AIRFARE & TICKETING PART-II (ADVANCED) (PRACTICAL + THEORY)



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ROLE OF SELF INSTRUCTIONAL MATERIAL IN DISTANCE LEARNING

The need to plan effective instruction is imperative for a successful distance teaching repertoire. This is due to the fact that the instructional designer, the tutor, the author (s) and the student are often separated by distance and may never meet in person. This is an increasingly common scenario in distance education instruction. As much as possible, teaching by distance should stimulate the student's intellectual involvement and contain all the necessary learning instructional activities that are capable of guiding the student through the course objectives. Therefore, the course / self-instructional material are completely equipped with everything that the syllabus prescribes.

To ensure effective instruction, a number of instructional design ideas are used and these help students to acquire knowledge, intellectual skills, motor skills and necessary attitudinal changes. In this respect, students' assessment and course evaluation are incorporated in the text.

The nature of instructional activities used in distance education self- instructional materials depends on the domain of learning that they reinforce in the text, that is, the cognitive, psychomotor and affective. These are further interpreted in the acquisition of knowledge, intellectual skills and motor skills. Students may be encouraged to gain, apply and communicate (orally or in writing) the knowledge acquired. Intellectual- skills objectives may be met by designing instructions that make use of students' prior knowledge and experiences in the discourse as the foundation on which newly acquired knowledge is built.

The provision of exercises in the form of assignments, projects and tutorial feedback is necessary. Instructional activities that teach motor skills need to be graphically demonstrated and the correct practices provided during tutorials. Instructional activities for inculcating change in attitude and behavior should create interest and demonstrate need and benefits gained by adopting the required change. Information on the adoption and procedures for practice of new attitudes may then be introduced.

Teaching and learning at a distance eliminates interactive communication cues, such as pauses, intonation and gestures, associated with the face-to-face method of teaching. This is particularly so with the exclusive use of print media. Instructional activities built into the instructional repertoire provide this missing interaction between the student and the teacher. Therefore, the use of instructional activities to affect better distance teaching is not optional, but mandatory.

Our team of successful writers and authors has tried to reduce this.

Divide and to bring this Self Instructional Material as the best teaching and communication tool. Instructional activities are varied in order to assess the different facets of the domains of learning.

Distance education teaching repertoire involves extensive use of self- instructional materials, be they print or otherwise. These materials are designed to achieve certain pre-determined learning outcomes, namely goals and objectives that are contained in an instructional plan. Since the teaching process is affected over a distance, there is need to ensure that students actively participate in their learning by performing specific tasks that help them to understand the relevant concepts. Therefore, a set of exercises is built into the teaching repertoire in order to link what students and tutors do in the framework of the course outline. These could be in the form of students' assignments, a research project or a science practical exercise. Examples of instructional activities in distance education are too numerous to list. Instructional activities, when used in this context, help to motivate students, guide and measure students' performance (continuous assessment)

PREFACE

We have put in lots of hard work to make this book as userfriendly as possible, but we have not sacrificed quality. Experts were involved in preparing the materials. However, concepts are explained in easy language for you. We have included many tables and examples for easy understanding.

We sincerely hope this book will help you in every way you expect. All the best for your studies from our team!

AIRFARE TICKETING - II

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<u> Airfare Ticketing – II</u>

BLOCK 1: ELECTRONIC & PAPER TICKETING

UNIT 1: HISTORY OF TICKETING IN AVIATION

UNIT 2: ELECTRONIC TICKETING AND ITS ROLE IN AVIATION

UNIT 3: HANDLING OF ELECTRONIC TICKET

UNIT 4: ADDITIONAL TRANSACTION ON TICKETS

ELECTRONIC & PAPER TICKETING

Block Introduction:

In 1914, Tony Jannus piloted the world's first scheduled passenger service between Tampa and St Petersburg, ushering in the era of commercial aviation. Despite the fact that commercial aviation did not take off right once, a growing number of firms attempted, with varied degrees of success, to capitalise on this milestone during the 1920s. When flying, there are two types of tickets to consider: paper tickets and electronic tickets. Paper tickets are being rapidly decorated with dinosaur strokes, making them appear less modern. Paper tickets are printed on paper. This information is stored in the airline's reservation system and is indicated as electronic tickets when using an electronic ticket. Traveling without a ticket ensures that it is never lost or stolen.

With continuous development in technology, aviation sector also have seen various advancement in ticketing. Due to an increase in the number of passengers and the use of analogue ticketing, American Airlines had to change their booking procedure. The first computerised reporting system (CRS) was built. SABRE was the world's first computerised reservation system. Interlining agreements can help airlines attract new passengers by giving simple access to destinations not served by the originating airline. Airlines utilise an ADM, or Agency Debit Memo, as an accounting method to collect adjustments for Electronic Tickets and Refunds issued by Agents. In a free text section on the ADM transaction called "Reason for Memo," airlines must explain why an ADM was raised, as well as the type of transaction it corresponds to. Attachments and the transaction's matching document number(s).

Block Objectives:

After understanding this block learns will have knowledge and its objectives is :

- To provide the learner with a knowledge about milestone of ticketing
- To provide knowledge about E-Ticketing, advantages and disadvantages as well as ticketing behaviour
- To make learner understand about the development of GDS and CRS.
- To provide information about Interlining and Handling and Controlling E-ticket
- To make understanding To provide the learner with information about Additional transections, Refund, ADM and its dispute solving

Block Structure:

Unit 1 : History of Ticketing in Aviation

Unit 2 : Electronic Ticketing and its role in Aviation

Unit 3: Handling of Electronic Ticket

Unit 4 : Additional Transaction on Tickets

History of Ticketing in Aviation

UNIT STRUCTURE

- 1.0 Learning Objectives
- 1.1 Introduction
- 1.2 Airline Ticket
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1.0 LEARNING OBJECTIVES:

- To provide the learner with information about milestone of ticketing and GDS.
- To make learner understand about the process of ticketing.

1.1 INTRODUCTION:

Tony Jannus piloted the world's first scheduled passenger service between Tampa and St Petersburg in 1914, marking the beginning of commercial air travel. Despite the fact that commercial aviation did not take off right once, a rising number of businesses attempted to capitalise on this milestone during the 1920s, with varying degrees of success. Air travel has now become a commonplace and practically indispensable part of people's lives all across the world, in both developed and developing countries. Despite the fact that many aspects of air travel have changed, airfares have benefited customers and service providers alike.

Passengers must purchase their tickets in advance, whether it is for an international or domestic flight, so that a seat or seats can be reserved for the duration of the journey. It's available as part of travel class packages, which vary per company. Economy and business classes are the most typical packages. The check—in fee is also included in the ticket price.

An airline ticket is a document that confirms that a passenger has purchased a seat on a plane and is provided by an airline or a travel agency. It contains important information about the traveller as well as the aircraft they will be taking. This is used to obtain a boarding card at the airport. The passenger is then allowed to board the plane using the boarding card and ticket that came with it. The older kind with coupons, now known as a paper ticket, and the modern electronic ticket, now known as an e-ticket, are the two varieties of airline tickets.

Airlines have a significant financial motive to maximise both the number of passengers and the amount of money they can extract from each individual on any given journey. While a traveller may be offered the choice of choosing between economy and business class, an airline has a far more complicated strategy based on how many tickets it can sell at any given price – which is why prices on online booking platforms can vary so much.

1.2 AIRLINE TICKET:

A flight ticket has three primary functions: it entitles customers to a seat on the trip, it acts as a contract between the passenger and the vendor, and it establishes responsibilities. The ticket's central position in defining obligations and payments is one of the reasons it is so crucial and thus so strictly managed.

A ticket serves as proof that a seat has been paid for and that it is theirs alone – no one else can take it. It's a travel document in this sense. The ticket comprises information about the booking, such as the PNR number, passenger information, and information on the itinerary, fare, and payment, for the airline.

Whether purchased directly from an airline or through an agent, a ticket is a contract between the passenger and the seller that seals the contract and establishes the conditions and responsibilities for postbooking services such as alterations, cancellations, and refunds.

The third most important function of a ticket is to establish responsibilities. When numerous airlines are involved, tickets establish responsibilities; some routes involve multiple airlines working under a codeshare or interlining arrangement. A ticket can help divide responsibilities between the validating carrier and the operating carrier in several situations.

Airlines exchange tickets among themselves during the flight. However, at any given time, the ticket can only be held by one airline. When an airline owns a ticket, it is accountable for the passenger and will update the ticket with the passenger's journey status, such as checkedin, boarded, and flown. This is carried out for a variety of reasons:

1. To Assign Responsibility: If operating carrier holds the ticket, for example, it is responsible for rescheduling passengers in case of flight delayed.

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- **2. To Prevent Errors of Miscommunication :** For example, a validating carrier may repay a passenger for a flight that has already been provided by the operating carrier.
- 3. To Initiate Payments between Carrier: To initiate payments between airlines, the ticket is returned to the validating carrier after the travel as proof that the flight was successfully delivered. This informs the validating carrier that it is responsible for paying the operating carrier's share.

1.3 PAPER TICKET VS E-TICKET:

A physical ticketed document used for travel is known as a paper ticket. Nowadays, paper tickets are rarely necessary. The majority of airlines have abandoned paper tickets in favour of E-tickets (electronic tickets.)

Paper Tickets are traditional paper ticket cards that has a paper coupon for each trip segment, and this variation is still used in the travel industry. After booking a flight, the agent issues a printed copy from flight reservations and passenger receives a map consisting of paper coupons for each flight segment plus passenger certificate. This map is required at check—in time in exchange for a boarding pass.

The majority of trip information is recorded on the map, which is a benefit of paper tickets. This is particularly handy if the booking system is down or if a flight is cancelled for mechanical (generally non-weather-related) reasons. Data from the original flight ticket coupons can be "read" by other airlines.

Paper tickets might also be useful in situation where there are no cancellations. A traveller may be allowed to switch airlines using a paper ticket, especially if it is a domestic ticket, but it is not valid on a charter airline. When flying to a foreign destination, the requirements for international tickets differ significantly from those for domestic flights. Agents were told to scoop the passenger, which meant accepting the person's ticket from another airline and taking (scooping) a portion of the profit from the other airline. This does not happen at every airport on a constant basis, but it does happen and could help passengers who have a paper ticket. As well as when travelling abroad, the paper ticket version is quite useful because some countries need verification of a return travel ticket and paper carrying such information.

However like each coin has two faces the paper ticket too has some shortcomings like; If the ticket is lost and needed to be reissued the traveller may request to purchase a new ticket. In case of changing the destination or date which often require, the passenger have to present the old ticket. In addition online checking cannot be done in case of paper ticket.

E-Tickets are tickets that are saved in computer system rather than being printed, therefore the chance of losing it negligible.

When flying on an E-ticket, the airline will print a boarding card for the passenger when they arrive at the airport and hence no paper ticket is issued. It can be can be purchased at the last minute on 24 × 7. Depending on the airline, they print boarding pass online up to 24 hours before flight by going to their website. Passenger can check in online at the airline's website or electronic kiosks at the airport, and on some occasions they can even check their bags online. Also there is no need to wait for a ticket to be received. Passenger does not require to stand in a long queue. In case of cancellation or change, re-issue paper tickets is not required.

These days, paper tickets are rarely issued. Passengers will receive a voucher and itinerary in the mail before their flight if the airline offers paper tickets. They check in for the flight by presenting the vouchers and proper identification to the person at the check—in counter. Boarding cards are distributed during the check—in process.

1.4 AIR TICKETING PROCESS AND REQUIREMENTS:

A flight can now be found directly on an airline's website or through OTAs. The search process will differ differently in terms of technologies and results depending on the type of retailer.

A reservation is made before the ticket is given. In this phase, the airline produces a system entry that contains all of the necessary information. After that, the passenger can enter their personal information and a Passenger Name Record (PNR) will be established. The ticket will be issued to the traveller once the PNR has been created.

As we know within few minutes of filling the form booking confirmation appears in the mailbox of customer. But it should be understood that it is not as simple as we think. The airline need to perform various activities and systems to issue a ticket and ensure that the right person board on the plane.

As now online booking is preferred over telephonic booking. As a travel professional you should focus on online booking as it is more efficient and saves your efforts and money.

1.4.1 Steps in Ticket Booking:

1.4.1.1 Search for Availability of Flight(s) for said Destination:

When using an airline's website to search, the website sends a search request straight to the airline's CRS, which then displays a list of available flights to the user, bypassing the GDS entirely. While Smart booking engines are used by travel platforms to maximise revenue by selecting and prioritising airline deals based on business and pricing principles.

1.4.1.2 Select Date of Intended Journey:

The traveller confirms a suitable date as per their requirement and convenience.

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1.4.1.3 Look for Available Offer(s):

Once date is confirmed the booking site shows available offers for the same. Sometimes combination and other benefits are offered the traveller can opt for those.

1.4.1.4 Seller Retrieves Offers for Matching Criteria:

Now the gateway directed the search for matching criteria.

1.4.1.5 Confirms Fare and Offers Applicability:

After matching the criteria applicability of offer is confirmed. Sometimes the offers are limited to certain time frame that may lapse.

1.4.1.6 Show Final Price after Including Taxes and Deducting Discounts:

Now the platform shows the final price that includes taxes and the discount applicable are deducted. Now this would be final price what they need to pay.

1.4.1.7 Passenger Details Entry:

In this stage gateway may ask for the name and other details as per government document record. This will secure the ticket to actual passenger.

1.4.1.8 Entry of Payment Details:

Now gateway ask for payment; it can be done through cards or other transection option. Once the payment is received proof of payment is generated.

1.4.1.9 Create PNR (After Receiving of Payment):

A Passenger Name Record is created and logged in the airline's Computer Reservation System (CRS) when a ticket is booked, also creating an official record of booking on the airline's system.

Airlines require proof of payment to ensure a seat on the flights. When a payment is made, the method of payment is entered into the PNR, and the price information is saved in a file known as a Transitional Stored Ticket (TST). These two files together include the data that will be printed on the final airline ticket.

The flight has now been booked and paid for successfully. The traveller, on the other hand, does not have the right to board the plane, they'll need to get a ticket in order for it to happen.

1.4.1.10 Issue a E-Ticket :

Following the booking, the PNR (together with the TST) is sent to a ticketing server, which confirms the information and issues the eticket. The reservation has been ticketed, and the seat has been assigned.

Ticketing usually occurs immediately after booking, but PNRs can be queued for ticketing with a pre-determined date and time for the ticket to be issued. In some cases, such as wait-listed reservations, open-return flights, or overbooking.

Airfare Ticketing - II 1.4.1.11 Customer Receives Confirmation Mail along with E-Ticket:

After officially allotment of seat the customer receives their e-ticket on their registered mail that shows confirmation of their booking.

If the booking cannot be confirmed for any reason, the travel supplier has to either offer an alternate flight or issue a full refund.

1.4.2 Requirements to Issue Airline Tickets:

Because of the critical importance of ticketing in the airline business, it is tightly regulated, and many airlines place rigorous restrictions on who can issue tickets on their behalf. This is primarily a financial concern.

Airlines want a global network of agents and booking sites to sell their tickets, but they also want to ensure that it is done in a controlled manner and that they are paid. As a result, huge accrediting organisations were formed to function as payment mediators between airlines and agents, with the airlines receiving a payment guarantee from all agents selling their tickets in exchange for the agents' ability to sell tickets for those airlines. This means that in order to issue tickets on behalf of an airline, merchants must be accredited. IATA and ARC are two major ticketing accrediting organisations in the world.

IATA: The Billing and Settlement Plan (BSP) is managed by IATA and is a payment processing system that collects and distributes payments and commissions among member airlines and agents. Agents must be IATA accredited in order to issue tickets for any IATA carrier.

ARC: The ARC's primary function is to act as a middleman between agents and airlines by using its own payment processor. To provide tickets for its member airlines, all US-registered agencies require ARC accreditation.

Beside IATA or ARC accreditation there are other ways too by which a booking cane be done like from Airline consolidators, Host agencies, Franchises and so on. However, all booking has to be routed directly or indirectly through these two organisations.

1.5 HISTORY AND DEVELOPMENT OF TICKETING:

Since American Airlines initially coined the current notion of air ticketing in 1952, it has played a critical role in the flight booking industry. While the introduction of the e-ticket has rendered manual issuance and paper tickets obsolete, the necessity of ticketing remains unchanged, and knowing its role is critical for any newcomer to the travel business.

The world's first scheduled passenger airline service took flight on January 1, 1914, between St. Petersburg and Tampa, Florida. Although the St. Petersburg–Tampa Airboat Line only lasted four months, it prepared the groundwork for today's daily transcontinental flights. The inaugural flight took place on New Year's Day, 1914, with great fanfare. Approximately 3,000 people lined the streets of downtown St. Petersburg to see the first

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ticket be auctioned off. Pheil, who was in the warehouse business at the time, won with an offer of \$400 (about \$8,500 today). It was an hour and a half journey for Pheil when he went about his business and placed an order.

The airline then offered two daily flights with a normal rate of \$5 per person and \$5 for 100 pounds of freight six days a week. Tickets were sold out 16 weeks ahead of time. Trips to Sarasota, Bradenton, and Manatee were increased after a second Benoist airboat was installed. Roger Jannus, Tony's brother, was the second pilot. This operation lasted nearly four months and transported thousands of travellers. When the winter residents began to return north, though, interest waned quickly.

Initially seats used to be allotted randomly so getting on asile or window seat was not less than winning a lottery ticket. Before computers, there were all sorts of strange and fantastic systems and contraptions: simple paper ledgers were replaced with index cards, which became blackboards, which became gigantic systems of boards of coloured chips. A mechanical system with tubes representing flights and tiny plastic balls representing seats was used to display aircraft capacity. When a ticket for a flight was purchased, a button was clicked, and a ball would emerge from the appropriate tube.

For many years, booking a ticket was a frustrating and complicated procedure. Thousands of people bought tickets as air travel became a feasible mode of transportation in the early 1940s. Carriers had to overcome various hurdles to make booking quick, convenient, and operationally simple as the number of clients grew. The entire booking process could be completed in minutes – through a travel agent – twenty years later, in the 1960s.

Paper tickets have been around since the 1920s. Each airline has its own form with its own set of rules. To support the growth of an industry that covered the globe, airlines quickly recognised the need for standardisation of traffic documentation, laws, and processes. The first standard hand—written ticket for numerous trips was produced by the IATA Traffic Committee in 1930. Until the early 70s, the industry was governed by the same rules.

In the 50s, airlines in the United States and Europe saw a surge in new consumers. Due to increased demand, major airlines were forced to look for a system that could process bookings much faster than before. At the time, airlines relied on antiquated, manual systems that gave customers access to the airline's inventory and allowed them to order tickets over the phone. A single reservation could take up to an hour or more. Ticketing agents checked flight and seat availability manually, entering in passenger information by hand, using paper cards housed in a spinning tank. The entire procedure was cumbersome and slow, making it difficult for carriers to handle high amounts of reservations.

American Airlines was required to upgrade their booking process because to an increase in the number of travellers and the use of analogue booking. The first computer reservation system (CRS) was established.

SABRE was the first computerised booking system, and it helped American gain market share swiftly. It was completed in 1964, and it was capable of processing over 7,000 bookings per hour with a near–zero mistake rate. SABRE was based on two IBM mainframes that were linked to hundreds of terminals, allowing American Airlines employees to check inventories and book flights in seconds. A reservation system might also retain passenger information in its memory for the first time. Later SABRE established its own online travel service in 1996, seeing huge prospects in internet booking. Travelocity was the first website to allow customers to book and purchase tickets online.

Following their exclusion from the US market, European carriers developed their own CRSs. As a result, Lufthansa, Iberia, SAS, and Air France founded Amadeus, an additional European GDS, in 1987. It came from Amadeus Germany, a company that specialises in airline IT systems. Galileo GDS was founded in the same year by nine major European airlines, including British Airways, KLM Royal Dutch Airlines, and Aer Lingus. Galileo grew to become one of Europe's major GDSs, incorporating Travicom GDS the following year to establish Galileo UK. Galileo merged with US-based Apollo systems four years later, in 1992, to form Galileo International. And hence There have been two CRSs operating in Europe since 1960s (CORDA by Dutch KLM and SASCO by Scandinavian). From the late 1970s through the end of the twentieth century, new systems emerged.

Automation brought in the first ticketing revolution in 1972. In Tokyo that year, the IATA Billing and Settlement Plan (BSP) for travel brokers was launched. As a result, the IATA neutral paper ticket was born. The IATA emblem appeared for the first time on the front of tickets that could be used by any travel agent to book flights on nearly any airline in the globe.

In 1983, the method was further mechanised with the addition of a magnetic stripe on the back of the ticket. This allowed all ticket information to be saved electronically on the ticket, which could also be used as a boarding pass.

In 1994, the first electronic ticket was issued. By 1997, the International Air Transport Association (IATA) had established global eticketing standards. However, progress was gradual, and only 19% of global tickets were electronic by May 2004. In 2005, 285 million IATA neutral paper tickets (both kinds) were printed at their highest point. Travellers now have access to fully automated ticket purchasing, reserving, and payment for flights via their smartphones, which was previously unimaginable.

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Meanwhile, with the introduction of smartphones and 3G internet access, mobile technologies have progressed. Furthermore, APIs were utilised to link with mobile websites and applications to source and update data. As a result, travel technology companies concentrated on inventing ways to book flights directly from mobile devices.

The iPhone app KAYAK, which released in 2009, can be regarded the first example of a mobile travel app. In the tourism sector, mobile websites and applications have been the norm since early 2010. All other travel meta–search engines, online travel agencies, airlines, and fare booking tools quickly followed suit with their own mobile apps. Passengers could also use their smartphones as an electronic ticket by scanning a barcode, which is now a common practise.

For 2019, there were a few small changes to online booking, all of which were related to overall technological advance. Online payment methods have become far more secure, allowing for faster processing and even cryptocurrency transactions. In just a few taps, a leisure consumer may plan a week–long trip, book flights, hotel rooms, and rent automobiles using a shared smartphone application.

The consumer may easily obtain trip info, compare prices, and book electronic tickets stored in their smartphone memory thanks to a variety of technological devices. However, all flight information is still obtained from GDSs over channels that date back to the 1960s.

Check Your Progress: 1. was the first computerised booking system. a. KAYAK b. SABRE c. AMADEUS d. GALILEO Who was the pilot for world's first scheduled passenger service 2. between Tampa and St Petersburg in 1914. a. Orville Wright b. Rajiv Gandhi c. Tony Jannus d. Sachin Pilot are two major ticketing accrediting organisations in the 3. world. a. WTO and SITA b. IATA and ARC c. IACO and IATA d. IATA and PATA The full form of PNR is: 4.

The method of payment is recorded into the PNR, and the pricing

b. Passenger Name Registered

d. Passenger Name Registration

a. Transitional Stored Ticket (TST)

a. Passenger Number Record

c. Passenger Name Record

5.

b. Computer reservations system (CRS)

information is saved in a file known as _____

- c. Billing and Settlement Plan (BSP)
- d. None of the above

Airfare Ticketing - II 6. The first example of a mobile travel app was _____. a. SAS b. KAYAK c. SASCO d. CORDA 7. What was the name of computer reservations system (CRS) founded by Lufthansa, Iberia, SAS, and Air France, an additional European GDS, in 1987. a. GALILEO b. CORDA c. SABRE d. AMADEUS

- 8. Two CRSs operating in Europe since 1960s are ______ by Dutch KLM and ______ by Scandinavian).a. GALILEO and SASCO b. CORDA and SASCO
 - c. SASCO and AMADEUS d. CORDA and AMADEUS

 In Tokyo, the LATA Billing and Settlement Plan (BSP) for tra
- 9. In Tokyo, the IATA Billing and Settlement Plan (BSP) for travel brokers was launched in the year of ______.
 a. 1857 b. 1927 c. 1972 d. 2008

1.6 LET US SUM UP:

Tony Jannus was the pilot of the world's first scheduled passenger flight between Tampa and St Petersburg in 1914. It was the start of commercial aviation. Air travel has become a commonplace and almost unavoidable aspect of people's lives all across the world. Carriers had to overcome various hurdles to make booking quick, convenient, and operationally simple as the number of clients grew. The entire booking process could be completed in minutes – through a travel agent – twenty years later, in the 1960s. Travelers now have access to fully automated ticket purchasing, reserving, and payment for flights via their cellphones, which was previously unimaginable.

Ticketing and Booking are two distinct processes. Booking only secures a seat on the plane. The term "ticketing" refers to the payment of a seat and the passenger's right to use it throughout the trip. Even if a traveller pays for the trip immediately, as most OTAs and LCCs require, there is a time lag between these processes. Verifying payment details and completing money transmission can take up to three business days. Paper tickets, which had been in use since the dawn of air travel, were about to become obsolete and e–ticketing is acquiring the entire industry.

Major participants in the airline distribution sector include Amadeus, Sabre, and Travelport. In 1996, SABRE launched its own internet travel agency. Travelocity was the first website to allow customers to book and purchase plane tickets online. IATA and ARC are two of the most well–known ticketing accreditation bodies in the world.

<u>1.7</u>	ANSWERS FOR CHECK YOUR PROGRESS:				
Check Your Progress :					

1. b	2. c	3. b	4. c	5. a
6 h	7 d	8 h	9 c	

History of Ticketing in Aviation

1.8 GLOSSARY:

Alliance : A term for airlines that have grouped together and formed an alliance to give them a stronger identity and larger market share.

Apex: A travel ticket which has an advance purchase requirement.

ARC: Airlines Reporting Corporation

Operating Carrier: The airline operating the flight **Validating Carrier:** The airline that sold the ticket

1.9 ASSIGNMENT:

1. Collect some tickets from various airlines and compare the data printed on it. And think the reasons behind similarities of data required to print on it.

1.10 ACTIVITIES:

1. Entire world faced crises due to several disasters whether it is pandemic, terrorist attacks, economic crisis and political instability and so on. The airline industry also had faced challenges time to time. Find out key events when this industry had faced those situations and how they overcome from it.

1.11 CASE STUDY:

Singapore Airlines by Christopher Raynes and Kan Wai Hong Tsui:

Between 2000 and 2016 the Singapore Airlines Group experienced one of their most turbulent periods of operation, due to the intense competition and numerous exogenous shocks that took place (Ramaswamy, 2002). The group began 2000 recovering from the aftermath of the Asian Financial Crisis in 1999, which had had a crippling effect on the core Asian markets and the demand for premium travel. This was followed by acts of terrorism during 2001 in the USA, and in the resort city of Bali, Indonesia, during 2002. In the wake of the USA terrorist attacks, Singapore Airlines reduced flight frequencies to the USA by 11 weekly flights and Japan by 8 weekly flights (Singapore Airlines, 2002). This capacity was restored in 2002.

In the wake of the Bali bombings, the Singapore Airlines Group began a large marketing push in order to help increase air traffic demand back to the region. The Severe Acute Respiratory Syndrome (SARS) broke out in Asia in 2003 and had a negative effect on Singapore Airlines' services primarily to China and Hong Kong. On average, demand for air travel in the Asia–Pacific region fell 10–50% during the most affected months of April and May 2003. Hong Kong experienced the largest decline in air travel demand at 68% during these months (Abdulla et al., 2004, Singapore Airlines, 2002, World Tourism Organisation, 2003). At its worst the SARS outbreak saw load factors across the Singapore

Airlines Group decline to 49.2% (Singapore Airlines, 2002). Following the containment of SARS, large marketing campaigns were again launched to attract passengers and tourists back to Singapore itself and the region as a whole.

The global financial crisis (GFC) in 2008 resulted in some of the most significant network cuts at Singapore Airlines; however, it was necessary to ensure the capacity best met the level of air transport demand. A network wide capacity reduction of 10–11% was implemented along with the suspension of several routes.

Singapore Airlines was hindered again from April 2009 when the H1N1 virus broke out and spread rapidly throughout Asia and then across the rest of the world. Throughout this operating period, the airline initiated a number of marketing campaigns in an effort to stabilise passenger numbers, which included offering low fares to a variety of destinations, and encouraging more travel via the airline's frequent flyer program.

New aircraft such as the Boeing 777 and Airbus A380 have allowed the Singapore Airlines' fleet to remain relatively young by allowing older aircraft such as Airbus A310s and Boeing 747-400s to be retired. This in turn improves dispatch reliability, decreases the amount of maintenance and overhaul required to operate at higher daily utilisation levels, improves passenger comfort and allows for new innovations to be launched (Heracleous and Wirtz, 2010, Heracleous and Wirtz, 2014). The on-board lounge area on the Airbus A340–500 was one of Singapore Airlines' many notable innovations, and was introduced for the nonstop USA services to Los Angeles and New York's Newark Airport. Additional innovations launched over the period observed included inflight internet, email services, telephone and fax check-in options, personal inflight entertainment options in all classes, flat-bed seats in premium cabins and fully enclosed suites on the airline's flagship A380 fleet in place of traditional first class seats (Fan and Lingblad, 2016, Heracleous and Wirtz, 2014, Ramaswamy, 2002, Singapore Airlines, 2002). These initiatives and fleet development continued to reinforce Singapore Airlines as the premium long-haul arm of the group and its continuous innovation strategy ensured it remained a market leader in the region (Chan, 2000, Heracleous et al., 2004, Heracleous and Wirtz, 2009).

Challenges for Singapore Airlines and the group as a whole have arisen from intense competition from LCCs in the Southeast Asian market such as Air Asia, Cebu Pacific, and Lion Air, and from the Middle Eastern airlines, namely Emirates Airline, Etihad Airways, and Qatar Airways (Fan and Lingblad, 2016, Vespermann et al., 2008). The latter three carriers posed a considerable threat to Singapore Airlines' European, Australasian and Indian services, particularly as their premium cabin offerings and high levels of service quality mirrored those of Singapore Airlines (Fan and Lingblad, 2016, Nataraja and Al–Ali, 2011, Singapore Airlines, 2014). These Middle Eastern carriers flew similar networks to Singapore Airlines and provided compelling transit options between Australia and Europe

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at their respective hubs of Dubai, Abu Dhabi, and Doha. Furthermore, these carriers were also taking a large portion of the lucrative Europe—Asia traffic from those continents' legacy airlines (Vespermann et al., 2008, O'Connell and Williams, 2011). This is due to these carriers' unique geographic positioning which is within eight hours flying time of a large portion of the world's population (O'Connell and Williams, 2011). Singapore Airlines responded to this threat by announcing additional product and service enhancements including on—board wireless internet (Wi—Fi), premium economy, and a refurbishment program for their Boeing 777 aircraft (Singapore Airlines, 2015).

1.12 FURTHER READINGS:

- 1. International Airfare and Ticketing- Methods and Techniques by Gupta, S.K.
- 2. Encyclopaedia of Flight Reservation and Airline Ticketing by Vivek Tiwari
- 3. Air Travel Ticketing and Fare Construction by Negi Jagmohan
- 4. Flight Reservation and Airline Ticketing by Sharma Jitendra

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UNIT STRUCTURE

- 2.0 **Learning Objectives**
- 2.1 Introduction
- 2.2 Advantages of E-Ticketing
- 2.3 Limitation of E-Ticketing
- 2.4 How to Use
- 2.5 Ticketing behaviour
- 2.6 Let Us Sum Up
- 2.7 **Answers for Check Your Progress**
- 2.8 Glossary
- 2.9 **Assignment**
- 2.10 Activities
- 2.11 Case Study
- 2.12 Further Reading

LEARNING OBJECTIVES: 2.0

- To provide the learner with information about E-ticketing, uses, advantages and disadvantages.
- To make learner understand about the ticketing behaviour.

2.1 **INTRODUCTION:**

As we have studied in previous chapter, e-ticketing combines the issue and distribution of a ticket into a single activity. E-ticketing is a type of electronic ticket that does not require the use of paper. It is most commonly used in the airline sector. In this day and age, the majority of major airline firms use electronic ticketing. Consumers can enter information directly into the airline's database using an e-ticketing mechanism. Consumers also have the option of checking in without having to display an actual paper ticket. This system of ticketing allows airlines to cut expenses by eliminating the requirement for printing and shipping tickets, as well as reducing the demand for manpower by reducing employee workload.

Airlines Bookings System (ARS) is an upgraded, computerised element of airline reservations that evolved from manual records and logs in the early thirties. ARS helps in the arrangement of bookings, prices, schedules, and client information in a logical and efficient manner. Today's airline reservation system is known as a computer reservation system

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(CRS). When ARS is combined with a Global Distribution System (GDS), it can be utilised by numerous distribution channels, such as travel agencies, to book hotel rooms, flights, vehicle rentals, and excursions and tours all through a single system. Inventory management, availability display and reservation, as well as fare quotes and tickets, are all part of ARS.

The Electromechanical Reservisor was the first automated ARS introduced by American Airlines. It was succeeded by the Magnetronic Reservisor, a new machine. An enhanced automated booking system called SABRE was introduced to replace the previous Reservisor. Other airlines, likewise, developed their own ticketing and management systems. Many businesses are now collaborating with global airline corporations to provide user–friendly direct systems, as well as greater productivity and efficiency. Amadeus, Sabre, Abacus, Navitaire, and so on are some of the prominent ARS brands today.

2.2 ADVANTAGES OF E-TICKETING:

The world is witness of continuous technological growth in the previous five decades, with breakthroughs in every field today making human existence easier and more comfortable. The airline sector has progressed to become one of the most sophisticated and exciting industries in the world today. In less than a century, the airline industry has turned the human fantasy of flying into a reality. Nowadays millions of people fly every day. This has helped to build not only local economies, but also individuals and cultures. Over the years, technological advancements have resulted in significant advancements in the aeroplane ticket purchase system.

With the introduction of the internet, online ticket purchase for airline travel has grown in popularity. Today's airline companies are primarily concerned with customer satisfaction. The organisations are accomplishing this by enabling journeys in a completely mobile and social environment, utilising enormous amounts of data intelligently to bring actual service and operational gains.

Experts estimate that flight tickets account for more than 90% of the money generated by several online ticket booking companies. They receive thousands of unique visitors each day and have a 20% conversion rate for flight ticket bookings. Millions of dollars are made each year by online travel marketers. The internet travel business is clearly drawing new participants, while current firms are expanding their operations to meet demand. It's time for some stiff competition. Whether it's the domestic or foreign market, both are expanding in popularity and relevance.

With the use of the internet, e-ticketing systems now provide their consumers the option of picking and purchasing tickets from the comfort of their own homes, much like many other large businesses throughout the world. In ecommerce, many sets of communication and interaction

rules are employed, such as file transfer, email, and shopping carts. In ticket booking, this allows customers to purchase tickets, book reservations, and add services at any time, from anywhere in the globe, using a computer connected to the internet. It is not only more convenient than going to the ticket windows in person, but it also allows for a more personalised selection.

For transactions, the system now used for booking or resolving airline–related inquiries uses an electronic payment system. Because of its simple and convenient facilities, minimal paperwork on invoices, and low labour and administration expenses, the monetary paperless system has radically transformed the face of global trade. Credit cards, debit cards, bank transfers, and other corporations are the most prevalent ways to pay online. Many industries, including the aviation industry, have steadily increased over the years as a result of the rise in e–commerce and its simple, hassle–free e–payment system.

One of the numerous benefits of e-commerce is the ability to order tickets online. More people are travelling than ever before, and one of the key factors contributing to this surge is the simplicity with which travellers may purchase tickets online. To book an airline ticket for anywhere in the world today, all one has to do is go to the airline's website (or other websites that search for the best tickets for clients), search, and purchase. Many major airlines allow passengers to check in online and print their boarding passes prior to arriving at the airport.

Because of the various benefits and conveniences that an online airline booking system provides, an increasing number of consumers are purchasing their flight tickets online. In contrast to the conventional method of purchasing tickets at a travel agent's office, online booking now gives instant access to hundreds of flight routes, pricing, and other services. This is crucial for customers looking for the greatest value and the easiest connection. Customers have more control over their vacation planning and are able to make better informed decisions using the online system for booking aircraft tickets.

The technique for seeking flights is so simple that anyone with a computer and internet access can simply search for flights, compare costs, and purchase any flight they choose. Not only that, but this method is also lot faster, simpler, less time—consuming, and more convenient. Many flight companies now offer additional services such as airport transfers, lodging, vehicle rental, and airport parking. Customers can also benefit from frequent discounts, promotions, and other offers from the airlines by signing up for their email list or visiting their website. Clients can also be completely informed about the company's numerous policies, such as cancellation, baggage rules, and others, and can readily take use of those services.

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2.3 LIMITATION OF E-TICKETING:

The online booking system is built using a variety of tools and programmes. E-tickets, despite their benefits, have significant drawbacks. If a computer crashes, a passenger's reservation and other information could be lost forever. Most networks have backup procedures in place to prevent this, and passenger printouts of e-ticket papers can help, but it is still a possibility that has occurred in the past. Frequent passengers, such as business travellers, may also make last-minute modifications to their plans and neglect to utilise their original e-tickets or transfer the value to another flight. The old paper ticket could serve as a simple reminder in that situation.

The online flight booking system has its own set of drawbacks. Prospective clients in Asia and other regions of the world with inadequate connection speed and availability may have difficulty accessing airline websites and booking tickets. Aside from internet connectivity, inadequate understanding and access to technology might also make it difficult to use this service in many less developed parts of the world. As a result, many people in poor countries continue to employ the conventional technique of obtaining tickets through travel agents' offices.

Machine issues, such as a failed connection or an unresponsive software, might cause the entire flight schedule to vanish. Furthermore, because it is not done face to face with a person who knows everything about the connections, offers, and corporate policies, the consumer may not be able to acquire accurate or sufficient information from the website alone. Then there's the problem of security: it's possible that credit card and other confidential information could be stolen.

2.4 HOW TO USE:

As we have studied the process of ticket booking in previous chapter. Users can easily purchase an e-ticket by going to the ticket sale website, searching and selecting the desired destination, entering personal information such as name, mode of transportation, luggage information, and travel dates, and finally paying with bank cards, bank transfers, or online payment companies. The customer's phone is then emailed or texted with the e-ticket. While travel agencies and airlines used to assist clients with ticket purchases, the better internet system is making it easier and easier to book flights on one's own. Following the customer's purchase, the electronic record and ticket details are saved in the airline's database. The passenger service system is linked to the database, which is then connected to the airports, airlines, travel agencies for sharing real time information.

2.5 TICKETING BEHAVIOUR:

Changes in travel behaviour can be characterised and measured as follows:

- (1) Changes in booking patterns, whether through a travel agency or directly with the airline;
- (2) Changes in travel behaviour in general. The amount of time the passenger will spend using the new ticketing system;
- (3) The level of anxiety induced by various ticketing schemes;
- (4) The perception of a service enhancement (agent friendliness, improved boarding processes, etc.)
- (5) The belief that the new ticketing technique has reduced the product's worth.

Consumer behaviour, according to Chester R. Wasson, is "the way people act in an exchange transaction." As per this we can say that the behaviour is directly associated with:

- 1. Variety of options, in terms of airlines, booking gateways and so on.
- 2. Influenced by the same factors make different decisions.
- 3. Both external and internal (personal) influences influence choices.
- 4. In order to forecast future behaviour in specialised and broad markets, individual choice patterns must be stable.

Major consumer behaviour pattern in terms of e-ticketing can be affected by:

- 1. Acceptability: Initially consumers are uncomfortable with ticketless systems and have queries about situations like server down, unviability of fax (however email has solved this problem), airline loses records, Data leak, and extra charges on transection and so on. The concern of consumer cannot be said wrong. If the transection fail they have to wait for refund and in some case they are clueless about where to raise complain as well as their amount get blocked until it is not credit back to their bank account. It has been seen that sometimes the gateway is blaming to bank, bank is blaming to gateway or airline. Whatsoever situation is the consumer become the ultimate suffer. The traditional method has a single window where consumer has to face for their all the concerns.
- 2. Customer Service Expectations: The expectation of customer is increasing that may raise concern for airlines with the challenge of corresponding with the adequate requested level of service. For example Indian travellers not only traveling for convenience but showing status symbol is also important for them, and as a part they expect to get more importance during availing any service. As well as they are not ready to spent their time in long queue to get a ticket irrespective of e-ticket. Package is very carefully chosen by the customer whether they are purchasing directly from airlines or travel agents. As a behavioural pattern it is also seen that for simple domestic travel itineraries that may require minimal additional arrangements such as hotel or car rental, they tend to use direct

airline booking. It is difficult to generalise but saving of cost and time with comfort is primary concern of customer now a days.

- 3. Price Effects: Online travel agencies and price comparison engines have improved market openness and altered the search process. These Intermediaries (ATIs) are sophisticated decision assistance systems that allow users, regardless of expertise, to search and book thousands of flight options online. Which may affect the buying pattern of an individual customer.
- 4. Ease of Use: The consumer will ultimately select a flight from a Consideration Set based on a set of search criteria that has evolved over time. The Consideration Set is the number of brands included in the set of flight alternatives that the consumer is actively viewing and considering. The last re–finement iteration of the search process used the Consideration Set to select the flight. When compared to participants who do not use search tools, ATIs have been proven to minimise the Consideration Set size. As a result, the number of visitors to airline websites, i.e. brands, is not a reliable indicator. Consumers want websites to protect personal information, allow for secure payment, and keep online discussion private. They assess a website's usefulness and convenience of use, as well as information search, online subscriptions, and payment options.
- 5. **Brand Image:** The perception of an organisation as a whole is comprised of all of the people's experiences, beliefs, impressions, sentiments, and information. According to this definition, corporate image is a customer perception linked to how an individual feels and believes about a firm. The company's brand image is formed by the impressions of various types of people. As a result, corporate image is a summative process of contrast across multiple facets of the business. Airline Companies should and do attempt to improve their image. An unfavourable image will result in a slew of negative consequences for the business. Rumours, internet reviews, and the powerful feature of word of mouth are all possible ways for it to spread. Corporate image is seen as a valuable strategic instrument for achieving long-term goals and objectives. Customers are more likely to trust a company with a good corporate image, especially when purchasing tickets online.

☐ Check Your Progress:

- 1. The full form of ARS in ticketing is:
 - a. Aviation Reservation System b. Aviation Research Services
 - c. Airlines Research Services d. Airlines Reservation System
- 2. Corporate image is a customer perception that shows how an individual feels and believes about :
 - a. A firm

- b. Wealth of the firm
- c. Number of employees
- d. None of these

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- During booking of ticket the payment cannot be done through: 3.
 - a. Debit card b. Credit card c. Cash
- d. UPI
- 4. The full form of GDS in ticketing is:
 - a. Global Distribution Software b. Global Distribution System
 - c. Global Digital Server
- d. General Distribution Software
- 5. For sending E-tickets Fax has been replaced with:
 - a. E-Mail
- b. Speed Post c. Courier
- d. None of these
- 6. The Electromechanical Reservisor was the first automated ARS introduced by:
 - a. American Airlines
- b. American Army
- c. British Airways
- d. Air France
- 7. The full form of CRS in ticketing is:
 - a. Computer reserve system
- b. Computer reservation system
- c. Computer reserve software d. Computer reservation software
- 8. "The Consideration Set is the number of brands included in the set of flight alternatives that the consumer is actively viewing and considering."
 - a. Yes
- b. No
- c. May be
- d. None of these

2.6 LET US SUM UP:

Because of the drive to cut costs and improve customer service, there is fierce competition among airlines. The majority of airline companies used their websites to give customers with online e-ticketing services in addition to providing company information. One of the strategies used by industry players to increase ticket sales is this. Additionally, the internet solution enhances the efficiency of commercial transactions. Ease of use, assurance, responsiveness, and personalisation are some of the qualities of an e-service. Customer satisfaction is largely determined by ease of use, which may influence ticketing habits.

Customer tickets purchasing patterns have evolved, as have the amount of time and anxiety invested, as well as the quality and value provided. These developments are influenced by the customer's internal and external situations, as well as previous use of electronic or "ticketless" things. Identifying these elements of change is necessary for understanding the effects on behaviour and regulating the variables that produce this behaviour change. While each of the categories is important in its own right, they are neither mutually exclusive nor self-contained. That is, a change in the customer's anxiety is linked to a change in the customer's perception of the product's value. Nonetheless, each modification was evaluated in the context of the characteristics of the effected group.

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2.7 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

1. d 2.

2. a

4. b

5. a

6. a

7. b

3. c

8. a

2.8 GLOSSARY:

ATIs: Air Travel Intermediaries

Consumer Behaviour : The various internal and external forces that influence people's purchasing habits.

2.9 ASSIGNMENT:

1. Collect information about different software available to book a flight ticket.

2.10 ACTIVITIES:

1. Analyse the user friendliness of different gateways for booking a flight ticket.

2.11 CASE STUDY:

Airline Booking Experience:

Author: Adil Dahmani (https://bootcamp.uxdesign.cc/case-study-airline-booking-experience-7f4d36d3b69d)

While booking flights is returning to be a common occurrence, airlines have yet to grasp the usefulness and visual appeal connected with the thrill of flying. Many users find the online approach to be intimidating, time—consuming, and tedious.

This concept project highlights important areas of opportunities and examines how the booking process may be improved to allow users to search, choose, book, and pay for flights more quickly, easily, and effectively online.

Goal : Improve users' overall experience and usability when searching for, reserving, and paying for flights online.

Problem:

- ✓ Too many ads on important pages
- ✓ Overwhelming and confusing flight selection possibilities
- ✓ Overall procedure takes too long
- ✓ The perception that "hidden costs" would be added to the overall cost
- ✓ Payment/confirmation websites appear insecure and untrustworthy
- ✓ Unintuitive and unattractive UI

Conclusion:

- ✓ Most people book through a third–party aggregator
- ✓ Most people book on their computer over mobile
- ✓ People are money conscious and want pricing to be transparent and readily availability
- ✓ Top three booking factors (ranked most important to least important)
- ✓ Price, Date, and departure /landing time of flight
- ✓ Number of layovers / total travel time

Question:

- 1. What steps are advisable to solve above problems.
- 2. According to you what are the reasons for these problems.
- 3. How these problems affects consumer behaviour.

2.12 FURTHER READING:

- 1. Customer Behavior : A Managerial Perspective by Jagdish Sheth and Banwari Mittal
- 2. Consumer Behavior : A managerial viewpoint by Chester R Wasson
- 3. Consumer Behavior and Marketing Action by Henry Assael

Handling of Electronic Ticket

UNIT STRUCTURE

- 3.0 Learning Objectives
- 3.1 Introduction
- 3.2 Interlining
- 3.3 Handling during Irregular Operation
- 3.4 Displaying an E-Ticket Record
- 3.5 E-Ticketing Control
- 3.6 Let Us Sum Up
- 3.7 Answers for Check Your Progress
- 3.8 Glossary
- 3.9 Assignment
- 3.10 Activities
- 3.11 Case Study
- 3.12 Further Reading

3.0 LEARNING OBJECTIVES:

- To make learner understand about the Interlining.
- To make learner understand about the Handling and Controlling E-ticket.

3.1 INTRODUCTION:

As we all know, electronic ticketing is a means of selling passenger transportation and tracking usage without the need of paper documents. It also allows passengers to check in and board without the use of a paper ticket. If the itinerary is entirely made up of Electronic Ticket eligible portions, an Electronic Ticket can be issued. If an electronic ticket cannot be issued for any parts of the itinerary, a paper ticket shall be issued for all transit.

A separate electronic flight coupon database stores the electronic ticket and its accompanying coupons. Airlines compel passengers to travel according to the itinerary specified on their ticket, from the point of departure to their final destination via any agreed—upon connecting points, and vice versa. Each leg of the journey corresponds to a certain segment on an interactive map. This is an electronic ticket. In most cases, if all of the segments are not utilised in order, the ticket as a whole will lose its validity.

Airlines don't offer individual flight segments; instead, they sell a trip from the passenger's starting point to his or her final destination. Each of these travels is a market product with a set price based on current market conditions.

Passengers on board any scheduled aircraft will have paid a variety of rates, depending on the tariff conditions under which they purchased their tickets. Passengers may have boarded the aircraft or will be boarded on another, and their fares will reflect the current competitive condition in the end-to-end markets.

3.2 INTERLINING:

The most basic form of partnership occurs when two airlines enter into an interline agreement. It enables passengers to book itineraries on multiple airlines with less hassle than booking each one individually.

If two airlines have an interline agreement, they will usually handle check—in and baggage for each other's passengers. This means that passengers only need to check in once for all flights on their itinerary, and their luggage will be transferred from the first to the second airline without them having to manually collect and drop it off.

For the airlines involved, this sort of agreement can attract more passengers by providing easy connectivity to destinations not served by the original airline. Emirates recently signed an interline agreement with Mexico's Interjet, which will allow passengers on its new Mexico City flights to continue on to other destinations without having to recheck themselves or their luggage.

The disadvantage of an interline agreement is that passengers cannot accrue frequent flier miles for the entire journey. Skywards miles would be earned only on the Dubai–Mexico City leg of the Emirates flight, not on the subsequent journey. There may also be differences in things like carry–on luggage allowances, and there is no coordination on flight timings, so it is not always the easiest method of getting a right through booking.

Virtual Interlining:

During the 2010s, companies like dohop (which collaborates with EasyJet) and the Czech travel agency Kiwi have begun to sell interlining tickets.

Airlines in interlining, single segments on booking systems such as Sabre and Amadeus and resell them with extras such as reimbursed hotel costs in the event of missed connections, vouchers to purchase another connecting flight, and phone helplines.

Passengers using virtual interlining must reclaim and re-check their luggage, and they are not permitted to use the customs-free transit area because they are travelling on a series of single flights rather than two (or more) connecting flights. As a result, virtual interlining is simpler

Handling of Electronic Ticket

within a visa-free zone, such as the United States and Canada, or within Europe's Schengen zone. Schengen zone include 26 countries and they are: France, Italy, Germany, Spain, Sweden, Poland, Denmark, Finland, Holland, Malta, Austria, Belgium, Portugal, Czech Republic, Slovakia, Norway, Estonia, Greece, Hungary, Latvia, Slovenia, Liechtenstein, Lithuania, Luxembourg, Iceland, and Switzerland.

Interline Agreement Vs Codeshare Agreement:

An interline agreement, also known as interlining, interline ticketing, or interline booking, is a contract between two or more airlines to manage passengers whose itinerary includes numerous flights. This means they agree to handle their luggage until they get at their ultimate destination and check—in. A codeshare flight varies from an interline flight in that it is the entire flight, whereas an interline flight is one trip within a larger itinerary.

A codeshare agreement is when two or more airlines agree to share the same flight number in exchange for a fee. This means that passengers can book a flight on one airline and then use their flight number on a different airline.

The majority of interline agreements include a check—in portion, implying that the consumer should only have to check in once for their entire journey. This normally happens with the airline that handles the initial leg of the flight. Baggage must be checked in at the departing airport, and the airline will process it until the traveller can pick it up at the destination. In codeshare agreement the operating carrier is in charge of check—in and baggage allowances.

3.3 HANDLING DURING IRREGULAR OPERATION:

In the event of an unplanned reroute, providing smooth passenger handling is critical, as it directly contributes to the overall customer experience. As it does not happen very often but due to unavoidable circumstances the operation has to postponed or cancel.

Irregular Operations (IROPs) are identified by an airline or ground handler acting on its behalf when a disruption on the day of travel or the day before travel prevents the customer from using the flight ticketed. A flight delay, cancellation, diversion due to weather, mechanical problem, landing restriction, air traffic congestion, accident/aircraft damage, security concern, immigration issue, oversold flight, boarding delay, crew shortage, or other staff issues are examples of IROPs.

In this case, the Original Marketing/Operating Carrier, or the Ticket Handler acting on their behalf, arranges for an involuntary refund or provides onward carriage to the destination or point of stopover named on the ticket, without additional charge to the passenger, in accordance with IATA guidelines.

In the event of a misconnection, as per IATA Resolution 766 (Interline Passenger Reservation Procedures), it is the responsibility of the delivering airline to cancel any remaining space that cannot be used and rebook the passenger as necessary.

As stated in Resolution 735d, Article 6 (Absorption of Passenger Expenses), it is the responsibility of the carrier responsible for a delay (causing involuntary change of a passenger's journey) in an interline journey to arrange for a reasonable alternative route within a reasonable time. If that is not possible, the airline that caused the delay may be required to compensate the customer for some expenses incurred during the delay period. These direct expenses may include a hotel room, appropriate meals and beverages, ground transportation, transit taxes, and reasonable communications costs that the passenger must incur as a result of the involuntary change.

According to the Recommended Practice RP1775, its provisions do not apply to international intra-EU traffic and are subject to the terms of Passenger Tariff Conference Resolution 102. (Published separately). Some airlines' tariffs may also restrict the circumstances in which some of these provisions apply.

The delivering carrier is responsible for arranging hotel accommodations and other facilities as stipulated in the agreement when a passenger arrives late at interline connecting point.

3.4 DISPLAYING AN E-TICKET RECORD:

Airlines must have a database that is integrated with their passenger service system in order to issue e-tickets. That information is then shared in real time with all other partners, such as airlines, airports, ground transportation, and travel agencies.

The electronic ticket's record is saved in an airline's electronic database when it is successfully issued (ETS). After a record is saved in ETS, it can be searched in a database–connected system. The system makes an ETS request to the airline when a command to review an eticket record is entered. The received response will be automatically converted to a system–acceptable kind and presented. The agent can use an ET display to retrieve the E–ticket data.

In the E-ticket display, status codes are used. According to ATA (Air Transport Association) regulation 20.61, a Computer Reservation System (CRS) must accommodate all of these codes. However, because the electronic ticket server holds the electronic ticket record, the airline can choose whether or not to utilise these codes and how they want to use them. As a result, E-ticket servers frequently do not support all of them. For example the airlines or any one working through Amadeus system may find these codes.

The code displayed in the E-ticket record and the comparable code used in the EDIFACT messages are shown in this graph. The comments

below will assist you in determining whether a transaction is permitted for a given status code.

Handling of Electronic Ticket

Coupon Status Code Used in ETKT Display	Coupon Status Name	Code Set (Element 4405) Used in EDIFACT Only			
A	Airport control	AL			
С	Checked in	CK			
E	Exchanged/Reissued	Е			
F	Flown/Used	В			
G	Converted to FIM	G in 98.1 and 00.1 708 in 03.1			
I	Irregular operations	IO			
L	Lifted/Boarded	BD			
N	Notified				
0	Open for use	Ι			
P	Printed	PR			
R	Refunded	RF			
S	Suspended	S			
Т	Paper Ticket	T			
U	Unavailable	NAV			
V	Void	V			
Y	Refund Taxes/Fees/Charges only	710			
X	Print Exchange	PE			
Z	Closed	CLO			
1	Ground Transportation Voucher				

There are some codes which are not used so often used:

RQ	Non restricted fares (could be issued in WL)				
NA	Unused ticket but non-refundable/non changeable. The airlines				
	send the NA (Not Available) status in order to lock the coupon				
Q	Status showing on the ticket: suspicion of fraud				

A reason for an involuntary change in the itinerary (such as rerouting) or a change in flight accommodations can be indicated by airline offices (such as an upgrade or a downgrade). The following codes can be found for the same.

Involuntary	Explanation Indicator
С	Involuntary downgrade. Passenger compensated.
D	Diversion
I	No reason given
L	Labour-related activity (for example : strike action)
N	Involuntary downgrade. Passenger not compensated.
0	Oversale
S	Schedule change
U	Involuntary upgrade
W	Delay related to the weather or initiated by Air Traffic Control
X	Cancellation

Note: for more detail about the above mentioned code, visit Amadeus service hub. (Link is provided in further reading section).

Whereas, while using some other system the following table lists the various ticket coupon statuses can also be found. After going through that, you'll be able to grasp the ET display and find it simple to access the data.

Coupon Statuses	Definition
OPEN	Unused
OK	Okay for travel
CTRL	Under airport control
ACTL	Under airport control
CKIN	Checked in
USED	Lifted/boarded
VOID	Transaction voided
REAC	Reactivated
EXCH	Exchanged/reissued
RFND	Refunded
SUSP	Suspended by carrier
PRTD	Flight coupons printed

3.5 E-TICKETING CONTROL:

In addition to check-in, airport control is utilised to take control of all applicable flight coupons for the purpose of executing ticketing transactions. Control allows you to get your hands on e-ticket coupons

Handling of **Electronic Ticket**

for boarding, check-in, reissue, and refund. Other carriers are given control by the validating carrier. According to the interline agreement, it can also be transferred to a marketing or operating carrier. Only one airline has control at any one time. As a result, electronic control with the ticket agent is required. When the issuance command is issued, the validating carrier receives an information message. The data element of the ticket is stored in the validating airline database when the carrier r

-		se, they have the option to refuse					
	1	an exchange, refund, voiding, or					
		to the validating carrier, who must					
		quest. In some situations, like as					
	,	g carrier will verify the request and					
		coupon is not opened (for exchange/					
	ed, the carrier contacts Airport of the color of the colo	Control, and once the coupon is					
	Check Your Progress:	improtou.					
1.	<u> </u>	is not in Europe's Schengen zone.					
	a. Poland b. Ukraine	c. Holland d. Malta					
2.	Every change in coupon, requivalidating carrier, which must	ires a message to be sent to the be					
	a. Approved	b. Rejected					
	c. Either approve or rejected	d. No response					
3.	In Amadeus System Involuntary indicator "X", indicates:						
	a. Diversion	b. Cancellation					
	c. Non-refundable	d. Exchange					
4.	Unused ticket but non-refundate code	ole/non changeable is indicated by					
	a. RQ b. WL	c. NA d. NC					
5.	Which of the following is not a benefit of interlining?						
	a. Can attract more passengers						
	b. Provides easy connectivity to destinations not served by the original airline						
	c. Avoid paying custom duties						
	d. Getting more revenue						
6.	How many countries are there	in Europe's Schengen zone ?					
	a. 51 b. 27	c. 30 d. 26					
7.	Coupon status code "I" used in	n ETKT display indicates					
	a. No reason given	b. Irregular operations					
	c. Airport control	d. Checked in					

- 8. Who among the following has to arrange for an involuntary refund or related procedure at no additional cost to the passenger ?
 - a. Original Marketing
- b. Operating Carrier
- c. Ticket Handler
- d. All of them

3.6 LET US SUM UP:

Interline relationships are a vital enabler of the travel industry providing traffic for airlines and connectivity for passengers, while allowing one airline to sell to a customer services provided by another airline, such as itineraries that they would otherwise not be able to serve alone.

In virtual interlining airlines buy single segments on booking systems like Sabre and Amadeus and resell them with extras like reimbursed hotel costs in case of missed connections, vouchers to purchase another connecting flight, and phone helplines.

Passengers using virtual interlining must reclaim and re-check their luggage, and they are not permitted to use the customs-free transit area because they are travelling on a series of single flights rather than two (or more) connecting flights. As a result, virtual interlining is simpler within a visa-free zone, such as the United States and Canada, or within Europe's Schengen zone.

The majority of interline agreements include a check—in section, meaning that the customer should only have to check in once for the duration of their trip. This usually occurs with the airline that handles the flight's first leg. Baggage must be checked in at the outgoing airport, where it will be processed until the traveller can pick it up at the destination. In Code sharing Check—in and luggage allowances are handled by the operating carrier.

In some situations, like as itinerary or fare changes, the validating carrier will verify the request and reissue the ticket. When the applicable coupon is not opened (for exchange/reuse), the carrier contacts Airport Control, and once the coupon is opened, the following job can be completed. A reason for an involuntary change in the itinerary (such as rerouting) or a change in flight accommodations can be indicated by airline offices (such as an upgrade or a downgrade).

3.7 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

- **1.** b
- **3.** b
- **4.** c

- **5.** c
- 2. c6. d
- **7.** b
- **8.** d

3.8 GLOSSARY:

Codeshare Agreement : When two or more airlines agree to share the same flight number in exchange for a fee.

Handling of Electronic Ticket

CCT ('Common Customs Tariff') : Applies to products imported beyond the EU's external borders.

End-to-End Marketing : A marketing campaigns that takes a system or service from start to finish and produces a fully functional solution without the need to rely on a third party.

Interlining: A contract between two or more airlines to manage passengers whose itinerary includes numerous flights.

IROPs (Irregular Operations): The extraordinary situations in which a flight does not operate as scheduled.

Itinerary: A travel itinerary is a list of activities connected to a trip that includes destinations to be visited at specific times as well as modes of transportation to get between them.

3.9 ASSIGNMENT:

1. Think and write; what is the need to go for interlining for the airlines.

3.10 ACTIVITIES:

1. Search or collect information about recent interline agreement between airlines. Also find what benefits all the participants get after this agreement.

3.11 CASE STUDY:

Sabre launches interline e-ticketing hub; It's part of the company's new passenger-management suite, dubbed SabreSonic By Linda Rosencrance

Sabre Airline Solutions, a Sabre Holdings Corp. company, today launched its interline e-ticketing (IET) hub, offering airlines a single link to their airline partners.

Interline agreements among different airlines enable them to share passenger information. These agreements allow passengers to use one eticket when their itinerary includes travel on two or more carriers.

The IET offering is part of the company's next-generation passenger management suite, dubbed SabreSonic, said Kathryn Hayden, a spokeswoman for Southlake, Texas-based Sabre.

Until now, each airline's IET link was unique and customized for each partner airline. That meant that any one airline would need to have an individual agreement with each of its partners — a system that was time-consuming to create and maintain, and expensive, Sabre said in a statement.

With the new Sabre system, once a carrier is connected to the hub, it has access to all the other connected carriers, according to Hayden.

"The reason it's a beneficial offering for airlines is that it's extremely expensive the way they have to do it now," she said. "This is the kind

of thing airlines were interested in, so we developed it. It's in keeping with the overall SabreSonic offering, which is all about the ability to lower cost and enhance customer service."

Sabre said the IET hub supports all airline carrier technology requirements and is able to transfer electronic data from one carrier to another by translating all forms of electronic data interchange software, eliminating the extensive development that was once required in order for carriers to establish interline connections between individual airlines.

"I think the airlines will sign on for it," said Henry Harteveldt, an analyst at Cambridge, Mass.—based Forrester Research Inc. "This is a very timely technology and financially efficient offering, especially for the midsize and smaller airlines who can't afford to develop their own interline solutions."

Harteveldt said developing the IET hub is a smart move for Sabre because the system is based on Web services.

"So with the development, it's basically write once, use often," he said. "So it's an extremely cost-effective solution for Sabre to develop. It's the type of thing that even a major airline like American Airlines or British Airways or Air France could potentially evaluate ... and say, 'Yes, we've already developed the links with our primary alliance partners or other key airlines. But this lets us do potentially interline e-ticketing with airlines that right now can't afford these other solutions.' Harteveldt said IET is also an example of how Sabre is working really hard to reinvent itself as a travel technology partner rather than just as a reservations company, and to provide value to its most important customer base – the airlines — as well as to its stockholders

3.12 FURTHER READING:

- Customer Behavior: A Managerial Perspective by Jagdish Sheth and Banwari Mittal
- 2. IATA Ticketing Handbook
- 3. IATA Course material of air travel fare and ticketing
- 4. https://servicehub.amadeus.com/c/portal/view-solution/879101/en US/amadeus-electronic-ticketing-e-ticket-coupon-status-codes

5 04

Additional Transaction on Tickets

UNIT STRUCTURE

- 4.0 Learning Objectives
- 4.1 Introduction
- 4.2 Refund
- 4.3 Customer Card Transactions
- 4.4 Agency Debit/Credit Memos
 - 4.4.1 Reasons for Issuance of ADM
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- 4.6 Answers for Check Your Progress
- 4.7 Glossary
- 4.8 Assignment
- 4.9 Activities
- 4.10 Case Study
- 4.11 Further Reading

4.0 LEARNING OBJECTIVES:

 To provide the learner with information about Additional transections Refund, and ADM and its dispute solving

4.1 INTRODUCTION:

In the travel sector, airlines work with travel service providers, representative groups, and GDSs. They are collectively responsible for providing the best possible service to the passenger in the most efficient and effective manner, within the context of local laws, IATA standards, suggestions, and established rules and regulations.

GDS is a key component of an airline's indirect channel of distribution, thus the airline distributes its inventory through all major GDS across the world. The airline is responsible for the expense of using the GDS. Booking, cancellation, wait list, and ticketing fees are all included in the price. When booking criteria and best practises are broken while accessing an airline's inventory through a GDS, it costs them a lot of money. There's also the opportunity cost of unused seats and goods denied to other brokers and passengers. As a result, the airlines analyse all booking transactions on a regular basis in order to uncover booking irregularities and raise ADMs and bills to recover excessive GDS costs.

Currency Rules: Foreign fares are displayed in the Local Currency Fare, which is usually the national currency of the country where international travel begins. International fares from Malaysia, for example, are denominated in Malaysian Ringgit, the country's official currency.

However, some countries' Local Currency Fares are expressed in a currency other than their own national currency. These countries are classified into two groups: those that use the US currency and those that use the Euro. Additionally, for those nations that do not use the euro as their national currency, passenger rates and excess luggage costs are set in euros. The Ruble, for example, is Russia's national currency (RUB).

4.2 REFUND:

Subject to the consent of the respective Airline, an Agent may handle refunds of electronic tickets that it has already issued and that have been notified through the BSP through the BSP. Another Agent's transactions cannot be refunded by an Agent. The Agent must always follow the instructions of the airline and/or the applicable refund policy.

When completing a refund, the Agent must utilise the same method of payment that was used on the initial ticket. For example, if a ticket was purchased using a Cash Payment Method, the refund must be made using the same method. In the event of Card transactions, the Agent must also make certain that the Card used is the same as the one on the original ticket.

Refunds can be processed either an Agent's GDS refund feature or the BSPlink Refund Application, depending on Airline availability. The Agent can use the same GDS/TSP that issued the ticket when employing its GDS refund feature. Once a Refund Application has been submitted, the Airline is able to review it and either approve, change and approve, or reject it. This feature is especially beneficial if the Agent has any questions about how to calculate a specific Refund or if a Refund could not be completed through the Agent's GDS.

On a market-by-market basis, each airline can decide whether or not to allow the Refund Application capability. If an Airline has not activated this feature and the Agent is unable to process the refund through link, the Agent can contact the Airline directly to request the refund.

Unless the carrier specifies otherwise, any commission claimed on the original transaction is owed by the Agent back to the issuing airline in the event of a refund. Any commission amount reported on a refund transaction on the BSP Billing Reports signifies an amount owing to the BSP.

4.3 CUSTOMER CARD TRANSACTIONS:

A Card transaction processed through the BSP is one issued on the Customer's Payment Card and processed in accordance with the airline's merchant card acceptance agreement. The airline receives payment for

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the ticket straight from the card issuer in such circumstances. If a Customer's Card is processed under the terms of the Agent's merchant agreement, the transaction is not reported to the BSP as a Card transaction and is not covered by this section.

Resolution 890 lays forth the rules for selling Customer Card (CC) cards. Before issuing any transactions with this type of payment, each Agent must comply with the Resolutions. Due to local market regulations, CC is not available as a payment method in a small number of BSPs.

The Agent must comply with the standards stated in Resolutions 812 and 890, including PCI DSS Compliance, in order to be authorised to issue tickets using the Customer Card Payment Method. If an Agent does not yet have authorization to utilise the Customer Card Payment Method and would like it, the Agent should contact IATA via the Customer Portal. Once all necessary conditions have been completed, authorization will be issued.

In each market, airlines determine their own Card acceptance policy, including whether or not to take Card as a mode of payment and which Card brands may be accepted on their behalf by an Agent. Before issuing a ticket with a Card as a payment method, the Agent should first check the Airline's card acceptance policy. The Airline will not be paid if the Card brand in question is not accepted and there is no merchant agreement in place to perform the transaction. As a result, an ADM to the Agent is likely in such a case.

To avoid card chargebacks, the Agent can verify that the conditions of Resolution 890 are followed. If this is not the case, the Agent shall be completely responsible for any ADMs that may emerge, according to the appropriate resolution. It should also be noted that Resolution 890 establishes that Agents shall be completely accountable in the event of chargebacks for any non–'face–to–face' card transactions (also known as card not present transactions). Obtaining an authorisation number at the moment of sale or a scanned copy of the buyer's card and ID are insufficient to defend against fraud or resolve a chargeback.

Agents have to consider whether they are ready to accept the potential danger before receiving non-'face-to-face' payments. Compliance with the Payment Card Industry's Data Security Standards is one of the requirements for authorization to use the Customer Card Payment Method in the BSP.

The Payment Card Industry, which includes American Express, Discover Financial Services, JCB International, MasterCard, and Visa inc., has established a standardised, global set of data security standards aimed at preventing the theft of personal payment card information. As a result, PCI data security rules must be followed by all companies that store, handle, or transfer payment card data. PCI DSS specifies the technical and operational requirements for maintaining payment card security. Merchants who fail to comply with the PCI DSS risk incurring hefty

financial penalties. PCI DSS compliance standards apply to any Agent who accepts card transactions against its own merchant agreement or issues BSP card transactions.

In accordance with Resolution 812 Section 3, IATA shall monitor compliance, and any failure will result in an administrative non-compliance and the removal of the Customer Card Payment Method.

4.4 AGENCY DEBIT/CREDIT MEMOS:

An ADM, or Agency Debit Memo, is an accounting tool used by airlines to collect adjustments for Electronic Tickets and Refunds issued by Agents. ADMs are governed by Resolution 850m of IATA, which specifies their definition and application. ARC issues the debit memos to U.S.A. based agencies and for travel agencies outside the USA, IATA issues it. Debit memo for booking violations can vary from \$5 to \$250 per reservation.

Through BSP link, an airline issues an ADM to an agent. The ADM is included in the Agent's billing once its lifespan is completed, i.e. the amount of the ADM is part of the outstanding amount owed by the Agent to the BSP on Remittance Date. Standard Agents who do not have access to a cash facility must remit "Cash" sums owing for ADMs to the BSP according to the local remittance calendars.

4.4.1 Reasons for Issuance of ADM:

4.4.1.1 Churning :

Churning is the process of making several bookings for the same passenger on the same or different GDSs for the same itinerary. Airlines allow churns up to a certain number of bookings, which varies according on the class of travel. Following then, a fee is paid for each additional churn per passenger per segment. The same—origin, destination, segment date, passenger name, flight number, and IATA PCC code can all be used to judge churn. The churn violation check may be skipped for group bookings and transactions with the status Confirmed from Waitlist.

4.4.1.2 Duplicate Booking:

Duplicate booking violations apply to all ongoing bookings for a passenger with the same origin and destination, segment date, passenger, same or different flight number, same or different RBD, and similar IATA BSP/ARC PCC code. Group Duplicate booking violations are not checked for bookings made on any GDS. However, same—day bookings and schedule changes are not permitted.

4.4.1.3 Invalid Class Booking Violation:

When an agent makes a booking through GDS in RBDs that airlines ban, such as Air India's prohibited RBDs I, N, O, R, and X, an invalid class booking violation occurs. Ticketed PNRs, on the other hand, will be exempt from this violation check.

4.4.1.4 Waitlist Booking Violation:

Agents should cancel all unconfirmed waitlist segments 24 hours before departure. All waitlist bookings that are not cancelled or ticketed by the end of the month are deemed a waitlist booking violation, and an ADM is raised. However, same—day bookings are exempt from the queue booking violation check. This violation check excludes ticketed and cancelled waiting reservations.

4.4.1.5 Fictitious Name Booking Violation:

Fictitious name bookings are those with names like test/xyz/aaa/ abc and so on. An ADM can be charged for each fictitious name booking, and once found, the booking is susceptible to automatic cancellation. The fake name booking violation check is not apply to ticketed PNRs.

4.4.1.6 Passive Booking Violation:

When a segment is manually generated in a GDS, the corresponding airline's inventory system is not updated, resulting in passive booking. For tickets purposes, an approved Passive booking should be generated. It must match an existing booking in the PRS of the airline. It is a violation of booking policy to issue tickets with mismatched portions. When Passive bookings are those with transaction statuses such as Booked with carrier, Waitlisted, Waitlisted/ Confirmed outside GDS, Discounted passenger, not available, discounted passenger, and so forth. All passive bookings made in a month that have not been cancelled or ticketed before the end of the month are considered a passive booking violation. The passive booking violation check does not apply to same—day bookings.

4.4.1.7 Blocking of Inventory:

When agents sell a segment, they are required to complete the transaction before the end of the booking session. A PNR is only formed after a transaction is completed, and since the transaction is not completed in this booking violation, no PNR is created. When an agent does not complete the transaction after selling a segment, Airline inventory is blocked unnecessarily. The seat stays blocked until the end of the booking session, resulting in an opportunity cost for carrier in the form of denying another passenger or agent the option to take that seat.

4.4.1.8 ADMs for Commission Errors:

Within the BSP, each airline has the ability to put up numerous Commission Controls. These are the restrictions that are applied to a transaction after the Agent has issued it and the GDS has reported it to the BSP. IATA's DPC validates the commission percentages and amounts claimed in the transaction during BSP processing to ensure that they are within the allowed parameters set up as per the Airline's instructions to the BSP.

The reported commission is honoured if all requirements are met; otherwise, the BSP will adjust the commission to the level set by the airline's commission regulations. There are other market—wide characteristics

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that may apply in particular areas. Agents can examine the Airline Commission Control settings that apply to them on the Airline Commission Control page. Any wrong amounts will be found through the Airline's auditing procedure if the Airline is not using the BSP Commission Control options, or if the issue involves private fares or agreements that are not recorded inside the DPC. The ADM procedure is commonly used to recover these sums.

An Agent should be aware of each Airline's commission policy and commission control systems as a best practise to avoid ADMs related to wrong commissions. To submit commission appropriately, the Agent must follow the instructions provided by the airline. Any wrong amounts will be found through the Airline's auditing procedure if the Airline is not using the BSP Commission Control options, or if the issue involves private fares or agreements that are not recorded inside the DPC. The ADM procedure is commonly used to recover these sums.

4.4.1.9 ADMs for Standard Agents with No Cash Facility:

ADMs can be issued to agent with Standard Accreditation and No Cash Facility. Each Agent must log into BSPlink at least once per billing cycle to evaluate outstanding ADMs and double–check their BSP Billings for all Amounts Outstanding. Agents may want to set up ADM email alerts to help with the process. If an ADM payment is due, the Agent must make sure to make the payment by the due date.

Airlines have to explain why an ADM was raised, as well as the type of transaction it corresponds to, in a free text field called "Reason for Memo" on the ADM transaction. Attachments and the corresponding document number(s) of the transaction(s) that generated the ADM can also be included by airlines.

4.4.2 Doubts and Disputes:

If a relevant document number is present, the Agent can check the original transaction in BSPlink and, in the case of a ticket, confirm the error by looking at how the original transaction was issued. If an Agent has any doubts or disagrees with the ADM(s) during review, Disputes, Forward to GDS, and/or Post–Billing Disputes may be triggered.

4.4.2.1 Disputes:

If an Agent disagrees with an ADM, the Agent has the option to challenge the ADM before it is included in the BSP billing. The Agent has a 15-day grace period from the date of issuance of the ADM to lodge the dispute in BSPlink. By adding the reason for dispute in the remark area and attaching any supporting documents to the ADM, the Agent begins a dialogue with the Airline.

After that, the issuing airline has 60 days to accept or reject the disagreement. During this time, the Agent and the Airline are supposed to communicate and reach an agreement on whether the ADM disagreement is valid or not. If an ADM dispute is rejected or modified, the ADM

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will be included in the Billing Period in which the rejection date was executed.

4.4.2.2 Forward to GDS:

Forwarding to the GDS is the second option. If an Agent has cause to suspect that an ADM is not the result of its own fault and needs its GDS to look into it, the Agent may be able to send a copy of the ADM directly to the GDS via BSPlink. This option allows the GDS to view a copy of the document and send feedback, as well as supporting material, to the Agent, either directly through BSPlink comments and attachments, or through a different communication route previously agreed upon with the Agent.

The "Forward to GDS" option may not be available in all countries or for all GDSs; this option is activated at the request of the GDSs to IATA. If the Agent cannot locate the "Forward to GDS" button at the bottom of an ADM, the Agent should contact its GDS. A GDS's selection of this option does not imply that the GDS is responsible for the ADM. The outcome of the GDS investigation, as well as specific agreements between the GDS and the Agent, will determine this.

Furthermore, the "Forward to GDS" option has no effect on the ADM's delay period. If the ADM is still being investigated, the Agent must contact the Airline and request that the ADM be deactivated until more information is available. The Agent may dispute the ADM separately if it is clear that it disagrees with it.

This step can be conducted at any time before or after being included in BSP Billing, regardless of whether there is any pre or post-billing dispute activity, because it solely involves transmitting information to the GDS and has no impact on the ADM's lifecycle.

4.4.2.3 Post-Billing Disputes:

If an Agent disagrees with an ADM or any other debit Accountable Transaction after it has been included in the Agent's billing, the transaction can still be disputed using BSPlink's Post–Billing Dispute feature up to 12 months after the transaction was completed.

When the Agent queries an ADM that has been included in a Billing, the Post–Billing Dispute for ADMs is only available to the chevalier. Only the Dispute option will be available if an ADM is inside its latency period, and the Agent will be required to execute the pre–billing processes.

If an amount is contested after it has been billed, it remains part of the invoice, and the Travel Agent is responsible for paying the complete billing amount, including any disputed charges. IATA shall hold the disputed sums in escrow for 30 days, during which time the issue between the Agent and the Airline is expected to be settled.

When contesting an Accountable Transaction, it's critical that the Travel Agent presents as much proof as possible using BSPlink so that the disagreement may be addressed swiftly.

Airfare Ticketing – II	Ticketing - II □ Check Your Progress:					
	1.	ADMs are issued by airlines in order to:				
		a. Gain additional revenueb. Recover excessive GDS costsc. Make profit				
		d. Realise TA aware about that Airline is their boss				
	2.	The Agents have a grace period of days to lodge the dispute of the ADM.				
		a. 7–days b. 15–days c. 21–days d. 30–days				
	3.	Post-Billing Dispute can be redress up to months after the transaction was completed.				
		a. 1 months b. 2 months c. 10 months d. 12 months				
	4.	The is Russia's national currency.				
		a. INR b. EUR c. RUB d. RWF				
	5.	If waitlist bookings are not cancelled by the end of the month are considered as violation.				
		a. Duplicate booking violation b. Waitlist booking violation				
		c. Passive Booking Violation d. Churning				
	6.	When a travel agents is making several bookings for the same passenger on the same or different GDSs for the same itinerary, it is called				
		a. Duplicate booking b. Churning				
		c. Passive Booking d. Fictitious Name Booking				
	7.	In accordance with Resolution 812 Section 3, who is responsible for monitor compliances regarding Customer Card Payment Method?				
		a. Travel Agency b. Airlines				
		c. Passenger d. IATA				
	8. In the event of a refund, any commission claimed on the transaction is given to the					
		a. Travel Agent b. Issuing Airline				
		c. IATA d. Passenger				

4.5 LET US SUM UP:

Airlines collaborate with travel service providers, representation groups, and GDSs in the travel industry. Within the context of local laws, IATA standards, proposals, and established rules and regulations, they are jointly accountable for providing the best possible service to the passenger in the most efficient and effective manner.

The Local Currency Fare, which is usually the national currency of the country where overseas travel begins, is used to display foreign

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fares. Local Currency Fares are calculated in a currency other than the country's official currency. These countries are divided into two groups: those using the US dollar and those using the Euro.

An Agent may manage refunds of electronic tickets that it has already issued and that have been informed through the BSP with the approval of the appropriate Airline. An Agent cannot reimburse another Agent's transactions. The Agent must always adhere to the airline's instructions and/or the applicable refund policy. Any commission claimed on the original transaction is owed by the Agent back to the issuing airline in the event of a refund, unless the carrier indicates otherwise. On the BSP Billing Reports, any commission amount reported on a refund transaction indicates a sum owed to the BSP.

When a traveler's/booking arranger's action hinders the airline's capacity to properly handle and sell its inventory, the airline assesses booking violation fines. When a person holds airline inventory, such as a seat they do not intend to purchase, that seat is unavailable to other travellers. This is considered an illegal booking or "booking breach" by the airline. A booking violation debit memo is sent when the airline finds a violation. A debit memo is a bill issued by an airline as a result of a booking or ticketing mistake. Debit notices for booking violations can vary from \$5 to \$250 per reservation.

4.6 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

1. b 2. b

b

3. d **4.** c

5. b

6. b

7. d

8. b

4.7 GLOSSARY:

BSP (Billing and Settlement Plan): Sometimes known as a "Bank Settlement Plan". It is an electronic billing system that helps travel agents and airlines exchange data and payments.

Churn: The process of making several bookings for the same passenger on the same or different GDSs for the same itinerary.

PCC (**Pseudo City Code**): An alpha–numeric identity for a corporate user of a CRS and/or GDS, usually a travel agency, in the aviation business.

PCI DSS: The Payment Card Industry Data Security Standard

RBD (Reservation Booking Designator): The code used in reservation transactions to identify the booking class

4.8 ASSIGNMENT:

1. What are the similarities and differences in ARC and BSP guidelines? How these differences impact the operation.

4.9 ACTIVITIES:

1. Find out recent disputes between airlines and travel supplier in regards of ADM (Agency Debit Memo).

4.10 CASE STUDY::

Antitrust : Commission re-adopts decision and fines air cargo carriers €776 million for price-fixing cartel

Press release, 17 March 2017, Brussels

The European Commission has re–adopted a cartel decision against 11 air cargo carriers and imposed a fine totalling € 776 465 000 for operating a price–fixing cartel. The Commission's original decision was annulled by the General Court on procedural grounds.

Commissioner Margrethe Vestager, in charge of competition policy, said: "Millions of businesses depend on air cargo services, which carry more than 20% of all EU imports and nearly 30% of EU exports. Working together in a cartel rather than competing to offer better services to customers does not fly with the Commission. Today's decision ensures that companies that were part of the air cargo cartel are sanctioned for their behaviour"

In November 2010, the Commission imposed fines of nearly €800 million on 11 air cargo carriers who participated in a price–fixing cartel, from December 1999 to February 2006, in the airfreight services market covering flights from, to and within the European Economic Area. The cartel arrangements consisted of numerous contacts between airlines, at both bilateral and multilateral level to fix the level of fuel and security surcharges.

The companies fined in 2010 were Air Canada, Air France–KLM, British Airways, Cargolux, Cathay Pacific Airways, Japan Airlines, LAN Chile, Martinair, Qantas, SAS and Singapore Airlines. A 12th cartel member, Lufthansa, and its subsidiary, Swiss International Air Lines, received full immunity from fines.

All but one of the companies (Qantas) subject to the 2010 decision challenged the decision before the EU's General Court. In December 2015, the General Court annulled the Commission's decision against the 11 cartel participants that appealed, concluding that there had been a procedural error. However, it did not rule on the existence of the cartel.

The Commission maintains that these air cargo carriers participated in a price—fixing cartel and is adopting a new decision and re—establishing the fines. This new decision addresses the procedural error identified by the General Court while remaining identical in terms of the anticompetitive behaviours targeted by the Commission. The decision confirms that the Commission will not let cartels go unpunished. Cartels are illegal and cause consumers and business to suffer.

Additional Transaction on Tickets

The fines: The fines were set on the basis of the Commission's 2006 Guidelines on fines (see also MEMO). They were fixed at exactly the same level as in the 2010 Decision for all the companies, except for Martinair. In the 2010 decision, Martinair's fine had been capped at 10% of the company's total turnover in 2009. EU rules allow a maximum fine of 10% of the total turnover in the year preceding the adoption of the decision. Martinair's turnover is significantly lower in 2016 than in 2009. As a result, Martinair's fine has been lowered to reflect this.

In the 2010 decision, Lufthansa, and its subsidiary Swiss International Air Lines, received full immunity under the Commission's 2006 Leniency Notice, as it brought the cartel to the Commission's attention and provided valuable information. Furthermore, the fines for the majority of carriers were also reduced for their cooperation with the Commission under the Leniency Notice.

The individual fines are as follows:

Sr. No.	Carrier	Fine (€)*	Reduction under the Leniency Notice
1.	Air Canada	21 037 500	15%
2.	Air France	182 920 000	20%
3.	KLM	127 160 000	20%
4.	Martinair	15 400 000	50%
5.	British Airways	104 040 000	10%
6.	Cargolux	79 900 000	15%
7.	Cathay Pacific Airways	57 120 000	20%
8.	Japan Airlines	35 700 000	25%
9.	LAN Chile	8 220 000	20%
10.	SAS	70 167 500	15%
11.	Singapore Airlines	74 800 000	
12.	Lufthansa	0	100%
13.	Swiss International Air Lines	0	100%

(*) Legal entities within the undertaking may be held jointly and severally liable for the whole or part of the fine imposed.

Procedural Background:

The investigation started as a result of an immunity application by Lufthansa filed in December 2005. In February 2006, the Commission carried out unannounced inspections at the premises of a number of providers of airfreight services. In November 2010, the Commission adopted a decision against 12 air cargo carriers imposing fines totalling €799 445 000.

All carriers except Qantas appealed to the EU's General Court against the Commission's 2010 decision. Since Qantas did not appeal, the 2010 Decision became final for it.

In December 2015, the Court annulled the Commission's 2010 decision after finding a discrepancy between the reasoning and operative part of the decision. The reasoning part of the decision described the infringement as a single and continuous infringement covering all addressees. However, some articles of the operative part suggested that there were four separate infringements with only some addressees participating in all four.

The Commission's March 2017 Decision addresses the Court's conclusions by bringing the operative part in line with the reasoning part.

Action for Damages:

Any person or company affected by anti-competitive behaviour as described in this case may bring the matter before the courts of the Member States and seek damages. The case law of the Court and Council Regulation 1/2003 both confirm that in cases before national courts, a Commission decision constitutes binding proof that the behaviour took place and was illegal. Even though the Commission has fined the cartel participants concerned, damages may be awarded without being reduced on account of the Commission fine.

4.11 FURTHER READING:

- 1. Airline Operations and Management: A Management Textbook by Gerald N. Cook and Bruce G. Billig
- 2. IATA BSP Agent Billing Reports
- 3. BSP Data Interchange Specifications Handbook
- 4. BSP ADM Policy

BLOCK SUMMARY

An airline ticket is a document issued by an airline or a travel agency that indicates that a passenger has purchased a seat on a plane. It contains vital information about the passenger as well as the plane they would be flying on. At the airport, this is used to obtain a boarding card. Airlines have a vested financial interest in increasing both the number of passengers and the amount of money they can collect from each passenger on any given voyage. In the early 1930s, the Airlines Bookings System (ARS) grew from manual records and logs into an improved, computerised part of airline reservations. ARS assists in the logical and effective organisation of bookings, prices, schedules, and client information.

In the travel sector, airlines collaborate with travel service providers, representation organisations, and GDSs. They are collectively responsible for providing the best possible service to the passenger in the most efficient and effective manner, in accordance with local laws, IATA standards, proposals, and established rules and regulations. With the agreement of the applicable Airline, an Agent may manage refunds of electronic tickets that it has previously issued and that have been informed through the BSP.

BLOCK ASSIGNMENT

- 1. What development have been seen in Air-ticketing in last two decade.
- 2. What is the impact of replacing Paper ticket with E-ticket ? Elaborate with its advantages and drawbacks.
- 3. How interning and codeshare agreements helping airlines, passengers and Travel agents.
- 4. How TAs are handling ADMs.
- 5. How violence of price–fixing cartel can affect the passenger ticketing behaviour.
- 6. What is the role of Operating Carrier in e-ticket?

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	С	onceptual Clarity					
		heck your progress luest					
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AIRFARE & TICKETING PART-II (ADVANCED) (PRACTICAL + THEORY)



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The content is developed by taking reference of online and print publications that are mentioned in Bibliography. The content developed represents the breadth of research excellence in this multidisciplinary academic field. Some of the information, illustrations and examples are taken "as is" and as available in the references mentioned in Bibliography for academic purpose and better understanding by learner.'

ROLE OF SELF INSTRUCTIONAL MATERIAL IN DISTANCE LEARNING

The need to plan effective instruction is imperative for a successful distance teaching repertoire. This is due to the fact that the instructional designer, the tutor, the author (s) and the student are often separated by distance and may never meet in person. This is an increasingly common scenario in distance education instruction. As much as possible, teaching by distance should stimulate the student's intellectual involvement and contain all the necessary learning instructional activities that are capable of guiding the student through the course objectives. Therefore, the course / self-instructional material are completely equipped with everything that the syllabus prescribes.

To ensure effective instruction, a number of instructional design ideas are used and these help students to acquire knowledge, intellectual skills, motor skills and necessary attitudinal changes. In this respect, students' assessment and course evaluation are incorporated in the text.

The nature of instructional activities used in distance education self- instructional materials depends on the domain of learning that they reinforce in the text, that is, the cognitive, psychomotor and affective. These are further interpreted in the acquisition of knowledge, intellectual skills and motor skills. Students may be encouraged to gain, apply and communicate (orally or in writing) the knowledge acquired. Intellectual- skills objectives may be met by designing instructions that make use of students' prior knowledge and experiences in the discourse as the foundation on which newly acquired knowledge is built.

The provision of exercises in the form of assignments, projects and tutorial feedback is necessary. Instructional activities that teach motor skills need to be graphically demonstrated and the correct practices provided during tutorials. Instructional activities for inculcating change in attitude and behavior should create interest and demonstrate need and benefits gained by adopting the required change. Information on the adoption and procedures for practice of new attitudes may then be introduced.

Teaching and learning at a distance eliminates interactive communication cues, such as pauses, intonation and gestures, associated with the face-to-face method of teaching. This is particularly so with the exclusive use of print media. Instructional activities built into the instructional repertoire provide this missing interaction between the student and the teacher. Therefore, the use of instructional activities to affect better distance teaching is not optional, but mandatory.

Our team of successful writers and authors has tried to reduce this.

Divide and to bring this Self Instructional Material as the best teaching and communication tool. Instructional activities are varied in order to assess the different facets of the domains of learning.

Distance education teaching repertoire involves extensive use of self- instructional materials, be they print or otherwise. These materials are designed to achieve certain pre-determined learning outcomes, namely goals and objectives that are contained in an instructional plan. Since the teaching process is affected over a distance, there is need to ensure that students actively participate in their learning by performing specific tasks that help them to understand the relevant concepts. Therefore, a set of exercises is built into the teaching repertoire in order to link what students and tutors do in the framework of the course outline. These could be in the form of students' assignments, a research project or a science practical exercise. Examples of instructional activities in distance education are too numerous to list. Instructional activities, when used in this context, help to motivate students, guide and measure students' performance (continuous assessment)

PREFACE

We have put in lots of hard work to make this book as userfriendly as possible, but we have not sacrificed quality. Experts were involved in preparing the materials. However, concepts are explained in easy language for you. We have included many tables and examples for easy understanding.

We sincerely hope this book will help you in every way you expect. All the best for your studies from our team!

AIRFARE TICKETING - II

Contents

BLOCK 2: PASSENGER TICKET DETAILS ENTRIES

Unit 1 Ticket Format

Introduction, Information on Ticket, Boarding Pass, Airport Gate-Pass

Unit 2 Passenger, Tour Code & From-to Details Box/Data Elements

Introduction, Passenger Data, Tour Code element, PNRGOV, Flight Information Display

Unit 3 Reservation, Airline & Baggage Box/Data Elements Introduction, Reservation, Airlines, Baggage Allowance

Unit 4 Tax/Fee/Charges, Mode of Payment & Total Box/ Data Elements

Introduction, Government Taxes, Airports Authority and AAI Taxes, Taxes Imposed by Airlines, Mode of Payment, Credit / Debit Cards, Wallets, UPI (Unified Payments Interface), Netbanking



<u> Airfare Ticketing – II</u>

BLOCK 2: PASSENGER TICKET DETAILS ENTRIES

UNIT 1: TICKET FORMAT

UNIT 2: PASSENGER, TOUR CODE & FROM-TO DETAILS BOX/ DATA ELEMENTS

UNIT 3 : RESERVATION, AIRLINE & BAGGAGE BOX/DATA ELEMENTS

UNIT 4: TAX/FEE/CHARGES, MODE OF PAYMENT & TOTAL BOX/DATA ELEMENTS

PASSENGER TICKET DETAILS ENTRIES

Block Introduction:

The ticket contains important details about the passenger and the aircraft they will be taking. So, it's a price document that shows the cost of the trip, as well as passenger and voyage information. The ticket is exchanged for a boarding pass during the check-in process, which allows the traveller to board the plane. All tickets contain the same information, such as the airline that issued the ticket, the passenger's name, the ticket number, the validity date, the origin and destination cities, the flight number, the fare basis, the payment method, and the cost breakdown. Border control was also essential for the collecting of such data.

Whatever the reason, due to the lack of a middleman and additional costs for air trip reservations, the procedure for booking an online ticket remains almost the same. The best discounts and bargains can be found by comparing pricing across numerous websites. The baggage allowance is printed on the ticket and the passenger receipt. The cost of baggage is usually lower when purchased ahead of time on most airlines. If additional baggage is required, passengers must prepay extra bags online to avoid paying airport excess baggage costs. Because each aircraft has a weight restriction, they must arrange for all of the baggage. If the weight exceeds the limit, the cargo must be sent on another flight.

Block Objectives:

After understanding this block learns will have knowledge and its objectives is :

- To provide the learner with information about information on ticket
- To make learner understand about the Boarding pass and airport gatepass
- To provide knowledge about passenger data, tour PNRGOV and flight display
- To provide information about reservation process and baggage.
- To make understanding about different taxes and mode of payments for E-ticketing

Block Structure:

Unit 1: Ticket Format

Unit 2 : Passenger, Tour Code & From-to Details Box/Data

Elements

Unit 3: Reservation, Airline & Baggage Box/Data Elements

Unit 4 : Tax/Fee/Charges, Mode of Payment & Total Box/Data

Elements

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Ticket Format

UNIT STRUCTURE

- 1.0 Learning Objectives
- 1.1 Introduction
- 1.2 Information on Ticket
- 1.3 Boarding Pass
- 1.4 Airport Gate-pass
- 1.5 Let Us Sum Up
- 1.6 Answers for Check Your Progress
- 1.7 Glossary
- 1.8 Assignment
- 1.9 Activities
- 1.10 Case Study
- 1.11 Further Reading

1.0 LEARNING OBJECTIVES:

- To provide the learner with information about information on ticket
- To make learner understand about the Boarding pass and airport gate–pass.

1.1 INTRODUCTION:

Airline tickets are vital documents that prove a passenger has a seat on a flight. The ticket contains vital information about the passenger and the flight they will be taking. During the check—in process, the ticket is exchanged for a boarding pass, which grants the passenger's permission to board the plane.

After its original use, a ticket can be used as a collectible item, and collecting them is a popular hobby all over the world. For collectors, the value of a ticket is primarily determined by the event associated with it. Rarity, theme, or even country of issue may be important criteria for collectors.

More than a decade ago, all airlines issued paper airline tickets, and passengers were not permitted to fly without one. There were additional costs and complications if this type of plane ticket was lost.

As of today, all IATA-member airlines only issue electronic airline tickets, which are assigned a unique number. Because the number is saved in the system, if someone loses the ticket, it can be reprinted from the system by producing this number. Most airlines and airports require only a personal ID.

When a booking has multiple passengers, basic ticketing contains one passenger and one stored fare, but any number of tickets can be issued from a single stored fare quote.

1.2 INFORMATION ON TICKET:

A travel agent or airline may issue an airline ticket as a printed document or as an electronic record. It acts as proof that a person is entitled to one of the seats on an aviation flight. A printed ticket or an electronic ticket are the two forms of plane ticket templates. Although paper tickets are no longer provided, printed versions of e-tickets are acceptable.

Other segments of itinerary data, fare costs, and terms and conditions are included in addition to the name, date, time, and location of travel is few thing printed on a ticket. regardless of their type, provide the following information:

Airline that Issued the Ticket: Name of airline who issued ticket.

PNR Number: A passenger name record, often known as a booking reference number, is a digital document that contains information about a passenger's or a group of passengers' itinerary. It's a crucial step in the flight booking process that occurs before and after ticketing. Depending on the system used to make a reservation, the code normally has 6 characters letters or letters and digits. Amadeus and Galileo generate alphanumeric strings, but Sabre just uses letters.

Passengers are emailed a unique booking reference after completing a reservation, which can also be found on e-tickets and boarding permits. It allows tourists to check in and maintain their reservations online. Travelers can also access their flight details with the code, but not PNR files containing personal information.

Place of Issue: That means the name of authority or airlines who issued the ticket after successful booking.

Date of Issue : That means when the ticket is issued after successful booking by competent authority.

Name of the Passenger: Because the name of the passenger appears on the ticket and on the boarding permit, and it is verified by competent authorities at numerous security points, the name of the passenger must be recorded exactly as it appears on the valid Photo Identity Proof. In our country BCAS approved photo identity proof are Passport, Voter Identity card, Aadhaar/m–Aadhaar, PAN Card, Driving License issued by RTO, Service Photo Identity Card (Central / State Government, Public Sector Undertakings, local bodies or Public Limited Companies), Student Photo Identity Cards (Government/ Government recognized Institutions), Nationalized Bank Passbook with attested Photograph, Pension card / Pension documents having photograph of the passenger, Disability Photo ID Card / handicapped medical certificate issued by the respective State / UT Governments / Administration.

Ticket Format

Frequent Flyer Number: airlines provide frequent flyer number to their loyal passengers. A frequent flyer number is a code that identifies a consumer who travels by plane with a specific airline on a regular basis. Individuals can have various frequent flyer numbers based on how many airlines they fly on a regular basis.

Ticket Number: It's an official ticket number that includes the airline's 3-digit ticketing code, a 4-digit form number, a 6-digit serial number, and a check digit if applicable. As a result, it's a 13-digit number that's always different for each passenger.

Valid Date: Means date of journey intended by passenger.

Time: Expected time of departure is mentioned in this section.

Origin and Destination Cities: Name of cities from where the journey started and destination city along with their airport code is mentioned in this section.

Flight Number: The flight that the ticket will be used to travel. Each aeroplane/airbus has their unique number for example 7M 569.

Fare Class: Fare class with its code is mentioned in this section.

Fare Basis: an alphanumeric or alphabetic code that identifies the fare is mentioned in this section.

Baggage Allowance : For each passenger, each airline has a limit on the number of bags and the weight of each bag. The allowance may differ depending on the passenger's destination and the class of service used. However it is not always printed on the ticket.

Fare Details (Breakdown of Costs): The next section shows the break-up of fare. That include Fare (include Base fare, Fuel charge and service charge combined together), Taxes (the applicable tax amount is mentioned) and fee (it may include combination of passenger service fee, convenience fee, user development fee and, other charges and taxes). However it is not necessary to include this break-up on ticket it can be printed on itinerary or receipt.

Policy for Changes and Refunds: In this section all necessary notes are mentioned along with link of terms and conditions applied with this ticket. Other informations like reprint of ticket, check—in instruction and time and so on can be seen on ticket.

Payment Method: The method of payment by which the booking has been done. That helps the airlines during refund due to cancellation or other reasons

1.3 BOARDING PASS:

At airports, a variety of security methods are frequently implemented. Therefore airlines ensure that the passengers intended to travel has to carry boarding pass with them at all times at the airport, as security personnel may restrict access to certain areas.

Boarding card can be received either of two ways: by downloading it or by producing a ticket at the airport counter.

A boarding pass is a document provided by an airline during check—in, giving a passenger permission to board the airplane for a particular flight. At a minimum, it identifies the passenger, the flight number, and the date and scheduled time for departure. Boarding Passes are always required to board a flight. Flyers can check in online and print their own boarding cards in some situations. For a traveller to enter a secure sector of an airport, a boarding permit may be necessary.

A boarding pass contains the passenger's legal name as well as flight information such as the airline's name, departure gate information, departure and arrival cities, flight numbers, departure time, boarding time, boarding group number (if applicable), and seat assignment (when applicable). There will also be a bar code (for paper boarding passes) or a QR code (for mobile boarding passes) to scan at the security checkpoint and when you board the plane.

A traveller with an electronic ticket will often simply require a boarding pass. If a passenger possesses a paper airline ticket, it may be necessary for the ticket (or trip voucher) to be connected to the boarding pass before he or she can board the plane. For "connecting flights," regardless of whether a separate aircraft is boarded or not, a boarding pass is required for each new leg (identified by a different flight number).

There can be paper boarding pass or electronic. In paper boarding pass, Agents at check—in counters, self—service kiosks, and airline web check—in sites all provide paper boarding passes. ATB (Automated Ticket & Boarding Pass) or direct thermal printers, as well as a personal inkjet or laser printer, can print BCBP at the airport. PDF417 is the symbology for paper boarding passes. The mandate of the IATA Board of Governors specified that by the end of 2008, all IATA member airlines would be able to issue BCBP, and by the end of 2010, all boarding passes would have the 2D bar code.

After e-ticketing, electronic boarding cards were dubbed "the industry's next major technological innovation." According to SITA's Airline IT Trend Survey 2009, mobile BCBP accounted for 2.1 percent of use (as opposed to paper boarding passes) in 2009, with that figure expected to rise to 11.6 percent in 2012.

The mobile pass has the same bar code as a traditional paper boarding pass, and it can be scanned by machines. Simply scan the code displayed on the phone by the gate attendant.

1.4 AIRPORT GATE-PASS:

It is possible to do so with a gate pass, also known as an escort pass. Simply put, a gate pass allows non-traveling passengers to bypass security and enjoy all that the terminals have to offer while you drop off a loved one or wait for them to arrive. Unfortunately, only a few

Ticket Format

airports provide unrestricted gate passes, and most US airlines only allow non-ticketed passengers access to terminals if they are accompanying minors, people with special needs, or military family members. A gate pass can be obtained in one of two ways: through an airline or directly through participating airports.

An escort pass can be issued by an airline check—in agent to anyone with a government—issued photo ID who wishes to accompany a minor child or a person with a disability, whether age—related or not, to a departure gate. Escort passes are also issued by airlines to anyone who needs to meet minor children or people with disabilities at a domestic arrival gate. Escort pass holders must go through airport security and follow the same rules as airline passengers.

Although escort passes are not a panacea for all gate-related issues, they do allow family members to accompany minor children, grandchildren, and relatives with mobility issues or disabilities to departure gates. Some airports and airlines will also provide you with escort passes, allowing you to meet arriving passengers at their arrival gates.

Anyone transporting a child, grandchild, or accompanying a disabled relative or friend to a departing flight may require one. When meeting someone who falls into one of these categories, an escort pass must be requested. Passengers arriving from other countries will have to clear Customs and Immigration before they can meet. Due to customs and immigration regulations, Escort passes are never issued in some countries for people meeting passengers on incoming international flights.

Check Your Progress: 1. Fare on ticket include b. Fuel charge a. Base fare d. None of these c. Both a and b During the _____, the ticket is exchanged for a boarding pass. 2. b. Check-out c. Boarding a. Check-in d. De-boarding 3. _ is a gate pass that allows non–traveling passengers to enter to airport to accompany their love one. a. Passenger pass b. Emergency Pass c. Escort pass d. Security pass 4. _____ permit the passenger to board the plane. a. Aadhar card b. Ticket c. Boarding pass d. None of these Ticket number is a _____ digit number and is different for each 5. passenger. b. 13 a. 11 c. 15 d. 17

- 6. BCAS approved photo identity proof are
 - a. Voter Identity card
- b. Aadhaar

c. PAN Card

- d. All of these
- 7. In paper boarding pass can be get from
 - a. Agents at check-in counters b. self-service kiosks,
 - c. airline web check-in sites
- d. All of them
- 8. Baggage allowance for a passenger is differ depending on:
 - a. Airline
- b. Destination c. Class
- Class d. All of these

1.5 LET US SUM UP:

Air ticket is a document with a price that shows the cost of that travel, as well as the passenger and journey details. Flight tickets are tickets purchased to fly with an airline. Flight tickets include information such as departure and arrival times, PNR and booking code, seat number, and boarding time. Passengers booking an international or domestic flight must purchase their flight tickets first so that a seat or seats can be reserved for the duration of the journey.

When multiple passengers are booked, basic ticketing contains one passenger and one stored fare, but any number of tickets can be issued from a single stored fare quote. Airline companies or intermediary agents provide flight tickets.

1.6 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

- 1. c
- **2.** a
- **3.** c
- **4.** c

- **5.** b
- **6.** d
- **7.** d
- **8.** d

1.7 GLOSSARY:

BCAS: Bureau of Civil Aviation Security

BCBP: Bar Coded Boarding Pass

Fare Basis: an alphabetic or alpha-numeric code that airlines use to identify a fare type and help airline employees and travel agents to determine the rules that apply to that fare.

Funnel Flight: A flight that is made up of two or more member flights and is identified by the airline designator and flight number of one of the members. Segment AE (ADE) is made up of Legs AD and DE, which are identified by the member flight number DL 123.

Non-Operational Flights include any other Airline designators and/ or flight numbers associated with the same flight.

Operational Leg: A flight that is physically operated and identified by its airline designator and flight number

Ticket Format

PDF417: PDF417 is a stacked linear barcode format that is widely used in transportation, identification cards, and inventory management. "PDF" is an abbreviation for Portable Data File. The "417" indicates that each pattern in the code is made up of four bars and seventeen spaces in a pattern that is 17 units (modules) long.

1.8 ASSIGNMENT:

1. How security concerns has been solved at airport specially in–terms of entrance of passengers, post covid–19.

1.9 ACTIVITIES:

1. Find out the current improvement and changes in air ticketing after Covid–19.

1.10 CASE STUDY:

Uplift the air travel experience – a post–Covid flight plan; NEC Group, New Zealand

Throughout the pandemic, NEC has been working on a number of solutions to help to arrest the spread of COVID-19. NEC's iQuarantine application is a mobile check—in and case management system that allows users to report their location and health status from their own homes.

Drawing on our experience with Delta Airlines in the US, we continue to work on new solutions to unify requirements into one complete solution.

Seamless Airport Experience in Atlanta

In 2018, NEC partnered with Delta Airlines in Atlanta to launch the first biometric terminal in the United States. Customers flying directly to an international destination were given the option to use facial recognition from curb to gate, transforming the customer journey with a seamless experience through the airport.

The end-to-end Delta Biometrics experience used facial recognition technology to :

- ✓ Check in at the self–service kiosks in the lobby
- ✓ Drop checked baggage at the counters in the lobby
- ✓ Serve as identification at the TSA checkpoint
- ✓ Board a flight at any gate on concourse F
- ✓ And go through CBP processing for international travellers arriving in the U.S.

New seamless travel solution provides a unified experience

In order to provide a safe and seamless experience for travellers in a post-COVID-19 world, NEC has been working on a new and complete seamless travel solution. This solution offers :

- Seamless integration of all components
- ✓ Compatible with existing equipment and systems
- ✓ Works with all genders and races, faces covered by face mask
- ✓ Fast, highly accurate results

The focus for airlines and airports around the world is on minimising contact points. The minute you arrive at the airport, passengers are able to use their face as a secure and effective way of contactless identification. This form of identity is also used during the check—in process including baggage drop and security screening.

No longer will passengers be required to handle boarding passes – your face will be your boarding pass and NEC-driven technology will verify your identity enabling safe and seamless passage to board your flight.

Star Alliance Biometrics

In July 2019, NEC signed a partnership agreement with Star Alliance, the world's largest airline alliance, to develop a biometric data—based identification platform, significantly improving the travel experience for customers of Star Alliance member airlines.

Star Alliance customers who opt-in to biometrics will enjoy a seamless and hands-free travel experience, allowing them to pass from curb-to-gate through touchpoints within airports, e.g. check-in kiosks, bag-drop, lounges, and boarding gates. Traditionally these touchpoints require a passport and or a boarding pass.

Our partnership with Star Alliance means that in New Zealand, Air New Zealand has access to our new seamless travel solution. This means that airports, including Auckland International, can benefit from the new seamless travel solutions, further enhancing the customer experience at Auckland Airport.

New Technology Adds New Level to Biometric Solution

Our new seamless travel solution incorporates new technology as an integral part of the airport experience. These technologies include:

- ✓ Thermal screening which can detect anyone with elevated body temperature. Employees and travellers can be screened via:
 - \triangleright Pause and Go a self–check system that gives a green light for normal body temperatures or:
 - Free Flow which screens temperatures in open spaces as groups walk by sensors
- ✓ Hygienic technology screens
- ✓ Neo Face Thermal Express can flag employees and travellers who are not wearing masks as required

These technologies will help reduce the risk to travellers in airports, identifying people who are potentially contagious, screening them before they board their flight.

Ticket Format

Pay by Face Technology to Roll Out

The COVID-19 pandemic has accelerated the integration of specific technology into our day to day lives. Contactless solutions and remote working solutions have meant that some technologies have been more widely rolled out.

Outcomes

NEC continues to work with Star Alliance and Delta Airlines to roll out new seamless travel solutions. Once international airports are able to welcome travellers contactless solutions will continue to be adopted by both airports and airlines, looking at ways to keep customers safe while improving the airport experience. In New Zealand, Air New Zealand, a member of the Star Alliance network, may utilise these new seamless travel solutions to help improve the customer experience and ensure we keep our borders safe.

1.11 FURTHER READING:

- 1. Airline Airport & Tourism management: Aviation Manual by Dr. Sumeet Suseelan
- 2. Airliners by Robert Wall
- 3. A Study About Aviation by Rishiraj Singh Rathore
- 4. Flight Reservation And Airline Ticketing by Jitendra k Sharma

Passenger, Tour Code & From-to Details Box/Data Elements

UNIT STRUCTURE

- **Learning Objectives** 2.0
- 2.1 Introduction
- 2.2 Passenger Data
- 2.3 **Tour Code element**
- 2.4 **PNRGOV**
- 2.5 Flight information display
- Let Us Sum Up 2.6
- 2.7 **Answers for Check Your Progress**
- 2.8 Glossary
- 2.9 **Assignment**
- 2.10 Activities
- 2.11 Case Study
- 2.12 Further Reading

2.0 **LEARNING OBJECTIVES:**

To provide the learner with information about passenger data, tour PNRGOV and flight display

INTRODUCTION: 2.1

Airlines transport a large number of passengers at the same time, and airports are frequently described as inland borders where strangers congregate and disperse. They also serve as a conduit for terrorism and transnational criminal activity. Border control authorities have made an effort to obtain information about travellers' identification, baggage, and travel plans ahead of time in order to detect and deter terrorism and transnational crime more effectively. However, the transmission of detailed personal information – an essential component of advance passenger information (API) and passenger name record (PNR) data raises privacy and data protection concerns.

The collection of such data for border control can also lead to betterinformed decisions and judgement calls by investigators about which travellers to apprehend, as opposed to the current, seemingly arbitrary and often intuition-based decisions, and the consequent invasion of privacy that such investigations entail.

Keeping passengers informed is critical for the modern airport, as it improves the passenger experience, passenger flow, and, as a result, the efficiency of airport operations.

Passenger, Tour Code & From-to Details Box/Data Elements

2.2 PASSENGER DATA:

Advance Passenger Information (API) and Passenger Name Records (PNR) are two types of passenger data. Because it can help governments pre-identify travellers and patterns, this data can be a useful tool for border control or security processing. To assist Government, strong global standards and guidelines are in place. It is critical that states understand and adhere to them in order to ensure that airlines comply quickly and that passenger movements at airports run smoothly.

API includes information such as full name, date of birth, and nationality. It is collected during check—in as passenger reference number or crew member identification. Flight information, such as flight number, arrival and departure times, is also included in API data. Travel documents, such as passports, are commonly used to obtain API. The iAPI allows governments to communicate an instant response to carriers based on vetting results. Airlines collect PNR primarily for business purposes. PNRs contain information about reservations that can be as simple as a name, an itinerary, and a ticket indicator. PNR is not guaranteed to be accurate, and it may contain sensitive personal data. PNR data is information obtained from the departure control and reservation systems, and collection of it varies from airline to airline.

The API Guidelines were first developed in 1993 by the World Customs Organization (WCO) in collaboration with IATA. Following that, ICAO joined the process, and a 'Contact Committee' of the three organisations was formed. To assist their respective members in implementing the API system, the three organisations jointly published the WCO/IATA/ICAO Guidelines on Advance Passenger Information in 2003, 2010, and 2013, respectively. There were other records for more formal purposes, most notably Advanced Passenger Information and, in the United States of America, Secure Flight Passenger data (SFPD). These latter records are essentially limited to information from travel documents (passports) and, in the case of API, basic information about the flights in question.

PNRs, in contrast to API and SFPD, contain extensive information about the passenger's entire itinerary, including hotel and car reservations, contact information including addresses, email— and IP—addresses, phone and mobile phone numbers, payment information, dietary information, and disability information. When a passenger books an itinerary, the travel agent or website user creates a PNR in the CRS. This is usually one of the large GDS, such as Sabre, Amadeus, Worldspan, or Galileo, but if the booking is made directly with an airline, the PNR may also be in the airline's CRS database. For the passenger and the associated itinerary, this PNR is referred to as the Master PNR. A record locator identifies the PNR in the specific database.

When the holder of the Master PNR is unable to provide portions of the travel, copies of the PNR information are sent to the CRS of the

airlines that will be providing transportation. To manage the portion of the itinerary for which they are responsible, these CRSs will open copies of the original PNR in their own database. Many airlines have their CRS hosted by one of the GDS, allowing for PNR sharing.

The record locators of the copied PNRs are communicated back to the CRS that owns the Master PNR, ensuring that all records remain linked. This allows for the exchange of PNR updates when the status of the trip changes in any of the CRS.

New provisions in the Guidelines address issues such as security, data protection, mutual administrative assistance, and 'Interactive API,' a more advanced method of passenger processing at airports.

The WCO/IATA/ICAO API Contact Committee has been working on updating the PNR electronic reporting standards since 2010. The PNRGOV Working Group is a joint industry–government working group led by IATA that works on the 'PNRGOV' message for reporting PNR information to government. The government–industry collaboration operates under the auspices of IATA and the WCO/IATA/ICAO API Contact Committee. It emphasises the importance of the participating governments' contributions to the development of the PNRGOV standards.

The API Contact Committee serves as the final clearing house for any changes to API and PNR reporting standards. PNRGOV standards supplement Doc 9944 ICAO's PNR guidelines and reflect the agreement reached by the WCO, IATA, and ICAO on matters relating to the reporting of passenger information to governments.

The three organisations have also created a Management Summary to provide a high-level executive brief that describes and differentiates between the various sources and systems for passenger-related information contained in API and PNR that international Carriers are required to provide to border control agencies.

2.3 TOUR CODE (FT) ELEMENT:

A tour code on a flight ticket is frequently a special code arranged between a travel agency and a sales representative for a specific airline. When the agent enters the tour code into the reservation and ticketing system, certain information will be added to the ticket. For example, agent commissions, specific fare fares that take precedence over published fare rules, and so on.

When a published tour or a special negotiated fare is sold in conjunction with a ticket, the tour code element (FT) is used. The transaction code, as well as the passenger and segment associations, have a maximum length of 12 characters. The maximum number of characters allowed if the tour code begins with BT or IT is 14.

A Tour Code is a special code arranged between the Travel Agency and the Airlines. It denotes discounts or special offers provided by the

Passenger, Tour Code & From-to Details Box/Data Elements

respective airlines to the travel agency. On an automatic Public or Private Fare, an agent can manually insert or modify a Tour Code.

2.4 PNRGOV:

As we all know, a PNR is a record in a CRS's database that contains the itinerary for a single passenger or a group of passengers travelling together. The concept of this was first introduced by airlines that needed to exchange reservation information in the event that passengers needed flights from multiple airlines to reach their destination. As a result, the need for defined standards for interline messaging of PNR and other data has been identified. Via the "ATA/IATA Reservations Interline Message Procedures Passenger (AIRIMP). There was, however, no industry standard for the layout and content of a PNR.

The European Union created PNRGOV, a new messaging standard for PNR. It went into effect on May 24, 2016, with member states having until May 25, 2018 to implement it. It governs how airlines and tour operators manage and distribute PNR data to local PIUs. The PADIS Board of Directors served as a director for the PNRGOV message. The message structure and content are intended to provide a consistent approach for all airlines required to provide PNR information to States.

The IATA Passenger and Airport Data Interchange Standards (IATA PADIS) is used with both EDIFACT and XML syntaxes. IATA's passenger data comprises of both API and PNR. This data can be a useful tool for governments' border control or security processing as it can help them pre–identify travellers and patterns. The main messages are PADIS PNRGOV Message Standards, which are subsets of the EDIFACT standard. These messages are intended to facilitate the exchange of data relevant to government requirements on PNR data and Airlines reservation systems.

Although PNRGOV not required for use, it is anticipated that the message will provide an opportunity to rationalise data provision in the future. Governments are referred to as States in this document, and airlines are referred to as Carriers.

2.5 FLIGHT INFORMATION DISPLAY:

A flight information display system (FIDS) is software used in airports to configure and deliver media information on dynamic screens. Such systems, also known as digital signage software, not only help passengers find the gate, but they can also power a variety of screens and be used for all types of information display.

The computer system controls mechanical or electronic display boards or TV screens to display arriving and departing flight information in real time. The displays can be found inside or near an airport terminal. Most airport websites and teletext systems also have a virtual version of a FIDS. In large airports, each terminal or even each major airline has its own set of FIDS. FIDS are used to notify passengers of boarding

gates, departure/arrival times, destinations, flight delays/cancellations, and partner airlines, among other things.

Each line on a FIDS represents a different flight number, which is accompanied by the airline name/logo and/or its IATA or ICAO airline designator (which can also include the names/logos of interlining/code sharing airlines or partner airlines, such as HX252/BR2898.) the city of origin or destination, as well as any intermediate stops, the anticipated arrival or departure time, as well as the updated time, the gate number the check—in counter numbers or the name of the airline handling the check—in the flight status, such as "Landed," "Delayed," "Boarding," and so on. A flight may be represented by a series of different flight numbers due to code sharing.

Keeping passengers informed is critical for modern airports because it improves the passenger experience, passenger flow, and, as a result, airport operations efficiency. People rely on display systems to guide them to their desired destination when their surroundings are unfamiliar and time is of the essence. Sophisticated flight information systems must account for existing language barriers and provide accurate and complete information at all relevant locations. They must be easily configurable, run automatically, and be visually appealing.

Flight, delay, and boarding information is updated in real time on these singes. Timely data has a significant impact on passenger experience and relieves airport staff and information booths of their workload. With the ability to control when and what information is displayed, the airport can direct passenger flow through the terminal and avoid crowds, ensuring that people do not congregate in front of the gate before the plane is ready to board.

These screens display flight-related data; however, the same system is frequently used to communicate information that is not directly related to flight but improves the overall passenger experience. FID systems can be configured to display a variety of useful data such as weather, navigation, baggage handling, immigration information, and security alerts. It also serves as a marketing tool by displaying promotions, ads, or other graphical content to change the terminal's overall aesthetics.

☐ Check Your Progress:

1	The API Guidelines were first	developed in 1993 by the		
	in collaboration with the IATA	•		
	a. UNWTO b. UNSC	c. EU d. WCO		
2 and are two types of passenger data				
	a. API and PNR	b. FID and PNR		
	c. FID and PADIS	d. None of these		
3.	API is collected during crew member identification.	_ as passenger reference number o		
	a. Departure b. Arrival	c. Check-in d. Booking		

PNRs were initially designed for: 4. a. Train tickets b. Air travel c. Hotel Booking d. Car rentals _____ is software used in airports to configure and deliver media 5. information on dynamic screens. a. PADIS b. RFID c. API d. FIDS Board of Directors served as a director for the PNRGOV 6. message. a. WCO b. PADIS c. IATA d. SITA Who have created PNRGOV, a new messaging standard for PNR? 7. b. UN Security council a. US Customs department c. EU d. WCO 8. PNRGOV came into effect on: b. May 24, 1993 a. May 25, 2018

d. May 24, 2016

2.6 LET US SUM UP:

c. May 26, 2006

If the reservation is made directly with an airline, the PNR may be stored in the airline's CRS database as well. This PNR is referred to as the Master PNR for the passenger and the associated itinerary. When the holder of the Master PNR is unable to provide portions of the travel, copies of the PNR information are sent to the CRS of the airlines that will be providing transportation. The copy PNRs' record locators are communicated back to the CRS that owns the Master PNR, ensuring that all records remain linked. When the status of the trip changes in any of the CRS, this allows for the exchange of PNR updates. Although PNRs were initially designed for air travel, airline systems can now be used to book hotels, car rentals, airport transfers, and train trips as well.

The ongoing challenge for governments is to effectively manage border control and traveller identification. To meet this need, the PNRGOV messaging standard was developed by EU for the processing of passenger data for all global flights, and it has since become an essential law enforcement tool. It became effective on May 24, 2016, and the implementation deadline has been set for May 25, 2018. It governs how airlines and tour operators manage and distribute PNR data to local PIUs. The PADIS Board of Directors served as a director for the PNRGOV message.

2.7 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

1. d 2. a 3. c 4. b 5. d 6. b 7. d 8. d

Passenger, Tour Code

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2.8 GLOSSARY:

AIRIMP: The ATA / IATA Reservations Interline Message Procedures manual produced and distributed by IATA for the purpose of developing a communication standard between airline reservation systems and CRSs.

FCPI: Fare Calculation Pricing Indicator

PADIS: Passenger and Airport Data Interchange Standards

PNRGOV: A new messaging standard of PNR, carried out by the

2.9 ASSIGNMENT:

EU

Cyber-attacks are serious threats for aviation industry. Find out the security measures taken by industry.

2.10 ACTIVITIES:

1. Find out the strategy of airlines followed to secure passenger data.

2.12 CASE STUDY:

Delta to launch first biometric terminal in the U.S. by Staff Writer

Delta Air Lines, in partnership with U.S. Customs and Border Protection (CBP), Hartsfield–Jackson Atlanta International Airport (ATL) and the Transportation Security Administration (TSA), is launching the first biometric terminal in the United States at Maynard H. Jackson International Terminal and Concourse F in Atlanta.

Beginning late this year, customers flying direct to an international destination have the option of using facial recognition technology from curb to gate, transforming the customer journey with a seamless travel experience through the airport.

This optional, end-to-end Delta Biometrics experience includes using facial recognition technology to:

- ✓ Check in at the self–service kiosks in the lobby
- ✓ Drop checked baggage at the counters in the lobby
- ✓ Serve as identification at the TSA checkpoint
- ✓ Board a flight at any gate on concourse F
- ✓ And, go through CBP processing for international travelers arriving into the U.S.

Traveling on partner airlines Aeromexico, Air France–KLM or Virgin Atlantic Airways out of Concourse F? Those customers are eligible to use this technology too – another benefit of Delta's unmatched global network of partnerships.

"Launching the first biometric terminal in the U.S. at the world's busiest airport means we're bringing the future of flying to customers traveling around the globe," said Gil West, Delta's COO. "Customers have an expectation that experiences along their journey are easy and happen seamlessly – that's what we're aiming for by launching this technology across airport touch points."

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Delta employees' input has been key to move facial recognition from testing to this full–scale launch – they've provided invaluable feedback on everything from the best camera angle for a successful scan to an added device enhancement that better facilitates face—to—face interactions with customers. Based on initial testing, the facial recognition option not only saves up to nine minutes per flight, but provides employees an opportunity to have more meaningful interactions with customers throughout the journey.

"This is the latest example of Delta's investment in, and partnership with, the world's busiest and most efficient airport. We are looking forward to bringing the future of travel to life with Delta, CBP and TSA," said Balram Bheodari, interim General Manager, Hartsfield–Jackson Atlanta International Airport.

How it Works:

Customers flying direct to an international destination from Atlanta's International Terminal wanting to use this option simply

- ✓ Enter their passport information when prompted during online check—
 in
 - Forgot to enter passport information in advance? Don't worry this option will be available at the terminal after an initial passport scan and verification.
- ✓ Click "Look" on the screen at the kiosk in the lobby, or approach the camera at the counter in the lobby, the TSA checkpoint or when boarding at the gate.
- ✓ Breeze through once the green check mark flashes on the screen.
 - Travellers will need to have their passports available and should always bring their passports when they travel internationally for use at other touch points during their trip.

And, if customers do not want to participate, they just proceed normally, as they've always done, through the airport.

"Delta and CBP have developed a strong partnership over the years, and share a common vision for enhancing security and the traveler experience," said CBP Commissioner Kevin McAleenan. "Together with innovative partners like Delta, TSA and ATL, we are using technology to create a secure, efficient and simplified travel experience."

Also at ATL's International Terminal, customers can take advantage of industry leading Computed Tomography (CT) scanners at two automated screening lanes, which are being installed in partnership with the TSA and the airport. This means travellers won't have to take out electronics

from their bags at the TSA checkpoint, further enabling a smooth travel experience.

"The expansion of biometrics and facial recognition throughout the airport environment represents the next generation of security identification technology," said David Pekoske, TSA Administrator. "TSA is committed to working with great partners like Delta, ATL and CBP on developing and deploying new capabilities like these."

The expansion of the facial recognition option with Delta Biometrics is a natural next step following CBP and Delta's optional facial recognition boarding tests at ATL, Detroit Metropolitan Airport and John F. Kennedy International Airport over the past several years. In addition, Delta recently tested a self–service biometric bag drop at Minneapolis–Saint Paul International Airport for international customers. Delta has also tested biometric boarding at Ronald Reagan Washington National Airport, and has launched optional biometric check—in for all domestic Delta Sky Clubs, facilitated by Delta Biometrics Powered by CLEAR.

Over the past several years, Delta has led the industry on a number of customer solutions like RFID baggage handling, automatic check—in and bag tracking via the Fly Delta mobile app, a cross—industry alliance that will empower customers with seamless in—cabin connectivity experience, more efficient and high—tech automated screening lanes, and a ground breaking app that helps Delta pilots avoid turbulence for a more comfortable flight. Delta was named one of Fast Company's Most Innovative Companies Worldwide in 2018, earning the No. 6 spot among travel companies.

2.12 FURTHER READING:

- 1. Guidelines on Advance Passenger Information (Api): Iata
- 2. Encyclopaedia of Flight Reservation and Airline Ticketing by Vivek Tiwari
- 3. Air Transport & Travel Industry: Principles, Functional and Business Requirements; PNRGOV



Reservation, Airline & Baggage Box/Data Elements

UNIT STRUCTURE

- 3.0 Learning Objectives
- 3.1 Introduction
- 3.2 Reservation
- 3.3 Airlines
- 3.4 Baggage Allowance
- 3.5 Let Us Sum Up
- 3.6 Answers for Check Your Progress
- 3.7 Glossary
- 3.8 Assignment
- 3.9 Activities
- 3.10 Case Study
- 3.11 Further Reading

3.0 LEARNING OBJECTIVES:

 To make learner understand about the reservation process and baggage.

3.1 INTRODUCTION:

Travellers from all over the world travel frequently for vacations, business trips, corporate meetings, discovering new locations, VFR, and a variety of other reasons. Whatever the reason, the procedure for booking an online ticket remains nearly the same, owing to the absence of a middleman and the absence of additional expenses for air trip reservations. By comparing prices with different websites, the finest discounts and bargains can be found. Air travel, like flight reservations, is growing at an incredible rate.

For a variety of reasons, travellers from all over the world travel frequently. Whatever the reason, the steps for purchasing an online ticket are almost same. Date and time of travel, airport preference, personal information, passport information, and payment method information are all common reservation requirements. Passengers can compare these pricing levels to the information on their fare sheet. Passengers have the opportunity to inquire with the airline if the charges are greater. Airline direct ticket sales include airline websites and mobile applications, IVR booking, and airline city or airport ticket offices.

Luggage allowances frequently include both Cabin baggage and checked baggage, which are bags hauled in an airplane's cargo hold. On

board airlines, athletic, musical, and hunting equipment are subject to special regulations and taxes. To guarantee safe shipment, some commodities require special packaging. Passengers travelling with small children may bring a diaper bag or child safety seat as a carry—on or personal item. Passengers with special needs can use medical and mobility gadgets.

3.2 RESERVATION:

After searching and comparing various sites when a passenger make his mind to book ticket. Usual reservation required information like Date and Time of Travel, Choice of Airport, Personal Information, passport information and Information about method of Payment and so on. Some additional data may require and that depends on platform to platform used while searching. Once the flight is been booked confirmation code is received. This allows traveller to access reservation through the airline's website that eventually enables to add information. Once all the fields are filled with correct information it is processed for reservation.

Once booking gets conformed reservation code and trip id is generated. On an itinerary, a Reservation Code is a six-character alphabetical code. This code may be requested by airlines during check-in at the airport counter or kiosk. A 12-digit number code can be found on an itinerary as a Trip ID.

Date and Time of Travel: The dates of travel and chosen flight times are the first pieces of information needed to purchase a trip so as reservation. Travellers have the option of selecting a specific day and time for their trip or having some flexibility. Flexibility allows for a more thorough search for lower fares or better flight timings. Travellers sometimes adhere to a strict arrival and departure schedule. In that case larger and smaller cities play major role.

Airport Choice: Larger cities may offer a variety of airport alternatives with a higher frequency of flights. Best deals and timing possibilities can be obtained with flexibility. Some airlines have hubs at specific airports, which might aid in the planning of the ideal route. Whereas, in case of small cities it can be limited or passenger can choose nearby larger airport.

Personal Information: Passenger name, age, billing address, and phone no. and so on other required personal information has to be mentioned correctly. When booking a flight, enter each traveller's personal information, including complete name, date of birth, email address, and phone number. It is necessary to check the applicability of fare rules and bases, for example, travellers under the age of 18 or who are carrying a new-born or child in their lap may require accompanying or other special services. The name of each passenger as it appears on their official government-issued ID should be mentioned to avoid unnecessary kiosks or any unpleasant situations throughout the travel. It also assists with cancellation or other claims. Add a passenger's Known Traveller ID

number, which is given to those who have Global Entry or TSA precheck, to the booking, along with any other information.

Flying Abroad: Each person need numerous pieces of passport information while going outside of their home nation. When booking an overseas flight, they have to enter passport number, country of issue, and expiration date, as well as other vital information. This information can be added later or entered in during the online check—in process. The passport's validity is also a significant consideration. It is recommended to have at least six months of validity before it expires to avoid a hurry situation. For stamps and visas, most destinations require at least one full blank page.

Payment Information: Payment is a necessary step in the booking procedure. It is possible to pay using a credit or debit card. This requires the cardholder's name and billing information, as well as the card number and expiration date. Travel insurance can be opt to provide aid in case of plan changes or passenger is delayed due to bad weather.

3.3 AIRLINES:

Travel agents get reservation data from the major GDSs. A booking is a record or reservation of a passenger's desire to fly at a later date. Before a ticket is sold, it is booked. It can be postponed, altered, or cancelled. A ticket is issued using an assigned fare when a reservation is purchased, and tickets are issued by both travel agents and airlines. Clearinghouses transfer cash from travel companies to airlines that transport passengers, as well as handling refunds and exchanges. Once passengers board their flight, airlines collect flight coupons.

According to a circular released in 2010, airlines must also post tariff sheets on their websites, displaying fare in many tiers or buckets referred to as Reservation Booking Designators (RBDs). Passengers can compare these pricing levels to what is being given to them on the tariff sheet. If the charges are higher than these, passengers have the right to inquire with the airline.

Airlines' websites and mobile applications, airline telephone reservation centres (IVR booking), and airline city or airport ticket offices are all examples of airline direct ticket sales. "Direct link" relationships between airlines and online sites.

Airline consolidators, host agencies, and franchises, in addition to IATA and ARC, have a role in reservations and bookings. Airlines have a global network of agents and booking sites that sell their tickets, but they must ensure that this happens in a controlled manner and that they are paid. As a result, huge accrediting organisations were formed to function as payment mediators between airlines and agents, with the airlines receiving a payment guarantee from all agents selling their tickets in exchange for the agents' ability to sell tickets for those airlines. This

Reservation, Airline & Baggage Box/Data Elements

means that in order to issue tickets on behalf of an airline, merchants must be accredited.

The ticket displays Name of airline who issued the ticket. Whether it is a multi-leg flight or non-stop flight. In multi-leg flight number changes whereas for non-stop or no-leg flights the number remain unchanged. The commercial as well as private jet has different fare. No-frills and low cost carrier enable for paying less fare. Customer need to select if they want more fare deal.

Apex fare, Discount fare, Joint fare, Bereavement fare or Openjaw or other also have different pricing. It is mentioned on ticket which is filled during booking process. The gateway of reservation must have filed to enter the detail so that it can be opted by the passenger or agent. Airlines also provide discount and other benefits for their loyal customers, therefore one field for enter the detail of frequent flyer or related is there on gateway.

3.4 BAGGAGE ALLOWANCE:

For each passenger, each airline has a limit on the number of bags and the weight of each bag. The allowance may differ depending on the passenger's destination and the class of service used. On ticket and passenger receipt, baggage allowance is printed. When purchasing baggage ahead of time on most airlines, the cost is usually lower. If more baggage is required to carry, passenger need to prepay extra bags online and paying airport excess baggage fees can be avoided. Since each aircraft has limitation in terms of weight also, therefore they need to plan for all the baggage if the weight exceeds they need to send these on other flight also. Prier information provide ease in planning for airlines.

There are special limits on the transportation of specific objects, equipment, or devices to many aircraft destinations. In some cases, bringing these things into a country may result in sanctions being imposed. For more information, we recommend that passengers check with the country's consular authorities to see if any restrictions apply before departing.

Luggage allowances often comprise both carry—on and checked baggage, which are bags that are transported in the cargo hold of an aircraft. Special regulations and fees apply to sporting, musical, and hunting equipment aboard airlines. Some commodities require special packaging to ensure safe transportation. This data is usually available on the carrier's website.

As a carry-on or personal item, passengers travelling with small children may bring a diaper bag or child safety seat. Medical and mobility devices are available for passengers with specific needs. Musical instruments are also carry-on items that must fit in the overhead bin or beneath the seat in front of the passenger carrying them. When travelling with a pet,

the kennel or container counts as the passenger's carry-on, but some airlines charge a pet carry-on fee.

Air safety regulators released advisory to reduce potential risk due to overloads. The danger of aircraft overloading cannot be overstated. There have been cases in the recent past where an aeroplane took off with a take-off weight that exceeded the Regulated Take-off Weight (RTOW). Although checked baggage is weighed and accounted for, hand baggage is not weighed and its size is rarely controlled. By keeping track of the size and weight of carry-on luggage, the possibility of the plane being overloaded is reduced.

Overweight and oversized hand luggage are two factors that contribute to overloading since they are more likely to be carried with excess weight due to their size. In the event of an emergency, excessive hand baggage may pose a safety risk by hindering passenger evacuation since it cannot fit inside the bins or beneath the passenger seats. As a result, the amount of hand luggage should be limited by the dimensions of the overhead bins or the available space beneath the seats in the aeroplane. The passenger ticket jacket's maximum size limit of 115 centimetre must be adhered to by the operator. A basket, measured to the size, should be provided/used at airline check-in counters to identify oversize baggage brought into the passengers' cabin as hand luggage.

Ground staff, cabin crew, and other associated operator's personnel shall ensure that the aforementioned rules on allowing transport of hand baggage of the specified size into the cabin are rigorously followed in order to ensure safety. The operator's safety employees should monitor the situation on a regular basis for compliance with the guidelines.

Check Your Progress:

1	TT ID	1 1 .	•	1		
	IV/R	booking	10	done	Oη	•
1.	1 1 1	BIHADOU	13	uone	OH	

- - b. Intranet
- c. Telephone d. None of these
- VFR allows a passenger to visit another country with intention to 2. Visiting:
 - a. Family

a. Internet

- b. Friends
- c. Relatives
- d. All of them

- 3.
- A Reservation Code is a _____ alphabetical code
 - a. Seven-character
- b. Six-character
- c. Eleven-character
- d. Twelve-character
- 4. Which of the following generally allows passengers to book ticket with spending less fare ?
 - a. Full service carriers
- b. Passenger aircraft

c. LCC

- d. None of these
- A Trip ID is_____ number code can be found on an itinerary. 5.
 - a. 11–digit
- b. 12-digit
- c. 21-digit
- d. 22-digit

Reservation, Airline &

Baggage Box/Data

Elements

- 6. Out of which of the following factor not effecting the baggage allowance for passengers ?
 - a. Destination

- b. Service Class
- c. Airline typ e
- d. Profile of passenger
- 7. In which of the following flight type Flight number is change during a trip
 - a. Multi-leg
- b. No-leg frills c. Both
- d. None of these
- 8. Luggage allowances comprise both carry-on and.
 - a. Checked baggage
- b. Hand luggage

c. Both

d. None of these

3.5 LET US SUM UP:

Vacations, business trips, corporate meetings, discovering new places, VFR, and a variety of other reasons bring people from all over the world to travel. Due to the lack of a middleman and the absence of additional costs for air trip reservations, the procedure for booking an internet ticket stays practically the same. The best discounts and bargains can be found by comparing pricing across multiple websites. Air travel, like flight bookings, is exploding.

Carry—on and checked baggage allowances are commonly included in luggage allowances. Special laws and fees apply to on—board flights, sporting, musical, and hunting equipment. Some commodities necessitate special packaging to ensure safe transport.

3.6 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

- 1. c
- **2.** d
- **3.** b
- **4.** c

- **5.** b
- **6.** d
- **7.** a
- **8.** c

3.7 GLOSSARY:

Baggage: The luggage that must be provided to the airline or hand luggage that must be taken on board and contains the personal possessions of passengers.

Cabin Baggage (Hand Luggage): Personal possessions on board

Checked Baggage: Luggage given to an airline and held in an inaccessible place for the passenger throughout the trip.

Carousel: a conveyor system at an airport from which arriving passengers collect their luggage.

MTOW (Maximum Take-Off Weight): The maximum weight in which an aircraft can ever take-off, under any circumstances.

RTOW (Regulated Take-Off Weight): The maximum weight in which an aircraft can take off from a particular runway under specific conditions.

VFR (Visiting Friends and Relatives): The movement of a person from their usual residence to the residence of a family member or acquaintance.

Reservation, Airline & Baggage Box/Data Elements

3.8 ASSIGNMENT:

1. What is the role of DGCA in regulating baggage allowance?

3.9 ACTIVITIES:

1. Read out some of the incidents when airlines have been issued a notice by authorities.

3.10 CASE STUDY:

Airline Reservation Systems

Reservation systems are a set of applications that support the direct contact between an airline and their passengers. The reservation systems of Jet Blue and West Jet were used for reservation and interfacing with various systems belonging to other partner airlines as well supported travel agencies and a number of distribution channels in making reservations for their airlines.

The reservation systems contain airline schedules, fare rates and tariffs as well as passenger and ticket reservation. The reservation system allows customers who use Jet Blue and WestJet to make reservations via the use of internet and mobile phone applications. The reservation system run by the two airlines ensured effective customer service and in turn marketed them and they grew to become large airlines with fleets of airlines in the region of hundreds and over 300 flights in a single day. By relying on their efficient reservation systems, the two airlines were able to notice and see the importance of system upgrade as the systems for more processing power as the systems they relied upon were from the initial stages when the airlines were relatively smaller and served fewer customers. The initial systems also had limitations in linking prices and seat inventories to different airlines that worked with both Jet Blue and WestJet. Upgrading the system would allow them incorporate the feature of linking ability with the other airlines that cooperated with either airline.

Before flipping from one system to another, rigorous planning is entailed and this is in attempt to avoid any shortcomings that may arise during the changing as well as come up with alternatives and solutions to some of the problems entailed that cannot be avoided. WestJet's website crashed down severally as it was jammed by customers who wanted answers over the below par services they were being accorded during the system switch. Even though the upgrading and moving to Sabre servers had been planned for several months, WestJet had not anticipated the secondary shortcomings that would arise such as the jamming and crashing of their website.

JetBlue had a smoother transition but owing to lessons learnt from the shortcomings during the WestJet's transition. The risk factors both airlines entailed in upgrading their reservation systems did not only end at the customer dissatisfaction but moved to the risk of information and data loss. Furthermore, the airlines were transferring their systems to a larger IT specialist system that served several airlines. In turn, competition risk factors definitely arise as competitors can readily borrow a leaf from your successful plans and improve on them to bit you in the market.

The large amount of files that WestJet had to transfer to the Sabre servers proved a challenge to the airline. First, the airline did not anticipate the time it would take for the entire transfer as well it did not bring down the passenger loads such as bookings so as to make the transfer easier and more efficient. Out of this poor planning, secondary risks followed such as the large number of provoked customers who took to the airline website in magnitudes to air their grievances as well as jamming the airlines call centers.

Similarly JetBlue had a number of pitfalls such as prolonged call waiting and failure of airport kiosks and ticket printers to come online as supposed. Both these challenges faced by WestJet and BlueJet had managerial faults as the management did not widely consult and get down to draft proper alternatives since all these pitfalls were avoidable. Apart from the lack of proper timing as an organizational risk, the airlines as well faced technical hitches as seen with BlueJet, for instance, the failure of the airport kiosks from reading could have been a technicality where the data about the kiosk may have been corrupted or ignored during file transfer to Sabre servers. The IT technologies of the airlines as well did not proof strong enough to handle hitches and large influxes; this resulted to, for instance, the crashing of WestJet's website.

Reservations is what coordinates a good customer relation with the airlines, therefore the airlines should have looked deeper at the expense altering the reservation systems would have on their patrons. First and foremost, the airlines ought to have brought to the attention of their customers their intentions to upgrade the systems early enough and not wait until the material day to inform the customers; a mistake that WestJet did. Informing customers early enough would have served the airline the trouble of making reservation even when they were about to transfer their files, this led to the customers being letdown as they had to wait longer alongside experiencing booking difficulties and several of services crushed and inaccessible thus hurting the customer relation.

Additionally to tackle the risks that were faced in the projects by the airlines, having in house skills and know how would have been beneficial. With this, the airlines would have been in a position to foresee some of the challenges like the need to hire more supporting stuff as well they would not need to put their agents through rigorous complex steps to process the data that was to be transferred to Sabre.

3.11 FURTHER READING:

- Reservation, Airline & Baggage Box/Data Elements
- 1. Airline Operations and Scheduling By Massoud Bazargan
- 2. Airline Operations and Management: A Management Textbook By Gerald N. Cook, Bruce Billig
- 3. Airline and Airport Operations By Edissa Uwayo
- 4. Airline Operations: A Practical Guide By Peter J. Bruce, Yi Gao, John M. C. King

Tax/Fee/Charges, Mode of Payment & Total Box/Data Elements

UNIT STRUCTURE

- 4.1 Introduction
- 4.2 Government Taxes
- 4.3 Airports Authority and AAI Taxes
- 4.4 Taxes Imposed by Airlines
- 4.5 Mode of Payment
 - 4.5.1 Credit / Debit Cards
 - 4.5.2 Wallets
 - 4.5.3 UPI (Unified Payments Interface)
 - 4.5.4 Netbanking
- 4.6 Let Us Sum Up
- 4.7 Answers for Check Your Progress
- 4.8 Glossary
- 4.9 Assignment
- 4.10 Activities
- 4.11 Case Study
- 4.12 Further Reading

4.0 LEARNING OBJECTIVES:

• To provide the learner with information about different taxes and mode of payments for E-ticketing.

4.1 INTRODUCTION:

The amount paid for commercial air transportation is subject to air ticket taxes. Some taxes are enforced by governments (known as 'government imposed duties'), while others are imposed by airports (known as 'departure tax'), and still others are levied by airlines (known as 'carrier imposed surcharges'). Typically, an airline adds necessary ticket taxes to a ticket's base fee, resulting in the total ticket price.

The amount of airline tax paid by a traveller is determined by a number of criteria, including the country of departure, the destination, as well as age (small children are frequently exempt) and the class of travel.

Government authorities apply taxes, fees, and levies on air transportation. Taxes and fees are subject to vary at the government's discretion and may be modified for inflation and/or currency fluctuations. Passenger may also be asked to pay any unpaid taxes, fees, or levies.

The passenger is responsible for any applicable taxes, fees, and charges imposed by the government or other body, or by the airport operator. As a result, the fare displayed on the website may not include all relevant taxes, fees, and levies. Most taxes, fees, and levies are generally stated separately on the Ticket at the time of purchase. Taxes, fees, and levies imposed on air travel are subject to change and may be charged beyond the date of issuance of the ticket. If a tax, fee, or charge shown on the Ticket increases, the traveller is responsible for paying it. Similarly, if a new tax, fee, or charge is levied after the issuance of the ticket, the traveller will be required to pay it.

Airlines collect extra taxes, fees, and charges in addition to rates for both domestic and international travellers. Passenger Service Fees are one of the supplementary charges made by airports to support security and facilitation at all AAI and private airports in cities such as New Delhi, Mumbai, Bengaluru, Kochi, and Hyderabad. Other fees, such as User Development Fees, Development Fees, Fuel Surcharge, and Carrier Imposed Miscellaneous Fees, are also collected during the payment process.

Domestic travellers are subject to additional fees such as Passenger Ticket Tax, Flight Segment Tax, Cargo Waybill Tax, Commercial Jet Fuel Tax, LUST Fuel Tax, Non-commercial Jet Fuel Tax, Non-commercial Avgas Tax, and so on, which are added to the overall price/ cost of the journey.

International journeys, in addition to these taxes, necessitate the collection of fees and taxes applicable at international locations. Customs User Fees, Immigration User Fees, Frequent Flyer Taxes, International Departure Taxes, and International Arrival Taxes are just a few examples.

If any tax, fee, or charge paid to airlines at the time of ticket issuance is repealed or reduced to the point where it no longer applies to the ticket, or a lower amount is required, it will be refunded and the passenger can request it.

Due to different components included in the tariff, such as the UDF, aviation security fee, and passenger service fee, airline tickets are flying high. The airline component, airport operator fees, fees to the Airports Authority of India (AAI), and charges paid to the government make up the structure of the airfare. The airline component includes the basic fare, airline fuel charge, common user terminal equipment fee (if applicable), and convenience fee, which is charged on debit or credit card bookings made online.

The airport operator collects the airport development fee and the user development fee, while the AAI collects the passenger services fee. Airfares also include a government–imposed service tax.

It should also be noted that these taxes are subject to a particular country and it may or may not apply in general. In this chapter the author has tried to compile various charges, taxes and fee for awareness and understanding of students. The rate or amount are also subject to change

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so it should be used as reference only. Official websites of concern taxes, charges and fee collecting and imposing authority must be checked on real time basis since it is dynamic in nature.

4.2 GOVERNMENT TAXES:

In addition to traditional income and payroll taxes, airlines and their customers (passengers and shippers) pay numerous special taxes and fees to various authorities both at home and abroad. National security, environmental protection, agriculture inspection, infrastructure enhancement, airport and airway operations and maintenance, and agency financing are among the stated purposes of these taxes and fees. Since the advent of air travel, the number, amount, and scope of these taxes have increased. The amount a passenger pays in taxes and fees on a ticket varies depending on his or her itinerary, such as how many times he or she boards a new flight and at which airports. Although some of the fees levied by governments are used to cover the costs of keeping travellers safe or using government—run services. Some of them, on the other hand, are a revenue—generating device to fill government coffers.

Goods and Services Tax (GST): In India since 2017 GST is charged at the rate of 5% for Economy class and 12% in Premium Economy, Business or First Class travel. Similar like GST, Canadian government also imposed GST/HST, in which All participating provinces have a 15% HST rate, except Ontario, which has a 13 percent charge.). Other country also have their own taxes on similar manner.

VAT: The states collect VAT (Value Added Tax) on the sale of physical goods and commodities in India's tax system. VAT is a multipoint charge on each entity in the supply chain with the ability to deduct input tax, i.e. the tax paid by a trader on the purchase of goods and the tax paid by a manufacturer on the purchase of raw materials. Domestic VAT rates on airline turbine fuel range from 5–29 percent, while some states, such as Punjab, Kerala, and Nagaland, apply additional taxes in addition to VAT.

LUST Fuel Tax: Imposed by US Government, The Leaking Underground Storage Tank (LUST) Trust Fund was established by Congress in 1986 with two objectives: to provide money for oversight and enforcement of corrective action taken by a responsible party, who is the owner or operator of the leaking UST, and to provide money for cleanups at UST sites where the owner or operator is unknown, unwilling, or unable to respond, or where emergency action is required. It is a one cent per gallon imposed on taxable fuels sold nationwide

Immigration Inspection User Fee (IUF): This Fee is imposed for arrival of passengers aboard commercial aircraft or commercial vessels in USA. Amendments to the Immigration and Nationality Act, 8 U.S.C. 1356, passed in 1986, permitted the INS to charge a fee for passenger inspections on commercial aircraft or vessels. In 1986, the price was fixed

at \$5.00 per person, then increased to \$6.00 per passenger in 1993, and now to \$7.00 per passenger.

Departure Tax: Some countries additionally charge passengers fees during their departure or arrival, or in some situations, both.

4.3 AIRPORTS AUTHORITY AND AAI TAXES:

The airport operator is responsible for collecting both the airport and user development fees. Whereas the passenger services fee is collected by the AAI.

Airport Tax: Passengers are charged an airport tax as they travel through the airport. It is employed in facility upkeep. Airport taxes are used to cover the costs of operating and maintaining the airport. Some airports don't charge these fees to connecting passengers who don't depart the airport or who have a connecting flight within a certain timeframe of their arrival. Airport taxes are classified as user fees by the Internal Revenue Service (IRS) because the money collected does not go to the government's coffers. The United States, the United Kingdom, Fiji, Australia, Germany, and Austria are among the countries with the highest airport taxes. Tax—related costs are lower at smaller airports.

User Development Fee (UDF): The user development fee, which is collected to fund the modernization of airports, is one of the most typical levies in the flight fare. The fee varies depending on the airport from which the user departs. For instance, UDF in Ahmedabad is INR 466 for international departure and INR 124 for domestic, whereas international departure in Jaipur is INR 1000. This Fee is imposed at Indian airports under Rule 89 of the 1937 Aircraft Rules as a way for the airport operator to increase revenue. The UDF is imposed to cover any revenue shortfalls, ensuring that the airport operator receives a reasonable return on investment.

CUTE Fee: Passengers may be charged CUTE fees by the Indian Airports Authority. Costs for using metal detectors, escalators, and other airport equipment are included in the 'Common User Terminal Equipment' (CUTE) fees. The CUTE fee is also known as the passenger handling fee. The fees range between Rs 50 and Rs 100 per passenger, depending on the airport.

Security Cost for Passengers: Passengers are also paid passenger security fees or aviation security fees for the personnel of the Central Industrial Security Force (CISF) stationed at airports. In USA the September 11th Security Fee, commonly known as the Passenger Fee is collected.

Passenger Service Fee: The AAI collects this money from passengers to cover the costs of passenger facilities and security at airports. Only a few airports charge travellers this cost. The passenger services fee ranges from Rs 83 to Rs 236 for individuals flying from Kochi, Delhi, and Bangalore. However it is also charged in other countries. The fee will depend on that particular country.

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4.4 TAXES IMPOSED BY AIRLINES:

The base fare, airline fuel charge, common user terminal equipment cost (if applicable), and convenience fee, which is levied on debit or credit card bookings made online, are all included in the airline component.

Service Tax : Service Tax is a type of indirect tax that is exclusively applied to services rendered. In layman's terms, offering services entails assisting in any task, undertaking any work on behalf of others, completing any professional project, or providing intangible benefits to others. Service has been described as any activity that is performed for a fee and is declared by a person for another. A Service Tax is levied on airlines. This tax is paid in India under the rules of the Finance Act of 1994. The provisions concerning the Service Tax took effect on July 1, 1994. As a result, it is included in the ticket price.

Airline Fuel Surcharge : Airlines sometimes impose a 'fuel surcharge' over and above the base rate to pass on rising fuel expenses to their consumers. From April 2021 onwards, several international airlines charge fuel surcharges on flight tickets.

Convenience Fee: A convenience fee is a ticketing/reservation cost paid on all tickets booked at any airport ticketing office or Customer Service Centre, as well as tickets purchased through an airline's website or mobile app using a debit or credit card. The fee depends on various factors like: Airlines, platform used, card used and so on.

No–Show Fee: It is a situation not fee. When someone does not go on their departure trip, any other connecting or return flights associated with the booking are automatically cancelled. If travel on these flights is still planned, new tickets for returning or connecting flights will be required.

Most airlines only levy a fee if the traveller appears to have a pattern of missing flights on purpose, a practise known as skiplagging, in which a passenger books a ticket with no intention of taking the secondary legs of a journey in order to get a cheaper rate. If no seats are available on alternative flights, the traveller may not be eligible for a refund or a rebooking. Many rates become non–changeable on the day of departure, according to the airline's Contract of Carriage.

4.5 MODE OF PAYMENT:

Payment is a vital stage in the ticket booking process. Passengers must pay the fare plus taxes and ancillaries for the use of a seat. After successful payment the passenger receives PNR number as well as itinerary via email. Debit cards, credit cards, UPI, wallets, and other payment methods are available. The popularity of rapid payment alternatives is becoming more worldwide as internet technology advances. Some cashless options, such as India's Unified Payments Interface (UPI), are growing more popular and are even required in some countries. Airlines also allows payment through cryptos like utrust, bitcoin, ethereum and so on. Other

method such as Single Euro Payments Area (SEPA), Bancontact (online payment method in Belgium) and cs10 mada (electronic payments in Saudi Arabia) can also be used.

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Payment gateways third-party services that not only handle transactions but also assure data security is used to conduct financial transactions between passengers and low-cost carriers. It can grow more complicated when full-service airlines, GDSs, and OTAs are involved. As a result, funds is passed via IATA's Billing and Settlement Plan (BSP) or its American equivalent, Airline Reporting Corporation (ARC.)

The payment method is saved in the PNR's Form of Payment field, as well as the air ticketing modifiers and ticketing modifiers associated with the stored fare. Within an Air Reservation, a stored fare Form of Payment can be added or modified.

The PNR may be associated with a form of payment within the Universal Record (UR), and with basic ticketing, this is the form of payment invoiced at the time of ticketing. After the first generate reservation, the mode of payment associated with a stored fare can be changed. It is also possible to specify on the stored fare that the method of payment will be saved in the stored fare when the reservation is created.

According to the IATA website the existing payment systems have a substantial influence on airlines' operating capital. In the coming years, these prices are expected to rise dramatically. IATA Pay, an alternate method for travellers to pay for flight tickets purchased online by directly debiting their bank account, is designed to address these concerns. It will increase payment speed and security while lowering payment expenses. It also enables airlines to offer direct payment for airline products and services online.

Some of the popular payment methods are discussed here in brief. These are few, however, while booking the payee need to check the available option on that country as well as airline. You can explore them for further queries.

4.5.1 Credit / Debit Cards:

Visa : A Visa card is a payment card that is branded by Visa and operates on the Visa network. Initially, the company only accepted credit cards, but it has now expanded to accept debit, prepaid, and gift cards as well. Despite the fact that Visa cards feature the Visa logo, they are not issued by the corporation. Instead, allied financial institutions issue them. It has a magnetic stripe, a microchip, and a 16–digit account number. Credit cards, debit cards, prepaid cards, and gift cards are all examples of Visa cards.

Master Card : In the worldwide payments business, Mastercard is the second-largest payments network, trailing only Visa. American Express and Discover are two more prominent payment networks. It offers Mastercard-branded network payment cards through a global partnership with member financial institutions.

The card facilitates payment transactions involving the Mastercard account holder and a merchant, as well as their respective financial institutions, using its proprietary worldwide payments network, which it refers to as its core network. Credit, debit, and prepaid cards are accepted for payment.

Amex: Amex card is an electronic payment card issued by American Express, a publicly traded financial services business (AXP). Prepaid, charge, and credit cards are issued and processed by the company. Individuals, small businesses, and corporate customers can use American Express cards around the globe. This is one of the few organisations that both provides cards and operates a payment network. Although Visa and Mastercard operate processing networks, they do not issue cards.

Diners Club: Discover Financial Services owns Diners Club International, a banking and payment services company. The Diners Club Card was the first multipurpose charge card in the world, and it could be used for both dining and travel expenses.

RuPay: RuPay is a product of the National Payments Corporation of India (NPCI), which oversees retail payments in the country. The Reserve Bank of India (RBI) and the Indian Banks' Association (IBA) were given the authority to build a secure electronic payment and settlement system in India under the Payment and Settlement Systems Act, 2007.

Maestro: Maestro is a global debit card service provider that was founded in 1992 as part of the MasterCard group of companies. Maestro cards can be obtained through partner banks and linked to the cardholder's current account. The user of a debit card can present it at any point of sale (POS), where it will be swiped on a CHIP-AND-PIN system by the store owner, shop assistant, cashier, or someone else. The payment is approved by the bank to ensure that the customer has sufficient funds in his or her account to pay the charge.

4.5.2 Wallets:

Paytm: Paytm is an Indian-based global financial technology company that specialises in digital payment systems, e-commerce, and financial services. This wallet is a safe and secure digital/mobile wallet that can be used for a range of financial transactions and has been approved by the RBI. It is a digital cash system that accepts deposits via UPI, online banking, and credit/debit cards. Money can also be transferred from a Paytm wallet to a bank account or another Paytm wallet.

iCASHCARD: ICash is India's most popular semi-closed loop prepaid wallet for online payments and domestic money transfers. Following a licence obtained by the Reserve Bank of India, GI Technology Private Limited (GIT) issues ICash (RBI). On the internet, ICash can be used for a variety of applications.

MobiKwik: MobiKwik is an Indian payment service provider that offers a mobile phone–based payment system and a digital wallet. It was

created in 2009 by Bipin Preet Singh and Upasana Taku. Customers deposit funds into an online wallet that can be used to make purchases.

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Oxigen Wallet: Oxigen Wallet, powered by Oxigen Services Pvt. Ltd., is India's first non-bank wallet, certified by the Reserve Bank of India that allows clients to send and receive money using popular social media sites. Oxigen was one of India's first payment gateway services. It was founded in 2004 by Pramod Saxena and processes real-time micropayments and remittances. The Oxigen Mobile Wallet is a digital wallet through which users can access all of Oxigen's services. It's an app-based service that works on all major smartphone platforms, including Android, Windows, and iOS. According to RBI rules, Oxigen wallet is a semi-closed wallet.

Zipcash: In India, ZIpCash is a digital currency that powers an online wallet service. The RBI has granted ZipCash permission to provide semi-closed payment instruments to clients. It can be used to shop online, pay bills, purchase prepaid mobile talktime/ DTH recharges, purchase mVouchers for other retailers, and take advantage of a variety of interesting bargains and offers. ZipCash is a cutting-edge micropayments startup that enables people to transact safely, securely, and conveniently online and offline without the use of a credit or debit card. ZipCash was the first company in India to introduce the prepaid mobile payment model, with the goal of empowering and enabling every customer with a basic mobile phone to participate in the digital revolution.

4.5.3 UPI (Unified Payments Interface):

The Unified Payments Interface is a real-time instant payment system. It's a system that combines many banking services, smooth fund routing, and merchant payments into a single mobile application (of any partner bank). It also handles "Peer to Peer" collection requests, which can be scheduled and paid according to need and convenience. With the foregoing in mind, the NPCI launched a pilot programme with 21 member banks. Dr. Raghuram G Rajan, Governor of the Reserve Bank of India, launched the pilot on April 11, 2016 in Mumbai. Since August 25, 2016, banks have been uploading their UPI-enabled apps to the Google Play store.

4.5.4 Netbanking:

Net Banking is an electronic payment mechanism that is also known as online banking or Internet Banking. It enables you to make a variety of transactions via the internet from a convenient location using a PC or laptop and an internet connection. In other terms, it is a bank–provided electronic system that allows consumers to access financial and non–financial banking services in minutes. The net banking system eliminates the need to go to the bank physically. Customers can use net banking to access a number of financial services, including money transfers, the construction of FDs and RDs, transaction tracking, and so on.

Airfare Ticketing - II **Check Your Progress:** 1. The security fee paid on airport in USA is known as: a. Security fee b. Passenger Fee c. CUTE fee d. IUF 2. In India Who collects the passenger services fee b. MOCA c. CBIC d Air India a. AAI The fees levied by governments on air tickets, are: 3. a. Used to cover the costs of keeping travellers safe b. Used in government-run services c. Are a revenue-generating device to fill government coffers d. All of these A pattern of missing flights purposefully is known as: 4. a. Delaying b. Missing c. Cancellation d. Skiplagging _____ fee is levied on debit or credit card bookings made online. 5. a. CUTE b. Passenger fee c. UDF d. Convenience Fee The CUTE fee is also known as: 6. a. Passenger handling fee b. Passenger fee c. UDF d. Convenience Fee 7. Which of the following is collected to fund the modernization of airports? a. Passenger handling fee b. Airport taxes c. UDF d. Convenience Fee 8. _____ are used to cover the costs of operating and maintaining

6 LET US SUM UP :

a. Passenger handling fee

the airport.

c. UDF

4.6

Different components of airline ticket tariffs include UDF, aviation security fee, and passenger service cost, among others. The structure of the airfare is made up of the airline component, airport operator fees, and fees to the Airports Authority of India (AAI), and government levies. The base fare, airline fuel charge, common user terminal equipment cost (if applicable), and convenience fee, which is levied on debit or credit card bookings made online, are all included in the airline component. The airport operator is responsible for collecting the airport development and UDF, while the AAI is responsible for collecting the passenger services fee. A government–imposed service tax is also included in airfares

b. Airport taxes

d. Convenience Fee

Ticket Taxes are any transactional taxes or passenger facility charges imposed on passengers (or which air carriers or their agents are required to collect from passengers) by any authority in any country, including, without limitation, sales taxes, use taxes, stamp taxes, excise taxes, value added taxes, gross receipts taxes, departure taxes, surcharges, and travel taxes, as well as all related charges, fees, licences, or assessments (and

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4.7 ANSWERS FOR CHECK YOUR PROGRESS:

any interest or penalty thereon) imposed on passengers.

Check Your Progress:

1. b

2. a

3. d

4. d

5. d

6. a

7. c

8. b

4.8 GLOSSARY:

CUTE (Common Use Terminal Equipment): Airport common use terminal equipment (CUTE) is an IT solution that allows various airlines to control passenger and flight operations through their own servers using existing airport infrastructures (the same hardware and equipment at each airport).

Contract of Carriage : A contract in which a carrier, against the payment of freight, undertakes to transport goods from one place to another.

INS: United States Immigration and Naturalization Service

NPCI: National Payment Corporation of India.

September 11th Security Fee: was established to fund the Transportation Security Administration (TSA), but is currently used to reduce the government budget. The fee is \$11.2 round–trip and applies to all flights to and from a United States airport.

HST, or Harmonised Sales Tax: The HST, or harmonised sales tax, is a combination of federal and provincial taxes that applies to five provinces in Canada: Ontario, New Brunswick, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island.

4.9 ASSIGNMENT:

1. What is the role of digitalisation in air ticketing?

4.10 ACTIVITIES:

1. Find out the mode of payment used by travel agents of area for booking a ticket.

4.11 CASE STUDY:

GST on Air Tickets in 2022 [Tax Rates, HSN Codes] 22 NOV 2021, by OkCredit.

Launched in 2017, Good and Services Tax (GST) is a broad scope indirect tax that has revolutionised taxation of goods and services. It has profoundly impacted the economy of India.

Air tickets have been subject to the unified and indirect Good and Services Tax (GST) since its implementation in July 2017. GST is levied on them at the point of sale.

Let us discuss the GST on air tickets in 2022. You can also check out the various taxes and their rates for air tickets here.

Announcement of Changes

Recently, the GST Council announced the rates of Goods and Services Tax. These rates apply to the supply of various goods and services in India.

The distribution of these rates occurs across different rate bands, which are 5%, 12%, 18%, and 28%. Civil aviation is one of the booming sectors of the Indian economy that has grown exponentially. However, this growth took place under the VAT and Service Tax regime. Therefore, the implementation of GST affects the development of the civil aviation sector. There is certainly an GST on air tickets, but the main question is how ?

The Old Tax vs. New Tax

Service Tax as applicable on all air ticket bookings. The tax rate applicable under the VAT regime was 5.6% for an economy class ticket and 8.4% for a business class ticket.

The GST Council lowered the tax on domestic and international Economy class tickets to 5%, keeping in line with their aim to make air travel affordable for the masses. On the other hand, the domestic and international Premium class tickets are dearer under the GST regime with a 12% tax.

Type of Ticket	GST Rate			
Business Class	12%			
Economy Class	5%			

Pre- and Post-GST Price Comparison

There has been a boost in domestic air travel after GST. It is due to the reduction of air prices. Budget travellers, therefore, have plenty to rejoice in happiness as a substantial financial burden shall be lifted off them. They can now plan for the upcoming holidays without having to worry about the finances. The representation of the difference is in the tables below.

Below is the Economy Class Fare under the Service Tax:

Charge or Fare i	Amount in ₹
Charge of Base	2000
Charge of Airline Fuel	700
CUTE Charge Fee For Public Charge	50
Fee For Passenger Service	239
Fee For User Development	150
Airline Service Tax at the Rate of 5.6%	154
Surcharge That is Other Than These	12
Total Charge or Fare	3305

Below is the Economy Class Fare under the Regime of GST:

Charge or Fare	Amount in ₹
Charge of Base	2000
Charge of Airline Fuel	700
CUTE Charge Fee For Public Charge	50
Fee For Passenger Service	239
Fee For User Development	150
Airline Service Tax at the Rate of 5%	137.5
Surcharge That is Other Than These	12
Total Charge or Fare	3288.5

On the other hand, an increase has taken place for the business class fares leading to higher costs. However, there is not much to worry about as the rise is only marginal from 9% to 12%. Moreover, this slight increase has not deterred business travellers from traveling much.

Below is the Business Class Fare under the Service Tax:

Charge or Fare	Amount in ₹
Charge of Base	8000
Charge of Airline Fuel	2800
CUTE Charge Fee For Public Charge	200
Fee For Passenger Service	700
Fee For User Development	400
Airline Service Tax at the Rate of 8.4%	1016.4
Surcharge That is Other Than These	100
Total Charge or Fare	13216.4

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Below is the Business Class Fare under the Regime of GST:

Charge or Fare	Amount in ₹
Charge of Base	8000
Charge of Airline Fuel	2800
CUTE Charge Fee For Public Charge	200
Fee For Passenger Service	700
Fee For User Development	400
Airline Service Tax at the Rate of 12%	1320
Surcharge That is Other Than These	100
Total Charge or Fare	13520

If you are a frequent flier, you should be happy with the positive GST on air tickets. Moreover, this impact is highly beneficial for domestic carriers in India and would boost the Indian economy.

However, the airlines must pass on the benefits of the GST to customers. Only then will the GST for flight tickets indeed be a success. Most noteworthy, economic travellers contribute a significant portion of airlines revenue.

4.12 FURTHER READING:

- 1. Auth n Capture: Introduction to India's Digital Payments Ecosystem by Aditya Kulkarni
- 2. Digital Payments in India by Singh Jaspal
- 3. Fintech Future: The Digital Dna Of Finance by Sanjay Phadke
- 4. Fees and Charges Indigo: https://www.goindigo.in/information/fees—and—charges.html

BLOCK SUMMARY

Tickets hold critical information that aids in many operational events as well as border control. Before purchasing a ticket, a traveller may conduct research on a variety of topics, such as price or destinations that they wish to include in their itinerary. Through general talk, a travel agent should be able to determine the requirements as well as expectations.

The fare does not only comprise the cost of the aeroplane seat, but also some taxes and fees paid to various authorities and service providers. Air ticket taxes apply to the sum paid for commercial air transportation. Some taxes are imposed by governments, while others are levied by airports and airlines.

The payment stage of the ticket reservation procedure is critical. For the use of a seat, the passenger must pay the fare plus taxes and fees. Passengers receive their PNR number and itinerary through email after making a successful payment. There are a variety of payment methods accessible, including debit cards, credit cards, UPI, wallets, and others. As internet technology progresses, the popularity of quick payment options is growing around the world. Some cashless methods, such as India's Unified Payments Interface (UPI), are becoming increasingly popular, and in some countries, are even compulsory.

Luggage limits frequently include both carry—on and checked baggage, which are bags that are transported in the cargo hold of an aeroplane, and the allowance varies depending on a variety of factors such as the type of traveller, the type of flight, and so on. Modern airports keep travellers informed in order to improve the passenger experience, passenger flow, and, as a result, airport operations efficiency. When their surroundings are new and time is of the essence, people rely on display systems to guide them to their desired destination.

BLOCK ASSIGNMENT

- 1. How the GST imposed to Airline, helping in development of economy.
- 2. How Skiplagging can affect the airline revenue.
- 3. What reason could be people try to mislead the airline during ticket booking online ?
- 4. What taxes are imposed by government for airlines?
- 5. How UPI is impacting current trends in aviation industry.
- 6. What are the points a passenger consider while taking reservation for a flight.

riare Ticketing – II	**	Enrolment No). : <u> </u>					
	1.	How many ho	urs did yo	u need for	studying	g the uni	its ?	
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		lustration used Diagram, tables etc)						
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AIRFARE & TICKETING PART-II (ADVANCED) (PRACTICAL + THEORY)



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ROLE OF SELF INSTRUCTIONAL MATERIAL IN DISTANCE LEARNING

The need to plan effective instruction is imperative for a successful distance teaching repertoire. This is due to the fact that the instructional designer, the tutor, the author (s) and the student are often separated by distance and may never meet in person. This is an increasingly common scenario in distance education instruction. As much as possible, teaching by distance should stimulate the student's intellectual involvement and contain all the necessary learning instructional activities that are capable of guiding the student through the course objectives. Therefore, the course / self-instructional material are completely equipped with everything that the syllabus prescribes.

To ensure effective instruction, a number of instructional design ideas are used and these help students to acquire knowledge, intellectual skills, motor skills and necessary attitudinal changes. In this respect, students' assessment and course evaluation are incorporated in the text.

The nature of instructional activities used in distance education self- instructional materials depends on the domain of learning that they reinforce in the text, that is, the cognitive, psychomotor and affective. These are further interpreted in the acquisition of knowledge, intellectual skills and motor skills. Students may be encouraged to gain, apply and communicate (orally or in writing) the knowledge acquired. Intellectual- skills objectives may be met by designing instructions that make use of students' prior knowledge and experiences in the discourse as the foundation on which newly acquired knowledge is built.

The provision of exercises in the form of assignments, projects and tutorial feedback is necessary. Instructional activities that teach motor skills need to be graphically demonstrated and the correct practices provided during tutorials. Instructional activities for inculcating change in attitude and behavior should create interest and demonstrate need and benefits gained by adopting the required change. Information on the adoption and procedures for practice of new attitudes may then be introduced.

Teaching and learning at a distance eliminates interactive communication cues, such as pauses, intonation and gestures, associated with the face-to-face method of teaching. This is particularly so with the exclusive use of print media. Instructional activities built into the instructional repertoire provide this missing interaction between the student and the teacher. Therefore, the use of instructional activities to affect better distance teaching is not optional, but mandatory.

Our team of successful writers and authors has tried to reduce this.

Divide and to bring this Self Instructional Material as the best teaching and communication tool. Instructional activities are varied in order to assess the different facets of the domains of learning.

Distance education teaching repertoire involves extensive use of self- instructional materials, be they print or otherwise. These materials are designed to achieve certain pre-determined learning outcomes, namely goals and objectives that are contained in an instructional plan. Since the teaching process is affected over a distance, there is need to ensure that students actively participate in their learning by performing specific tasks that help them to understand the relevant concepts. Therefore, a set of exercises is built into the teaching repertoire in order to link what students and tutors do in the framework of the course outline. These could be in the form of students' assignments, a research project or a science practical exercise. Examples of instructional activities in distance education are too numerous to list. Instructional activities, when used in this context, help to motivate students, guide and measure students' performance (continuous assessment)

PREFACE

We have put in lots of hard work to make this book as userfriendly as possible, but we have not sacrificed quality. Experts were involved in preparing the materials. However, concepts are explained in easy language for you. We have included many tables and examples for easy understanding.

We sincerely hope this book will help you in every way you expect. All the best for your studies from our team!

AIRFARE TICKETING - II

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BLOCK 3: FARE CALCULATION ELEMENTS IN ELECTRONIC TICKETS

Unit 1 Fare Calculation Area/Data Elements

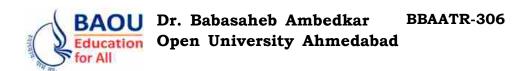
Introduction, Data Elements, Market (City Pair), Fare Class, Effective Date, Rule Number, Fare Amount, Currency Code, Discontinue Date, One-Way/Round-Trip Indicator, MPM or Routing Number, Footnote, Fare Calculation Factors, Available Seat Miles, Load Factor, Breakeven Load Factor, Cost Structure, Components of Air Fare, Airline Component, Passenger Services Fee (PSF), Airport Operator, Government, Optional Services on Chargeable Basis

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Unit 3 Special Fares and Airline Ticketing

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<u> Airfare Ticketing - II</u>

BLOCK 3: FARE CALCULATION ELEMENTS IN ELECTRONIC TICKETS

UNIT 1: FARE CALCULATION AREA/DATA ELEMENTS

UNIT 2: FARE TYPE IDENTIFICATION IN AIRLINE TICKETING

UNIT 3: SPECIAL FARES AND AIRLINE TICKETING

FARE CALCULATION ELEMENTS IN ELECTRONIC TICKETS

Block Introduction:

Air travel has changed dramatically over the last century. Market (city pair), rule number, fare class, one-way/round-trip indicator, MPM or routing number, footnote (optional), currency, fare amount, effective date, cease date, and miles are the 11 components of a fare. Fare Calculation and Charging is made up of three functions that are all related. The applicable fare for the travel being done is calculated first, followed by the transaction that will result in receipt of the applicable fare and finally, the transactions are recorded.

Block Objectives:

After understanding this block learns will have knowledge and its objectives is :

- To provide the learner with information about fare calculation Data elements, Fare calculation Factors and Components of Air fare
- To provide knowledge about airline fare types
- To provide information about pricing and special fares

Block Structure:

Unit 1: Fare Calculation Area/Data Elements

Unit 2: Fare Type identification in Airline Ticketing

Unit 3: Special Fares and Airline Ticketing

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Fare Calculation Area/ Data Elements

UNIT STRUCTURE

- 1.0 Learning Objectives
- 1.1 Introduction
- 1.2 Data Elements
 - 1.2.1 Market (City Pair)
 - 1.2.2 Fare Class
 - 1.2.3 Effective Date
 - 1.2.4 Rule Number
 - 1.2.5 Fare Amount
 - 1.2.6 Currency Code
 - 1.2.7 Discontinue Date
 - 1.2.8 One-Way/Round-Trip Indicator
 - 1.2.9 MPM or Routing Number
 - 1.2.10 Footnote
- 1.3 Fare Calculation Factors
 - 1.3.1 Available Seat Miles
 - 1.3.2 Load Factor
 - 1.3.3 Breakeven Load Factor
 - 1.3.4 Cost Structure
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 - 1.4.2 Passenger Services Fee (PSF)
 - 1.4.3 Airport Operator
 - 1.4.4 Government
 - 1.4.5 Optional Services on Chargeable Basis
- 1.5 Let Us Sum Up
- 1.6 Answers for Check Your Progress
- 1.7 Glossary
- 1.8 Assignment
- 1.9 Activities
- 1.10 Case Study
- 1.11 Further Reading

1.0 LEARNING OBJECTIVES:

After learning this unit students will be able to understand:

- Data elements
- Fare calculation Factors
- Components of Air fare

1.1 INTRODUCTION:

A passenger's air fare is the cost of flying from point A to point B. When a tourist want to travel by air or carry their belongings from one location to another, they must pay a fee for the service. This fee is known as the fare. However, by paying a fee, users are not given carte blanche to do whatever they want; instead, they must abide by the terms and conditions laid forth by the service provider. As a result, in order to qualify for a given fare, the regulations and restrictions must be met.

As we have studied, IATA accredits all flights for their schedule. IATA also accredits travel agencies and standardises international fare regulation. We will refer to IATA fares as international basic fares that are governed by IATA and are independent of the airline. These tariffs are referred to as "published fares," meaning that information about them is available in the fare guide and in all computer reservation systems.

Airlines' stated fares cannot be set or changed without IATA's consent, and their values are comparable to IATA rates. The airline may also publish fares that have no equivalents among IATA fares, but only with IATA approval, which represents the interests of all carriers and states with a financial interest in this sector. Purchasing a ticket at the published fare is extremely costly. Normal fares, on the other hand, have no restrictions. Normal fares include first (usually denoted by "F"), business (usually denoted by "C"), and full annual economic class (usually denoted by "Y") tickets. These tickets are normally entirely refundable, dates and routes can be altered at any time, and they are not time or date limited.

Airlines seek to raise costs on a regular basis, but if other airlines do not follow suit, the airline risks losing the most price—sensitive consumers. Because of the impact of competitors' replies, the airline may "test the waters" by implementing a unilateral fare increase in the hopes that others will follow suit. If competitors follow suit, the fare increase will be successful, and the airlines will benefit. If competitors do not follow suit, the instigator has no choice but to reverse the price hike or risk losing market share to lower—cost competitors.

1.2 DATA ELEMENTS:

A fare includes components like: including market (city pair), fare class, effective date, rule number, fare amount, currency, discontinue date, one-way/round-trip indicator, MPM or routing number, and footnote. In this unit we will understand all these elements in detail.

- 1.2.1 Market (City Pair)
- 1.2.2 Fare Class
- 1.2.3 Effective Date
- 1.2.4 Rule Number
- 1.2.5 Fare Amount
- 1.2.6 Currency Code
- 1.2.7 Discontinue Date
- 1.2.8 One-Way/Round-Trip Indicator
- 1.2.9 MPM or Routing Number
- 1.2.10 Footnote

1.2.1 Market (City Pair):

The Origin City and Destination City specify the market in which the fare record is valid for travel; they do not specify the travel direction. The origin city transmits the international fare records. The data in the Directional Indicator determines which way to go. In either field, a multi–airport city code corresponds to all airports in the city. Fare regulations and routings decide whether or not a fare record can be used in pricing. Records to and from a "airport" and records to and from a "city" do not have a hierarchical application.

1.2.2 Fare Class:

When booking a ticket online, the fare class code is provided on the flight details on the e-receipt. A fare basis code is a letter assigned to an e-ticket that denotes a few characteristics. Every seat on a plane is divided into multiple ticket classes, each with its own price and set of rules. One-letter fare codes are used to identify different fare classes. It essentially tells the airline's computer what is and isn't permitted for a specific ticket.

1.2.3 Effective Date:

This specifies the first date on which travel from the origin of the trip can begin, unless any footnote, fare rule, or general rule data that relates to the fare restricts it further. It is a contract between an airline and a customer that is valid for the specified journey for a maximum of a pre–determined duration by the airline from the date of issue. The tariff of Qatar Airlines, for example, is valid for 12 months.

1.2.4 Rule Number:

The airline's 3-digit ticketing code, a 4-digit form number, a 6-digit serial number, and sometimes a check digit are all included in the official ticket number. The Rule Number is used to match the Automated Rules records that apply.

Airfare Ticketing - II 1.2.5 Fare Amount :

The Fare Amount field displays the actual published fare amount that applies to the current fare record. To signify a "free" quantity, this field may contain zeros with suitable data in the Currency Code (must have a valid Currency Code and not value Blank) and Number of Decimal fields.

1.2.6 Currency Code:

The Currency Code identifies the currency with which the specified Fare Amount is related. Any currency can be used to publicise fares. The fare does not have to be published in the currency of the destination or origin country. Regardless of currency, processing should use all matching fare records for the fare component in question (and provided all applicable rules, footnote, and routing conditions are passed). The currency of the Base Fare is determined by the departure country of transit on the ticket for itineraries involving numerous domestic tickets but no international fares.

1.2.7 Discontinue Date:

The Discontinue Day determines the last date on which travel from the origin of the voyage can begin, unless differently stated by any footnote, fare rule, or general rule data that resolves to the fare. An unreserved aeroplane ticket and its price are usually valid for one year, beginning on the day the ticket is issued and ending on the day the ticket is issued.

1.2.8 One-Way/Round-Trip Indicator:

This entry indicates whether the fare is for a one-way or round-trip journey. This parameter also defines whether or not a one-way cost can be doubled for round-trip travel.

1.2.9 MPM or Routing Number:

The Maximum Permitted Mileage (MPM) distances are the maximum distance between two specified international points calculated using the shortest combinations of non–stop sectors and, if applicable, increased by 20% over specified construction points.

Whether or not the fare is truly controlled by MPM, data is always included in this area. Data in the Routing Number field will indicate if the fare is restricted to the MPM and/or any applicable routing map that must be applied. For domestic fares, the information in this field has no relevance (and is ignored).

1.2.10 Footnote:

A foot note is a set of Alpha, numeric, alphanumeric, or numericalpha characters appended to a fare record that specifies the fare's special requirements. Footnotes are frequently used in conjunction with categories to further restrict a fare. They usually include travel dates, sales periods, or other unique restrictions. A benefit of coding limits in a footnote rather

Fare Calculation
Area/Data Elements

than a rule is that a footnote can be found in any fare within a carrier's/carrier/tariff. tariff's The footnote can be assigned any number from 1 to 99, as well as any letter other than F and T. (When F and T are coded in Category 23, they signify "travel must be FROM/TO the first city shown in a specific market.") It is used to match the Automated Rules/Footnotes records that apply.

1.3 FARE CALCULATION FACTORS:

When pricing an itinerary, individual pricing systems are intended to determine the scope of the pricing solutions they will consider. The systems will attempt to process the individual fare components against the applicable fares as well as the necessary rules/footnotes/routings records after the available pricing solutions have been determined.

Airlines seek to raise costs on a regular basis, but if other airlines do not follow suit, the airline risks losing the most price—sensitive consumers. It must be continuously monitored and great attention must be used throughout the development of the fare. Because of the impact of competitors' replies, the airline may "test the waters" by implementing a unilateral fare increase in the hopes that others will follow suit. If competitors follow suit, the fare increase will be successful, and the airlines will benefit. If competitors do not follow suit, the instigator has no choice but to reverse the price hike or risk losing market share to lower—cost competitors. As a result, it is considered while determining the fare.

When constructing the tariff, numerous aspects must be considered in order to assure revenue generation as well as profit generation. The quantity of trip purchased, or revenue passenger miles, is one of the most important components of airline revenue. The RPM is calculated by multiplying the quantity produced (available seat miles) by the percentage purchased (load factor). Each of these elements is described below.

1.3.1 Available Seat Miles:

Airline capacity is measured in ASM, in some markets it is also known as available seat kilometres. The number of seat miles available for purchase on an airline is referred to as available seat miles. Seat miles are computed by multiplying the number of seats available for a flight by the amount of miles that an aeroplane will be travelling. The airline's ASM is running at below capacity if all of the seats on the plane are not sold.

Non-revenue passengers are those who sit in seats used by airline employees, for example, to connect with a flight crew with whom they will work. While some standby customers may occupy seats, they do not produce income for the airline. Non-revenue passengers may be transported by airlines to avoid the need to relocate flight crews or to fulfil obligations to passengers who have been guaranteed passage on the carrier. The way

airlines balance non-revenue passengers against seats occupied by paying customers has a direct impact on the flight's profitability.

Seat pricing and aircraft capacity are important factors in determining a carrier's health; nevertheless, other costs such as fuel, maintenance, and other resources are required to fully demonstrate the airline's performance. If it is not considered during fare construction or not included into fare it may cause a huge loss.

1.3.2 Load Factor:

The load factor, the number of seats actually purchased divided by the number produced, is as important as the average ticket price. The load factor is a ratio of Revenue Passenger–Miles to Available Seat–Miles that compares the usage of aircraft capacity. The load factor is a metric that measures how much of the available seating capacity is occupied by passengers.

The International Air Transport Association publishes it once a month (IATA). By distributing fixed—cost expenses among a larger number of customers, higher load factor values make the airline more lucrative. Passengers account for around 75% of airline revenue, while air freight delivery accounts for the remaining 15%, with some revenue coming from other types of transportation. Because domestic travel accounts for the majority of passenger earnings, the load factor is especially important on domestic flights. Flying operations account for over a third of all airline fixed costs. Another 13% of costs goes to aircraft maintenance, 13% to advertising, 16% to airport gate services, 9% to in–flight services, and the rest to other expenses.

1.3.3 Breakeven Load Factor:

The average percent of seats that must be full on an average flight at average tickets for the airline's passenger revenue to equal the entire cost is known as the breakeven load factor (BLF).

Airlines frequently employ the break-even load factor in strategic planning. To stay profitable, an airline that wants to attract low-budget clients with low-cost tickets will certainly need a greater load factor and aircraft that can carry more passengers. The airline may elect to charge more per ticket and offer fewer seats while giving a higher degree of comfort in order to provide better service and a better customer experience.

1.3.4 Cost Structure:

Both fixed as well as variable price effects cost structure of operation. While pricing, taxes, rental leasing payments, insurance, interest expenditures, and depreciation must all be taken into account. Labor cost and fuel cost are the two largest expenses for airlines. Fuel expenses account for 10% to 12% of total operational costs. Labour costs account for around a third of all airline operational costs. Operating costs account for approximately 75% of all non–fixed costs.

Fare Calculation
Area/Data Elements

Aside from this, there are a few additional costs, but the largest is the cost of purchasing capacity from regional airlines, or the cost that comprehensive network carriers pay their regional partners to offer service on select routes. The capital cost of all of the airlines' assets, including aircraft, is represented by rents and ownership, which makes up more than half of this category. Professional services have a shockingly high price tag. Attorney and other legal bills, engineering, and consulting fees are all included. In a bankruptcy case, legal and consulting fees skyrocket. The remaining is made up of all other expenses, which include anything from catering to advertising and insurance.

1.4 COMPONENTS OF AIR FARE:

Costs incurred in supplying the particular product or service are a primary factor of prices in the aviation sector, as they are in most other industries. As an air traveller, customer have the right to know the specifics of their flight's price. The basic components of an air tariff in India are the airline component, the airport authority component, the airport operator component, the government component, and optional services. These component can be considered the basic components however it may differ from country to country.

1.4.1 Airline Component:

It includes Basic fare, Airline fuel charge, Common user terminal equipment fee and Convenience fee.

1.4.1.1 Basic Fare :

Different airlines use different fare structures around the world. There was a period when most airfares were computed based on miles. In a nutshell, this involved fees based on a maximum permissible mileage from the point of origin to the passenger's final destination, with the option for customers to make stops along the way at no additional cost.

Fare computations, reissues, and revenue accounting are all made easier with a one-way fare structure. On multi-sector trips, fares are pooled from beginning to conclusion to constitute a whole route. Each carrier receives the complete fare for each covered sector.

1.4.1.2 Airline Fuel Charge:

Airlines include the cost of fuel, as well as a fuel surcharge, in their fares. Because of the rise in fuel prices, most airlines are now adding a fuel surcharge to the base fare.

1.4.1.3 Common user Terminal Equipment Fee (If Applicable) :

Airport common use terminal equipment is an IT system that allows different airlines to control passenger and flight operations using existing airport infrastructures through their own servers (the same hardware and equipment at each airport). It allows passengers to get their boarding cards, check—in information, and luggage tags from any counter, independent of whose airline they are going with.

Airfare Ticketing - II 1.4.1.4 Convenience Fee (If Booking is Made Online Via Debit/Credit Card):

The convenience fee is intended to compensate a traveller for the "luxury" of utilising other payment methods. It also covers payment processing fees as well as the fees that payment gateways must pay banks for online transactions. There are no fees on any airline. Travel sites, on the other hand, charge convenience fees (like payment option like credit or debit card, booking Charges).

1.4.2 Passenger Services Fee (PSF):

To cover airports in terms of security and facilitation. Passenger Service Fees are imposed to cover the costs of airport security and passenger services, but they are not used to fund new airport expansion or upgrades. The PSF is divided into two parts: the security component, which accounts for 65 percent of the total fee, and the facilitation component, which accounts for 35 percent.

1.4.3 Airport Operator:

Airlines charge from customer as Airport Development fee and User Development fee.

1.4.3.1 Airport Development Fee:

The Development Fee is a charge used to fund or finance the cost of airport upgrades, modernization, or development. The levy is structured as a "pre-funding" fee.

1.4.3.2 User Development Fee (UDF):

The User Development Fee is a fee levied at airports to help the airport operator increase revenue. The UDF is imposed to cover any revenue shortfalls, ensuring that the airport operator receives a reasonable return on investment.

1.4.4 Government:

Taxes, fees, and levies are collected on behalf of government organisations and/or airport authorities by airlines. Government taxes are levied to raise funds for the country's general treasury, which is used to provide basic public services. Arrival or Departure Taxes, Value Added Tax, Transportation Tax, and Passenger Tax are just a few examples of government–imposed taxes. Charges are levied in order to raise funds for specific aviation–related infrastructure or services. Passenger Facility Charge, Safety and Security Charge, and International Aeronautical Development Charge are examples of airport charges. Depending on the purpose of the revenue, the word fees can be substituted for taxes or charges.

1.4.5 Optional Services on Chargeable Basis:

The Airlines may also offer optional services on chargeable basis. Any passenger can avail these services at the time of booking process and choose any of them as desired.

Fare Calculation Area/Data Elements

It is possible airfare include any carrier imposed Service Fees/ Charges. Some of these costs are not readily apparent because they are included in the base fare. They are normally listed as a surcharge in the fare calculation box of the ticket, whereas other Service Charges are listed in the tax boxes beside the government taxes. Fuel surcharges, insurance surcharges, security surcharges, and miscellaneous surcharges are just a few examples of surcharges. Varying carriers may charge different levels of surcharges or none at all on any given route. These can be very high, particularly on transatlantic and transpacific trips, and are a significant factor to consider when comparing fares.

In addition to the carrier–imposed fees that travellers must pay when airlines apply them, there are a variety of optional service expenses. Unbundled fares are gaining popularity in the travel industry. This necessitates carriers separating their services and offering them independently. Baggage fees, early check–in, and other fees Charges for meals, snacks, and beverages (except drinking water), Access to airline lounges is subject to fees. Baggage fees at check–in, Charges for sporting equipment, carriage of musical instruments, seating preference etc. Airlines encourage prepayment by reducing the cost of certain services when bought online prior to arriving at the airport.

	☐ Check Your Progress:				
1.	Business class of air-ticket is usually denoted by letter:				
	a. B b. C	c. F d. Y			
2.	The market in which the fare record is valid for travel do not specify				
	a. Destination City	b. Origin City			
	c. Travel direction	d. None of these			
3.	A foot note is sequence of characters attached to a fare record.				
	a. Alpha	b. Numeric			
	c. Alphanumeric	d. All of above			
4.	Full form of RPM is	<u>—</u> :			
	a. Revenue per mile	b. Revenue per minute			
	c. Revenue passenger mile	d. Revenue passenger minute			
5.	The currency of the Base Fare is usually determined by the country of transit on the ticket				
	a. Origin of passenger	b. Departure			
	c. Origin	d. Depends on Travel agent			
6.	Every seat on a plane is divided into multiple ticket classes, each with its uniqueness in				
	a. Price b. Set of rul	es c. Both d. None of these			

- 7. The full form of BLF is _____:
 - a. Breakeven luggage factor b. Baggage load factor
 - c. Breakeven load factor d. Breakage luggage file
- 8. The PSF is divided into two parts, they are:
 - a. 75% the security component and 25% the facilitation component
 - b. 55% the security component and 45% the facilitation component
 - c. 65% the security component and 35% the facilitation component
 - d. 35% the security component and 65% the facilitation component

1.5 LET US SUM UP:

The cost of an aircraft ticket varies from airline to airline due to the carrier's base rates and carrier-imposed taxes, not only because of the Government taxes. The level of fare offered at the time of ticket purchase is also crucial. The Fare Charging function starts the process of collecting or allocating the trip's income. The fare itself may not be physically collected at the time the journey is undertaken, depending on the setup and fare goods employed. The Fare Charging function initiates the transaction record against which the Operator or Authority will be reimbursed for the travel in the downstream revenue allocation processes in such circumstances (which are the majority for electronic ticketing). Market, fare class, effective date, rule number, currency, one—way/round—trip indicator, MPM or routing number, and so on are some of the components of tickets. The cost of a ticket is affected by available seat miles, load factor, and cost structure.

1.6 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

- **1.** b
- **2.** c
- **3.** d
- **4.** c

- **5.** b
- **6.** c
- **7.** c
- **8.** c

1.7 GLOSSARY:

Account Code: A unique code that denotes a specific fare scheme contracted with a company for that carrier.

Code for Service Type : A code that identifies the service that will be charged.

Component of Fare : Between two successive fares break points on a travel or itinerary.

Field: A designated place on a user interface screen where data can be entered.

Flight Voucher: When boarding, the traveller gives the carrier a portion of their ticket.

Market: The city that serves as the starting point or end point of a journey.

RPM (Revenue Passenger Mile): A transportation sector measure that primarily shows the number of miles travelled by paying passengers.

Fare Calculation Area/Data Elements

1.8 ASSIGNMENT:

1. How rising rate of fuel is affecting aviation industry.

1.9 ACTIVITIES:

1. Find out the pricing strategy of different airlines.

1.10 CASE STUDY:

An Indian Airline Is Hiring All Female Flight Attendants To Save Money On Fuel: (Rahul Bedi, New Delhi, The Daily Telegraph Jun 28, 2013, 11:21 PM)

Low cost carrier GoAir: A private Indian airline has decided to recruit only female flight attendants in future as its aircraft will burn less fuel carrying them than their heavier male counterparts. The low cost carrier Go Air maintains that deploying air hostesses, who on average weigh 33–44 lbs less than male stewards, will help it save around Rs30 million (\$499,000) per year in fuel costs. Airline official's estimate that every extra kilogram (2.2lbs) a commercial aircraft carries costs it an additional Rs3 per flight hour. Alternatively, an overall reduction in weight results in savings. "We are looking at all possible ways of cost—cutting to remain profitable" Go Air Chief Executive Officer Giorgio De Roni told the Times of India. A sharp decline in the value of the Indian rupee—that has dropped 27 per cent against the US dollar since July 2012—had so far cost the airline an additional Rs300 million (£3.33 million), he added.

Questions:

- 1. Is this strategy working for Go-air?
- 2. What implications the company will have to face in long term.
- 3. Is this strategy healthy for current environment? Justify your view with few examples.

1.11 FURTHER READING:

1. Airline Operations and Management : A Management Textbook by Gerald N. Cook and Bruce G. Billig

Fare Type identification in Airline Ticketing

UNIT STRUCTURE

- 2.0 Learning Objectives
- 2.1 Introduction
- 2.2 Economy Class
- 2.3 Business Class
- 2.4 First Class
- 2.5 Premium Economy Class
- 2.6 Category of Passenger
- 2.7 Identification of Air Fare Type
- 2.8 Let Us Sum Up
- 2.9 Answers for Check Your Progress
- 2.10 Glossary
- 2.11 Assignment
- 2.12 Activities
- 2.13 Case Study
- 2.14 Further Reading

2.0 LEARNING OBJECTIVES:

After learning this unit students will be able to understand:

 Airline fare types can help in Finding and access the lowest fares for their clients and convince them on why you don't have access to (some) fares.

2.1 INTRODUCTION:

Economy, premium economy, business, and first class service. Classes are further separated into fare classes, which can be seen on ticket as a letter. Each seat on an aeroplane is assigned to a fare class, which has its own set of rules and costs. What appears to be a random letter on a ticket is actually important information.

It's difficult to keep track of all the different fares given by the country's airlines. Because the big airlines have constructed fare schedules that are as complicated as the federal tax law, this is the case. Because there are so many different tariffs, it's rare that two customers on the same flight will pay the same price for their tickets.

There are four fare classes of service—first, business, economy plus/ Premium, and economy/coach. The majority of passengers choose economy. A business traveller on a strict timeline, for example, is likely to pay

Fare Type Identification in Airline Ticketing

far more than a leisure traveller with greater leeway. Airlines understand that each passenger has a price threshold for purchasing an aeroplane ticket—the most a person will pay for a seat. It is the airlines' responsibility to determine what that price threshold is and to offer a price that is as close to that barrier as possible without exceeding it. First Class, Business Class, and Economy Class are the three conventional travel classes offered by airlines. Some airlines now offer a no-frills option called Basic Economy. The number of airline fare classes available is determined on the cabin arrangement. The IATA used to standardise booking codes, but today each airline determines their own. For each letter of the alphabet, most airlines have a different fare class, which varies by airline: Regardless of the airline, F stands for first class, C and J for business class, and Y stands for economy. The letters assigned to each fare class aren't chosen at random. The letter "C" for business class, for example, comes from Pan Am, which was one of the first airlines to create "Clipper Class," a new class of service for business and full-fare economy passengers. Likewise, Y stands for full-fare economy, while T stands for discounted economy. J denotes a full business class fare, whereas D denotes a discounted business class fare.

2.2 ECONOMY CLASS (Y):

In any airline the most basic class is the economy class it is also called as coach class. The seats here are the smallest, measuring 16 to 19 inches broad. Typically, these seats recline and have a fold—down table. Seats have a pitch of 28 to 36 inches. With schedule flexibility, full economy class is normally signified by the letter 'Y,' but it can also be any other letter. Legroom varies from 30 to 34 inches depending on seat pitch.

2.3 PREMIUM ECONOMY CLASS (W):

The difference between economy and enhanced premium economy classes on international flights varies by airline, route, and plane type. It may also provide additional benefits like as free or superior food, increased baggage allowance, and amenity packs. On domestic flights, premium economy frequently refers to the "better" seats on an aircraft. Most airlines' economy class offers bigger seats and greater legroom at a more comfortable price than business or first class. Economy and premium economy are grouped together in several airlines' main cabins. The "premium" in premium economy refers to the extra room and occasionally the placement of seats in more desirable positions, such as the front of the plane, on international and some long—haul flights.

2.4 BUSINESS CLASS (J):

It can be said as a middle ground between economy and first class, but many airlines have dropped first-class seating and instead provide business class as the greatest level of service. The quality of the seating,

ground service, food, drinks and other amenities distinguishes business class from other travel classes. Full business class is commonly represented by the letters 'J' or 'C' with schedule flexibility in commercial aviation, however it can also be many different letters depending on conditions. Complementary alcoholic beverages and higher quality meals are served in this class. Economy–class passengers are not permitted to enter the business–class cabin, however first–class passengers can travel through the curtain separating business and first class.

In some airlines, passengers can enjoy a larger seat that reclines back, complete meal service, in–flight entertainment, and other amenities. However, it varies from one airline to the next. Some airlines include extra amenities like as a personal minibar, multi–course dinners served on fine china, and a full bar area with bartender and canapés.

In comparison to the economy sector, there may be Cradle/Recliner seats with roughly 150–160 degrees of recline and hence extra leg room. Seat pitch can range from 38 to 79.5 inches, with seat sizes ranging from 17.5 to 34 inches. Despite the fact that several airlines have renovated their long–haul business–class cabins to include angled lie–flat or entirely flat chairs, cradle/recliner seats are still popular in business class on shorter flights.

2.5 FIRST CLASS (F) OR FULL-FARE FIRST-CLASS TICKET:

First class is normally the highest class available. This is a travel class on some passenger planes that is meant to be more opulent than the others. Originally, all planes had only one service class (often equivalent to the modern business or economy class). On a passenger aeroplane, first class usually refers to a small number of seats or cabins near the front of the plane with additional space, comfort, service, and privacy (rarely more than ten). In general, this class is the most expensive class available.

Large reclining seats with more legroom and width than other classes to suites with a completely reclining seat, workstation, and TV surrounded by privacy partitions are available. In an international airline, first-class seats typically have a seat pitch of 58–94 inches and a width of 19–35 inches, although in domestic flight first-class seats may have a pitch of 34–68 inches and a width of 18–22 inches. As a result taller persons will be more comfortable in it. Some airlines provide first-class seats that allow travellers to have one guest sit face-to-face with the cabin occupant for a brief period of time. At least one exclusive lavatory is there for this class. Passengers from other class are not normally permitted in this class cabin. Mini bar facility may available for their use.

2.6 CATEGORY OF PASSENGER:

A Passenger Type Code (PTC) is a three-letter code that is used to categorise passengers into different types. For example ADT means

Fare Type Identification in Airline Ticketing

adult that refers to passengers aged 12 years or above. PTCs can be used to control price, such as with Military discounts, to impose limits, such as the Infant type (INF), which does not require a seat or ticket, and to identify Branded Fares. In the PNR, each passenger must be recognised by a PTC; however, there may be cases where the passenger is identified by one PTC and the fare is decided by another using a Type Priced element.

PTCs can be customised used in some circumstances when two trading entities like GDSs, suppliers, airlines, etc. agree to exchange data or process or both in a specific way. When creating Branded Fares, the greatest example is when it is still desirable to identify a traveller by one of the basic types, but pricing and amenities are to be determined by another. When choosing which of the branded fares an airline wants to offer, these Bilateral PTCs will be used as the "Type Priced."

Some of these PTCs are used to enforce to accompany the traveller or put any other restriction, such as INF (infant) requires an adult on the reservation but does not require a seat or a ticket. The code INF or INS is used for infants under the age of two. "INF" is used for an Infant on Lap who does not require a seat or a ticket and "INS" is used for an Infant who require a seat or ticket. For children age 2 years to 15 years code "CNN" is used instead of "ADT" to give discount in fare.

These PTCs can be employed to return lower price, however sufficient identification is required. A Government (GVT) or Military (MIL) discount, which might give the traveller with a fare lower than the Lowest Priced normal fare in selected markets, is the most prevalent occurrence of this.

2.7 IDENTIFICATION OF AIR FARE TYPE:

Bunch of letters can be observed on airline tickets, which identify the class of service as well as the type of fare purchased. For a layman it is not so easy to understand what these class of service letters imply, especially when the classes differ from airline to airline.

It also specifies the type of ticket purchased, as well as any additional expenses or benefits that may be associated with it. As we've seen, certain codes are universal, while others are determined by the airline. As we have already studied in Airfare & Ticketing Part–1 module last year in booking code section. Here we will see a glimpse of those codes so that it would be easy to identify.

Class of Service Letters can be found directly after the flight number on tickets or boarding passes. It could also be referred to as Booking Class or a similar, abbreviated term. For example, the letter "E" following the service letter indicates a ticket with an excursion cost, indicating that the location or trip has a minimum or maximum stay requirement.

On a ticket the letters "F", "A", and "P" denote a full rate First Class ticket. "J" and "C" denote full-fare Business or Executive Class

tickets, "W" denotes premium economy tickets, and "Y" denotes full-fare economy tickets almost always.

Subclasses like discounted, restricted or reduced tickets are denoted by letters such as "B", "H", "L", "M", and "V". The value of these letters varies depending on the airline. On one airline, the letter "B" could indicate a more expensive ticket. "L" could stand for a ticket purchased for a seat sale on another airline. Similarly if a fare is purchased from a consolidator, letters "X", "U", or "R" can be seen.

Economy tickets (Y) normally signify less flexibility when it comes to changing tickets, as well as restrictions such as not being able to choose your seat ahead of time, not being able to check your bags for free, and so on. Unrestricted fares, on the other hand, are among the most expensive tickets, but they come with perks like full refunds and the ability to change flight itineraries. This is particularly useful for business travellers who may need to extend a business trip or visit different locations.

Different fares apply in different markets Normal fares and special fares are the two types of airfares available, although they can be generally fall into the categories of Normal fares, Excursion fares, Point to Point prices, APEX fares, PEX fares, and Super–PEX fares. Normal fares are available for all service classes and are more flexible, but they are also more expensive. Normal fares are usually valid for a year. For example C, F,Y, R, while Y1 or J1 might be used to signify the highest fare level, and YOW or YRT can be used to indicate one way or round trip fares.

Many limits apply to special fares, such as minimum stay requirements or advance purchase requirements. They are, on average, less expensive.

Point-to-point prices are available in any class and let passengers to travel directly from point A to point B. There are normally no restrictions on refunds or advance booking requirements. Direct flights are usually the only option, though connecting flights may be available if no stopovers are required. Fares can be purchased for one-way or round-trip travel. If there are no seasonal restrictions, round trip prices are usually good for a year. Y2, C3, and SLX2 are examples of codes 2 and 3 that may appear at the end of a fare basis.

Excursion reservations can usually be modified, although there are minimum and maximum stay conditions. They are often available for purchase at any time and sold on a return basis. The conditions for routing and stopovers are frequently broad, and there are normally no refund limits. At the conclusion of the fare base, the code E or EE is found, followed by the maximum stay in days or months, e.g. YLEE14 or BEE3M.

APEX (Reservations for Advance Purchase Excursion) fares are normally non-refundable and cannot be changed without incurring a penalty. In most cases, no stopovers are permitted, and only direct flights are used. They're usually sold with a return policy and a minimum and

maximum stay requirement. The fare basis usually includes the codes AP, AN, or AB.

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These are Public Excursion fares, which are subject to the same restrictions as APEX fares but are available at any time. In most cases, no stopovers are permitted, and only direct flights are used. They are usually marketed on a return basis and have minimum and maximum stay limitations. The fare basis includes the codes PX or SX.

Check Your Progress:			
	that is used to categorise passengers		
into different types.	, pag		
a. APEX b. Super–PEX	c. PTC d. PX		
Class is normally the	e highest class available in Airlines.		
a. Economy	b. Premium Economy		
c. Business	d. First		
Class is commonly represented by the letters 'J' or 'C' with schedule flexibility in commercial aviation.			
a. Economy	b. Premium Economy		
c. Full Business	d. First		
used to standardise booking codes, but today each airline			
determines their own.			
a. PATA b. UNO	c. UNESCO d. IATA		
Classes are further separated in ticket as a letter.	nto, which can be seen on		
a. Category b. Fare	c. Fare classes d. None of these		
Code "AP" is used in			
a. APEX	b. Point-to-point prices		
c. Normal fare	d. Excursion reservation		
Passenger type "INF" is used for			
a. Military	b. Ladies above 60		
c. Children bellow 2	d. Adult		
class is commonly represented by the letters 'W' with schedule flexibility in commercial aviation			
a. Economy	b. Premium Economy		
c. Business	d. First		

2.8 LET US SUM UP:

The airline business has accomplished many milestones since the first commercial flight in 1914, including offering unique services to lure travellers to fly the friendly skies. Of course, today's flight experience is drastically different from that of the first commercial flight in 1914.

One of the most noticeable distinctions is the amount of money passengers pay for their journey and what is included in the price. Today's flight fares are primarily concerned with going from point A to point B. Another advancement is the introduction of different service classes and a choice of price schemes within each fare class, allows to pay solely for the extras if desire. Because airline fare classifications differ, it's important to check with the airline directly for clarification on what each letter implies. Within each fare class, there is a hierarchy of letters. When reading a fare class chart for an airline, read it from top to bottom and left to right. F and J, for example, are both full–fare first/business class on American Airlines, but F is higher than J. When attempting to upgrade or standby for a flight, hierarchy becomes important.

On airline tickets, a series of letters designate the class of service as well as the type of fare booked. It's not easy for a layperson to understand what these letters of class of service mean, especially when the grades fluctuate from airline to airline. In different markets, different fares apply. Normal fares and special fares are the two types of airfares available, albeit they can also be classified as Excursion fares, Point to Point pricing, APEX fares, PEX fares, and Super-PEX fares.

2.9 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

1.	c	2. d	3. c	4.	d

5. c **6.** a **7.** c **8.** b

2.10 GLOSSARY:

City-Pair: A routing between any two cities. A city-pair includes an origin (O) and destination (D) and may include connections between the O&D.

Connecting Flight: A flight from one point to another with intermediate stops and aircraft changes

Consolidators: Organisations that purchase tickets directly from airlines at deep discounts and then resale them to travel agents or clients at far lower prices than quoted fares.

Direct Flight: A flight from one point to another with a stop in an intermediate airport, but no aircraft change

Legroom : the distance from one seat to the seat in front or behind it

Published Fares: fare that is available for purchase by anyone

2.11 ASSIGNMENT:

1. Collect some tickets from different airlines and carefully analyse its classes also analyse the pricing differences.

Fare Type Identification in Airline Ticketing

2.12 ACTIVITIES:

1. Search and go through websites of different airlines and consolidators and compare pricing of tickets on these websites for same passenger, class and so on.

2.13 CASE STUDY:

Only 29% Got Full Cancellation Refund From Airlines, 34% from Hotels During Covid-19: Survey, News-18

For those who were forced to cancel their hotel bookings on account of the same reason, 34% of people could get the refunds, online community platform Local circles said in the survey. The survey received more than 20,000 responses from citizens residing in 332 districts of India.

Only 29% people who cancelled their flights due to latest surge in Covid–19 cases were able to get a full refund from airlines/travel agents, an online survey has revealed. The survey, by community social media platform Local Circles, also found that of those who cancelled hotel booking, only 34% were able to get a full refund. The survey received more than 20,000 responses from citizens residing in 332 districts of India. 62% respondents were men while 38% were women.

A similar survey conducted by Local Circles during the second wave had indicated that 13% of citizens who had booked hotels were able to get a full refund due to cancellation of hotels. During the third wave, 34% who have booked travel during January–March 2022 were able to get a full refund due to cancellation. Though over 2.5 times as many citizens were able to get a hotel booking refund due to third wave–related cancellation as compared to the second wave related cancellation, the majority still ended up losing money to hotels.

As COVID cases started growing in India from early December with the arrival of the Omicron variant of COVID, many who had travel booked during the months of January–March revisited their plans and a subset of them approached airlines and hotels for cancellations.

In December last week, Local Circles survey had found that even though the threat due to the Omicron variant of the coronavirus was rising in India, at least 58 per cent of citizens were planning to travel between December to March.

ONLY 29% WERE ABLE TO GET A FULL REFUND

The first question asked citizens, "For the flight travel that you had booked for Jan-March 2022, how did the cancellation process work?"

In response, at least 29% said that "travel agent and/or airline accepted cancellation and refunded full amount", 14% said "travel agent and/or airline accepted cancellation but refunded partial amount", 29% said "travel agent and/or airline accepted cancellation and refunded a very small amount", 14% said "travel agent and/or airline did not refund anything but rebooked the ticket for a later date". 14% couldn't say.

2.14 FURTHER READING:

- 1. The Business Travel Almanac, by Donna Williams and Michael Miller
- 2. The Business of Travel Agency Operations and Administration by Dennis. L. Foster
- 3. Air Travel and Fare Construction by Jagmohan Negi

3 03

Special Fares and Airline Ticketing

UNIT STRUCTURE

- 3.1 Introduction
- 3.2 Factors to Determine Pricing of Ticket
 - 3.2.1 Distance
 - 3.2.2 Flight Timing
 - 3.2.3 Peak Season
 - 3.2.4 Flight Travel Type
 - 3.2.5 Competition
 - 3.2.6 Fuel Price
 - 3.2.7 Demands and Yield Management
- 3.3 One Way Vs. Round Trip Vs. Multi-City Tickets
- 3.4 Special Fares
 - 3.4.1 Marine Fare
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- 3.5 Airline Booking Ploys
 - 3.5.1 Throwaway Ticketing
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 - 3.5.4 Cross Border Selling
- 3.6 Let Us Sum Up
- 3.7 Answers for Check Your Progress
- 3.8 Glossary
- 3.9 Assignment
- 3.10 Activities
- 3.11 Case Study
- 3.12 Further Reading

3.0 LEARNING OBJECTIVES:

After learning this unit students will be able to understand:

- About factors that determine the Price of an air ticket, special airline fares and, Ticket booking ploys.
- This will help in providing better options in terms of discount as well as different tricks that are not allowed although the airlines are providing those options for special situations.

3.1 INTRODUCTION:

There are many factors that effects the final price of an air—tickets such as season and timing of flying, class of travel, fuel cost and demand and so on. Customer as well as consolidators aim to get cheapest ticket. One way tickets only allow to travel to a particular city to another. Because return flight tickets are frequently less expensive than one—way tickets, the passenger benefits financially. The airline, of course, cannot compel the passenger to begin his return flight. However, problems arise if the passenger only wants to use the return ticket without first purchasing the one—way ticket. Multicity tickets have several advantages for traveller as well as the airlines also get customer at single window. One Way, Round Trip and Multi—City Tickets are options travellers can choose for their trip. The price and facility may differ in these three selections.

The majority of companies are now attempting to cut their travel costs. Corporate prices are customised fares that are adjusted to match the needs of business/official travel and are provided to organisations through a signed contract with mutual understanding with airlines. These fares are less expensive than full–service airline rates. These tickets can offer further savings by allowing you complete flexibility in terms of rescheduling and cancellations. Marine rates, bulk fares, consolidator fares, discounted or all–inclusive tour packages, vacation packages, and so on are examples of special fares.

Not only airlines but travellers in commercial aviation too employ trics to save their cost of travelling for that they use airline booking ploys by evading airlines' limitations on how tickets may be used. They are generally a breach of the passenger–airline contract, which airlines may attempt to enforce in a variety of methods.

3.2 FACTORS TO DETERMINE PRICING OF TICKET:

Before purchasing a plane ticket, it is necessary to review the numerous factors that influence the pricing strategy. Whether a consolidator or an individual traveller, they must identify the ideal time and opportunity to book flight tickets in order to acquire the greatest deals and, in certain cases, discounts or offers. Analysis of timing, popularity, and other factors is the best way to get the best offer. Some of these factors are discussed in this section.

Special Fares and Airline Ticketing

3.2.1 Distance:

Distance is the most important factor in deciding the cost of a plane ticket. The cost of a flight ticket varies depending on the distance travelled. The higher the cost of a flight ticket, the greater the distance travelled and the longer the trip duration. It is said to be nearly inextricably linked to the flight ticket pricing structure. Although it is not a deciding element in determining ticket pricing, it does have an impact on flight ticket prices. In general, distance is a significant component that influences airline ticket prices; however, it is not the sole determining factor, as there are other factors that could cause a change in the ticket pricing structure.

3.2.2 Flight Timing:

Flight ticket rates fluctuate depending on the flight's departure time. Some ticket price discounts are available during off—peak hours. Similarly, booking a ticket three to four months in advance can result in lower ticket prices. The aeroplane ticket charges would be excessive if it was booked a week or two ahead of the anticipated journey. Furthermore, going during a non–holiday season or booking for the next peak season during an off season can be more cost effective. When it comes to getting the greatest aeroplane ticket prices, the time is crucial.

3.2.3 Peak Season:

Seasonality is another key aspect that influences aeroplane ticket prices. Tourists are known to flock to certain locations around the world at certain times of the year. Depending on the peak season, flight ticket rates can skyrocket. Similarly, depending on the holiday season, such as summer vacations or other holidays, many travellers seek to whisk their families away to a beautiful vacation site. Flight ticket prices take advantage of the heightened demand throughout the holiday season to demand unusual flight ticket costs. As a result, it has a significant impact on the cost of airline tickets.

3.2.4 Flight Travel Type:

The type of flight that a traveller will take after purchasing a ticket is referred to as the flight travel type. The type of flight determines whether it is a direct flight with a shorter travel time or an indirect flight with a longer flight duration but a lower ticket price. Furthermore, ticket rates vary based on the number of stops the airline makes before arriving at its final destination. The main difficulty with these flight types is that passengers must compromise on trip duration. The fare is inversely proportionate to the duration.

3.2.5 Competition:

When it comes to fluctuating flight ticket rates, competition is crucial. Because the aviation business is devoid of monopolies, several firms have developed their own pricing strategies to compete with their peers. However, in order to enhance their sales, various unique deals and

discounts can be found. Flight service providers and airlines each have their own flight deals for different types of consumers, such as frequent fliers or loyal customers. Specific destinations that are exclusively served by a few airlines or aircraft may experience a price increase. Compare this to large cities where a majority of airlines operate, with competing prices that are comparable to other airlines and travel ticket services. Popularity of airlines also come into this criteria.

3.2.6 Fuel Price:

Fuel price contributes a huge operating expense for an airline, hence the hike in price of oil directly effects the price of ticket.

3.2.7 Demands and Yield Management:

As per theory of economics when demand of anything increases the price of that product/service also increases. In order to meet demand and supply airlines also swings their ticket price. Similarly during low or high demand (due to any factor viz. seasonal demand, situational demand or demand during crises situation like Russia–Ukraine war) the prices need to rise unexpectedly. When planes receive less sale of their seats and flying date is near the price will decrease as yield management strategy.

3.3 ONE WAY VS. ROUND TRIP VS. MULTI-CITY TICKETS:

One—way tickets are for fly that begin in one location and end in another, but do not involve a return trip. Ahmedabad to Kolkata, for example, can be reached directly or via Delhi or another place. That means it enable to fly to the destination without returning to starting point. To complete the circle, two one—way tickets are required. Whereas the term "round trip ticket" refers to a trip that takes you to a place and then back home. Ahmedabad to Kolkata and return, for example, can be done directly or via another city. And a travel that is broken up for more than 24 hours in more than one point on the journey is referred to as a multicity ticket. For example, a flight from New Delhi (IGI) to New York (JFK) via Dubai includes three days in Dubai and a week in New York.

A round trip ticket is sometimes known as a 'circular ticket' or a 'return air ticket,' because it allows you to travel from point A to point B and then return to point A after a few days at your travel destination B. Because this completes a circle, it is referred to as a circle ticket. The same air ticket contains both the inbound and outgoing flight information. These tickets usually have a maximum stay of one month, but some airlines offer return tickets with stays of up to one year at reasonable rates, and passengers can change their return date by paying the fare difference plus a change fee, which varies depending on the airline and fare class being booked.

A multi-city flight is a type of advanced airline ticket that allows passengers to travel the globe with many stops, considerably boosting the value of their trip by arranging additional legs with stops in multiple

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cities. A multi-city airfare combines flights from multiple cities into a single reservation, saving the time involve in taking reservation of multiple one-way tickets. It's often far less expensive than buying a series of one-way tickets.

There are various ways to make a flight with several destinations operate. Multicity ticket is a single ticket that carry a traveller anywhere in the world with several stops. Stopovers at major destinations are also feasible, providing an altogether new area to explore for little or no cost. They are free to stop for as long as they like. Because many long—haul flights connect in hub cities, stopping over for a few days to see the city before going on to the intended destination doesn't have to be expensive. It can also be used to switch modes of transportation at certain locations. For example, if you want to take a train from Cambodia to Thailand without having to return to your original airport, you can do so.

3.4 SPECIAL FARES:

The majority of businesses are now attempting to reduce their travel expenses. Corporate fares are special fares that are adjusted to meet the needs of business/official travel and are supplied to organisations with mutual understanding with airlines in a written contract. Group travellers may be given special consideration for fares, but discounts and other benefits differ from airline to airline.

Special prices are frequently purchased through a specialist agent, a third party, or as part of a package that includes air travel and hotel accommodations. Bulk fares are one of them. Fares for cruises Fares on the consolidator. These fares are less expensive than those offered by full–service airlines. These fares can provide additional savings by giving complete flexibility in terms of rescheduling and cancellations. Special fare may include Marine fares, Bulk fares, Consolidator fares, Discounted or inclusive tour packages, Vacation packages and so on. Some of special fares are discussed in this section. Some of these discounts are provided by airlines whereas, consolidator may also provide extra discount as per their marketing tactics.

3.4.1 Marine Fare:

Captains, Engineers and Contractors, Steward, cruise ship crew, Merchant marine crew, gas workers, Architects, Surveyors, and other positions who are going to join the vessel for the purpose of work are eligible for special discounted marine fares.

3.4.2 Student Fare:

This fare can be applied for students, faculty members, and youth under the age of 26 who present proper identification. Student airfares are cheap flights that allows them to remain for up to a year, fly one—way, or return to a different destination. Students can also change their return dates for free or for a modest price.

Airfare Ticketing - II 3.4.3 Senior Citizen Fare :

This fare is applicable for passenger aged 65 years or above on the date of travel.

3.4.4 Bereavement Fare:

Family members travelling because of an impending death or death in the family are eligible for a discounted fare. It is a last–minute fare that is offered until the departure time. For funerals or in the event of impending death, airlines provide them to family members. Despite the fact that bereavement prices are normally discounted full rates, they are not necessarily the cheapest option. Typically, the reduction is 50% off the whole fare. This rate can be purchased directly from the airline, over the phone, or at the ticket counter. Many airlines appear to have reduced their bereavement price options in recent years. Airlines providing bereavement fares may ask for details regarding the circumstances.

3.4.5 Military Fare:

Active Armed Forces personnel (Army, Navy, and Air Force), paramilitary categories, and their family members are eligible for these fares. Airlines serving India offer discounts on base fares to members of the Indian Armed Forces. Similarly, some airlines offer discounts to military personnel. This fare may be used on domestic and international Airlines routes. Spouse, dependent children between the ages of 12 and 26, and dependent parents are all considered family members. Passengers must present a valid Armed Forces identity card for verification purposes at the time of reservation and check—in. The booking may be subject to a Passenger Service Fee and any applicable airport charges. This deal, however, may not be combined with any other promotional scheme or discount offered by the company. Certain fares may be subject to change/cancellation and policy restrictions.

3.4.6 Joint Fare:

When a passenger travels on more than one airline, certain airlines agree to charge specified fares. These fares have been agreed upon by the airlines concerned and are more comparable to the fares that could be charged if a passenger only flew one carrier to their destination.

3.4.7 Open Jaw :

The return leg of an open—jaw ticket departs from a different airport than the arrival. Travelers with these types of arrangements have more flexibility, as they can spend time in several places before returning to their home airport. Furthermore, the prices are typically less expensive than reserving two identical single journeys. There are three open jaw flights destination open jaw, origin open jaw and double open—jaw.

A destination open jaw flight is one in which a person travels from one city to another and then returns to the original city from a different location. It's most popular among tourists and travellers who

Special Fares and Airline Ticketing

want to get the most out of their trip by visiting several places without having to return to the airport where they started.

An origin open jaw flight is one in which the passenger returns from their destination to a city other than where they began their journey. It's an excellent mode of transportation for business travellers looking for the quickest, most efficient, and least expensive option for their trip.

A double open—jaw flight is a type of round—trip flight in which the passenger's origin and destination are different in both directions. In most cases, different airports in the same city do not count as being open mouthed.

3.4.8 Group Fares:

For group passengers it permits a maximum member of 9 adults. However some airlines limits the number till 6. It's depend on airlines that what is their definition for group. The discount provided to them is also depend on service provider/booking agency.

3.5 AIRLINE BOOKING PLOYS:

Travellers in commercial aviation employ airline booking ploys to reduce the cost of travelling to a chosen destination. These strategies take advantage of pricing inefficiencies by working around the airline's fare and route systems, which are frequently the result of the airlines' utilisation of fortress hubs. Several of these strategies are available.

The shift in consumer behaviour, or the desire to obtain the greatest possible discount rather than the cheapest possible ticket, leads to the development of a habit of looking for loopholes in air–ticketing. Customers, as well as some OTAs, attempt to exploit these loopholes in order to maximise their profits. Consumers have embraced online shopping since the advent of e–commerce. They browse and compare, and geographical borders have little meaning for them unless they are restricted. The flow of money online has increased over time, providing more opportunities for fraudsters. Mobile payments have grown in popularity as technology has advanced, particularly in emerging markets.

Travel Merchants report an increase in fraud attempts via the mobile channel, primarily through mobile wallets. Aside from these frauds, there are instances where they take advantage of various offers and resell the tickets. Furthermore, events such as throwaway ticketing, hidden city ticketing, and back to back ticketing are becoming more popular. These circumstances have an impact on airline profit margins. We will discuss some of these events in this section.

3.5.1 Throwaway Ticketing:

This is the practise of purchasing a ticket with the intention of only using it partially. That means he/she does not travel as per their intended trip, that too intentionally or they have pre-planned to do so. When a passenger wishes to travel only one way, but the discounted round-trip fare is less expensive than a one-way ticket, this situation may arise.

This is possible on major airlines where all one—way tickets are full price and can get significant discount on round trip.

For example, if a passenger is only flying from Mumbai to Chennai, the one—way fare is \$4,283, but the round—trip fare is \$3,744. As a result, the passenger buys a round—trip ticket from Mumbai to Chennai and back, boards the flight to Chennai, but stays in Chennai and "throws away" the second half of the ticket by failing to show up for the return flight. It is only possible to "throw away" the final segment(s) of a ticket, because failing to show up for the outbound trip will often result in the airline cancelling the entire reservation.

3.5.2 Hidden City Ticketing:

It is a type of throwaway ticketing. The passenger purchases a ticket to a fictitious city (the "hidden" city) with a connection at the intended destination, walks away from the connection node, and discards the remaining segment. Flight fares are determined by market forces and do not always correspond to the distance flown. As a result, a flight from point A to point C with a connection node at point B may be less expensive than a flight from point A to point B. The remaining segment can then be discarded by purchasing a flight ticket from point A to point C, disembarking at the connection node (B), and discarding the remaining segment (B to C). This tactic is used by one-way trips travellers, as airlines will cancel subsequent segments of the trip once a traveller has disembarked. However, the baggage is unloaded at the flight's ticketed final destination. By doing so it violates most airlines' contract of carriage. If this act is intentional the privileged received by passenger may discontinued. If the act is infrequent the airline may avoid it, but frequent fliers may have to either losing or being threatened with losing their frequent flier accounts. Experienced fliers advise passengers who use the hidden city trick on a regular basis to either not associate their frequent flier numbers with the reservations or to credit the miles to a partner airline. United Airlines and Orbitz sued a search engine dedicated to finding hidden city tickets in 2014, alleging damages from lost revenues, but were unsuccessful.

3.5.3 Back-to-Back Ticketing:

Back-to-back ticketing is an airfare booking ploy used by clever travellers to avoid expensive fares from airline fare systems by purchasing two sets of round trip tickets for one or two flights, taking advantage of the fact that Saturday stays are usually cheaper than midweek round trip flights.

For a time, it was possible, but it is much more difficult now, because the prices for the same set of arrival/departure destinations do not vary as much as they used to, and because most airlines now require a traveller to fly each leg of the ticket in the order in which it was purchased. As a result, the traveller can almost never fly the second leg of a round–trip ticket without first flying the first.

Special Fares and Airline Ticketing

Though neither strategy is illegal, many airlines will penalise if they come to know about it, possibly by confiscating tickets or, more likely, cancelling frequent flier status.

3.5.4 Cross Border Selling:

The booking of a flight that comprises of numerous successive flights is known as cross—border selling. It is an act of booking a ticket in such a way that the journey looks to begin in a different country than it actually does. A passenger took advantage of lower fare structures in the past. However, the traveller intends to complete only a part of the routes at this time. Here, low pricing are designed to be utilised for a different market, such as abroad.

	Check Your Progress:				
1.	Lufthansa is a national airline	of			
	a. USA b. Germany	c. Russia d. Ukraine			
2.	_	such a way that the journey appears the one in which it actually begins			
	a. Cross Border Selling	b. Back-to-back ticketing			
	c. Hidden city ticketing	d. Throwaway ticketing			
3.	When a passenger uses only one way of his return ticket intentionally it is called :				
	a. Cross Border Selling	b. Back-to-back ticketing			
	c. Hidden city ticketing	d. Throwaway ticketing			
4.	Fare provided to family member death is called	s for attending funerals of impending			
	a. Bereavement fare	b. Joint fare			
	c. Senior Citizen Fare	d. Group Fares			
5.	If a passenger purchases a ticket to a city with a connection at the intended destination and walks away from the connection node, and discards the remaining segment the situation is called as				
	a. Cross Border Selling	b. Back-to-back ticketing			
	c. Hidden city ticketing	d. Throwaway ticketing			
6.	Group Fares is permitted for group of maximum member ofadults.				
	a. 7 b. 16	c. 9 d. 10			
7.	Military Fare is applicable to Active				
	a. Armed Forces personnel				
	b. Paramilitary forces				
	c. Family members of both armed forces and paramilitary forces				
	d. All of these				

- 8. Tickets that combines flights from multiple cities into a single reservation are called ______.
 - a. One way b. Round trip c. Multi-city d. None of these

3.6 LET US SUM UP:

Every business have single agenda to get profit, for what they are working. Consolidator either OTA or small agents also works with same intention. As airline also working for its profit. They offer various schemes to attract their customer (passenger). Intermediaries as name suggest are link between passenger and airlines but they are not doing it for charity. Therefore they are also allowed to use offers provided by airlines. However, some of them use cheap tricks to get more profit and these tricks are also used by some cleaver passengers who knows the loopholes. For financial reasons, airlines are strongly opposed to such booking tricks. Airlines also cite "public safety" concerns as one of their justifications. Many airlines have developed methods for identifying and penalising passengers who use such tactics, most notably through their frequent flier programmes.

Booking ploys are generally a violation of the passenger-airline contract of carriage. Contract infringement is typically treated as a civil, rather than a criminal, offence. When a traveller is found to have used such methods, airlines may confiscate tickets, cancel frequent flier status, and charge travel agencies for the fare difference.

3.7 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

- **1.** b **2.** a **3.** d **4.** a
- 5. c 6. c 7. d 8. c

3.8 GLOSSARY:

Back to Back Ticketing: When a passenger booked to round trip ticket and use inappropriately.

Blackout Dates: Duration in which certain fares or certain types of tickets are not permitted.

Bucket Shop (Consolidator): A company that negotiates the purchase of blocks of tickets from an airline and sells them to the public.

Bumping: Passengers who are denied a seat on a flight they initially booked owing to an oversold flight. They'll be 'bumped' to another flight after that.

Stopover: A layover of more than 12 hours in length that allows to get out and about in the city.

Yield Management : A variable pricing technique focused on anticipating, influencing, and analysing consumer behaviour in order to optimise revenue or profits from a fixed, time-limited resource.

3.9 ASSIGNMENT:

1. In this module you will find a case study of an airline who sued his passenger for taking advantage of air booking ploys. Find out similar incidence and discuss with your peers, teachers and experts of the industry.

3.10 ACTIVITIES:

1. Visit websites of various Air ticket booking sites and find what special tickets they offer? As well as also try to find out, how they are managing their profit by doing so?

3.11 CASE STUDY:

Lufthansa is suing a passenger for taking advantage of "hidden city" fares to save money

By Gaby Del Valle

Lufthansa, the German national airline, is suing a passenger for missing his layover. This story is a little more complicated than an airline suing a customer for being late or careless: Lufthansa is claiming that the passenger booked a flight from Seattle to Oslo, Norway, with a layover in Frankfurt, Germany, and intentionally missed the connecting flight, instead boarding a different Lufthansa flight he had booked that was headed to Berlin, his intended destination. (Would he have gotten caught if he had just, you know, booked the Berlin flight through a separate airline? Who knows?)

The passenger, who is unnamed in court documents obtained by CNN, was allegedly taking advantage of a loophole that makes fares through a certain destination – such as a flight to Oslo through Frankfurt – cheaper than fares to that destination. Lufthansa is claiming €2,112 (approximately \$2,300) in damages, claiming the passenger violated its terms and conditions by using the so–called "hidden city" loophole.

Here's how it works: Let's say you need to get from point A to point B, but for some reason, it's cheaper for you to fly from point A to point C with a layover in point B. As long as you don't check a bag (since checked bags always fly to the plane's final destination, provided the airline doesn't lose your luggage) there's theoretically nothing stopping you from simply not catching your connecting flight, as long as your paperwork is in order.

These flights are cheaper because, as the blog Cranky Flier points out, "airlines don't price based on cost. Airlines price based on demand." A direct flight is more desirable than a flight with a layover, so airlines will price those flights higher. And certain cities, like Frankfurt, also operate as hubs that serve as common layover points. An airline can fill a plane into Frankfurt with a mix of customers who are actually headed there and others who are stopping there to catch a flight elsewhere.

Airlines, obviously, don't like that people have caught on to hidden city ticketing. The most obvious reason is that if someone books a flight and only shows up for one leg of it, the airline can't sell that seat to another passenger. (Although it's worth noting that airlines often overbook flights, and it's always possible that someone is waiting to catch a flight on standby – but since it's not a guaranteed sell, airlines don't prefer it.)

They also claim that passengers who intentionally miss part of their flight make things worse for other customers: Gate agents could hold the flight for a passenger who has no intention of showing up, possibly delaying the flight and having a cascading effect. And a customer who purchases a flight he has no intention of taking could drive prices up for other customers who try to book later by making it seem like there's more demand for that flight than there actually is.

Airlines also argue that the hub-and-spoke model, where one airport serves as a "hub" to other airlines in the region, lets them keep prices low in order to compete with budget airlines, which do charge per leg.

The Lufthansa lawsuit isn't the first time an airline has sued someone for gaming the system. In 2014, United Airlines and the booking website Orbitz filed a joint suit against Aktarer Zaman, the then–22–year–old coder behind Skiplagged, a website that helps people find hidden city flights, claiming \$75,000 in damages. United argued that Zaman was unfairly competing with other booking sites and promoting "strictly prohibited" travel. Orbitz joined the suit because Skiplagged redirected potential passengers through Orbitz, effectively forcing the site to violate its own contract with United. A judge ended up throwing out the case because it was filed in Chicago and Zaman neither lived nor worked in that jurisdiction.

As for the Lufthansa suit, it's unclear what will happen next. A judge dismissed the case in December, but a Lufthansa spokesperson told CNN that the company "has already filed the appeal against the decision" and will move forward with the case. One travel blogger argues that no matter the outcome, Lufthansa will end up looking like the bad guy. After all, it's rare that the public will side with an airline.

Ouestions :

- 1. According to you, in this incident who (passenger, Airlines) is right and who is not. Explain your view in detail.
- 2. As a part of marketing and selling strategy airlines use to give various offers. Do you think these can be called ethical practice? Explain Yes or No.

3.12 FURTHER READING:

Special Fares and Airline Ticketing

- 1. The Business Travel Almanac, by Donna Williams and Michael Miller
- 2. Ethical Issues in Aviation by Elizabeth Hoppe
- 3. Flight Reservation And Airline Ticketing by Jitendra Sharma
- 4. Air Fares and Ticketing by Davidoff

BLOCK SUMMARY

A fare consists of the following elements: city pair, rule number, fare class, one-way/round-trip indicator, MPM or routing number, currency, fare amount, effective date, cease date, and miles. Fare Calculation and Charging is made up of three interconnected functions. First, the applicable fare for the trip is computed, next the transaction that will result in the receipt of the applicable fare, and finally, the transactions are recorded. Commercial airline passengers use airline booking ruses to cut the cost of flying to a specific destination. These tactics exploit pricing inefficiencies by working around the airline's fare and route structures, which are typically the product of fortress hubs. Passengers are permitted to take advantage of airline promotions. However, some of them utilise cheap techniques to increase their profits, and some savvy passengers who are aware of the loopholes also use these tricks. Airlines are strongly opposed to such booking methods for financial reasons. Passenger-airline contracts of carriage are routinely violated by booking ploys. In most cases, contract infringement is addressed as a civil rather than a criminal offence. In some situations, airlines have penalised passengers for their transgression.

BLOCK ASSIGNMENT

- 1. What impact will be on society after decision of GoAir to Hire All Female Flight Attendants to Save Money on Fuel?
- 2. Why air-tickets involves various codes ?
- 3. Why One Way ticket is costlier than Round Trip or Multi-City Tickets?
- 4. Why price of same airline for same itinerary have different cost on different platform ?
- 5. What service difference can be seen in different class of an airline?
- 6. What reason could be people try to mislead the airline during ticket booking online ?
- 7. Briefly explain, how data element of an air–ticket effects the cost of ticket ?

mare ricketing - ii	***	Enrolment N	0.:				
	1.	How many ho	ours did yo	u need for	studyin	ng the uni	ts?
		Unit No.	1	2		3	
		No. of Hrs	S.				
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	ı	tems	Excellent	Very Good	Good	Poor	Give specific example if any
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	11)	lustration used Diagram, tables etc)					
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AIRFARE & TICKETING PART-II (ADVANCED) (PRACTICAL + THEORY)



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ROLE OF SELF INSTRUCTIONAL MATERIAL IN DISTANCE LEARNING

The need to plan effective instruction is imperative for a successful distance teaching repertoire. This is due to the fact that the instructional designer, the tutor, the author (s) and the student are often separated by distance and may never meet in person. This is an increasingly common scenario in distance education instruction. As much as possible, teaching by distance should stimulate the student's intellectual involvement and contain all the necessary learning instructional activities that are capable of guiding the student through the course objectives. Therefore, the course / self-instructional material are completely equipped with everything that the syllabus prescribes.

To ensure effective instruction, a number of instructional design ideas are used and these help students to acquire knowledge, intellectual skills, motor skills and necessary attitudinal changes. In this respect, students' assessment and course evaluation are incorporated in the text.

The nature of instructional activities used in distance education self- instructional materials depends on the domain of learning that they reinforce in the text, that is, the cognitive, psychomotor and affective. These are further interpreted in the acquisition of knowledge, intellectual skills and motor skills. Students may be encouraged to gain, apply and communicate (orally or in writing) the knowledge acquired. Intellectual- skills objectives may be met by designing instructions that make use of students' prior knowledge and experiences in the discourse as the foundation on which newly acquired knowledge is built.

The provision of exercises in the form of assignments, projects and tutorial feedback is necessary. Instructional activities that teach motor skills need to be graphically demonstrated and the correct practices provided during tutorials. Instructional activities for inculcating change in attitude and behavior should create interest and demonstrate need and benefits gained by adopting the required change. Information on the adoption and procedures for practice of new attitudes may then be introduced.

Teaching and learning at a distance eliminates interactive communication cues, such as pauses, intonation and gestures, associated with the face-to-face method of teaching. This is particularly so with the exclusive use of print media. Instructional activities built into the instructional repertoire provide this missing interaction between the student and the teacher. Therefore, the use of instructional activities to affect better distance teaching is not optional, but mandatory.

Our team of successful writers and authors has tried to reduce this.

Divide and to bring this Self Instructional Material as the best teaching and communication tool. Instructional activities are varied in order to assess the different facets of the domains of learning.

Distance education teaching repertoire involves extensive use of self- instructional materials, be they print or otherwise. These materials are designed to achieve certain pre-determined learning outcomes, namely goals and objectives that are contained in an instructional plan. Since the teaching process is affected over a distance, there is need to ensure that students actively participate in their learning by performing specific tasks that help them to understand the relevant concepts. Therefore, a set of exercises is built into the teaching repertoire in order to link what students and tutors do in the framework of the course outline. These could be in the form of students' assignments, a research project or a science practical exercise. Examples of instructional activities in distance education are too numerous to list. Instructional activities, when used in this context, help to motivate students, guide and measure students' performance (continuous assessment)

PREFACE

We have put in lots of hard work to make this book as userfriendly as possible, but we have not sacrificed quality. Experts were involved in preparing the materials. However, concepts are explained in easy language for you. We have included many tables and examples for easy understanding.

We sincerely hope this book will help you in every way you expect. All the best for your studies from our team!

AIRFARE TICKETING - II

Contents

BLOCK 4: GDS AND CRS

Unit 1 Introduction and Role of GDS & CRS in Aviation

Introduction, CRS, GDS, Sabre, Amadeus, Travelport, Galileo, Worldspan, Abacus, History and Evolution, PSS, NDC

Unit 2 Operators in Global Distribution System

Introduction, Sabre GDS, Amadeus GDS, Worldspan GDS, Galileo GDS, Apollo GDS, Abacus GDS

Unit 3 CRS Codes and its Function in Aviation

Introduction, Codes Provided by IATA, Amadeus Codes, IATA SSR, Ancillary Revenue, Functions of Codes

Unit 4 Future Trends in Airline GDS & CRS

Introduction, Future Trends in Reservations, Problems with Current GDS and CRS, Current Situations, MSP, NDC



<u> Airfare Ticketing – II</u>

BLOCK 4: GDS AND CRS

UNIT 1: INTRODUCTION AND ROLE OF GDS & CRS IN AVIATION

UNIT 2: OPERATORS IN GLOBAL DISTRIBUTION SYSTEM

UNIT 3: CRS CODES AND ITS FUNCTION IN AVIATION

UNIT 4: FUTURE TRENDS IN AIRLINE GDS & CRS

GDS AND CRS

Block Introduction:

Advancement is technology gives birth of GDS and CRS system which is very useful for all the stakeholder viz. Passengers, Airlines as well as travel agents. A global distribution system (GDS) connects travellers with suppliers such as hotels and other lodging options all around the world. It allows travel agencies and online booking engines to receive real-time product, pricing, and availability data, as well as automate transactions.

Despite the fact that both systems perform the same activities, CRS only offers information on airlines. GDS allows you to book a ticket, arrange a hotel stay, or rent a car. The CRS is used by airlines as part of their PSS inventory management system. It's even more perplexing because all of the big GDSs also 'own' a PSS, making the distinction difficult to make in many circumstances.

Block Objectives:

After understanding this block learns will have knowledge and its objectives is :

- To provide the learner with information about evolution and development of GDS and CRS
- To provide information about its operators, code and future trends

Block Structure:

Unit 1: Introduction and Role of GDS & CRS in Aviation

Unit 2 : Operators in Global Distribution System

Unit 3: CRS Codes and its Function in Aviation

Unit 4: Future Trends in Airline GDS & CRS

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Introduction and Role of GDS & CRS in Aviation

UNIT STRUCTURE

- 1.0 Learning Objectives
- 1.1 Introduction
- **1.2** CRS
- 1.3 **GDS**
 - 1.3.1 **Sabre**
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- 1.8 Answers for Check Your Progress
- 1.9 Glossary
- 1.10 Assignment
- 1.11 Activities
- 1.12 Case Study
- 1.13 Further Reading

1.0 LEARNING OBJECTIVES:

- To provide the learner with information about historical development of GDS systems
- Understanding of the relationship between CRS and GDS

1.1 INTRODUCTION:

For years, booking an airline ticket was a difficult and unpleasant procedure. Since it became a viable means of transportation in the early 1940s, the demand for air travel has increased. As a result, carriers had to overcome a number of challenges in order to make booking efficient, convenient, and simple from an operating standpoint. This gives rise to the concept of a travel agent, and then to travel agencies. The entire booking process might be finished in minutes with their assistance. That happened in the 1960s, twenty years later. Travellers now have access

to fully automated ticket purchasing, reserving, and payment for flights via their cell-phones, which was previously inconceivable due to constantly growing technology and advanced gadgets.

Due to a rise in the number of passengers and the use of analogue booking, American Airlines improved their booking pipeline. As a result, the first computer reservation system (CRS) was created. In the late 1960s, work on an automated reservation system began. SABRE was born as a result of this endeavour. The travel and tourism business has seen a boom with the emergence of the internet.

The original reservation system went through three rounds of development. Computer Reservation System (CRS), Airline Reservation System (ARS), and Global Distribution System (GDS) are all examples of airline reservation systems (GDS).

A computerised system that contains information about multiple air carriers' schedules, seat availability, and fares, with or without the ability to make reservations or issue tickets, to the extent that some or all of these services are made available to subscribers.

A system that allows airlines, automobile companies, hotels, and trains to make reservations and issue tickets by storing information on availability, rates, and related services. Subscribing travel agents, booking engines, and airlines have access to some or all of these functions through a GDS.

The "Global Distribution System," or "GDS," or the "Computerised Reservation System," or "CRS," are internet—based travel and tourism information highways and inventory storage platforms that connect buyers (tourists) and sellers (service providers). GDS and Computer Reservation System (CRS) perform the same duties, except CRS only supplies airline information. GDS allows you to reserve a ticket, book a hotel room, or rent a car. This is why they are known as Global Distribution Systems (GDS), because they allow you to reserve anything.

1.2 CRS:

A Computer Reservation System (CRS) or central reservation system is an automated reservation system used to store information, retrieve information, and conduct air travel transactions. The system was originally intended for use by airlines, but it was eventually expanded to include travel agents. It is now also used to store and disseminate information on tourism products and services to the general public.

SABRE was the first computerised booking system, and it helped American gain market share swiftly. SABRE was completed in 1964, and it was capable of processing over 7,000 bookings per hour with a near–zero mistake rate. SABRE was based on two IBM mainframes that were linked to hundreds of terminals, allowing American Airlines employees to check inventories and book flights in seconds. A reservation system might also retain passenger information in its memory for the first time.

American Airlines invested years and millions of dollars developing SABRE, which enabled the company to gain market leadership.

Introduction and Role of GDS & CRS in Aviation

A central reservation system, also called an airline or computer reservation system, serves as storage for flight-related information like schedules, fares and rules for each booking class, passenger name records (PNRs), e-tickets, etc. It's also involved in managing booking requests and ticket issuing. Some airlines run their own CRS that may come as a part of the PSS. Yet, many carriers prefer to host and manage reservations on one of the GDSs.

In a broader sense, a CRS is a key technology of any travel organization that sells its inventory online, namely, hotels and airlines. It allows managers to control reservations across all distribution platforms.

In the early 1960s, the Computer Reservation System, also known as the Central Reservation System or the Centralised Reservation System, was a technology for inventory management that was largely utilised by airlines. CRS is now utilised by the majority of airlines, hotel chains, bus and taxi companies throughout the world as an online, real–time booking engine and distribution system, in addition to an internal inventory control tool. Taj Central Reservation System, Hewlett Packard's EDS, Navitaire, Leading Hotels of the World CRS, SabreSonic or Altéa, Best Western Hotels CRS, ITC Welcome group CRS, Swiss bell hotels CRS, Holiday Inn Worldwide CRS, Hilton CRS, and Indian Railways reserved tickets are issued on a first come, first served basis through Computerized Passenger Reservation System (PRS)/through internet.

1.3 GDS:

Global Distribution System is a global network of multiple CRS connected through high speed internet. A GDS is owned by a company that offers its services globally at a certain charge. Initially GDS was used by airlines for online, real time inventory management, but as of now it is also used by Hotels, Cab and Bus service providers for not just inventory management but also for global distribution and bookings of its services. It is operating as a middleman between travel agents and numerous travel service providers. The three main GDSs to know about are Amadeus, Sabre, and Travelport Play.

A GDS collects flight data from a variety of sources, including the Airline Tariff Publishing Company (ATPCO), the leading provider of fare-related content. Carriers that work with ATPCO can update their prices four times a day for domestic flights in the United States and Canada, and once a day for international flights; the Official Aviation Guide for Airways (OAG) and Cirium, which store flight schedules; and a number of airline CRSs, which hold data on available seats and ancillaries. The GDS makes offers based on timetables, pricing, and availability and transmits them to OTAs and other travel platforms when they request them. Travel agents use manual terminals to connect to GDS content.

A global distribution system (GDS) is a massive database that keeps and updates massive amounts of information regarding inventory and hotel rates for travel agencies and websites. This system is responsible for the significant growth of the travel industry and served as the foundation for the majority of internet—based travel services. Travel agents/agencies can use this system to access real—time availability, pricing, and offers for aircraft tickets, hotel rooms, rental cars, cruises, ferry reservations, trains, and other services. When compared to public pricing, hotels sell their rooms on GDS for 30% less.

The Global Distribution System (GDS) is an expensive channel that primarily allows the sale of huge numbers of rooms to large corporations and travel agencies. As a result, small agencies do not require GDS. Sabre, Amadeus, Galileo, Abacus, Worldspan, and Travelport are some well–known instances of GDS.

1.3.1 Sabre:

Sabre is a US based global distribution system. Its origins may be traced back to the 1960s, making it an older GDS system than Amadeus, however it currently has a lesser market share, serving over 60,000 travel agents globally.

1.3.2 Amadeus :

Amadeus GDS is a prominent GDS system that was developed by Air France, Lufthansa, Iberia, and SAS airlines as a European alternative to Sabre, a similar GDS system headquartered in the United States. It was created in 1987, and while its initial concentration was on linking end customers with airline inventory, it has subsequently expanded to include access to additional travel services such as hotel rooms and vehicle rental services.

1.3.3 Travelport:

It is the third largest GDS system, and it was formed in the United States as well, albeit its headquarters are in the United Kingdom. Its origins date back to the 1970s, making it older than Amadeus but younger than Sabre. Galileo, Apollo, and Worldspan are among its subsidiaries.

1.3.4 **Galileo**:

Travelport owns the Galileo computer reservations system. It had a 26.4 percent share of global CRS airline bookings in early of this century. The Galileo CRS is used to book cruises, train trips, car rental, and hotel rooms in addition to airline reservations.

1.3.5 Worldspan:

Worldspan GDS provides travel agencies, travel service providers, and companies with global electronic distribution of travel information, Internet products and connectivity, and e-commerce capabilities. Travel agents and travel-related websites utilise Worldspan to book airline tickets, hotel rooms, rental cars, tour packages, and other related products. It holds a 15% market share in the global GDS industry.

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1.3.6 Abacus :

Abacus is a global distribution system (GDS) used by Asian travel agents. Abacus International Private Ltd owns it. Sabre Holdings and eleven Asian airlines own a portion of the company. Its headquarters are in Singapore.

1.4 HISTORY AND EVOLUTION:

The Internet has transformed the way we connect, communicate, store, and distribute not only data but also goods, services, and finance in real time, regardless of the sender's or receiver's geographical location. This has all been made possible by the internet, which dates back to the late 1960s, when the first functional prototype of the Internet was created with the construction of ARPANET, or the Advanced Research Projects Agency Network, ARPANET, which was first supported by the United States Department of Defence, used packet switching to allow several computers to communicate on a single network. Since then, the ARPANET has evolved into the "Internet," an "Information Superhighway." IBM's online transaction processing (OLTP), established in the 1960s, was one of the first kinds of online trade, allowing the processing of financial transactions in real-time. One of its applications was the Semi-Automatic Business Research Environment (SABRE), a computerised ticket reservation system developed for American Airlines. In this case, computer terminals in several travel agencies were linked to a giant IBM mainframe computer, which processed transactions concurrently and coordinated them so that all travel agents had access to the same information at the same time. It was the first CRS (Computerized Reservation System) in the travel business. Later, as the internet became a worldwide phenomenon, CRS evolved into GDS (Global Distribution System).

After 1970s, numerous airlines throughout the world realised the benefits of these technical developments in terms of real-time stock maintenance and distribution for not only B2B but also B2C linkages. With the increased acceptance of the internet by the general public, the CRS and GDS systems, which were primarily used by airlines to maintain and distribute airline seats globally, were modified so that they could also handle other services such as hotel booking, bus ticket booking, renting cars, cruise line booking, train ticket booking, and so on.

Accenture, a worldwide management consulting firm, established Navitaire, a distribution system for low-cost airlines, in 1993. Navitaire attempted to compete with GDS but eventually became a subsidiary of Amadeus, joining the growing monopolisation trend. Soon after, Amadeus acquired a number of smaller GDSs, outgrowing the German market to become the world's largest distribution system.

Over the next few years, GDSs will be spun off into separate firms around the world. Galileo purchased Apollo Systems in 1992 and went public as a separate company in 1997. Amadeus acquired different CRS/

GDS systems and went fully operational in 1999, while SABRE separated from American Airlines in 2000.

In the early 2000s, practically all airlines and travel firms found online booking to be a reliable alternative to phone sales. The first travel APIs were developed by technology suppliers, GDSs, and airlines to source flights and other types of travel data.

Meanwhile, mobile technologies advanced with the introduction of smartphones and 3G internet connections. Furthermore, mobile websites and applications gained the ability to connect to APIs in order to source and update data. As a result, travel technology vendors concentrated on inventing ways to book flights directly from mobile phones. In 2009 first mobile app KAYAK's application has been launched.

Now, with the rise of mobile internet, social networks have also taken up a significant portion of the travel business. Meet & Seat by KLM is an excellent example of leveraging social networks in online booking. KLM was successful in integrating social networking into the seat allocation procedure. KLM allows passenger to view who will sit next to them and choose their seat based on social profiles by sharing the link to Facebook or LinkedIn pages.

1.5 PSS:

A passenger service system (PSS) is a collection of software modules that facilitate interactions between the carrier and its clients. Its primary components are a central or airline reservation system (CRS), an inventory control system (ICS), and a departure control system (DCS). It includes reservation, Inventories and departure control system. It is also helpful in various passenger related issues and provide efficiency in operation. A revenue management tool that analyses historical data and sets pricing guidelines is also included in the PSS, as is an e-commerce platform for flight and ancillary distribution. PSSs with significant market share include Navitaire's New Skies, Amadeus' Altea, and Bravo Aero's Avantik.

PSS providers are transitioning from monolithic designs and toward service—based designs, such as service—oriented architecture (SOA) or microservices. This technique enables the development of complicated programmes as suites of tiny, scalable, independently maintained and deployed modules. When necessary, airlines can add, update, or change components without interrupting the overall system. Software components in the SOA scenario communicate with one another via Enterprise Service Bus (ESB) messaging protocols. Microservices are frequently regarded as the next step in SOA evolution: The components are totally self—contained, use different databases, and exchange data through HTTP—based REST or Thrift APIs.

1.6 NDC:

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The most of flights are distributed via GDSs, which require all of the above-mentioned systems, to communicate data using the archaic EDIFACT protocol. As a result, airlines are unable to collect precise information about their passengers, nor are they able to deliver feature-rich content and a diverse choice of ancillaries (such as in-flight meals or excess baggage alternatives) to their customers. They must, however, pay additional fees for GDS services.

The New Distribution Capability (NDC) is a data exchange standard based on Offer and Order management systems that enables airlines to produce and deliver relevant offers to customers independent of distribution channel.

IATA introduced it in the goal of replacing the current scenario. It enables travel systems to exchange data with one another through common travel APIs and the content–friendly XML protocol. It improves communications between airlines and travel agents and is available for implementation and usage by any third party, intermediary, IT supplier, or non–IATA member. NDC enables carriers to access customer information, customise user experiences, and offer ancillaries and seats from a single source, eliminating the need for most third parties. Despite the fact that dozens of airlines and IT businesses have adopted NDC capability, GDS remains the industry's primary distributor.

NDC, in general, is a more modern, feature—rich way for airlines to share their product offerings via Application Programming Interfaces (APIs) directly from the airline Passenger Service Systems (PSS) to a B2B platform or Airline Agent Portals or OTA's, etc., which is a significant improvement over the legacy EDIFACT protocol that has been in use for the past 40 years. Today, this connectivity (from the airline PSS to the outside world for direct consumers) occurs via the airline website, where customers can directly access airline material without any third—party interference.

☐ Check Your Progress:

- - a. NITA
- b. IATA
- c GITA
- d. SITA
- 2. Global Distribution System is a collection of _____ connected via high–speed internet and using a common platform as an inventory storage and management platform.
 - a. PSS
- b. ICS
- c. NDC
- d. CRS
- 3. SABRE was the first computerised booking system developed by
 - a. Air France

- b. American Airlines
- c. Russian Army
- d. None of these

Airfare Ticketing - II	4.	The primary components of PSS are
		a. CRS b. ICS c. DCS d. All the above
	5.	The full form of APIs in distribution system is
		a. Application Passenger Interfaces
		b. Airline Programming Interfaces
		c. Application Programming Interfaces
		d. Aviation Processing Interfaces
	6.	When the internet became widely accessible, CRS evolved into
		a. PSS b. NDC c. GDS d. PMS
	7.	IBM's online transaction processing (OLTP) was established in
		
		a. 1940s b. 1960s c. 1980s d. 1930s
	8.	The original reservation system went through three stages of
		development. These are
		a. CRS, ARS, and GDS b. CRS, PMS, and GDS
		c. ARS, PMS, and GDS d. CRS, ARS, and PMS

1.7 LET US SUM UP:

SABRE was the first computerised booking system, and it helped American gain market share swiftly. American Airlines invested years and millions of dollars developing SABRE, which enabled the company to gain market leadership. Due to technological improvements, particularly after the 1960s, airlines around the world began to manage their stocks online; this was then utilised as a reservation system and was dubbed CRS (Computerised / Centralised Reservation System); these CRS eventually evolved into the current GDS's. The "Global Distribution System," or "GDS," is a collection of CRS connected via high–speed internet and using a common platform as an inventory storage and management platform where tourists and service providers acquire and sell their services.

This is the new era of flight travel. Passengers' expectations for individualised travel and purchase experiences are rising. The need for omni-channel sales and distribution skills is greater than ever. The airline sector requires the most innovative and exciting ancillary items.

A modern PSS is a complicated framework that combines hundreds of technologies and applications that automate a wide range of passenger-related activities. Historically, this massive multi-tasking entity grew from its primary component, a computer reservation system (CRS).

The New Distribution Capability (NDC) enables airlines to produce and deliver relevant offers to customers independent of distribution channel.

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1.8 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

1. b **2.** d

3. b

4. d

5. c

6. c

7. b

8. a

1.9 GLOSSARY:

ARPANET: Advanced Research Projects Agency Network

B2B: Business-to-business transactions are those that take place between corporations rather than between a company and an individual consumer.

B2C: Transactions between a firm and individual consumers are referred to as business—to—consumer transactions.

CRS: Computerised / Centralised Reservation System

GDS: Global Distribution System

Information Highway: a telecommunications infrastructure or system used for common and rapid access to information

OTA: Online Travel Agency

SABRE: Semi-Automatic Business Research Environment

VRS: Virtual Reservation System

1.10 ASSIGNMENT:

1. What are different GDS and CRS used in airline industry? Make a detailed list of it.

1.11 ACTIVITIES:

1. Discuss with your friend how these GDS have provided ease for both traveller as well as service providers.

1.12 CASE STUDY:

The Sabre Story: A chance meeting on an airline flight that turned into the technology leader for the travel industry.

It was 1953, the airline industry had seen a growth in air travel following World War II, and airlines were struggling to manage the link between airline inventory and passenger reservations. This resulted in inaccuracies that drove flights to be frequently over—or under—booked, passenger service issues, and underutilized aircraft. C.R. Smith, president of American Airlines, and R. Blair Smith, a senior sales representative for IBM, met on an American Airlines flight from Los Angeles to New York. Their conversation about the travel industry sparked the idea for a data processing system that could create and manage airline seat reservations and instantly make that data available electronically to any agent at any location.

The two companies studied the feasibility of building such a system for five years, ending with an agreement between American Airlines and IBM to build out the specifications for the industry's first passenger name record or "PNR" system. The system was built by IBM based on technology created at MIT for the SAGE (Semi–Automatic Ground Environment) air–defense project. American Airlines named its system Sabre, or Semi–Automated Business Research Environment.

Sabre was fully operational in 1964, a year before any other airline had an installed reservations automation system, and demonstrated to the industry that real–time processing was a feasible and realistic solution to the passenger reservations problem. The first Sabre system was installed on two IBM 7090 computers, located in a specially designed computer centre in Briarcliff Manor, NY. The initial research, development and installation investment in this system took 400 man–years of effort at a development cost of almost US \$40 million. The state–of–the–art mainframe system processed 84,000 telephone transactions per day.

The success of Sabre prompted IBM to build its own system to market to airlines, named PARS – Programmed Airline Reservations System. This brought the realization among the major carriers that their operations also required a similar system, triggering a wave of airline automation that would last through the decade, and truly transform the airline industry, as electronic reservations systems provided important new efficiencies in the distribution of airlines' product. Eventually, a new category developed within the travel industry – the Customer Reservations System (CRS). Later CRS technology was leveraged into Global Distribution Systems (GDS). Sabre has retained its position as an industry leader and innovator in both the airline hosting and global distribution markets.

In 1972, the American Society of Travel Agents (ASTA) saw that the airlines had gained productivity through automation, but the travel agencies were still largely manual and were reliant upon calling the airlines to make reservations for their customers. ASTA had a strong desire to have a common, integrated travel agency system that would allow agencies to take advantage of the same efficiencies the airlines saw through automation. Without the needed support for an industry solution, Max Hopper, who was now responsible for Sabre at American, with the backing of American's new Senior Vice President of Finance, Robert Crandall, prepared to make the Sabre system available to travel agencies.

By April 1976, Robert Crandall had moved from Finance become the Senior Vice President of Marketing, and the first Sabre terminals, and first automated reservations terminals in the industry, were installed in travel agent offices. Approximately 130 travel agent offices had the system by the end of the year. The Airline Deregulation Act of 1978 changed the landscape for airlines, which now had more opportunities to take actions like adding and deleting routes and changing fares. But with opportunity came new threats and challenges, and customers were no longer just looking for available seats, but were looking for available

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seats at the best price. This drove the usage of the systems up, drove reservations and ticket office costs higher, and incented the airlines to transition more of the reservations to travel agents. With that transition, technical innovation was critical to keeping up with demand, and technology advances like the creation of multiprocessor systems, the ability to handle a large fares database, and a large communications network became part of the Sabre system. Sabre introduced Bargain Finder pricing, which automatically provided the lowest fare for a given itinerary, a service that was unmatched in the industry but welcomed as fare pricing became more dynamic, adding complexity for travel agents trying to find the lowest fare for their customers. During this time, the Sabre system expanded to store 36 million fares, which could be combined to create more than 1 billion fare options. By the end of the decade Sabre was running on over 130,000 travel agency terminals worldwide. Although Sabre was primarily focused on corporate customers, easySabre was offered via online services, which enabled consumers to access the Sabre system directly. Using personal computers, consumers could access airline, hotel and car rental information and make their own reservations.

Sabre Airline Solutions released the industry's first revenue management system, increasing airline revenue by optimizing the fare at which each seat was sold, then further advancing revenue management with the invention of virtual and continuous nesting concepts, which are still in use today. By the end of the decade, Sabre's software and systems management had positioned American Airlines as one of the most technologically advanced airlines in the world, and Sabre started taking that technology to the marketplace, providing software, consulting, and systems management services to other airlines.

The early 90s were an exciting time for Sabre as American Airlines was starting to see Sabre as a much larger asset than just an internal IT group. In 1993, American Airlines combined the internal technology teams to form The Sabre Technology Group, and pioneered another first when Kathy Misunas was named CEO – one of the first female CEOs in the technology sector.

In 1996, AMR Corp. – the parent company of American Airlines – made The Sabre Group a separate subsidiary of AMR and did an initial public offering of Sabre stock, with AMR as the majority owner. At this time, leadership of Sabre transitioned to Michael Durham, who moved from his position as Chief Financial Officer of American Airlines. Technology was also moving forward. The World

Wide Web became a viable channel, and the possibility of using the internet to market and sell to consumers outside of the online services like CompuServe and The Source became a reality.

Sabre embraced this new capability, and was the first Global Distribution System (GDS) to create a consumer–facing online booking engine. Travelocity launched on March 12, 1996. It soon had over 1.6

million registered members and began logging about 15 million hits monthly. Sabre was also expanding its services, forming a joint venture with ABACUS international including an agreement for Sabre to provide a customized version of its reservations system to 7,300 subscribers in Asia. This positioned Sabre as the market–share leader in electronic travel distribution in the Asia Pacific region and worldwide.

In another bold move, Sabre signed a hosting agreement with US Airways, and in December of 1998 successfully transitioned approximately 200 US Airways systems to Sabre systems, the largest systems migration in the history of the airline industry. To round out the decade, William Hannigan became the Chairman and Chief Executive Officer of Sabre in 1999.

In 2003, Sam Gilliland was named Chairman and Chief Executive Officer of Sabre Holdings, moving into the position after serving in executive leadership positions in each of the holding companies. Continuing its legacy of innovation, Sabre built a new air travel shopping engine that both enabled the move of historical shopping capabilities off of the mainframe to open systems, and included new, state—of—the art algorithms for finding the lowest available fare. This provided growing the fast—growing online travel agency (OTA) sector with the competitive advantage of hundreds of itinerary options and flexible shopping capabilities, enabling Sabre to fuel capabilities within its own OTA, Travelocity, but also to become the leading global service provider for online agencies.

Big advances were also made to airline products throughout the 2000s. Sabre introduced SabreSonic Customer Sales and Service (CSS) creating the industry's first real intersection of customer—focused solutions and revenue generation across every distribution channel. Sabresconic married the high availability platform and core capabilities already present in the Sabre system with graphical user interfaces, reservations with full customer insight, airline alliance and partnering tools, complete departure control, inventory, online booking, shopping, pricing and interline eticketing hub.

Beyond sales and service, there was significant innovation in airline operations products. In a strategic partnership with Delta Air Lines and Lufthansa, Sabre Airline Solutions built the best network planning suite in the industry, with over 110 airlines using these products today. In addition, Sabre Airline Solutions was one of the first to develop large crew systems, with the initial system first delivered to Singapore Airlines. This product solved complex crew pairing problems of long—haul flights, a solution that has not been replicated by any other competitor and is still in use 20 years later. Finally, Sabre Airline Solutions developed the Aerodynamic Traveler suite which introduced curbside check—in, roving agents and self—serve kiosks. Sabre also made a strategic acquisition in SynXis Corp, expanding the core business to now include reservation management, distribution and technology services for hotels. This business

was renamed Sabre Hospitality Solutions and served to provide an industry–leading platform on which to expand and serve the hospitality industry.

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y, with
re Red
buyers,
leisure

Following the introduction of Sabre Red Workspace, Sabre introduced the world's first B2B application store for the travel industry, with applications that connect to the Sabre Red Workspace. The Sabre Red App Centre was the first online marketplace to connect travel buyers, including travel agencies, travel management companies and leisure operators, with third–party developers. In just two years Sabre Red App Centre adoption grew to 500,000 app downloads from 70,000 users in 112 countries.

Sabre's solutions business, Airline Solutions and the growing Hospitality Solutions have also been busy. Airline Solutions launched key new products across the portfolio, adding powerful merchandising, loyalty, and airport capabilities to the Customer Sales and Service platform. Taking advantage of Sabre's Data and Analytics platforms, AirVision Market Intelligence, the industry's first online tool powered by global demand data that helps airlines make informed flight operation decisions, was launched along with other airline operations and planning applications. Hospitality Solutions launched SynXis

Booking Engine in–context suite, a first–of–its–kind digital retailing solution to help hoteliers optimize their direct distribution channel – and provide travelers with new booking options to unlock the unique hotel experience that is right for them. To round out recent innovations, the award–winning Sabre TripCase mobile travel app was launched on wearable devices, including the Apple watch. Sabre Airline Solutions has business relationships with 82 of the top 100 of the world's largest airlines, and in 2015, worked with American Airlines to support the largest airline reservations system integration project in history. Hospitality Solutions is the partner of choice for 43 percent of all global hotel brand groups, and it hosts the reservations platform for more hotel properties than the top five global hotel chains combined.

1.13 FURTHER READING:

- 1. Reservations and Ticketing with SABRE by Foster Dennis L
- 2. Etourism: Information Technology for Strategic Tourism Management by Buhalis D.
- 3. Tourism, Technology and Competitive Strategies by Poon A.
- 4. Introduction to ecommerce by Rayport J.F. & Jaworski B.J
- 5. The Future Of Global Distribution Systems: The World Wide by Rene Waksberg

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UNIT STRUCTURE

- 2.0 Learning Objectives
- 2.1 Introduction
- 2.2 Sabre GDS
- 2.3 Amadeus GDS
- 2.4 Worldspan GDS
- 2.5 Galileo GDS
- 2.6 Apollo GDS
- 2.7 Abacus GDS
- 2.8 Let Us Sum Up
- 2.9 Answers for Check Your Progress
- 2.10 Glossary
- 2.11 Assignment
- 2.12 Activities
- 2.13 Case Study
- 2.14 Further Reading

2.0 LEARNING OBJECTIVES:

• Understand the evolution, differences and GDS operators.

2.1 INTRODUCTION:

Global distribution system is connecting travellers and suppliers in the market. Whether it is hotel or other lodging operations as well as airlines or transport mode around the world. It gives travel companies and online booking engines real—time product, pricing, and availability data, as well as the ability to conduct automated transactions.

Because of its ability to present hotels, flights, and car rentals in a single convenient interface, the GDS is frequently used to join the corporate travel business. Businesses that organise excursions for their employee also uses the GDS as their primary booking mechanism.

The proliferation of OTAs made the complex web networks of databases even more of a labyrinth. By embracing digital technologies, hotels and other travel firms are capitalising on this trend. As we know it has be started as airline distribution channel and gradually expanded to carry hotel and car rental inventory. The advantage for travel agencies is that the GDS not only displays pricing from multiple airlines, but it also provides extensive information about flights at single window.

Operators in Global Distribution System

Each GDS has its own set of connection costs and regulations for signing up for independent operation rather than through a technical solution. The four major travel and tourism EMSs depicted are Amadeus, Galileo International, SABRE, and Worldspan, as well as the four global distribution systems (GDSs).



2.2 SABRE GDS:

Sabre is a major provider of technology and data-driven solutions that assist airlines, hotels, and travel agencies in growing their businesses and transforming the traveller experience. It was created as part of a collaborative research and development project between IBM and American Airlines. Sabre, which stood for Semi-Automatic Business Research Environment, was given by American Airlines' project manager. The first Sabre system was deployed in Westchester County, New York, in 1960 and until 1964 it became fully operational. This initiative grew to become largest private real-time data processing system of USA and now globally. It pioneered online travel agencies, corporate booking systems, revenue management, and web and mobile itinerary tools.

As of now, Sabre which is a global B2B Travel Network and principally comprises of the GDS. They have travel suppliers approximately 450 airlines, millions of hotels, 200 tour operators, 50 rail carriers, 40 car rental shops, and 17 cruise lines using their platform.

Sabre provides significant flight booking tools, such as mileage tracking, seat maps, queue activities, and so on. Sabre, like Amadeus, has limited hotel data availability, although it does offer basic search, booking, cancellation, and access to reward programme data. They also have numerous APIs for automobile rentals, which enables for the development of a comprehensive search and booking platform, such as calculating rates based on length and fees, exact geo search, searching by unique needs, and so on. Cruises. Despite having the smallest cruise provider portfolio, it provides access to comprehensive cruise content, including interactive maps and cabin photographs. In terms of railway service, Aside from normal services, Sabre allows travellers to buy rail cards, look for station codes, and arrange train trips.

It provides a wide range of technological solutions to travel suppliers and purchasers, including data-driven business analytics, mobile, distribution, and Software as a Service (SaaS) solutions for planning, marketing, selling, serving, and operating their operations.

Dynamic break-even point charts, sensitivity analysis, rapid access, sketch of cost-volume-profit (CPV) correlations, Analysis reports, User specified pie charts, and so on are some of the hidden features of Sabre.

2.3 AMADEUS GDS:

Amadeus GDS integration is a comprehensive GDS Flight API integration for service provider in the industry. It offers great savings and commissions on flights, hotels, transfers, and sight—seeing for them. To improve capital, Amadeus GDS gathers all travellers in one location with a core. As a result, it saves money, pays commissions, and provides a better overall service. This GDS has been developing crucial solutions to assist airlines, hotels, trains, travel agents, tour operators, and others in running their businesses and improving the travel experience.

Air France, Lufthansa, Iberia, and SAS established Amadeus as a European–based alternative to Sabre, a similar GDS system based in the United States. It began in 1987 by connecting end users with airline inventories, but it has since evolved to include additional travel services such as hotel rooms and car rentals. The Amadeus software was created as a modification of the System One software and began operations in 1992. Amadeus eventually merged with System One in 1995.

By pure market share, Amadeus is the world's leading distribution system, accounting for over 40% of travel agency bookings. The company's offices are in Spain, and the central database is located in Germany. It now works in over 190 markets, bringing together almost 500 airlines, 77 million hotel rooms, 69 car rental firms, 43 railway carriers, and 53 cruise and ferry lines. The EMEA region is Amadeus' main distribution area, and it employs over 17,000 employees worldwide.

This GDS enables the users to control and load document stock, print tickets, perform manual document registrations, and view sales reports. It also includes automatic reporting of documents that are accountable. The IATA ticketing regulations, as well as the needs of BSP and ARC in the United States, are all met by the Amadeus Central Ticketing system. Amadeus provides basic hotel booking capabilities, including search and pricing information. It also operates an iHotelier GDS, which connects to all major GDS. Amadeus Cruise Web Services offers a wide range of cruise booking options, including transfers, special services, excursions, bus options, and more. It allows for revisions and cancellations in addition to conventional bookings.

Adopting the Amadeus GDS system has a number of benefits for hoteliers, the most obvious of which being global distribution to travel agents and clients. The portal allows travel firms to access hotel inventory

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round the clock, for both B2B and B2C distribution. When compared to other GDSs, Amadeus is unique in that it enables insurance shopping in addition to booking. It connects OTAs and retail agencies with international and domestic insurance providers, allowing them to create pre–filled insurance paperwork.

2.4 WORLDSPAN GDS:

Travelport, the third major GDS system, was formed in the United States as well, albeit its headquarters are in the United Kingdom. It was created for airlines companies, however now it is used to distribute a wide range of products and services to the travel industry, including hotel rooms and hotel merchandise. Its origins date from the 1970s, making it older than Amadeus but younger than Sabre. While North America is Travelport's primary market, it is less reliant on a single market than its competitors, with a major portion of its bookings split across North America, Europe, and Asia Pacific. The Apollo, Worldspan, and Galileo GDS systems make up Travelport. So, it is a Travelport platform and the technology leader in web-based travel e-Commerce, offering solutions for all elements of the travel business online, as previously said. As a leading GDS, Worldspan delivers travel distribution, technologies, and services to thousands of travel organisations worldwide, including travel agents, businesses, travel suppliers, and websites. Worldspan optimises worldwide travel distribution and transaction processing by providing industry-first rates, pricing, shopping, and booking technologies, as well as a portfolio of interactive shopping features, helping travel companies to decrease costs, improve efficiency, and boost revenues.

The ability for hotel owners and others in the travel business to distribute their products to travel agencies all around the world is one of the key advantages of Travelport GDS. Indeed, Travelport's global distribution is particularly important because it is less reliant on its local market than its two main competitors (Sabre and Amadeus).

2.5 GALILEO GDS:

United Airlines built the first computerised central reservation system in 1971, which gave birth to Galileo. Due to the great market penetration of American Airlines' Sabre and United Airlines' Apollo systems, other airline groups established Worldspan and Galileo in an attempt to obtain share of the market in the online booking market. The Galileo system was moved from Denver, Colorado, to the Worldspan data centre in Atlanta, Georgia, in 2008, following the merger of Travelport and Worldspan (although they now share the same data centre, they continue to be run as separate systems). This system was formed by a collection of nine European airlines and modeled after United's Apollo which it absorbed. Later, Travelport bought the Galileo system and added Worldspan in 2007. The Galileo International Partnership was formed in September 1993 by The Galileo Company Limited of Swindon/Wiltshire, England, and Covia

Corporation of the United States to merge the Apollo and Galileo technologies. Galileo International has operated as Apollo in the United States, Mexico, and Japan, and as Galileo in the rest of the world, since the merger. The Galileo Central System was based in Denver, Colorado, and used its own Galileo International Distribution Network, as well as national and international networks, including the global SITA network.

This CRS is also used to book train trips, cruises, auto rentals, and hotel rooms, in addition to airline reservations. The International Air Transport Association, the Open Travel Alliance, and SITA are all members of Galileo. It has direct booking and ticketing capabilities. It opened the way for airlines, hotels, automobiles, tourism, cruises, and other industries. It caters to tourist agents, travel agencies, tour operators, and other hospitality professionals. The system has created ASK Travel Port, an online search tool where registered customers can obtain answers to their commonly asked inquiries and queries.

2.6 APOLLO GDS:

Apollo, as a leading GDS, provides travel distribution, technologies, and services to tens of thousands of travel organisations throughout the world, including travel agencies, enterprises, travel suppliers, and travel websites. United Airlines utilised the Apollo reservation system until 2012, when it converted to shares, the system used by its former Continental Airlines affiliate. Customers of Galileo International (now Travelport GDS) travel agencies in the United States, Canada, Mexico, and Japan continue to use Apollo.

The Apollo system was introduced by United Airlines in 1971, and it was based on IBM's PARS (programmed airline reservation system), which had been established in 1964 and subsequently refined by Eastern Airlines. United Airlines established the Apollo Services Division in 1976 to handle the Apollo system and connect it to travel agencies. In 1986, the division was split up under the subsidiary Covia Corporation. The Galileo Company Limited, commonly known as the Galileo Partnership, was created in July 1987 by the Covia Corporation and the European carriers British Airways, KLM, and Swissair. Alitalia and Austrian Airlines joined the Galileo consortium in August 1987, with AerLingus and TAP Air Portugal joining in October 1987, Sabena Belgian World Airlines joining in February 1988, and Olympic Airways joining in March 1988.

Due to financial issues, Sabena exited the consortium in the early 1990s. Covia Corporation was renamed Covia Partnership in early 1988, and its shares were purchased by United Airlines (50%) and USAir (12%), as well as Alitalia, British Airways, KLM, and Swissair (38 percent combined). In 1989, the Galileo system went live, merging the national reservation systems of several partner airlines such as Corda in the Netherlands, Sigma Travel System in Italy, Travicom in the United Kingdom, Traviaustria in Austria, and Traviswiss in Switzerland. After

Operators in Global Distribution System

then, the name Corda was solely used for KLM's internal airline system, and Travicom was renamed Galileo UK.

2.7 ABACUS GDS:

Check Your Progress:

7.

Cathay Pacific Airways, Singapore Airlines, and Thai Airways International PLC created Abacus in 1987. Other airlines joined after Thai Airways International dropped out of the arrangement. PARS and Abacus inked a contract in 1988 to build a global system, laying the groundwork for Worldspan. This region's travel agencies are now the only ones who use Abacus. It is located in Singapore and is owned by Sabre Holdings, which bought a majority investment in the company from 11 Asian airlines those are All Nippon Airways, Cathay Pacific, China Airlines, EVA Airways, Garuda Indonesia, Dragonair, Philippine Airlines, Malaysia Airlines, Royal Brunei Airlines and SilkAir. Abacus has global and distinctively local ties with airlines and hotels, including the top portfolio of low–cost content and Chinese airline content, and services over 100,000 travel agencies across the Asia–Pacific region's 59 markets.

1.	owns	Galileo, a glob	oal distribution	system.	
	a. Sabre	b. Travelport	c. Abacus	d. None of these	
2.	Abacus is a glo		system (GDS)	only used by travel	
	a. Asia	b. Europe	c. America	d. Australia	
3.	Air France, Luf as an alternativ		and SAS has est	tablished	
	a. Apollo	b. Travelport	c. Abacus	d. Amadeus	
4.	The first Sabre	system became	fully operation	nal in	
	a. 1960	b. 1964	c. 1987	d. 2008	
5.		ounded in 1987 b nai Airways Inte	<i>3</i>	Airways, Singapore	
	a. Sabre	b. Travelport	c. Abacus	d. Amadeus	
6.	•	was moved from in 200	ŕ	lo, to the Worldspan	
	a. Westchester County, New York b. Belmopan, Belize				
	c. Atlanta, Geo	rgia	d. Geneva,	Switzerland	

The major four GDSs of this time are _____

a. Amadeus, Galileo, Travelport, and Apollo

b. Sabre, Amadeus, Galileo, and Worldspan

d. Sabre, Travelport, Galileo and Worldspan

c. Amadeus, Apollo, Sabre, and Galileo

- 8. The Apollo system was introduced by _____ in 1971.
 - a. Singapore Airlines
- b. United Airlines
- c. KLM Airlines
- d. US Army
- 9. _____ is made up of the GDS systems Apollo, Worldspan, and Galileo.
 - a. Abacus
- b. Amadeus
- c. Sabre
- d. Travelport

2.8 LET US SUM UP:

GDS has been providing airline, hotel, auto rentals, bus tickets, and many other industries with reliability, security, speed, and accuracy for years. According to an IATA research, GDS has a bright future and will provide a solid ecommerce platform for the travel industry. GDSs will govern the travel business if they continue to meet the ever—changing needs of airlines and hotels. The majority of data from hotels, airlines, and other distributors is housed and processed by several main global distribution systems. Amadeus, Sabre, Galileo, Worldspan, Apollo, and Pegasus are among them.

Sabre's beginnings can be traced back to 1976. American Airlines was the first to establish it. Sabre is currently owned by AMR Corporation and has a significant and powerful global presence in the United States and Asia Pacific. Delta, TWA, and North West Airlines formed Worldspan in 1990. It was also up for sale to Transaction Processing Corporation. Mostly in the United States and Europe. Iberia, Air France, SAS, and Lufthansa established Amadeus in 1987. Its core markets include Europe, the Middle East, North Africa, and Asia Pacific. In 1993, United Carriers brought together 11 of the most important North American and European airlines to form Galileo. Cendant Corporation currently owns it, and it has a substantial web presence in the United States and Western Europe. Abacus was founded in 1987 by Cathay Pacific Airways, Singapore Airlines, and Thai Airways International PLC. After Thai Airways International fell out of the agreement, other airlines joined.

The airline distribution process relies heavily on the so-called global distribution system. Several independent GDS companies now provide distribution channels for travel-related services such as airline tickets, rental cars, and hotel rooms, as well as local attractions. Airlines created, owned, and operated the vast majority of them. Independently owned and operated airlines and other travel-related services expanded their scope in the mid— to late–1980s. Although the terms "CRS" and "GDS" are occasionally interchanged, "GDS" has assumed dominance in recent years. Although these GDSs are the only ones that cover the entire globe, there are a few smaller regional distribution systems, such as TravelSky, a Chinese state–owned travel corporation, and KIU in Latin America.

Operators in Global Distribution System

2.9 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

1. b **2.** a

3. c

4. b

5. c

6. c

7. b

8. b

9. d

2.10 GLOSSARY:

Break–Even Point : The moment at which total cost and total income are equal, indicating that firm is not losing money.

Cost-Volume-Profit Analysis (CVP): A method of determining how changes in variable and fixed costs effect a company's profit.

EMEA: Europe, Middle East, and Africa

Electronic Market Systems (EMSs): Electronic markets (also known as electronic marketplaces) are information systems that are used by numerous organisational entities within one or more layers of economic value chains.

PARS: Programmed Airline Reservations System is a computer reservations system that runs under the management of the IBM Airline Control Program (ACP).

2.11 ASSIGNMENT:

- 1. What roles do Sabre, Amadeus, and Travelport play in the evolution of modern GDS systems?
- 2. What impact has the Internet had on the airline industry in the modern era ?

2.12 ACTIVITIES:

1. Find out different GDS used by small/Regional Travel agents use for their operation. Find the reason behind using that specific GDS.

2.13 CASE STUDY:

Press Release; Sabre and United Airlines sign new distribution and merchandising agreement SOUTHLAKE, Texas, May 22, 2013

https://www.sabre.com/insights/releases/sabre-and-united-airlines-sign-new-distribution-and-merchandising-agreement/

Global travel technology company Sabre announced today it has signed a new, long-term, full content agreement with United Airlines. Sabre and the airline plan to work together to make United's material ancillary products and services, including its Economy Plus seats, available in the Sabre global distribution system (GDS).

United's published fares and inventory, as well as its material ancillary products and services that are distributed through Sabre, will be available to travel buyers worldwide who use the Sabre travel

marketplace. Sabre and United currently are working to make United's premium seat option, Economy Plus, available once again through Sabre.

United joins other global airlines that sell or expect to sell their ancillary products and services in the Sabre travel marketplace.

Sabre and United will co-develop solutions using next-generation technology that will permit United to offer more relevant personalized offers to their loyal customers. These advancements will also better promote and disclose the unique value of the airline's different fare and ancillary products and services to travel agents with additional descriptive text and graphics for enhanced on–screen merchandising within the Sabre Red Workspace and through Sabre Web Services.

"Sabre will merchandise United's complete range of fare offerings, including material ancillaries, into our marketplace in a way that will help differentiate them," said David Gross, senior vice president, Sabre Global Supplier Distribution. "Sabre is committed to helping United more effectively market and sell its products and services to the broadest number of travelers."

Doug Leo, United's senior vice president of Strategy and Business Development said: "We look forward to this next chapter in distribution, where United and Sabre are better able to promote the airline's growing portfolio of products and services through our travel agency partners where many of our highest value customers shop. Our new agreement with Sabre will support more personalization for travelers who wish to receive tailored offers, give travelers and agencies a richer experience, promote revenue growth, and improve United's ability to connect with our customers."

2.14 FURTHER READING:

- 1. Tourism, Technology and Competitive Strategies by Auliana Poon
- 2. Tourism: Operations and Management by Roday, Biwal, and Joshi
- 3. Introduction to E Commerce by Jeffrey Rayport, Jaworski
- 4. Air Mobility Command Passenger Reservation Center System Analysis by Tuttle Robert E

CRS Codes and its Function in Aviation

UNIT STRUCTURE

- 3.0 Learning Objectives
- 3.1 Introduction
- 3.2 Codes Provided by IATA
- 3.3 Amadeus Codes
- 3.4 IATA SSR
- 3.5 Ancillary Revenue
- 3.6 Functions of Codes
- 3.7 Let Us Sum Up
- 3.8 Answers for Check Your Progress
- 3.9 Glossary
- 3.10 Assignment
- 3.11 Activities
- 3.12 Case Study
- 3.13 Further Reading

3.0 LEARNING OBJECTIVES:

- To provide the learner with information about CRS codes and its functions.
- Understanding of ancillary revenue of airlines

3.1 INTRODUCTION:

The first automated airline computer reservation systems (CRS) based on mainframes marked the beginning of e-tourism. They evolved into global distribution systems (GDS) with the global growth of data transmission networks, which act as B2B touristic distribution backbones until now. The development of convenient Internet/web booking engines was aided by the seamless integration of heterogeneous data networks into the Internet and the introduction of the World Wide Web as a distributed multimedia application platform. They made easy-to-use browser-based online booking available to customers as a self-service option, as well as new types of B2C travel distribution. Because the Internet and the World Wide Web have become the foundation technology for all E-Tourism applications, their architecture and components as important enablers for online booking and CRS-Web-Front ends are described in depth. Like Galileo also runs Apollo, a GDS that caters solely to the US market.

3.2 CODES PROVIDED BY IATA:

Reservations, schedules, timetables, telecommunications, ticketing, cargo paperwork, legal, tariffs, and other commercial/traffic objectives all use airline designator codes as a single point of reference. On the other hand, airline accounting codes and airline prefixes are required for the identification of passenger and cargo traffic documents, as well as the processing of passenger accounting transactions, cargo transactions, and other commercial/traffic purposes.

Location Identifiers is a database of multimodal airline travel destinations around the world, including airports, bus stations, train stations, and ferry ports.

Airline Designator Codes and Location Identifiers are combined to form a unified global reference database for airline and location codes.

Issuer Code for Baggage Tags (BTIC): Baggage tag issuer codes are used in conjunction with the tag serial number to identify each piece of checked luggage throughout the baggage handling process. They assist in providing a unique identity throughout the voyage. This one–of–a–kind identification is the foundation of the "License Plate."

Companies assigned an IATA **Airline Designator Code** must use it for reservations, scheduling, timetables, telecommunications, ticketing, cargo paperwork, legal, tariffs, and/or other commercial/traffic purposes.

Airline accounting codes and airline prefixes are required for the identification of passenger and cargo traffic documents, as well as the processing of passenger accounting transactions, cargo transactions, and other commercial/traffic purposes.

Codes for accounting or prefixes: Identification of passenger and cargo traffic documents, processing of passenger accounting transactions, cargo transactions, and other commercial/traffic objectives all require airline accounting codes and airline prefixes.

3.3 AMADEUS CODES:

There are two variations of the same command to display a location in the Amadeus system. The first is accomplished by entering the name of a site, while the second is accomplished by entering a city or airport code.

Three types of airline availability displays are available through the Amadeus display system. These are A, D, and N, where 'A' stands for Availability by Arrival and displays flights in order of arrival time, including planes that arrive up to two hours early. Availability by Departure (abbreviated as 'D') means that flight availability is displayed in departure time order, starting with flights departing up to one hour before the chosen time. Furthermore, 'N' Neutral Availability shows flights that depart one hour before the time you choose in your entry. Nonstop flights are listed in chronological order of departure. Direct and connecting flights are listed in the order of shortest flight time.

CRS Codes and its Function in Aviation

Code	Description
FQTS	Frequent flyer service request
FQTR	Frequent flyer mileage program redemption
FPML	Fruit platter
EXST	Extra seat
DEPU	Deportee, unaccompanied
DEPA	Deportee accompanied by an escort
DEAF	Deaf (with or without guide dog)
DBML	Diabetic meal
COUR	Commercial courier
CKIN	Information for airport personnel
CHML	Child meal
CBBG	Cabin baggage
BULK	Bulky baggage
BSCT	Bassinet/Carry cot/Baby basket.
FRAV	First available
FRAG	Fragile baggage
FQTV	Frequent flyer mileage program accrual
FQTU	Frequent flyer upgrade and accrual
HMFL	High fiber meal
GRPS	Passengers travelling together using a common identity.
GRPF	Group fare
LFML	Low cholesterol
LCML	Low calorie meal
LANG	Languages spoken
KSML	Kosher meal
HNML	Hindu meal
MOML	Moslem meal
MEDA	Medical case
MAAS	Meet and assist
LSML	Low sodium, no salt added meal
LPML	Low protein meal

NSST	No smoking seat
NSSB	No smoking bulkhead seat
NSSA	No smoking aisle seat
NLML	Non lactose meal
NAME	when airline holds reservations under a different name
PETC	Animal in cabin
PCTC	Emergency contact details
OTHS	Other service not specified by any other SSR code
ORML	Oriental meal
NSSW	No smoking window seat
SMSW	Smoking window seat
SMST	Smoking seat
SMSB	Smoking bulkhead seat
SMSA	Smoking aisle seat
SLPR	Bed/Berth in cabin
SFML	Sea food meal
SEMN	Seaman – ship's crew
SEAT	Pre-reserved seat with boarding pass issued or to be issued
RVML	Raw vegetarian meal
RQST	Seat request – include seat number preference
PSPT	Passport
PRML	Low Purim meal
TWOV	Transit or transfer without visa
TKTL	Ticket time limit
TKNM	Ticket number in FH element
TKNC	Ticket number in transmission
TKNA	Ticket number in FA element
STCR	Stretcher passenger
SPML	Special meal
SPEQ	Sports equipment
XBAG	Excess baggage
WCOB	Wheelchair - on board

CRS Codes and its Function in Aviation

WCMP	Wheelchair - manual power (US carriers only)
WCHS	Wheel chair up and down steps
WCHR	Wheelchair – for ramp
WCHC	Wheelchair – all the way to seat
WCBW	Wheelchair
WCBD	Wheelchair - dry cell battery
VLML	Vegetarian meal (lacto-ovo)
VGML	Vegetarian meal (non-diary)
UMNR	Unaccompanied minor

3.4 IATA SSR :

It will be classified as a service if an SSR provides a "service on demand" that can be tracked as a service item in an Order Management system. An SSR that does not require any additional information than the AIDM-defined Service Definition. In accordance with the pattern given in the Service Items section, all Service SSRs will be mapped to a Service Item. When a passenger seeks special help, the airline enters a special service request code, or SSR, into their ticket record. These numbers make it simple for airlines to keep track of support requests and send workers as needed.

It's critical to use the correct code(s) in records to guarantee that the help given is relevant and timely. The tables below identify and clarify the many forms of help and SSR codes that are relevant to disabled aviation travellers.

The SSR codes below pertain to help provided to passengers with limited mobility. The majority of airlines use these codes, but certain foreign carriers may use a different format. These Codes convey the Description of Assistance to the service provider.

WCHR: Passenger requires wheelchair assistance; passenger can walk a short distance up or down stairs.

WCHS: Passenger can walk a short distance but not up or down stairs; wheelchair help is required.

WCHC: Wheelchair necessary; passenger is unable to walk any distance and will need to board using the aisle chair.

WCOB: A wheelchair for the aisle has been requested on board (for use during flight).

WCMP: Passenger is using a manual wheelchair to travel.

WCBD: Passenger is using a wheelchair that is powered by a dry cell battery.

WCBW: A wet cell battery–powered wheelchair is being used by the passenger.

Different combinations of letters are used for other disability-related support needs, and they can be used in conjunction with the wheelchair assistance codes. Passengers who want any of these services should request that the airline record their ticket with the appropriate SSR codes. You can find few of these codes below:

BLND: Passenger is blind or has vision problems.

DEAF: Passenger is hard of hearing or deaf.

DPNA: It stands for Disabled Passenger with a Mental or Developmental Disability and they required help.

ESAN: The passenger is accompanied by an emotional support animal.

EXST: Due to their size, the passenger necessitates an extra seat.

MAAS: It means Meet–and–Assist System. Some airlines use this code to identify passengers who have intellectual disability.

MEDA is a medical condition. Some airlines use this to identify people who require oxygen.

The OXYG Passenger will need oxygen.

PETC: Passenger is travelling in a cabin with a pet.

PNUT: Passenger has a peanut allergy.

A portable oxygen concentrator is being carried by **PPOC** Passenger.

A stretcher is being used by an STCR passenger.

The SVAN Passenger is accompanied by a service animal.

Passengers should ensure that the applicable SSR codes be added to their ticket record at the time of booking or as soon as possible afterward. Airlines and airport contractors can better organise and assign workers who provide wheelchair and other assistance at the airport with advance notification.

3.5 ANCILLARY REVENUE:

A key source of revenue for airlines, particularly low-cost carriers, is ancillary revenue. Additional services include seat selection, additional baggage, extra legroom, and in-flight meals.

Auxiliaries are usually chosen during the flight reservation procedure. If you buy your flight directly from the airline, you can add extras later. Passengers can use their PNR number to access and modify their reservations on the airline's website.

In any event, the CRS receives information on needed ancillaries in the form of IATA-developed special service request (SSR) numbers. Each code consists of four characters and is associated with a certain incentive.

CRS Codes and its **Function in Aviation**

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In any event, the CRS receives information on needed ancillaries in the form of IATA-developed special service request (SSR) numbers. Each code consists of four characters and is associated with a certain incentive

3.6 **FUNCTIONS OF CODES:**

The GDS's job is to make it possible for Travel Agents to book airline tickets. Travel Agents who book airline products and airlines who make their work accessible for Travel Agent reservations are both users of the GDSs. The more Travel Agents that are connected to a GDS, the more appealing that GDS becomes as a distribution channel for airlines.

To make its option available for booking through a GDS, an airline must agree a Participation Agreement, which outlines how the GDS and the airline's Reservations system will connect to keep the GDS's Travel Agent customers up to date on the airline's products and inventory.

Every CRS and GDS have their own unique codes for their functioning however, these codes are decoded in their manual. The user/s need to undergo through training of these manual. Once the code is entered the suitable code it decoded and further process is done.

The basic purpose of these codes are to provide ease and use few numbers or latter for specific service instead of typing whole sentence/ s. It saves time as well as efforts of user and hence improves and qualify the result. As the key word or code enables to select the preference what the user want to enter

Check Your Progress:

- 1. GDS, now becomes as a distribution channel for airlines
 - a. Yes
- b. No
- c. Not Yet
- d. Can't say
- 2. Low-cost carriers have a key source of revenue from
 - a. Ticket selling
- b. Ancillary revenue
- c. Consultancy services
- d. Hiring staff for other carriers
- 3. Who has developed special service request (SSR) numbers
 - a. PATA
- b. WTO
- c. Amadeus
- d. IATA
- Which of the following codes say; Wheelchair is necessary as the 4. passenger is unable to walk and will need to board using the aisle chair.
 - a. WCHS
- b. ESAN
- c. WCHC
- d. PETC

- 5. Passengers with huge baggage is denoted by which of the following codes ?
 - a. CBBG
- b. BULK
- c. XBAG
- d. EXST
- 6. The code SFML denotes passenger required
 - a. Non Sea food meal
- b. Safe vegetarian meal
- c. Sea food meal
- d. Non lactose meal
- 7. Frequent flyer service request is denoted by :
 - a. FQTR
- b. FQTS
- c. FPML
- d. EXST
- 8. Apollo GDS is catering solely to the market in :
 - a. Japan
- b. China
- c. US
- d. Russia

3.7 LET US SUM UP:

The GDS's role is to enable Travel Agents to purchase airline tickets. GDSs are used by both Travel Agents who book airline items and airlines who make their work available for Travel Agent reservations. The greater the number of Travel Agents connected to a GDS, the more appealing the GDS becomes as a distribution channel for airlines.

Because the Internet and the World Wide Web have become the foundation technology for all E-Tourism applications, their architecture and components as key enablers for online booking and CRS-Web-Front ends are thoroughly defined. Apollo, a GDS that only serves the US market, is owned by Galileo.

Passengers should make sure that the appropriate SSR codes are entered into their ticket record at the time of booking or as soon as feasible afterward. With early notice, airlines and airport contractors can better organise and assign staff who provide wheelchair and other help at the airport.

An airline must agree to a Participation Agreement before making its option accessible for booking through a GDS. This agreement explains how the GDS and the airline's Reservations system will link to keep the GDS's Travel Agent clients up to date on the airline's products and inventory.

3.8 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

- **1.** a
- **2.** b
- **3.** d
- **4.** c

- **5.** b
- **6.** c
- **7.** b
- **8.** c

3.9 GLOSSARY:

Specific Service Request (SSR): A Specific Service Request (SSR) is a communication delivered directly to suppliers to indicate traveller preferences, special services required by the passenger, or a carrier procedure.

CRS Codes and its Function in Aviation

AIDX: Aviation Information Data Exchange is a global XML messaging standard for transferring flight data between airlines, airports, and third parties.

XML Message: A set of data elements sent or received in a single message between software applications.

Participation Agreement : A contract between all leaseholders who are engaging in the joint purchase of their freehold, and it serves as a legal foundation for the action.

Distribution Channel: A network of firms or intermediaries that a product or service passes through before reaching the final customer or end user.

Frequent Flyer: someone who travels by plane on commercial flights on a regular basis, especially if they are enrolled in a frequent flyer programme.

3.10 ASSIGNMENT:

1. Collect brochures and flyers or ticket/boarding pass from different travel suppliers, observe the codes mentioned on it.

3.11 ACTIVITIES:

1. Visit OTA and find how they are able to manage different airlines by the help of different types of codes viz. airport—code, airlines—codes and so on.

3.12 CASE STUDY:

Can an Airline Cut "Turn Times" Without Adding Staff? by Ethan Bernstein and Ryan W. Buell

Kentaro Hayashi buttoned his uniform shirt and wondered if he could really pull this off.

As president of RSA Ground, the subsidiary of Rising Sun Airlines responsible for servicing its planes at airports across Japan, he'd been under enormous pressure in recent months. Thanks to increased demand for air travel, Rising Sun's flights were now fuller and more frequent than ever before. And yet "turn" times—how long it took Ken's crews to clean, check, restock, and refuel the planes—had slipped from an average of 12 minutes to 20 in the past year. In a world of intricate flight schedules, tight take—off windows, and fickle fliers, those were costly delays.

Of course, the problem was easily diagnosed: RSA Ground was trying to do more work with the same number of employees. But Ken knew he couldn't just go to the executive committee asking for more money to staff up. The committee would insist that he first try making his crews more efficient. And after several fruitless meetings with the COO, the HR chief, and industry consultants, he'd decided that he needed to investigate the issue himself.

That's why he now wore an RSA Ground uniform. He planned to work undercover as a service crew member for a few days, starting as a cleaner of planes at Narita International, where RSA's bottlenecks were worst. He'd also arranged to spend some time on cleaning and maintenance teams at three other airports—Haneda, Osaka, and Sendai—to get a feel for how his employees were handling all the aircraft in the fleet, from the small jets that served mainly short—haul, domestic commuters to the massive airliners with multiple cabins that flew long—haul international flights.

When Ken had asked Rising Sun's CEO, Daishi Isharu, for permission to do so, his boss had laughed heartily. "I like your initiative, Kentarosan–not just down in the trenches but down in the toilet bowls!" Then he quickly turned serious. "I will certainly support this research. However, you must make sure it pays off. A week from now, I'd like a proposal for how to get back to 12 minutes, if not down to 10. The faster we can turn these planes, the happier our customers will be and the more profits we will make."

The only person at RSA Ground who knew of Ken's plan was the head of staffing, who'd agreed to assign him to various teams as a "temporary worker" over the next few days.

Waiting on the Narita tarmac with five other cleaners while passengers disembarked, Ken was more nervous than he'd expected to be. He'd studied the manuals for all the different planes and even practiced some procedures—clearing seat pockets, wiping food trays, vacuuming seats. But now he was responsible for half the economy seats in a Boeing 787 and he couldn't imagine completing the task in the desired 10 minutes (leaving two minutes for inspection). Luckily, bathroom duty had gone to someone else—a short, gray—haired man, his protective goggles and plastic gloves already on, who seemed much more seasoned than the others in the group. Ken looked at his watch: 6:14 AM. When the door to the jet bridge opened, he and the rest of the crew filed into the plane and spread out to their assigned positions.

There Are Tricks

Eighteen minutes later they had finished: not terrible, but not amazing either. The schedule said they had 10 minutes until the next plane arrived, so the workers discarded their gloves and towels in a rubbish bin and retreated to a small waiting room.

"First time?" one of the younger crew members asked Ken.

"Yes"

"I'm Toshi. I've been here only a month myself. It gets better. You'll learn how to do it faster. But not ever as fast as the manager wants!"

"Where is the manager?" Ken asked. She had given him his assignment when he'd clocked in at 6 AM, but he hadn't seen her since.

CRS Codes and its Function in Aviation

"Lady Stopwatch oversees another crew in the morning; she's with us in the afternoon."

"Lady Stopwatch?"

"Yes. She holds one up and shouts out times to help us keep pace. Sometimes that helps, but it can also get annoying. They want us to do the turns in 12 minutes. That's fine for a half-full 787. But last week we were on 747s the whole day-with only six people in the crew-and it was just impossible. After the first two turns went overtime, we had to start skipping stuff. The next day Lady Stopwatch was angry and on our backs all day because of the customer complaints."

"So the crews need to be bigger?"

"Yes. Maybe seven people for a 787, 10 for a 747. But listen to me talking about planes! I grew up on a farm, and this was the only job I could find when I moved to Tokyo. I haven't even told my family I'm doing it; they would be embarrassed. I hope to be out of here in another month or two. If you're going to stay longer, you should talk to Nobuo—san." He pointed to the gray—haired man, who was in the corner sipping from a canteen. "He's been here forever."

They still had five minutes left in the break, so Ken walked over. "Hello, Nobuo-san," he said, bowing slightly. "That whippersnapper over there said you're the expert around here."

"That is probably true," Nobuo replied with a small smile.

"Is it good work?"

"Hard work. Dirty work. But it pays the bills. And some of us take pride in doing it well."

"The turns do seem tough. I was working as fast as I could, following all the techniques in the manual, and it still took me 18 minutes."

"I was done with the bathrooms in eight. People could go faster. The more experienced people do. But fewer of us are around now."

Ken winced. Attrition rates had indeed spiked in the past year, along with turn times. Mari Kata, his HR chief, had been rapidly hiring temporary and part–time workers–20 to 30 a month–to pick up the slack, but few of them stayed on. They found the work too difficult and stressful and, like Toshi, were probably eager to find better–paying and more prestigious jobs.

"Why have you stayed?" Ken asked.

Nobuo shrugged. "I have no education or training to do anything else. This is what I know. And I'm good at it. The manager says I'm the only one she trusts with the toilets."

"How did you get so good?"

"There are tricks," he said. "But"-Nobuo's voice dropped to a whisper-"they aren't in the manual."

"Would you share them with me?" Ken asked, unsure why he was whispering too.

"Not now. The next plane's coming. If you're still around next week, we can talk then."

By lunchtime Ken was exhausted. He grabbed the container of cold teriyaki his wife had packed the night before and tried to approach Nobuo again, but Lady Stopwatch intercepted him in the break room.

"How is your first day going?" she asked.

"Very well, thank you," he replied.

"My other crew also has a new temp, and although I would have liked to watch both of you in the morning, I couldn't risk putting two inexperienced workers on one team." She looked at a spreadsheet on the tablet she was carrying. "I see your group is averaging 18—minute turn times so far. The other crew did 16. So we'll see if we can get you down to that." She was cheerful but stern.

Amazingly, in the afternoon Ken's team did cut its time to 16 minutes. He didn't know if that was because everyone had fallen into a rhythm or because Lady Stopwatch's shouting ("Five minutes—half done, team! Let's finish strong!") had inspired them to work just a little bit harder.

After each turn she quickly inspected the plane and pointed to the cleaner who had not only finished in the desired 10 minutes but had done so without any mistakes or oversights. It was Nobuo the first three times, which he acknowledged with a nod and a smile. Another older employee, a woman, won the next two rounds, which left her beaming, and then it was back to Nobuo through the end of the shift. Ken worked faster and more diligently in an effort to win once, but he wasn't sure the competition had the same effect on the rest of the group. During one of Lady Stopwatch's announcements, he thought he'd seen Toshi roll his eyes. And in his brief encounters with the flight crew—shuffling past them on the jet bridge—he'd sensed that a 16—minute turn was well below their expectations as well. They looked impatient and frustrated and barely acknowledged the cleaners.

As Ken clocked out at 2:30 PM, the manager told him, "You do good work. And you look familiar. Have you been with us before?"

"Not as part of the cleaning crew, ma'am, but elsewhere in the airport, yes," Ken said carefully.

"Well, I hope you'll be back."

"I think I'm heading to Haneda tomorrow."

"I guess we're all struggling to find good workers," she replied.

Yes we are, Ken thought.

More Nobuos

CRS Codes and its Function in Aviation

His stints on maintenance teams at the other airports were similar. Ken met experienced employees, accustomed to grunt work, who knew how to get the job done but seemed discouraged. He talked to newer workers, many of them part—time, who viewed RSA Ground as a distasteful and ideally a brief stopover on their way to better employment. And he saw managers who were effective but spread too thin.

When he called a meeting with his executive team to share these observations, his colleagues were flabbergasted.

"Forgive me, Kentaro-san, but you did what?" Mari sputtered.

"Worked undercover on the crews for four days."

They sat in stunned silence. Finally Mari spoke up. "Well, sir, I applaud you for understanding how very important the people on the ground are to our business. And I believe that what you saw confirms what I've been saying all along. We need to invest in our personnel—hire more crew members and give them better training and higher wages. We need to make sure that the Toshis learn the ropes quickly and that the Nobuos stick with us. That's the only way we'll get to quicker turn times."

"What sort of budget increase are you suggesting we ask for?" Ken said.

"I'd have to run the numbers, but perhaps 20%."

Ken turned to his CFO, expecting a reaction, and got one: "Respectfully, Mari–san, I would be extremely uncomfortable putting a request of that size to management. We've promised them, and they've promised shareholders, that we're going to improve margins this year."

Ken didn't want to shoot down Mari's proposal immediately, but he agreed with the CFO. He would have to push very hard to win approval for half that amount, and Daishi Isharu would no doubt expect a nearimmediate return on it.

"Well, of course we could make headway with less money," Mari said.

Mayuka Mori, the COO, jumped in. "May I offer my perspective? The message I take away from Kentaro–san's report is the importance of managers. The teams perform best when they are following best practices and fully coordinated. Stopwatches and competitions are terrific ideas. If we want to hire people or pay more, it should be at the managerial level. But we could achieve stronger oversight and tighter controls with our current staff if we work at it."

Yoshiyuki Taniguchi, the CTO, spoke up: "I like your thinking, Mayuka–san, but why not use technology to achieve the same result? Make a onetime investment in a system that uses wearable tracking devices to monitor employee performance, including individual and team turn times and the quality of the work performed. We don't need more Lady Stopwatches–we need the next generation of oversight."

Yoshiyuki had mentioned this to Ken before, but like Mari's suggestion, it would require a significant upfront expense. Pilot programs using such systems at other companies had shown some promise, but the results were mixed.

"Aren't there any more creative, less costly ways to solve this problem?" Ken asked. It wasn't the first time he'd put the question to the group, and he'd asked it of himself too many times to count. The "undercover boss" experiment was supposed to have given him some new ideas, but the only one he'd had so far was to clone Nobuo. That proposal would surely make Isharu—san laugh again. But Ken needed a plan that would impress him.

3.13 FURTHER READING:

- 1. The Complete Amadeus Manual by Jasir Alavi
- 2. https://www.iata.org

Future Trends in Airline GDS & CRS

UNIT STRUCTURE

- 4.0 Learning Objectives
- 4.1 Introduction
- 4.2 Future Trends in Reservations
- 4.3 Problems with Current GDS and CRS
- 4.4 Current Situations
- 4.5 MSP
- 4.6 NDC
- 4.7 Let Us Sum Up
- 4.8 Answers for Check Your Progress
- 4.9 Glossary
- 4.10 Assignment
- 4.11 Activities
- 4.12 Case Study
- 4.13 Further Reading

4.0 LEARNING OBJECTIVES:

- To provide the learner with information about future trends in Airlines reservations
- Understanding of the Problems with current GDS and CRS

4.1 INTRODUCTION:

The aviation industry has been a pioneer in the development and adoption of new technologies over the last half—century. The entry of metasearch companies into the leisure air travel search industry has drastically changed the consumer search dynamic. These metasearch firms operate a multifaceted platform that allows end users to search, compare, and analyse all of the flight options available to them for free.

Globally, the number of people who have Internet access is growing by the day. As a result, it is critical for businesses to be able to adapt to changing online consumer demands.

GDS had a near monopoly in terms of a global inventory management tool from the 1960s until 2000, when it evolved and matured into a real—time global distribution and booking system for not only airlines but also hotels, taxi and bus companies, railways, and other businesses.

However, due to increased competition, the spread of the World Wide Web, and greater access to devices for both service providers and end customers, i.e. tourists, this status is under threat.

Another issue with GDSs is that they are derivatives of CRSs, which were created before two decade with solely airlines in mind and were not developed with vacation packages, cruises, vehicles, or hotels in mind. GDS bookings are still overwhelmingly dominated by airlines.

4.2 FUTURE TRENDS IN RESERVATIONS:

Service providers and end customers can now have direct connections, bypassing the (Intermediary) GDS and lowering service costs. Both the service provider and the end customer profit from this direct link. The service provider establishes a direct relationship with its consumers, sells its products directly to them, creates customised services for them, and saves a little money in the process. Customer, on the other hand, receives personalised one—on—one services and a low—cost relationship with the service provider.

In 2019, a number of minor improvements to online booking were made, which were typically related with general technology advancement. Online payment systems have improved significantly in terms of security, allowing for speedier processing and even cryptocurrency exchanges. A simple mobile app now allows a leisure consumer to plan a week–long vacation in minutes, book flights, hotel rooms, and rent cars with just a few taps.

The distribution system evolves year after year. A recent development is the New Distribution Capability (NDC), which has been in effect since 2012. Although no revolutionary modifications were made, GDSs were required to establish more current data transmission channels in order to provide ancillaries to clients. As a result, more online booking platforms and online travel agencies (OTAs) gained access to rich content, allowing travellers to choose their seats, order onboard food, and check additional luggage.

End consumers may simply access trip information, compare costs, and book electronic tickets stored in their smartphones using a variety of technology gadgets. All flight information, however, is still obtained over lines established in the 1960s from GDSs.

Because of the high cost of distribution, airlines are having to reconsider their distribution strategy and rely less on GDS. Airlines are bypassing GDSs and selling straight to customers.

Consumers can now book tickets directly from airlines thanks to advancements in mobile and internet technologies such as the World Wide Web (WWW) and smart phones. As a result, compared to 2015, the number of travel brokers using GDS to purchase tickets fell in 2018. Some airlines charge extra fees for booking tickets through GDS rather than their own website, discouraging travel brokers and end customers

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from using the major GDSs. Inexpensive—cost airlines, on the other hand, have grown their market share, generating new demand for air travel by offering low tickets.

Many LCCs have chosen GDS because of its capacity to process complex itineraries. As a result, the growing importance and expansion of LCCs is contributing to the worldwide distribution system market's growth.

Asia Pacific is one of the world's fastest–growing regions, with two countries – India and China – driving expansion. The rising travel and tourism industry in the region, as well as an increase in the population's disposable income, are expected to drive up demand for global distribution systems significantly during the projected period. The change from on–premise systems to cloud–based global distribution system solutions is happening quickly in Asia Pacific. For the travel and tourism industry, the region is significantly improving its infrastructural basis for ticket booking and bookings. Hence the Cloud–based deployment is rapidly expanding in the region.

While GDS bookings have increased globally in last few years, some industry watchers was predicting GDSs will be practically obsolete by 2020. But it is growing continuously. GDS, like many other technology/software-based systems, may, instead, change.

Instead than being a system utilised exclusively by travel management businesses, GDSs may become more of a "direct corporate booking tool." Technology may allow engines to be refined and tailored to certain travel interests, such as business or pleasure travel. Integration approaches may evolve, blurring or combining previously distinct services such as booking and in–flight operations. Technology may also lead to new solutions that make data more relevant and practical for consumers (travel agents), as well as expand to new sectors.

Apart from these changes few other disruptions happening in the reservation businesses are as under –

Ticketless Travel: Ticketless air travel means that no physical ticket is required, but passengers must still reserve a seat on the trip. In this instance, passengers should simply go to the airline's website or one of the flight aggregator sites such as Kayak, Expedia, or Hotwire to book their flights. The next step is to fill out the form with chosen travel dates and select one of the flight options. They must then pay for the flight with a cards or UPI and print off the confirmation page as evidence of payment; alternatively, they can save the confirmation page as a pdf for future reference on their computer or mobile phone. It can also be save in google drive and it can be produced when required.

Skiplagged, Google Flights, Kayak, Expedia, TripAdvisor, Yahoo Farechase, and other intelligent search engines

The VRS (Virtual Reservation System) is a system that allows you to make reservations online. The VRS will function similarly to a traditional CRS, allowing agents to search for and book airline seats, car rentals, hotel rooms, train, cruises, and other travel arrangements, but it will differ in two significant ways: (1) Information will be exchanged over the WWW rather than proprietary networks; (2) The system will not charge retailers (agents) for using it. Suppliers, on the other hand, will be charged a set price based on the amount of bookings they generate.

4.3 PROBLEMS WITH CURRENT GDS AND CRS:

Every positive has an equal and opposite negative. There are also downsides to consider in addition to the many benefits.

While a GDS might be useful, many hotels as well as airlines prefer to book their rooms or seat through other channels. With the travel industry in flux, many businesses are searching for methods to save money, and with high ticket prices, GDSs are frequently among the first to depart.

Another issue with GDSs is that they are derivatives of CRSs, which were created 25 years ago with solely airlines in mind and were not developed with vacation packages, cruises, vehicles, or hotels in mind. GDS bookings are still overwhelmingly dominated by airlines.

GDSs make 85 to 90 percent of their revenue from air bookings, according to Sabre president Jeff Katz (Elliott, 1996 Dec 30). Travel agencies are still more likely to book an airline reservation through GDS than a hotel room; for every 10 to 15 airline tickets booked, one hotel room is booked. Only 10% of tour packages and 7% of cruises are purchased using GDS.

Economically, for many business, the cost of GDSs is a deterrent. Business funds can be better invested in other areas as a growing company. As a result, hotels are beginning to steer clear of GDS.

It is ineffective if neither side uses it, despite their ability to connect agents and properties. According to a HotelHub bookings report, GDS hotel bookings did not expand in 2011, while non–GDS hotel bookings did. Hotels that do not use a GDS receive bookings via hotel aggregation sites or direct bookings, both of which are proven and true ways.

A GDS isn't the only way to manage reservations, and some hotels are discovering that it's not the best fit for them. There are numerous solutions available, none of which are certain to be successful.

4.4 CURRENT SITUATIONS:

Now, GDS businesses are offering cloud services, such as Amadeus' cloud service, which is based on Google's infrastructure as a service (IaaS) platform. It assists them in preventing airline back—end flight—booking systems from becoming overburdened by internet queries. The term "cloud services" refers to a wide range of internet—based services that are offered

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on demand to businesses and customers. These services are meant to enable simple, cost-effective access to applications and resources without requiring internal infrastructure or hardware. As we previously explained, a metasearch engine gathers data from various search engines and provides users with results. It saves both time and effort while booking. The benefit of using cloud services for airlines or hotels is that they may readily access the market and have a more effective presence among users.

The cloud-based solution aids airlines in dealing with the massive rise in search and shopping volumes. In addition, the service employs dynamic revenue management tactics. This service grew in response to demand to fulfil the demands of airlines and channels, providing flexibility and efficiency. When combined with highly automated cloud infrastructure, it can handle any search surge, so airlines don't have to plan for them months in advance. Big brand airlines may be able to increase global direct sales by paying higher advertising and traffic acquisition expenses in partnership with gatekeepers like Google and Facebook.

For years, the airline industry has been lurching toward adoption of the International Air Transport Association's New Distribution Capability paradigm, which essentially uses the XML coding language to simplify transactions between different members of the ecosystem and allows for the sale of ancillary products such as seat upgrades. IATA Cargo–XML messaging is quickly becoming the preferred standard for electronic communication between airlines and other air cargo stakeholders, including shippers, freight forwarders, ground–handling agents, regulators, and customs and security agencies. This new standard, which is based on multimodal and cross–border messaging, intends to simplify cargo business processes, meet customs requirements for Advanced Cargo Information (ACI) filing, and comply with security rules such as e–CSD.

4.5 MSPs:

Multi-sided platforms are a new innovative business paradigm. This strategy has taken the corporate world by storm system is a combination of multiple components. It is often backed by venture capitalists prepared to take a big risk in exchange for the promise of an exponential return.

Multisided platforms (MSPs) are becoming increasingly popular in the travel sector, allowing travel agencies (TAs) and global distribution systems (GDSs) to strengthen their intermediate roles. Because of the ever—changing developments in information and communication technologies, such as the emergence of metasearch engines, online travel agencies, direct bookings on airline websites, and the widespread use of mobile applications for travel related bookings, Orthodox TAs are at risk of being disintermediated.

In current scenario, GDSs are facing disintermediation threats from low-cost carriers and legacy carriers, as these carriers promote and encourage direct bookings through their official websites or the new distribution capability. In this situation, MSPs are a way for individual

or group users to interact, communicate, and transact with one another. Platforms, in general, are technologies that are used in a variety of industries to reduce transaction costs while increasing transaction value. It is a comprehensive travel services platform for seller, distributors and even for B2B suppliers.

MSPs are providing intermediaries with the tools, technologies, and solutions required for supplying, distributing, and selling travel content on a single platform, with access to information, prices, and packages that facilitate comparison, monitoring, and control. As a result, they offer monitoring and control tools, as well as other robust back—end solutions for financing, reporting, user management, and provider management.

4.6 NDC:

Direct distribution was made possible by NDC (New Distribution Capabilities). This is a new communication protocol that replaces one that has been in use since the 1980s. Airlines such as Lufthansa, British Airways, Iberia, and American have announced direct connection initiatives via NDC. They either implemented fees to book through a GDS or will offer extra capacities if booked directly through their NDC interface. The other aspect of NDC is that airlines want to control distribution by providing 'who is asking'—based offers, price ancillaries, and so on to differentiate themselves.

In 2012, the IATA set out to improve the GDS system by introducing this new distribution model. It displays information using newer Internet protocols and allows travel agents to find the full range of airline products on it in the same way that the airlines' websites do. This distribution channel also enables agents to provide tailored products based on passenger profiles, thereby improving their service to the traveller.

Messaging between a GDS and a CRS was traditionally done in EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) however, structured interfaces are also available. NDC is essentially a new pipe running parallel to EDIFACT as a new standard. So the best concept would be for the GDSs to unplug their EDIFACT pipe and plug it into their NDC pipe. Then there's the unresolved ticketing issue. Bookings are made and paid for in the GDS through ATPCO. The airline reservation system uses the Airline API to make reservations via NDC.

4.7 LET US SUM UP:

Global distribution systems are innovating on the outside of the travel distribution sector, as airlines try to reclaim market share. Airlines has started to use the cloud–based technology to deal with the significant increase in search and shopping volumes. Furthermore, the service uses dynamic revenue management strategies. This service emerged in response to customer demand for flexibility and efficiency in meeting the needs of airlines and channels.

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The metasearch engine has emerged as a tool which collects data from numerous search engines and displays the results to consumers. Consumer can utilises this to save their time and efforts. NDC after being introduce into distribution system, made direct distribution possible. This is a new communication protocol that has been in use since the 1980s. Direct connection initiatives via NDC have been announced by Lufthansa, British Airways, Iberia, and American Airlines. Asia Pacific is one of the world's fastest–growing regions, with India and China leading the charge.

charg	ge.						
	A GDS isn't the only option to mainding that it's not the greatest fit ptions available, but none of the	for	their needs. There are a variety				
	Check Your Progress:						
1.	What is the full-form of NDC in air ticketing						
	a. National Distribution Control						
	b. National Distribution Capability						
	c. New Distribution Control						
	d. New Distribution Capability						
2.	In aviation industry LCC stands for :						
	a. Labour Class Carrier	b.	Low Class Carrier				
	c. Labour Class Courier	d.	Low Cost Carrier				
3.	NDC has come into effect since	e :	year :				
	a. 2002 b. 2012	c.	2021 d. 2019				
4.	MSP is a comprehensive travel services platform for :						
	a. Sellers	b.	Distributors				
	c. B2B suppliers	d.	All of them				
5.	VRS in ticketing and booking	sta	nds for :				
	a. Verified Reservation System	b.	Virtual Reservation System				
	c. Verified Returning System	d.	Virtual Returning System				
6.	A engine collects info engines and presents it to users		nation from a variety of search				
	a. GDS b. Metasearch	c.	CRS d. Motor				
7.	Asia Pacific is one of the world by	l's f	fastest-growing regions, leading				
	a. India and Singapore	b.	Japan and China				
	c. India and China	d.	Malaysia and Thailand				
8.	NDC has been introduced by:						
	a. ATPCO b. IATA	c.	Amadeus d. Sabre				

4.8 ANSWERS FOR CHECK YOUR PROGRESS:

Check Your Progress:

- **1.** d **2.** d **3.** b
- **5.** b **6.** b **7.** c **8.** b

4.9 GLOSSARY:

Advance Cargo Information (ACI): A new customs system that requires cargo data and papers to be submitted at least 48 hours prior to the departure of vessel from the loading port.

4. d

ATPCO: Airline Tariff Publishing Company, a privately held corporation that collects and distributes fare and fare—related data for the airline and travel industries.

E-CSD: Enables operators to electronically share and store security information, ensuring that only secure cargo is delivered.

EDIFACT : International electronic data interchange (EDI) standard developed for the United Nations and approved and published by the United Nations Economic Commission for Europe (UNECE).

Full Service Airline (FCC) : In–flight entertainment, checked baggage, meals, refreshments, and comforts such as blankets and pillows are often included in the ticket price of a full service airline. Seats are often more reclined and provide greater leg room than those on a low–cost carrier.

Low-Cost Carrier (LCC): Often referred to as low-cost, no-frills, or budget airlines. The bulk of LCCs' flights are short-haul, and the majority of their bookings are made online.

XML: A modern and open technology standard for storing and transmitting structured data.

4.10 ASSIGNMENT:

1. Find out the trends adopted or created by different airlines to curve—out traditional GDS and CRS.

4.11 ACTIVITIES:

1. Visit travel agencies of your city and analyse what trends they are adopting to sell their products.

4.12 CASE STUDY:

American Airlines wins \$15 million in antitrust case against Sabre

Author: Nate Raymond

American Airlines Group Inc AAL.O on Tuesday won about \$15.3 million in an antitrust lawsuit that accused airline booking service Sabre Corp SABR.O of harming competition and charging grossly inflated booking fees.

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The Manhattan federal jury awarded nearly \$5.1 million, a fraction of the up to \$73 million American Airlines was seeking at trial. But the sum automatically will be tripled under federal antitrust law.

American Airlines was suing under the name of US Airways, the carrier it merged with in 2013. US Airways had filed the lawsuit in 2011.

American Airlines welcomed the verdict, saying it hoped the jury's finding that Sabre had violated federal antritrust law in a 2011 contract with US Airways could result in changes in how the airline's services are sold.

The jury rejected a separate claim that Sabre conspired with its competitors to not compete with each other.

Sabre said in a statement that it continued to believe it had operated "fairly and lawfully." The company said it would seek to have the verdict set aside and, if unsuccessful, pursue an appeal.

Following the verdict, Sabre shares closed at \$25.15, down 35 cents, or 1.4 percent, on Nasdaq.

The case concerned fees that Sabre and other travel reservation systems collect from airlines to display flights for booking.

At trial, Chuck Diamond, a lawyer for American Airlines, contended that Sabre used its power in the industry to "bully" airlines into paying unfair fees and signing unfair contracts that suppress competition and maintain its position.

The lawsuit claimed that provisions of a 2011 contract between US Airways and Sabre, including those governing what fares the airline makes available to a computerized network by Sabre used by travel agents, harmed competition.

The airline also contended that Sabre conspired with its competitors to not compete with each other for airline content like flight and fare information at the expense of consumers and innovation.

Sabre denied conspiring with competitors, and said its contract with US Airways benefited competition. Chris Lind, a lawyer for Sabre, told jurors US Airways was far from powerless as it could leave the network, causing agents to stop using it.

The case is US Airways Inc v. Sabre Holdings Corp et al, U.S. District Court, Southern District of New York, No. 11–cv–2725.

4.13 FURTHER READING:

- 1. eAirlines : Strategic and Tactical Use of ICTs in the Airline Industry by Buhalis, Dimitrios.
- 2. AIRLINE IN SHIFTS & MANAGEMENT by Stephen Shaw
- 3. Flight Reservation and Airline Ticketing by Jitendra k Sharma
- 4. Airline Operations and Management : A Management Textbook by Gerald N. Cook and Bruce G. Billig

BLOCK SUMMARY

A global distribution system (GDS) is a global linking point for travellers and suppliers such as hotels and other lodging alternatives. It gives travel companies and online booking engines real—time product, pricing, and availability data, as well as the ability to conduct automated transactions.

Despite the fact that both systems perform the same functions, CRS only provides airline information. GDS enables you to book a flight, a hotel room, or a vehicle rental. As part of their PSS, airlines use the CRS as an inventory management system. A metasearch engine is a tool that collects information from other search engines and displays it to the user. It may immediately gather price and availability from service providers.

The first reservation system was built in three stages. CRS, ARS, and GDS are examples of airline reservation systems. PSS is a collection of software modules that aid in the interaction of the carrier and its consumers.

The GDS is an expensive channel that primarily allows major organisations and travel agencies to sell a large number of rooms. As a result, small organisations are exempt. Sabre, Amadeus, Galileo, Abacus, Worldspan, and Travelport are some GDS examples. Amadeus was founded by Air France, Lufthansa, Iberia, and SAS as a European alternative to Sabre, a similar GDS system located in the United States.

BLOCK ASSIGNMENT

- 1. Explain GDS and CRS is revolutionary change in Aviation sector.
- 2. Today we have a number of GDS and CRS. How these are evolved.
- 3. Technology is playing very important role in our society. According to you what step should we take in order to provide great customer experience by using this ?
- 4. How GDS and CRS provide ease in reservation system.
- 5. GDS is an expensive investment for airlines. How LCCs can cope up with this situation without excluding it from their operations?
- 6. "With the span of time SSR will become regular service and will be provided by airlines as compulsory service". Comment on above statement.
- 7. Emergence of information and communication technologies, such as the emergence of metasearch engines, online travel agencies and so on has been seen. According to you what next things can be seen in order to enhance customer experiences?

mare neketing - n	•••	Enrolment N	0.:				
	1.	How many hours did you need for studying the units ?					
		Unit No.	1	2		3	4
		No. of Hrs	S.				
	2.	Please give y reading of the		ons to the	followi	ng items	based on you
		items	Excellent	Very Good	Good	Poor	Give specific
	Р	resentation Quality					example if any
	L	anguage and Style					
		lustration used Diagram, tables etc)					
	С	onceptual Clarity					
		heck your progress luest					
		eed back to CYP Question					
	3.						