Chapter 5

Research methodology and design

Introduction

This chapter examines the research methodology adopted in this thesis. It first outlines the philosophy that underpins the approach taken with the research, discussing the researcher’s interpretivist stance to research and the consequent choice of a qualitative approach. The next section discusses the rationale for the research design, and details the unit of analysis. The chapter then outlines the reasons for the adoption of the case study method. It also provides an overview of the data collection methods used for the thesis, as well as the means used to analyse the data. The chapter concludes with sections on the limitations of the research and ethical considerations.

Research philosophy

It has been noted that some writers use the terms ‘methodology’ and ‘method’ interchangeably (Hussey & Hussey, 1997). They consider that methodology refers to the overall approach taken, as well as to the theoretical basis from which the researcher comes, and that method is the various means by which data is collected and analysed (Hussey & Hussey, 1997). Similarly, Mason (2002) separates “the concept of methodological strategy” (2002: 30) from the method, while noting that a particular method will be a part of the strategy. In line with these writers, the approach taken here is to include all facets of the research process under the overall heading of methodology. Therefore, the research design, the approach taken, the particular data collection methods chosen and the means of analysis, are all considered to be part of this thesis’s methodology, and are set out in the following sections.
However, underpinning the methodology, by necessity, is a philosophical stance in relation to the purpose and place of research in general, and this research in particular. A distinction that is frequently made regarding research philosophies is between positivism and interpretivism (Bryman & Bell, 2007; Hughes & Sharrock, 1997; Travers, 2001).

A central tenet of positivism is that researchers can take a ‘scientific’ perspective when observing social behaviour, with an objective analysis possible (Travers, 2001). Bryman and Bell (2007) caution against assuming positivism and science are synonymous concepts, noting that there are some differences between a positivist philosophy and a scientific approach. They also note that there are some circumstances where an inductive strategy is apparent within positivist research, with “knowledge arrived at through the gathering of facts that provide the basis of laws” (Bryman & Bell, 2007: 16). Nonetheless, research based on a positivist philosophy tends to be based on deductive theorising, where a number of propositions are generated for testing, with empirical verification then sought (Babbie, 2005). Considerable data are often required as a positivist study would favour the use of quantitative methods to analyse large-scale phenomena (Travers, 2001). Inherent in this overall approach to research is the view that it is possible to measure social behaviour independent of context and that social phenomena are ‘things’ that can be viewed objectively (Hughes & Sharrock, 1997).

In contrast, interpretivism tends to view the world in quite a different manner, requiring a different response from researchers. As Bryman and Bell (2007) state, interpretivists take the view that:

> the subject matter of the social sciences—people and their institutions—is fundamentally different from that of the natural sciences. The study of the social world therefore requires a different logic of research procedure (2007: 17).

This different logic within an interpretivist stance might prompt a researcher to use inductive theory construction, reversing the deductive process by using data to generate theory. Researchers would observe aspects of the social world and seek to discover patterns that could be used to explain wider principles (Babbie, 2005). In addition, it is...
seen that there is no one reality, rather reality is based on an individual’s perceptions and experiences (Robson, 2002). Linked to this position is the argument that the facets of the real world that are distinctly human are lost when they are analysed and “reduced to the interaction of variables” (Hughes & Sharrock, 1997: 102). For this reason the role of the researcher should be to analyse the various interpretations that actors related to a particular phenomenon give to their experiences (Easterby-Smith et al., 2002).

An interpretivist position was adopted in this research. That is, it is considered that there are multiple realities that make measurement difficult, and we can only seek to understand real-world phenomena by studying them in detail within the context in which they occur.

**Qualitative research**

In many ways this interpretivist position is based on a belief that a qualitative approach to the research aim set out in Chapter 1 is one that will best provide insight. To reiterate here, the overall aim of this research is to:

> Investigate the factors that influence the extent to which the Australian state museums now incorporate electronic marketing strategies into their overall marketing activities.

This is a complex issue, involving many and varied global, societal factors, and as was indicated in Chapters 2 and 3, one that has developed over a considerable time. It is felt that qualitative research methodology provides the variety and depth of data required to understand the phenomena under study. Miles and Huberman (1994) have summarised the strengths of qualitative data in terms of realism, richness and a longitudinal perspective, locating the meaning of experience within the social world; in other words placing the phenomena within their context. This, it seems, is crucial in seeking to explain phenomena and to generate theory.

Generation of theory is a key feature of qualitative research (Gummesson, 2005). In contrast, positivist, and perhaps quantitative approaches, aim to test theories specified at the start of a study (Bryman & Bell, 2007). Furthermore, generalising is a common aim
with quantitative research (through statistical sampling), which is not the case with qualitative research (Silverman, 2005). This is not to imply that qualitative research cannot be used to test theory, or indeed, that it cannot be combined with quantitative methods. As Silverman (2005) notes:

Qualitative research can mean many different things involving a wide range of methods and informed by contrasting models (2005: 14).

Similarly, quantitative research can be used for theory generation (Robson, 2002). The point is, perhaps, that there is no right or wrong, no one approach that is the ‘best’. The issue is more that the choice of approach should fit the research aims and questions, the purpose of the study, as well as the conceptual framework within which the researcher operates (Silverman, 2005). This is despite criticisms of qualitative research, such as the claim that it is purely descriptive and therefore not rigorous, and that the data are flawed due to the subjective role of the researcher (Goulding, 2002). As Goulding (2002) has noted, though, researchers always aim to reduce subjectivity and to apply academic rigour to any study. In addition, there is the alternative view, held here, that a subjective position is one of the features of qualitative research—the researcher *is* a measurement device, and *is* viewing the phenomena ‘from the inside’ (Miles & Huberman, 1994).

There is growing body of literature that uses a qualitative research approach in the museum management and marketing areas. Kawashima (1997) used an in-depth case study approach in a study of the impacts of cultural policy on museums in the UK. Rentschler and Gilmore (2002) used qualitative methods and modelling in an investigation of services marketing in museums in Australia and Ireland. Ross (2004) and Lehman (2007) both used a qualitative approach when interviewing museum professionals regarding changes in the museum sector over the last few years. This thesis takes the view that the nature of the museum sector, as a significant cultural institution and a social entity with a long history, warrants an approach where those parts of the real world that are distinctly human are not “reduced to the interaction of variables” (Hughes & Sharrock, 1997: 102).
Rationale for the research design

Within a qualitative framework, and an interpretivist stance, this thesis is concerned with identifying the factors that impact on how, and the extent to which, the state museums in Australia use electronic marketing. The review of museum history and development in Chapter 2 and of museum management and marketing in Chapter 3 has shown that there have been significant societal changes over the history of museums generally, and in Australia particularly, that have shaped museums activities. This, combined with the increased role of an integrated approach to marketing and electronic media in the for profit environment, and, to a lesser extent, the museum sector outlined in Chapter 4, means that the task of identifying such factors is a complex one. It is also a task, to this researcher’s knowledge, that has not been undertaken by other researchers to date, either in the wider museum sector or across the six Australian state museums.

With this in mind, the nature of the research presented in this thesis is exploratory, building on existing knowledge and theories, but also being receptive to any new or as yet unthought of relationships or phenomena. It seeks to generate theory to suggest possible relationships between the use of electronic marketing in Australia’s state museums, and a range of internal factors and external forces noted in the literature, as outlined in Chapters 2 to 4. Further, though, it seeks to analyse the activities and opinions of significant actors in the Australian museum sector.

Unit of analysis

A number of distinct industries are defined as being part of the broad cultural sector in Australia (Cultural Ministers Council Statistics Working Group, 2006). Areas commonly discussed include the performing arts, which might include organisations such as orchestras, theatres and dance companies, the visual arts, which might itself include art galleries and arts festivals, and museums. Like the aforementioned, the museum sector has its own sets of structures, activities, and levels of audience or customer involvement, that make it distinctive within the broader cultural sector. This study concentrates on one sector, museums, in a broad range of possible cultural organisations. However, it has been noted that:
single-industry studies are warranted—even preferred—when the internal validity of the study is more important than the generalizability of the results (Voss & Voss, 2000: 78)

As has been previously stated, qualitative research does not necessarily seek to provide generalisable results. That said, this thesis aims to answer the research questions within one of the most significant cultural sectors in Australia. However, the museum sector is not made up of homogenous organisations. As outlined in Chapter 2, there are a number of alternative views of what constitutes a museum, and many different applications of the concept. Museums range from one room, volunteer-run entities to the federally-funded National Museum of Australia (Australian Bureau of Statistics, 2005a). As set out in Chapter 1, the museums selected for study here are the six government-funded state museums: the Australian Museum, Museum Victoria, the Queensland Museum, the South Australian Museum, the Tasmanian Museum and Art Gallery, and the Western Australian Museum.

The Australian state museums were selected on the basis of their role as the pre-eminent cultural institution of their type in their respective state, and their place as peak museums within the museum sector. Each is the current iteration of an original Australian Colonial museum, which allows for a useful historical perspective, as well as a national census. In addition, they have a continuous and well-documented history. They also provide an example of the tension between the potentially conflicting multiple roles within society noted previously. For example, in recent years museums have developed new roles as economic development engines within communities, and as tourist destinations in cultural precincts driving income and employment (Kotler & Kotler, 2000). These roles mean the days of museums having a narrow constituency base, in terms of collection, research and professional activities, are long gone. As the pre-eminent cultural institution, each Australian state museum faces just this type of pressure from its many stakeholders. This no more evident than in the requirement that they be accountable to government as the primary funder—as government funded entities museums are subject to the same policy pressures as any government instrumentality. In other words, as state museums they have had to be responsive to
changes in their environment. In this respect they are no different to any other organisation.

The case study as a research approach

This thesis follows Mintzberg’s (1979) arguments in support of ‘direct’ research in an organisational setting, and Eisenhardt’s (1989) arguments that theory development and the understanding of phenomena can be achieved using a case study approach. The case study approach is now widely used in the social sciences, and there is a growing confidence in its applicability as “a rigorous research strategy in its own right” (Hartley, 2004: 323). There is also considerable support for the approach within marketing research (Bonoma, 1985; Johnston, Leach and Liu, 1999; Perry, 1998; Riege, 2003). Case studies comprise a single unit of analysis, based upon depth that is both holistic and exhaustive (Ball, 1996), and which retains the meaningful characteristics of realistic events. Thus a case study, as defined by Yin (2003), is an empirical inquiry that:

investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (2003: 13).

Miles and Huberman (1994) reinforce Yin’s second point, seeing boundaries as the critical issue in the struggle to define case studies. They state that “we can define a case as a phenomenon of some sort occurring in a bounded context” (Miles & Huberman, 1994: 25; emphasis in original). Writing in support of the use of case research in business to business marketing studies, Johnston et al. (1999) note:

Case study research consists of a detailed investigation that attempts to provide an analysis of the context and processes in the phenomenon under study (1999: 203).

It is not only, then, that the case study approach can provide considerable insightful information into organisational behaviours, it also offers a particular richness of detail of processes in context—providing an opportunity to analyse how behaviours and/or processes influence context and context might influence behaviours and/or processes.
Reinforcing this point, Bonoma (1985) has offered a persuasive argument in favour of the use of case studies in marketing research. He states that “[m]any issues of interest to marketers cannot be studied outside the context in which they naturally occur” (Bonoma, 1985: 202). In this present study, the case study approach was justified, as attempting to understand the factors that influence museums to either adopt or not adopt certain marketing strategies, or indeed any other management activity, would be difficult without the contextual picture provided by the case study approach (Patton, 1990). Within the overall case study approach there is a choice to be made in relation to the number of cases to include. The next section considers the use of multiple cases in this research.

**Multiple cases**

Stake (2005) notes three types of case studies: intrinsic, instrumental and collective. The intrinsic case enables a better understanding of that particular case. It is not representative of other cases, nor does it shed light on phenomena or build theory. Rather it simply illustrates a particularly interesting case. In contrast, instrumental cases are studied with the aim of providing insight into issues or to refine theory. The case is still looked at in considerable depth, but the case itself plays a secondary role in that it facilitates an understanding of something else. The final type, the collective case, involves a study of multiple instrumental cases. The cases may be the same or different, with variety and redundancy both important. Multiple cases are not chosen because more means a better ‘sample’, with a consequent generalisation to a wider population (Robson, 2002). To do so would not be in line with the interpretivist stance taken here. The cases are chosen because:

> Understanding them will lead to better understanding, perhaps better theorizing, about a still larger collection of cases (Stake, 2005: 446)

The case study museums used for this thesis are quite different in many respects. As will be demonstrated in the next chapter, the museums have a variety of organisational structures, governance regimes and collections. This fact does not lessen their usefulness as a collection of cases. Indeed, within a multiple case study such variety can be particularly useful when conducting cross-case analysis (Stake, 2005).
Nonetheless, in order for the differences to be sufficiently illustrated this thesis has a separate section in Chapter 6 for each case museum. Details regarding each museum will be set out, commencing with an overview of the history and governance of each. While these sections might be felt to be somewhat descriptive, such detail is, as Eisenhardt (1989) points out, “central to the generation of insight” (1989: 540). Each museum’s section will conclude with a analytical summary. The final section in Chapter 6 will provide a synthesis of all cases, following Yin (2003), who noted that “both the individual cases and the multiple-case results can and should be the focus of a summary report” (2003: 50).

**Data collection within the case study approach**

While many studies successfully utilise one method, combining methods, an approach defined as triangulation (Denzin, 2006; Flick, 2002), can be a useful research option. As Mason (2002) has stated, the aim of triangulation is to “seek to corroborate one source and method with another… [and to] enhance the quality of the data” (2002: 33). Within the broad idea, Easterby-Smith et al. (2004) point out that there are four different forms of triangulation: data triangulation (data collected from different sources or at different times); methodological triangulation (combining different methods); theoretical triangulation (the application of a theory from a different discipline); and triangulation by investigators (the use of multiple independent investigators). This thesis uses data triangulation as a strategy whereby multiple perspectives of the same phenomena are considered through analysis of different data sources (Denzin, 2006). It is felt that a richness and depth is gained with an analysis of the multiple sources of data available to the researcher within each of the Australian state museums.

Integral to this approach is a recognition of the importance of what could be termed ‘the visual’. The world in which museums find themselves is increasingly influenced by visual communication media, which have a significant role in social, economic and political life (Loizos, 2006). In the marketing discipline this is readily apparent—if nothing else marketing seeks to communicate (Fill, 2005). Cutting across the data
collection methods addressed in this section, as well as the data analysis methods covered in a later section, is a belief in the power of visual communication tools, and their significance to the modern museum. That said, the principal method that was adopted for this thesis was the in-depth interview, which will be addressed in the next section. This is followed by a section outlining the fieldwork undertaken, and a section on the secondary data sources used.

**Interviews**

According to Kvale (1996), the qualitative research interview attempts “to understand the world from the subjects’ points of view, to unfold the meaning of peoples’ [sic] experiences, to uncover their lived world” (1996: 1). Further, qualitative research interviews enable a researcher to “see the research topic from the perspective of the interviewee” (King, 2004: 11). Significantly, interviewing is a particularly efficient means of collecting data when the research design involves an analysis of people’s motivations and opinions (Keats, 2000), as was the case in the present study. In accord with the research questions, in-depth interviews were conducted with a minimum of two staff from each of the six case study museums. The first was the most senior person available with board-level strategic responsibility—this was either the director or a member of their senior management group; and the second was the most senior person available with an operational marketing position—most frequently, this was the marketing manager. The two levels were chosen with the aim of providing a range of viewpoints within the museums’ organisational structures. The position titles for each museum’s interviewees is given in Table 5.1. However, it has been deemed unnecessary to attribute the quotes used in subsequent chapters to identified individuals. The interviews took place across the six museums from December 2006 to February 2007.

There are no fixed rules as to the ideal number of interviews. Some qualitative research takes a positivist stance, tending to adopt the approach, “the more interviews, the more scientific” (Kvale, 1996: 103). Alternatively, within an interpretivist framework Travers (2001) advises that researchers will simply need “enough data to explore and document a range of themes” (2001: 37). It was considered that a minimum of two interviews at
Table 5.1
Australian state museum staff interviewed

<table>
<thead>
<tr>
<th>Museum</th>
<th>Staff position</th>
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<tbody>
<tr>
<td>Australian Museum</td>
<td>Director</td>
</tr>
<tr>
<td>Australian Museum</td>
<td>Head, Commercial Services</td>
</tr>
<tr>
<td>Australian Museum</td>
<td>Marketing Manager</td>
</tr>
<tr>
<td>Museum Victoria</td>
<td>Manager, Public Information&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Museum Victoria</td>
<td>Marketing Manager&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Queensland Museum</td>
<td>General Manager</td>
</tr>
<tr>
<td>Queensland Museum</td>
<td>Marketing Manager</td>
</tr>
<tr>
<td>Queensland Museum</td>
<td>Senior Designer&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>South Australian Museum</td>
<td>Acting Director/General Manager</td>
</tr>
<tr>
<td>South Australian Museum</td>
<td>Sponsorship and Business Development Manager</td>
</tr>
<tr>
<td>South Australian Museum</td>
<td>Marketing and Public Relations Officer</td>
</tr>
<tr>
<td>Tasmanian Museum &amp; Art Gallery</td>
<td>Deputy Director of Public Programs and Operations</td>
</tr>
<tr>
<td>Tasmanian Museum &amp; Art Gallery</td>
<td>Promotions and Program Manager</td>
</tr>
<tr>
<td>Western Australian Museum</td>
<td>Director of Exhibitions, Design and Public Programs&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Western Australian Museum</td>
<td>Marketing and Events Manager&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>1</sup> In the museums with a multiple campus structure these interviewees were from the corporate level. Other interviewees from the same museum had responsibilities on one campus only.

<sup>2</sup> This interviewee had responsibilities at both the corporate and single campus level.

Each museum was appropriate for this study, with a range of perspectives likely given the strategic/operational position split. Also significant in this decision was the resource and logistical implications of extended interstate travel in order to conduct more interviews. Such implications are frequently overlooked during the research design stage (Kvale, 1996).

A semi-structured approach to the interviews was chosen. Babbie (2005) notes the inherent flexibility in this approach as one of its major advantages. There is an
expectation that the views of the interviewee will be more freely expressed when the format of the interview is more flexible and open-ended than where the interview style is regulated and confined to a standard set of questions or a survey (Flick, 2002). This is not to say that interviews should be without structure. In order to fully cover the research questions it was considered important for the researcher to have an interview schedule which served to guide discussion and lessened the chance of important topics being neglected. As Babbie (2005) cautions: “it is vital for the qualitative interviewer… to be fully familiar with the questions to be asked” (2005: 314).

The themes for the interview schedule (set out in Appendix B) were structured around the issues raised in the review of the literature relating to the development of museums and museum marketing that formed the basis of the research questions noted in Chapter 1. It was recognised that the schedule may not necessarily be followed, in order to pursue fruitful lines of inquiry or elicit greater detail from interviewees (King, 2004). However, following Easterby-Smith et al. (2002), the researcher aimed to cover all of the themes during the interviews. The semi-structured interview, using similar questions and wording for each interviewee, is justified in multi-case study research as it is an appropriate level of structure to ensure cross-case compatibility (Bryman & Bell, 2007). Using semi-structured interviews allowed comparisons between the individual case study museums to be made.

All the interviews lasted for a minimum of 1 hour. As soon as practical after the interviews concluded reflective interview notes were made. Each interview was recorded on to tape and subsequently transcribed into Microsoft Word by a person employed for the purpose. The researcher subsequently replayed the tapes and amended the transcripts in relation to inaccuracies with transcription and to clarify inaudible responses (MacLean, Meyer & Estable, 2004). This process also allowed an additional opportunity to reflect on the content of each interview.

**Field visits**

For the museums with multiple campuses, time and resource constraints did not permit site visits to all facilities. However, in these instances the central campus—the location
of the museum’s corporate administration—was visited. Where possible, special exhibitions at the main campus were visited. Field visits were supported by the taking of comprehensive notes and photographs, which documented pertinent elements of the museum experience to form an holistic impression of each case. Field notes were also used as an ongoing record of what was happening as the fieldwork progressed (Eisenhardt, 1989). Overall, with each museum being a significant cultural entity in its state, and having been so for a considerable time, it was considered vital to form an opinion on their physical presence and spatial relativities in order to place them within the cultural landscape. The field notes recorded such impressions as the style of building in relation to branding ‘clues’, the relationship of the museum to its location and the mix of facilities and exhibitions. Even where only the central campus was visited this was deemed a useful activity. This type of information about built spaces like museums can convey meanings in relation to the values and beliefs of those who created them, as well as their publics (Yanow, 1998). The photographs supported these notes and recorded the visits, and also provided a significant source of visual data. As Yin (2003) has commented, at a minimum, photographs are useful to convey significant details about the case to outside observers. Selected photographs are included as Appendix C.

The observation method used here is considered vital to the study as it added significant depth to the case analysis. As noted by Bryman and Bell (2007), observation as a business research method can be manifested in seven different ways: structured observation, systematic observation, participant observation, non-participant observation, unstructured observation, simple observation and contrived observation. In this study, the observation technique was unstructured, as the field visits aimed “to record in as much detail as possible… with the aim of developing a narrative account” (Bryman & Bell, 2007: 283) which could be used as an additional method to support further triangulation of data. Observation has become an established technique in studies of museums, with Yanow (1998) adopting it to consider the role of space within the museum, for example. In a study into the nature of the visitor experience Goulding (2000) used observation methods within a services marketing context. Her observations
of “both the physical environment and the nature of the exhibits on offer” (Goulding, 2000: 261) provided the basis for a more detailed analysis of visitor behaviour.

**Secondary sources**

As noted previously, within a broad qualitative approach to research, triangulation of data sources can provide a richness of data that can give each case additional depth (Easterby-Smith et al., 2004; Flick, 2002; Mason, 2002). In addition, Fillis (2000) has noted that new theory generation can benefit from embracing non-traditional modes of enquiry. The aim here was to use annual reports, websites and marketing collateral from the Australian state museums to provide a broader perspective of each one’s organisational behaviours.

**Annual reports**

Each museum’s annual reports for the five year period prior to the case study research were analysed. The final reports available prior to the time of writing were for the financial year 2005 to 2006. Organisational documents such as annual reports are particularly useful in business research, where they can be used to develop a description of the organisation and its history (Hussey & Hussey, 1997). Annual reports in the museum sector, particularly in relation to the government funded state museums under discussion here, are “a rich source of hard data… and useful for a longitudinal perspective.” (Gilmore & Rentschler, 2002: 748). Annual reports are written for a particular audience and a particular purpose, and as such there is the potential for bias (Bryman & Bell, 2007). However, the researcher was interested in how these corporate documents sought to portray the organisation, rendering the issue of bias irrelevant, providing it was acknowledged as possible.

**Museum websites**

All the Australian state museums had comprehensive websites. As will be discussed in Chapter 7 there is some variation in the level of development of the website between each of the case study museums. Some were of considerable size and were used extensively for the dissemination of research output, others less so. It is common in Australia for museums not to use the full range of marketing communications on their
websites (Rentschler & Geursen, 2003). Museum websites were viewed regularly throughout the research. However, due to the ease with which websites can be changed, there was no obvious way to keep a copy of each iteration. Therefore, it was considered appropriate to print out pages from each site each year for three years. (The main structural and ‘public’ pages were printed. Specialist research or stakeholder areas were not printed.) Printouts were done on 1 July 2005, 1 July 2006 and 1 July 2007. This procedure allowed a chronological perspective that could be triangulated with the interview data in relation to changes and developments in the use of electronic media.

Additional marketing material
It was considered important that an analysis of marketing materials relating to each museum and their current marketing campaigns was made. Where possible materials were sourced over a period of time. With some museums, logistical difficulties meant that materials could only be obtained at the time of the field visit. However, for each museum a suite of marketing collateral was obtained. These included corporate publications where available, and any publications related to special exhibitions.

Data analysis methods
As Miles and Huberman (1994) state, differentiating and combining data, and then reflecting on that data, is “the stuff of analysis” (Miles & Huberman, 1994: 56). This step in the qualitative research process typically involves assigning descriptive and inferential tags or codes to data (Bryman & Bell, 2007; Flick, 2002). After Miles and Huberman (1994) the data analysis for this research study commenced with a preliminary set of codes based on the perceptual framework, the research aim and research questions, and the key factors apparent from the literature review. As Robson and Hedges (1993) advise, a process of revisiting the data was adopted, whereby the data were continually re-examined and re-evaluated. The researcher was then able to refine and revise the codes as the analysis progressed. Some codes ‘decayed’ and were dropped, while others ultimately proved important enough to be included in Chapter 7, the findings and discussion chapter.
Computer assisted data analysis

Computer assisted qualitative data analysis software (CAQDAS) has become a common tool for the qualitative researcher (Easterby-Smith et al., 2002). This is despite criticisms of a reliance on computer analysis. For instance, Bringer, Johnston and Brackenridge (2004) suggest that the ability to conduct frequency counts, which neglects the opportunity for contextual analysis presented by the data, can lead to an inappropriate quantification of the research study. Similarly, the ability to easily code-and-retrieve can result in a fragmentation of the data that loses the narrative flow—one of the principal reasons why a qualitative approach was taken in the first place (Bryman & Bell, 2007).

That aside, there are advantages in using CAQDAS. Coding and retrieving using a software package means that laborious tasks such as photocopying, highlighting, writing marginal notes and cutting and pasting can now be automated (Bryman & Bell, 2007). One of the significant advantages of CAQDAS is that it allows a level of transparency of method, with a congruence of analysis and theory evident from the documentation of the research (Bringer et al., 2004; Bryman & Bell, 2007). Wickham and Woods (2005) also note several advantages of using computer software. They point to features such as the ability to code multiple categories, the support of complex code structures and the facility to construct searchable memos and annotations.

In this thesis, analysis of the data was carried out with the assistance of the qualitative data analysis software package NVivo 7.0 produced by QSR. While there is no one particular software package that is best for qualitative data, there are criteria upon which to make a judgement, such as the methodology chosen and the experience of the researcher (Weitzman, 2000). NVivo 7.0 was chosen due to the features offered by the software (such as, searchable annotations and hierarchical categories), and the ample textbook and online support (see for example, Richards, 1999; 2005). Interview transcripts, field notes and text versions of the case museum’s annual reports were imported into the software.
In this research NVivo 7.0 was used to assist the researcher in analysing the data. As noted above, a preliminary set of codes was established prior to analysis, based on the perceptual framework, the research aim and research questions, and the key factors that were drawn from a review of the literature. These informed the initial structure of the NVivo 7.0 ‘project’, as indeed they did for the interview themes. A hierarchy of themes became apparent as the analysis was conducted. (These themes will be discussed in the main body of Chapter 7.) A subsequent analysis of this hierarchy was conducted to search for any common threads that ran through the themes, resulting in a summary theme structure. (The summary themes will be discussed in the summary analysis section of Chapter 7.) NVivo 7.0 proved an invaluable tool to both store the data in categories (nodes, as they are named in NVivo 7.0), and in themes. It also allowed the researcher to ‘lay out’ the data to visualise better any patterns as they emerged. Figure 5.1 shows the hierarchical theme structure that was the result of the data analysis, and Figure 5.2 shows the summary theme structure. Key to the approach taken here is the idea that software cannot replace or duplicate analysis of the data by the researcher (Easterby-Smith et al., 2002; Weitzman, 2000). It did allow comparisons to be more easily made, which meant that themes and ideas could more readily be teased out of the data, but in the end, the responsibility for actual analysis was the researcher’s.

**Analysis of secondary sources**

Analysis of annual reports, museum websites, additional marketing material and fieldwork photographs was carried out using content analysis techniques. Content analysis is an established research method that has been used in various areas of social science, including business, since the middle of the last century (Neuendorf, 2002). Krippendorff, widely regarded as an authority, defines content analysis as “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (2004: 18). As Krippendorff (2004) went on to explain, content analysis can be applied to forms other than the written word. Riffe, Lacy and Fico (1998) state that all communication—verbal, textual or images—carry symbols that can be investigated using content analysis, and that visual communication appropriate for study might include “photos, graphics or display ads” (1998: 24). Within
this context, how the Australian state museums use their marketing collateral to communicate to their perceived audience is of importance. It has been established by Barnard (2005) that graphic design is central to the communication process. What symbols the museum might use in their communication becomes significant, as does its connection to the physical aspects of the museum sites. As noted above, an extensive
photographic record of the museum sites visited was taken with a view to providing just such insight.

However, it has been said that academic orthodoxy regards images as “a subjective, inferior or even eccentric form of data compared to words and numbers” (Stiles, 2004: 127). This is despite photography’s long tradition in anthropology and ethnography (Flick, 2002). Nonetheless, the use of photographs in social research, both as a form and object of research, is growing (Flick, 2002). The aim here, however, was to use photographs to produce, what Prosser and Schwartz (2006) call, a “visual record…[which seeks to] systematically record visual detail with emphasis on reproducing objects, places, signs and symbols” (2006: 144).

The approach taken here, then, is in line with Flick (2002), who has pointed out that “the analysis of visual material is mostly triangulated with other methods and data” (2002: 153). Therefore, the analysis of photographs is in support of points made in relation to the ‘look and feel’ of a museum. There is no attempt to conduct an ethnographic study or present a photographic essay. Similarly, analysis of the museums’
marketing collateral links to inferences the researcher makes regarding each museum’s involvement in the marketing concept. Museum publications provide a source of data that can only add to the overall analysis, but they are not central to this thesis’s research aims.

The same can be said in regard to the museums’ websites. Analysis of websites, while still in its infancy, is starting to appear in the literature. For example, Perry and Bodkin (2000) used content analysis techniques in their study of Fortune 100 companies’ websites. Griffith and Krampf’s (1998) two-stage study of the web strategies of retailers in the USA used interviews, observation and content analysis with an expert panel. In this thesis, museum websites are viewed as communication tools that can be used to build relationships with museum audiences (Streten, 1999). Of course, in a study on electronic marketing, websites, almost by definition, are significant. However, while it will be shown in Chapter 7 that Australian state museums do not use any other electronic media tools to any great extent, the analysis of websites conducted here is firmly grounded in the research questions. Analysis, again, was aimed at providing a more complete picture of each case museum and was not an end in itself.

**Limitations**

As previously discussed, there are perceived limitations with a qualitative research approach. The criticisms noted there, that qualitative research is purely descriptive and therefore not rigorous, and that it is too subjective and impressionistic (Goulding, 2002) have been addressed. A further criticism is that there is a lack of transparency in qualitative research, that is, it is difficult to see why and how a researcher might reach their conclusions (Bryman & Bell, 2007). This chapter has sought to address this issue by noting the reasons for choosing certain methods such as interviews and field visits, and how these methods were analysed. With the latter, in particular, the use of CAQDAS has meant that the research process is well documented.
One final limitation, more of method than approach, involves the interviews. It is considered a limitation of the study that the researcher could not control the selection of the candidates for interview. While the selection of case study museums was determined by the researcher, the persons who participated in the study were largely decided by each museum. The researcher could only request the position level of staff that would be ideal. As has been noted, the research design suggested that one staff member from a strategic, board-level and one from an operational, marketing-level would provide a basis for the research questions to be answered. This was noted in the preliminary phone contact with each museum. Each museum, however, responded differently, and each nominated a different range of persons to participate in the research. In the case of three of the museums three persons were interviewed. In all cases the interviews included at least one strategic and one marketing operational staff member.

Ethical considerations

There are a number of issues that need to be considered when conducting research in the business, management and marketing areas. Bryman and Bell (2007) have noted a lack of informed consent as an ethical issue not widely debated in the academic literature. The issue of confidentiality is also relevant. Protecting interviewees from any repercussions of their comments being reported should also be a concern for researchers (Robson, 2002).

This thesis adopted several measures to address such issues and to ensure that this research was conducted in an ethical manner. The research was conducted in line with University of Tasmania ethical guidelines. The research received ethical approval from the Human Research Ethics Committee (Tasmania) Network. This involved lodging a Social Sciences - Minimal Risk Application Form, along with the script for the initial telephone contact with potential interviewees, the plain language Information Sheet to be presented to each interviewee prior to their interview, and the Interview Consent Form that each interviewee was required to sign before their interview. (Copies of these
documents are to be found as Appendix D.) Interviewees were subsequently provided with a copy of the Interview Consent Form to retain for their records.

Participants in the research were informed that information provided was to be securely stored against access by persons other than the researcher for a period of five years. At the end of that five-year period all data provided by participants will be destroyed, paper records will be shredded and electronic records deleted.

Given the fact that there are only six state museums in Australia, and the persons involved in the sector are well known to one another, anonymity was an issue that needed to be addressed with interviewees. The Information Sheet made it clear that the museum with which each participant was associated would be identified by name in the thesis and other research output. It was also noted that they, as individuals, may be identified in the thesis and other research output by their official position and title. Under these circumstances participants were asked to consider carefully their responses. It was noted that participants would be given the opportunity to review the transcript of their interview for information they did not wish to be included. Participants were subsequently posted a printed copy of their transcript and a pre-paid reply envelope for its return. Of the transcripts returned, three were amended.

**Conclusion**

This chapter examined the research methodology used in the thesis. The first sections of the chapter discussed the research philosophy within which the researcher has undertaken the research. It was noted that a distinction that is made between approaches to research is that of the positivist/interpretivist dichotomy (Bryman & Bell, 2007; Hughes & Sharrock, 1997; Travers, 2001). The researcher’s interpretivist stance was shown as partly determining the qualitative approach to the study which was taken here. It was noted that a perceived fault of qualitative research—its subjective nature (Goulding, 2000)—was in fact a positive in this researcher’s, and others’, view, allowing the phenomena under study to be viewed from the inside (Miles & Huberman,
This qualitative framework and the interpretivist stance subsequently shaped the research design. In considering the unit of analysis used in the thesis, it was apparent that while the research provides a census of Australia’s state museums, each is an individual organisation in its own right, with a considerable history and significance within their respective state. This background provided justification for this research analysing the data through the case study approach, given that this approach provides a means of studying organisations within a real-life context (Yin, 2003).

This chapter also included a section on the issue of data collection within the case study approach. This research used a triangulation approach which aimed to provide different perspectives on the same data from different data sources (Denzin, 2006). In the context of the museum sector, this was particularly useful given the availability of secondary sources, such as annual reports, websites and marketing collateral. These sources were used, along with extensive field visits and interviews, to provide the data for the thesis. Interviews were seen as a method well suited to the qualitative approach, as they seek to allow the researcher to understand the reality of the interviewee, providing insight into their perspectives (King, 2004; Kvale, 1996).

Following on from this was a section on the data analysis methods used. It was pointed out that CAQDAS has become a common research tool (Easterby-Smith et al., 2002). However, criticisms were noted, such as inappropriate quantification of the research (Bringer et al., 2004) and the potential for fragmentation of the data (Bryman & Bell, 2007). Based on a preliminary set of codes, the perceptual framework, the research aim and research questions, and the key factors evident from the literature, a thematic analysis was conducted on the interviews, field notes and the annual reports, assisted by the CAQDAS software NVivo 7.0. Analysis of the annual reports, as well as the websites and marketing collateral was carried out using content analysis, which provided a more complete picture of each case museum as a method of triangulation.

Chapter 5 concluded with two sections on the limitations of the study and the ethical issues that the researcher needed to consider. The first limitation mentioned related to the perceived problems with qualitative research itself. It was indicated that these had
been sufficiently covered in the preceding discussion of qualitative research in the research philosophy section. The other limitation noted concerned the selection of interviewees. It was pointed out that the researcher could only suggest appropriate persons for interview—it was the decision of each case museum as to the actual person selected. As regards ethical considerations, the final section set out the procedures followed, in line with University of Tasmania ethical research guidelines, to address issues such as a lack of informed consent (Bryman & Bell, 2007) and confidentiality (Robson, 2002).