

Unit 3: Research Methods

Level: 7

Unit type: Mandatory in the 270 GLH Extended Diploma, Optional in the 45 GLH Certificate

Guided learning hours: 45

Credit value: 20

Unit introduction

One of the key responsibilities of strategic managers is to make decisions. Working in any organisation could involve making different decisions regarding major capital investment projects, business finance, new product development, mergers and acquisitions, business location and workforce planning. The one factor that is common to all these decisions is that there will be different alternatives which will be presented to the strategic manager for a decision to be made. In many cases, each alternative will be supported by different members of the executive management team who will present well-argued cases for their preferred solution, based on their role and experience as well as other available management information.

Strategic managers must, therefore, develop a set of skills and a way of thinking that enables them to consider, review and evaluate the evidence presented to them, and to challenge strategic decisions with their own evidence-based knowledge and experience.

In this unit, learners will need to propose a unique research question related to an area of professional business practice that interests them and will contribute to their professional development. They will carry out a literature review on a topic, critically evaluating the literature's relevance to their research question.

Successful completion of the unit will contribute towards helping learners develop and improve their own critical and reflective skills by applying decision-making, problem-solving and other skills, including planning, research, critical thinking, analysis, synthesis, evaluation and presentation.

Learners will present and justify their research findings to an invited audience using appropriate presentation software.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

Learning outcomes		Assessment criteria	
A	Understand how to prepare a research proposal	A.1	Systematically analyse a topic to formulate an appropriate research question
		A.2	Prepare a comprehensive research proposal
		A.3	Prepare a work schedule to a given timescale
B	Understand the principles of research methodology	B.1	Systematically analyse the contribution of relevant quantitative and qualitative data to research activities
		B.2	Critically evaluate the methods used to generate appropriate evidence used in research projects
		B.3	Comprehensively analyse the potential ethical considerations arising from relevant research activities
C	Understand how to select material from the outcome of research activities	C.1	Comprehensively analyse relevant statistical data drawn from research activities
		C.2	Interpret the results of a statistical analysis of research findings
		C.3	Critically evaluate literature used in a research project
D	Understand how to present the findings of a research project	D.1	Prepare a comprehensive and analytical formal research report
		D.2	Present a logically consistent justification of the findings of a research project
		D.3	Critically evaluate own skills and knowledge, with reference to the outcome of a research project

Unit content

Learning outcome A: Understand how to prepare a research proposal

- *Research question*: definition of a hypothesis; constructing a hypothesis; the functions of a hypothesis; testing of a hypothesis; types of hypothesis; aims and objectives of the research question; terms of reference; duration; rationale for selection; methodology for data collection and analysis; type of research, e.g. qualitative, quantitative, systematic, original; methodology; resources; statistical analyses; validity; reliability; control of variables; literature review; implications, e.g. resources; ethical issues.
- *Action plan*: rationale for research question or hypothesis; task dates; review dates; monitoring/reviewing process; strategy.
- *Preparation*: identifying ideas/topics/areas of investigation; research question(s); scope and feasibility; hypothesis; literature search; agreeing the process; targets; milestones; action plan; timetable and procedure; monitoring and revision.
- *Methodology*: literature search, e.g. library, internet, sector data sources; pure and applied research, developmental, longitudinal, survey, case study; research and development; concepts and theories; terminology; validity and reliability.
- *Contents of a research proposal*: preamble/introduction; the research problem; objectives of the study; hypothesis to be tested; study design; testing; measurement procedures; ethical considerations; sampling; analysis of data, structure of the report; work schedule; budget.

Learning outcome B: Understand the principles of research methodology

- *Qualitative data analysis*: interpreting transcripts and records, coding techniques, categorisation, relationships, trends, processes, use of computers; presentation of data and information.
- *Quantitative data analysis*: coding/values, manual/electronic methods, specialist software; presentation of data, e.g. bar/pie charts, graphs, statistical tables; comparison of variables, trends, forecasting.
- *Ethical considerations*: the concept of ethics; stakeholders in research activities; ethical issues, e.g. seeking sensitive information, maintaining confidentiality, collecting information, seeking informed consent, choosing research participants.
- *Research methodologies*: intervention, non-intervention, action research.
- *Implement*: according to research design and method; test research question/hypotheses; considering test validity; reliability.
- *Methodology for quantitative data*: questionnaires (type, layout, questions, distribution, original research data); interviews (selecting interviewees, bias, verification of data, time, place, style, preparation, format, recording); surveys (survey size; difference between a sample and a census).
- *Methodology for qualitative data*: case study; observation; interviews.

- *Data collection*: selection of appropriate tools for data collection; types, e.g. qualitative, quantitative; systematic recording; methodological problems, e.g. bias, variables and control of variables, validity and reliability.
- *Sampling methods*: advantages and disadvantages of different sampling methods, e.g. simple random sampling, systematic (interval) sampling, stratified sampling, multi-stage sampling, quota sampling.

Learning outcome C: Understand how to select material from the outcome of research activities

- *Statistical terminology and their application*: representative values, e.g. mean, median and mode; measures of dispersion, e.g. standard deviation and normal distribution; correlation coefficient; percentiles and quartiles.
- *Data analysis and interpretation*: qualitative and quantitative data analysis – interpreting transcripts; coding techniques; specialist software; statistical tables; comparison of variables; trends; forecasting.
- *Literature review*: secondary research: books; journals; papers; conferences; library search; use of IT; internet; media.
- *Evaluation of literature*: credibility; validity; reliability; frequency of references and esteem in which publications are held; use and acceptance by others.

Learning outcome D: Understand how to present the findings of a research project

- *Presentation*: e.g. formal written format, by *viva voce* or oral presentation, diagrammatic or graphical figures.
- *Methodology*: presentation, e.g. IT, audio, visual aids, time, pace; delivery critique of the methods used in the study, recommendations, e.g. using the findings, recommendations for the future, areas for future research.
- *Evaluation*: planning, objectives, focus, benefits, difficulties; an overview of the success or failure of the research project planning, aims and objectives, evidence and findings, validity, reliability, benefits, difficulties, conclusion(s).
- *Future considerations*: significance of research investigation; application of research results; implications; limitations of the investigation; improvements; recommendations for the future, areas for future research.
- *Criteria*: purpose, editing, format, sequencing success, critical analysis, discussion of evidence and findings.
- *Format*: professional delivery format appropriate to the audience; use of appropriate media.

Essential information for assessors

Essential resources

There are no specialist resources needed for this unit.

Suggested assessment approach

This section must be read in conjunction with *Section 6: Assessment*.

This unit is assessed internally by the centre and externally verified by Pearson.

The table below shows the suggested approach to assessments.

When preparing the assessment for this unit, the learner should be given an Assignment brief designed by the tutor. This brief should be set in a specific organisational context, it should draw on learning from the unit, and be designed in a way that enables learners to meet all the assessment criteria. All the learning outcomes in this unit can be assessed within one research project activity once the unit content has been delivered.

The unit provides the opportunity to draw together a range of other content areas from the programme of study to form a holistic piece of work that makes a positive contribution to research on commercial practice.

Learning outcome	Suggested assessment approach
A Understand how to prepare a research proposal	A completed research project and presentation delivered for an audience that must contain a subject specialist. As a minimum, the audience must consist of the tutor-assessor who has supported the learner throughout the project. The tutor-assessor should decide whether to expand the audience to include other people, if appropriate and it is practical to do so. The audience could include other tutors, members of the community, representatives from employment sectors and other learners.
B Understand the principles of research methodology	
C Understand how to select material from the outcome of research activities	
D Understand how to present the findings of a research project	

Assessment requirements

Learners are required to identify, plan and manage a research project. Identifying and planning the research project requires learners to select a topic from an area within the field of strategic management and leadership that is related to professional business practice. They should conduct a literature review to help them narrow down the topic to a working title, which should be in the form of a question or problem.

Learners should prepare a project proposal form that should include objectives and a rationale for their choice of topic/title. It is essential that tutors monitor the development of individual research questions closely to ensure that learners are following the correct guidelines and working towards agreed objectives.

Learners should also identify the proposed activities that they will need to undertake, including background reading, conducting research, analysing information and drawing conclusions, writing up the project, checking and redrafting, evaluating the project and own learning, and preparing for the presentation. Plans should include the resources that they will require and an attempt to prepare for contingencies. Plans should be amended in the light of the research learners carry out.

Learners are expected to undertake research, collect evidence and select information using appropriate methodology. Learners should also use skills gained from the taught element of the unit to comment on the reliability and validity of sources, distinguishing between primary and secondary sources, as well as between facts, speculation and subjective opinion when evaluating the reliability of sources. They should be sensitive to the fact that particular sources will offer biased views.

Learners must interpret evidence, draw conclusions and write up the research project in an academically accepted format with correct referencing and bibliography details. Learners must plan and draft their work before producing the finished dissertation, which must include a conclusion summarising what has been found in relation to the original question or problem. It must also include recommendations, such as wider implications and suggestions for further work. Learners are required to suggest alternative interpretations or arguments, making use of relevant data and other researched information, including secondary literature they have researched to support their report findings and conclusions. Their assessment should be based on critical argument. The learner will also evaluate their strengths and weaknesses, and defending their own arguments against possible objections.

On completion of the project, the learner must prepare and deliver a presentation for an audience that must contain a subject specialist. As a minimum, the audience must consist of the tutor-assessor who has supported the learner throughout the project. The tutor-assessor should decide whether to expand the audience to include other people, if appropriate and it is practical to do so. The audience could include other tutors, members of the community, representatives from employment sectors and other learners. The presentation should be a succinct summary of the main features and an evaluation of the project. Learners should be prepared to answer questions from the audience after the presentation. The presentation may be produced and/or delivered by any suitable means. The learner may choose to use presentational aids, such as presentation slides, overhead transparencies (OHTs), wall displays and printed handouts. They may also use notes or prompt cards to help them. Learners may choose a different method of presenting, such as video, DVD or PowerPoint presentation.

However, they must still be ready to answer questions afterwards in a face-to-face session witnessed by the tutor-assessor.

Learning outcome A

To achieve learning outcome A, learners must identify a topic area and title that is well-defined and clearly focused. The project plan is clear and concise, with clear and detailed objectives and rationale. Learners must explain the factors that contribute to the process of successful research question selection and justify their choice of research question. This will require careful planning and preparation in relation to the selected research question, as well as consideration of alternative questions before the final selection. Learners should adopt a critical and realistic approach in this selection exercise and gain tutor support before progressing further.

All the main tasks to be completed are provided in an appropriate order and described in detail with an appropriate timespan allocated for each task. The plan includes information with realistic deadlines, showing how learners will organise their time in order to meet the project objectives. Potential problems are described and there are realistic and convincing ideas for how to overcome them. The learner shows a high level of organisational ability and time management skills when managing the project. The learner maintains clear and detailed records of activities undertaken during the project, including problems encountered and steps taken to overcome them. Progress is monitored against the original plan and adjustments made to the plan where necessary.

Learning outcome B

To achieve learning outcome B, learners must utilise a wide range of different types of source, which have been thoroughly investigated. Research sources are referenced appropriately and consistently and a bibliography is included, listing the sources in an appropriate and consistent format.

Information and resources relevant to the research question have been carefully selected. The information has been analysed and synthesised in reference to the research question posed. Clear, concise and detailed links have been established between the information used.

A thorough understanding of the complexities of the research question is shown. Learners have placed the research question into the wider context of the research area. The learner uses the distinction between fact, speculation and subjective opinion in evaluating the reliability of sources and does this effectively.

Learners produce a comprehensive analysis of the potential ethical issues that may arise when conducting research involving the analysis and evaluation of professional business practice in a work-based setting.

Learning outcome C

To achieve learning outcome C, learners must provide comprehensive evidence of the supporting information and statistical data used in their research project and present it in a structured and logically consistent format. Learners demonstrate a high level of involvement in, and a thorough understanding of, relevant statistical data that is subject to analysis and interpretation. Learners need to evaluate techniques used with quantitative and qualitative data in their research activities. This requires understanding of both types of data and the relevant techniques, and an evaluation of their appropriateness to the research question. Learners must undertake a critical review of

the key literature referenced in their research project. The review should be critical and consider the validity, credibility and esteem in which material is held as well as its use by other researchers, and its relevance to the current research question.

Learners need to evaluate appropriate research methodologies in terms of their research question, choose an appropriate methodology and justifying their choice for their research. This needs to include a thorough evaluation of all methodologies, with clear reference to the research question, from selection through to justification.

Learning outcome D

To achieve learning outcome D, learners must present a well structured project report that is well structured and carefully laid out with a clearly developed line of argument. There is consideration of, and response to, counterarguments. There a clear conclusion that summarises the argument being presented. The presentation of the project report must be appropriate in format and content. It must conform to in an academically accepted format with correct referencing and bibliography details. It must show in-depth knowledge and understanding of the research and its context, and a critical analysis of its success and findings. The project report must include an evaluation of the successes, weaknesses and limitations of the project and highlight, with reasons, what could be done differently to improve the robustness of the conclusions drawn. The oral presentation is clearly and logically structured so that it is completely clear to the audience how the different parts link together and the learner shows a high level of ability to convey the main ideas. The learner handles questions confidently and answers them clearly and insightfully, exhibiting a good grasp of the subject knowledge.