OCR
Oxford Cambridge and RSA

Cambridge **TECHNICALS LEVEL 3**

Cambridge TECHNICALS 2016

# *IT*

## Unit 12 – Mobile technology
## DELIVERY GUIDE

Version 2

ocr.org.uk/it

# CONTENTS

# INTRODUCTION

**This Delivery Guide has been developed to provide practitioners with a variety of creative and practical ideas to support the delivery of this qualification. The Guide is a collection of lesson ideas with associated activities, which you may find helpful as you plan your lessons.**

OCR has collaborated with current practitioners to ensure that the ideas put forward in this Delivery Guide are practical, realistic and dynamic. The Guide is structured by learning outcome so you can see how each activity helps you cover the requirements of this unit.

We appreciate that practitioners are knowledgeable in relation to what works for them and their learners. Therefore, the resources we have produced should not restrict or impact on practitioners' creativity to deliver excellent learning opportunities.

Whether you are an experienced practitioner or new to the sector, we hope you find something in this guide which will help you to deliver excellent learning opportunities.

If you have any feedback on this Delivery Guide or suggestions for other resources you would like OCR to develop, please email resources.feedback@ocr.org.uk.

## OPPORTUNITIES FOR ENGLISH AND MATHS SKILLS DEVELOPMENT AND WORK EXPERIENCE

We believe that being able to make good progress in English and maths is essential to learners in both of these contexts and on a range of learning programmes. To help you enable your learners to progress in these subjects, we have signposted opportunities for English and maths skills practice within this resource. We have also identified any potential work experience opportunities within the activities. These suggestions are for guidance only. They are not designed to replace your own subject knowledge and expertise in deciding what is most appropriate for your learners.

English

Maths


Work

**Please note**

The timings for the suggested activities in this Delivery Guide **DO NOT** relate to the Guided Learning Hours (GLHs) for each unit.

Assessment guidance can be found within the Unit document available from www.ocr.org.uk.

The latest version of this Delivery Guide can be downloaded from the OCR website.

## UNIT AIM

You may come to this unit as a proficient user of a mobile phone but you may be less familiar with other mobile technologies and their operating systems. The aim of this unit is to broaden your knowledge and understanding of the wider potential of mobile technologies and its consequences to people and businesses. This unit is as much about new technologies as it is about promoting critical analysis of existing situations and proposing better solutions.

Technical developments move quickly and legislation usually lags behind. Tutors are encouraged to incorporate relevant new developments and laws into this unit.

This unit is an optional unit to the Emerging Digital Technology Practitioner pathway due to the strong links between mobile technology and emerging digital technologies. In addition it is also in the Application Developer pathway due to the increase in the use of mobile technology within business, as application developers need to have a good understanding of the uses of mobile technology and the technologies involved and as mobile technology is now in wide use by individuals and businesses. It is also in the IT Infrastructure Technician specialist pathway as it is important that IT technicians have an understanding of the hardware, software and technology involved. This unit will provide them with an insight into mobile technology providing them with the foundation to develop their skills, knowledge and understanding of this important area further in the future.

Knowledge gained in the study of this unit will also help prepare you for relevant industry qualifications such as CompTIA Mobility+.

The activities within this teaching and learning resource must not be used for summative assessment purposes. As part of our teaching we expect support to be given to your learners; such support is not permissible for summative assessment and is likely to be considered malpractice.

| Unit 12 Mobile technology | |
|---|---|
| **LO1** | Understand mobile technologies |
| **LO2** | Be able to investigate how businesses use mobile technologies |
| **LO3** | Be able to determine solutions for the use of mobile technologies |
| **LO4** | Be able to present solutions for the use of mobile technologies |

To find out more about this qualification please go to: http://www.ocr.org.uk/qualifications/cambridge-technicals-it-level-3-certificate-extended-certificate-introductory-diploma-foundation-diploma-diploma-05838-05842-2016-suite

Cambridge TECHNICALS 2016

## *2016 Suite*

- **New suite for first teaching September 2016**
- **Externally assessed content**
- **Eligible for Key Stage 5 performance points from 2018**
- **Designed to meet the DfE technical guidance**

# RELATED ACTIVITIES

The Suggested Activities in this Delivery Guide listed below have also been related to other Cambridge Technicals in IT units/Learning Outcomes (LOs). This could help with delivery planning and enable learners to cover multiple parts of units.

| This unit (Unit 12) | Title of suggested activity | Other units/LOs | |
|---|---|---|---|
| **LO1** | Current uses of mobile technology<br>Features and functions of mobile devices | Unit 1 Fundamentals of IT | LO1 Understand computer hardware<br>LO2 Understand computer software |
| | The ins and outs of mobile devices connection<br>Playing tag 1<br>Playing tag 2<br>Using location services 1<br>Using location services 2 | Unit 1 Fundamentals of IT | LO5 Understand ethical and operational issues and threats to computer systems |
| | The future of mobile technologies | Unit 1 Fundamentals of IT | LO5 Understand ethical and operational issues and threats to computer systems |
| | | Unit 17 Internet of everything | LO1 Understand what is meant by the Internet of Everything (IoE) |
| **LO2** | Use of social media by business | Unit 13 Social media and digital marketing | LO2 Understand the use of social media by business |
| | Ethical obligations – a debate | Unit 3: Cyber security | LO2 Understand the issues surrounding cyber security |
| | Cloud-based solutions – practical use | Unit 1 Fundamentals of IT | LO3 Understand business IT systems |
| **LO3** | Risks with mobile technologies | Unit 2 Global information | LO6 Understand the principles of information security |
| | | Unit 3 Cyber security | LO3 Understand measures used to protect against cyber security incidents |
| **LO4** | How to promote mobile technological solutions to a non-technical audience | Unit 14 Software engineering for business | LO3 Be able to develop software solutions to meet business requirements<br>LO4 Be able to propose software solutions to meet business requirements |
| | Comparing verbal versus written communication | Unit 1 Fundamentals of IT | LO4 Understand employability and communication skills used in an IT environment |
| | Analyse feedback and consider the viability of changes to the solution | Unit 14 Software engineering for business | LO3 Be able to develop software solutions to meet business requirements<br>LO4 Be able to propose software solutions to meet business requirements |

# KEY TERMS

| Explanations of the key terms used within this unit, in the context of this unit | |
|---|---|
| **Key term** | **Explanation** |
| **ATC** | Air Traffic Control (ATC) is a service provided by ground-based controllers who direct aircraft on the ground and through controlled airspace. |
| **Cloud computing** | Cloud computing and storage solutions provide users and enterprises with various capabilities to store and process their data in third-party data centres. It relies on sharing of resources to achieve coherence and economies of scale, similar to a utility (like the electricity grid) over a network. Google Docs and Google Drive are simple, everyday examples. |
| **Global Positioning System (GPS)** | GPS is a space-based navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites. A GPS receiver monitors multiple satellites and solves equations to determine the exact position of the receiver. |
| **The Internet of Things (IoT)** | IoT is the network of physical objects, devices, vehicles, buildings and other items which are embedded with electronics, software, sensors, and network connectivity, which enables these objects to collect and exchange data. |
| **The Internet of Everything (IoE)** | IoE is a broad term that refers to devices and consumer products connected to the Internet and outfitted with expanded digital features. It is a philosophy in which technology's future is comprised of many different types of appliances, devices and items connected to the global Internet. The term is somewhat synonymous with the Internet of Things (IoT). |
| **Near field communication (NFC)** | NFC is a set of communication protocols that enable two electronic devices, one of which is usually a portable device such as a smartphone, to establish communication by bringing them within 10 cm (4 inches) of each other. NFC tags can be programmed to show text on the reading device or start an application e.g. web browser to show a specific webpage. Data can be exchanged between smartphones, and payments made with systems such as Apple Pay. |
| **Social media** | Social media are computer-mediated tools that allow people or companies to create, share, or exchange information, career interests, ideas, and pictures/videos in virtual communities and networks. |
| **Request For Information (RFI)** | RFI is a request made typically during the project planning phase where a buyer cannot clearly identify product requirements, specifications, and purchase options. |
| **Radio-Frequency Identification (RFID)** | RFID refers to small electronic devices that consist of a small chip and an antenna. Typically the chip is capable of carrying 2,000 bytes of data or less. RFID tags are frequently used in retail. For example, you could just put all of your groceries or purchases in a bag, and set the bag on the scanner. It would be able to query all of the RFID devices and total your purchase immediately. |
| **Traffic collision avoidance system (TCAS)** | A traffic collision avoidance system or traffic alert and collision avoidance system (both abbreviated as TCAS, and pronounced tee-kas) is an aircraft collision avoidance system designed to reduce the incidence of mid-air collisions between aircraft. |

# MISCONCEPTIONS

| Some common misconceptions and guidance on how they could be overcome | | |
|---|---|---|
| **What is the misconception?** | **How can this be overcome?** | **Resources which could help** |
| **The difference between telecare and telehealthcare** | Telecare is specifically different from telemedicine and telehealth. Telecare refers to the idea of enabling people to remain independent in their own homes by providing person-centred technologies to support the individual or their carers.<br><br>In contrast, telehealthcare (or telehealth) is the remote exchange of data between a patient at home and their clinician(s) to assist in diagnosis and monitoring typically used to support patients with long-term conditions. Among other things it comprises fixed or mobile home units to measure and monitor temperatures, blood pressure and other vital signs parameters (and the answering of targeted questions) for clinical review at a remote location using phone lines or wireless technology. | NHS Choices<br>Telecare and alarms<br>http://www.nhs.uk/Planners/Yourhealth/Pages/Telecare.aspx<br>NHS guide to telecare and personal alarms. |

# SUGGESTED ACTIVITIES

| LO No: | 1 | | |
|---|---|---|---|
| **LO Title:** | **Understand mobile technologies** | | |
| **Title of suggested activity** | **Suggested activities** | **Suggested timings** | **Also related to** |
| **Current uses of mobile technology** | Learners could be put into small groups to make lists of different mobile devices. The lists could be combined and then discussed by the whole group with the tutor's assistance to ensure that a full range of devices is included.<br><br>The whole group could be brought together to expand the list into a table of features to include types of input (e.g. mini keyboard, voice, touchscreen, NFC, GPS) and output (e.g. print, audio, IR, and vibration alerts), and attributes such as size, active or passive, and functionality (e.g. telephony, Internet access, ability to run apps). | 40 minutes | Unit 1 LO1, LO2 |
| **Features and functions of mobile devices** | Tutors could allocate the name of one or more device(s) to each group of learners to research the features/functionality of the device(s) i.e. connectivity and operating systems. Each group could report back, for example, using one or more mindmaps/spidergrams, covering their allocated device(s) and their features/functionality. (This will give learners a broad introduction to a wide range of mobile technology.)<br><br>The mindmaps/spidergrams could be retained at the end of the lesson so that additions could be made during some of the following activities. | 40 minutes | Unit 1 LO1, LO2 |
| **What is TCAS?** | A short research activity focussing on a specialised application of mobile technology to improve the learners' awareness of the range of applications (in this example, aircraft collision avoidance). Tutors could ask the following questions:<br>• What is TCAS?<br>• Where would you find TCAS?<br>• How does TCAS help its user?<br>• What communications are used by TCAS?<br>• What equipment is needed to use TCAS?<br><br>Useful resources:<br>https://www.ll.mit.edu/publications/journal/pdf/vol16_no2/16_2_04Kuchar.pdf<br>https://www.youtube.com/watch?v=zk7dl3NStIo | 20 minutes | |

| Title of suggested activity | Suggested activities | Suggested timings | Also related to |
|---|---|---|---|
| **The ins and outs of mobile devices connection** | Learners could carry out individual or group research into the limitations, ranges and uses of different standards, using the areas shown in the Teaching Content plus any developing technology. The mindmaps/spidergrams from the Features and functions of mobile devices activity could be used to record the findings. Alternatively, a comparison chart could be created incorporating the findings.<br><br>Practical applications, such as Bluetooth data transfer, could be investigated for range and limitations using available Bluetooth devices such as mobile phones, Bluetooth enabled speakers, hands-free phone kits. The range and limitations of GPS could be investigated using free trial GPS mapping apps such as Viewranger or services such as Google Maps.<br><br>Learners could be encouraged to investigate the ethical issues associated with mobile technologies such as offender tagging. Offender tagging is explored in an online presentation:<br><br>The Electronic Monitoring of Offenders: ethics, policy and technology<br>http://cep-probation.org/wp-content/uploads/2015/03/pres-EM09-Nel.pdf<br>This includes some comparison with other 'benign' methods such as parents tracking children's mobiles, and tagging the elderly and hospital patients for care and safeguarding purposes. These issues could also be considered in the following activities, particularly those concerning the use of location services.<br><br>The ethical considerations of tagging learners are considered in the following resource from *The Guardian*:<br>Is UK college's RFID chip tracking of pupils an invasion of privacy?<br>https://www.theguardian.com/technology/2013/nov/19/college-rfid-chip-tracking-pupils-invasion-privacy | 1 hour | Unit 1 LO5 |
| **Playing tag 1** | Learners could use smartphone apps to generate QR codes and use QR code reader apps to read the codes. Similarly, NFC tags are available cheaply which can be programmed using an NFC enabled smartphone app for a number of different types of data/application. Learners could create smart business cards using both types of technology, and compare the benefits and disadvantages of them.<br><br>The learners could also investigate the ethical issues associated with mobile technologies as outlined in the activity above, (The ins and outs of mobile devices connection). | 1 hour | Unit 1 LO5 |

| Title of suggested activity | Suggested activities | Suggested timings | Also related to |
|---|---|---|---|
| **Playing tag 2** | Learners could visualise and implement a creative use for QR codes or NFC tags. This could focus on current and potential future uses of the mobile technology. Some areas to consider are listed in the Teaching Content, others could include simple games or medical applications. Additional information discovered could be added to the mindmap/spidergram from the Features and functions of mobile devices activity.<br><br>The learners could also investigate the ethical issues associated with mobile technologies as outlined in the activity above, (The ins and outs of mobile devices connection). | 40 minutes | Unit 1 LO5 |
| **Using location services 1** | Learners could begin by identifying devices that are capable of using location services. There will be a number of obvious choices such as sat nav devices. Learners could be encouraged to find less obvious examples such as autonomous robotic devices.<br><br>The learners could also investigate the ethical issues associated with mobile technologies as outlined in the activity above, (The ins and outs of mobile devices connection). | 20 minutes | Unit 1 LO5 |
| **Using location services 2** | Learners could investigate current and potential future uses of geofencing. There are Internet sources which explain the concept and include example uses, such as :<br>http://www.howtogeek.com/221077/htg-explains-what-geofencing-is-and-why-you-should-be-using-it/<br>https://www.youtube.com/watch?v=f1I4dXxWK1E<br><br>Learners could discuss their findings, and compare geofencing technology with, for example, use of physical sensors such as on railway systems and whether such systems could use geofencing.<br><br>The learners could also investigate the ethical issues associated with mobile technologies as outlined in the activity above, (The ins and outs of mobile devices connection). | 30 minutes | Unit 1 LO5 |

| Title of suggested activity | Suggested activities | Suggested timings | Also related to |
|---|---|---|---|
| **The future of mobile technologies** | Many of the items listed under current and potential future uses in the Teaching Content are encompassed by the concepts of the Smart City and the Internet of Everything (IoE).<br><br>By researching the Smart City and IoE, learners could identify the mobile technologies that enable them to happen. There are Internet sources that demonstrate the concepts, for example:<br><br>UK Government Paper – Smart Cities background paper<br>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/246019/bis-13-1209-smart-cities-background-paper-digital.pdf<br><br>BBC News article 2013 – Tomorrow's cities: Do you want to live in a smart city?<br>http://www.bbc.co.uk/news/technology-22538561<br><br>IBM website - Smarter Care in Bolzano<br>http://www-03.ibm.com/able/news/bolzano_video.html<br><br>Learners could discuss and compare their findings, and be encouraged to generate ideas for future uses of the technologies.<br><br>The learners could also investigate the ethical issues associated with mobile technologies as outlined in the activity above, (The ins and outs of mobile devices connection). | 40 minutes | Unit 1 LO5<br>Unit 17 LO1 |

# SUGGESTED ACTIVITIES

| LO No: | 2 | | |
|---|---|---|---|
| **LO Title:** | **Be able to investigate how businesses use mobile technologies** | | |
| **Title of suggested activity** | **Suggested activities** | **Suggested timings** | **Also related to** |
| **Uses of mobile technologies 1** | Learners could investigate the use of mobile technology in road haulage companies using a worksheet devised from resources below.<br><br>The following resource describes how vehicle tracking systems work:<br>http://en.wikipedia.org/wiki/Vehicle_tracking_system<br><br>The following example features the owner of a haulage company explaining how technology supplied by Quartix Vehicle Tracking is used, and the benefits it brings:<br>https://www.youtube.com/watch?v=a-RIP-Nczys&feature=player_detailpage<br><br>The following resource covers fuel consumption monitoring and fuel management:<br>http://vehicletracking.expertmarket.co.uk/fuel-monitoring-management-systems<br><br>The group could discuss the benefits they have identified. | 40 minutes | |
| **Uses of mobile technologies 2** | Learners could investigate the use of mobile technology in healthcare using android and/or iOS apps or a suitable simulation on a laptop or PC.<br><br>For example, the NHS National Early Warning Score system is described with printable resources such as charts and scoring system on the following website: https://tfinews.ocbmedia.com/<br><br>The system is available as an Android app (see https://play.google.com/store/apps/details?id=appinventor.ai_ACutePhysician.MEWS) or could be, for example, modelled using a spreadsheet to simulate use on a mobile device.<br><br>Learners could be given example data and asked to compare the accuracy and efficiency of recording and scoring manually against using the mobile app.<br><br>The group could discuss the advantages and disadvantages of the two systems. | 1.5 hours | |

| Title of suggested activity | Suggested activities | Suggested timings | Also related to |
|---|---|---|---|
| **Uses of mobile technologies 3** | Learners could investigate mobile payment systems and consider the best way for a small trader to facilitate payments by customers.<br><br>Learners could be split into two groups. The first group could investigate the use of mobile technologies such as Paypal Here, which requires card reader technology linked to mobile phones. Suitable directed research should take place, for example, using the video below, and other suitable sources.<br><br>Paypal Here Chip and PIN Card Reader Review<br>https://www.youtube.com/watch?v=ilL9GsBI3ik#t=387<br><br>The second group could investigate the use of mobile payments technology such as Paym, where the customer only needs to know the merchant's mobile phone number to make payment. http://www.paym.co.uk/how-does-it-work<br><br>The two groups could then be brought together to present their findings which could compare the benefits and similarities of the different technologies, and also the different constraints that will apply. | 1 hour | |
| **Use of social media by business** | Learners could identify different social media used by businesses and then identify the ways in which they use each of the social media and why they need it.<br><br>Useful resources:<br><br>Using Social Media to Grow Your Small Business<br>https://www.youtube.com/watch?v=hsjrnrl6mq4<br><br>Social media and the law: A handbook for UK companies<br>http://www.linklaters.com/pdfs/mkt/london/tmt-social-media-report.pdf<br><br>Law Society 2015<br>http://www.lawsociety.org.uk/support-services/advice/practice-notes/social-media/ | 30 minutes | Unit 13 LO2 |

| Title of suggested activity | Suggested activities | Suggested timings | Also related to |
|---|---|---|---|
| **Ethical obligations – a debate** | Learners could research the ethical considerations of using mobile technologies. Learners could be split up into small groups to investigate the issues, some of which are given as examples in the Teaching Content. Those issues, with others, may have been encountered in earlier research such as the HGV tracking activity. Further issues such as the blurring of boundaries between personal and professional use of social media, for example the use of LinkedIn, are found in sources such as the following:<br><br>Law Society 2015<br>http://www.lawsociety.org.uk/support-services/advice/practice-notes/social-media/<br><br>A debate could follow where one set of learners supports the use of social media for business whilst another set of learners argues the case against. | 40 minutes | Unit 3 LO2 |
| **Cloud-based solutions – practical use** | A practical exercise could involve tutors setting up a Google account in order to demonstrate the use of Google Docs and Google Drive.<br><br>A simulation could be set up, such as a spreadsheet, where learners are given a link to access Google Sheets. For example, learners could be given the role of sales personnel with their month's sales figures to be entered into a summary worksheet. This will demonstrate collaborative working and productivity gain together with a cloud-based solution. | 40 minutes | Unit 1 LO3 |

# SUGGESTED ACTIVITIES

| LO No: | 3 | | |
|---|---|---|---|
| **LO Title:** | **Be able to determine solutions for the use of mobile technologies** | | |
| **Title of suggested activity** | **Suggested activities** | **Suggested timings** | **Also related to** |
| **Investigate business requirements 1** | Tutors could ask learners to supply responses to the points listed in 3.1 Investigating Business Requirements section of the Teaching Content. The group could then carry out a practical exercise such as a simulation of tracking using one of the many free mobile phone tracking applications.<br><br>An extension task could be to consider the ethical issues of tracking. | 1.5 hours | |
| **Investigate business requirements 2** | Using the example of telehealthcare, tutors could ask learners to identify client and user needs and wants, and possibly arrive at a solution that could meet some of them. Ideas might include adding NFC tags or QR codes to medication to perform useful functions for the users.<br><br>Resources identifying client and user needs and wants include:<br>http://www.nhs.uk/Planners/Yourhealth/Documents/Supporting your independence and wellbeing with Telehealth and Telecare.pdf<br><br>Learners could prototype their ideas using simple available technology such as NFC writer apps and QR-code writer apps.<br><br>An extension task could be to investigate the APIs that are available e.g. Bluetooth connectivity, for app development accessing healthcare devices such as blood pressure monitors:<br>• Android development – https://developers.google.com/android/<br>• Apple development – https://developer.apple.com/ios/?WT.mc_id=Blog_Intune_Announce_PCIT_1_1_1_1 | 1.5 hours | |
| **Planning for mobile technology** | Tutors could provide learners with a scenario involving use of mobile technology e.g. a team of estimators for a double-glazing business that uses an online costing system to produce quotes at the customer's house/place of business. Learners could investigate the topics under 3.2 Planning in the Teaching Content. The group could then be brought back together to share the findings. | 30 minutes | |

| Title of suggested activity | Suggested activities | Suggested timings | Also related to |
|---|---|---|---|
| **Risks with mobile technologies** | Learners could research the risks to business of using mobile devices. These could include physical risks such as theft, and other risks such as interception of transmissions, or reliance on externally provided resources e.g. the GPS system owned by the US government. Learners could then share their findings with the group. Real-life instances of risks could be researched using the News Search feature on Internet search engines.<br><br>In small groups, learners could then find possible ways to manage the risks e.g. remote deleting of data. Findings would then be shared with the other groups. | 40 minutes | Unit 2 LO6<br>Unit 3 LO3 |
| **Technology business plan** | Organisations use mobile technology with their own devices. Some will also communicate with other devices such as customers' smartphones and tablets.<br><br>Tutors could lead the learners through an investigation of the topics under 3.3 Technology business plan of the Teaching Content, using examples from the real world. For example:<br>Personalised health and care 2020: a framework for action:<br>https://www.gov.uk/government/publications/personalised-health-and-care-2020/using-data-and-technology-to-transform-outcomes-for-patients-and-citizens<br>https://www.gov.uk/government/publications/personalised-health-and-care-2020 | 40 minutes | |
| **Technology business plan – advances in technology** | Learners could be introduced to the Ipsos MediaCT Tech Tracker which provides demographic information on mobile technology ownership and usage. This information is used for planning and is referred to in the NHS plan identified in the activity above. Tutors could host a discussion which involves reviewing demographic information to predict which groups would expand the use of different mobile technologies.<br><br>Useful resource:<br>https://www.ipsos-mori.com/researchspecialisms/ipsosmediact/customresearch/technology/techtracker.aspx | 40 minutes | |

# SUGGESTED ACTIVITIES

| LO No: | 4 | | |
|---|---|---|---|
| **LO Title:** | **Be able to present solutions for the use of mobile technologies** | | |
| **Title of suggested activity** | **Suggested activities** | **Suggested timings** | **Also related to** |
| **How to promote mobile technological solutions to a non-technical audience** | Learners could be directed to tutorial material on the Internet such as:<br><br>How to summarise:<br>http://www.library.dmu.ac.uk/Support/Heat/index.php?page=489<br>http://www.monash.edu.au/lls/llonline/writing/information-technology/sources/2.5.3.xml<br><br>Let's write a summary!<br>https://www.youtube.com/watch?v=SYLxIudVQnA<br><br>Tutors could provide further information to assist in understanding the audience. Learners could be directed to sources such as:<br>Audience Analysis<br>https://www.prismnet.com/~hcexres/textbook/aud.html | 30 minutes | Unit 14 LO3, LO4 |
| **Comparing verbal versus written communication** | Learners could be directed to sources of information on verbal and written communication such as:<br><br>Difference between oral and written communication<br>http://thebusinesscommunication.com/difference-between-oral-and-written-communication/<br><br>Types of communication – interpersonal, non-verbal, written, oral<br>https://www.youtube.com/watch?v=7BlYJVr7M2U<br><br>Learners could be shown examples of different types of information such as numerical and textual, complex and none-complex. They could group them according to the suitability of verbal or written communication. A tutor-directed discussion could be used to confirm the choices. | 30 minutes | Unit 1 LO4 |

| Title of suggested activity | Suggested activities | Suggested timings | Also related to |
|---|---|---|---|
| **What is a business case?** | Learners may need to gain an understanding of what a business case is, what it looks like, and how one is written. There are many sources of explanation and examples on the Internet that could be explored individually or as group work. For example:<br><br>Definition of business case<br>http://whatis.techtarget.com/definition/business-case<br><br>How to write a business case<br>http://whatis.techtarget.com/reference/How-to-write-a-business-case<br><br>Templates for writing a business case<br>http://www.projectmanagementdocs.com/project-initiation-templates/business-case.html | 30 minutes | |
| **How to make a convincing case** | Learners could be helped to understand the importance of the visual impact as well as the content of their presentation by the use of exemplar videos. Learners could note the key points whilst watching the videos. These points could then be reviewed with the learners to enable them to correct or add to their individual records.<br><br>The following are examples of the resources that are available.<br><br>The first resource is a blog that explains a wide range of factors that go to make up an effective presentation.<br><br>How to Improve Your Presentation Skills – 10 Tips for Most Important Skills<br>http://www.virtualstudio.tv/blog/post/147-how-to-improve-your-presentation-skills--10-tips-for-most-important-skills<br><br>The following video is an analysis of a presentation by one of the founders of Apple Corporation, Steve Jobs, which highlights the features that get the audience onside, and inform them:<br>Make a Presentation Like Steve Jobs<br>https://www.youtube.com/watch?v=RHX-xnP_G5s | 30 minutes | |

| Title of suggested activity | Suggested activities | Suggested timings | Also related to |
|---|---|---|---|
| **Improvements to mobile technological solutions** | Learners could gain understanding of ways to obtain feedback from stakeholders by being directed to online sources such as:<br>7 Ways to Communicate with Your Stakeholders<br>https://thesavvypm.wordpress.com/2008/05/28/7-ways-to-communicate-with-your-stakeholders/<br><br>Tutors could introduce discussions on other ways more related to feedback from users of mobile technology using questions related to the technology e.g. How is user feedback for mobile apps obtained?<br><br>A discussion with the learners could uncover existing experience of feedback requests such as by email, SMS or online survey such as SurveyMonkey. | 45 minutes | |
| **Analyse feedback and consider the viability of changes to the solution** | Learners could perform qualitative and/or quantitative analysis of feedback data. This data could be collected, for example, from the reviews of mobile apps in Google Play or App Store, and/or generated using, for example, random numbers and a data generator such as:<br>http://www.mockaroo.com/<br>http://homepage.net/name_generator/.<br><br>To find a methodology for carrying out the analysis, learners could be directed to a relevant source such as:<br>How To Analyze Customer Feedback<br>http://www.customerservicemanager.com/how-to-analyze-customer-feedback/<br><br>Learners could analyse the quantitative data in a spreadsheet using formulae and functions, and present the data using tables and charts. | 1.5 hours | Unit 14 LO3, LO4 |
| **Predicting consequences of change** | Following the activity above, the learners could discuss the viability of changes and what improvements to the solution could be implemented based on viability of feedback.<br><br>Learners could then identify future actions or events which are measurable (e.g. increased profits, customer satisfaction, response time). | 30 minutes | |

The small print

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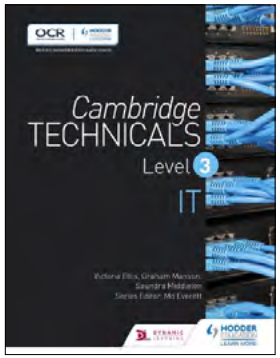
Publication date: 26 Aug 2016

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