



**University of Kyrenia**  
**Institute of Graduate Studies**

**The Change in Quality Perceptions of Tourists Using Airlines for  
Transportation in Turkish zone in post-Covid Era**

**Submitted to the Institute of Graduation Studies  
In Partial Fulfillment of the Requirements for the Degree of  
Master of Science in Aviation Management**

**University of Kyrenia**  
**February 2023**  
**Girne,TRNC**





University of Kyrenia  
Institute of Graduate Studies

The Change in Quality Perceptions of Tourists Using Airlines for Transportation  
in Turkish zone in post-Covid Era

M.Sc. THESIS

Naghmeh NADERI ADIB

Supervisor

Assist. Prof. Dr. Cengiz Mesut B  ke 

February 2023

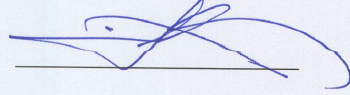
**APPROVAL**

The jury members certify that the study conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality as a dissertation for the degree of Master of science in Aviation Management.

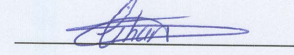
University of Kyrenia  
Academic year: 2022-2023

**For jury committee:**

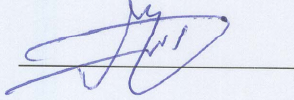
Asst.Prof.Dr. Cengiz Mesut B  ke 



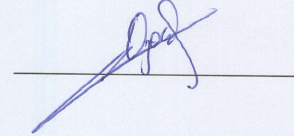
Asst.Prof.Dr. Cihan Alphon



Dr.Nazanin Alpler

**Institute of Graduate Studies Director:**

Prof. Dr. Candan   zo ul



### DECLARATION

I hereby declare that this is my original work and has never been presented for a degree or any award in any university or any academic institution of higher learning. It is all the result of my own effort and under the supervision of Dr. Cengiz Mesut B  ke .

Student

Naghmeh Naderi Adib

Signature.....

Date 10/02/2023

Supervisor

Asst.Prof.Dr. Cengiz Mesut B  ke 

Signature.....

Date 10/02/2023



## **Aknowledgements**

I want to thanks to all my family, my teachers and my lovely son Bilgi Maaşoğlu to be next to me all the time while I was studying.

**Naghmeh Naderi Adib**

## Abstract

The COVID-19 pandemic has impacted Aviation industry , healthcare and the economy on a global scale. This pandemic has changed consumer habits and behaviors significantly, primarily because of confinement-related issues. While numerous research has been undertaken to study customer satisfaction using surveys and online passenger ratings, the effect of COVID-19 on passenger satisfaction has not been explored. It is vital to assess satisfaction indicators gathered from online consumer reviews to ascertain consumers' preferences for airline services during the COVID-19 pandemic. The goal of this study is to determine the primary themes that emerged from airline travelers' internet reviews during the COVID-19 outbreak. Additionally, it attempts to determine which of these themes relate to higher and lower passenger satisfaction. This research analyses to examine the main components of passengers' subjective experiences of the airline. Data are represented by passenger reviews posted on the TripAdvisor website. The analyses revealed ten themes in descriptions of airline travel experiences. These include flight, service, staff, food, check-in, cancellation, COVID-19, airport, class, and luggage. Dissatisfying concepts are linked with the cancellation, check-in, refund, and airport concepts.

### **Keywords:**

Aviaition- COVID-19 outbreak; online passengers' reviews; passengers' satisfaction; Leximancer; airline; TripAdvisor

## Table of Contents

Approval.....	iv
Declaration.....	v
Acknowledgements.....	vi
Abstract.....	vii
Table of Contents .....	viii
List of Tables/List of Figures.....	ix

### CHAPTER I

Introduction.....	1
Backround .....	1
Problem Statement.....	2
Rationale.....	3
Purpose.....	4
Contribution.....	4
Thesis Outline.....	5

### CHAPTER II

Literature Review.....	6
Airline Business Model.....	11
Full Service Carriers.....	14
Low Cost Carriers.....	15
Service Quality Models .....	19
Service Quality in Airline Industry.....	26
Value for Money in the Hospitality Industry.....	28
Impact of Online Review.....	29

### CHAPTER III

Research Methodology.....	31
Study Context.....	31



Research Approach.....	32
Sampling Method.....	34
Data Treatment.....	35
Data Analysis .....	37

#### CHAPTER IV

Results.....	39
Value for Money Before Covis-19.....	58
Value for Money After Covis-19.....	59

#### CHAPTER V

Discussion and Conclusion .....	60
Implication.....	63
Limitation and Future Research Directions.....	66

#### CHAPTER VI

References.....	67
-----------------	----

## CHAPTER ONE

### INTRODUCTION

In this chapter, Reveal the basic introduction to the thesis, including the principles, reasoning, purpose, goal, and importance of the study. Finally, the chapter concludes with the thesis framework, which provides the reader with a road map for the entire thesis trip.

#### **Background**

The COVID-19 pandemic has caused a sharp change in passenger risk perception for the airline industry. The radical increase in risk aversion by travellers has resulted in a disastrous impact on the tourism and airline sectors globally (Lu et al., 2022). The airline industry's fierce competitiveness needs efficient customer relations management both online and offline in order to retain passenger satisfaction and improve revenue. Customer feedback is very essential since it is an enabler for corporate growth and performance helping an organization fill up gaps in passenger experience and in the development of unique products and the delivery of tailored services. Thus, airlines must consistently exceed their passengers' expectations and translate these into commitment in order to stay competitive in the business. To retain current customers and attract new customers, tourism and hospitality company often increase their service quality and, as a result, visitor satisfaction as a primary strategy (Malik et al., 2020). Scholars have expressed a strong interest in measuring consumer satisfaction among tourists (Malik et al., 2020; Liat et al., 2020; Tefera and Govender, 2017; Nunkoo et al., 2020).

Online reviews, the most common user-generated content (UGC), have helped travellers to convey their preferences in travel services and share their tourism experiences (Arasli *et al.*, 2020). Online reviews are regularly employed in assessing client satisfaction with tourist and hospitality airline services (Tseng *et al.*, 2015). Several studies have examined this using quantitative methods in surveys and research. Nonetheless, it is important to deploy more

accurate research methods quantitative and qualitative surveys when assessing customer satisfaction and change in quality perceptions of airline users in recent times (Nilashi *et al.*, 2021). Several works of literature have reported on the impact of Covid-19 on the travel industry, but few studies have discussed the impact and extent of change in customers' risk perception resulting in changes in the patronage of tourist services and low investment in the stock market of the airline industry (Lu *et al.*, 2022). This will aid researchers to infer key implications, hence enhancing the delivery of quality service in the airline industry (Ahani *et al.*, 2021).

### **Problem Statement**

The COVID-19 pandemic has overshadowed every previous pandemic, spreading all over the world, and this has been enabled by the aviation sector (Sun *et al.*, 2020). The COVID-19 pandemic caused a huge disruption in the global airline industry on an unprecedented scale (Liu *et al.*, 2021). Although the global aviation sector was flourishing, the COVID-19 pandemic impacted it negatively. The estimated loss in worldwide commercial aviation service was 51.8 billion U.S. dollars in 2021, after a loss of 137.7 billion U.S. dollars in the year 2020. The COVID-19 pandemic has made an impact theorized to persist until no sooner than 2024 (IATA, 2020). Gudmundsson *et al.*, (2021) forecast a similar path post the covid-19 era for the industry, with the best outcome occurring in mid-2022 and the worst happening in 2023.

Online customer reviews have been quite beneficial for documenting customer preference during an outbreak. Indeed, through online customer evaluations, the basic concerns of customers may be realized; nonetheless, there will be a need to probe further and this is where the qualitative component of the study comes to play. Consequently, improved data analysis tools and methodologies should be employed and developed for collecting and analyzing data from online customer evaluations. Hence, we opine that a mere statistical method-based

survey from online data collection would be inadequate in assessing customer satisfaction during and post the COVID-19 pandemic.

Global restrictions on travelling together with tourists' increased risk perceptions have influenced travel patterns throughout the world, even beyond the COVID-19 pandemic. As a result of this, the aviation sector has been affected by these changes and patterns (Garaus et al., 2022). Hence, this study ascertains the change in Quality Perceptions of Tourists Using Airlines for Transportation to in Turkish zone in the post-Covid Era

### **Rationale**

The aviation and tourism industries' will be revitalized when healthy competition is restored via a seamless customer relations management that is sustained both online and offline to ensure adequate client satisfaction, an increase in revenue and a better economy. Feedback from the customer is crucial because it boosts the growth and performance of the sector.

At this time of information technology, apps for travelling have become a key element influencing modern travel behaviour. However, studies on changes in the quality perception of airline services rendered remain limited in scientific literature. This study aims to assess the level of change in the perception of the quality of airline service by tourists bound for the Turkish zone in the post covid-19 era. It is predicted that the burden of the covid-19 pandemic will not be compensated for a long while (Tuncal et al., 2021). The results will help assist in efforts being put together to rejig the aviation and tourism sectors by authorities in the Turkish zone. It will help inform policies and efforts set up to lighten the burden of a pandemic, widely reputed as the deadliest and the most devastating in human history. This study will complement the evolving body of knowledge on proven ways to revamp the economy of the Turkish zone and by extension the global economy.

### **Purpose**

The study is aimed at investigating the degree of Change in the Perception of quality in tourism and airline services in the Turkish zone following the covid-19 pandemic. The

COVID-19 pandemic transformed travel patterns and the business of tourism globally, especially with the introduction of restrictions due to safety concerns. Some literature has been cited earlier reported feedback from customers from online surveys that showed a reduction in the use of airline and tourism services due to perceived health risks. This has been implied to mean a reduction in trust, hence, it is important to dig deeper and investigate these assertions including the degree of change in the perception of tourists and air travellers to the Turkish zone in the post covid-19 era

**R1** Before COVID-19, what are the key concepts that drive visitor perceptions of service quality?

**R2** What are the primary concepts influencing tourists' perceptions of service quality following COVID-19?

**R3** What are the themes most linked with a higher and lower value for money?

### **Contribution**

Despite that emotional appeal is usually used to promote airline travel and tourist experience, the covid-19 pandemic and customers' primary concern for safety appears to have influenced consumers' decision to less exciting travel, especially to the Turkish zone.

Secondly, the findings from this study might encourage airline managers to take additional measures to increase the quality perception of travellers amidst concerns about the safety of the flight. The research will also explore opportunities for direct feedback from customers to help inform up-to-date policies in the aviation and tourism sectors of the Turkish zone.

Hence, the results will go a long way in contributing to target marketing strategies post the COVID-19 pandemic, helping to revamp the aviation and tourism economy in the Turkish zone. It will also contribute to the global body of knowledge for informing relevant policies and sound economic decisions by authorities throughout the world. Finally, also from a societal perspective, our research offers interesting implications that can be used to strengthen

advocacy for more connectivity around the world as facilitated by a bigger and better global airline industry.

### **Thesis outline**

The purpose and reason for the study were explained to the readers in the first chapter of this research. The linkage of the constructions and a brief introduction to the topics were also provided. A review of the literature pertaining to service characteristics, the definition of service quality, service quality models, service quality in the airline industry in the hospitality industry, the role of web-based reviews in service quality studies, the effect of internet-based reviews on the airline industry, and the COVID-19 pandemic will be covered in the second chapter. The third chapter will cover data collecting, leximancer data analysis, and sampling. In Chapter 4, data analysis findings, an overview of airline experiences during the COVID-19 epidemic and after. The final chapter provides a summary of the topics covered in this study, along with any theoretical or management implications, potential limitations, and suggestions for additional research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Airline industry**

An airline is a firm that provides frequent services for carrying cargo or passengers by air. These businesses are referred to as the airline industry, which is also considered a sub-sector of the aviation sector and the larger travel industry. Airlines are generally recognized by an air operating certificate or license granted by a governmental aviation organization. Airlines can operate on a scheduled or charter basis. The first airline was DELAG, a German airship corporation that started on November 16, 1909 (Brooks, 1965). The Netherlands' KLM (1919), Colombia's Avianca (1919), Australia's Qantas (1920), and the Czech Republic's Czech Carriers (1923) are the four oldest non-airship airlines currently in operation (Schmitt & Gollnick 2016).

Airline ownership shifted from primarily private ownership until the 1930s to government control of major airlines from the 1940s through the 1980s, and then reverted to large-scale privatization from the mid-1980s (Chang et al., 2004). There has also been a pattern of large airline mergers and the development of airline alliances since the 1980s. Star Alliance, SkyTeam, and One World are the main alliances, accounting for more than 60% of worldwide commercial aviation traffic in 2015 (Alliance 2015). Airline alliances collaborate on passenger service programs (such as lounges and frequent-flyer programs), provide discounted interline fares, and frequently participate in substantial code sharing.

The global aviation sector now serves almost every country on the planet and has played an important part in the development of a global economy (Banerji et al. 2022). The airline business is a significant economic force, both in terms of its own operations and the effects it has on allied industries such as aircraft production and tourism, and so on. (Ozer et al. 2019).



Major technological advancements like the introduction of jet aircraft for commercial usage in the 1950s and the subsequent development of wide body "jumbo jets" in the 1970s were key factors in the expansion of the global airline industry throughout a significant portion of that time (Davies, 2016). Airline regulation was strict everywhere at the same time, which led to a situation in which government policy and technology advancements took precedence over profitability and competitiveness (Levine, 2006).

Cost effectiveness, operational, profitability, and competitive dynamics have only recently emerged as the key challenges facing airline management, with the economic deregulation of airlines commencing in the USA in 1978 (Bailey et al., 1985). According to Morrison and Winston, (2010) most of the industrialized world has now seen airline deregulation, or at the very least, "liberalization," which has an impact on both local air travel and, probably more significantly, the ongoing development of a fiercely competitive international airline sector.

Currently, the global aviation sector includes over 2000 airlines that operate over 23 000 passenger airliners and serve over 3700 airports (ATAG, 2008). The American Airlines Group was the largest airline by passengers carried and fleet size in 2019, whereas Delta Air Lines was the biggest by revenue. Lufthansa Group had the most workers, FedEx Express had the most freight tonne-kilometres, Turkish Airlines had the most countries serviced, and UPS Airlines had the most routes served while United Airlines is the biggest passenger airliner by number of route (Ellis & Leib, 2021).

The COVID-19 global pandemic in 2019 has had a huge influence on the aviation sector globally, affecting both non-scheduled and scheduled trips, both domestic and international, and also cargo airlines (Amankwah-Amoah, 2021). In 2020, the worldwide market size of the sector was evaluated at approximately 359.3 billion US dollars, a 56 percent decrease from the previous year. Though this is expected to rise to 471.8 billion US dollars in 2021, it represents just a little rebound in comparison to pre-pandemic statistics (IBISWorld, 2021).

The aviation sector has been one of the most affected industries globally since the World Health Organization (WHO) officially declared it as a global pandemic in March 2020 (Maneenop & Kotcharin 2020). The number of scheduled passengers boarded by the worldwide airline sector fell by 60% in 2020 compared to 2019 (ICAO, 2021). This was due to lockdown requirements and substantial travel restrictions. Furthermore, following the commencement of the pandemic in 2020, commercial airlines recorded a net profit loss of 137.7 billion US dollars (Erick, 2022). Aside from lockdowns and limitations, there has been a drop in air traveller trust owing to safety concerns and trust in health precautions. To assure the aviation industry's resilience, airports and airlines have to use new technologies including digital immunity passports, contact tracking and passenger distancing (Belhadi et al., 2021).

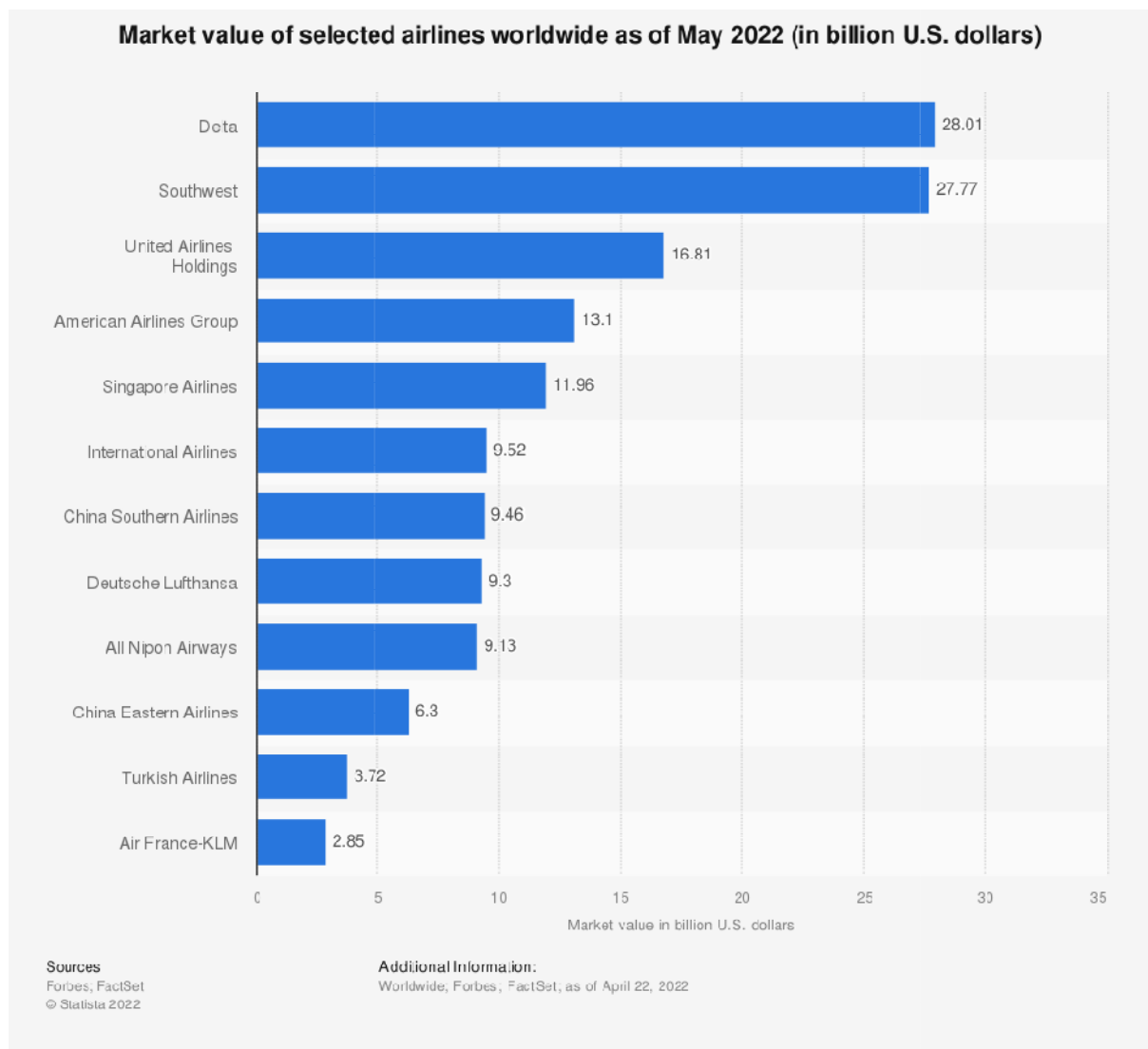
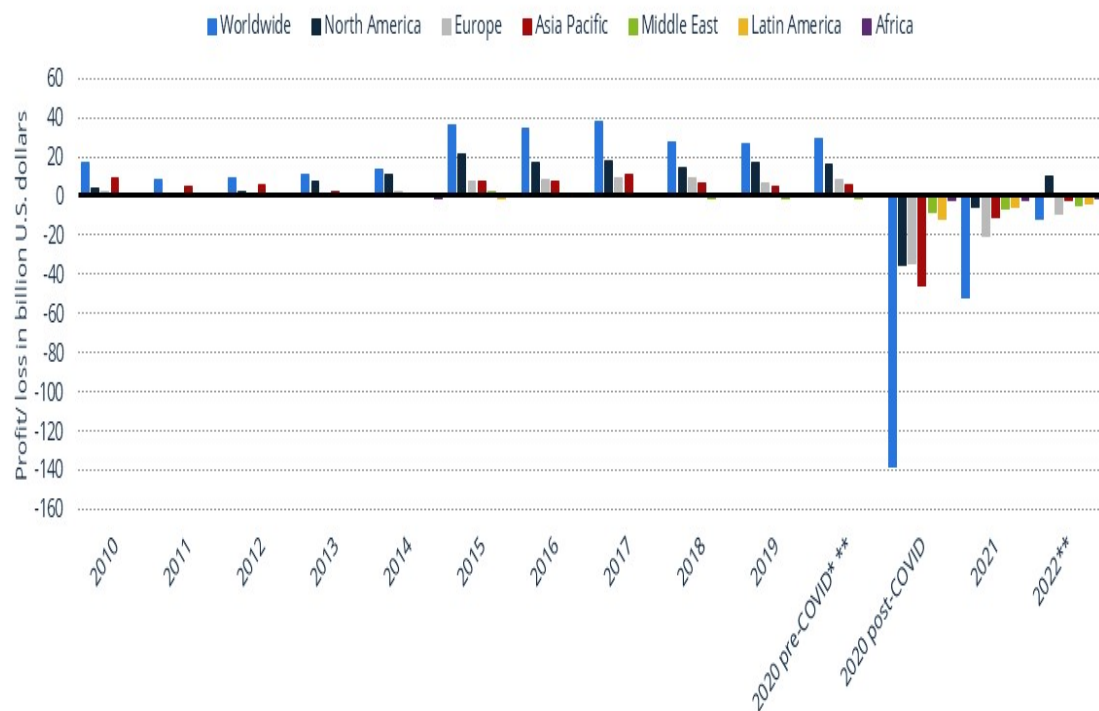


Figure 1: Market value of selected airline worldwide

# Profit and loss of commercial airlines worldwide from 2010 to 2022, by region (in billion U.S. dollars)

Profit and loss of airlines worldwide 2010-2022



5 | Description: Although the global air travel industry was booming, the coronavirus (COVID-19) pandemic hit it hard. The loss in global commercial aviation profit is expected to reach another 51.8 billion U.S. dollars in 2021, after a loss of 137.7 billion U.S. dollars in 2020. On the other hand, prior to the COVID-19 shock, it was estimated that the commercial airline operations during 2020 would generate over 29 billion U.S. dollars. In regional dimensions, the Middle Eastern and African carriers reported [...] [Read more](#)  
 Note(s): Worldwide, 2010 to 2021; \*\* This figure was taken from a previous edition which was released prior to the coronavirus outbreak and can be accessed here. \*\* Forecast. Figures prior to 2016 were taken from previous reports. 2021 figure is [...] [Read more](#)  
 Source(s): IATA

statista

**Figure 2: Profit and lost of commercial airlines worldwide from 2010 to 2022 by region**

## **Airlines business model**

Although the subject of airline business models and their variations has been extensively studied, there isn't a "uniform and structured technique to examining airline business models," according to Mason and Morrison (2008). This insight is still applicable today. Mason and Morrison's (2008) study provided the first foundation for assessing the differences across airline business models. Six European low-cost carriers were compared by the authors using a product and organizational architecture (POA) model (Air Berlin Ryanair, FlyBe, Norwegian, SkyEurope, and easyJet). The 10 indices used to measure airlines against one another based on "best in class" performance are based on 37 operational and managerial criteria. The study comes to the conclusion that even if all six of the airlines studied in the study were previously categorized as low-cost carriers, there are still significant distinctions between them based on the combination of indices. The researchers replicate the assessment in Mason et al. (2013) using the same structure of indices and the same six airlines because they recognize that constraints (the study was conducted in two years, 2005–2006) levied restrictions on their findings about the evolution of the product and organizational architecture of airlines over time.

The research came to the conclusion that there are at least two distinct categories of low-cost carriers: the "really low cost" and the "full-service airline challenger" after revisiting the data over a longer six-year period (2005-2010). Between 2005 and 2010, the traditional low-cost type showed very little variation from the traditional low-cost while full-service airline challenger is tilting into the Full-service carrier model of traditional rivals, The index-based methodology mentioned in Mason and Morrison (2008) is also used by Lohmann and Koo (2013) in their investigation. They take into account nine US airlines, which are rated to produce a range of various business models. The lists of variables and indices are based on operational data from the years 2008 and 2009 and were taken from Mason and Morrison

(2008). Jean and Lohmann (2016) re-examine the business model spectrum for the years 2011 to 2013, coming to the conclusion that US airlines that combined shifted toward the Full-service carrier spectrum post-2009, while those that did not merge shifted toward the low-cost carrier spectrum. Moir and Lohmann (2018) review the product and organizational architecture model. Seven indices made up of their variables throughout the 2011–2013-time frame indicate measurements of revenue, connection, convenience, comfort, unit cost, aircraft, and labour. Their strategy demonstrates the competitive variety that exists among US airlines and the potential for hybrid business models to excel at both cost leadership and distinctiveness. The authors' findings contradict Porter's (1985) competitive advantage hypothesis, which claims that businesses may compete on cost or distinctiveness but not both. A novel methodology is presented by Daft and Albers (2013) to evaluate the convergence of airline business models across time. Three elements make up their framework's structure (configuration of the value chain activities, corporate core logic and assets). Five German airlines (Germanwings, Lufthansa, Air Berlin, Germania and Condor) serve as practical examples of the framework, and the convergence of their business models between 2003 and 2010 is evaluated. The researchers discover that, by 2010, non-FSC airlines in the sample had begun to apply certain procedures that, in 2003, had only been employed by the Full-service carrier Lufthansa. Basically, Lufthansa did not alter. Daft and Albers (2015) perform longitudinal research to examine the placement of 26 European airline business models at four different times in time: 2012, 2010, 2007 and 2004. They do this by expanding on the framework from their prior study. The findings paint a picture of business models shifting from their 2004 starting points and settling into a medium ground characterized by less distinct company models by 2012.

According to their analysis, there is less diversity across airline business models among all the framework's elements. Additionally, the decrease in difference is constant throughout all three

time periods, pointing to a genuine influence from the airline management's strategy initiatives instead of a chance effect (Whyte & Lohmann 2020). The indices technique, used by a number of scholars, is helpful in designing the cost and product data structure but difficult to gather data for, particularly in the absence of cost and revenue information. Therefore, it has mostly been used by a small number of airlines. Daft and Albers' (2015) analysis is the largest one to date in terms of the number of airlines. In contrast, Whyte & Lohmann (2020) provides the most thorough coverage of airlines in a particular geographic area, covering nearly twice as many carriers than Daft and Albers' (2015) analysis. Eighty percent of the European fleet is operated by the airlines that were part of the research (excluding Russia and Turkey). The temporal component of convergence has already been established in earlier research, and there is proof that airline business models have evolved through time. The researcher thinks that, in light of the available study, the next crucial task is to assess the current state of airlines in order to look at the consequences of convergence and the variations in their business models that arise. Instead of tracking data over an extended period, they examine the operational traits of a vast array of airlines and record the information as it becomes available at the moment. They only include European airlines in the analysis because of the geographic proximity and similarities in the legal system, consumer travel habits, and so on. The several operating European airlines also provide us access to a sizable sample set.

They use a similar approach to Klopheus et al. (2012), who compare the low-cost features of 20 of the biggest European low-cost carriers against those of four significant European Full-service carriers as a control group. According to Klopheus et al. (2012), airlines are rated according to whether or not they exhibit the traits of traditional low-cost carriers. In their method, they categorize airlines by establishing a low-cost carriers index that measures the proportion of variables that satisfy the low-cost carriers' requirements.



The traits of the low-cost carriers are counted, added together, and graded. Due of their high scores for meeting the low-cost carrier requirements, the airlines around the top of the list are closer to the usual low-cost carrier model. On the other hand, because they scored the lowest for low-cost carriers' features, the airlines around the bottom are closer to the Full-service carrier standard model. They draw the conclusion from their investigation that the majority of European low-cost carriers use high flexibility and that either Full-service carrier or low-cost carrier characteristics predominate (Klophaus et al., 2012).

Whyte & Lohmann (2020) retrieved 49 European airlines in their empirical investigation. Where applicable, data are gathered in a categorical format or, if numerical, are translated into category variables. The well-known k-modes approach is the analytical methodology they deployed. There are four observable airline categories, from the research including Full-service carrier, low-cost carriers and two intermediate hybrid kinds, which was revealed using clustering technique.

### **Full-Service Carriers (FSC)**

A full-service airline's ticket prices sometimes include amenities like blankets and pillows, in-flight entertainment, checked baggage, meals, and drinks. Compared to budget airlines, seats frequently have greater leg room and are more reclined. Customers of full-service airlines have the choice of flying in economy, business, premium economy, or first class on some flights (Chiou & Chen, 2010). The majority of full-service carriers are included in the alliance with which these airlines belong, and they will transfer bags between flights and to alliance partners (Oneworld, Star Alliance. SkyTeam). Many full-service airlines have a long history and act as the national flag carriers for their respective countries.

## **Low-Cost Carriers (LCC)**

Early in the 1970s, Southwest Airlines helped establish the concept of "low-cost carriers" in the US. When the Irish company Ryanair converted from a regular airline to an LCC in 1991, the Southwest model was replicated across Europe. Other low-cost carriers in the United Kingdom soon followed (e.g., easyJet in 1995). A low-Cost Carriers is described as an airline firm that is meant to have a cost advantage over a full-service carrier. To attain this advantage, a Low-Cost Carrier relies on a simplified business model (as compared to the full-service carrier), a model that includes any or all of the following important elements:

Low-cost ancillary services carriers are increasingly generating money from sources other than ticket sales. Commissions from hotels and vehicle rental businesses are common examples, as are credit card fees, (extra) baggage costs, in-flight food and beverages, and advertising space. Telephone operations and gaming on board have the potential to increase this revenue. Ryanair's non-ticket income contributed £259 million to its net profit of £302 million in 2005-06. These revenues already account for 16% of the carrier's overall revenue. For easy Jet, that sort of money originally constituted only 6.5 per cent of the airline's overall revenue, but it climbed by 41.3% from 2004. Not every low-cost airline follows all of the guidelines outlined above. For instance, Air Berlin began operating domestic flights within the UK in 2005 as feeders to its German services out of Stansted, as part of an experiment with hub-and-spoke business models. There are several ways in which the FSC and LCC business strategies diverge. These essential distinctions are what cause the two models' substantial structural cost gap.

## **Service quality**

In today's competitive global market, service quality has become a vital factor for airlines. Service quality is a critical idea that businesses must grasp in order to stay relevant in the marketplace. (Ghorabae et al., 2017; Chen, 2016; Hussain et al., 2015; Chow, 2014).

Improved customer service not only gives a company a competitive edge over other airlines, but it also encourages repeat business, which boosts market position (Park et al., 2004). In order to better understand customers' demands and how to meet them, businesses must be able to evaluate the quality of their services from the customers' point of view and maintain a customer-focused attitude. It is impossible to overstate the role that the airline industry plays in a nation's economic growth. It makes it easier for people or goods to move from one location to another, whether they do so domestically or internationally. The air transportation market has grown increasingly difficult and competitive since the beginning of the current decade, and several airlines are now focusing on airline service quality to boost customer satisfaction (van Lierop and El-Geneidy, 2016). Additionally, according to Aksoy et al. (2003), modern company philosophies include putting the client first. Modern marketing strategies involve "creating, understanding, communicating, and delivering customer value and satisfaction." Additionally, businesses' main goal is to satisfy their customers with their services. Airlines typically like to introduce new tactics to boost consumer satisfaction. One of them is the use of in-flight entertainment systems. In-flight entertainment system use (in the form of audio/video systems) has reportedly become a more exciting instrument in the aviation sector (Alamdari, 1999). There are in-flight entertainment systems available for all types of flights. Multimedia IFEs like video-on-demand, music channels, telephones, destination information, gambling, financial services, cameras that allow for an external view, air map displays, and computer games have been added in order to enhance the passenger experience and keep them engaged, amused, and comfortable throughout the flight. Yes, an enjoyable travel experience will unintentionally create associations that will affect the consumer's decision to buy services in the future. According to Lien et al. (2014), various academics have studied the topic of quality, noting that a company's overall dominance and

differentiation in the market are reflected by the level of customer service it offers (Zeithaml, 1988).

This study supports the assertions made concerning service quality by Woodside et al. (1989). The study propose that customer evaluation of the services rendered by an organization's service processes constitutes an assessment of service quality. Because customers give feedback to organizations by demonstrating their trust in and behavioural intentions toward the organization's products and services, it is crucial for businesses to demonstrate concern for the level of service they offer to their clients. Customers' trust in the organization's goods and services increases when they perceive that they live up to their expectations. As a result, customers display their behavioural intentions based on their level of trust in the company and its goods and services. According to Bateson and Hoffman (2002), "the customer's total appraisal of the performance of the service provider is the cognitive creation of service quality."

According to a different study, customers' trust in an organization is determined by the appraisal of the quality services they receive (Chiou and Droge, 2006), which also confirms the consumers' behavioural intentions. Numerous research has investigated how well-performing services affect client trust. Service excellence has a favourable influence on trust (Alrubaiee and Alkaa'ida, 2011; Cho and Hu, 2009). It implies that consumer trust increases when service quality is at its highest. Customers are more at ease with that company, its offerings, and services. If customers are happy, they recommend the business to other potential customers. This kind of connection forecasts different client behavior. Customers' behavioral intentions are impacted when they grow to trust a business owing to improved service quality. Due to the fact that privatization affects service quality and has a distributional impact on people's welfare (Swindell and Kelly, 2005).

This is crucial because it gives organizations perspective into how well their services are being received by customers and allows them to gauge that satisfaction. Their level of trust and contentment with the organization's goods and services determines how they will act in the future. Greater emphasis is placed on service quality by privatized organizations.

The similar phenomenon was illustrated by Ai et al. (2004), who showed how crucial it is for the private sector to consider service quality since it affects long-term company performance and success. This indicates that the effectiveness of the business is significantly influenced by the quality of the services provided and made available by any organization. Due mostly to the quality of service provided to the clients, superior quality of service sets one firm apart from another or from a group of rivals (Ghobadian et al., 1994). The advantages of having a competitive edge go to the business that offers better and higher quality services than the competition. Because of this, the essential aspect determining an organization's competitive advantage is service quality. According to Pina et al. (2014), where there is intense rivalry, service quality must be preserved. Because service quality is consistently seen as a significant and critical factor of competitiveness for any sort of firm, whether privatized or public, this should be done in order to maintain and uphold consumers.

An organization may set itself apart from all other companies and establish a sustainable competitive advantage over its competitors by providing exceptional service quality (Prajogo and McDermott, 2011). Additionally, a lot of researchers have shown that another crucial aspect that affects service quality is how fierce the competition is (Pina et al., 2014; Alexander and Feinberg, 2004).

This shows that when there is fierce competition, businesses work to improve their service quality in an effort to triumph over rivals. They also deal with the competition by enhancing their service procedures, which gives their business a chance to gain a competitive edge and spur competition between them. Pina et al's (2014) report that recent times have seen more

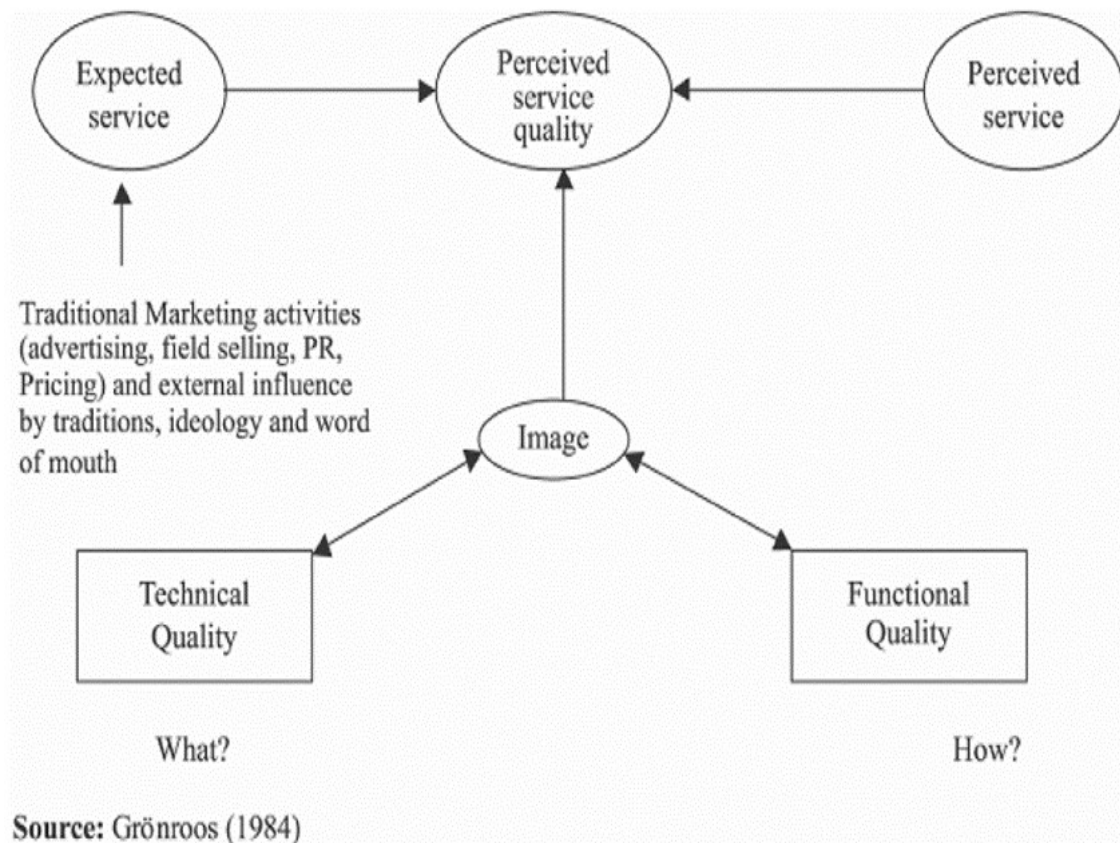
active competition has assisted in identifying the differentiation in various business units/segments, which led to better and enhanced services and advanced and superior service quality for the clients and customers, further supports this phenomenon.

According to Chou et al. (2011), the importance of airline service quality is growing in the global air transportation sector. Since there have been several studies on the airline industry's customer service and quality assessment, SERVQUAL has been employed extensively in many of them. By creating a conceptual framework and measuring scale, Wu and Cheng's (2013) study's goal was to improve knowledge of service quality in the aviation business.

Similar to this, Archana and Subha (2012) noted that company competition in the aviation business is increasingly dependent on customer retention and satisfaction. By offering consumers high-quality service, it is possible to increase customer satisfaction and keep existing customers. Additionally, it aids in gaining a larger market share. As a result, Namukasa (2013) argued that the aviation industry places a high value on providing customers with high-quality services. This is due to the fact that customers are now paying attention to the kind of service they receive. A few more investigations, including Hussain et al. (2015) and Jiang and Zhang (2016), observed the similar result.

### **Service Quality Models**

Parasuraman et al (1985,1988) and Grönroos' (1984). models, which were first developed in consideration of service quality in the literature Service quality models are detailed in this portion of the literature with general acceptance. Grönroos Service Quality Model (1984) incorporate technical quality, functional quality, corporate image, anticipated service, and perceived service variables are all part of the Grönroos service quality model.

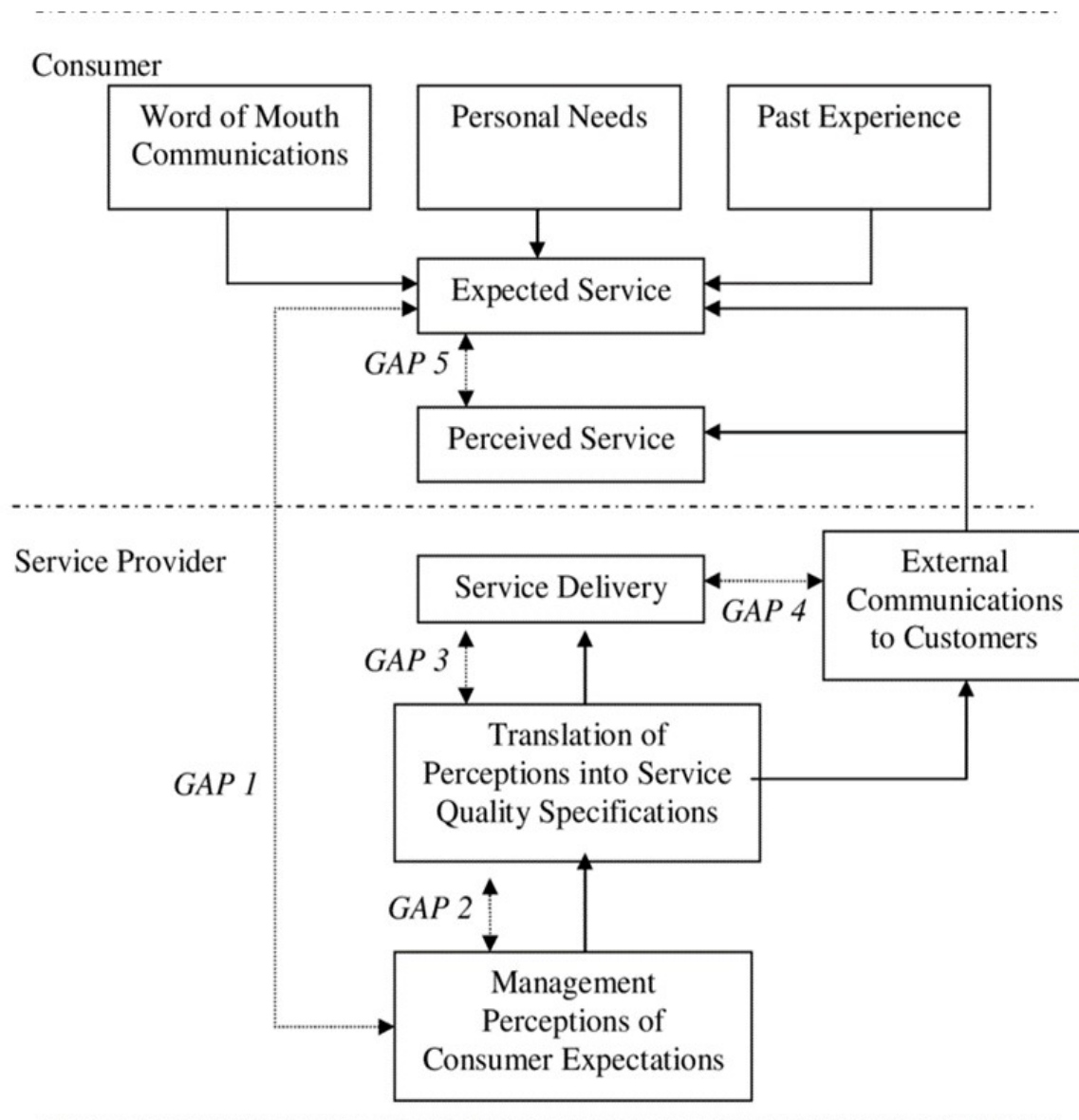


Technical quality refers to the concern for "what the customer gets from the service" from the consumer or customer from the consumer's service. For instance, booking a hotel room, purchasing a train ticket, and dining out are all considered technical grade activities.

Functionality concerns "How" the service procedures are carried out. Particularly essential in the functional qualities are appearance and conduct. The conduct of a plumber may be used as an example for functional quality in the conversation between a receptionist and a customer.



## Gap Model and SERVQUAL Service Quality Scale



**Gap 1:** This is the discrepancy between what consumers demand and what management believes. The management of the service provider inform customers about the high-quality products and services available, as well as the kind of services that will best fit their needs. Choosing the appropriate level in advance could be challenging. Briefly, it represents the notion that service providers frequently lack understanding of what clients anticipate. It is claimed that these flaws will influence how customers perceive quality.

To close this gap, it is important for organizations to conduct thorough research and gather feedback from their customers to understand their expectations (Parasuraman et al., 1985).

This can be done through various methods such as customer surveys, focus groups, and online reviews. The feedback collected should be analyzed and used to develop a clear understanding of what customers expect from the organization's services. In addition to gathering feedback from customers, it is also important for organizations to have open lines of communication with their customers (Parasuraman et al., 1985). By engaging with customers, organizations can gain valuable insights into their needs and expectations, which can be used to improve service quality. Regular customer engagement and interactions through various channels such as social media, email, or phone can help organizations understand their customers' expectations better. Closing the first gap in the service quality model is critical to ensuring that organizations understand their customers' expectations and are able to deliver services that meet those expectations (Parasuraman et al., 1985). Failure to do so can result in a gap between what customers expect and what the organization provides, leading to dissatisfaction, decreased loyalty, and ultimately, decreased revenue.

**Gap 2:** The disparity between management standards and service quality perceptions. The managers of businesses that provide repair and maintenance services in particular. The interview focused on the challenges of standardization. Customers value prompt service as a crucial component of high-quality services. On the other side, management makes it challenging to standardize the lack of skilled staff. In other words, even though managers are aware of customer expectations, there may be a number of issues (resource limitations, market conditions, or management variances) that prevent them from meeting service standards (Parasuraman et al., 1985). It was developed to gauge its arrival in terms of service uniformity and the degree of management. To close this gap, it is essential for organizations to clearly define their service quality standards based on a comprehensive understanding of customer expectations (Parasuraman et al., 1985). This can be achieved by using customer feedback to identify areas where service improvements are necessary and then specifying the standards for

those areas. Once service quality standards have been specified, it is crucial for organizations to communicate these standards effectively to employees (Parasuraman et al., 1985). This can be done through training programs, written procedures, and regular performance feedback. In addition to effective communication, organizations should also ensure that their employees have the necessary resources and support to meet the specified service quality standards (Parasuraman et al., 1985). This may include providing adequate staffing levels, appropriate technology, and effective management support. Closing the second gap in the service quality model is essential for ensuring that service quality standards are aligned with customer expectations and that employees have the necessary resources and support to meet those standards. Failure to do so can result in a gap between what customers expect and what is actually delivered, leading to decreased customer satisfaction, loyalty, and ultimately, revenue.

**Gap 3:** There is a disparity between service quality criteria and service delivery. According to reports, employee performance plays a significant part in the establishment of this disparity. In the final analysis, people's perceptions of service delivery varies. Even though service quality standards are established, there is a gap between service standards and delivery as a result of this difference. To close this gap, organizations need to ensure that their employees have the necessary skills, knowledge, and resources to deliver services that meet the specified service quality standards (Parasuraman et al., 1985). This can be achieved through effective training programs, regular feedback and coaching, and appropriate technology and equipment. In addition to providing employees with the necessary resources, it is important for organizations to monitor and measure service quality during service delivery (Parasuraman et al., 1985). This can be done through various methods such as mystery shopping, customer feedback surveys, and service quality audits. The feedback and data collected through these methods can be used to identify areas where service improvements are necessary and to make necessary adjustments to service delivery processes. Closing the third gap in the service quality model is essential for ensuring that

service quality standards are met during service delivery and that customers receive the services they expect. Failure to do so can result in decreased customer satisfaction, loyalty, and ultimately, revenue.

**Gap 4:** The distinction between service delivery and customer external communication. The expectations of customers are influenced by advertising and other forms of communication. Employees have high expectations for the company's actual service offers. They said that the marketing and advertising campaigns that would result could not be coordinated, presenting a falsely improved image of service excellence. It may have a detrimental impact on how people perceive its value. This gap can occur when organizations overpromise in their marketing communications or fail to effectively communicate service quality standards and improvements to their customers. To close this gap, organizations need to ensure that their external communications are aligned with the service quality standards they are delivering (Parasuraman et al., 1985). This can be achieved by effectively communicating service quality standards and any improvements to customers through various channels such as advertising, social media, and customer feedback surveys. In addition to effective communication, organizations should also manage customer expectations by providing realistic promises about the services they offer (Parasuraman et al., 1985). This can be done by ensuring that marketing communications are truthful and accurate, and that any potential limitations or drawbacks of the service are clearly communicated to customers. Closing the fourth gap in the service quality model is essential for ensuring that customers have realistic expectations of the services they will receive and are not disappointed by overpromising marketing communications. Failure to do so can result in decreased customer satisfaction, loyalty, and ultimately, revenue.

**Gap 5:** Disparity between perceived and anticipated service. The study found that in order to provide excellent service quality, managers must raise perceived service quality. They stated

that the level of service should exceed expectations. In the future, for instance, when a person's possessions cannot be fixed, a technician describing what to do to resolve the same distress was deemed by customers to have a very high level of service quality. if it exceeds your expectations, He claimed that something happened. The consumer's perception of quality is, in essence, what makes the difference. Its quality is the difference between what is provided and what is anticipated. This gap can occur when customers' expectations of service quality are not met during service delivery. To close this gap, organizations need to ensure that they have a clear understanding of customer expectations of service quality (Parasuraman et al., 1985). This can be achieved by using various methods such as customer feedback surveys, focus groups, and complaint analysis. The feedback and data collected through these methods can be used to identify areas where service improvements are necessary and to make necessary adjustments to service delivery processes. In addition to gathering customer feedback, organizations should also manage customer perceptions of service quality by effectively communicating service quality improvements and resolving any service failures promptly (Parasuraman et al., 1985). This can be done by providing customers with regular updates on service quality improvements, offering compensation for service failures, and ensuring that customer complaints are addressed in a timely and effective manner. Closing the fifth gap in the service quality model is essential for ensuring that customers' expectations of service quality are met during service delivery, which can lead to increased customer satisfaction, loyalty, and revenue. Failure to do so can result in decreased customer satisfaction, negative word-of-mouth, and ultimately, decreased revenue.

## **Service quality in airline industry**

Parasuraman, Zeithaml, and Berry are credited with establishing the notion of service quality and its measures (Parasuraman et al., 1985; Zeithaml et al., 1990). In scientific study, Parasuraman et al. (1988) created 'SERVQUAL,' a service quality measurement system based on aspects such as responsiveness, reliability, tangibles, empathy and assurance.

- (1) Tangibility: The actual equipment or infrastructure used to supply the service, as well as representations of the service. This comprises on-board equipment and facilities for delivering aircraft service in the case of an airline firm (Chen and Chang, 2005).
- (2) Reliability: service delivery accuracy, honouring promises, or providing a service on time. According to Wu (2014), the dependability of airline schedules is frequently studied to evaluate schedule reliability since it has a significant impact on customer satisfaction.
- (3) Responsiveness: if the employee reacts promptly and efficiently to the needs of the consumers. The most important aspect of airline service quality for achieving the intended results of customers is responsiveness (Rezaei et al., 2018).
- (4) Assurance: actively offering services and upholding trustworthy standards. In the airline sector, assurance speaks of staff members' proficiency in communication and attention, as well as their capacity to earn passengers' trust and confidence by upholding dependable airline service criteria. (Hussain et al., 2015).
- (5) Empathy: giving each of its clients and/or visitors unique attention. To keep up with the customisation trend and win over customers' attention and loyalty, airline firms must study their unique wants and give them personalised service.

This strategy attempted to assess customer satisfaction by measuring customer perceptions and expectations. The SERVQUAL was used in research by Pakdil and Aydin (2007) to assess the service quality of the airline sector from the viewpoint of foreign travellers.

According to Andotra and Gupta (2008), the airline industry views service quality as a "competitive marketing strategy" that involves customer attention, service inventiveness, innovation, and the desire to achieve "service excellence." Business management has been interested in service quality for many years (Caro and Garcia, 2008). Service quality is viewed as a continuous and consistent construct that incorporates performance quality in organizational activities undertaken by workers and organizational management (Prayag, 2007).

Customers view clean seats and comfortable seats as crucial services that any airline sector may provide (Chen and Chang, 2005; Liou and Tzeng, 2007). Additionally, they provided factual evidence for the notion that it is crucial for the airline sector to offer "complaint management services" to customers. In addition, Park (2007) states that regardless of their origin or background, passengers have their own perceptions about the seats they take, the classes they belong to, and how often they use them. Additionally, consumers in the aviation business place importance on "safety related services" (Liou and Tzeng, 2007).

Chen (2008) stressed the need for firms to offer their customers high-quality services if they want to obtain a competitive edge and expand steadily while making a high profit in the aviation sector. Chen (2008) cites several research that claimed service quality had a big influence on customer satisfaction or perceived value.

Management must comprehend the true meaning of service quality and how it is measured, claim (Asubonteng et al., 1996). If management intends to improve quality, it is critical to have a clear grasp of what quality is. In order to "increase quality," it is suggested that staff members who interact with clients directly establish their own idea of what quality is. How can businesses now enhance this vague idea? Management should instruct staff members who deal with consumers directly to be more successful in their response, a component of service



excellence. To make workers aware of the organization's requirements and what exactly service excellence entails, management should define responsiveness clearly.

The conclusion of reliable and valid service quality measurement, which is essential to quality management, is significant. A measure is seen to be dependable if it is consistent in the sense that it would not change if the quality did not change. A valid measure is one that yields the actual outcomes that the scale is intended to assess (Asubonteng et al., 1996).

### **Value for money in the hospitality industry**

According to Zeithaml et al. (1996), value for money may be defined as the process of determining what consumers "receive". and what these customers must "pay". From the perspective of passengers, hotels stay strong if they give superior quality products at a higher value for money than their competitors (Dedeolu and Demirer, 2015). Tourists who stay in airline that offer good value for money are expected to be loyal and to recommend these businesses to others (Liat, Mansori and Huei, 2014). Value for money led decision-makers and executives to estimate total customer happiness, loyalty, referral intentions, and firm productivity, in line with the literature on service, travel, and tourism (Brochado et al., 2019). In their study of six airlines, Brochado et al. (2019) sought to uncover the key themes that airline travelers frequently discussed in their online evaluations as well as which of these themes were linked to higher and lower value for money ratings. For instance, Messner's (2017) research revealed a high and favorable correlation between airline customers' intentions to suggest products and services online and their perceptions of value for money. In 2020, Arasli, Saydam, and Kilic performed research on the eight most well-liked cruise ships. They wanted to know whether cruise passengers rated value for money as greater or worse based on their own experiences with service quality. Rajaguru (2016) also discovered that perceived value for money has a significant role in how well airlines are able to achieve customer satisfaction and loyalty.

## **Impact of online review**

There are several internet platforms available at the moment that direct customers to restaurants, hotels, and shops (Yi et al., 2018). When looking for travel information, 75% of passengers trusted user-generated material (Gretzel and Yoo, 2008). Nowadays, more people can post online reviews because to ease access to the internet (Brochado et al., 2019; Yi, Li and Jai, 2018). Smartphones and other personal electronics also hasten the flow of user-generated content and online reviews. Online reviews, which are connected to conventional word-of-mouth, are regarded as digital word-of-mouth and have a stronger delivery impact (Hart and Blackshaw, 2006).

Additionally, consumers concur that genuine customers' comments on social media are the most regarded, making online evaluations more reliable and relevant than data on business websites (Ye et al., 2009). Online reviews significantly influence the hotels that clients choose (Ye et al., 2009). There is little doubt that individuals are turning to internet resources like personal blogs, forums, and review sites more and more when making decisions (Yi, Li and Jai, 2018; Xiang and Gretzel, 2010).

It is generally acknowledged that internet reviews both favorable and negative have a substantial impact on consumers' tastes. Additionally, when customers are dissatisfied with the quality of the services they receive, they are more inclined to publish an online review as payback (Yi et al., 2018). It has been demonstrated that customer preferences are directly impacted by negative reviews, which have greater sway than favorable evaluations (Smyth et al., 2010). Additionally, according to Spark and Browning (2011), customers are more inclined to consider unfavorable evaluations.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

This chapter covers topics including methodological technique, data collecting, sample strategy, and review strategy that are pertinent to the setting of research.

#### **Study Context**

Actual visitor contacts with an airline with a base in Turkey before and after Covid 19 were sampled for the purpose of this study, this thesis adopted a qualitative content analysis methodology. Samples were collected from Turkish Airline, Pegasus Airline, Anadolu jet, Corendon Airlines and SunExpress Airline on TripAdvisor based on the popularity index. Leximancer 5 was used for the study due to its ability to explore and forecast (Olorunsola et al., 2022).

<b>Airline</b>	<b>Headquarters</b>	<b>Number of reviews</b>
Turkish Airlines	Istanbul Türkiye	32,863 reviews
Pegasus Airlines	Istanbul Türkiye	6,817 reviews
Corendon Airlines	Antalya Türkiye	3,418 reviews
SunExpress Airlines	Antalya Türkiye	2,707 reviews
Anadolujet	Ankara Türkiye	717 reviews
		46,522 Reviews

#### **Research approach**

According to Altinay and Paraskevas (2008), the research methodology depends on the study's guiding principles. Deductive research approaches are used when the goal of a study is to establish existing theories and ideas, whereas inductive research approaches are used when the goal of the study is to develop new theories or to validate existing ones through literature review and data analysis. The deduction method aids researchers in transitioning from one topic to another or from a known element to an unknown element. Hypotheses that may be deduced from the theory's premises can be used to explain the deductive process. To put it another way, the deductive method focuses on drawing conclusions from premises or assertions. Additionally, this method is linked to "quantitative analysis," known as the "Top-Down approach" (Spangler 1986). The inductive method is based on the idea of investigating a certain reality and coming up with new theories or ways of thinking that are supported by the facts or facts gathered (Altinay and Paraskevas, 2008). The inductive method examines any topic from an abstract to a broad perspective.

The positivist approach is linked with deductive approach and quantitative research which focuses on finding answers on how a variable influence another in a community by evaluating the linkage between these by using techniques based on statistics and numerical data such as frequencies, correlation and means. Two research designs of quantitative research are called descriptive and experimental. Descriptive approach focuses on determining a sample at a particular time point without aiming to alter to change the way it behaves or to alter the situation it is embedded in.

In short, in quantitative research, researcher 'quantify' things as they are (Altinay, 2008; Creswell, (1994). In experimental approach, the main aim is to test the theory and the hypothesis on the sample by imposing the condition into it. Experimental approach requires particular measurements, altering existing circumstances then quantifying again, comparison of the two to formulate a generalized derived from conclusions acquired.

Qualitative approach on the other hand is in relation with phenomenology (interpretivism) as well as induction research and qualitative research methods which emphasizes on conducting an in depth and breadth study to be able to understand how and why certain behaviors and phenomena is happening. It concentrates on feelings and experiences of participants of the study. This is usually done by participant engagement in demonstrating the perception of their importance of mentality on several concepts to explore a new phenomenon rather than analyzing an area that has already been discovered by other researchers. Qualitative evidence is generally in written form and provides a broader understanding on why and how people's experiences attitudes and beliefs are shaped therefore it is more personal and contextual. Therefore, since the data collected are based on specific sample research a specific behavior the theory conducted cannot be generalized in contrary to quantitative research (Altinay, 2008).

When we look at the main differences between quantitative and qualitative research design, quantitative design is referred as being objective whilst qualitative design is more subjective and dependent on unique perspectives of participants there for world is not external and objective but socially constructed and personal. Moreover, quantitative methods use deductive approach based on already existing theory to test whether it is correct or false. Whereas qualitative approach is related to inductive approach it aims to explore a new phenomenon to create a new theory rather than taking an existing one as its basis. Quantitative research methods allow generalization due to large sample size study, whilst qualitative cannot be generalized because it focuses on specific samples in small sizes. Quantitative approach is based on numerical data; qualitative data is usually in text form. Both are both systematic research methods. Some researchers suggest that combination of both methods can offer a great balance in providing more validation and gaining a deeper understanding in certain areas of topics which is called mixed method. Significant issue with this is, when using mixed

methods researchers first need to draw attention to qualitative research topic then support it with quantitative data collected. This method is associated with "qualitative analysis" in prose. In this study, the quantitative and quantitative technique was chosen to examine user-generated web data. Material research of online surveys has become more and more common in the investigation of environments in the travel industry. The content investigation has gained popularity over the past 10 years as a crucial tool for comprehending the rapidly evolving Internet environment. Leximancer software was used in this work to find key concepts (i.e., arrays of commonly related words) and categorize them into themes by analyzing the occurrences of terms as co-events in data (Öztüren et al., 2021).

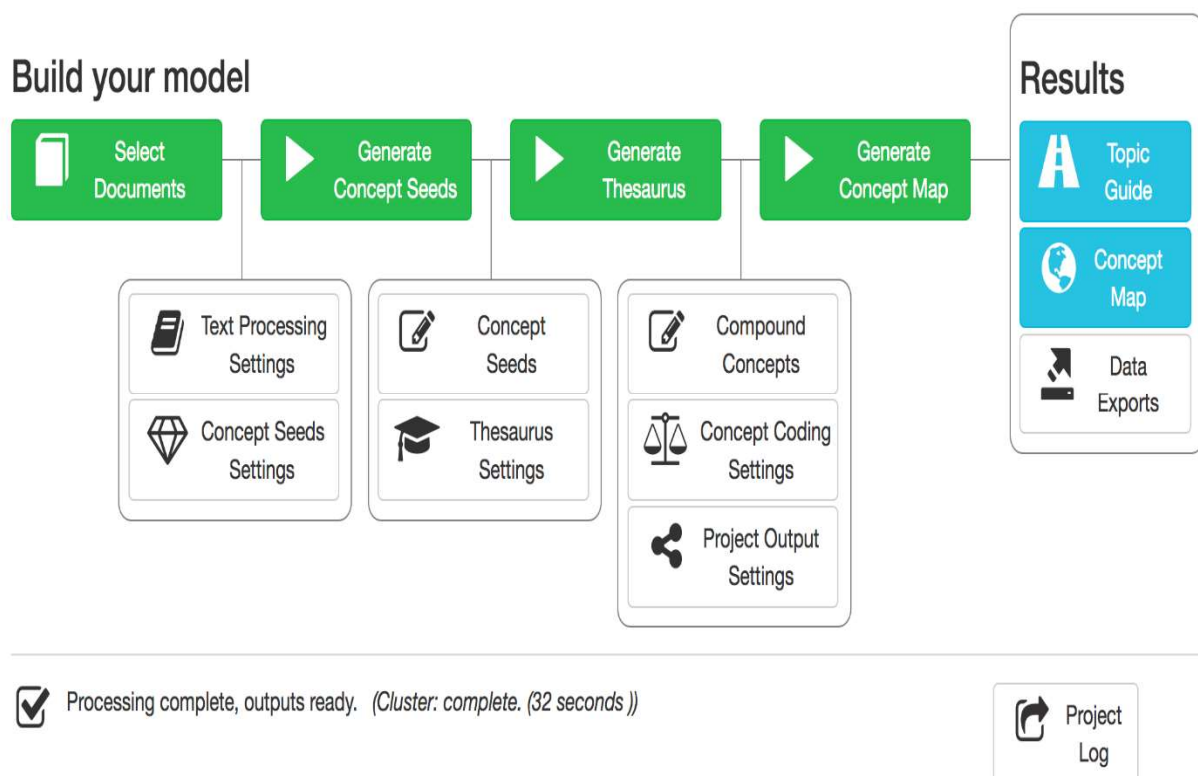
### **Sampling Method**

The study employed a probability sampling method approach. As a systematic sampling, systematic data gathering approach, systematic sampling is a basic procedure that is accomplished by selecting each  $n$ th individual from the intended population. Following this, a random selection of the major subject and a selection of each  $n$ th example is made. The inspection component is specified as the number  $n$ , which is calculated by dividing the target population size by the sample size required.

This study gathered a sample from 5 airlines, with  $n=10$ . The overall sample size was 4652, which corresponds to previous research such as Brochado et al., (2019), which examined 1,200 online reviews to examine passengers' service quality judgments regarding airlines. Another looked explored visitors' service perceptions of World Heritage sites (226 people) (Stoleriu et al., 2019). According to the methodologies utilized by previous experts, only English assessments were included in the current analysis. Online visitor reviews were acquired from booking.com and copied to an Excel sheet (csv. Comma Delimited) folder.

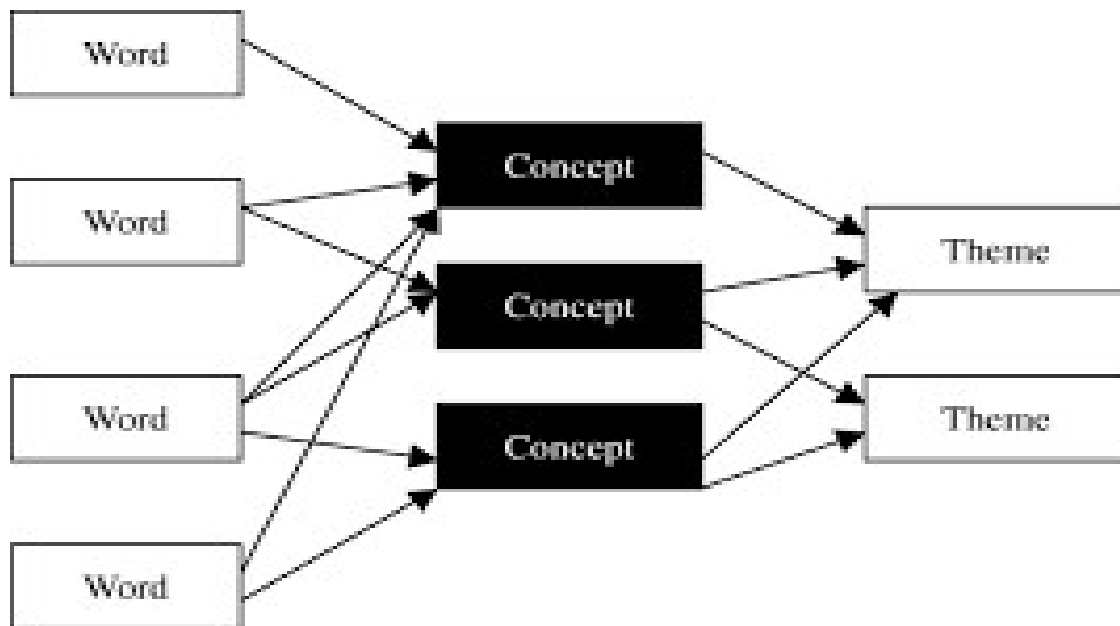
### **Data treatment**

Another method that is often employed in data analysis is content analysis. It is a method for discovering enormous amounts of word-based data that uses hierarchical coding and grouping. It describes the sentence patterns, frequency, linkages, and connection structures. This Leximancer-based content analysis translates word-based data from popular languages into semantic representations. In the current study, four stages were done to create a virtual map.



The first step is to submit the csv file with the collected data. As a result, notion seeds are created. Thesaurus is then produced from the notion. Each seed was associated with the phrase thesaurus, and a map was generated by mixing words that were potential keywords for different concepts. As previously stated, ideas are collections of linked terms that encompass a certain topic. When these word descriptions for each idea have been specified, a concept map will be constructed to show the link between the concepts in the text. The thesaurus

displays a list of ideas, the number of variations performed by the thesaurus's learning mechanism, thereby generalizing the concepts from the seed terms and providing a graded list of thesaurus's words that identifies and describes each concept. The weightings associated with each suggestive word are likewise included in the thesaurus list.



### **Data analysis**

Leximancer is a tool that analyses document types and explains details extracted from created documents. At that point, Leximancer uses a quantitative technique to graphically characterize the major concepts contained in the text and outlines how the ideas are connected based on the Bayesian premise of employing computations as well as nonlinear components. Researchers examine three major functional units, terminology, ideas, and themes.



Bayes' theorem is stated mathematically as the following equation:

$$P(A | B) = \frac{P(B | A)P(A)}{P(B)}$$

where  $A$  and  $B$  are events and  $P(B) \neq 0$ .

- $P(A | B)$  is a conditional probability: the likelihood of event  $A$  occurring given that  $B$  is true.
- $P(B | A)$  is also a conditional probability: the likelihood of event  $B$  occurring given that  $A$  is true.
- $P(A)$  and  $P(B)$  are the probabilities of observing  $A$  and  $B$  respectively; they are known as the marginal probability.
- $A$  and  $B$  must be different events.

To perform theoretical and sociological research, this program employs a two-organized analytical strategy for dealing with extricating co-event data. As a result, Leximancer determines the similarity of reformulated ideas and forms where these ideas are linguistically interconnected to create a graphic representation of the results/ Because Leximancer conducts similar social and rational studies, it quantifies not only the proximity of distinct ideas but also the manner in which morals to which ideals are related. When analysing data, the first step is to programmatically define the phrases that occur in the findings.

These notions are decided by the repetition of phrases that incorporate the contradictory principle, as well as the repetition of the contrary principle in another sentence. That is how ideas are generated (Sotiriadou et al., 2014). The application also interprets concepts by grouping them into groups and then into larger groupings that are designated as themes that display as colourful circles on the map. The outcomes of the most recent review reviews frequently emphasize which papers involve significant subjects.

## CHAPTER 4

### RESULTS

This study inspects 4,652 online user-generated content from Turkish Airline, Pegasus Airline, Anadolu jet, Corendon Airlines and SunExpress Airline. This study aims to assess the level of change in the perception of quality of airline service by tourists bound for Turkish based airline in the post covid-19 era. This study aims to give scholarly insight into the framework of change in the perception of airline service quality by analyzing user experience through online evaluations generated by users and also generating a visual representation for practical application in the airline sector. In addition, the study identifies crucial characteristics that impact both positive and negative customer experiences. The thesis used Leximancer 5 software to create a concept map that corresponded to the primary motivation driving this study, displaying the prevalent topics and thought lines found in the gathered online input. Furthermore, the algorithm generated repeating phrases and co-words.

Figure 4.1 depicts the results of the study sans COVID-19-related concerns, which indicated five themes: "flight", "service", "food", "fly", and "change". Figure 4.2 depicts the results of the study with COVID-19-related difficulties, with seven themes: "flight", "service", "food", "fly", "pay", "COVID-19" and "airplane".

**R1** Before COVID-19, what are the key concepts that drive visitor perceptions of service quality?

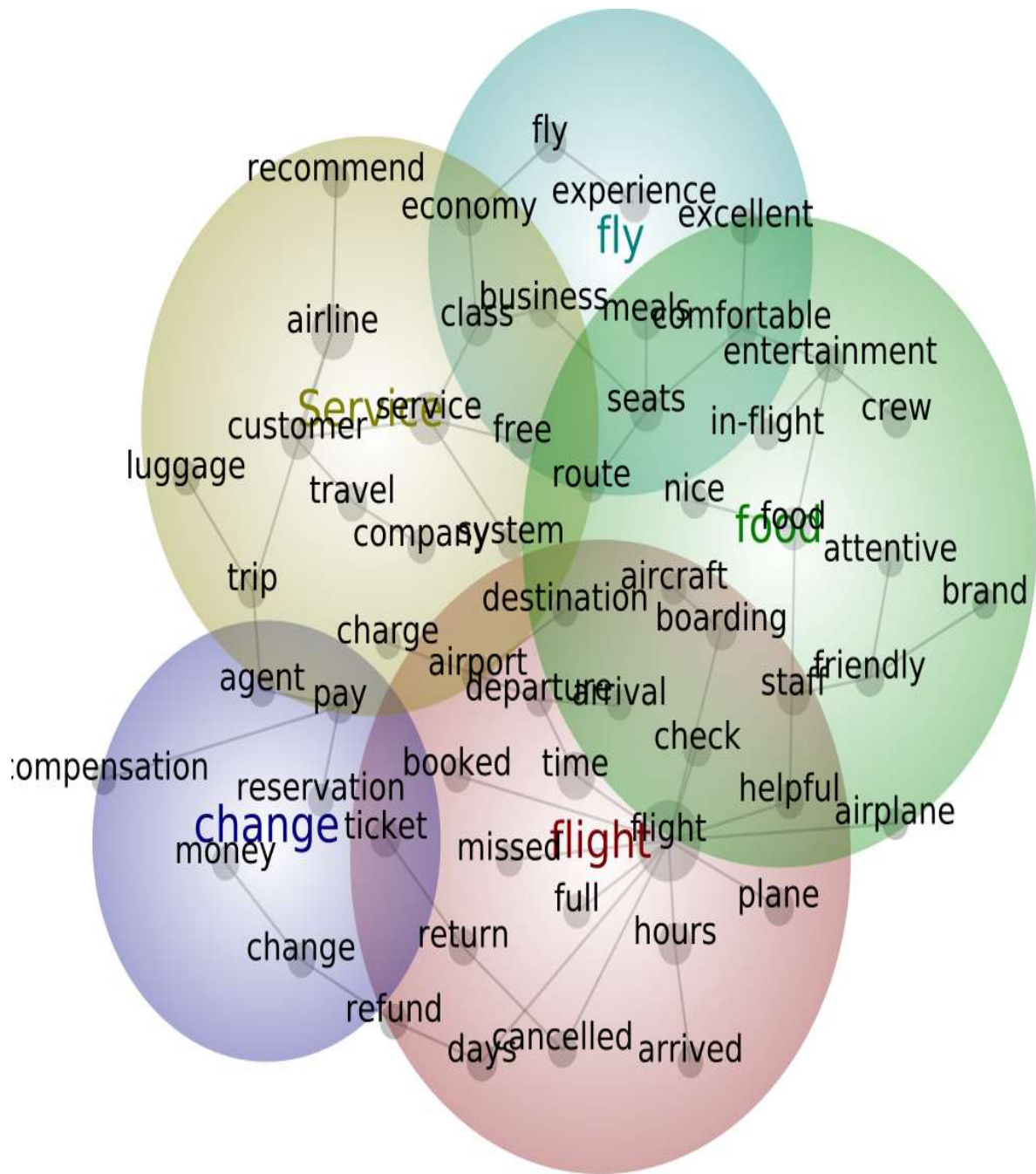
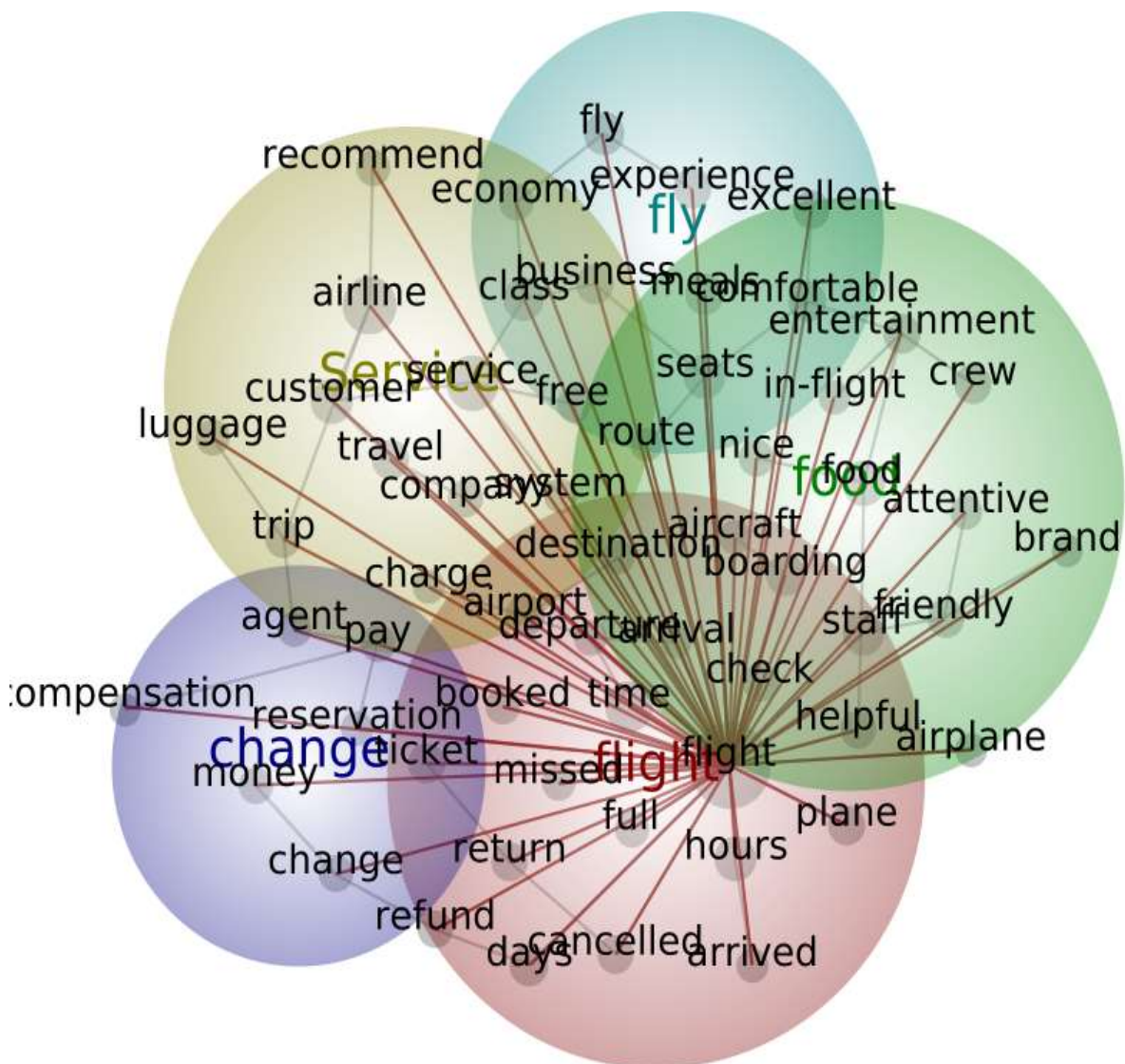


Figure 4.1: Concept map before covid-19

## Flight theme



flight (Word count = 2610; word relevance percentage = 100 percent), time (Word count = 1713; word relevance percentage = 70 percent), airport (Word count = 1670; word relevance percentage = 69 percent), plane (Word count = 1083; word relevance percentage = 50 percent), return (Word count = 632; word relevance percentage = 43 percent), cancelled (Word count = 518; word relevance percentage = 37 percent), missed (Word count = 503; word relevance percentage = 36 percent), departure (Word count = 217; word relevance percentage = 20 percent), arrival (Word count = 183; word relevance percentage = 19 percent), and destination (Word count = 35; word relevance percentage = 8 percent).

Posts reflecting this theme include the following;

*“The plane they choose was taken off from Bangkok and was a scheduled arrival at 4.40 am to IST and it arrived on time, so they already knew they messed up 280 people's first day of holiday. Best part: No apology has been made, not a single sorry for the delay, the pilot announcement never mentioned that this flight has a delay.... “*

*“I booked my ticket MONTHS in advance, 2 flights going and 2 flights coming home. Exactly 2 weeks before my flight, I received a text from TURKISH AIRLINES that my return flight (3rd flight) was cancelled. “*

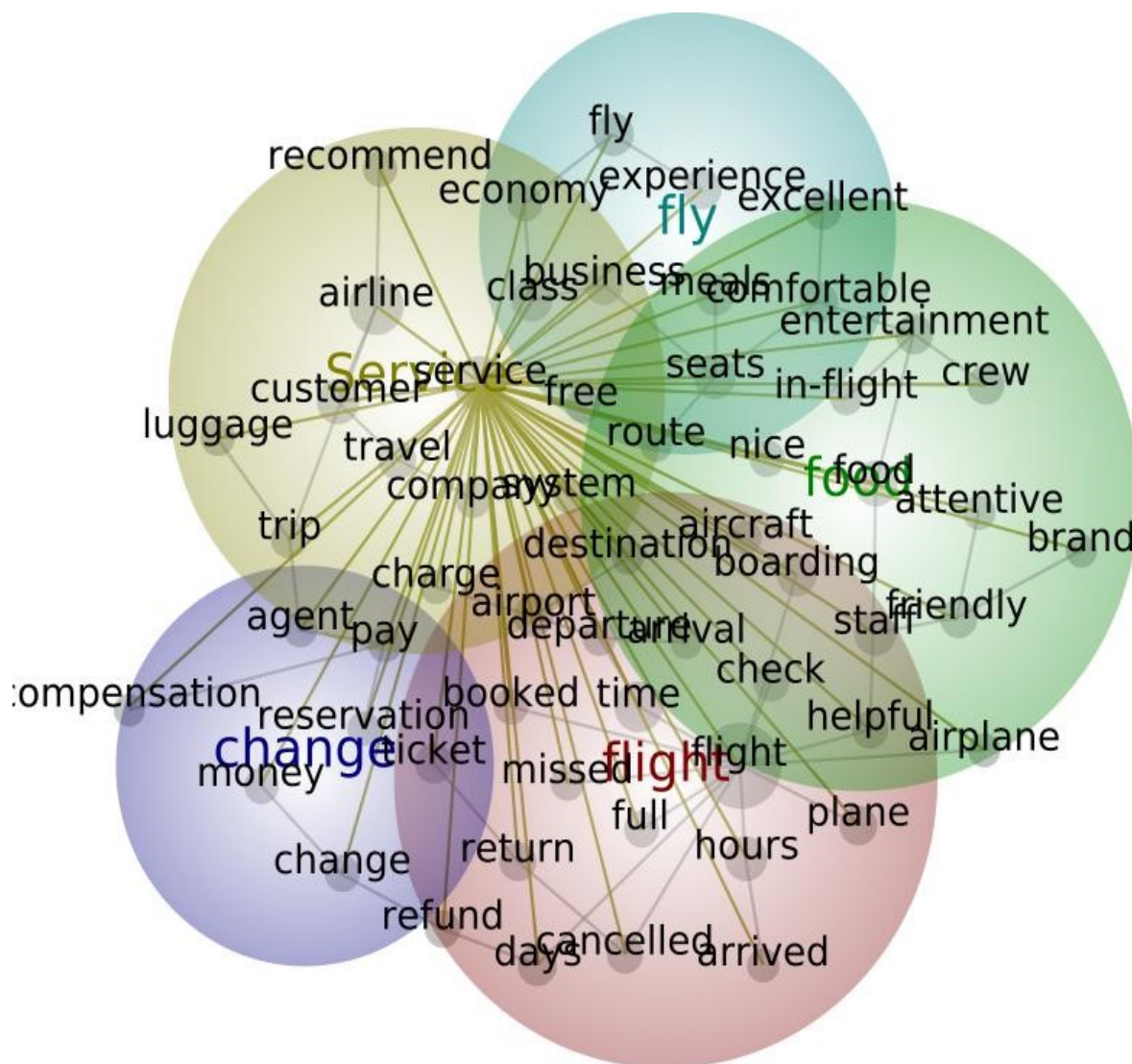
*“We arrived home three days after we were supposed to. We missed work and college. “*

*“Booked our tickets to mauritious well ahead of time at a reasonable price ready for our dream christmas holiday with our children. One month before departure Turkish airlines informed us that the flight was cancelled and offered us to be rescheduled on another flight on another day which we accepted. The very next day they cancelled our rescheduled flight as well and we were not really offered any alternatives other than a refund which it absolutely useless as there are no other flights to be found at this stage. also I am absolutely certain that the flights have not been cancelled they are simply overbooked and they have bumped us off the flight without even an apology or an acceptable solution as to how to save our holiday that we have had booked and looked forward to all year.as a result we are now not unable to travel for Christmas as planned and I am absolutely astounded that it is even possible for them to act in this way and gutted that our Christmas has been completely ruined. Terrible services and no customer-care I will never book with them again What a nightmare! I arrived at destination 31 hours later this was August!*

*“Had fantastic return flights from Gatwick to Dalaman. The cabin crew were attentive and kind both ways. The food was really nice and the whole experience was much more pleasant*



*than being treated like cattle with the dreadful uk budget airlines- all of which I won't be flying with again."*



18 percent), recommend (Word count = 163; word relevance percentage = 16 percent), free (Word count = 34; word relevance percentage = 8 percent), system (Word count = 23; word relevance percentage = 5 percent), and charge (Word count = 18; word relevance percentage = 2 percent).

The following posts are related to this theme:

*"I am now still wrangling with them as I disputed this charge with my credit card company. If you dislike rude and unhelpful customer service avoid this airline like the plague"*

*"Dinner was also included free of charge."*

*"Would highly recommend this company and will definitely travel again with them."*

*"I will never travel with this low-class airline again and do not recommend it."*

*"This airline is one of the best I have ever been on. on-boarding its not a big plane.3x3 seating. Seating was bigger better leg area. ipad in headrest. Movies up-to-date games. Other things too. The staff were friendly polite. Food was part of the booking. Where other airlines you pay extra. Which was a pleasant surprise. Lovely food lunch on way there and breakfast on way back.one thing I did like. No selling stuff which made it a calm flight. Toilets clean. All I can say is thank you. Excellent customer service from Turkish Airlines. Flights moved from June 2020 to June 21, no extra charge."*

*"Travelled to Turkey ???? twice this year. Used whizz easyjet and turkish Airlines. And the difference was unbelievable.with turkish Airlines I got Entertainment a Touch screen latest films music and games , a dinner free bottle water ,juice and pudding , and with the other 2 I got nothing! Same price. It's a no-brainer, makes the flight so much quicker and entertaining. Great service"*

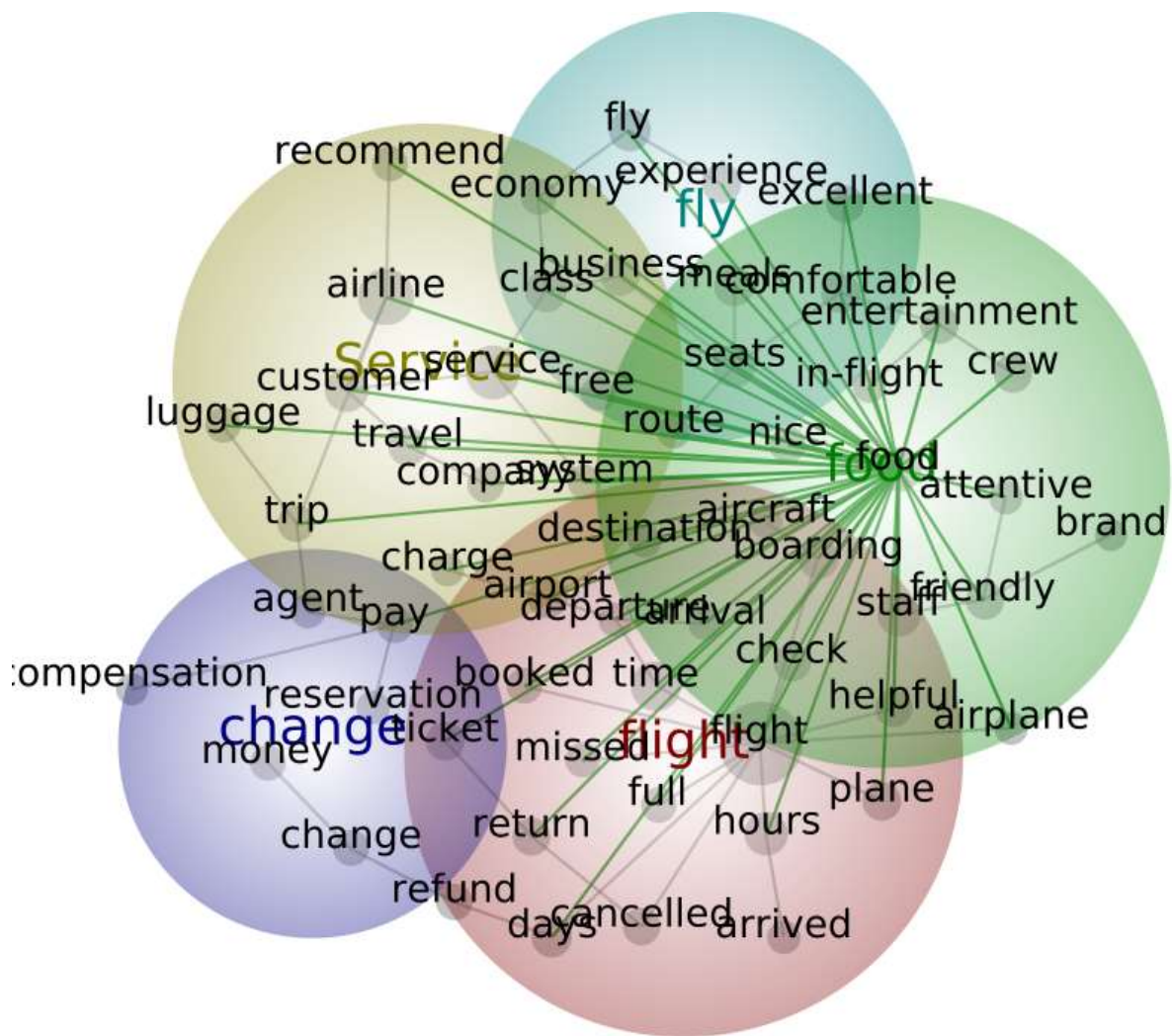
*"It was an amazing experience, an upgrade was offered at a reasonable £350 but I didn't take it! The food in economy was amazing and the service was good. Bathrooms were clean. IFE is incredibly extensive. The screen needs a refresh. I have flown on Turkish's : A321, A321NEO,*

737-800, 737MAX9, 787-9, A350-9 and A330-300. Would recommend the second and second last”

“My first booking with Turkish. I was flying to Hamburg Germany, and while the route took a little extra time it was worth it. The price to fly me directly into Hamburg was a much better value than any other airline, plus, I was allowed a check in and carry on included in price where others were charging. After my booking, I realized I had only put my middle initial instead of my full name as issued on my government id. I called customer service wanting to fix this before my flight as there could be issues. Customer service call was answered right away and they directed me on how to resolve this by sending the feedback team a name change request. They gave me several options on what could happen, including me possibly having to rebook flight which wasn't a great option. In a few days I got an email saying they fixed my middle name and reissued my tickets with no changes or fee. Also after booking, I realized I had given myself a very short time window of 70 minutes to get from one flight to another in Istanbul which is one of the largest airports in the world. So if my flight was delayed by at least an hour or more, I would miss the last flight out to Istanbul to Hamburg and I needed to be in Hamburg by afternoon for a conference. Luckily my plane was on time. The service on the plane was incredible. The plane was very modern, seats were very comfortable in economy and the pitch on the seats are much better than any other airline in the seating class. They give you a little travel pack with slippers, sleep mask, toothbrush/paste and such and they give you a blanket. The food on the plane was incredible as I knew from the chefs greeting us at the front door it would be. The staff itself was very professional and nice. We got two full chef inspired meals on the flight. The entertainment system was great, the screens were big with lots of options. I would definitely recommend Turkish Airlines to others. Just wonderful service from ease of booking online, requests and in flight”



## Food theme



food (Word count = 1534; word relevance percentage = 56 percent), staff (Word count = 1458; word relevance percentage = 55 percent), seats (Word count = 1170; word relevance percentage = 54 percent), boarding, (Word count = 1001; word relevance percentage = 48 percent), entertainment (Word count = 432; word relevance percentage = 33 percent), crew (Word count = 418; word relevance percentage = 31 percent), friendly (Word count = 415; word relevance percentage = 30 percent), nice (Word count = 217; word relevance percentage = 20 percent), attentive (Word count = 189; word relevance percentage = 18 percent), in-flight (Word count = 188; word relevance percentage = 18 percent), and brand (Word count = 13; word relevance percentage = 1 percent).

The following posts are related to this theme:

*“The queue, although long went down fairly quickly and the check in process was smooth, as was boarding. The aircraft, a brand new A321 -NEO was comfortable, cabin was clean and well-presented and crew were friendly - if a little distant.”*

*“The airplane was super clean so many safety measures being applied, and the cabin crew was very friendly and professional. The boarding and check-in process was very organized.”*

*“Great service, from de leg room to the food and general attention to the passenger certainly, will try to use next time. It was unknown decided to take a chance for fly duration and price..I wasn't disappointed at all”*

*“Turkish Airlines were initially selected for my journey from the UK to Caracas due to the limited options, previously my flights have been via Air France who no longer operate on the route. This has been my first journey in forty years of business travel that I have utilised this airline. Unlike a number of other carriers Turkish Airlines appear a high standard & exceed this in every respect. Well impressed with both the food & service consistently excellent. Aircraft, well maintained, clean. In-flight, cabin lighting dimmed & coincided with European time. Staff, attentive, chef provided excellent recommendations”*

*“The best company to fly with!! Very clean and the staff was awesome. They have great food too. Checkin was easy at the airport, also we had no delays on boarding.”*

*“My family and I had the pleasure of flying with TA for 3 flights during our holiday to Turkey. The first flight was from CDG to IST. That was the first time we flew with them and boy were we impressed. They put every American based airline to shame from their in-flight entertainment to dining. The meals provided were tasty and delicious. The options for dinner were a pesto ravioli or chicken with roasted veggies and mashed potatoes. They included side salads and pudding (banana and chocolate for most flights) Both entrees were tasty and hot. I fell in love with the mini scented hand wipes they provided and wish I could've stashed a few.*

*The attendants were pleasant and the airplane was clean and comfortable. We actually had leg space and enough room to move the headrest in order to be comfortable. Our two other flights (AYT to IST and IST to ORD) were just as great. The food, staff, plane and cleanliness is what really sets them apart in spite of the 30-45min delays which really isn't that bad considering the travel climate worldwide right now. I'm so glad I didn't pay attention to all of the negative reviews as I was totally impressed."*

### **Fly theme**

Fly (Word count = 641; word relevance percentage = 43 percent), experience (Word count = 593; word relevance percentage = 40 percent), class (Word count = 570; word relevance percentage = 39 percent), comfortable (Word count = 483; word relevance percentage = 37 percent), excellent (Word count = 402; word relevance percentage = 31 percent), economy (Word count = 328; word relevance percentage = 27 percent and route (Word count = 37; word relevance percentage = 8 percent).

Posts reflecting this theme include the following;

*"Hot food is served and most of the time, the food served were delicious. I flew YUL-IST in economy and IST-KUL in business and I have had a very satisfying flight. While in Business, Cabin crews were attentive and helpful. Business Class with TK is highly recommended.*

*It was great brilliant service; economy class was good as business class I was surprised to see latest films in economy seats"*

*"Two recent flights between Dublin and Istanbul on Turkish Airlines were a dream. This airline offers comforts not easily found on planes since the industry stripped back to a more affordable basis. You can chose your seat with extra cost, bring 8kg on board and another 23kg in the hold - and I flew Economy. Travel-friendly luxuries did not stop there. Plan your meal options in advance or settle for one of three main courses on board within the context of a three course meal that were tasty. Your drink of choice is included and they will bring tea*

*and coffee to you as needed. Choose your movie from various genres including new releases, or game, or follow the flight path. Seats recline, the plane is immaculate, staff are kind and a sterile pack of masks, wipes and sanitiser is offered to every person while boarding. Terrific class.”*

*“I was nervous before my flight after reading some negative reviews but my experience flying round-trip SFO-IST-DXB on a Boeing 777-300ER (2-3-2- seat configuration in business class) was excellent. The flights were on-time, check-in and boarding were quick and smooth, the flight attendants were very professional and courteous, the meals were generous and delicious, the seats were comfortable esp. with quilted blanket bedding the flight attendant sets up for the passenger. Although the business class seats are not pods with more privacy, the seats have more storage areas including a sizeable storage box on the floor behind the seat in front of you; this box also serves as a footrest, esp. when the seat is extended flat. There's a slide-out partition between you and your seat mate to give some privacy but you'll share the center console. There's also a storage area on the side of your seat. Besides the well-equipped toiletry bag (women's by Versace; included covid masks, hand sanitizer, etc.) , the flight attendants provided high fidelity headphones by Denon for use. There were a variety of movies but I would have liked to see more recently released films. I would fly business class again on Turkish Airlines.”*

### **Change theme**

Change (Word count = 2610; word relevance percentage = 100 percent), money (Word count = 1713; word relevance percentage = 70 percent), agent (Word count = 1670; word relevance percentage = 69 percent), reservation (Word count = 1083; word relevance percentage = 50 percent) and compensation (Word count = 632; word relevance percentage = 43 percent).

The following posts are related to this theme:

*“My first booking with Turkish. I was flying to Hamburg Germany, and while the route took a little extra time it was worth it. The price to fly me directly into Hamburg was a much better value than any other airline, plus, I was allowed a check in and carry on included in price where others were charging. After my booking, I realized I had only put my middle initial instead of my full name as issued on my government id. I called customer service wanting to fix this before my flight as there could be issues. Customer service call was answered right away and they directed me on how to resolve this by sending the feedback team a name change request. They gave me several options on what could happen, including me possibly having to rebook flight which wasn't a great option. In a few days I got an email saying they fixed my middle name and reissued my tickets with no changes or fee. Also after booking, I realized I had given myself a very short time window of 70 minutes to get from one flight to another in Istanbul which is one of the largest airports in the world. So if my flight was delayed by at least an hour or more, I would miss the last flight out to Istanbul to Hamburg and I needed to be in Hamburg by afternoon for a conference. Luckily my plane was on time. The service on the plane was incredible. The plane was very modern, seats were very comfortable in economy and the pitch on the seats are much better than any other airline in the seating class. They give you a little travel pack with slippers, sleep mask, toothbrush/paste and such and they give you a blanket. The food on the plane was incredible as I knew from the chefs greeting us at the front door it would be. The staff itself was very professional and nice. We got two full chef inspired meals on the flight. The entertainment system was great, the screens were big with lots of options. I would definitely recommend Turkish Airlines to others. Just wonderful service from ease of booking online, requests and in flight.”*

*“I had planned 13 days Turkey tour about 4 months back. paid 2600Euro in advance for full trip less air tickets both ways from my country. I joined one international group of Turkish airlines. Istanbul is most common lay over airport. Maybe many people got their part of full*

*flights cancelled due to ukrainian war or covid-19. Refunds not given. only customer care number +90 8503330849 is means of calling and talking. No email or 3 tiers of grievance mechanism by internet,a common practice. I became apprehensive. Dont know why I bought delhi istanbul delhi trip through cleartrip flt 716,717 and not from mumbai which is nearest from nashik maharashtra my home. paid 89000/- but apprehensive as HES codes opened on 01 April and Turkey partly joined Ukraine. I thought full money gone for NO SHOW. But God sent me an angel Ms Gita Gulati v v senior official in Turkish Airlines in India. I just wrote her routine formal email requesting for assisted wheel chair. I always take that as i have med problem; but Turkish airlines loads you in hydraulic containers from front right gates. I got his help in 2 int 2 local TK Flights. I never heard or saw it.. Suitable seat numbers are given. Crew were fabulous. Food was tasty, good quantity but not lavish like so many european airlines. Liquor due to religion is not their stress point. The assistances helped minimum time fastest clearances. Not much hassles as in indian immigration staff natakbaazi/absenteeism from seats. Booking supervisors were excellent. perhaps gita madam sent messages even for 2 local flights we got unimaginable services. No harassment at emigration or customs. Our delhi mumbai airports are far too big and good but work culture bad. Gita madam not only opened my account of miles and smiles program of star alliance but ensured that all my points are added to for flight 717 on 17/04; TK 716 ON 29/04; tk7296 ON 21/04; TK 2413 on 29/04. local connecting flight to IST had change over to international dep in same building at IST. Each member even did not know english helped maybe it was ramzan month of the moon. We do not see gods/goddesses but this officer without knowing me, talking or anything helped me more than anyone. Heartfelt thanks to her. I liked SINGAPORE AIRLINES BEST after flying 17 airlines abroad but Turkish Airlines is no less. In personal help it was GODS BOON to me and my wife. Be rest assured no help from numbers given in india 0124-4193000;044-42554255;044-35113511."*

**R2** What are the primary concepts influencing tourists' perceptions of service quality following

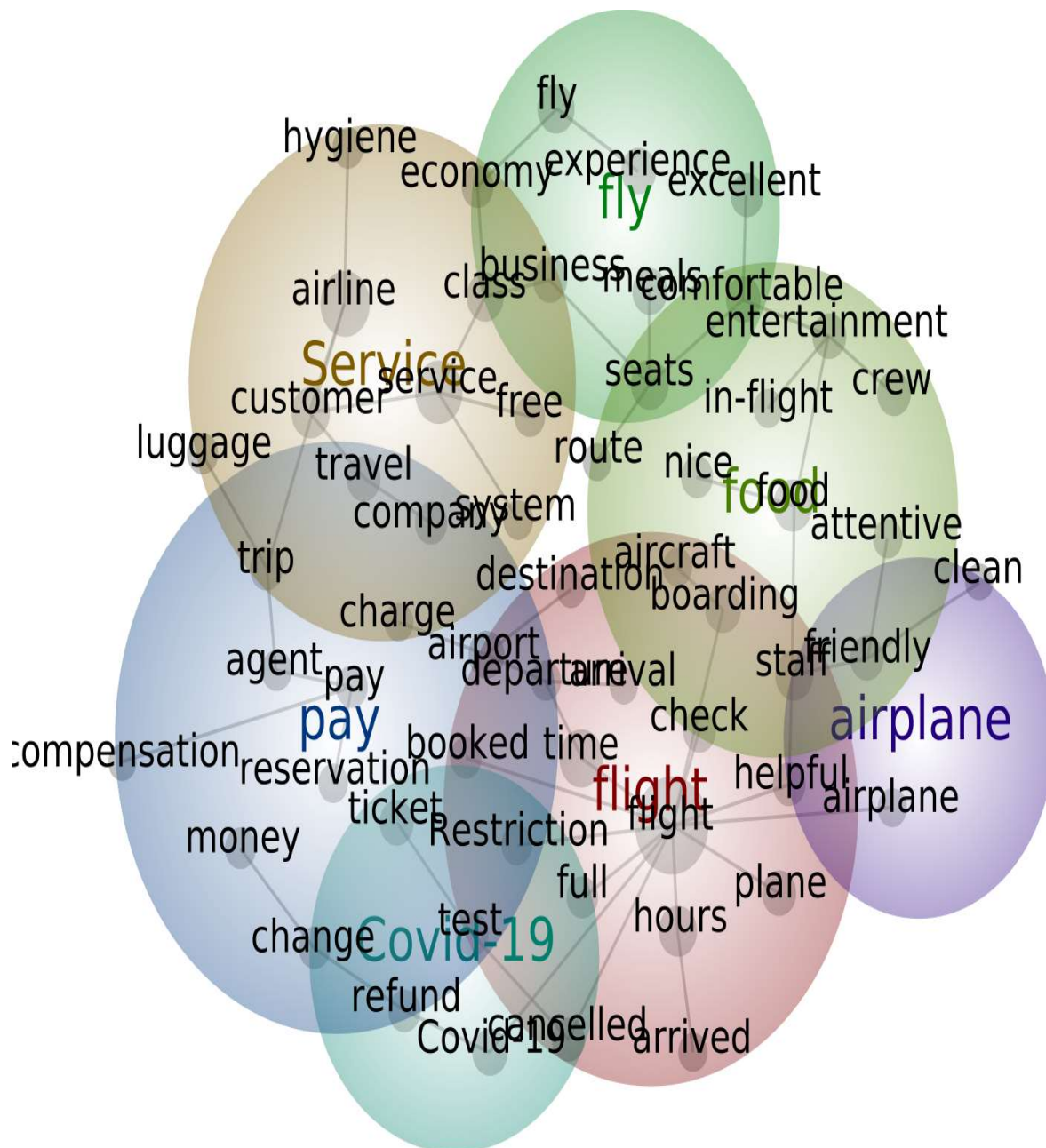


Figure 4.2: Concept map before covid-19



*“What an incredible flight! We took a business class flight from Tel Aviv to Los Angeles. The service was incredible, everything was very clean, the food and drinks were delicious (they have their own chefs on the flight), and the flight attendances were very friendly and helpful. I was sorry to read about other people's reviews on their experience with flight cancellation*



*and refunds. I had that experience with other companies (Alaska and Lufthansa) and it seems like COVID has changed a lot for flight companies. All I can say is that Turkish Airlines was the best flight experience we ever had.”*

*“An amazing airline, very polite and nice staff, plane super-clean, they follow the covid rules, and they exceed my expectations when in just one hour and a half flight, they served a sandwich with a snack and a drink. Very good company. I will fly again with you, Turkish Airlines”*

*“I was asked for a Rapid Covid-19 test on my last flight with Turkish Airlines. However, it was not actually required for my trip, so I had to pay 40 EUR at the airport to get a test. Later on, I realized it was their mistake, and there was no need for any test result, but the Airline took no responsibility and told me the information I was given was correct! It was a mess. I am not going to fly with this Airline ever again.”*

*“Recently me and my family visited Istanbul Turkey. So we took flight from Edinburgh to Istanbul with Turkish airline. The flight crews are not friendly and service are very bad. they're looks like doing their jobs by force. And food was horrible. It's not 1st time we flying with Turkish air but previous experiences are good. After covid situation they're became worst airliner.”*

### **Pay theme**

Pay (Word count = 717; word relevance percentage = 45 percent), booked (Word count = 713; word relevance percentage = 45 percent), money (Word count = 678; word relevance percentage = 39 percent), agent (Word count = 273; word relevance percentage = 50 percent), reservation (Word count = 184; word relevance percentage = 23 percent), charge (Word count = 87; word relevance percentage = 5 percent) and compensation (Word count = 32; word relevance percentage = 3 percent).

*“Over a month ago I traveled from turkey to US Los Angeles, and my luggage got lost in the process. Turkish airline has not stayed in touch with me nor provides me with any status in finding my bag. As of today, my bag has not been located and I have not been offered any compensation for this inconvenience and for mishandling my luggage. When I call to get a status I’m on hold for a long time before I can speak with customer service. My great trip turned out to be sour and painful after all and Turkish airline has not made it any easier for me. My emails and calls to Turkish airlines for the past month and half had no results. I do not recommend Turkish airlines to anyone and will need to take legal actions for the lost content in my baggage that I haven’t heard anything back on.”*

*“I have a fly at 8h45 from instanbul to paris, i passed the baggage enregistration the passport control and everythings no one ask me about covid test no one send me sms or email, and also i checked in the official web site of frensh gouvernement for vaccinated people is not obligated. so in the last step when i'll enter to plane they ask me for covid test, i explain him but they don't let me enter and they said we'll be redirected for free to the next fly go just make antigen test, and they assume that will be for free and our luggage will be redirected automatically. so we went make antigen test it takes us 5mn and when we went to pegasus counter they said we'll need to pay 350 for return fly i told him what him colleague said, he answer that he gives me wrong information so we was in the obligation they charged me 350 euro without receipt neither price indicated in the ticket, it's really a fraud, and when i arrive to paris my luggage was lost. i have important thing for work in my baggage i stayed 3 days without work and when i call him and ask him for confirmation of delayed baggage they are stalling and they didn't send me”*

*“They cancelled my flights last year took ages to get credit voucher go use on new flight. This year more cancellations 4 weeks before travelling. 5 sets of feedback later then spent an hour on the phone yesterday and because this is my 2nd year of cancellation for the same outbound*

*flight now my Card details aren't on file any more customer service team can't refund over the phone! This means a trip to Turkish airlines customer desk at Gatwick tomorrow to get them to do the refunds to my card! Which is an afternoon lost it's over an hour away and cost of train tickets. To get this refund sorted we had to cancel the in bound flight TK1159 as well and rebooking cost was £71.45 more per person even though it's Turkish Airlines fault. So I've now got to claim compensation though yet more feedback no more Turkish Airlines for me I'm afraid! Dreadful Turkish Airlines you need to care for your clients properly"*

### **Airline theme**

Airplane (Word count = 731; word relevance percentage = 45 percent) and Clean (Word count = 622; word relevance percentage = 40 percent).

*"The flight leaving Dubai was delayed because they said they had to clean the plane so boarding was 1 hour late. This meant that we missed our connecting flight anyway. Then at the transit desk in Turkey they could not give me an extra leg room seat or alternative because they were taken. They passed the buck again and told me to email Pegasus for refund."*

*"I was apprehensive about flying with Pegasus after reading some of the reviews here, but can only say that if you prepare properly, this is a perfectly good flight experience. Both my flights on this journey were on time. Clean, new planes, friendly staff both on the ground and in the air. Yes, this is a low cost airline and as such you pay for a bottle of water, or a snack on the plane, or you take it with you. If you can't handle that, then that is not the airline's fault. Yes you pay for bags, so what? "*

**R3** What are the themes most linked with higher and lower value for money?

### **Value for money before Covid-19**

The study also objectively examines the interpretation of higher and lower value for money scores before the COVID-19. According to the survey, customers who rated airline closely

associate their pleasant experience to concepts such as flight (92%), service (82%), comfortable (78%), food (71%), entertainment (63%), staff (51%), and seat (31%). Example of higher value for money: *“My family and I had the pleasure of flying with TA for 3 flights during our holiday to Turkey. The first flight was from CDG to IST. That was the first time we flew with them and boy were we impressed. They put every American based airline to shame from their in-flight entertainment to dining. The meals provided were tasty and delicious. The options for dinner were a pesto ravioli or chicken with roasted veggies and mashed potatoes. They included side salads and pudding (banana and chocolate for most flights) Both entrees were tasty and hot. I fell in love with the mini scented hand wipes they provided and wish I could've stashed a few. The attendants were pleasant and the airplane was clean and comfortable. We actually had leg space and enough room to move the headrest in order to be comfortable. Our two other flights (AYT to IST and IST to ORD) were just as great. The food, staff, plane and cleanliness is what really sets them apart in spite of the 30-45min delays which really isn't that bad considering the travel climate worldwide right now. I'm so glad I didn't pay attention to all of the negative reviews as I was totally impressed.”* The following concepts have a high likelihood of co-occurrence with a low monetary value: agent (63%), departure (46%), luggage (39%), seat (31%), compensation (22%), boarding (20%), hours (18%), and reservation (12%). Example: *“After a flights cancellation my layover changed from 2 to 9 hours and I was not offered nor compensation not complimentary anything. Could not cancel my flight as other tickets got more expensive in the months between the flight acquisition and flight change”*

### **Value for money After Covid-19**

The study also objectively examines the interpretation of higher and lower value for money scores after the COVID-19. The study reveals that guests who rated airline closely link their

positive experience to the notion of the concept such as flight (72%), service (61%), seat(60%), Helpful (55%), Friendly(51%), staff (43%), and Hygiene(34%).

*“Turkish Airlines was outstanding! I was a bit nervous about international air travel since COVID but the airline did an amazing job. The service at check in was great. Staff member, Irena, assisted us with checking in and printing out our boarding passes. She went above and beyond to make sure we were pleased! Additionally, Turkish Airlines also offers travellers FREE tours if you have a connecting international flight in Istanbul and have a layover that is between 6 and 24 hours. All you have to do is sign up for a tour at the Hotel Desk in the International Arrivals Terminal of Istanbul airport. We were able to see several mosques, the Grand Bazaar and several other sites. Dinner was also included free of charge.”*

Concepts regarding the probability of co-occurrence with low money value are: COVID-19(65%),restriction (43%),test(42%), refund (61%),boarding(39%),ticket(61%),charge(28%), and change(16%).

*“I was asked for a Rapid Covid-19 test on my last flight with Turkish Airlines. However, it was not actually required for my trip, so I had to pay 40 EUR at the airport to get a test. Later on, I realized it was their mistake, and there was no need for any test result, but the Airline took no responsibility and told me the information I was given was correct! It was a mess. I am not going to fly with this Airline ever again.”*

## CHAPTER 5

### DISCUSSION AND CONCLUSION

The study's goal is to ascertain how the covid-19 outbreak has affected people's perceptions of the quality of travel and airline services to the via Turkish zone. This study inspects 4,652 online user-generated content from Turkish Airline, Pegasus Airline, Anadolu jet, Corendon Airlines and SunExpress Airline. Global travel and tourism sector were drastically altered by the COVID-19 epidemic, especially once safety-related limitations were put in place. As previously stated, certain literatures referenced consumer feedback from online surveys that shown a decrease in the usage of airline and tourism services as a result of perceived health hazards. This has been seen as indicating a decline in trust, thus it is crucial to look into these claims further. This includes determining how much tourists and air passengers' perceptions of Turkish based airline have changed after COVID-19. Figure 4.1 depicts the results of the study sans COVID-19-related concerns, which indicated five themes: "flight", "service", "food", "fly", and "change". Figure 4.2 depicts the results of the study with COVID-19-related difficulties, with seven themes: "flight", "service", "food", "fly", "pay", "COVID-19" and "airplane".

As stated in the research by Brochado et al., (2019) and Saydam, et al.,(2022). the topic of "flights" is a feature that is a critical service quality element of airlines' core services. The words "flight," "pay," "baggage," "pay at the airport," "passengers," and "take-off" are commonly used together. According to Rezaei et al. (2018), an efficient airport service is crucial for a pleasant flying experience and that the airline luggage handling system is one of the most significant factors for passengers. "Service" was a further recurrent theme in this research. The words "food" and "entertainment" are frequently used in conjunction with the idea of "service." These results support the research by Noviantoro and Huang (2019) The mentioned writers also came to the conclusion that for today's airline customers, in-flight

entertainment is essential. Furthermore, Han et al's study (2019), which made comparable discoveries to ours, consistently came to the conclusion that in-flight food and beverage quality greatly increases passengers' happiness as well as their propensity to travel again.

The outcome of the study also reveals significant impact COVID-19 pandemic has on the perception of airline service among passengers. Many of the reviews reflect more concerns about the safety and cleanliness of flying, particularly in the wake of the spread of the virus on airplanes (For example: *"Pegasus positions itself as a reliable cheap airline. During my flight in the middle of a second COVID 19 wave they chose filled the plane without any respect to social distance. No middle seats were left empty. If you want to fly safe and without worries you have to consider this. I experienced their pricing as manipulative and in some sense a "price trap". If you book your ticket in advance at e.g., premium carrier you will pay the same as for Pegasus and get more value for money (more baggage allowance, inflight entertainment, meal, service-oriented crew). Conclusion money oriented instead of service oriented and little respect for safety with regard to Covid-19."*).

In addition, the implementation of various social distancing measures and changes to in-flight services have altered the overall passenger experience (For example: *"Flight check in was efficient and checked covid vaccine status and locator form for Turkey. Flight boarded on time out and return. Outbound wasn't full so we could spread out but inbound was full and strangely the leg room felt more restricted. Take off was smooth as was touch down on both occasions. Staff ran refreshments smoothly Nothing to complain about would recommend."*).

According to a survey conducted by the International Air Transport Association (IATA) in 2020, nearly 60% of respondents reported that they were either "very concerned" or "extremely concerned" about the potential risk of contracting COVID-19 while traveling by air (IATA, 2020). This suggests that the pandemic has caused a significant shift in the perception of airline safety among passengers. In addition, the changes to in-flight services

and amenities as a result of the pandemic have also impacted the overall passenger experience. For example, many airlines have suspended or modified their food and beverage service, and some have even removed in-flight entertainment systems to reduce the potential for transmission of the virus (IATA, 2020). This phenomenon was also noted especially when comparing concept before and after COVID-19, for example: *"Recently me and my family visited Istanbul Turkey. So, we took flight from Edinburgh to Istanbul with Turkish airline. The flight crews are not friendly and service are very bad. they're looks like doing their jobs by force. And food was horrible. It's not 1st time we flying with Turkish air but previous experiences are good. After covid situation they're became worst airliner. Hopefully they'll improve their services. Comment"*

Overall, it seems likely that the COVID-19 pandemic has had a significant impact on the perception of airline service among passengers, with many passengers evaluating their service quality experience in concepts such as "Covid-19", "Restriction", "pay", "fly" and so on. Other key indicators include safety and cleanliness and furthermore passengers also experienced changes to in-flight amenities.

The COVID-19 pandemic has had a major impact on the airline industry. Some of the changes that have been observed include: Reduction in demand: The pandemic has led to a significant reduction in the demand for air travel, as people have been advised to stay home and avoid non-essential travel. This has resulted in a decrease in the number of flights being operated and a significant reduction in passenger numbers. Changes to travel restrictions: Many countries have implemented travel restrictions and quarantine requirements for travellers arriving from certain countries. These measures have also contributed to the reduction in demand for air travel. Increased focus on health and safety: Airlines have implemented a range of measures to ensure the health and safety of passengers and staff, including the use of face masks and other personal protective equipment, enhanced cleaning



and disinfection procedures, and temperature checks. Financial challenges: The reduction in demand for air travel and the impact of travel restrictions have had a major financial impact on the airline industry, with many airlines experiencing significant losses and some going bankrupt.

### **Implication**

There is a lacuna in the existing research about service perception in respect to post COVID-19 and pre COVID-19 in the airline business. First and foremost, this study adds to the literature on the airline sector, in particular on service quality. This study also sheds light on the issue in a way that other academics may use to create service quality metrics from the viewpoint of passengers.

Second, this study utilized a distinct methodological technique by analysing user-generated reviews using Leximancer because the majority of research on post COVID-19 and/or pre COVID-19 in the airline business has been conceptual. With the use of Leximancer's techniques, patterns might be investigated with little interference by academics in the inclusive interactions of the visitors. It has been demonstrated that this subject is more substantial than the others among them. The current study further contributes to the body of research by outlining the major narrative patterns connected to "greater" and "lower" assessments of the value for money of airline. Hence, this is aim to encourage airline managers to take additional measures to increase the quality perception of travellers amidst concerns on the safety of the flight. The research will also explore opportunities for direct feedback from customers to help inform up-to-date policies in the aviation and tourism sectors. The narratives of service encounter uploaded online by the two distinct satisfaction groups (satisfied-dissatisfied) contain opposing themes since content analysis clearly showed that satisfaction groups include various narratives and reviews regarding airline experiences. Since all of the research was clear about the service elements that offered the most value for

the money during the COVID-19 epidemic, this study's findings add to the body of knowledge by identifying those service features.

The results will go a long way contributing to target marketing strategies post the COVID-19 pandemic, helping to revamp the aviation and tourism economy. It will also contribute to the global body of knowledge for informing relevant policies and sound economic decisions by authorities throughout the world. Finally, also from a societal perspective, our research offers interesting implications that can be used to strengthen advocacy for more connectivity around the world as facilitated by a bigger and better global airline industry.

This study's findings give airline owners, directors, and decision-makers more understanding of how customers perceive facilities in terms of consistency and experience. Understanding online reviews as a reflection of customer interactions can help airline owners pinpoint crucial elements for fostering good post-purchase trends and minimizing unfavorable behaviors. As a consequence, customer reviews provide airlines a practical way to get feedback from passengers while also giving them a chance to learn how to make wise post-purchase decisions.

Managers should prioritize the safety and health of their employees and customers by implementing measures such as regular sanitation, and providing personal protective equipment (PPE). COVID-19 has accelerated the adoption of digital services, and managers should continue to enhance their digital service offerings to provide more convenient and efficient services to customers. This can include offering online service portals, mobile applications, and other digital tools. The pandemic has highlighted the need for businesses to be flexible and adaptable in the face of changing circumstances. Managers can increase flexibility and adaptability by offering flexible work arrangements, adjusting service offerings to meet changing customer needs, and being open to new business models and revenue streams. In uncertain times, customers appreciate clear and transparent communication from

businesses. Managers can improve communication and transparency by providing regular updates to customers about service changes and updates, and being honest and upfront about any challenges or limitations. Furthermore, employees are the frontline of service delivery, and investing in their training and development can improve service quality and customer satisfaction. Managers can provide ongoing training and development opportunities, such as customer service skills training, to ensure that employees have the skills and knowledge they need to deliver high-quality service. Overall, these service quality policies can help managers improve the quality of their services, increase customer satisfaction, and build trust and loyalty with their customers. The result from this research reveal that by prioritizing safety and health, enhancing digital service delivery, increasing flexibility and adaptability, improving communication and transparency, and investing in employee training and development, managers can position their businesses for success in the post-COVID-19 era.

Other stakeholder such as government also have a pivotal role to play in upholding the service quality post covid 19

In the post-COVID-19 era, safety and health concerns will remain a top priority for passenger. Governments can prioritize safety and health by implementing measures. Furthermore, governments should ensure that their services are accessible and inclusive for all citizens, including those with disabilities and language barriers. This can include offering translation services, providing accommodations for those with disabilities, and ensuring that digital services are accessible to all at airports. Governments can improve service responsiveness by ensuring that guest at airport can easily reach out to government representatives to seek information or assistance. This can include providing multiple channels for communication, such as phone, email, and social media, and ensuring that responses are timely and effective. Governments should continuously measure and improve service quality by gathering feedback from guest at the airport, analyzing service delivery data, and implementing

improvements based on this feedback. This can help governments identify areas for improvement and enhance guest satisfaction with government policies.

### **Limitation and future research directions**

There are several restrictions on the current study that must be taken into account. First, this study contained 4,652 reviews and five airlines. By contrasting various airlines in various regions and using larger samples, further research might contribute to a more thorough understanding of the key storylines in customers' online evaluations. Second, the focus of the current study was solely on one social media channel. Future studies should analyze the content of online reviews from various social media platforms (such as Facebook or Twitter) to assess how closely the findings from this study match up. Assessing if the primary themes of visitors' overall experiences vary according to visitors' demographic profiles is another issue that requires further study (e.g. sex, race or luxury vs family class). For post-pandemic strategy, this may help to better understand market segmentation in the airline business.

## Reference

- Ahani, A., Nilashi, M., Ibrahim, O., Sanzogni, L., & Weaven, S. (2019). Market segmentation and travel choice prediction in Spa hotels through TripAdvisor's online reviews. *International Journal of Hospitality Management*, 80, 52-77.
- Ahani, A.; Nilashi, M.; Ibrahim, O.; Sanzogni, L.; Weaven, S. Market segmentation and travel choice prediction in Spa hotels through TripAdvisor's online reviews. *Int. J. Hosp. Manag.* 2019, 80, 52–77
- Ahani, A.; Nilashi, M.; Ibrahim, O.; Sanzogni, L.; Weaven, S. Market segmentation and travel choice prediction in Spa hotels through TripAdvisor's online reviews. *Int. J. Hosp. Manag.* 2019, 80, 52–77
- Ahani, A.; Nilashi, M.; Ibrahim, O.; Sanzogni, L.; Weaven, S. Market segmentation and travel choice prediction in Spa hotels through TripAdvisor's online reviews. *Int. J. Hosp. Manag.* 2019, 80, 52–77
- Ai, C., Martinez, S., & Sappington, D. M. (2004). Incentive regulation and telecommunications service quality. *Journal of Regulatory Economics*, 26(3), 263-285.
- Aksoy, S., Atilgan, E., & Akinci, S. (2003). Airline services marketing by domestic and foreign firms: differences from the customers' viewpoint. *Journal of Air Transport Management*, 9(6), 343-351.
- Alamdari, F. (1999). Airline in-flight entertainment: the passengers' perspective. *Journal of Air Transport Management*, 5(4), 203-209.
- Alexander, D. L., & Feinberg, R. M. (2004). Entry in local telecommunication markets. *Review of industrial organization*, 25(2), 107-127.
- Alliance, S. (2015). Star Alliance. *Luettavissa: [http://www. staralliance. com/en/about/](http://www.staralliance.com/en/about/)*. *Luettu, 11*, 2015.

Alrubaiee, L., & Alkaa'ida, F. (2011). The mediating effect of patient satisfaction in the patients' perceptions of healthcare quality-patient trust relationship. *International Journal of Marketing Studies*, 3(1), 103.

Altinay, L. (2008). The relationship between an entrepreneur's culture and the entrepreneurial behaviour of the firm. *Journal of small business and enterprise development*.

Altinay, L. (2008). The relationship between an entrepreneur's culture and the entrepreneurial behaviour of the firm. *Journal of small business and enterprise development*.

Altinay, L., & Paraskevas, P. (2008). Data collection techniques. *Planning Research in Hospitality and Tourism*, 107-135.

Altinay, L., & Paraskevas, P. (2008). Data collection techniques. *Planning Research in Hospitality and Tourism*, 107-135.

Amankwah-Amoah, J. (2021). COVID-19 pandemic and innovation activities in the global airline industry: A review. *Environment International*, 156, 106719.

Andotra, N., & Gupta, S. (2008). Airline service effectiveness: an analysis of value addition, quality and risk perception. *Abhigyan*, 26(2), 10-20.

Andotra, N., & Gupta, S. (2008). Airline service effectiveness: an analysis of value addition, quality and risk perception. *Abhigyan*, 26(2), 10-20.

Arasli, H., Saydam, M. B., & Kilic, H. (2020). Cruise travelers' service perceptions: a critical content analysis. *Sustainability*, 12(17), 6702.

Arasli, H.; Saydam, M.; Kilic, H. Cruise Travelers' Service Perceptions: A Critical Content Analysis. *Sustainability* 2020, 12, 6702.

Arasli, H.; Saydam, M.; Kilic, H. Cruise Travelers' Service Perceptions: A Critical Content Analysis. *Sustainability* 2020, 12, 6702.

Arasli, H.; Saydam, M.; Kilic, H. Cruise Travelers' Service Perceptions: A Critical Content Analysis. *Sustainability* 2020, 12, 6702.

- Archana, R., & Subha, M. V. (2012). A study on service quality and passenger satisfaction on Indian airlines. *International Journal of Multidisciplinary Research*, 2(2), 50-63.
- Asubonteng, P., McCleary, K. J., & Swan, J. E. (1996). SERVQUAL revisited: a critical review of service quality. *Journal of Services marketing*.
- ATAG, A. (2008). The economic and social benefits of air transport 2008. *Air Transport Action Group, Geneva*.
- Bailey, E. E., Graham, D. R., & Kaplan, D. P. (1985). *Deregulating the airlines* (Vol. 10). MIT press.
- Banerji, D., Saha, V., Singh, N., & Srivastava, R. (2022). What are the most important consumer decision factors when choosing an airline? An emerging economy perspective. *Asia Pacific Journal of Marketing and Logistics*.
- Belhadi, A., Kamble, S., Jabbour, C. J. C., Gunasekaran, A., Ndubisi, N. O., & Venkatesh, M. (2021). Manufacturing and service supply chain resilience to the COVID-19 outbreak: Lessons learned from the automobile and airline industries. *Technological Forecasting and Social Change*, 163, 120447.
- Brochado, A., Rita, P., Oliveira, C., & Oliveira, F. (2019). Airline passengers' perceptions of service quality: Themes in online reviews. *International Journal of Contemporary Hospitality Management*.
- Brochado, A., Rita, P., Oliveira, C., & Oliveira, F. (2019). Airline passengers' perceptions of service quality: Themes in online reviews. *International Journal of Contemporary Hospitality Management*.
- Brochado, A., Rita, P., Oliveira, C., & Oliveira, F. (2019). Airline passengers' perceptions of service quality: Themes in online reviews. *International Journal of Contemporary Hospitality Management*.

- Brooks, P. W. (1965). A History of the World's Airlines. *The Journal of Transport History*, (1), 60-61.
- Bryan, D. L., & O'Kelly, M. E. (1999). Hub-and-spoke networks in air transportation: an analytical review. *Journal of regional science*, 39(2), 275-295.
- Caro, L. M., & Garcia, J. A. M. (2008). Developing a multidimensional and hierarchical service quality model for the travel agency industry. *Tourism Management*, 29(4), 706-720.
- Chang, Y. C., Williams, G., & Hsu, C. J. (2004). The evolution of airline ownership and control provisions. *Journal of Air Transport Management*, 10(3), 161-172.
- Chen, F. Y., & Chang, Y. H. (2005). Examining airline service quality from a process perspective. *Journal of Air Transport Management*, 11(2), 79-87.
- Chen, I. S. (2016). A combined MCDM model based on DEMATEL and ANP for the selection of airline service quality improvement criteria: A study based on the Taiwanese airline industry. *Journal of Air Transport Management*, 57, 7-18.
- Chiou, J. S., & Droge, C. (2006). Service quality, trust, specific asset investment, and expertise: Direct and indirect effects in a satisfaction-loyalty framework. *Journal of the academy of marketing science*, 34(4), 613-627.
- Chiou, Y. C., & Chen, Y. H. (2010). Factors influencing the intentions of passengers regarding full service and low cost carriers: A note. *Journal of Air Transport Management*, 16(4), 226-228.
- Cho, J. E., & Hu, H. (2009). The effect of service quality on trust and commitment varying across generations. *International journal of consumer studies*, 33(4), 468-476.
- Chou, C. C., Liu, L. J., Huang, S. F., Yih, J. M., & Han, T. C. (2011). An evaluation of airline service quality using the fuzzy weighted SERVQUAL method. *Applied Soft Computing*, 11(2), 2117-2128.



Chow, C. K. W. (2014). Customer satisfaction and service quality in the Chinese airline industry. *Journal of air transport management*, 35, 102-107.

Daft, J., & Albers, S. (2013). A conceptual framework for measuring airline business model convergence. *Journal of Air Transport Management*, 28, 47-54.

Daft, J., & Albers, S. (2015). An empirical analysis of airline business model convergence. *Journal of Air Transport Management*, 46, 3-11.

Davies, R. E. G. (2016). *Airlines of the Jet Age: a history*. Smithsonian Institution.

Dedeoğlu, B. B., & Demirer, H. (2015). Differences in service quality perceptions of stakeholders in the hotel industry. *International Journal of Contemporary Hospitality Management*.

Ellis, D., & Leib, S. (2021). Benchmarking Global Carrier Status in the Airline Industry. *Journal of Aviation Technology and Engineering*, 10(2), 51.

Erick Burgueño Salas.(2022) Coronavirus: impact on the aviation industry worldwide - statistics & facts In *Statista*. Retrieved November 29, 2022, from <https://www.statista.com/topics/6178/coronavirus-impact-on-the-aviation-industry-worldwide/#dossierKeyfigures>

Garaus, M., & Hudáková, M. (2022). The impact of the COVID-19 pandemic on tourists' air travel intentions: The role of perceived health risk and trust in the airline. *Journal of Air Transport Management*, 103, 102249.

Garaus, M; Hudakova, M. The impact of the COVID-19 pandemic on tourists' air travel intentions: The role of perceived health risk and trust in the airline. *Journal of Air Transport Management* 103 (2022) 102249

Garaus, M; Hudakova, M. The impact of the COVID-19 pandemic on tourists' air travel intentions: The role of perceived health risk and trust in the airline. *Journal of Air Transport Management* 103 (2022) 102249

Garaus, M; Hudakova, M. The impact of the COVID-19 pandemic on tourists' air travel intentions: The role of perceived health risk and trust in the airline. *Journal of Air Transport Management* 103 (2022) 102249

Ghobadian, A., Speller, S., & Jones, M. (1994). Service quality: concepts and models. *International journal of quality & reliability management*.

Ghorabae, M. K., Amiri, M., Zavadskas, E. K., Turskis, Z., & Antucheviciene, J. (2017). A new hybrid simulation-based assignment approach for evaluating airlines with multiple service quality criteria. *Journal of Air Transport Management*, 63, 45-60.

Gretzel, U., & Yoo, K. H. (2008). Use and impact of online travel reviews. *Information and communication technologies in tourism 2008*, 35-46.

Hart, C., & Blackshaw, P. (2006). Internet Inferno-One customer can take down your company, but you can turn the potential nightmare into a boon. *Marketing Management*, 15(1), 18.

Hoffman, K. D., & Bateson, J. E. (2002). *Fundamentos de marketing de servicios: Conceptos, estrategias y casos* (No. 658.8 H699f). México, MX: International Thomson Ed..

Hussain, R., Al Nasser, A., & Hussain, Y. K. (2015). Service quality and customer satisfaction of a UAE-based airline: An empirical investigation. *Journal of Air Transport Management*, 42, 167-175.

IATA, IATA Recovery Delayed as International Travel Remains Locked Down, 28 July 2020  
IBISWorld. (August 12, 2021). Market size of the airline industry worldwide from 2018 to 2021 (in billion U.S. dollars). In *Statista*. Retrieved November 29, 2022, from <https://www.statista.com/statistics/1110342/market-size-airline-industry-worldwide/>

ICAO. (15 January 2021). 2020 passenger totals drop 60 per cent as COVID-19 assault on international mobility continues. In *ICAO* Retrieved November 29, 2022, from

<https://www.icao.int/Newsroom/Pages/2020-passenger-totals-drop-60-percent-as-COVID19-assault-on-international-mobility-continues.aspx>

Jean, D. A., & Lohmann, G. (2016). Revisiting the airline business model spectrum: The influence of post global financial crisis and airline mergers in the US (2011– 2013). *Research in transportation business & management*, 21, 76-83.

Jiang, H., & Zhang, Y. (2016). An investigation of service quality, customer satisfaction and loyalty in China's airline market. *Journal of air transport management*, 57, 80-88.

Klophaus, R., Conrady, R., & Fichert, F. (2012). Low cost carriers going hybrid: Evidence from Europe. *Journal of Air Transport Management*, 23, 54-58.

Levine, M. E. (2006). Why weren't the airlines reregulated. *Yale J. on Reg.*, 23, 269.

Liat, C. B., Mansori, S., & Huei, C. T. (2014). The associations between service quality, corporate image, customer satisfaction, and loyalty: Evidence from the Malaysian hotel industry. *Journal of hospitality marketing & management*, 23(3), 314-326.

Lien, C. H., Wu, J. J., Chen, Y. H., & Wang, C. J. (2014). Trust transfer and the effect of service quality on trust in the healthcare industry. *Managing Service Quality*.

Liou, J. J., & Tzeng, G. H. (2007). A non-additive model for evaluating airline service quality. *Journal of Air Transport Management*, 13(3), 131-138.

Liou, J. J., Tzeng, G. H., & Chang, H. C. (2007). Airline safety measurement using a hybrid model. *Journal of air transport management*, 13(4), 243-249.

Liu, A., Kim, Y. R., & O'Connell, J. F. (2021). COVID-19 and the aviation industry: The interrelationship between the spread of the COVID-19 pandemic and the frequency of flights on the EU market. *Annals of Tourism Research*, 91, 103298.

Liu, A.; Kim, Y.R.; O'Connell, J.F. COVID-19 and the aviation industry: The interrelationship between the spread of the COVID-19 pandemic and the frequency of flights on the EU market. *Ann. Tour. Res.* 2021, 91, 103298.

Liu, A.; Kim, Y.R.; O'Connell, J.F. COVID-19 and the aviation industry: The interrelationship between the spread of the COVID-19 pandemic and the frequency of flights on the EU market. *Ann. Tour. Res.* 2021, 91, 103298.

Liu, A.; Kim, Y.R.; O'Connell, J.F. COVID-19 and the aviation industry: The interrelationship between the spread of the COVID-19 pandemic and the frequency of flights on the EU market. *Ann. Tour. Res.* 2021, 91, 103298.

Lohmann, G., & Koo, T. T. (2013). The airline business model spectrum. *Journal of Air Transport Management*, 31, 7-9.

Lu, Z., Zhu, L., Li, Z., Liang, X., & Zhang, Y. (2022). The effects of passenger risk perception during the COVID-19 pandemic on airline industry: Evidence from the United States stock market. *Frontiers in Psychology*, 12, 5966.

Lu, Z; Zhu, L; Li, Z; Liang, X; Zhang, Y. The Effects of Passenger Risk Perception During the Covid-19 Pandemic on Airline Industry: Evidence from the United States Stock Market. *Frontiers in Psychology*. Jan. 2022. Volume 12.

Lu, Z; Zhu, L; Li, Z; Liang, X; Zhang, Y. The Effects of Passenger Risk Perception During the Covid-19 Pandemic on Airline Industry: Evidence from the United States Stock Market. *Frontiers in Psychology*. Jan. 2022. Volume 12.

Lu, Z; Zhu, L; Li, Z; Liang, X; Zhang, Y. The Effects of Passenger Risk Perception During the Covid-19 Pandemic on Airline Industry: Evidence from the United States Stock Market. *Frontiers in Psychology*. Jan. 2022. Volume 12.

Maneenop, S., & Kotcharin, S. (2020). The impacts of COVID-19 on the global airline industry: An event study approach. *Journal of air transport management*, 89, 101920.

Mason, K. J., & Morrison, W. G. (2008). Towards a means of consistently comparing airline business models with an application to the 'low cost' airline sector. *Research in Transportation Economics*, 24(1), 75-84.

Mason, K., Morrison, W. G., & Stockman, I. (2016). Liberalization of air transport in Europe and the evolution of 'low-cost' airlines. In *Liberalization in Aviation* (pp. 163-177). Routledge.

Messner, W. (2017). Does value for money create advocates? A study in the international airline services industry. *Journal of Global Marketing*, 30(5), 309-321.

Moir, L., & Lohmann, G. (2018). A quantitative means of comparing competitive advantage among airlines with heterogeneous business models: Analysis of US airlines. *Journal of Air Transport Management*, 69, 72-82.

Morrison and Winston, C. (2010). *The economic effects of airline deregulation*. Brookings Institution Press.

Namukasa, J. (2013). The influence of airline service quality on passenger satisfaction and loyalty: The case of Uganda airline industry. *The TQM Journal*.

Nilashi, M., Abumalloh, R. A., Alghamdi, A., Minaei-Bidgoli, B., Alsulami, A. A., Thanoon, M., ... & Samad, S. (2021). What is the impact of service quality on customers' satisfaction during COVID-19 outbreak? New findings from online reviews analysis. *Telematics and Informatics*, 64, 101693.

Nilashi, M.; Abumalloh, R.A.; Alghamdi, A.; Minaei-Bidgoli, B.; Alsulami, A.A.; Thanoon, M.; Asadi, S.; Samad, S. What is the impact of service quality on customers' satisfaction during COVID-19 outbreak? New findings from online reviews analysis. *Telemat. Inform.* 2021, 64, 101693

Nilashi, M.; Abumalloh, R.A.; Alghamdi, A.; Minaei-Bidgoli, B.; Alsulami, A.A.; Thanoon, M.; Asadi, S.; Samad, S. What is the impact of service quality on customers' satisfaction during COVID-19 outbreak? New findings from online reviews analysis. *Telemat. Inform.* 2021, 64, 101693

- Nilashi, M.; Abumalloh, R.A.; Alghamdi, A.; Minaei-Bidgoli, B.; Alsulami, A.A.; Thanoon, M.; Asadi, S.; Samad, S. What is the impact of service quality on customers' satisfaction during COVID-19 outbreak? New findings from online reviews analysis. *Telemat. Inform.* 2021, 64, 101693
- Olorunsola, V. O., Saydam, M. B., Arasli, H., & Sulu, D. (2022). Guest service experience in eco-centric hotels: a content analysis. *International Hospitality Review*, (ahead-of-print).
- Olorunsola, V. O., Saydam, M. B., Arasli, H., & Sulu, D. (2022). Guest service experience in eco-centric hotels: a content analysis. *International Hospitality Review*, (ahead-of-print).
- Ozer Balli, H., Balli, F., & Tsui, W. H. K. (2019). International tourism demand, number of airline seats and trade triangle: Evidence from New Zealand partners. *Tourism Economics*, 25(1), 132-144.
- Öztüren, A., Kilic, H., Olorunsola, V. O., & Osumaje, B. O. (2021). Managing natural tourism attractions based on visitor reviews: a case study of Golden Beach, Karpaz. *Worldwide Hospitality and Tourism Themes*, 13(4), 535-544.
- Öztüren, A., Kilic, H., Olorunsola, V. O., & Osumaje, B. O. (2021). Managing natural tourism attractions based on visitor reviews: a case study of Golden Beach, Karpaz. *Worldwide Hospitality and Tourism Themes*, 13(4), 535-544.
- Pakdil, F., & Aydın, Ö. (2007). Expectations and perceptions in airline services: An analysis using weighted SERVQUAL scores. *Journal of Air Transport Management*, 13(4), 229-237.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41-50.
- Park, J. W. (2007). Passenger perceptions of service quality: Korean and Australian case studies. *Journal of Air Transport Management*, 13(4), 238-242.

- Park, J. W., Robertson, R., & Wu, C. L. (2004). The effect of airline service quality on passengers' behavioural intentions: a Korean case study. *Journal of Air Transport Management*, 10(6), 435-439.
- Pina, V., Torres, L., & Bachiller, P. (2014). Service quality in utility industries: the European telecommunications sector. *Managing service quality: an international journal*.
- Prayag, G. (2007). Exploring the relationship between destination image and brand personality of a tourist destination: An application of projective techniques. *Journal of Travel and Tourism Research*, 2(Fall 2007), 111-130.
- Rajaguru, R. (2016). Role of value for money and service quality on behavioural intention: A study of full service and low cost airlines. *Journal of Air Transport Management*, 53, 114-122.
- Rezaei, J., Kothadiya, O., Tavasszy, L., & Kroesen, M. (2018). Quality assessment of airline baggage handling systems using SERVQUAL and BWM. *Tourism Management*, 66, 85-93.
- Schmitt, D., & Gollnick, V. (2016). Historical development of air transport. In *Air transport system* (pp. 19-38). Springer, Vienna.
- Sotiriadou, P., Brouwers, J., & Le, T. A. (2014). Choosing a qualitative data analysis tool: A comparison of NVivo and Leximancer. *Annals of Leisure Research*, 17(2), 218-234.
- Sotiriadou, P., Brouwers, J., & Le, T. A. (2014). Choosing a qualitative data analysis tool: A comparison of NVivo and Leximancer. *Annals of Leisure Research*, 17(2), 218-234.
- Sparks, B. A., & Browning, V. (2011). The impact of online reviews on hotel booking intentions and perception of trust. *Tourism management*, 32(6), 1310-1323.
- Sulu, D., Arasli, H., & Saydam, M. B. (2021). Air-Travelers' Perceptions of Service Quality during the COVID-19 Pandemic: Evidence from Tripadvisor Sites. *Sustainability*, 14(1), 435.
- Sulu, D; Saydam, M; Arasli, H; Air-Travelers' Perceptions of Service Quality during the COVID-19 Pandemic: Evidence from Tripadvisor Sites. *Sustainability*. Dec. 2021

Sulu, D; Saydam, M; Arasli, H; Air-Travelers' Perceptions of Service Quality during the COVID-19 Pandemic: Evidence from Tripadvisor Sites. Sustainability. Dec. 2021

Sulu, D; Saydam, M; Arasli, H; Air-Travelers' Perceptions of Service Quality during the COVID-19 Pandemic: Evidence from Tripadvisor Sites. Sustainability. Dec. 2021

Sun, X., Wandelt, S., & Zhang, A. (2020). How did COVID-19 impact air transportation? A first peek through the lens of complex networks. *Journal of Air Transport Management*, 89, 101928.

Sun, X.; Wandelt, S.; Zhang, A. How did COVID-19 impact air transportation? A first peek through the lens of complex networks. J. Air Transp. Manag. 2020, 89, 101928

Sun, X.; Wandelt, S.; Zhang, A. How did COVID-19 impact air transportation? A first peek through the lens of complex networks. J. Air Transp. Manag. 2020, 89, 101928

Sun, X.; Wandelt, S.; Zhang, A. How did COVID-19 impact air transportation? A first peek through the lens of complex networks. J. Air Transp. Manag. 2020, 89, 101928

Swindell, D., & Kelly, J. (2005). Performance measurement versus city service satisfaction: intra-city variations in quality?. *Social Science Quarterly*, 86(3), 704-723.

Tseng, C., Wu, B., Morrison, A. M., Zhang, J., & Chen, Y. C. (2015). Travel blogs on China as a destination image formation agent: A qualitative analysis using Leximancer. *Tourism management*, 46, 347-358.

Tseng, C.; Wu, B.; Morrison, A.M.; Zhang, J.; Chen, Y.-C. Travel blogs on China as a destination image formation agent: A qualitative analysis using Leximancer. Tour. Manag. 2015, 46, 347–358.

Tseng, C.; Wu, B.; Morrison, A.M.; Zhang, J.; Chen, Y.-C. Travel blogs on China as a destination image formation agent: A qualitative analysis using Leximancer. Tour. Manag. 2015, 46, 347–358.



- Tseng, C.; Wu, B.; Morrison, A.M.; Zhang, J.; Chen, Y.-C. Travel blogs on China as a destination image formation agent: A qualitative analysis using Leximancer. *Tour. Manag.* 2015, 46, 347–358.
- Van Lierop, D., & El-Geneidy, A. (2016). Enjoying loyalty: The relationship between service quality, customer satisfaction, and behavioral intentions in public transit. *Research in Transportation Economics*, 59, 50-59.
- Wensveen, J. G., & Leick, R. (2009). The long-haul low-cost carrier: A unique business model. *Journal of Air Transport Management*, 15(3), 127-133.
- Whyte, R., & Lohmann, G. (2020). Airline business models. In *Air Transport Management* (pp. 129-144). Routledge.
- Woodside, A. G., Frey, L. L., & Daly, R. T. (1989). Linking service quality, customer satisfaction, and behavior. *Marketing Health Services*, 9(4), 5.
- Wu, H. C. (2014). The effects of customer satisfaction, perceived value, corporate image and service quality on behavioral intentions in gaming establishments. *Asia Pacific Journal of Marketing and Logistics*.
- Wu, H. C., & Cheng, C. C. (2013). A hierarchical model of service quality in the airline industry. *Journal of Hospitality and Tourism Management*, 20, 13-22.
- Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism management*, 31(2), 179-188.
- Ye, Q., Law, R., & Gu, B. (2009). The impact of online user reviews on hotel room sales. *International Journal of Hospitality Management*, 28(1), 180-182.
- Yi, S., Li, X., & Jai, T. M. (2018). Hotel guests' perception of best green practices: A content analysis of online reviews. *Tourism and Hospitality Research*, 18(2), 191-202.
- Yi, S., Li, X., & Jai, T. M. (2018). Hotel guests' perception of best green practices: A content analysis of online reviews. *Tourism and Hospitality Research*, 18(2), 191-202.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of marketing*, 52(3), 2-22.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of marketing*, 60(2), 31-46.

Zeithaml, V. A., Parasuraman, A., Berry, L. L., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Simon and Schuster.

Saydam, M. B., Olorunsola, V. O., & Rezapouraghdam, H. (2022). Passengers' service perceptions emerging from user-generated content during the pandemic: the case of leading low-cost carriers. *The TQM Journal*, (ahead-of-print).

Noviantoro, T, & Huang, J. P. (2022). Investigating airline passenger satisfaction: Data mining method. *Research in Transportation Business & Management*, 43, 100726.

IATA (2020). COVID-19: Consumer sentiment survey. Retrieved from [https://www.iata.org/en/pressroom/facts\\_figures/consumer-sentiment-survey/](https://www.iata.org/en/pressroom/facts_figures/consumer-sentiment-survey/)