Chapter 3: Research Methodology and Philosophy (1500-2000 words)
(Textual Guidance)

This chapter is divided into six sections:

1. Philosophy

Based on assumptions:

i. ***Ontology***
ii. ***Epistemology***
iii. ***Axiology***

Main philosophies of management and business

i. ***Positivism***
ii. ***Critical Realism***
iii. ***Interpretivism***
iv. ***Post-modernism***
v. ***Pragmatism***

2. Approach to theory development

2.1 Deduction
2.2 Induction
2.3 Abduction

3. Methodological Choice

3.1 Quantitative
3.2 Qualitative
3.3 Mixed Methods

4. Recognizing the purpose of research design

4.1 Exploratory
4.2 Descriptive
4.3 Explanatory
4.4 Evaluative
4.5 Combined

5. Strategies

5.1 Experiment
5.2 Survey
5.3 Archival Research
5.4 Case Study
5.5 Ethnography
5.6 Action Research
5.7 Grounded theory
5.8 Narrative Inquiry

6. Time Horizon

6.1 Cross-Sectional
6.2 Longitudinal

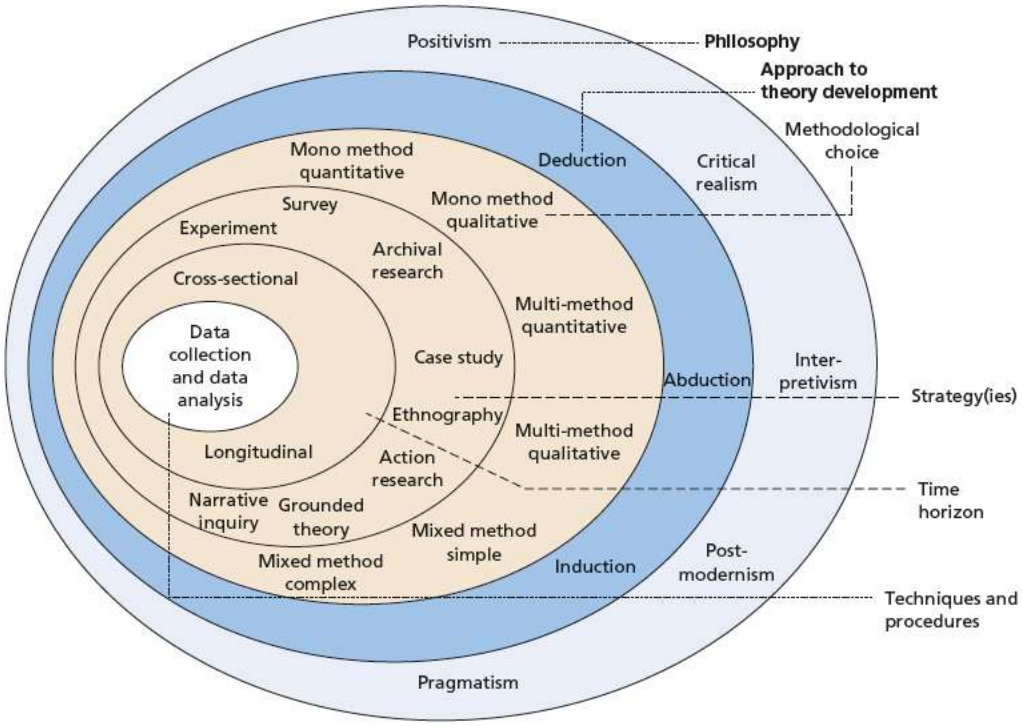

Figure 4.1 The research 'onion'
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1. Philosophies

The term 'research philosophies' refers to systems of beliefs and assumptions about the development of knowledge. This means that your research philosophy contains important assumptions about the way in which you view the world. These assumptions shape all aspects of your research projects.
To understand your research philosophy, you need to develop the skill of reflexivity, which means asking yourself questions about your beliefs and assumptions, and treating these with the same scrutiny as you would apply to the beliefs of others.

There is no single 'best' business and management research philosophy. Each philosophy contributes a unique and valuable way of seeing the organisational world.
All research philosophies make three major types of assumption: ontological, epistemological and axiological. We can distinguish different philosophies by the differences and similarities in their ontological, epistemological and axiological assumptions.

i. *Ontology concerns researchers' assumptions about the nature of the world and reality. Ontological assumptions you make determine what research objects and phenomena you focus on, and how you see and approach them.*
ii. *Epistemology concerns assumptions about knowledge – how we know what we say we know, what constitutes acceptable, valid and legitimate knowledge, and how we can communicate knowledge to fellow human beings. Epistemological assumptions you make determines what sort of contribution to knowledge you can make as a result of your research.*
iii. *Axiology refers to the role of values and ethics within the research process, which incorporates questions about how we, as researchers, deal with our own values and also with those of our research participants.*

Research philosophies can be differentiated in terms of where their assumptions fall on the objectivism–subjectivism continua.

i. Objectivism incorporates assumptions of the natural sciences. It entails realist ontology (which holds that social entities exist in reality external to and independent from social actors), epistemology focused on the discovery of truth by means of observable, measurable facts, and claims to have a value-free, detached axiology.
ii. Subjectivism incorporates assumptions of the arts and humanities. It entails nominalist ontology (which holds that social phenomena are created through the language, perceptions and consequent actions of social actors), epistemology focused on the social actors' opinions, narratives, interpretations, perceptions that convey these social realities, and claims to have a value-bound, reflexive axiology.

Management and business research can be understood in terms of four social research paradigms: functionalist, interpretive, radical structuralist and radical humanist. These paradigms add the dimension of the political rationale for research to the objectivism–subjectivism continua.

Management and business research comprises five main philosophies: positivism, critical realism, interpretivism, postmodernism and pragmatism.

i. Positivism relates to the philosophical stance of the natural scientist. This entails working with an observable social reality and the end product can be law-like generalisations similar to those in the physical and natural sciences.
ii. Critical realism focuses on explaining what we see and experience in terms of the underlying structures of reality that shape the observable events. Critical realists tend to undertake historical analyses of changing or enduring societal and organisational structures, using a variety of methods.
iii. Interpretivism is a subjectivist philosophy, which emphasises that human beings are different from physical phenomena because they create meanings. Interpretivists study meanings to create new, richer understandings of organisational realities. Empirically, interpretivists focus on individuals' lived experiences and cultural artefacts, and seek to include their participants' as well as their own interpretations into their research.
iv. Postmodernism emphasises the world-making role of language and power relations. Postmodernists seek to question the accepted ways of thinking and give voice to alternative worldviews that have been marginalised and silenced by dominant perspectives. Postmodernists deconstruct data to expose the instabilities and absences within them. Postmodernist axiology is radically reflexive.
v. Pragmatist ontology, epistemology and axiology are focused on improving practice. Pragmatists adopt a wide range of research strategies, the choice of which is driven by the specific nature of their research problems.

Table 4.3 Comparison of five research philosophies in business and management research

Ontology (nature of reality or being)	**Epistemology** (what constitutes acceptable knowledge)	**Axiology** (role of values)	**Typical methods**
	Positivism		
Real, external, independent One true reality (universalism) Granular (things) Ordered	Scientific method Observable and measurable facts Law-like generalisations Numbers Causal explanation and prediction as contribution	Value-free research Researcher is detached, neutral and independent of what is researched Researcher maintains objective stance	Typically deductive, highly structured, large samples, measurement, typically quantitative methods of analysis, but a range of data can be analysed
	Critical realism		
Stratified/layered (the empirical, the actual and the real) External, independent Intransient Objective structures Causal mechanisms	Epistemological relativism Knowledge historically situated and transient Facts are social constructions Historical causal explanation as contribution	Value-laden research Researcher acknowledges bias by world views, cultural experience and upbringing Researcher tries to minimise bias and errors Researcher is as objective as possible	Retroductive, in-depth historically situated analysis of pre-existing structures and emerging agency. Range of methods and data types to fit subject matter
	Interpretivism		
Complex, rich Socially constructed through culture and language Multiple meanings, interpretations, realities Flux of processes, experiences, practices	Theories and concepts too simplistic Focus on narratives, stories, perceptions and interpretations New understandings and worldviews as contribution	Value-bound research Researchers are part of what is researched, subjective Researcher interpretations key to contribution Researcher reflexive	Typically inductive. Small samples, in-depth investigations, qualitative methods of analysis, but a range of data can be interpreted

Ontology (nature of reality or being)	Epistemology (what constitutes acceptable knowledge)	Axiology (role of values)	Typical methods
Postmodernism			
Nominal Complex, rich Socially constructed through power relations Some meanings, interpretations, realities are dominated and silenced by others Flux of processes, experiences, practices	What counts as 'truth' and 'knowledge' is decided by dominant ideologies Focus on absences, silences and oppressed/ repressed meanings, interpretations and voices Exposure of power relations and challenge of dominant views as contribution	Value-constituted research Researcher and research embedded in power relations Some research narratives are repressed and silenced at the expense of others Researcher radically reflexive	Typically deconstructive – reading texts and realities against themselves In-depth investigations of anomalies, silences and absences Range of data types, typically qualitative methods of analysis
Pragmatism			
Complex, rich, external 'Reality' is the practical consequences of ideas Flux of processes, experiences and practices	Practical meaning of knowledge in specific contexts 'True' theories and knowledge are those that enable successful action Focus on problems, practices and relevance Problem solving and informed future practice as contribution	Value-driven research Research initiated and sustained by researcher's doubts and beliefs Researcher reflexive	Following research problem and research question Range of methods: mixed, multiple, qualitative, quantitative, action research Emphasis on practical solutions and outcomes

2. Approach to Theoretical Development

There are three main approaches to theory development: deduction, induction and abduction.

i. With deduction, a theory and hypothesis (or hypotheses) are developed and a research strategy designed to test the hypothesis.
ii. With induction, data are collected and a theory developed as a result of the data analysis.
iii. With abduction, data are used to explore a phenomenon, identify themes and explain patterns, to generate a new or modify an existing theory which is subsequently tested, often through additional data collection.

2.1 Deductive Approach

Blaikie (2010) lists six sequential steps through which a deductive approach will progress:

1. *Put forward a tentative idea, a premise, a hypothesis (a testable proposition about the relationship between two or more concepts or variables) or set of hypotheses to for a theory.*
2. *By using existing literature, or by specifying the conditions under which the theory is expected to hold, deduce a testable proposition or number of propositions.*

3. *Examine the premises and the logic of the argument that produced them, comparing this argument with existing theories to see if it offers an advance in understanding. If it does, then continue.*
4. *Test the premises by collecting appropriate data to measure the concepts or variables and analysing them.*
5. *If the results of the analysis are not consistent with the premises (the tests fail!), the theory is false and must either be rejected or modified and the process restarted.*
6. *If the results of the analysis are consistent with the premises then the theory is corroborated.*

2.2 Inductive Approach

An alternative approach to developing theory on retail store employee absenteeism would be to start by interviewing a sample of the employees and their supervisors about the experience of working at the store. The purpose here would be to get a feel of what was going on, so as to understand better the nature of the problem. Your task then would be to make sense of the interview data you collected through your analysis. The result of this analysis would be the formulation of a theory, often expressed as a conceptual framework. This may be that there is a relationship between absence and the length of time a person has worked for the retail store. Alternatively, you may discover that there are other competing reasons for absence that may or may not be related to worker age or length of service. You may end up with the same theory, but your reasoning to produce that theory is using an inductive approach: theory follows data rather than vice versa, as with deduction.

2.3 Abduction Approach

Instead of moving from theory to data (as in deduction) or data to theory (as in induction), an abductive approach moves back and forth, in effect combining deduction and induction (Suddaby 2006). This, as we have noted earlier, matches what many business and management researchers actually do. Abduction begins with the observation of a 'surprising fact'; it then works out a plausible theory of how this could have occurred. Van Maanen et al. (2007) note that some plausible theories can account for what is observed better than others and it is these theories that will help uncover more 'surprising facts'. These surprises, they argue, can occur at any stage in the research process, including when writing your project report! Van Maanen et al. also stress that deduction and induction complement abduction as logics for testing
plausible theories.

At this point you may be wondering whether your reasoning will be predominantly deductive, inductive or abductive. The honest answer is, 'it depends'. In particular, it depends on the emphasis of the research and the nature of the research topic. A topic on which there is a wealth of literature from which you can define a theoretical framework and a hypothesis lends itself more readily to deduction. With research into a topic that is new, is exciting much debate and on which there is little existing literature, it may be more appropriate to work inductively by generating data and analysing and reflecting upon what theoretical themes the data are suggesting. Alternatively, a topic about which there is a wealth of information in one context but far less in the context in which you are researching may lend itself to an abductive approach enabling you to modify an existing theory.
The time you have available will be an issue. Deductive research can be quicker to complete, albeit that time must be devoted to setting up the study prior to data collection and analysis. Data collection is often based on 'one take'. It is normally possible to predict the time schedules accurately. On the other hand, abductive and, particularly, inductive research can be much more protracted. Often the ideas, based on a much longer period of data collection and analysis, have to emerge gradually. This leads to another important consideration, the extent to which you are prepared to indulge in risk. Deduction can be a lower-risk strategy, although there are risks, such as the non-return of questionnaires. With induction and abduction you have to live with the fear that no useful

data patterns and theory will emerge. Finally, there is the question of audience. In our experience, most managers are familiar with deduction and much more likely to put faith in the conclusions emanating from this approach. You may also wish to consider the preferences of the person marking your research report. We all have our preferences about the approach to adopt.

Table 4.4 Deduction, induction and abduction: from reason to research

	Deduction	Induction	Abduction
Logic	In a deductive inference, when the premises are true, the conclusion must also be true	In an inductive inference, known premises are used to generate untested conclusions	In an abductive inference, known premises are used to generate testable conclusions
Generalisability	Generalising from the general to the specific	Generalising from the specific to the general	Generalising from the interactions between the specific and the general
Use of data	Data collection is used to evaluate propositions or hypotheses related to an existing theory	Data collection is used to explore a phenomenon, identify themes and patterns and create a conceptual framework	Data collection is used to explore a phenomenon, identify themes and patterns, locate these in a conceptual framework and test this through subsequent data collection and so forth
Theory	Theory falsification or verification	Theory generation and building	Theory generation or modification; incorporating existing theory where appropriate, to build new theory or modify existing theory

3. Methodological Choice

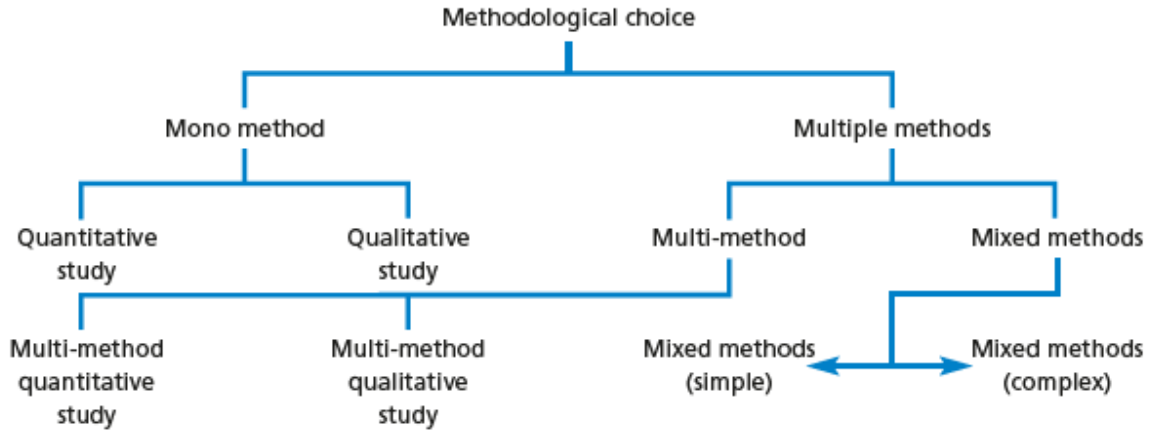

Figure 5.2 Methodological choice

3.1 Quantitative research design

Research philosophy

Quantitative research is generally associated with positivism, especially when used with predetermined and highly structured data collection techniques. However, a distinction needs to be drawn between data about the attributes of people, organisations or other things and data based on opinions, sometimes referred to as 'qualitative' numbers.

Approach to theory development

Quantitative research is usually associated with a deductive approach, where the focus is on using data to test theory. However, it may also incorporate an inductive approach, where data are used to develop theory.

Characteristics

Quantitative research examines relationships between variables, which are measured numerically and analysed using a range of statistical and graphical techniques. It often incorporates controls to ensure the validity of data, as in an experimental design.

Because data are collected in a standard manner, it is important to ensure that questions are expressed clearly so they are understood in the same way by each participant. A quantitative research design may use a single data collection technique, such as a questionnaire, and corresponding quantitative analytical procedure. This is known as a ***mono method quantitative study*** *(Figures 5.1 and 5.2). A quantitative research design may also use more than one quantitative data collection technique and corresponding analytical procedure. This is known as a* ***multi-method quantitative study*** *(Figures 5.1 and 5.2). You might, for example, decide to collect quantitative data using both questionnaires and structured observation, analysing these data using statistical (quantitative) procedures.* ***Multi-method*** *is the branch of* ***multiple methods*** *research that uses more than one quantitative or qualitative method but does not mix the two.*

Research strategies

Quantitative research is principally associated with experimental and survey research strategies. In quantitative research, a survey research strategy is normally conducted through the use of questionnaires or structured interviews or, possibly, structured observation.

3.2 Qualitative research design

Research philosophy

Qualitative research is often associated with an interpretive philosophy (Denzin and Lincoln 2011). It is interpretive because researchers need to make sense of the subjective and socially constructed meanings expressed about the phenomenon being studied. Such research is sometimes referred to as naturalistic since researchers need to operate within a natural setting, or research context, in order to establish trust, participation, access to meanings and in-depth understanding. Like quantitative research, qualitative research may also be used within realist and pragmatist philosophies (see 'Mixed methods research design' later).

Approach to theory development

Many varieties of qualitative research commence with an inductive approach to theory development, where a naturalistic and emergent research design is used to build theory or to develop a richer theoretical perspective than already exists in the literature. However, some qualitative research strategies start with a deductive approach, to test an existing theory using qualitative procedures (Yin 2014). In practice, much qualitative research uses an abductive approach to theory development where inductive inferences are developed and deductive ones are tested iteratively throughout the research.

Characteristics

Qualitative research studies participants' meanings and the relationships between them, using a variety of data collection techniques and analytical procedures, to develop a conceptual framework and theoretical contribution. Bansal and Corley (2011) point out that while qualitative research is characterised by methodological variations, it

remains vital irrespective of the method used to demonstrate methodological rigour and theoretical contribution. Data collection is non-standardised so that questions and procedures may alter and emerge during a research process that is both naturalistic and interactive. It is likely to use non-probability sampling. The success of the researcher's role is dependent not only on gaining physical access to participants but also building rapport and demonstrating sensitivity to gain cognitive access to their data. A qualitative research design may use a single data collection technique, such as semi- structured interviews, and corresponding qualitative analytical procedure. This is known as a ***mono method qualitative study*** *(Figures 5.1 and 5.2). A qualitative research design may also use more than one qualitative data collection technique and corresponding analytical procedure. This is known as a* ***multi-method qualitative study*** *(Figures 5.1 and 5.2). You might, for example, decide to collect qualitative data using in- depth interviews and diary accounts, analysing these data using qualitative procedures. Box 5.2 provides an example of a multi-method qualitative study.*

Research strategies

Qualitative research is associated with a variety of strategies. While these share ontological and epistemological roots and common characteristics, each strategy has a specific emphasis and scope as well as a particular set of procedures. Some of the principal strategies used with qualitative research are: action research, case study research, ethnography, Grounded Theory and narrative research. Some of these strategies can also be used in a quantitative research design such as a case study strategy, or used in a mixed methods research design as we now discuss.

3.3 Mixed methods research design

Research philosophy

We consider two philosophical positions that often lead to mixed methods research designs. ***Mixed methods*** *research is the branch of multiple methods research that combines the use of quantitative and qualitative data collection techniques and analytical*

procedures (Figure 5.2). We discussed the philosophical position of realism and in particular that of the critical realists. They believe that while there is an external, objective reality to the world in which we live, the way in which each of us interprets and understands it will be affected by our particular social conditioning. To accommodate this realist ontology and interpretivist epistemology (Tashakkori and Teddlie 2010), researchers may, for example, use quantitative analysis of officially published data followed by qualitative research methods to explore perceptions. Pragmatism may also be likely to influence a mixed methods research design.

Pragmatists view the exclusive adoption of one philosophical position as unhelpful and choose instead to see these as either end of a continuum, allowing a choice of whichever position or mixture of positions will help them to undertake their research (Tashakkori and Teddlie 2010). For pragmatists, the nature of the research question, the research context and likely research consequences are driving forces determining the most appropriate methodological choice (Nastasi et al. 2010). Both quantitative and qualitative research are valued by pragmatists and the exact choice will be contingent on the particular nature of the research.

Approach to theory development

A mixed methods research design may use a deductive, inductive or abductive approach to theory development. For example, quantitative or qualitative research may be used to test a theoretical proposition or propositions, followed by further quantitative or qualitative research to develop a richer theoretical understanding. Theory may also be used to provide direction for the research. In this way a particular theory may be used to provide a focus for the research and to limit its scope (Tashakkori and Teddlie 2010).

Characteristics

In mixed methods research quantitative and qualitative techniques are combined in a variety of ways that range from simple, concurrent forms to more complex and sequential forms (Figure 5.2). The ways in which quantitative and qualitative research may be combined, as well as the extent to which this may occur, have led to the

identification of a number of variations of mixed methods research (Creswell and Plano Clark 2011; Nastasi et al. 2010). We now briefly consider these. ***Concurrent mixed methods research*** *involves the separate use of quantitative and qualitative methods within a single phase of data collection and analysis (a* ***single-phase research design****) (Figure 5.3). This allows both sets of results to be interpreted together to provide a richer and more comprehensive response to the research question in comparison to the use of a mono method design. Where you collect qualitative and quantitative data in the same phase of research in order to compare how these data sets support one another, you will be using a* ***concurrent triangulation design****.*

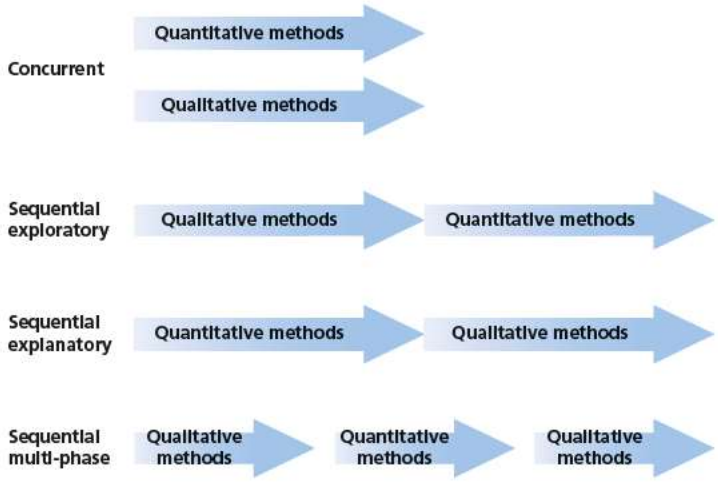

Figure 5.3 Mixed methods research designs

Using a concurrent mixed methods design should provide richer data than a mono method design and be shorter in timescale as well as more practical to undertake than a sequential mixed methods design. ***Sequential mixed methods research*** *involves more than one phase of data collection and analysis (Figure 5.3). In this design, the researcher will follow the use of one method with another in order to expand or elaborate on the initial set of findings. In a* ***doublephase research design*** *this leads to two alternative mixed methods research strategies, either a* ***sequential exploratory research design*** *(qualitative followed by quantitative) or a* ***sequential explanatory research design*** *(quantitative followed by qualitative). In a more complex, sequential* ***, multi-phase design*** *, mixed methods research will involve multiple phases of data collection and analysis (e.g. qualitative followed by quantitative, then by a further phase of qualitative).*

Research design

As we have just discussed, different combinations of mixed methods research characteristics lead to various research designs. The principal mixed methods research designs summarised earlier in this section are: concurrent triangulation design, concurrent embedded design, sequential exploratory design, sequential explanatory design (Creswell 2009; Creswell and Plano Clark 2011) and sequential, multi-phase design. Quantitative data collection techniques and analysis procedures that may be used as part of mixed methods research and qualitative techniques and procedures that may be used as part of mixed methods research.

4. Recognizing the purpose of your research design

Research can be designed to fulfil either an exploratory, descriptive, explanatory or evaluative purpose, or some combination of these. In Chapter 2 we encouraged you to think about your research project in terms of the question you wish to answer and your research objectives. The way in which you ask your research question will

inevitably involve you in exploratory, descriptive, explanatory or evaluative research. The purpose of your research may also change over time.

4.1 Exploratory studies

*An **exploratory study** is a valuable means to ask open questions to discover what is happening and gain insights about a topic of interest. Research questions that are exploratory are likely to begin with 'What' or 'How'. Questions that you ask during data collection to explore an issue, problem or phenomenon will also be likely to start with 'What' or 'How'. An exploratory study is particularly useful if you wish to clarify your understanding of an issue, problem or phenomenon, such as if you are unsure of its precise nature. It may be that time is well spent on exploratory research, as it might show that the research is not worth pursuing!*

4.2 Descriptive studies

*The purpose of **descriptive research** is to gain an accurate profile of events, persons or situations. Research questions that are descriptive are likely to begin with, or include, either 'Who', 'What', 'Where', 'When' or 'How'. Questions that you ask during data collection to gain a description of events, persons or situations will also be likely to start with, or include, 'Who', 'What', 'Where', 'When' or 'How'. Descriptive research may be an extension of a piece of exploratory research or a forerunner to a piece of explanatory research. It is necessary to have a clear picture of the phenomenon on which you wish to collect data prior to the collection of the data.*

4.3 Explanatory studies

*Studies that establish causal relationships between variables may be termed **explanatory research**. Research questions that seek explanatory answers are likely to begin with, or include, 'Why' or 'How'. Questions that you ask during data collection to gain an explanatory response will also be likely to start with, or include, 'Why' or 'How'. The emphasis in explanatory research is to study a situation or a problem in order to explain the relationships between variables. You may find, for example, that a cursory analysis of quantitative data on manufacturing scrap rates shows a relationship between scrap rates and the age of the machine being operated. You could go ahead and subject the data to statistical tests such as correlation. As an alternative example, you might collect qualitative data to explain the reasons why customers of your company rarely pay their bills according to the prescribed payment terms.*

4.4 Evaluative studies

*The purpose of **evaluative research** is to find out how well something works. Research questions that seek to evaluate answers are likely to begin with 'How', or include 'What', in the form of 'To what extent'. Evaluative research in business and management is likely to be concerned with assessing the effectiveness of an organisational or business strategy, policy, programme, initiative or process. This may relate to any area of the organisation or business: for example, evaluating a marketing campaign, a personnel policy, a costing strategy, the delivery of a support service.*

4.5 Combined studies

A research study may combine more than one purpose in its design. This may be achieved by the use of mixed methods in the research design, to facilitate some combination of exploratory, descriptive, explanatory or evaluative research. Alternatively a single method research design may be used in a way that provides scope to facilitate more than one purpose.

5. Choosing a research strategy or strategies

In this section we turn our attention to your choice of **research strategy** (Figure 5.1). In general terms, a strategy is a plan of action to achieve a goal. A research strategy may therefore be defined as a plan of how a researcher will go about answering her or his research question. It is the methodological link between your philosophy and subsequent choice of methods to collect and analyse data (Denzin and Lincoln 2011).
The strategies we discuss are:

- Experiment;
- Survey;
- Archival and Documentary Research;
- Case Study;
- Ethnography;
- Action Research;
- Grounded Theory;
- Narrative Inquiry.

5.1 Experiment

We start with discussion of the experiment strategy because its roots in natural science, laboratory- based research and the precision required to conduct it mean that the 'experiment' is often seen as the 'gold standard' against which the rigour of other strategies is assessed. ***Experiment*** *is a form of research that owes much to the natural sciences, although it features strongly in psychological and social science research. The purpose of an experiment is to study the probability of a change in an* ***independent variable*** *causing a change in another,* ***dependent variable****. Table 5.2 provides a description of types of variable. An experiment uses predictions, known as hypotheses, rather than research questions. This is because the researcher anticipates whether or not a relationship will exist between the variables. Two types of (opposing) hypothesis are formulated in a standard experiment: the* ***null hypothesis*** *and the* ***alternative hypothesis*** *(often referred to as the* ***hypothesis****). The null hypothesis predicts that there will not be a significant difference or relationship between the variables. An example of a null hypothesis might be that: customer services training of IT telephone support staff will not lead to a significant improvement in users' satisfaction feedback. The alternative hypothesis predicts that there may be a significant difference or relationship between the variables. An example of a (directional) alternative hypothesis might be that: customer services training of IT telephone support staff will lead to a significant improvement in users' satisfaction feedback.*

In an experiment, it is the null hypothesis that is tested statistically. Where the probability of there being no statistical difference is greater than a prescribed value (usually 0.05), the null hypothesis is accepted and the alternative hypothesis is rejected. Where the probability is less than or equal to the prescribed value (usually 0.05), this indicates that the alternative hypothesis is likely to be true. The simplest experiments are concerned with whether there is a link between two variables. More complex experiments also consider the size of the change and the relative importance of two or more independent variables. Experiments therefore tend to be used in exploratory and explanatory research to answer 'what', 'how' and 'why' questions.

Table 5.2 Types of variable

Variable	Meaning
Independent (IV)	Variable that is being manipulated or changed to measure its impact on a dependent variable
Dependent (DV)	Variable that may change in response to changes in other variables; observed outcome or result from manipulation of another variable
Mediating (MV)	A variable located between the independent and dependent variables, which explains the relationship between them (IV → MV → DV)
Moderator	A new variable that is introduced which will affect the nature of the relationship between the IV and DV
Control	Additional observable and measurable variables that need to be kept constant to avoid them influencing the effect of the IV on the DV
Confounding	Extraneous but difficult to observe or measure variables that can potentially undermine the inferences drawn between the IV and DV. Need to be considered when discussing results, to avoid spurious conclusions

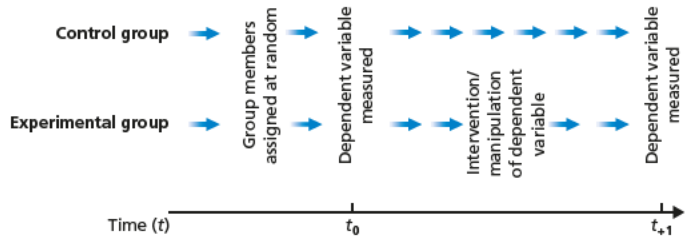

Figure 5.4 A Classical experiment strategy

5.2 Survey

*The **survey** strategy is usually associated with a deductive research approach. It is a popular and common strategy in business and management research and is most frequently used to answer 'what', 'who', 'where', 'how much' and 'how many' questions. It therefore tends to be used for exploratory and descriptive research. Survey strategies using questionnaires are popular as they allow the collection of standardized data from a sizeable population in a highly economical way, allowing easy comparison. In addition, the survey strategy is perceived as authoritative by people in general and is comparatively easy both to explain and to understand. Every day a news bulletin, news website or newspaper reports the results of a new survey that is designed to find out how a population thinks or behaves in relation to a particular issue.*

The survey strategy allows you to collect quantitative data which you can analyse quantitatively using descriptive and inferential statistics. In addition, data collected using a survey strategy can be used to suggest possible reasons for particular relationships between variables and to produce models of these relationships. Using a survey strategy should give you more control over the research process and, when probability sampling is used, it is possible to generate findings that are statistically representative of the whole population at a lower cost than collecting the data for the whole population. You will need to spend time ensuring that your sample is representative, designing and piloting your data collection instrument and trying to ensure a good response rate. Preparing and analysing the data will also be time consuming, even with readily available analysis software. However, it will be your time and, once you have collected your data, you will be independent. Many researchers complain that their progress is delayed by their dependence on others for information.

5.3 Archival and documentary research

The digitalisation of data and the creation of online archives have increased the scope for you to use an archival or documentary research strategy. Because of the Internet and the digitalisation of university-based, governmental, organisational and media documents and other data, it is now possible to access such sources

from around the world.This potentially provides you with considerable scope to design a research project that capitalises on a wide range of available data sources. There are limitations in attempting to use this strategy and we briefly consider these after outlining types of documentary sources and discussing their attributes. It is difficult to describe adequately the range of archival and documentary sources potentially available. Lee (2012: 391) suggests that 'a document is a durable repository for textual, visual and audio representations'. This illustrates the wide range of sources encompassed by this definition. Categories of textual documents include:

- *communications between individuals or within groups such as email, letters, social media and blog postings;*
- *individual records such as diaries, electronic calendars and notes;*
- *organisational sources such as administrative records, agendas and minutes of meetings, agreements, contracts, memos, personnel records, plans, policy statements, press releases, reports and strategy documents;*
- *government sources such as publications, reports and national statistics;*
- *media sources including printed and online articles and other data.*

5.4 Case study

*A **case study** is an in-depth inquiry into a topic or phenomenon within its real-life setting (Yin 2014). The 'case' in case study research may refer to a person (e.g. a manager), a group (e.g. a work team), an organisation (e.g. a business), an association (e.g. a joint venture), a change process (e.g. restructuring a company), an event (e.g. an annual general meeting) as well as many other types of case subject. Choosing the case to be studied and determining the boundaries of the study is a key factor in defining a case study (Flyvberg 2011). Once defined, case study research sets out to understand the dynamics of the topic being studied within its setting or context (Eisenhardt 1989; Eisenhardt and Graebner 2007). 'Understanding the dynamics of the topic' refers to the interactions between the subject of the case and its context.*

The study of a case within its real-life setting or context helps to distinguish this research strategy from others. In an experimental strategy, outlined earlier, contextual variables are highly controlled as they are seen as a potential threat to the validity of the results. In a survey strategy, research is undertaken in a real-life setting, but the ability to understand the impact of this context is limited by the number of variables for which data can be collected. In contrast, case study research is often used when the boundaries between the phenomenon being studied and the context within which it is being studied are not always apparent (Yin 2014). Understanding context is fundamental to case study research. A case study strategy has the capacity to generate insights from intensive and in-depth research into the study of a phenomenon in its real-life context, leading to rich, empirical descriptions and the development of theory (Dubois and Gadde 2002; Eisenhardt 1989; Eisenhardt and Graebner 2007; Ridder et al. 2014; Yin 2014). Dubois and Gadde (2002: 554) make the point that, 'the interaction between a phenomenon and its context is best understood through in-depth case studies'. An in-depth inquiry can be designed to identify what is happening and why, and perhaps to understand the effects of the situation and implications for action. To achieve such insights, case study research draws on quantitative or qualitative research and frequently uses a mixed methods approach, to understand fully the dynamics of the case.

5.5 Ethnography

***Ethnography** is used to study the culture or social world of a group. Ethnography literally means a written account of a people or ethnic group. It is the earliest qualitative research strategy, with its origins in colonial anthropology. From the 1700s to the early 1900s, ethnography was developed to study cultures in so-called 'primitive' societies that had been brought under the rule of a colonial power, to facilitate imperialist control and administration. Early anthropologists treated those among whom they lived and conducted their fieldwork as subjects and approached their ethnography in a detached way, believing that they were using a scientific approach, reminiscent of a positivism, to produce monographs that were meant to be accurate and timeless accounts of different cultures (Denzin and Lincoln 2005; Tedlock 2005). From the 1920s the use of ethnography changed through the work of the Chicago School (University of Chicago), which used ethnographic methods to study social*

and urban problems within cultural groups in the USA. A seminal example of this work is Whyte's 'Street Corner Society' published in 1943, which examined the lives of street gangs in Boston. This approach to ethnography involved researchers living among those whom they studied, to observe and talk to them in order to produce detailed cultural accounts of their shared beliefs, behaviours, interactions, language, rituals and the events that shaped their lives (Cunliffe 2010). This use of ethnography adopted a more interpretive and naturalistic focus by using the language of those being studied in writing up cultural accounts. However, the researcher remained the arbiter of how to tell the story and what to include, leading many to question how the socialisation and values of this person might affect the account being written (Geertz 1988).

5.6 Action Research

*Lewin first used the term **Action Research** in 1946. It has been interpreted subsequently by management researchers in a variety of ways, but a number of common and related themes have been identified within the literature. In essence, Action Research is an emergent and iterative process of inquiry that is designed to develop solutions to real organizational problems through a participative and collaborative approach, which uses different forms of knowledge, and which will have implications for participants and the organization beyond the research project (Coghlan 2011; Coghlan and Brannick 2014). Our definition identifies five themes, which we briefly consider in the following order: purpose, process, participation, knowledge and implications. The purpose of an Action Research strategy is to promote organisational learning to produce practical outcomes through identifying issues, planning action, taking action and evaluating action. Coghlan and Brannick (2014: 4) state that Action Research is about 'research in action rather than research about action'. This is because Action Research focuses on 'addressing worthwhile practical purposes' (Reason 2006: 188) and resolving real organisational issues (Shani and Pasmore 1985).*

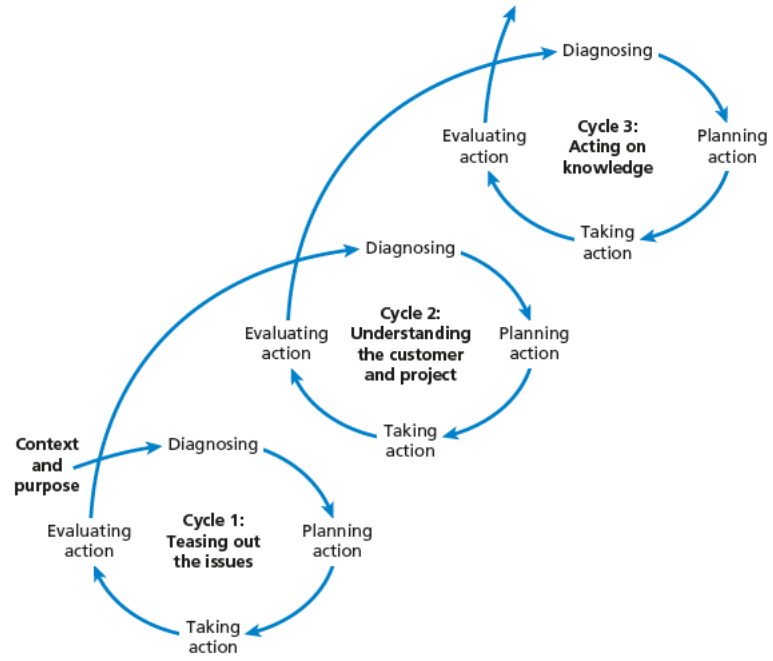

Figure 5.5 The three cycles of the Action Research spiral

5.7 Grounded Theory

*'**Grounded theory**' can be used to refer to a methodological approach, a method of inquiry and the result of a research process (Bryant and Charmaz 2007; Charmaz 2011; Corbin and Strauss 2008). 'Grounded theory methodology' refers to the researcher's choice of this strategy as a way to conduct research. '**Grounded theory method**' refers to the data collection techniques and analytic procedures that it uses (discussed in Chapter 13). 'Grounded theory' may be used loosely to incorporate methodology and method but more specifically it refers to a theory that is grounded in or developed inductively from a set of data. In this section we refer to 'Grounded Theory' (i.e. as a proper noun), to indicate its use as a research strategy and to distinguish this from 'a grounded theory' (no capital letters).*

Grounded Theory was developed by Glaser and Strauss (1967) as a response to the 'extreme positivism' of much social research at that time (Suddaby 2006: 633). They disputed the view that social research should use a paradigm based on a premise that theory will reveal a pre-existing reality. In positivism, reality is seen as existing independently and externally (to human cognition). While positivism is suited to research in the natural sciences, they believed that social research should use a different philosophy. By adopting interpretivism in social research, 'reality' is seen as being socially constructed through the meanings that social actors ascribe to their experiences. Grounded Theory was therefore developed as a process to analyse, interpret and explain the meanings that social actors construct to make sense of their everyday experiences in specific situations (Charmaz 2006; Glaser and Strauss 1967; Suddaby 2006). Grounded Theory is used to develop theoretical explanations of social interactions and processes in a wide range of contexts, including business and management. As much of business and management is about people's behaviours, for example consumers' or employees', a Grounded Theory strategy can be used to explore a wide range of business and management issues. As the title of Glaser and Strauss's (1967) book The Discovery of Grounded Theory indicates, the aim is to 'discover' or generate theory grounded in the data produced from the accounts of social actors.

In summary, while some Grounded Theory authors produce prescriptive accounts of grounded theory method and others offer more flexible accounts, all appear to be agreed on the key elements we discussed earlier:

- *Early commencement of data collection;*
- *Concurrent collection and analysis of data;*
- *Developing codes and categories from the data as these are collected and analysed;*
- *Use of constant comparison and writing of self-memos to develop conceptualization and build a theory;*
- *Use of theoretical sampling and theoretical saturation aimed at building theory rather than achieving (population) representativeness;*
- *Use of an abductive approach that seeks to gain insights to create new conceptual possibilities which are then examined;*
- *Initial use of literature as a complementary source to the categories and concepts emerging in the data, rather than as the source to categorise these data. Later use to review the place of the grounded theory in relation to existing, published theories;*
- *Development of a theory that is grounded in the data.*

5.7 Narrative Inquiry

*A narrative is a story; a personal account which interprets an event or sequence of events. Using the term 'narrative' requires a distinction to be drawn between its general meaning and the specific meaning used here. A qualitative research interview inevitably involves a participant in storytelling. In this way, the term 'narrative' can be applied generally to describe the nature or outcome of a qualitative interview. As a research strategy, however, **Narrative Inquiry** has a more specific meaning and purpose. There will be research contexts where the researcher believes that the experiences of her or his participants can best be accessed by collecting and analysing these as complete stories, rather than collecting them as bits of data that flow from specific interview questions and which*

are then fragmented during data analysis. Chase (2011) distinguishes between asking participants to generalise when answering questions in more structured types of qualitative research and being invited to provide a complete narrative of their experience. This contrasts with the approach to Grounded Theory which we discussed earlier. Narrative Inquiry seeks to preserve chronological connections and the sequencing of events as told by the narrator (participant) to enrich understanding and aid analysis. Chase (2011: 421) refers to this strategy as providing the opportunity to connect events, actions and their consequences over time into a 'meaningful whole'. Through storytelling the narrator will also provide his or her interpretation of these events, allowing the narrative researcher to analyse the meanings which the narrator places on events. Where there is more than one participant providing a personal account of a given context, the narrative researcher will also be able to compare and to triangulate or contrast these narratives. Coffey and Atkinson (1996) recognise this, drawing on previous research to outline the structural elements that are useful to facilitate analysis of narratives:

- *What is the story about?*
- *What happened, to whom, whereabouts and why?*
- *What consequences arose from this?*
- *What is the significance of these events?*
- *What was the final outcome?*

6. Choosing a time horizon

An important question to be asked in designing your research is, 'Do I want my research to be a "snapshot" taken at a particular time or do I want it to be more akin to a diary or a series of snapshots and be a representation of events over a given period?' This will, of course, depend on your research question. The 'snapshot' time horizon we call **cross- sectional**, while the 'diary' perspective we call **longitudinal**.

6.1 Cross-sectional studies

It is probable that your research will be cross-sectional, involving the study of a particular phenomenon (or phenomena) at a particular time. We say this because we recognize that most research projects undertaken for academic courses are necessarily time constrained. However, the time horizons on many courses do allow sufficient time for a longitudinal study, provided, of course, that you start your research early! Cross-sectional studies often employ the survey strategy. They may be seeking to describe the incidence of a phenomenon (for example, the IT skills possessed by managers in one organisation at a given point in time) or to explain how factors are related in different organisations (e.g. the relationship between expenditure on customer care training for sales assistants and sales revenue). However, they may also use qualitative or mixed methods research strategies. For example, many case studies are based on interviews conducted over a short period of time.

6.2 Longitudinal studies

The main strength of longitudinal research is its capacity to study change and development. This type of study may also provide you with a measure of control over some of the variables being studied. One of the best-known examples of this type of research comes from outside the world of business. It is the long-running UK television series, 'Seven Up'. This has charted the progress of a cohort of people every seven years of their life. Not only is this fascinating television, it has also provided the social scientist with a rich source of data on which to test and develop theories of human development.