X5), price value (X6), habit (X7), online promotion (X8), personal innovativeness (X9), and traceability (X10), The 10 independent factors and behavioural intention have a substantial and positive association, as indicated by the coefficient value of.828.

The co-efficient of determination, or R-square, quantifies the goodness-of-fit of the estimated sample regression plane in terms of the percentage of variation in the dependent variables that is represented by the fitted sample regression equation. Therefore, the estimated SRP using performance expectancy, effort expectancy, facilitating conditions, social influence, hedonic motivation, price value, habit, online promotion, personal innovativeness, and traceability as the independent variables can account for about 73.8% of the variation in behavioural intentions, and the estimated SRP's R square is significant at the 1% level.

The equation for multiple regression is

$$Y = .384 + 0.269X_1 + 0.076X_2 + 0.099X_3 + 0.146X_4 + 0.089X_5 + 0.149X_6 + 0.197X_7 + 0.110X_8 + 0.079X_9 + 0.084X_{10}$$

Here, the coefficient of X_1 of .269 indicates, while other variables are held constant, the partial impact of **performance expectancy** on behavioural intention. According to the projected positive sign, the impact is positive and would result in an increase in behavioural intention of .269 for each unit rise in performance expectancy. At the 1% level, this co-efficient value is significant.

The coefficient of X_2, at .076, shows the partial effect of effort expectation on behavioural intention when all other factors are held constant. This influence would be good, and behavioural intention would increase by .076 for each unit increase in effort expectation, according to the expected positive sign; this co-efficient figure is significant at the 5% level.

The coefficient of X_3 of .099, when all other variables are held constant, illustrates the enabling condition's partial influence on behavioural intention. This influence is positive, as indicated by the anticipated positive sign, and for every unit increase in the facilitating condition, behavioural intention would increase by .099; at the 5% significance level, this co-efficient figure is significant. The coefficient of X_4 of .146, when all other components are held constant, shows how social influence affects behavioural intention to some extent. The effect is favourable and would lead to a .146 rise in behavioural intention for each unit rise in social influence, based on the expected positive sign. At the 1% level, this co-efficient figure is significant.

The coefficient of X5 of .089, with all other variables held constant, shows that hedonic incentive has a partial effect on behavioural intention. The anticipated positive sign indicates that behaviour intention would increase by 0.089 for each unit rise in hedonic motivation; this co-efficient value is substantial at the 5% level. The partial influence of price value on behavioural intention is indicated by the coefficient of X6 of 0.149, holding all other factors constant. The impact would be positive, and behavioural intention would increase by 0.149 for each unit increase in price value, based on the expected positive sign. At the 1% level, this co-efficient value is significant.

Setting all other variables fixed, the coefficient of X7 of 0.197 indicates the partial impact of **habit** on behavioural intention. According to the anticipated positive sign, this impact is favourable, and behavioural intention would rise by 0.197 for each increase in habit units; this co-efficient value is substantial at a level of 1%. The partial impact of **online promotions** on behavioural intention is represented by the coefficient of X8 at 0.110, while other factors are held constant. For each unit increase in online promotions, there would be a 0.110 increase in behavioural intention, indicating a positive influence; this co-efficient figure is significant at the 1% level.

With all other variables held constant, the coefficient of X9 is 0.079, indicating that personal innovativeness has a partial influence on behavioural intention. This influence is good, as indicated by the expected positive sign, and for every unit increase in personal innovativeness, behavioural intention would increase by 0.079; at the 5% level, this co-efficient value is significant. The coefficient of X10 in this instance, holding all other variables fixed, is 0.084, indicating the partial influence of traceability on behavioural intention. The effect is expected to be positive and behavioural intention would increase by 0.084 for each unit increase in traceability; at the 5% level, this co-efficient f is figure significant.

4.8.2 Association Between Behavioural Intention and Actual Use Behaviour for online food services

Determining a statistical relationship between variables is known as regression. Simple linear regression just uses two variables. The behaviour of one dependent variable is caused by another independent variable.

Actual use behaviour and behavioural intention are the dependent and independent variables in this study, respectively.

Dependent Variable   Actual use behaviour (AB)

Independent Variable Behavioural Intention (BI)

R value of 0.809

R Square value 0.655

P value =.000

Table: 4.26 Variables in the Analysis of Simple Linear Regression

Variables	Unstandardized co-efficient	SE of B	Standardized co-efficient	t value	P value	Hypothesis accepted or not
(Constant)	.787	.082		9.562	.000	
BI	.788	.021	.809	37.695	.000	**Accepted**

The correlation coefficient, which is 0.809, indicates the level of connection between the actual values and the expected values of the actual usage behaviour. The co-efficientvalue of .809 suggests a strong and positive link between actual use behaviour and the independent variable (behavioural intention), since the projected values are derived as a linear combination of behavioural intention.

The coefficient of determination, or R-square, evaluates the degree of fit of the estimated sample regression plane (SRP) in terms of the percentage of variation in the dependent variables that can be understood by the fitted sample regression equation. Thus, the R square value of 0.655 indicates that approximately 65.5% of the variance in actual usage behaviour is explained by this SRP, and it is significant at the 1% level. The estimated SRP uses behavioural intentions as the independent variable.

Equation for linear regression

$$Y = .787 + 0.788X$$

The coefficient of X, which stands for behavioural intention on actual usage behaviour in this case, is .788. For every unit increase in behavioural intention, the effect is projected to be positive and improve actual use activity by .788; this coefficient value is significant at the 1% level. According to the standardised coefficient, the most important factor in predicting actual use behaviour is behavioural intention (.809).

4.8.3 Verification of the results of SEM with regression analysis

Results from both techniques are the same, as SEM path analysis performance expectancy, habit, price value, social influence, and online promotions are the most important aspects for online food services. Regression analysis shows consistent results for behavioural intention for online food services.

4.9 Mediation Effect

The mediation role of perceived health risk between behavioural intentions and actual usage behaviour is explored after the direct effects demonstrated in the hypothesised model are examined. A mediating variable explains how or why an independent variable affects an outcome. The bootstrapping method is used by AMOS software to determine whether there is a mediation effect across the independent and dependent variables. Using the bootstrap process, two structural models—one without a mediator construct and the other with one— have been constructed (Cheung & Lau, 2008).

4.9.1 Mediation analysis (Bootstrap Approach)

Figure 4.3 In the absence of mediator impact among behavioural intention and actual use behaviour of online food services
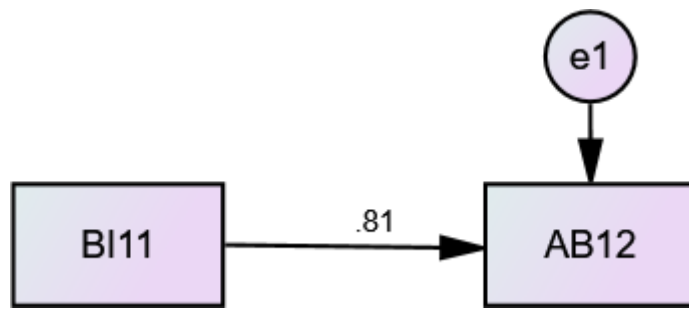
Figure 4.4 In the Presence of mediator impact among behavioural intention and actual use behaviour of online food services
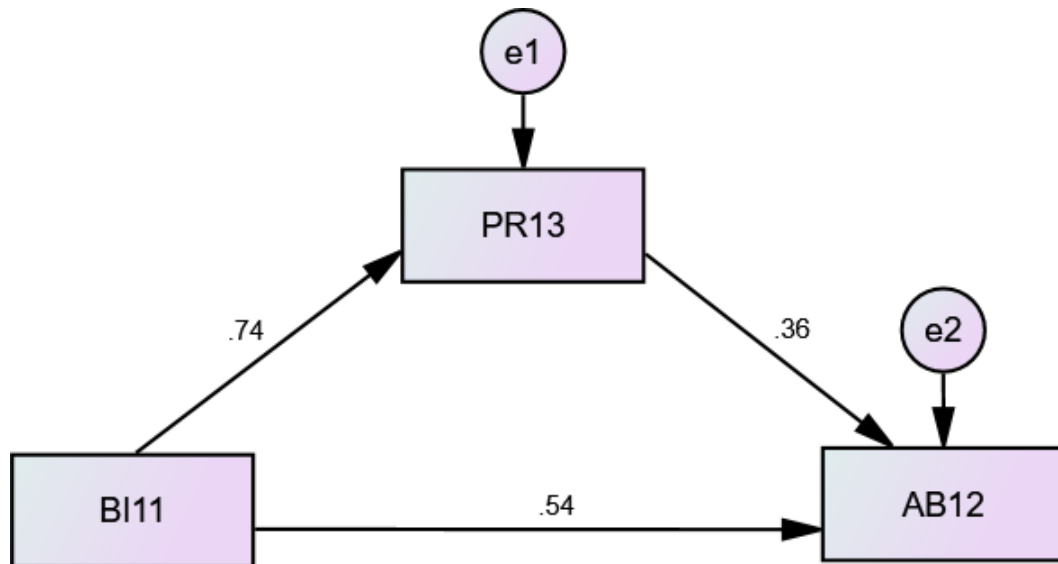
Table 4.27 Regression weight without mediator variable (Perceived health risk)

	Unstandardised Coefficient (B)	S.E of B	Standardised Coefficient (Beta)	t value	P value
AB11<---BI12	.78	.021	.809	37.720	***

The table above demonstrates that it has been determined that exogenous latent constructs significantly and directly impact the endogenous latent construct.

Table 4.28 Regression weight with mediator variable (Perceived health risk)

	Unstandardised Coefficient (B)	S.E of B	Standardised Coefficient (Beta)	t value	P value
PR13<---BI11	.745	.024	.745	30.520	***
AB12<---PR13	.353	.028	.363	12.417	***
AB12<---BI11	.524	.028	.539	18.409	***

The mediator construct is significantly influenced by exogenous constructs. Additionally, it was discovered that in the presence of a mediator construct, exogenous constructs significantly affect endogenous constructs. The structural path relationship further demonstrates that the direct impact of behavioural intention on actual use behaviour was 0.53 times stronger than indirect effects. The indirect effect is 0.76 x 0.36 = 0.266, which is smaller than the direct effect, which is 0.53 as a result. This outcome demonstrates the significance of consumer intention in influencing actual usage behaviour. However, it is impossible to disregard the mediation effect of perceived health behaviour between behavioural intentions and actual use behaviour.

Constructs have a direct impact on how health risks are perceived. The bootstrapping approach from SEM is used to illustrate the indirect association.

Table 4.29 Standardized Indirect Effects - Two Tailed Significance (BC)

	Behavioural intention	Perceived health risk

Perceived health risk	.005	…
Actual use behaviour	.004	.005

The exogenous construct has partial mediating effects through perceived health risk towards actual use behaviour, according to the standardised indirect impact in the table above. At the 0.001 level, the typical indirect (mediated) effect of BI on AB is significantly different from zero (p =.003 two-tailed).

Table 4.30 Two-tailed Significance for Standardised direct effects (BC)

	Behavioural intention	**Perceived health risk**
Perceived health risk	…	…
Actual use behaviour	.003	…

According to the standardised direct effect table above, the exogenous construct has a sizable direct impact on actual usage behaviour. It is important to emphasise that the mediator variable is significantly impacted by exogenous variables.Thus, it was discovered that perceived health risk partially mediated the relationship between behaviour intention and actual use behaviour.

Table 4.31: Summarized outcome of hypothesis testing Mediation influence of perceivedhealth risk among Behavioural Intentions and Actual Use Behaviour

Hypothesis 12 (H12):	Perceived health risk mediates the relationship between behavioural intention and actual use behaviour for online food services	H12 is supported (Partial mediating effect was found)

4.10 Moderating Effect of demographics (Gender and Age)

4.10.1 Gender's moderating influence on relationships between online promotion, personal innovativeness, traceability and behavioural intention (Hypothesis testing)

H13 Gender moderate the relationship between online promotion and behavioural intention for online food services.

H14 Gender moderate the relationship between personal innovativeness and behavioural intention for online food services.

H15 Gender moderate the relationship between traceability and behavioural intention for online food services.

This study examined how gender moderated the link between online promotion, individual innovativeness, traceability, and behavioural intentions. The gender moderating on the aforementioned connection was investigated using multi-group analysis in structural equation modelling. According to (Hair *et al.*, 2010), the moderating variable, gender, was divided into two groups for the analysis: males and females.

Figure 4.5 Male moderating effect between online promotion, Personal innovativeness, traceability and behavioural intention
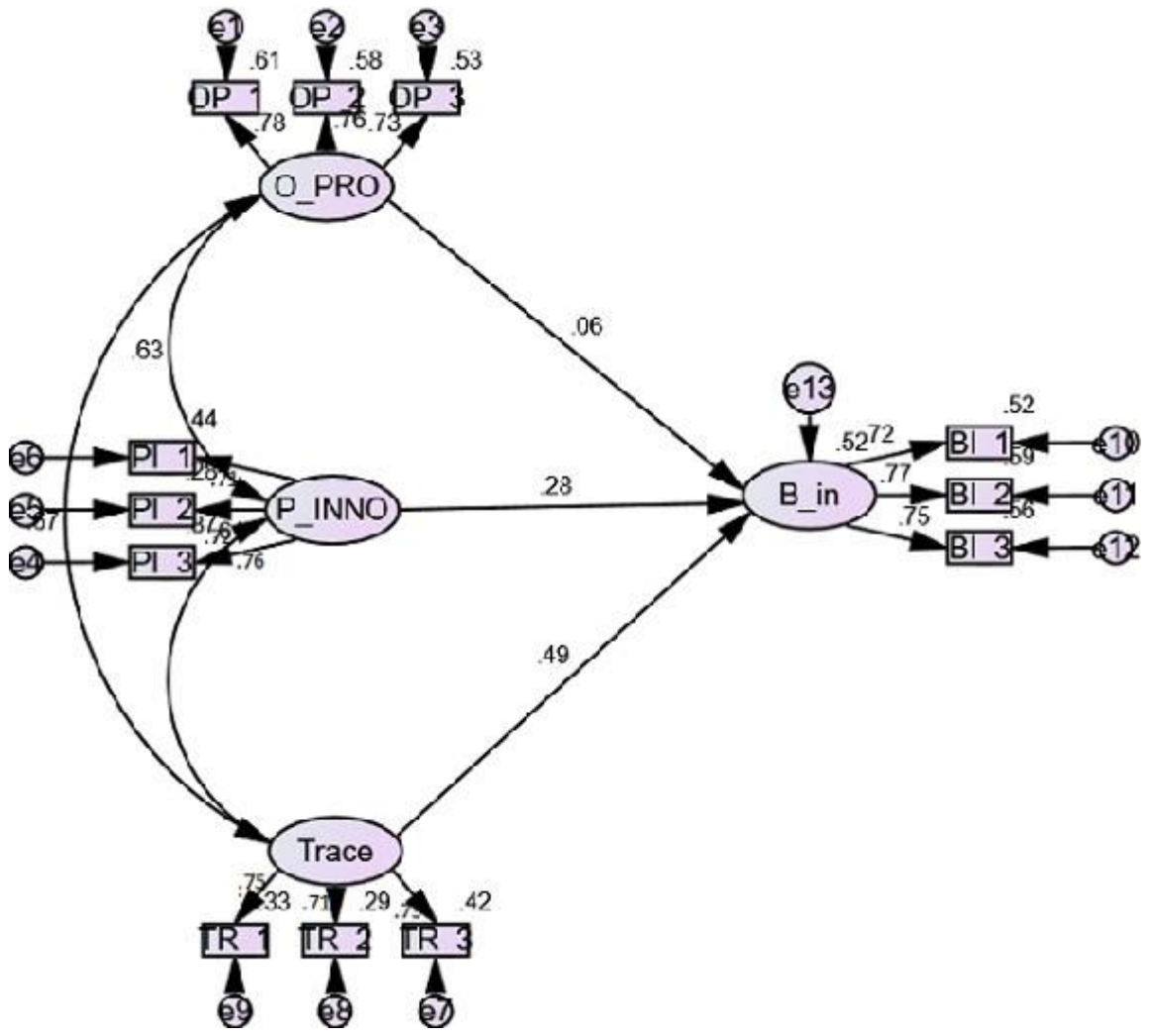
Note: O_PRO: Online Promotion, P_INNO: Personal Innovativeness, Trace: Traceability and B_in: Behavioural Intention

Figure 4.6 Female moderating effect between online promotion, Personal innovativeness, traceability and behavioural intention
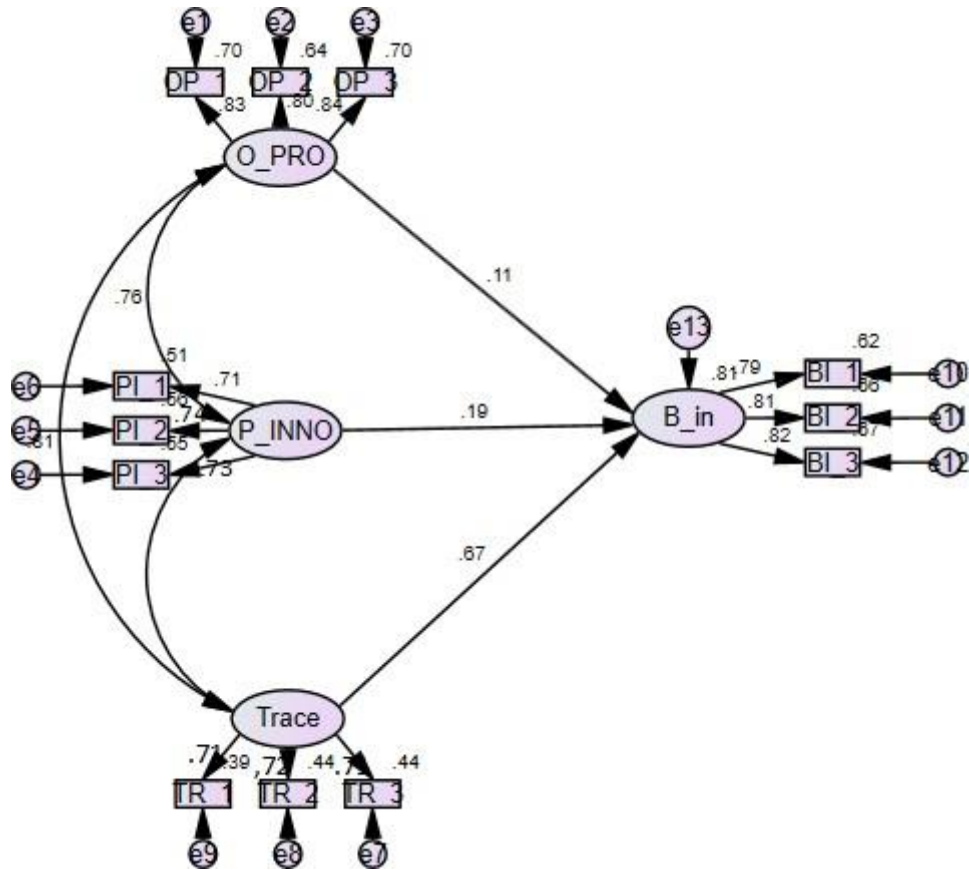
Note: O_PRO: Online Promotion, P_INNO: Personal Innovativeness, Trace: Traceability and B_in: Behavioural Intention

Table 4.32 Male & Female: Regression weights

	MALE				FEMALE				
	Estimate	S.E.	C.R	P	Estimate	S.E.	C.R.	P	Z-Score
B_IN←O_PRO	.056	.107	.526	.599	.104	120.	.868	.385	-.269
B_IN←P_INNO	.343	.128	2.683	.007	.230	.099	2.322	.020	.361
B_IN←TRACE	.473	.120	3.945	***	.736	.141	5.213	***	-1.268

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Figures 4.5 and 4.6, as well as Table 4.32, display the outcomes of the multiple-group SEM analysis. Table 4.32 displays the estimated values, p values, and Z-score values for males and females individually. The output of different crucial ratios is used to determine the Z-score values. In relation to all the dimensions, including online promotion, personal innovativeness, traceability, and behavioural intentions, it was concluded that the z-score values were not significant. Consequently, there was no support for hypothesis H13, H14, or H15. Nonetheless, for both males and females, the p-value for personal innovativeness and traceability on behavioural intention was demonstrated to be significant at a 5% level of significance. The gender-based moderating impact did not significantly differ between the behavioural intentions of males and females.

4.10.2 Age-related moderating effects on relationships between online promotion, personalinnovativeness, traceability and behavioural intention (Hypothesis testing)

H16 Age moderate the relationship between online promotion and behavioural intention for online food services.

H17 Age moderate the relationship between personal innovativeness and behavioural intention for online food services.

**H18** Age moderate the relationship between traceability and behavioural intention for online food services.

Table 4.33 ANOVA displaying differences among all constructs

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
OP	Between Groups	19.262	4	4.816	6.404	.000
	Within Groups	560.222	745	.752		
	Total	579.484	749			
PI	Between Groups	13.278	4	3.319	4.789	.000
	Within Groups	516.678	745	.693		
	Total	529.956	749			

			df				
TR	Between Groups	13.026	4	3.256	4.787	.001
	Within Groups	506.830	745	.680		
	Total	519.856	749			
BI	Between Groups	47.484	4	11.871	16.483	.000
	Within Groups	536.550	745	.720		
	Total	584.033	749			

Note: OP: Online Promotion, PI: Personal Innovativeness, TR: Traceability and BI: Behavioural Intention

Table 4.34 Difference across age and other constructs

Factors	Age category	N	Mean	SD	F value	Sig value	Multiple comparisons
Online Promotion (OP)	18-25 (a)	301	3.87	1.04	6.404	.000	A>B, C, D, E
	26-35 (b)	260	3.86	.809			
	36-45 (c)	114	3.66	.586			
	46-55 (d)	54	3.38	.612			
	Above 55 (e)	21	3.30	.348			
Personal Innovativeness (PI)	18-25 (a)	301	3.91	.785	4.789	.000	A>B, C, D, E
	26-35 (b)	260	3.83	.764			
	36-45 (c)	114	3.80	.657			
	46-55 (d)	54	3.66	.668			
	Above 55 (e)	21	3.65	.627			

Traceability (TR)	18-25 (a)	301	3.76	1.00	4.787	.001	B>A, C, D, E
	26-35 (b)	260	3.86	.737			
	36-45 (c)	114	3.57	.569			
	46-55 (d)	54	3.48	.687			
	Above 55 (e)	21	3.39	.374			
Behavioural Intentions (BI)	18-25 (a)	301	4.12	.968	16.483	.000	A> B, C, D, E
	26-35 (b)	260	4.01	1.02			
	36-45 (c)	114	3.99	.824			
	46-55 (d)	54	3.71	.701			
	Above 55 (e)	21	3.54	.775			

Age's moderating influence on online promotions:

Based on the mean difference across every age range, Tables 4.33 and 4.34 demonstrate the moderating effect of age on the reaction to online marketing of an online food service. The age group of 18 to 25 years old exhibited a greater propensity for internet promotions, as seen by their highest average value of 3.87. 26 to 35 was the second age range that found the internet promotions admirable. The average score, 3.66 and 3.38, was obtained by the age categories 36–45 and 46–55. The age group that responded least favourably to these attributes—those over 55—had the lowest mean value, 3.30. The f value is 6.404 and the significant value is.001. The moderating influence of age is responsible for the significant differences in online promotions across all age groups, as can be inferred from the fact that the threshold for significance is less than 0.05.

Age's moderating influence on personal innovativeness:

The impact of age on opinions of personal innovativeness is moderating, as seen by Tables 4.33 and 4.34, which present the mean difference across all age categories. With mean scores of 3.91, 3.83, and 3.80, respondents in the 18–25, 26–35, and 36–45 age groups had a resoundingly positive attitude towards personal innovativeness. Individuals over 55 and in the 46–55 age range also responded favourably to personal innovation. 4.789 is the f value and 0.001 is the significant value. Since the significant value is less than 0.05, it can be concluded that age has a significant moderating effect on all age groups' opinions of personal innovativeness.

Age's moderating influence on traceability

The moderating influence of age on preference for traceability is displayed in Tables 4.33 and 4.34, based on the mean difference for all age categories. The table's results show that there are notable variations in how each age category perceives traceability. The age categories of 18–25, 36–45, and 26–35 respondents had the highest mean values, 3.86, 3.76, and 3.57, respectively. 46–55 and above 55 were the age category that responded positively but lowest valued the food service provider's traceability services, with average scores of 3.48 and 3.39, in that order. The significant value is.001, and the f value is 4.787. Given that the significance threshold is less than 0.05, it can be concluded that age modifies opinions regarding traceability in a meaningful way among all age groups.

Age's moderating influence on behavioural intentions

The moderating effect of age on behaviour intentions is displayed in Tables 4.33 and 4.34 based on the average difference among all age categories. The table's results show that there are considerable differences across every age range in terms of behavioural intentions. With high mean values of 4.12, 4.01, and 3.99, the respondents who fall into the age ranges of 18–25, 26–35, and 36–45 exhibit the highest levels of customer satisfaction and the greatest desire to come back, recommend online meal services to relatives, close friends, and other people, and spread favourable word of phrase about them. Clients in the 46–55 and over–55 age groups displayed their intended behaviour with mean values of 3.71 and 3.54, respectively. 16.483 is the f value, while 0.000 is the significant value. Considering that the significance level is < .05, it can be concluded that age modifies customers' behavioural intentions in a substantial way for all age category.

To summarise, Tables 4.33 and 4.34 show that respondents differed significantly across all dimensions (online promotions, personal innovativeness, traceability, and behavioural intentions), mediated by age. All of the constructs—online promotions, personal innovativeness, traceability, and behavioural intentions—have significant p-values for the F test, which are less than 0.05 for all age groups. With respect to the relationship between online promotions, personal innovativeness, traceability, and behavioural intents, the age categories of 18–25, 26–35, and 36–45 exhibit greater positivity than the other age groups, as evidenced by the p-value of less than 0.05. These findings suggest that the relationship between online promotions, individual innovativeness, traceability, and the behavioural intents of customers is moderated by their age. H16, H17, and H18 are therefore accepted.

CHAPTER 5

FINDINGS, DISCUSSION, CONCLUSION, IMPLICATIONS AND LIMITATIONS

5.1 SUMMARISE FINDINGS

This section summarises the research key results and explores them in relation to earlier academic works. Various sub-sections have been divided into this chapter. It summarises the key outcomes and brings the study's outcomes to a conclusion. The impact of the UTAUT2 extended model on behavioural intentions and actual usage behaviour are discussed in relation to online food services in Delhi-NCR. Following that, the results of the moderating impact of demographics (gender and age) on the relatioship between online promotion, individual innovativeness, traceability, and behavioural intentions have been presented. Additionally, a discussion on research results regarding the mediating role of perceived health risk in the relationship between behavioural intentions and actual use behaviour has also been presented. Finally, a conclusion is drawn and the direction of future study as well as managerial implications for online meal delivery services are discussed. Indians have historically eaten home-cooked food and have long seen dining out as a special and rare occasion. The introduction of convenient meal ordering online has changed this practise. Food could be bought directly through the websites of food providers like Domino's, Pizza Hut, and others in the early days of online meal ordering which kicked in the custom of ordering food for special occasions and events. Customers' food purchasing behaviours have changed as a result of the introduction of food aggregator apps like Swiggy, Zomato, Uber Eats, etc. Customers now find these platforms useful for comparing prices, reading reviews, and rating restaurants before placing an order through their mobile applications (Mundy, 2018).

In India nowadays, about 50% of people in the 20 to 30 age brackets, particularly in metropolitan areas, order meals online or go out to dine once a month. Bangalore is in first place in terms of the number of online orders, followed by Delhi, Chennai, Mumbai, Pune, and Hyderabad. 82% of all internet orders in the nation come from these populated locations. In the study, 95% of participants preferred ordering meals online from dependent-on-time deals. Even though 73% of people utilised such services due to the large variety of cuisines available on a single platform, 84% of respondents indicated that ordering meals online is advantageous and efficient (Firstpost, 2021).

The present study makes several contributions to the corpus of literature in the subject matter. The UTAUT2 model has been enhanced with a number of features and evaluated in the context of Indian consumers to better understand the motivations behind users' actual use of online food delivery services. For online food services, a moderation analysis has been used to quantify the impacts of demographic factors gender and age categories on the linear relationship of outcome variable behavioural intention. The association among behavioural intention and actual use behaviour for online food services has been evaluated using a mediation variable of perceived health risk.

The evidence supporting all of the hypothesis proposed in this study was offered in the preceding chapter. It has been discovered that the supporting variables—performance expectancy, habit, price value, social influence, online promotion, and facilitating condition—strongly and favourably influence behavioural intention. Additionally found to influence of behavioural intention towards online food services include traceability, personal innovativeness, hedonic motivation, and effort expectation. Additionally demonstrated is the link between behaviour intention and actual usage conduct. It has been demonstrated that perceived health risks can somewhat mediate the relationship between actual usage behaviours and these risks. The mediating variable has demonstrated a favourable impact on consumer behaviour while using online meal delivery services. There is not a noticeable distinction between male and female behaviour intention when gender is the moderating variable. Furthermore, while age is a moderating variable, there is a significant variation among all age groups when considering the variables, i.e., online promotion, personal innovativeness, traceability, and behavioural intentions.

5.2 FINDINGS BASED ON DEMOGRAPHIC AND OBJECTIVE WISE

5.3.1 Demographic based finding

- According to the results of the demographic research, young respondents preferred to order from food apps available online, and 75% of the consumers are below the age group of 35. Most of consumers of online food delivery firms are students and employees. Both men and women prefer online meal services. However, women a consumers prefer fast meals owing to the rising demands of their jobs and the lack of time for domestic duties. Online food delivery services are in high demand due to the increasing number of working women. Younger generations are using online

food ordering applications more frequently as a result of having more disposable cash and higher expectations. These results are consistent with prior published report India food services reports (KPMG, 2016; NRAI, 2019; Statista, 2021b).

- The findings of the research showed that around 43% of the people used multiple food delivery apps. There is no brand loyalty or differentiation among users, according to these market surveys on food deliveries. With no preference for certain brands, all apps are treated equally. As a result, companies offering food should research the industry and its internal structure to determine the special abilities that will allow them to stand out and deliver effectively in the market. It was supposed that customers were utilising several brand apps to find greater discounted prices and offers. Results are consistent with previous study (Jain, 2022)

- The results of the frequency of usage of online food services showed that 264 respondents, or 35%, reported using it once every week. However, 178 respondents (23%) said they only used it once a month. The consumer's life has not before included food services as a regular daily commodity. The businesses must close the gap by offering better and sufficient services in order for their food delivery services to be often employed to improve everyday living.

- The average order value reported by most respondents (51.1%) is between Rs. 101 and 500, with 33.1% of users reporting orders between Rs. 501 and 1000. It was believed that many restaurants would waive or significantly reduce delivery fees for items that were more expensive. Therefore, users may be persuaded to place an order at a greater cost in order to benefit from the discounts and free shipping. Results are supported by Statista reports (Statista, 2021a).

5.3.2 Objective wise findings

Objective:1 **To investigate whether Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Price value (PV) and Habit (HB) affects decision maker's behavioural intention for online food services.**

Based on earlier research investigations, a UTAUT2 framework has been employed to address this subject. The suggested factors include performance expectation, effort

expectancy, social influence, hedonic motivation, price value, habit, social influence, and facilitating circumstances. SPSS and AMOS software have been employed to assess the outcomes of the primary data. Performance expectancy is dominant factor followed by habit, price value, social influence, facilitating conditions, hedonic motivation and effort expectancy are the traits that have the most influence on behaviour when it comesto online food services, according to the SEM study. These findings line up with regressionfindings.

The first and most important variable in the study is performance expectation. Performance expectation (PE) has a favourable impact on behaviour intention (BI). This shows that respondents think using OFD services will be advantageous to them. On the other hand, it also implies that people won't use OFD services if they don't benefit from them. This indicates how crucial the cognitive and functional advantages of OFS are from the standpoint of Indian clients. Compared to more conventional methods of ordering food, such as going to restaurants in person or calling them, OFS has a variety of appealing characteristics that provide customers with more mobility and flexibility. Customers are thus more ready to minimise time and effort. Similar conclusions on the important role of performance expectations were made by (Karulkar & Singh Uppal, 2021; Okumus et al., 2018). Furthermore, (Baabdullah et al., 2017) study, which examined the acceptance of mobile banking, verified the significance of performance expectancy.

The subsequent most vital variable in the study is habit. Habit (HB) has a favourable impact on behaviour intention (BI). According to research by Kadir & Ismail (2022), habit (HB) has a beneficial effect on behaviour intention (BI), or the intent to use the online delivery app system during the COVID-19 pandemic. This is because users feel comfortable using the application and want to keep using it to meet their needs from home as a means of enforcing social distancing policies during a pandemic. Furthermore, (Nikolopoulou et al., 2021) study, which examined the intention of adoption of mobile internet, and (Chang et al., 2019) study, which examined the adoption of online hotel booking, verified the significance of habit.

The third important variable is price value has a favourable impact on behavioural intention. Merhi, 2019 discovered that in order to increase the value of a service's pricing, it is required to charge a fair price by managing the service's cost-effectiveness. As

a result, marketers should focus especially on raising the perceived worth of their goods or services, which will boost client happiness. However, many believe that utilising food delivery apps during the epidemic is less expensive because of the convenience it offers. Price value has a favourable impact on behaviour intention (BI). This is because consumers are willing to pay whatever fee is required to use the online delivery application because they think it is reasonable to obtain and that the services it offers are consistent with what is promised. Results are consistent with other studies on the adoption of MOOCs (Meet et al., 2022) and blended learning in education (Hirschberg et al., 2020), which verified the significance of price value.

The fourth important factor is social influence, which has a significant impact on the behavioural intentions of decision-makers. Since SI had a largely favourable impact on consumers' behaviour towards online food services, it is evident that user intentions about OFS are impacted by friends' and relatives' views and ideas. Userswho believe that people in their social network have favourable intentions towards utilisingOFS are more likely to develop those same intentions themselves. Additionally, others in the user's social circle who have had favourable experiences with OFS may also have an impact on the user's behaviour. The study findings are consistent with previous studies on Uber mobile applications (Min, 2019), e-learning technology (Al Kurdi et al., 2020), shopping via mobile apps (Vahdat et al., 2020), CCtalk technology by Wang, 2022, and hotel robots (Zhong, 2022).

Facilitating conditions are the fifth variable, and they have a big influence on behavioural intention. This means that the acceptability of this technology is significantly influenced by how people perceive the resources and assistance that are offered for using internet services (Palau-Saumell et al., 2019; Surya et al., 2021). Since online food service applications lack a physical location, they must be adjusted for the customer. This requires active interaction with food aggregators to obtain information about the personnel, menu, brand, etc. Utilising the app's food product visuals is another strategy for drawing users. While these methods take time, they are essential to establishing the brand's credibility and reliability and enabling the inclusion of silver surfers. In order to accommodate the increase in traffic as the service becomes more popular, it is also crucial to upgrade and maintain the platform. Research on mobile tour guides (Lai, 2015), online shopping (Yang, 2010), MOOCs in higher education (Meet et al., 2022), and e-appointments for public health

medical services (Lee et al., 2020) using apps has confirmed the impact of facilitating conditions on intent to use.

Hedonic motivation, the sixth variable, strongly impacts behavioural intention. Results demonstrates that hedonic motivation (HM) considerably improves behavioural intention for online food services. This result suggests that online meal delivery services are used for hedonistic as well as utilitarian reasons. Users are more inclined to have positive behavioural intentions towards OFS if they find it interesting and fun. Additionally, users may enjoy being creative when they adopt OFS because online food services are still in their infancy. This outcome is in line with other research, smart homes (Aldossari & Sidorova, 2018), online shopping (Anand et al., 2019), and e-learning readiness (Ayasrah, 2020). which supports the findings of the study.

The last variable is effort expectancy, which has an influence on behavioural intention. However, the impact of effort expectancy does not strongly affect behaviour intention. These results are inconsistent with earlier findings (Chao, 2019; Hung et al., 2019; Igor Fedorko Radovan Baik Beata Gavurova et al., 1991), but result is consistent with others studies (Aldossari & Sidorova, 2018; PHAN & PV, 2020). Users' usage experience will boost awareness and familiarity with OFS since they have ample experience from prior use.

Ojective:2 **To analyse the impact of Online Promotion (OP), Personal Innovativeness (PI), and Traceability (TR) on decision maker's behavioural intention for online food service.**

Based on earlier research results, a conceptual framework has been created. Online promotions, personal innovativeness, and traceability are the suggested variables. Software such as SPSS & AMOS have been used to assess the outcomes of the primary data. According to the results of the SEM, online promotion is dominant factor, followed by traceability and personal innovativeness, which have the significant impact on consumers behavioural intentions to use online food services.

It has been demonstrated that online promotions are a important factor in impacting behavioural intention. Customers, for instance, do not need to exert the physical effort and energy required to attend eateries. For the purpose of luring clients, OFS offers a variety of

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promotions, including free shipping and discount vouchers. Another effective strategy for making purchase decisions and doing cognitive product evaluation is promotion. The study's findings supported the idea that online promotions significantly impacted behavioural intention (Prasetyo et al., 2021). Studies show that promotions are a crucial marketing technique for e-retailers to use to influence customers' purchase decisions. A promotion causes consumers to switch to an alternative brand. This is probably going to be the key to the online meal service applications' success. The study findings line up with previous studies, brand image and purchase decision (Lalu, 2022), games apps (Hajarian et al., 2021), and online learning apps (Wang et al., 2021), which verified and supported the study findings.

The investigation's findings show that traceability significantly impacts behavioural intentions for online food services. The importance of traceability-related logistic services is crucial when making judgements about online purchase decisions (Cao et al., 2018). Order traceability is an essential e-commerce tool since it allows businesses and their clients to track an online order's progress in real time while from the moment it is placed until it reaches the recipient's door. According to research by My Customer, 82% of customers believe it's essential for e-commerce firms to keep them informed at each step of the fulfilment and delivery process. Emails with shipment tracking links are the preferred mode of contact for 85% of consumers, while text messages are chosen by 45%. It's interesting to note that 81% of consumers report checking the status of their orders twice or more during the fulfilment process (*E-Commerce Order Tracking: Why It Matters | Whiplash*, 2021). The basis for really using the services is order traceability, which demonstrates firm transparency and helps to develop trust among consumers. The findings are consistent with prior studies on public service cloud platforms (Zhang, 2021), online purchasing intentions (Riley & Klein, 2019), grocery delivery services (Altay et al.,2022), and online shopping (Cao, 2018), which verified the outcomes of the study.

The findings show that people's behavioural intention to employ online meal delivery services is significantly impacted by their personal innovativeness. OFS is brand new and appealing to customers who are quite creative overall. However, the impact of personal innovativeness on behavioural intention to utilise an online food delivery service is minimal. The reason is that customers are opting to use meal services more often due to the OFS's convenience and utility than due to their own curiosity or desire for novelty.

The study's findings are consistent with those of (Lee and Lee, 2018; Kasilingam, 2020; Patil *et al.*, 2020; Wang *et al.*, 2020).

 Objective:3 **To examine the moderating role of demographics (gender and age) in the relationships between Online Promotion (OP), Personal Innovativeness (PI), Traceability (TR) and behavioural intention**

An attempt was made to determine the moderating impact of basic factors (gender and age categories) on the association among online promotion, personal innovativeness, traceability, and behavioural intention in accordance with the hypothesised objectives.

Gender's Moderating Effect

To assess the moderating impact of gender on the association between online promotions, personal innovativeness, traceability, and behavioural intentions, a multi-group analysis was used. The role that genders plays in moderating the proposed structural relationship is depicted in Figures 4.5 and 4.6 as well as Table 4.32. Due to the fact that theZ-score for each construct was determined to be not significant, no moderating effect of gender on the aforementioned association was discovered. It demonstrates that the customer's gender had no noticeable moderating impact on how they saw online promotions, personal innovativeness, traceability, and behavioural intent. The findingsof the work are in line with previous studies that support the idea that gender does not moderate the perception of online food service attributes (Belanche et al., 2020; Kim, 2016; Zhong & Moon, 2020).

Age Moderating Effect

The moderating impact of age on the associations between online promotion, individual inventiveness, traceability, and behavioural intentions was looked at. As shown in Table 4.33, all components have p-values below the 0.05 level of significance, indicating that the respondents' age has a substantial moderating influence on this connection. Age groups 18 to 25 and 26 to 35 were the next groups of respondents that were heavily impacted by online promotions. Personal innovativeness was also observed to vary by age group. Respondents from the 18 to 25 age range assigned personal innovativeness the highest value out of all age groups, followed by those from 26 to 35. Additionally, consumers between the ages of 26 to 35 and 18 to 25 had a favourable opinion of traceability services.

Customers between the ages of 18 and 25 and 26 and 35 were the most delighted, and they had a high behavioural intention to spread stories about the online food services they had used to relatives, peer, and acquaintances.

In brief, it can be said that the ranges of age 18 to 25 and 26 to 35 were discovered to be the most engaged age ranges, which moderated the link between online promotion, personal innovativeness, traceability, and behavioural intentions. This outcome is same with research by (Zhu et al., 2020) that found that online promotions had the greatest impact on younger age groups of consumers. The finding of a moderating effect of age on personal innovativeness is consistent with a prior study showing that young individuals are often excited to try out new technology, whereas elderly people are hesitant to do so if they can't see how those technologies will be secure and helpful (Deb et al., 2017). The results of the research are confirmed with previous studies that support the idea that age moderates the perception of online food service attributes (Gao, 2020; Gerritsen, 2021; Talwar et al., 2020).

Objective:4 **To study the mediating role of perceived health risk in the relationship between behavioural intention and actual use behaviour**

Two models were set up in order to do mediation analysis. First, without a mediator; then, with the mediator. In order to figure out the direct relationship between independent and dependent variables, a first model was created. A second model was then developed to comprehend how and to what degree the direct relationship across independent and dependent variables is captured by the mediator.

The direct effect was seen with the support of the model first. It was discovered that, without the involvement of a mediator, behavioural intention has a substantial direct impact on actual usage behaviour for online food services.

Model 2 demonstrated the mediator's indirect influence on the study's constructs. The model showed a substantial relationship between perceived health risk, behavioural intention, and actual use behaviour.

After taking into account the outcomes of models 1 and 2, the mediating impact was estimated, which eventually showed that:

- Perceived health risks mediate the relationship between behavioural intention and actual use behaviour.

The research supports the impact of perceived health risk on behavioural intention and actual use behaviour, supporting the idea that the pandemic context's anxiety and fear-provoking effects on health, along with the idea that eating out increases the risk of contracting the virus, have led people to use OFS more than before. The outcomes of the study are consistent with prior research (Francioni et al., 2022; Halan, 2021; Rather, 2021), which verified the result.

5.3 CONCLUSION

With regard to online food services, the current study presented and attempted to examine the influence and effect of various attributes on behavioural intention. Descriptive research was undertaken with the study's goals in mind to discover these links. Structured equation modelling was used to define and evaluate a conceptual model, and the outcomes were also confirmed by regression analysis. Using AMOS 23, the number of direct and indirect links was examined.

Four goals form the foundation of the current investigation. The first goal was to investigate how decision-makers' behavioural intentions can be affected by UTAUT2 notions. The second goal focuses on how online promotion, personal innovativeness, and traceability impact decision-makers' behavioural intentions. Examining the moderating role of how gender and age affect online promotion, personal innovativeness, traceability, and behavioural intention is the third objective. The fourth objective looks at the mediating effect of how perceived health risk affects the among behaviour intention and actual usage behaviour.

A study was done in order to reach all of the objectives listed above. Before that, the questionnaire had been prepared and forwarded for content validity. During the finalisation of the inventory, professional advice was considered. Data was gathered from the concerned respondents after content verification. There were also a few questions about the respondents' demographic background. To investigate the data, reliability tests, validity tests, measurement model assessments, structural model assessments, hypothesis tests, moderating tests, and mediation tests were carried out.

AMOS 23 software was used to apply structural equation modelling. A thorough assessment of the measurement model was done first. Convergent validity, discriminant validity, and internal consistency were examined. Following that, the structural model was evaluated. After all of this, the findings of the hypothesis testing were confirmed by regression analysis. To fulfil the objectives, a moderating and mediation analysis was also conducted. It was confirmed that age moderates' differences between constructs rather than gender. The existence of partial mediation between the research constructs has also been demonstrated.

5.4 IMPLICATIONS

5.4.1 Theoretical Implications

The main theoretical contribution of this study is the creation of a conceptual framework for the adoption of online food services, combining elements from UTAUT2 theories with features of online food services like online promotion, personal innovativeness, and traceability. From a theoretical standpoint, this study has investigated Delhi-NCR's actual usage behaviour as well as awareness of the characteristics of online food services. In this research, the descriptive factors of gender and age that influence the use of online meal delivery services were also studied. According to this study, the UTAUT2-derived variables of performance expectancy, habit, price value, social impact, and enabling factors are appropriate for studying technology adoption. The adoption of online food services is influenced by elements such as online promotions and traceability, both of which are viewed as motivating factors. The data was validated, and the theory's contribution greatly benefited from the way perceived health risk acts as a mediator. The spread of pandemic condition enhanced the value of the notion of perceived health risk. Future studies in online food delivery businesses will gain insight from this. The study will be expanded by the researchers in order to broaden the body of information and enable generalisation ofthe effects of the attributes mentioned above.

5.4.2 Practical Implications

The study will assist managers and business owners in comprehending the effects of many aspects that influence behavioural intention and actual use behaviour of consumers. As a result of the researcher's outcomes pertaining to the significance of performance expectancy, online promotions, social influence, and facilitating conditions, marketers

should place an emphasis on offering customers good deals, convenience, and enjoyable online experiences, as well as taking care of their real time traceability. The study found that customers' behavioural intentions to employ online food services are predicted by the performance expectations of these services. As a result, service developers ought to highlight the essential characteristics of the ordering activity and create designs that take advantage of them. For instance, ordering platforms should be created with clear information and without needless dialogue boxes that prompt users to choose at every stage or page of the purchasing process. Additionally, the online food services app might provide chances to personalise the interactions, including avoiding intermediate processes like the rapid checkout option in alongside customisation possibilities. In this manner, customers' experiences can be seamless, and the way they perform their tasks can be enhanced. Additionally, developers can provide a variety of ways for users to carry out their duties, such sending out alerts for abandoned carts or providing planning tools for upcoming purchases. In order to avoid creating a bottleneck due to the volume of information displayed on online food platforms, restaurants can offer online food service with just the pertinent information (such as image. ingredients, and price). This will help customers stay focused on their tasks. Overall, by providing a range of food goods and effective ordering interfaces, online food service providers and restaurants might both highlight the notion that ordering online can be simpler compared to ordering using conventional ways. These efforts should be able to persuade customers to actually use the service. The mediating role of perceived health risk cannot be ignored; therefore, it is suggested that policymakers create regulations that enhance intentions because doing so eventually results in greater actual use behaviour. They can survive and expand in the industry by using the research to assist them in developing their strategy and marketing plans for food delivery services in an online context.

5.5 LIMITATIONS

- The current study solely takes into account residents of Delhi-NCR, and it exclusively places a focus on urban consumers.
- The respondents might not provide accurate answers. The prejudice may result from a lack of interest, a failure to comprehend the questions, etc. The study's outcomes could be impacted by this, but the researcher has no influence over it.

- This research simply took comments from customers into account. Future studies on online food services may take into consideration input from operators, restaurant owners, etc.

- Using purposive sampling, the study's sample was chosen. But this study's sample was more varied.

- The results achieved can't be generalised to the entire universe because the research is limited to Delhi-NCR.

5.6 FUTURE DIRECTIONS FOR THE RESEARCH

In order to generalise the findings, the research area might be broadened outside Delhi-NCR to include responses from other geographical areas. The behavioural intention and use behaviour could potentially be influenced by factors other than those examined in this investigation. Visual effects, COVID-19 effects, information quality, environmental effects, etc. are a few of them. These and other dimensions, including consumer dietary behaviours during and after the pandemic and other demographic factors in the study, can be taken into account in future research.

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APPENDIX 1

QUESTIONNAIRE

"Servicing of Services: A Study of Online Food Services in Delhi-NCR"

Dear sir/ madam,

The survey aims to capture the behaviour intention towards online food services in Delhi-NCR such as Zomato and Swiggy. If you are familiar with these online food service providers and using those apps or websites to order food in the last 6 months, kindly proceed to read and be a part of the survey.

PART I

DEMOGRAPHIC PROFILE

Please tick the appropriate box

1	Gender	Female		Male		
2	Age	18-25	26-35	36-45	46-55	Above 55
3	City	Delhi	Noida	Gurugram	Sonipat	Faridabad
4	Marital Status	Married		Single		
5	Educational qualification	Up to 12th	Graduate	Post Graduate	Others	
6	Occupation	Student	Home maker	Self employed	Salaried	

7	Which of the following app have you ordered from?	Zomato	Swiggy	Both		Others
8	Online food applications usage duration	6-12 months	1-2 years	2-3 years		Above 3 years
9	How many times Online food services used in previous six months	Less than 3	3	More than 3		
10	Usage frequency of online Food Apps	Once per month	2-3 times per month	Once per week	2-3 times per week	Daily
11	Order value (per order)	Less than 100	101-500	501-1000		Above 1000

PART II

CONSUMER BEHAVIOURAL INTENTION TOWARDS ONLINE FOOD SERVICES

Indicate your level of agreement as regards consumer behavioural intention towards online food services (Tick the best alternative)

Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

1	Statements – Performance Expectancy	SA	A	N	DA	SDA
1	I find online food services useful in my daily life.	5	4	3	2	1
2	Using online food services apps increases my chance of achieving tasks that are important to me.	5	4	3	2	1
3	Online food services apps help me to accomplish tasks more quickly.	5	4	3	2	1
4	Using online food services apps increases my productivity.	5	4	3	2	1

2	Statements – Effort Expectancy	SA	A	N	DA	SDA
5	Learning how to use online food services apps is easy for me	5	4	3	2	1
6	My interaction with online food services apps is clear and understandable	5	4	3	2	1
7	I find it easy to use online food services through apps.	5	4	3	2	1
8	It is easy for me to become skillful at using online food apps.	5	4	3	2	1

3	Statements - Facilitating Conditions	SA	A	N	DA	SDA
9	I have necessary resources to use online food services through apps,	5	4	3	2	1
10	I have the knowledge necessary to use online food services apps.	5	4	3	2	1
11	I can get help from others when I have difficulties using online food apps.	5	4	3	2	1

4	Statements – Social Influence	SA	A	N	DA	SDA
12	People who are important to me think that I should use online food services	5	4	3	2	1

13	People who influence my behavior think I should use online food services	5	4	3	2	1
14	People whose opinion that I value prefer that I use online food services	5	4	3	2	1

5	Statements – Hedonic Motivation	SA	A	N	DA	SDA
15	Using online food services for purchasing foods is fun.	5	4	3	2	1
16	Using online food services for purchasing foods is enjoyable	5	4	3	2	1
17	Using online food services for purchasing foods is very entertaining	5	4	3	2	1

6	Statements – Price Value	SA	A	N	DA	SDA
18	I can save money by using online food services for purchasing foods by comparing the prices offered at different online stores.	5	4	3	2	1
19	I like to find for cheap deals at different online apps when I purchase foods through online food apps/websites	5	4	3	2	1
20	Online food services is a good value for the money	5	4	3	2	1

7	Statements – Habit	SA	A	N	DA	SDA
21	Using online foods services through online food apps is almost like a habit for me	5	4	3	2	1
22	I am addicted to using online food services for the purchase of foods.	5	4	3	2	1
23	I must use online food services for purchasing foods.	5	4	3	2	1
24	Using online food services for purchasing foods has become natural to me.	5	4	3	2	1

8	**Statements – Online Promotions**	SA	A	N	DA	SDA
25	I feel that discount provided encourages me to use online food services	5	4	3	2	1
26	Terms and conditions of promotion are important to me before I use online food services	5	4	3	2	1
27	I think that promotion validity date influences me in making an order	5	4	3	2	1

9	**Statements – Personal Innovativeness**	SA	A	N	DA	SDA
28	If I hear about new smart technology, I will look for ways to experiment with it	5	4	3	2	1
29	Among my friends, I am usually the first to explore online food services	5	4	3	2	1
30	Online food services seem creative	5	4	3	2	1

10	**Statements – Traceability**	SA	A	N	DA	SDA
31	The online food service provider provides tracking ability during shipping	5	4	3	2	1
32	I can track my shipment with my mobile device	5	4	3	2	1
33	I can receive instant e-mail/text delivery alerts	5	4	3	2	1

11	**Statements – Behavior Intention**	SA	A	N	DA	SDA
34	I intend to use online food services in the future	5	4	3	2	1
35	I will always try to use online food services for order food in my daily life	5	4	3	2	1
36	I plan to use online food servicesapps frequently.	5	4	3	2	1

12	Statements –Actual use behavior	SA	A	N	DA	SDA
37	I currently use online food services through apps.	5	4	3	2	1
38	I have frequently used online food services for ordering food	5	4	3	2	1
39	I will continue using online food services for ordering food	5	4	3	2	1

13	Statements – Perceived Health Risk	SA	A	N	DA	SDA
40	I understand about social distancing norms, so I choose to use online food services instead of dining in or buying it by myself	5	4	3	2	1
41	I find that people involved in preparing and delivering my order ensures the safety measures	5	4	3	2	1
42	I usually compared online food service providers based on the safety level	5	4	3	2	1

THANK YOU

APPENDIX 2

LIST OF PUBLICATIONS & PAPER PRESENTATIONS

SR.NO	TITLE OF PAPER	NAME OF JOURNAL / CONFERENCE	YEAR OF PUBLISHED/ CONFERENCE HELD	ISSN NO/ VOL NO, ISSUE NO
1	COVID 19 and Online food services: Impact of pandemic on customer continued purchase intention	European Chemical Bulletin	2023	2063-5346/ 12 (Special Issue 4)
2	Unearthing the impact of Customer satisfaction on overall service quality and purchase intention in online meal delivery services	International Journal of Electronic Finance	Accepted for publishing	1746-0077
3	Blockchain Technology: Application in online food industry	"Blockchain for Business: Embracing Digital Disruptions"	14th October 2022	Organized by Mittal School of Business, Lovely Professional University, Punjab
4	Technology in food industry: Effect of website quality, perceived risk and subjective norms on consumer trust and purchase intention	1st International Conference on Recent Advances of Computing Sciences (RACS-2022)	4th – 5th November 2022	Organized by School of Computer Application at, Lovely Professional University, Punjab