

Unit 11: E-business for Airlines

Unit code:	L/504/2285
QCF Level 3:	BTEC Nationals
Credit value:	4
Guided learning hours:	24

● Aim and purpose

The aim of this unit is to give learners an understanding of the important role of e-business in the interface between an airline and its customers.

● Unit introduction

The unit starts by asking learners to define e-business and to explore the impact on airline activities. E-business encompasses buying and selling, but also includes servicing customers (business to consumer) and collaborating with business partners (business to business). Learners will investigate current technologies available, and how they are used by airlines, and explore how e-business has helped to change aviation from a series of small local businesses into a global business with a worldwide marketplace.

Learners will review the features of websites, including appearance, navigation flight information, supplementary information and services, booking and check-in options, and consider how these vary across different types of airline. Finally, learners will have the opportunity to analyse the effectiveness of websites for the airline's target markets.

An understanding of the importance of e-business for airlines can lead to employment in many areas of aviation – including sales, marketing, planning, and yield control amongst others.

● Learning outcomes

On completion of this unit a learner should:

- 1 Understand the impact of e-business on airline activities
- 2 Understand the effectiveness of airline reservation websites.

Unit content

1 Understand the impact of e-business on airline activities

Types of e-business:

- definition of e-business
- business to consumer, e.g. promotions, advertising, bookings, travel information
- business to business, e.g. procurement, advertising, hyperlinks
- in-flight internet access, airport internet access, staff use of e-technology, e.g. flight deck data links, computer tablets for flight crew and ground staff

Current e-technology used by airlines:

- hardware, e.g. PCs, laptops, computer tablets, boarding pass readers
- internet, e.g. email, websites, web pages
- Television and Radio, e.g. crucial information on news channels ticker tape
- mobile phones, e.g. smartphones, mobile apps, QR code scanners
- social networking and monitoring
- self-check-in, barcode readers

Impacts of e-business on airlines:

- environmentally friendly, e.g. paperless transactions
- reduced brand loyalty, e.g. outbound with one carrier, inbound with another
- marketing opportunities to increase business
- disintermediation
- instant response to competitor pricing
- yield management
- staff savings, e.g. passenger service agents, call centres
- establishment costs, e.g. setting up, improving, updating and maintaining, savings on work space
- airline to ground handling agent (GHA), e.g. savings on services

Benefits of e-business for airline customers:

- increased choice and flexibility
- global availability
- efficiency of immediate booking
- independence
- 24-hour access
- pre ordering of meals and tax free goods
- less time spent at the airport
- environmentally-friendly travel

2 Understand the effectiveness of airline reservation websites

- definition of reservation websites
- scheduled airline, e.g. British Airways
- low-cost scheduled airline, e.g. easyJet
- cargo airline, e.g. DHL
- charter airlines, e.g. TUI

Website features:

- appearance, e.g. colour, font, style, image
- navigation type, e.g. menus, links
- provision of flight information, e.g. flight search, monthly view
- provision of supplementary information and services, e.g. destinations, car hire, hotels, transfers
- booking procedure, e.g. flight selection, luggage, add-ons, payment, printing shortcut, time-outs, group booking process
- check-in/boarding options, e.g. airport check in, online check in, priority check in/boarding, allocated/unallocated seating, boarding passes, fast track, lounges, upgrades
- other features, e.g. availability of package holidays, loyalty schemes, log-ins to manage bookings

Effectiveness relating to:

- appeal
- ease of navigation, e.g. using menus, links, backwards, forwards, multiple search
- flow from flight search to booking
- transparency of costs, e.g. luggage, taxes, seating, check-in fee, booking fee, credit/debit card charges
- simplicity of removing or selecting add-ons, e.g. insurance, car hire, hotel, transfers
- links to and ease of booking for other products, e.g. packages

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.

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:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 Define e-business for airlines	M1 Compare the way two different types of passenger airline use their websites to attract customers	D1 Evaluate an airline's website and make recommendations for improvement, stating what benefits the proposed changes would bring to the customer and the organisation
P2 Outline current e-technology used by airlines		
P3 Analyse the impact of e-business on airlines		
P4 Discuss the benefits of e-business on airline customers		
P5 Review the features of airline reservation websites		
P6 Analyse the effectiveness of different airline reservation websites [IE]		

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

This unit will enable learners to gain an understanding that e-business is not only the action of making a booking, it is fundamental to the whole airline operation and especially to its customers.

Learning outcome 1 asks learners to explore the impact of e-business on airlines. It is key to the learning experience that learners gain an early appreciation of the different types of e-business used by airlines in terms of both consumers and related businesses. Small-group debate, bringing findings back to the whole group, would enable learners to develop that early appreciation and then be able to arrive at a suitable definition of e-business.

An understanding of the impact of e-business on airlines may best be developed through a range of question and answer sessions with the tutor filling in gaps in learner knowledge. For example, it would benefit the learners to undertake some form of yield management exercise which shows what effect pricing can have on the profit or loss of any individual or series of flights.

Learners can investigate the benefits of e-business for airline customers by using the internet to see if they can make a booking for a flight on the other side of the world at a time that will show 24-hour access can be achieved. Feedback by learners to the group using evidence from a website, followed by a tutor-led discussion on how this has changed over the years both prior to and during the early years of the internet will aid understanding of the actual benefits.

Learning outcome 2 asks learners to explore the effectiveness of airline reservation websites. This needs an internet investigation of three different types of airline website and for learners to comment on the features for each website, for example ease of navigation, provision of information. Using screen downloads to support the relevant written work for each of the features within the three websites would help to show learner understanding.

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 understanding of the term 'e-business' and discussing possible definitions of e-business.
Outline the different types of technology used by airlines within e-business and the range of uses these may have in aiding not only sales but also the administration and accounts procedures airlines use.
Analyse the impact of e-business and technology on airlines, review past methods of sales and administration and how current and planned methods have streamlined and improved airline operations – especially with the growth of airline alliances.
Discuss the impact of e-business on airline customers and how this has reduced the reliance on travel agents, made routes and prices more visible, offered 24-hour availability and the capability of making quick comparisons between different airlines and schedules.

Topic and suggested assignments/activities and/assessment

Preparation for assignment

Assignment 1: Impact of E-business on Airline Activities (P1, P2, P3, P4, M1, D1)

Feedback on assignment

Review the features of airline reservation websites – the offering, hyperlinks, pricing structures, flight information and ancillary services.

Analyse the effectiveness of different airline websites. A comparison between scheduled full service airlines and low-cost or cargo airlines looking particularly at appearance, ease of use (navigation), speed of process etc.

Preparation for assignment

Assignment 2: Effectiveness of Airline Reservation Websites (P5, P6)

Feedback on assignment

Assessment

A number of assessment methods can be used in this unit, including a report, information sheets and presentations.

P1 – P2 – P3 – P4

To achieve P1, learners need to create a definition of e-business that goes beyond just selling products on websites. Learners should include examples of business to business, business to consumer and in-flight internet access within their definition.

To achieve P2, learners should produce an outline of the different technology used currently by airlines. Learners should include a minimum of two examples for each point listed in the unit content.

To achieve P3, learners need to analyse the impact of e-business on airlines for all of the items listed in the unit content giving actual examples, for example direct bookings have saved the payment of commissions to travel agents (disintermediation).

To achieve P4, learners need to discuss the benefits of e-business for airline customers. Learners should cover all the points listed in the unit content, provide examples to support their discussions and demonstrate a thorough understanding of how e-business has had a beneficial impact on airline customers. Learners could provide supporting evidence of interviews with airline customers and annotated screenshots of airline websites.

P5 – P6

To achieve P5, learners should provide a review of the features of airline websites. Learners should select a minimum of two websites each for the three different types of airline i.e. full service scheduled, low cost scheduled and cargo. Learners should review the features listed in the unit content. It is recommended that P5 is assessed at the same time as P6.

To achieve P6, learners should analyse the effectiveness of a minimum of three of the websites reviewed for P5. Learner analysis should cover all items listed in the unit content. Learners can use a comparison table for the three websites under each of the headings listed in the unit content. Learners should provide annotated screenshots of web pages to support their analysis.

M1 – D1

To achieve M1, learners should compare how two different types of passenger airline, for example a scheduled full service airline and a low-cost airline, style their websites to attract certain types of customer, for example business, leisure, VFR. Evidence should cover all the features listed in the unit content.

To achieve D1, learners should evaluate all aspects of an existing airline's website making recommendations for improvement. Learners must explain how any proposed changes will benefit both the customer and the airline. Learners will need to justify their proposed improvements fully. An example relating to the booking process might be for a low-cost airline to show a more inclusive fare. Another example might relate to navigating through the selection of seating to avoid extra payment.

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, P4, M1, D1	Assignment 1: Impact of E-business on Airline Activities	Working within an IT department you have been given the task of explaining the uses, benefits and drawbacks of e-business in aviation.	Information pack/ presentation
P5, P6	Assignment 2: Effectiveness of Airline Reservation Websites	Working within an IT department you have been given the task of reporting on the effectiveness of airline reservation websites.	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 Unit 10: Marketing in the Aviation Industry	n/a

Essential resources

Learners must have access to the internet.

Employer engagement and vocational contexts

The use of guest speakers and relevant 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	independently exploring different airline reservation websites identifying strengths and limitations.

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	visiting and reviewing different airline reservation websites
Self-managers	planning and managing the workload of the assessment
Effective participators	discussing the impact of e-business on airlines and customers.

● 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 variety of airline reservation websites to explore features and effectiveness
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	planning a review of different airline reservation websites
Manage information storage to enable efficient retrieval	saving screen shots safely in folders to enable retrieval for inclusion into written work
Follow and understand the need for safety and security practices	using passwords to access systems and take care not to make confirmed reservations
Troubleshoot	as required
ICT — Find and select information	
Select and use a variety of sources of information independently for a complex task	using appropriate search criteria to source appropriate airline reservation systems to meet the requirements of the unit assessment
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	accessing a range of airline reservation websites and evaluating the effectiveness
ICT — Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> • text and tables • images • numbers • records 	saving and inserting screen shots of airline reservation websites, entering and developing text to comment on features and effectiveness
Bring together information to suit content and purpose	collating research notes, screen shots and written text to meet the assessment requirements
Present information in ways that are fit for purpose and audience	presenting a review of airline websites to the IT department in a professional and clear manner
Evaluate the selection and use of ICT tools and facilities used to present information	selecting the most appropriate ICT tools to produce a professional review of airline websites
Select and use ICT to communicate and exchange information safely, responsibly and effectively including storage of messages and contact lists	safely storing and exchanging information relating to the assessment 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 the financial impacts of e-business on airlines such as commission payments associated with intermediation, yield management, staff savings and establishment costs
Draw conclusions and provide mathematical justifications	exploring the financial impacts of e-business on airlines such as commission payments associated with intermediation, yield management, staff savings and establishment costs
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	discussing the impact of e-business on airlines
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	reading text on airline reservation websites to understand the features and judge the effectiveness
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	writing a report on the effectiveness of reservation websites, communicating examples clearly and accurately.