

Unit 20: Managing Physical Resources in a Business Environment

Unit code:	A/502/5451
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

The aim of this unit is to introduce learners to the importance of physical resources to an organisation. They will develop their understanding of the role and remit of the resources manager and apply their knowledge of physical resource management. They will carry this out by conducting a risk assessment of physical resources in an organisation and by designing systems for monitoring the quality and effective use of these resources.

● Unit introduction

This unit introduces learners to the importance that organisations place on the use and management of their physical resources. Today there is greater awareness of the impact on the environment by the inefficient use of physical resources such as water, gas, oil and paper, and the high costs involved in producing energy to support an organisation's needs. This has resulted in organisations having to monitor usage of energy closely to support business operations in order to meet regulatory requirements, such as emissions of toxic substances, as well as seeking to reduce physical resource costs.

Learners will develop their understanding of the broad responsibilities and duties involved in the management of physical resources. The resource management function involves developing excellent negotiation skills in order to negotiate partnerships with suppliers, and knowledge of relevant legal obligations that fall within the remit of resource management, including health, safety, security and consumer legislation. The key activities of planning, procurement and monitoring the effectiveness of the use of resources are essential components of the operational function.

Organisations need to ensure that best use, efficiency, quality and waste management issues are addressed to improve performance and reduce costs. The unit will show learners that managing physical resources is a key function in organisations and that it involves obtaining and using materials, equipment, supplies, premises and energy in the most efficient way to achieve the organisation's operational objectives. Organisations must also ensure that their physical resources are a safe and secure working environment for employees and meet all legal requirements.

The unit shows learners why it is essential for organisations to carry out regular audits and reviews of the efficiency and value for money of their physical resources, such as procurement of consumables or energy usage. As part of this process, learners will carry out a risk assessment of resources in an organisation. Learners will need to appreciate that the maintenance and refurbishment of facilities are activities which require careful planning, ensuring compliance with organisational procedures and staying within budget.

● Learning outcomes

On completion of this unit a learner should:

- 1 Understand the key features of physical resources
- 2 Understand the role of the resources manager
- 3 Understand the legal requirements for managing physical resources
- 4 Be able to monitor the quality and effectiveness of physical resources.

Unit content

1 Understand key features of physical resources

Physical resources: equipment including ICT; materials; buildings and facilities; plant and machinery; supplies; services; energy

Key features: suitability for purpose; efficiency; security; accessibility; ergonomics; planned maintenance and refurbishment; environmental factors eg waste; emergency provision; insurance

2 Understand the role of the resources manager

Planning usage: requirements and suitability; previous trends and developments; meeting organisational objectives, policies and procedures; level of authority; contingency planning

Obtaining resources: eg cost/benefit analysis, sufficiency, amending plans, value for money, legal requirements (consumer legislation, contract management), purchasing procedures, single/multi sourcing, supplier evaluation

Ensuring availability: eg meeting standards, quality, delivery, corrective actions

Monitoring systems: eg impact on environment, benefits and methods of waste reduction, remedial action, accurate records, service level agreements

3 Understand the legal requirements for managing physical resources

Statutory regulations: employment and insurance law, building and accessibility regulations, pest control, hygiene, pollution, compliance, licences, recording documentation

Legal requirements: health and safety measures eg risk assessment procedures, preventative measures; environmental management; regulations for storage of supplies eg Control of Substances Hazardous to Health (COSHH); local and regulatory authorities eg Health and Safety Executive Inspectorate, environmental health officer, fire officer; compliance, recording documentation; good housekeeping

4 Be able to monitor the quality and effectiveness of physical resources

Criteria: performance measures to analyse efficiency and effectiveness, qualitative, quantitative, objectives, targets

Evaluation: purpose, sources of information eg customers, colleagues, staff, suppliers, management; methods of data collection, feedback, accuracy, relevance, reliability, validity; deviations and corrective action, stock control, value for money, improvements and recommendations

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 explain the key features of physical resources for a selected workplace [IE]	M1 evaluate how a selected organisation's policies and procedures contribute to effective and efficient management of physical resources	D1 make recommendations for improving physical resources in a selected workplace
P2 explain the role of the resources manager in a selected organisation	M2 assess how effective the management of physical resources is in complying with legal requirements in a selected organisation	D2 recommend improvements that could be made to managing physical resources to comply with legal requirements, to reduce waste and obtain better value for money in a selected organisation. [IE]
P3 outline key features of health, safety and environmental legislation	M3 review the effectiveness of monitoring systems to identify deviations to planned use of resources. [RL]	
P4 explain regulations that influence the management of physical resources		
P5 conduct a risk assessment of three physical resources in a selected workplace [CT]		

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:
<p>P6 design an appropriate system to monitor the quality and effectiveness of physical resources. [CT]</p>		

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 CT – creative thinkers	RL – reflective learners TW – team workers	SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This unit is intended to be delivered in the workplace, or under simulated conditions. Tutors must ensure that sufficient time is provided to deliver the knowledge and understanding for this unit. If simulations are being used, care must be taken to ensure that learners appreciate the type of organisation in question.

It is advisable for learners to base some learning activities on a selected organisation to gain an appreciation of the responsibilities in managing resources. This could be the organisation they work for, one chosen with tutor guidance, or the centre. Discussion groups can share ideas on the different resource management roles they can expect to carry out, and develop this further by examining how these would apply in different organisations. Visiting guest speakers could provide a valuable input on the management of physical resources.

This unit takes a practical approach to managing physical resources. Discussion groups can identify the range of physical resources an organisation needs to support its aims and objectives. It would be helpful for learners to compare and contrast requirements for different types of organisation, such as a fast food outlet, a car manufacturer, a local leisure centre. This will enable learners to consider the environmental impact of physical resources and security issues. Individual or group research and case studies can be used to illustrate this.

Managing physical resources involves planning usage and obtaining resources, through to monitoring their value for money. Learners need to investigate the process of ordering, storing and distributing supplies to users. The importance of keeping accurate records, complying with legal requirements and meeting organisational procedures, must be addressed. Tutors can provide examples of documentation used, and learners can use in-tray exercises to procure resources, for example stationery. Tutors should also ensure that learners develop an understanding of consumer legislation and contractual issues relevant for this level.

This leads onto legal requirements and health and safety issues associated with physical resources, and tutors should provide a broad overview of this topic. For example, the storage of supplies can be best understood through undertaking risk assessments. Health and safety is covered in many other units of this qualification and the emphasis here is on the quality of the environment for both the organisation's work premises and the wider community. There is a wealth of information and support material available from the Health and Safety Executive.

The use of physical resources needs to be evaluated and reviewed to ensure maximum efficiency, particularly in relation to energy and consumables. Guidelines for reducing energy consumption and wastage are available on the internet, and learners should be encouraged to visit a range of local business premises to examine the key features of the working environment which enable effective use of energy.

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 in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the unit. Whole class
Tutor input. Whole class <ul style="list-style-type: none">• key features of physical resources• role of resources manager• key features of health and safety and environmental legislation related to physical resources Computer room. Pair work researching examples of the impact of legislation on physical resources Feedback from pairs and whole class discussion
Visiting speaker from a regulatory authority
Visiting speaker from centre on role of resources manager
Visit to an outside organisation looking at physical resources
Small-group work: case studies examining the role of the resources manager in different organisations Group feedback and whole-class discussion
Assignment 1: Setting the Scene <ul style="list-style-type: none">• conduct research in the centre on the physical resources• prepare the presentation• give the presentation
Tutor input. Whole class <ul style="list-style-type: none">• introduction to risk assessment• introduction to monitoring systems
Small-group work: case studies and risk assessment Group feedback and whole class discussion Pair work on in tray exercises on monitoring documentation Pair work on preparing monitoring documentation
Assignment 2: Making it Work <ul style="list-style-type: none">• visiting speaker on risk assessment and monitoring• pair work conducting risk assessment• individual work to write up report• pair work preparing presentation• pair work giving presentation (whole-class time)
Supervised assignment work
Non-supervised study time and completion of assignments

Assessment

Learners will be expected to produce evidence that shows their knowledge and understanding of managing physical resources. Learners can provide records to show how they have evaluated and implemented improvements for office users. These can be witness testimonies, tutor observations or a logbook kept by the learner.

For P1, learners must provide a clear overview of suitable workplace facilities and use examples to explain the key features. They can include drawings or photographs to support their description, such as the layout of an office environment showing its suitability for efficient organisational performance. Evidence can be a report or a presentation.

For P2, learners must provide evidence of researching the activities undertaken to secure and use physical resources effectively. Information researched and gathered from visits and/or guest speakers should be used to provide examples of corrective actions taken when planned resources are unavailable. Learners must be able to demonstrate understanding of the importance of complying with consumer legislation. The evidence is likely to be an individual or group presentation.

For P3, learners should be able to illustrate their response with examples of different health, safety and environmental regulations and legislation, for example those relating to the storage of hazardous items, noise, pollution, hygiene. Learners can complete P5 in conjunction with P3 and P4. Evidence must outline actions to be taken to minimise risk and can be illustrated with photographs.

For P6, learners must demonstrate how they have set up a system to monitor the use of resources, for example stationery supplies, energy, room utilisation, telephones, cleaning, catering. They must identify performance criteria for measuring the use of resources and explain the purpose of evaluation in terms of quality, efficiency and effectiveness for the organisation. In addition, learners must give examples of different sources of feedback used for evaluation purposes. Evidence can be records of systems, witness statements, observation reports, and a written account.

For M1, learners can build on their evidence from P1. They must develop realistic suggestions.

For M2, learners can build on P2 and P3. They must explain how the role of the resources manager can benefit the organisation, in terms of waste reduction, room utilisation, etc, and use examples to support this. They can also assess the consequences of ineffective management for organisational performance such as financial penalties, legal action, etc. Evidence is likely to be in the form of a written report or account.

For M3, learners should use examples to show how monitoring systems, such as stock control, can identify deviations. They can examine whether monitoring systems need improving.

For D1, learners must extend their evidence, demonstrating their depth of knowledge and understanding by making recommendations for improving physical resources in a selected workplace. They must use justified examples to illustrate their work.

For D2, learners can develop the evidence produced for M2. They must make justified recommendations for the effectiveness of the improvement.

Programme of suggested assignments

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

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, M2, D2	Setting the Scene.	<p>The governing body of your centre have asked you to give a presentation on the key physical resources in the centre buildings. Your presentation will include:</p> <ul style="list-style-type: none"> • key features of the physical resources • the role of the resources manager • key features of appropriate legislation. <p>You will also need to assess the effectiveness of the management of physical resources in the organisation and recommend, and justify, any improvements that could be made.</p>	Presentation/report
P4, P5, M1, M3, D1	Making it Work.	<p>Your governing body were impressed with your presentation and are keen to see examples of the process in operation. They have asked you to carry out the following activities:</p> <ul style="list-style-type: none"> • design a system to monitor the quality and effectiveness of physical resources • conduct a risk assessment of three physical resources • review the effectiveness of the system for identifying deviations from planned use of resources • assess the effectiveness of the management of physical resources • make and justify recommendations for improvements. 	Design risk assessment and report

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

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

Level 3
Introduction to Marketing
Business Communication
Developing Teams in Business
Understanding Health and Safety in the Business Workplace

This unit also links with the following Level 3 National Occupational Standards.

Business and Administration:

- Unit 301: Carry out your responsibilities at work
- Unit 302: Work within your business environment
- Unit 303: Supervise an office facility
- Unit 304: Procure products and services.

Management and Leadership:

- Unit E05: Ensure your own actions reduce risks to health and safety.

Essential resources

Learners are encouraged to use their own organisation as a resource for investigating workplace physical resources and facilities. Visits to other organisations would be beneficial for learners to observe and experience work environments. Learners will also need access to research facilities via the internet. Case-study materials will support areas that cannot be delivered practically. Guest speakers can provide a valuable input to support the underpinning knowledge and understanding of the unit.

Employer engagement and vocational contexts

Centres should develop links with organisations that can provide visiting speakers to talk about topics related to physical resources planning and management. The centre as an organisation is a valuable resource for visiting guest speakers and as a vehicle for learners to conduct a risk assessment and to conduct further research into physical resources planning and management. Learners can draw on their own experience through their part-time jobs and work placements.

Indicative reading for learners

Textbooks

Atkin B and Brooks A – *Total Facilities Management* (Blackwell Publishing, 2005) ISBN 1 405 127902

Health and Safety Executive – *Successful Health and Safety Management, 2nd Edition* (Health and Safety Executive, 1997) ISBN 0717612767

Holman P and Snee D – *The Improving Efficiency Pocketbook* (Management Pocketbooks, 2000) ISBN 1 870471776

Institute of Leadership and Management – *Controlling Physical Resources (ILM Super Series)*, 4th Edition (Pergamon, 2002) ISBN 075065886X

Journal

Facilities Management Journal (MPP Limited)

Websites

www.hse.gov.uk Health and Safety Executive

www.peoplemanagement.co.uk The online magazine of the Chartered Institute of Personnel and Development

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	describing the key features of physical resources for a selected workplace evaluating the system for managing physical resources in an organisation recommending and justifying improvements to the system for managing physical resources in an organisation
Creative thinkers	generating ideas and exploring possibilities for conducting a risk assessment designing a system to monitor the quality and effectiveness of physical resources trying out alternative or new solutions and following ideas through when they are designing monitoring systems
Reflective learners	reviewing the effectiveness of monitoring systems.

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	planning and carrying out research into physical resources and information within organisations
Creative thinkers	looking at the physical resources of different businesses
Reflective learners	setting goals with, success criteria, for researching business inviting feedback on their own work and dealing positively with praise, setbacks and criticism evaluating their experiences and learning to inform future progress
Team workers	collaborating with others to work towards common goals whilst conducting a risk assessment reaching agreements and managing discussions to work towards common goals when organising and producing their presentations
Self-managers	organising their time and resources, prioritising actions on their risk assessment
Effective participators	presenting an effective case for action when making recommendations for changes to management processes in their presentations.

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Use ICT systems	
Manage information storage to enable efficient retrieval	writing and saving their assignment work
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	using websites to research information
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 	using PowerPoint to produce their presentations
Bring together information to suit content and purpose	developing their PowerPoint presentations
Present information in ways that are fit for purpose and audience	putting their PowerPoint presentations together
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	participating in pair work or in small groups to discuss the role of a resources manager and the management of physical resources
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	reading textbooks, journals, newspapers and web pages related to the management of physical resources
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	writing reports on the management of physical resources in an organisation.