
Overview

This unit covers the capture of specified originals into digital form using either a scanner or digital camera.

The unit involves working to instructions provided by someone else or, if you are carrying out image capture of your own material, then you provide the specification.

The scanners used are likely to be flatbed scanners or drum scanners. Digital cameras can be any camera capable of capturing and transferring a digital image to a computer.

This is what the unit covers

Equipment

Advances in scanning and digital camera technology mean that much of the work previously done on high-end drum scanners is now be done on flatbed scanners or captured straight onto a digital camera.

Although scanning and digital photography are quite different techniques, both create digital images that can be transferred to a computer for subsequent use.

The images to be captured

You must be able to accurately capture black-and-white images and colour images

You must be able to work with RGB colour and Greyscale.

A key requirement is the ability to handle safely any material to be scanned, particularly if this is the property of other people.

Assessment of captured image

You must be able to make an accurate subjective assessment of the image that has been captured. You must be able to detect any defects; you must also be able to recognise those due to faulty image capture and those due to other factors, e.g. difficult originals.

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Capture images from specific sources

Performance criteria

Prepare and maintain systems for image capture

You must be able to:

- P1 establish the following from the person issuing the image capture instructions:
 - P1.1 the nature of any material to be scanned
 - P1.2 the nature of the images required
 - P1.3 the file format in which the images should be saved
 - P1.4 the equipment to be used
- P2 confirm that the physical condition of any original material is suitable for scanning or that lighting is suitable for photography.
- P3 confirm that the equipment has been calibrated and the settings are correct for the image capture and the output required
- P4 make sure that the equipment to be used and any original materials are clean
- P5 handle any original material carefully and safely
- P6 position the camera and / or subject matter ready for image capture.

Capture specified images

You must be able to:

- P7 capture digital images which are correct in terms of the following:
 - P7.1 physical size
 - P7.2 file size
 - P7.3 content
 - P7.4 orientation
 - P7.5 colour space
 - P7.6 output resolution
- P8 capture digital images which are free of the following unwanted effects:
 - P8.1 physical defects — fingerprints, dust damage and scratches
 - P8.2 newton's rings
 - P8.3 moiré patterning
 - P8.4 pixelisation
 - P8.5 under- or over-exposure
- P9 if relevant, transfer the digital camera images to your computer and assign the correct source profile if it is available.
- P10 assess the captured images accurately against customer requirements and workplace standards
 - P10.1 detect any problems in the captured images
 - P10.2 identify correctly the causes of the problems
 - P10.3 agree the action to be taken to resolve the problems
- P11 save the scanned image data files in the correct format and location with the correct source profiles or working colour space embedded where appropriate.

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Capture images from specific sources

Knowledge and understanding

Capture specified images

You need to know and understand:

- K1 the law as it affects printing
 - K1.1 copyright & ownership of images
 - K1.2 obscenity
 - K1.3 forgery
- K2 ethical issues relevant to printing
 - K2.1 confidentiality
- K3 health & safety
 - K3.1 your duties and responsibilities for health & safety as defined by any specific legislation covering your job role
 - K3.2 workplace health & safety procedures
- K4 the safe handling of customer material
- K5 security & storage
 - K5.1 computer system security and virus protection
 - K5.2 secure means of archiving digital and conventional artwork
- K6 communication
 - K6.1 with colleagues
 - K6.2 with customers
- K7 workplace policy & practice
 - K7.1 workplace objectives, priorities, standards & procedures
- K8 the identification & assessment of printing options
 - K8.1 the role of images in graphic communication
 - K8.2 the stages in the printing process from pre-press to printed product
- K9 the operation of equipment
 - K9.1 the operation of scanners
 - K9.2 the operation of digital cameras
- K10 digital imaging
 - K10.1 the relationship between file size, image size and resolution
 - K10.2 file formats for digital images
 - K10.3 the assessment of material for scanning – potential problems and solutions
- K11 how to deal with digital files
 - K11.1 dealing with embedded information
 - K11.2 file management
- K12 quality assurance & control
 - K12.1 light standards for viewing and assessing colour print
- K13 cleaning, lubrication & maintenance
 - K13.1 the correct choice and use of suitable cleaning agents and lubricants

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