

Operations

Unit code: D/504/2288

QCF Level 3: BTEC Nationals

Credit value: 6

Guided learning hours: 36

Aim and purpose

The aim of this unit is to give learners knowledge and understanding of the many different sources of commercial revenue available to both airports and airlines.

Unit introduction

No airport makes a profit from landing charges and passenger taxes alone, they use several different income streams to boost their turnover and help to create profit. Airlines also have many 'extras' on top of promoted airfares to improve yield to either make more profit or help them to be able to keep fares low in an effort to increase passenger share at any airport or on any given route.

The unit starts by asking learners to describe the different sources of revenue, firstly for airports and then for airlines before identifying these sources as a percentage of revenue and what the current trends in aviation are in relation to these sources of revenue.

Learners will then describe any differences between the commercial opportunities for major and regional airports and also compare independent airports to those in groups (for example Manchester Airport Group (MAG), Rigby Group PLC).

Fare structures for different types of airline will be researched to show how the sales profile of fares affect revenue flows. Also, learners will explore ways of reducing the effect of costs. Finally, learners will describe how yield management helps in the maximisation of revenue.

Learning outcomes

On completion of this unit a learner should:

- 1 Know sources of revenue for aviation organisations
- 2 Understand the commercial capabilities of different airports
- 3 Understand how different airlines maximise revenue.

Unit content

1 Know sources of revenue for aviation organisations

Revenue sources for airports, for example:

- landing charges
- maintenance rental charges
- car parking
- retail, e.g. tax free, tax paid, car hire, foreign currency exchange
- catering
- taxi cabs
- hotel booking service
- business lounges
- advertising and sponsorship
- game zones
- crew room rentals
- office rentals, e.g. airlines
- charges for services, e.g. baggage trolleys, fast-track security
- re-charges for utilities, e.g. gas, water

Revenue sources for airlines, for example:

- duty free and tax paid
- catering
- fare add-ons, e.g. baggage, seat, pre-boarding, credit card
- linked services, e.g. hotel bookings, car hire, travel insurance, transfers

Commercial importance:

- percentages of total revenue
- trends

2 Understand the commercial capabilities of different airports

Commercial capabilities of major airports compared to regional airports:

- major airports, e.g. long-haul flights, multiple terminals, higher passenger throughput leading to increased retail and transport opportunities
- regional airports, e.g. European/domestic flights, single terminal

Commercial capabilities of independent airports compared to group airports:

- economies of scale, e.g. buying power, passenger numbers
- range and depth of services available

3 Understand how different airlines maximise revenue

Fare structures of different airlines:

- full-service scheduled
- low-cost scheduled
- charter
- cargo

Commercial strategies:

- incentives, e.g. staff, travel agents, handling agents, suppliers
- hedging, e.g. fuel, currency
- aircraft leasing
- outsourcing, e.g. staff, equipment
- e-business

Yield management:

- load factoring
- importance of knowing break-even sales level
- below break-even result
- above break-even result
- carriage of cargo
- airline alliance membership (One World, Star Alliance, Sky Team)

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Asse	Assessment and grading criteria				
To achieve a pass grade the evidence must show that the learner is able to:		To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:		the e	chieve a distinction grade evidence must show that, dition to the pass and t criteria, the learner is to:
P1	Describe sources of airport revenue	M1	Analyse how an airport benefits from the difference		
P2	Describe sources of airline revenue		sources of revenue available		
Р3	Describe the commercial importance of different revenue sources				
P4	Compare the differences between major and regional airport commercial capabilities				
P5	Compare the commercial capabilities of independent airports with those within airport groups				
P6	Describe the fare structures of different types of airline	M2	Explain how and why the fare structure of full service scheduled airlines attracts different passenger types		
P7	Explain how commercial strategies are used by different airlines [IE]	М3	M3 Explain how being a member of an airline alliance can help to reduce costs and increase load factors	D1	Evaluate the three airline alliances in terms of membership and global coverage
P8	Explain how yield management can help airlines maximise revenue				

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

Essential guidance for tutors

Delivery

Increasing commercial revenue is a must for all airports and airlines. Some are able to maximise this type of revenue due to the type of airport or airline they are, for example London Heathrow or low-cost airlines, others may not have the same range of opportunities.

Understanding the range of opportunities available for airlines and airports is the basis of this unit. Visiting any airport will enable learners to see for themselves the vast range of opportunities available even though they may not fully understand the commercial importance of any of these opportunities to the airport. Learners can work in groups to identify the different revenue sources that exist at all airports, such as landing charges, car parking, catering facilities, and those that perhaps only exist at some airports such as baggage trolley charges. Tutors should guide learners to look at the differences between major and regional airport capabilities – exploring retail opportunities and the impact on duty free sales and other areas such as increased passenger throughput at major airports leading to more taxi firms licensed by the airport, more public transport and possibly more car parking opportunities.

A talk from a local airport marketing team would be beneficial to explain further the benefits of these revenue sources and perhaps the percentage of revenue they yield. Learners could be introduced to an airport's reports and accounts where additional revenues can be shown as a percentage of turnover. Learners could explore current trends in different revenue sources, for example where airports have moved most, if not all, of their retail business into airside locations to overcome any security issues for goods bought landside, for example liquids over 100 ml.

For airlines learners can use their own flight experiences and be given the opportunity to examine a range of airline websites to identify all the different tactics airlines use to improve revenue, for example pre-booking of seats, priority boarding, airline meal deals. Many airlines have a range of extras over and above the flight reservation process that can increase revenue such as car hire, hotel accommodation etc. Learners could compile a portfolio of screen downloads to evidence their understanding of the topic.

Learners should be introduced to the different fare structures for scheduled full service, low-cost and charter airlines and which type of airline can boost these fares with the carriage of cargo above the passenger baggage. Tutors should provide information on how different airlines publish their airfares and how this impacts on when they target different passenger types. For example, full service scheduled airlines who publish their fare in advance will target leisure travellers initially, before targeting their final fare at business travellers who generally book within two weeks of departure. Other airline types do not have to publish their airfares in advance and can change them as demand (or lack of) requires.

Yield management is very important to airlines and it is an interesting exercise for learners to look at how sales above and below break-even yield make substantial differences to profit and loss before the other commercial opportunities are added. Also, explain the synergies of being part of an airline alliance and how this can reflect on yield.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment

Introduction to the unit, including gathering learner knowledge of what is included within the term 'commercial operations'. To do this learners first need to understand that the main visible charges to airlines are for aeronautical (landing charges) and passenger-related charges (PLS or airport taxes).

Learners should understand the different commercial opportunities as a source of additional revenue for airports. The list shown for P1 should be taught and learners should be given an input so they can identify which of these sources of revenue tend to be the most important to airports. A PowerPoint presentation may be an ideal assessment method giving learners the opportunity to show 'visuals' to support their descriptions of the sources listed.

Website investigation using the internet to identify the different add-ons and linked services for airlines. This could then be presented with a series of screen prints to show hyperlinks and add-ons in the form of fact sheets

Learners should identify the major additional sources of revenue for both airports and airlines.

Preparation for assignment

Assignment 1: Sources of Revenue for Aviation Organisations (P1, P2, P3, M1)

Feedback on assignment

Explore the different commercial opportunities likely to be available to both major and regional airports. A comparison listing would show the required results.

Explore the different opportunities for independent airports compared to those within groups, e.g. Rigby Group PLC, MAG. This could be done through group discussion followed by a short written assignment to say what and why the opportunities are.

Preparation for assignment

Assignment 2: The Commercial Capabilities of Airports (P4, P5)

Feedback on assignment

Introduce the three different types of published airfares for scheduled full service airlines and compare with the fare structures of low-cost and charter airlines and the principle of cargo charges.

Classroom discussion to tie different fares to differing passenger types.

Introduce trends in airline commercial management to either promote sales, give incentives for efficiency or reduce costs.

Describe load factoring and how this is the basis of being able to maximise revenue for airlines. This is based on break-even passenger numbers and sales over this level plus additional revenue from carriage of cargo. Learners should be encouraged to calculate a break-even load factor and then explore the results of either under or over achievement.

A simple table could be produced to give examples of the above.

Preparation for assignment

Assignment 3: Maximising Revenue (P6, P7, P8, M2, M3, D1)

Feedback on assignment

Assessment

There are a number of assessment opportunities presented by the subject matter in this unit. Suggestions include an assignment, a report and a presentation.

P1 - P2 - P3 - M1

To achieve P1, learners need to describe how an airport benefits from the different sources listed. Some of these sources will just pay rent, rates and utility charges and others will pay the airport a percentage of revenue. In some airports, car parking will be controlled by the airport itself and in others it could be franchised.

To achieve P2, learners should describe on-board services, some of which are charged for by some airlines. Learners also need to look at the booking process and show using screen prints the different charges made or available whilst making the booking – including hyperlinks to other providers such as car hire, hotels, insurance etc.

To achieve P3, learners should bring together P1 and P2 to describe the commercial importance of different sources of revenue to both airports and airlines. This should include aeronautical charges (for example landing charges) and mandatory passenger charges, but should also consider the importance of other revenue sources, for example car parking.

For M1, learners must expand on P1 and P3 to analyse how a specific airport benefits from the different sources of revenue available.

P4 - P5

To achieve P4, learners need to compare the different commercial opportunities at a major airport such as London Heathrow (LHR), for example multiple terminals and long haul flights which result in more retail opportunities and more duty free sales, to a regional airport such as East Midlands (EMA).

To achieve P5, learners need to understand the economy of scale available to 'group' airports, such as AGS Airports Limited or MAG, in comparison to independent airports such as Liverpool John Lennon Airport. Learners may look at examples where group airports insist on services being made available at all airports regardless of size or passenger throughput in comparison to examples where independent airports are more limited.

P6 - M2

To achieve P6, learners need to describe how different airline fare structures are tailored to differing customer types. Learners should cover the fare structures for all four types listed in the unit content.

For M2, learners need to explain how and why the fare structure of full service scheduled airlines attracts different passenger types. Learners should refer to both leisure and business passengers and provide examples.

P7 - P8 - M3 - D1

To achieve P7, learners need to explain how commercial strategies are used by different airlines to maximise opportunities for further revenue such as incentives given to staff and travel agents, buying fuel or currency in advance (hedging), reducing costs by outsourcing functions and the use of e-business for providing direct sales and as a source of information instead of printed matter.

To achieve P8, learners need to explain how an airline would use yield management to not only calculate its airfares but to help it maximise revenue by reaching the break-even load factor which covers all costs. Learners need to include in their explanation the effect of not reaching or exceeding break even. They also need to include how carrying cargo can help to reduce the passenger load factor requirement or increase overall yield.

For M3, learners need to consider the benefits of airlines being part of an alliance and how this can reduce costs and increase load factors, for example all members selling into one aircraft or route.

For D1, learners need to evaluate the three main alliances, One World, Star Alliance and Sky Team, comparing their membership in terms of global coverage, i.e. which is stronger in what part of the world (if any) and what does this mean to added opportunities for increased yield.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Pearson assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, M1	Assignment 1: Sources of Revenue for Aviation Organisations	Working for an aviation organisation, explore potential revenue sources.	Presentation Fact sheets Review
P4, P5	Assignment 2: The Commercial Capabilities of Airports	Working for an aviation organisation, investigate the commercial capabilities of different airports.	Comparative list Assignment
P6, M2, P7, P8, M3, D1	Assignment 3: Maximising Revenue	Working for an aviation organisation, investigate strategies airlines use to maximise revenue.	Presentation Report

Links to other BTEC units

This unit forms part of the BTEC aviation sector suite. This unit has particular links with the following unit titles in the aviation suite.

Level 2	Level 3	Level 4
n/a	Unit 1: The UK Aviation Industry	n/a
	Unit 11: E-business for Airlines	
	Unit 15: Passenger Terminal Management Within the Aviation Industry	
	Unit 16: Airline and Airport Economics	

Essential resources

Learners must have access to published resources and the internet.

Employer engagement and vocational contexts

Guest speakers and industry materials will be invaluable in enhancing delivery of this unit.

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are
Independent enquirers	exploring how commercial strategies are used by different types of airlines to maximise revenue.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are
Independent enquirers	conducting research into sources of revenue for airports and airlines, commercial capabilities and the use of commercial strategies to maximise revenue
Self-managers	managing their assessment
Effective participators	completing yield management tasks to gain an understanding of how airlines use yield management to maximise revenue.

Functional Skills — Level 2

Skill	When learners are
ICT — Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	using a range of major and regional airport websites to compare commercial capabilities
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	planning and conducting research into airport and airline commercial operations using trusted websites
Manage information storage to enable efficient retrieval	saving ongoing work logically in order to retrieve and develop work
Follow and understand the need for safety and security practices	accessing systems securely and using trusted websites
Troubleshoot	as required
ICT — Find and select information	
Select and use a variety of sources of information independently for a complex task	selecting and using appropriate sources such as the internet, journals, newspapers and notes to meet the unit assessment requirements
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	using suitable search criteria to source information on commercial operations using the internet
ICT — Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including:	entering and developing text, images, number and referenced material to complete assignments
text and tables	
• images	
• numbers	
• records	
Bring together information to suit content and purpose	collating research and notes to present a comparison of different airport commercial capabilities
Present information in ways that are fit for purpose and audience	presenting information appropriately for aviation employees that is accurate and clear
Evaluate the selection and use of ICT tools and facilities used to present information	selecting the most appropriate ICT tool to explain the use of yield management in a coherent manner
Select and use ICT to communicate and exchange information safely, responsibly and effectively including storage of messages and contact lists	exchanging information responsibly, paying attention to confidentiality issues

Skill	When learners are
Mathematics	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	exploring sources of revenue and how revenue is maximised through yield management
Identify the situation or problem and the mathematical methods needed to tackle it	identifying the significance of the break even load factor and of carrying cargo
Draw conclusions and provide mathematical justifications	identifying the consequences of not reaching or exceeding the break even point
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	discussing revenue sources for airports and airlines, contributing to the discussion from prior knowledge and listening to ideas of others
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	reading about and comparing the commercial capabilities of different types of airports
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	writing a report that communicates a clear explanation of commercial strategies used by airlines to maximise revenue including yield management.