
Overview

This unit is concerned with gathering all the information that you will need for your work on design projects. It is about deciding what information you need, and how it will be collected, analysed and presented.

You must be able to identify the parameters of the project, the data that you need to collect, where it will come from, and how you obtain it. It is about collating and evaluating the information that you have gathered.

You must be able to assemble all this information, and present the findings of your research to colleagues.

Performance criteria

You must be able to:

Identify investigation requirements

- P1 collect information about the **requirements** for the project and identify any gaps and uncertainties
- P2 identify the **factors** for investigation that may be significant for the planned development
- P3 **analyse and assess** how accurate, up to date and complete the existing information is, and deciding what additional information is needed
- P4 identify what data is needed, its **source**, how accurate the data needs to be and what information is required from investigation

Investigate data and present findings

You must be able to:

- P5 choose **methods and techniques** for the investigation which are valid, reliable and consistent with legal requirements
- P6 collect and collate relevant data from identified **sources** of information
- P7 accurately analyse and evaluate the investigation data which has been collected about all of the significant trends and **factors** affecting the project development
- P8 identify and accurately record the **opportunities and constraints** for project development options
- P9 identify and assess previous solutions which are similar to the current circumstances to see whether they are relevant and useful
- P10 **present** accurate findings which are unambiguous, which clearly describe all the important **factors**, and which detail the implications for the project brief
- P11 assemble any supporting data which is relevant to the study, but which is not included in the report, store it safely and index it clearly for future reference

Knowledge and understanding

You need to know and understand:

Identify investigation requirements

- K1 how to collect information about the **requirements** for the project (application)
- K2 how to identify any gaps and uncertainties in information about the **requirements** of the project (understanding)
- K3 how to identify **factors** for investigation that may be significant for the planned development (understanding)
- K4 how and why to **analyse and assess** how accurate, up to date and complete the existing information is (analysis)
- K5 how and why to decide what additional information is needed (evaluation)
- K6 how to identify what data is needed, its **source**, how accurate the data needs to be and what information is required from the investigation (understanding)

Investigate data and present findings

You need to know and understand:

- K7 how to choose **methods and techniques** for the investigation (evaluation)
- K8 how to collect and collate relevant data from identified **sources** (application)
- K9 how and why to analyse the investigation **data** which has been collected about all of the significant trends and **factors** affecting the project development (analysis)
- K10 how and why to evaluate the investigation **data** which has been collected about all of the significant trends and **factors** affecting the project development (evaluation)
- K11 what to identify as **opportunities and constraints** for project development options (understanding)
- K12 how to record the **opportunities and constraints** for project development options (application)
- K13 what previous solutions do you identify to see whether they are relevant and useful (understanding)
- K14 how and why to assess previous solutions to see whether they are relevant and useful (analysis)
- K15 how to **present** findings which describe all the important **factors** and detail implications for the brief (application)
- K16 how to assemble, store and index any supporting data which is relevant to the study, but which is not included in the report (application)

Scope/range

Identify investigation requirements

- 1 Requirements:
 - 1.1 functional requirement
 - 1.2 performance requirements
 - 1.3 cost
 - 1.4 time
- 2 Factors:
 - 2.1 historical
 - 2.2 conservation
 - 2.3 social
 - 2.4 visual and spatial
 - 2.5 ecological and environmental
 - 2.6 construction
 - 2.7 measured survey
 - 2.8 physical survey
- 3 Analyse and assess:
 - 3.1 comparison with similar projects
 - 3.2 standard checklists
 - 3.3 reference to relevant comparative research
- 4 Sources:
 - 4.1 client records
 - 4.2 tenants
 - 4.3 site owners
 - 4.4 site managers
 - 4.5 previous owners
 - 4.6 local authorities
 - 4.7 statutory authorities
 - 4.8 public utilities
 - 4.9 government departments
 - 4.10 public and specialist libraries and archives
 - 4.11 internet

Scope/range

Investigate data and present findings

- 5 Methods and techniques:
 - 5.1 comparison with similar projects
 - 5.2 standard checklists
 - 5.3 reference to relevant comparative research
- 6 Sources:
 - 6.1 client records
 - 6.2 tenants
 - 6.3 site owners
 - 6.4 site managers
 - 6.5 previous owners
 - 6.6 local authorities
 - 6.7 planning and policy documents
 - 6.8 building and construction regulations
 - 6.9 statutory authorities
 - 6.10 public utilities
 - 6.11 government departments
 - 6.12 public and specialist libraries and archives
 - 6.13 original designs
 - 6.14 contractors and suppliers
 - 6.15 experts including experienced craftspeople
 - 6.16 existing health and safety files
 - 6.17 community consultations
- 7 Factors:
 - 7.1 historical
 - 7.2 conservation
 - 7.3 social
 - 7.4 visual and spatial
 - 7.5 ecological and environmental
 - 7.6 construction
 - 7.7 infrastructure
 - 7.8 measured survey
 - 7.9 physical survey

Scope/range

- 8 Opportunities and constraints:
 - 8.1 use/function
 - 8.2 durability
 - 8.3 legal and regulatory constraints
 - 8.4 physical and technical constraints
 - 8.5 health and safety
 - 8.6 anticipated development timetable
 - 8.7 environmental quality and sustainability
 - 8.8 standardisation
 - 8.9 purpose, location, cost and time
 - 8.10 durability
 - 8.11 occupancy
 - 8.12 significance/status
 - 8.13 community benefits
 - 8.14 energy management
 - 8.15 renewable energies technologies
 - 8.16 waste management
 - 8.17 water management
- 9 Present:
 - 9.1 orally
 - 9.2 in writing
 - 9.3 graphically
 - 9.4 electronically

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built environment design



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