## **CHAPTER 9**

## EMPIRICAL RESEARCH PROCESS

		PAGE
9.1	INTRODUCTION	293
9.2	THE RESEARCH APPROACH	293
9.3	PLANNING THE EMPIRICAL STUDY	294
9.3.1	The questionnaire	294
9.3.2	Testing the questionnaire	295
9.3.3	The layout and contents of the questionnaire	296
9.3.4	The population and sample size	297
9.4	DISTRIBUTION OF THE QUESTIONNAIRE	299
9.5	THE RESPONSE	290
9.5.1	The response rate	299
9.5.2	Processing of the response data	300
9.5.3	Analyses of respondents	301
9.6	RELIABILITY AND VALIDITY OF THE MEASURING INSTRUMENT	305
9.6.1	Validity	305
	Reliability	306
9.7	SUMMARY	307

#### **CHAPTER 9**

#### EMPIRICAL RESEARCH PROCESS

#### 9.1 INTRODUCTION

In chapter 4 a model of destination competitiveness in which critical success factors could be identified and integrated was proposed. Chapters 5 to 7 discussed and critically evaluated the components of this model while chapter 8 summarised and compared it to similar models identified in the literature study.

The aim of this chapter is to document the process used during the empirical survey and the results of Section A of the survey representing the profile of the respondents to the questionnaire. The following key aspects will be addressed:

- Firstly, the research approach will be outlined in order to explain the objectives and application of the empirical investigation;
- Secondly, the planning of the empirical survey will be described: particularly focusing on the questionnaire design, testing procedure, questionnaire layout and contents, as well as the population and sample size;
- ☐ Thirdly, the methodology used to disseminate the questionnaires will be described;
- □ Finally, the response to the questionnaire dissemination will be evaluated. This will include the response rate, processing of the response data and analysis of the demographical data of the respondents.

#### 9.2 THE RESEARCH APPROACH

Research involves the application of various methods and techniques to create knowledge through the use of scientific methods and procedures. Allison *et al* [1996: 4]; and Welman and Kruger [1999: 2] add that research is a systematic enquiry that is reported in a form that allowed the research methods and outcomes to be accessible to others. Research also involves seeking solutions to problems or answers to questions. Riley *et al* [2000: 8] refer to two types of research: pure and applied research. Pure research is that which has no obvious practical implications beyond contributing to a particular area of intellectual enquiry. Applied research, on the other hand, is problem-focused and is directed towards solving some particular intellectual question

that has practical implications for a client outside the academic world.

This study attempts to develop a model to solve a problem and its focus is thus applied. According to Welman and Kruger [1999: 12], a research problem refers to some difficulty that the researcher experiences in the context of either a theoretical or practical situation. In the case of this study, the problem posed by the researcher is:

"How can critical success factors be identified and integrated to achieve competitive advantage and growth for South Africa as a tourism destination?"

In addressing the problem, the objectives of the empirical investigation were:

- ☐ To identify critical success factors considered to be important by South African tourism stakeholders;
- To investigate the integration of these critical success factors to achieve sustainable growth and competitiveness for the destination; and
- To formulate specific strategic recommendations for South Africa as a tourism destination based on the empirical findings.

#### 9.3 PLANNING THE EMPIRICAL STUDY

The empirical survey was conducted by means of an electronic-mail survey with the use of a questionnaire [see Annexure A ] developed from the literature study. The results of the survey were tabulated and statistically analysed. The process followed during the empirical survey is described below.

## 9.3.1 The questionnaire

The questionnaire is a common instrument for observing data beyond the physical reach of the observer [Leedy, 1997: 191]. Riley *et al* [1998: 82] state that in a questionnaire there may be open and closed questions. A closed question is one where responses are restricted to a small set of responses that generate precise answers. Open-ended questions do not impose restrictions on the possible answers, but are difficult to aggregate and computerise. However, the response is often richer and more detailed. Jancowitz [2000: 269] notes that a structured questionnaire must provide questions that possess an element of "steering" information from the respondent without any prompting from the researcher. This is the method that was used in the questionnaire developed for the empirical study.

In designing the questionnaire, a five point Likert-type scale was used. The Likert scale is the most widely used form of scaled items where the respondent chooses a point on a scale that best represents his/her view [Allison *et al*, 1996: 83]. Scoring for the scale was as follows: 1 indicated not important, 2 some importance, 3 reasonably important, 4 very important and 5 extremely important.

The questionnaire instructions should ensure that all respondents are treated equally. Two principles form the foundation for good instructions; clarity and courtesy. Anonymity was also ensured as the identity of the respondent was not required and an indication of the name of the organisation was optional.

Riley *et al* [1999: 96] name the following key issues pertaining to questionnaire design:

- □ Use simple and concise language;
- Do not make unrealistic demands on those who complete the questionnaire;
- □ Ask about only one topic;
- Have no "escape route" for example, don't know, no comment;
- □ Use polite language;
- Ensure that each question is straight-forward and guard against ambiguity;
- □ Order the questions correctly;
- □ Make the layout easy to follow;
- □ Give clear instructions; and
- □ Test the questionnaire first.

According to Thomas [1996: 121], a questionnaire should not be too long and complicated. More pages with a clear and user-friendly layout are better than fewer pages with cramped and forbidding layout. All of the above principles were followed in designing the questionnaire. In addition, the draft questionnaire was tested in a pilot study.

#### 9.3.2 Testing the questionnaire

To test the validity of the questionnaire, it was critically reviewed by six senior managers in the tourism sector in South Africa and by the researcher's promoter and co-promoter. The questionnaire was completed in close collaboration with the

researcher who particularly focused on the following key aspects of the process:

- The time taken to complete the questionnaire was measured. In the preliminary process of obtaining agreement to participate, a few potential respondents suggested that they would be reluctant to complete a questionnaire if the time to do so exceeded 20 minutes.
- The level of comprehension regarding the wording of the questions.
- The difficulty of allocating a score to each question. No specific difficulty was noted here, although test subjects ranked most of the critical success factors in the last three categories on the Likert scale. For example, reasonably important, very important and extremely important. This was anticipated as all of the success factors are expected to have at least some importance for the industry.

Several improvements were incorporated in the revision of the layout and the contents of the questionnaire based on the feedback received from the pilot group.

#### 9.3.3 The layout and contents of the questionnaire

The questions in the survey were prefaced with detailed instructions to the respondents on the actions required from him or her to complete the questionnaire properly. These instructions were then followed by the questions themselves, grouped into the following sections:

**Section A** required general detail about the respondents' position and the classification of the organisation that he/she represented. It also indicated the locality of the organisation that is represented as well as the percentage split between domestic and international business.

**Section B** tested the significance of indicators of performance for sustainable growth. This section was divided into economic indicators and social indicators in order to determine the significance of these indicators of performance. The indicators were identified in the literature study in chapter 8, Table 8.1.

**Section C** represented the customer perspective and consisted of two parts: in C1 respondents were requested to identify the most important attributes of a destination that would attract international tourists. In C2 respondents identified the success factors that could lead to optimum customer satisfaction and retention. The attributes

were derived from the list as identified in the literature study and tabulated in Table 8.2. The factors identified for customer satisfaction consisted of quality of service factors and quality of experience factors.

**Section D** focused on the destination management processes that could have the greatest impact on customer satisfaction and the achievement of sustainable growth objectives. Respondents were requested to identify the most important key elements for success in each of the identified processes. The destination management processes were identified in chapters 7 and 8.

**Section E** portrayed the learning and growth perspective that reflected future development factors that were critical to create long-term growth and competitiveness for the destination. Four categories for these success factors were identified in the literature: product development; infrastructure development; people development and systems development. The general success factors for these categories were identified in the literature and summarised in Table 8.4. Respondents were asked to identify the most important success factors in these categories for the future growth and sustainable development of South Africa as an international tourism destination.

The questionnaire was accompanied by an introductory letter explaining the purpose of the research.

## 9.3.4 The population and sample size

#### a] Population

Population can be defined as the entire group under study as specified by the objective of the research [Burns & Bush, 1998; and Yoon, 2002: 59]. Since the objective of this study was to investigate tourism stakeholders' perceptions regarding the identification and integration of critical success factors for South Africa as a tourism destination, the population of this study were South African tourism stakeholders. Specifically, the target population includes members or groups that are attracting or servicing the international tourism market in South Africa.

#### b] Sampling

Sampling is a procedure that uses a small number of units of a given population as a basis for drawing conclusions about the whole population [Zikmund, 1997: 112]. The

major source of the sampling frame was the official 2002 Tourism Indaba address list. The South African Tourism Indaba is an annual event aimed at providing a platform for exhibiting South Africa as a destination to the international world. Indaba 2002 had a total of 1300 tourism products and 1316 delegates. All primary stakeholders involved in international tourism in South Africa were represented at the Indaba. The address list classified stakeholders into ten formal classifications namely: Accommodation/Conference Facilities/Restaurants; Game Lodges/Game and Nature Reserves/Show farms; Tour Operators and Travel Agents; Tourist Attractions; Transport; Tourism Associations; Tourism Authorities of neighbouring countries; Provincial Tourism; Local and Regional Publicity Associations and Tourism Marketing Organisations. The remainder of the members were listed in a general and addendum section. All the members on the ten official classifications lists were used for this study. Forty-two members who did not have e-mail addresses were omitted from the list. The number of representatives in these categories are shown in Table 9.1.

 Table 9.1
 Population size classification

	Stakeholder Segment	Number of
		Representatives
1	Accommodation/Conference facilities/Restaurants	327
2	Game Lodges/Game and Nature Reserves/Show farms	154
3	Tour Operators and Travel Agents	275
4	Tourist Attractions	59
5	Transport	30
6	Tourism Associations	12
7	National Tourism Organisations	13
8	Provincial Tourism	11
9	Local/Regional PublicityAssociations	15
10	Tourism Marketing Organisations	24
	TOTAL	920

The sample size for this study, therefore, consists of 920 attendees at the 2002 Tourism Indaba conference representing all the major stakeholders involved in the South African tourism industry. Yoon [2002: 60] argues that, in general, there is no correct sample size although larger sample sizes are always preferable. A low response rate for the survey was anticipated, partly due to the electronic mail out

method and the length of the questionnaire. In recent similar studies on stakeholder perceptions on tourism development in Virginia, USA, the response rate was less than 15% [Yoon, 2002: 61].

## 9.4 DISTRIBUTION OF THE QUESTIONNAIRE

In order to achieve the largest possible response, a total of 920 questionnaires were sent out by electronic mail to the representatives identified in Table 9.1. Twenty-eight questionnaires were returned uncompleted. Thus, of the remaining 886 questionnaires, 139 usable questionnaires were completed and returned, representing a 15,7% response rate overall. This is considered satisfactory, given the nature of the mail-out collection method and the length of the questionnaire.

The questionnaires were distributed and collected in May and June 2003. Two reminder e-mails were sent out to the group after the responses on the first request were not received. The outcome of the original request as well as the follow-up requests is shown in Table 9.2.

Table 9.2 Responses to electronic mail survey

Responses on first due date	82
Responses after first follow-up	31
Responses after second follow-up	26
Total	139

#### 9.5 THE RESPONSE

#### 9.5.1 The response rate

The response rate as per classification for the questionnaires as at 20 June 2003 is shown in Table 9.3 below:

Table 9.3 Total responses from the electronic mail survey

		Final sample		
Stakeholder	Questionnaires	[after	Response	Response
Classification	distributed	adjustments]	frequency	rate
1. Accommodation/Conference				
Facilities/Restaurants	327	315	45	14,29%
2. Game lodges/Game and				
Nature Reserves/Show farms	154	150	20	13,33%
3. Tour Operators and Travel				
Agents	275	253	36	13,69%
4. Tourist Attractions	59	57	10	17,54%
5. Transport	30	29	6	20,69%
6. Tourism Associations	12	11	2	18,18%
7. National Tourism Organisation				
[Including neighbouring countries]	13	13	4	30,77%
8. Provincial Tourism	11	11	6	54,55%
9. Local/Regional tourism/-				
Publicity Association	15	15	5	33,33%
10. Tourism Marketing Organisations	24	22	5	20,83%
Total	920	886	139	15,69%

All the respondents in the different categories were more than 13% and this therefore correlates well with the overall response rate of 15.7%. The classifications with a small sample segment like the national, provincial, local and other marketing tourism organisations has a high response rate that can be a result of the small sample size in these categories. Taking the big sample size into consideration, the final response rate of 15,7% is acceptable. In a similar study that was done on a sample size of 1096 a response rate of 17% was considered satisfactory [Collie & Sparkes, 1999: 5].

## 9.5.2 Processing of the response data

Once the data had been captured, the data was processed by the Research Support Unit of the Department of Mathematical Science at the Port Elizabeth Technikon using the software package Statistika.

## 9.5.3 Analyses of respondents

Section A of the questionnaire required respondents to complete general information about the respondent's position and the classification of the organisation that he/she represented It also indicated the locality of the organisation as well as the percentage split between domestic and international business.

The results of the questions posed in Section A are provided in Tables 9.4 to 9.9.

Table 9.4 Position of the person completing the questionnaire

Cate	Category		Percentage
		frequency	
A	Senior Management eg. Owner, Managing Director,		
	Director	69	49,64
В	Middle Management eg. Marketing Manager, General		
	Manager, Administration Manager	38	27,34
C	Public Relations Officer; Marketing Official;		
	Administrative Personnel	18	12,95
D	Unanswered	14	10,07
	TOTAL	139	100,00

Table 9.4 shows that more than 75% [76,98%] of the respondents who completed the questionnaire were at management level, while nearly half [49,64%] were at senior management level. Taking into account that the feedback reflects the strategic perceptions of respondents, the high conceptual insight represented by the percentage of management responses were encouraging.

**Table 9.5** Nature of responding organisations

Туре	e of organisation	Response	Percentage
		frequency	
Dom	estic stakeholders		
1.	National [DMO]	3	2,16
2.	Regional [DMO] [including provincial]	6	4,32
3.	Metropolitan [DMO]	5	3,60
4.	Tourist Attraction	10	7,19
5.	Accommodation and Conference facilities	45	32,37
6.	Game Lodge/Nature Reserve/Show Farms	20	14,39
7.	Distribution channel	12	8,63
8.	Transport [Air and ground]	6	4,32
9.	Other	3	2,16
Intern	International stakeholders		
10.	Tour Operator	24	17,27
11.	National Tourism Organisation	1	0,72
12.	Unanswered	4	2,87
	TOTAL	139	100

Table 9.5 shows that the biggest response was from the accommodation and conference sector which also represented the largest segment in the sample as shown in Table 9.3. The next biggest group was tour operators followed by game lodges/nature reserves/show farms. It must, however, be noted that twenty of the twenty-four international tour operators also classified themselves as domestic tour operators and they can thus also be classified under domestic stakeholders. If the stakeholders are grouped into five categories, namely, accommodation and conferences, attractions, marketing and distribution, the response can be illustrated as shown in Table 9.6.

Table 9.6 Classification of responding organisations

	Response	Percentage
Type of organisation	frequency	
Accommodation and Conference	45	32,37
Attractions	30	21,58
Marketing	15	10,79
Distribution	42	30,22
Unanswered and others	7	5,04
TOTAL	139	100

Table 9.6 shows that there was a fair distribution of responses representing accommodation, attractions, distribution and marketing.

**Table 9.7** Location of responding organisations

Location	Response		Cumulative
	frequency	Percentage	percentage
Eastern Cape	11	7,91	7,91
Gauteng	30	21,58	29,49
Kwazulu-Natal	16	11,51	41,00
Western Cape	50	35,97	76,97
Limpopo	6	4.32	81,29
Mpumalanga	9	6,48	87,77
Free State	2	1,44	89,21
Northern Cape	1	0,72	89,93
TOTAL: South Africa	125	89,93	89,93
International	14	10,07	100,00
TOTAL	139	100,00	100,00

Table 9.7 shows that 89,93% of the respondents were from South Africa and 10,07% from other neighbouring countries. The biggest response from South African stakeholders was from the Western Cape [35,97%], followed by Gauteng [21,58%] and Kwazulu-Natal [11,51%]. These figures correspond with previous research that was done on the number of nights spent by international tourists in the different

provinces [Fabricius, 2001: 21].

Stakeholders were asked to estimate the percentage share of their domestic and international business. The results of these are shown in Table 9.8.

Table 9.8 Percentage share of international business

	Response		Cumulative
Category	frequency	Percentage	percentage
0 – 10%	22	14,38	14,38
10 – 20%	6	5,76	20,14
20 – 30%	5	3,60	23,74
30 – 40%	8	5,75	29,49
40 – 50%	10	7,20	36,69
50 – 60%	9	6,47	43,16
60 – 70%	19	13,67	56,83
70 – 80%	13	9,35	66,18
80 – 90%	18	12,95	79,13
90 – 100%	29	20,87	100,00
TOTAL	139	100,00	100,00

Table 9.8 indicates that 36,69% of the respondents' international share of their business is less than 50% while 63,31% of the respondents' international business share is more than 50%. For 33,82% of the respondents, the international share of their business is more than 80%. It is clear from the data that the weight of respondents business share is overwhelmingly in favour of international tourism and is, therefore, acceptable.

Table 9.9 Years the organisation has been in operation

	Response		Cumulative
Category	frequency	Percentage	percentage
Longer than 10 years	46	33,09	33,09
6 – 10 years	45	32,37	65,46
1-5 years	40	28,78	94,24
Unanswered	8	5,76	100,00
TOTAL	139	100	100,00

Table 9.9 shows that 33,09% of respondents have been in operation longer than 10 years, while 65,46% of the respondents have been in operation for more than 6 years. About two-thirds of the respondents, therefore, have 6 years and more experience in the tourism industry.

# 9.6 RELIABILITY AND VALIDITY OF THE MEASURING INSTRUMENT

Validity and reliability are terms that, according to Leedy [1997: 32] are encountered repeatedly in research methodology. They are primarily concerned with the measuring instrument and contribute to the integrity of the research. Each term is discussed below.

#### 9.6.1 Validity

As validity is concerned with the soundness and effectiveness of the measuring instrument [Leedy, 1997: 32], it must be asked whether the measuring instrument measures what it is intended to measure or not, and the degree of accuracy of that measurement. Therefore the following questions were asked regarding this study namely: Does the questionnaire measure what it is intended to measure and; does the questionnaire comply with the following validity criteria?

- □ **Face validity:** Face validity refers to whether the questions seem appropriate or not in the context of the study.
- Criterion validity: This is where validity is determined by relating a performance measure to another measure that may be used as a standard against which results are measured.
- □ Content validity: This is related to face validity. Content validity is where the accuracy of the instrument in measuring the factors of concern to the study is scrutinised.
- Construct validity: This is the degree to which the content of the study is measured by the questionnaire. In the case of this study "How can critical success factors be identified and integrated to achieve international competitiveness for South Africa as a tourism destination?"
- Internal validity: This is concerned with the information of conclusions based on the actual results obtained from the study and not based on any opinion that is influenced by research bias.
- **External validity:** This is the degree to which conclusions reached in the study may be applied to the broader population and not merely the sample study.

In this study, face validity, content validity, construct validity and external validity were applied. These criteria were chosen after consulting experienced senior managers in the tourism industry as well as academics in the pilot study described earlier in this chapter. The face validity, content validity and construct validity were confirmed by the pilot study. The external validity is based on the extensive literature study that was undertaken in order to develop a model of destination competitiveness.

#### 9.6.2 Reliability

Reliability is the consistency with which the measuring instrument performs [Leedy, 1997: 35]. This means that, apart from delivering accurate results, the measuring instrument must deliver similar results consistently.

Riley et al [2000: 126] feel that reliability refers to whether the measuring instrument,

in this case the questionnaire, measures what it was intended to measure. Singleton, Straits and Straits [1993: 121] feel that reliability may be improved through conducting exploratory studies in the area of interest, or by conducting pre-tests on a small sample of persons similar in characteristics to the target group. In this study, both of the above activities were conducted by the researcher – in the form of a comprehensive literature study [see Chapters 2, 3, 4, 6, 7 and 8], and a pilot survey conducted on senior managers and academics in the tourism industry. The aim of the pilot study was to ensure that all questions were understandable and relevant.

#### 9.7 **SUMMARY**

The aim of this chapter was to document the planning and process used in the empirical study as well as a quantitative analysis of the demographic details of the respondents. This was conducted through a brief overview of the literature relevant to the research methodology as well as detailed documentation of the process used to obtain information from the respondents.

The demographic details of the respondents reported in Section A of the questionnaire were presented in tabular form. The chapter concluded with a brief discussion of the validity and reliability of the data gathered through the use of the questionnaire.

---oOo---