

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

This chapter outlines the research methodology framework used in conducting this research on how the research methodology is produced in developing the key indicators for monitoring the heritage values of cultural properties in historic cities in Malaysia. It covers the discussion of the research development strategies and the process in carrying out the study. The selection of research methods and techniques for data collection and analysis are also discussed. The study used multiple data collection methods including a case study approach, in-depth structured interviews, questionnaire survey and Delphi technique.

This research mainly adopted qualitative approaches, whereby the case study and Delphi method applied the qualitative element and the questionnaire-based survey applied quantitative element of the research.

4.2 Research Methodology

According to Sekaran (2000), a research can be described as systematic and organized effort to investigate a specific problem that needs a solution. Furthermore, the author stressed that a research is an activity of solving problems with the aim to add new knowledge, developing theories, as well as gathering evidence to prove generalizations. Thus, as explained by Burns (1994), a research is a systematic investigation to find solution of a specific problems.

Chaudhary (1991) stated that the difference between research methods and research methodology are research methods describe all technique or methods that are used to conduct a research, while research methodology is a systematic way of solving research problem or a science of studies on how to carry research scientifically. On top of it, research methodology has many dimension but research methods are only some integral parts of it (Chauhary,1991; Kumar, 1999). Sarantakos (1998) classified research methodology into and qualitative quantitative.

4.2.1 Qualitative

The aim of the study is to understand the monitoring process and to develop indicators in the conservation of cultural property. The research adopted both qualitative and quantitative research approaches. Therefore, this enables the Researcher to interact with the respondents and investigate activities in their cultural setting.

Qualitative research is characterized by a set of research questions, issues and a search for patterns, in contrast to the hypothetical-deductive approach that requires the specification of the main variable and research hypothesis.

Qualitative phase discovers what the local authorities, conservation managers, stakeholders and professionals in the field of conservation management believe the monitoring strategies and indicators that should be involved for sustaining the heritage values of Malacca and George Town WH sites. There are currently no sufficient data and document on the monitoring system, let alone the indicators that measure about sustaining the value of the state of the cultural properties in Malaysia in general; hence this study is new and exploratory.

Therefore, a qualitative research seems to be the preferable approach to generate the essential data for analysis and this was conducted in two ways, namely; 1) interview; and 2) focus group discussion, which are discussed in Section 4.3.2.

4.2.2 Questionnaire Survey

This quantitative technique of research by questionnaire-based survey is considered as the second level of primary data collection for the research. The questionnaires were prepared for two categories; first, the questionnaire (Q1) that is specifically meant for stakeholders, professionals, architects, engineers, surveyors, lawyers, researchers and academicians; and the second questionnaire (Q2) that is specifically meant for professionals (conservation experts) involve in the conservation management of WH sites locally and internationally (refer to Appendix A and Appendix B).

The quantitative data was collected via questionnaire survey using a self-enveloped method. According to Babbie (1995, p. 257), survey research is “ probably the best method available to the social scientist interested in collecting original data for describing a population too large to be observed directly”; it is especially appropriate for making descriptive studies of a large population”. Salant and Dillman (1994:27) suggested that survey design collected measures from at least two groups of people at one point of time and compared the extent to which the groups differ on the dependent variables (Des, 2002).

Survey was used in this study to achieve two goals. The first goal is to investigate the opinion of the experts regarding the heritage and cultural properties at Melaka and George Town, the second objective is to serve as a validation procedure to confirm the proposition of the study.

According to Lewis (2003), using questionnaire can reduce bias as the Researcher's own opinions cannot affect the answer of respondents. According to Walonick (2004), questionnaires do not have significant effect on the general perception of respondents that might influence their responses, aside from the fact that they are familiar to most of the people. It is a common method of data collection anywhere.

Moreover, Walonick (2004) supported that those questionnaires are less intrusive on respondents compared to telephone or face-to-face survey. In this study, questionnaires were distributed during a seminar and collected at the end of session or posted by self-addressed method. Another advantage of questionnaire over other data collection methods is that it is less embarrassed to answer questionnaires compared to face-to-face or telephone survey.

Lewin (2005) stated that using questionnaire will provide two kinds of gathered data: structured and unstructured. Closed-ended questionnaire will achieve structured data while open-ended questionnaire will achieve unstructured data. This study employed a open-ended questionnaire.

Questionnaires should be designed based on a clear aim and objective (Lewin, 2005). In this study, each strategy defined the objective clearly the objective and followed by questions to achieve its aim. The questionnaires were structured according to the theme identified.

Regarding the use of questionnaire, Walonick (2004, p.6) explained that "questionnaire is familiar to most people, where nearly everyone has had some experience completing questionnaire and they generally do not make people apprehensive". The survey

questionnaires were administered to the three selected seminars held in Malacca and George Town, which can be referred to Table 4.1.

The target population for the questionnaire survey include mostly people with interest in the conservation of heritage including stakeholders, professionals, academicians, local authorities and conservationists from Malaysia. There were 58 respondents involved in the surveys.

4.2.3 Case Study

The case study is considered as the first level of primary data collection in this research. In order to assess the current practices of conservation management for heritage cities in Malaysia, this case study involved cases of the newly listed cities of Malacca and George Town WH sites, and the case studies are presented in Chapter Two. Francis (2000) stressed that “case study analysis is a particularly useful research method in a profession such as a landscape architecture, architecture and urban planning that are related to the real world context. This understanding is supported by Zeile (1994, p.65) who mentioned that:

Investigations used case studies to describe and diagnose single and internally complex objects; individuals, buildings episodes, institution, process and societies. In case study, investigators delineate boundaries of an object and then observe such things as the elements it comprises, relations among elements, the development of the object and contextual influences (Ziesel, 1984: p.65).

Yin (2003, p.13) emphasized the importance of the case study approach by stating that “case studies investigate real life events in their natural setting”. Patton (1987) further explained that going into the field means having direct and personal contact with participants in their own environments.

According to Yin (2002), there are six sources of data and evidence for case study research- documentation, which include archival records, direct observation, participant observation, physical artifacts, as well as interview. However, Yin (2002) explained that no single source has an absolute advantage over the others and each case study need not necessarily apply all methods. The term “case study” is strongly associated with the qualitative nature of research though it may be used in a variety of way (Lewis, 2003).

In the context of this research, the case study approach was carried out. The rationale to adopt the case study as an approach is to obtain an in-depth understanding of the conservation management on the heritage city focusing on monitoring the state of conservation of the cultural properties at both selected case studies; Malacca and George Town, WH sites. By focusing the nature of management and monitoring system being implemented at the local level and by the federal government, it would contribute to fair justification analysis of the research objectives. Furthermore, this research requires in-depth and specific strategies in studying monitoring strategies and indicators employed to assess the condition and benchmarking the condition of the cultural properties at WH sites in Malaysia.

In this approach, the empirical data focuses on two specific case studies, which are Malacca and George Town. The case studies allow for developing monitoring strategies and identifying appropriate indicators to sustain the heritage values of Malacca and George Town. The justification for choosing the sites is discussed in Chapter 1, while Chapter 2 explains these case studies in more detail.

The surveys, visiting and re-visiting of the case studies were conducted from November 2007 until February 2011. The process involved in the data collection for each case study is as follows:

- a) A review of initial information about Malacca and George Town World Heritage sites, which includes cases citation and report, official publications of the relevant authorities, newspaper clipping, related articles in journal and mass-media, and others.
- b) A review of available documents from World Heritage Centre, ICOMOS and ICROM files or other materials with regard to the World Heritage Sites, requirement for periodical reporting, monitoring and indicator, as well as management of WH sites of cultural properties specific to historical cities.
- c) Face-to-face interview session with local authorities and conservation managers.
- d) Questionnaire survey at local level.

4.3 Methodology of Data Collection

In any research, data can be collected in various ways, in deferent settings and from different sources. As observed by Sekaran (2000), data collection methods include face-to-face interview, telephone interview, computer-assisted interviews and questionnaire that are either personally administrated, sent through mail or electronically administrated. According to Ayob (2005), Rani (2004) and Sekaran (2000), data sources can be primary or secondary. For the primary data, the researcher must specifically set up respondents of research-individuals, groups and a panel of respondents whose opinion may be sought on specific issues. Interviews, questionnaires and observing people and phenomena are the three main data collection methods in survey research. Surveys are useful and powerful but they can do more harm than good if not correctly targeted (Sekaran, 2000). Data can also be obtained from the secondary

sources, for example, company records or archives, government publications and files, industry analysis offered by official publications and others.

As mentioned in Chapter One, the methods of data collection in this research are questionnaire-based survey, case study and Delphi method. Two sets of structured questionnaires were designed. The first questionnaire selected focus group that have ever involved or inclined in the conservation field in Malaysia. Both questionnaires were developed based on the literature survey and workshops and were further enhanced by employing the outcomes, suggestions and comments from the guided survey that involved professionals (locally) for the second set of questionnaire for expert validation.

Chaudhary (1991:28) has been quoted saying:

A research design is the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economic in procedure. Chaudhary (1991)

Furthermore, Kumar (1999) stated that a research design is a procedural plan adopted by researchers to answer questions objectively, accurately, economically and validly. Bryman and Bell (2003) stressed that research design should provide the overall structure and orientation of an investigation, as well as the framework within which data can be controlled and analysed.

4.4 Research Process

In seeking an appropriate monitoring system for cultural property in both historical cities (Historical City of George Town and Historical City of Malacca) in Malaysia, this research adopted a rational methodology based on exploratory research, which is problem generating rather than testing a hypothesis. As adopted by Yahaya (2004), Osman (2007) and suggested by Halimatun (1994), this approach could be used because

no explicit hypothesis testing is being done and the work is qualitative in nature. The exploratory method as claimed by Stebbins (2001) will give flexibility in searching for data and open mindedness about where to find them.

A simple but comprehensive research development strategy was formulated to ensure that all relevant areas are explored in a systematic manner and to assist in the analysis of the data. The research is performed following a 3-stage approach as shown in Figure 4.1. This figure illustrates the subject of examination and analysis in each stage, and the flow and links within each stage and between the stages. The stages in the research are as follow:

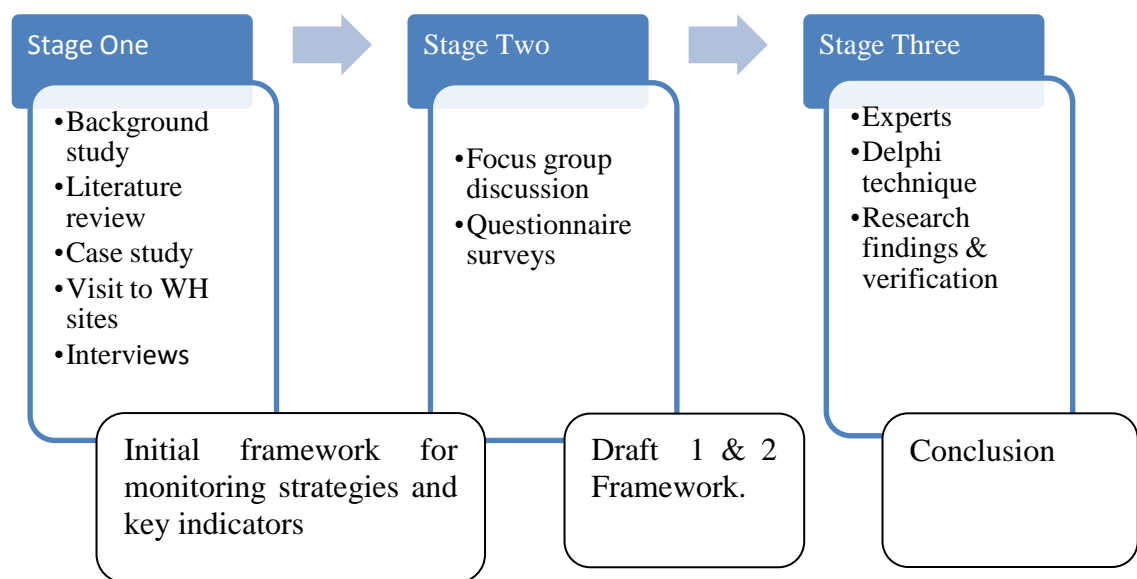


Figure 4.1 : Research Stages

- Stage 1: Background study and initial framework;
- Stage 2: Focus group discussion, questionnaire survey, and draft 1 and 2 framework; and
- Stage 3: Verification from experts, final framework of proposed monitoring strategies and key indicators for the WH sites.

4.4.1 Stage One: Background Study and Initial Framework

In this first stage, the main task is to continue with further literature review and document analysis concerning with the factor affecting the sites that contribute to conservation management and key indicators in monitoring the significance of the cultural properties, the existence of any conservation management system and monitoring and conceptual ideas of monitoring indicator. This conceptual study aims to identify the key issues, which are key indicator in monitoring the significance of the site and searching for an appropriate key indicators for monitoring the cultural properties on WH sites, and also the needs to develop one.

4.4.2 Literature Review

Literature review is to acquaint from the authors with the full range of materials available that are relevant to the field, and to avoid the risk of “reinventing the wheel” as mentioned by Calvert (1991). As suggested by Stebbins (2001), literature review is wholly justified as the background for empirical or theoretical examinations of particular areas of research and also to determine the nature and scope of the previous scientific activity so that the proposed work will truly add values to content of the study.

The review of available evidence, which includes books, articles in journals, seminar papers, newspaper and internet are important sources of information. Nordin (1995) stated that the information collected forms the basis of understanding the issues and problems of the discipline, provides examples of the past practices, the techniques used and its future perspective. Therefore, this method is in line with the approach which requires identification of the existing systems and concepts, issues, problems, future trends and perspectives, which justifies and contribute to the development of the proposal for the future needs.

There are currently no sufficient data on monitoring the indicators for state of conservation of the properties by local authorities in Malaysia. Therefore, this study is new and exploratory. As such, an interview method is seemed to be the preferable approach to generate the essential data for analysis.

Critical analysis of documentary sources was done to determine the key issues and problems in monitoring the significance of the shop houses in historic cities in Malaysia. Documentary sources examined during the study include Periodic Reports (UNESCO, 2003 to 2012), technical papers, conferences and seminar papers, speeches, leaflets and booklets. Furthermore, guidelines and policy papers that were linked with the research subject and produced by the local authority - Majlis Bandaraya Melaka Bersejarah (MBMB) and Majlis Perbandaran Pulau Pinang (MPPP) or Penang Municipal Council (PCC) and other related government agencies - were also analysed.

Initially, it was envisaged that information would be available from books and relevant journal and documents. Generally, such source that provide information include:

1. World Heritage Sites Listing under UNESCO;
2. Outstanding Universal Values of Cultural Properties;
3. Periodic Reporting of WH Sites for UNESCO; and
4. Monitoring system and indicators of other WH sites.

A large number of published and unpublished sources were also reviewed such as books, thesis, journals and websites. However, it was difficult to collect the required information for this research since the documents are often scattered. Often the information was not sufficient and has to be supplemented by materials and data gathered from other sources. Besides conferences, courses and seminars, the Researcher

carried out visits to other world heritage sites (Macao and Hoi An) for experiencing, exploring and understanding “managing change” practices at the local level.

4.4.3 In-depth, Semi-structured and Open-ended Interviews

Interview was used to collect the data in this study. As Patton (1987, p.45) said, “we interview people to find out from them those things we cannot directly observed”. Patton (1987: 348) also stated that the purpose of qualitative interview is to capture how those being interviewed view their world, to learn their terminology and judgments, and to capture the complexities of their individual perceptions and experience.

The purpose of the interview is to allow the Researcher to enter into another person’s “perspective”. Merriam (1998) explained that we can use three kinds of interview in a study. The first one is a highly structured/standardized interview, where the data collected in oral form of the written survey. The second type is a semi-structured interview that is composed of structured and flexible questions. The third type of interview is unstructured/informal interview, which is used when the researcher does not have enough information regarding the topic. Informal interview is used as the primary step of a research (Merriam, 1998).

After perusing the characteristics of different kind of interview, semi-structured interview was selected, which is the intermediate approach between structured and non-structured interview. Semi-structured interview was chosen because the Researcher had some idea of knowledge regarding the topic and need the flexibility and open-ended feature of a non-structured interview.

The purpose of the interview was, firstly, to identify policies and action of the local authorities in managing inscribed WH sites and secondly, how the management perceived their cultural properties. Thirdly, to know whether the WH sites are being monitored through identified indicators to benchmarking the state of conservation of the values of their cultural properties. The selection of the interviewees was based on their occupation, as well as their concern towards the topic under study. The time spent in each interview varied from one interview to another, however the average time spent was about one hour followed by site visit for another one hour. Therefore, the Researcher interviewed six officials who are administrators of heritage departments and the experts who are deeply involved in the field of conservation management at World Heritage sites (Refer to Appendix D). They were officials from the local authority of George Town and Malacca, PERZIM, the Department of Urban Planning, University of Hong Kong, the Ministry of Sport and Culture, Vietnam, Center for Monument and Preservation (CMP) Hoi An, Vietnam and the Department of Culture, Macao (ICT).

The interviews were carried out twice; first in December 2007 (before the inscription) with two local authorities (MBMB and MPPP). The second interview was conducted in early 2009, soon after the sites were successfully inscribed under UNESCO list as one of the WH sites in July 2008. The first interview was carried out at the early stage of the study, which is to assess the management objectives and to understand the policies adopted for conservation of heritage sites in both cities, Malacca and George town, as they were nominated for the World Heritage List in 2007 (e.g. not yet Listed). The second round of interview was conducted with interviewees with the officials in-charge of the “managing change” of the heritage from the Conservation Department at state level (MBMB and MPPP), PERZIM and other independent consultants in conservation

to further assess the status for conservation programme and monitoring the status of WH List.

These interviews were helpful in providing primary information about the issues and problems in conservation management practice and monitoring a significant World Heritage Site. The information gathered from the interview reflects the present knowledge and the technical know-how in the discipline. It also provides the Author with good background information, and in-depth understanding of the nature and level of conservation management practices in the Malaysian context. The summary of the interview were discussed in Chapter 1.2, Chapter 2 and Chapter 3.

The semi-structured interview was carried out with open-ended questions. The questions asked can be divided into two parts. The first part consists of questions about personal particulars (profession), and the second part of the question regarding their knowledge, experience in conservation and monitoring the cultural properties. These face-to-face interviews were conducted with the officials from MBMB and MPPP, as well as the conservation manager at WH Sites in Hoi An and Macao. Each interview last for approximately 45 minutes and was digitally recorded and transcribed verbatim. The advantage of the semi-structured interview is that the respondents expressed themselves in their own way for the interview to contain the discussion and to keep the information from being sought in the forefront of the discussion.

A letter was sent to the identified participants along with the questionnaire. This was followed up with the personal telephone calls to arrange a mutually convenient time for an interview if they were willing to be visited. The questionnaire was posted earlier prior to the interview to allow the officials to prepare some of the documents requested

for the purpose of the survey. In trying to ensure the relevancy, the researcher tried to ensure the clarity about the exact kind of data needed in the study.

The interviews were undertaken in person. Each interview last for approximately 45 minutes and was digitally recorded and transcribed verbatim. Semi-structured interviews were conducted with officers involved with the management of WH sites. The advantage of a semi-structured interview is that the respondents expressed themselves in their own way, the interview to contain the discussion and to keep the information from being sought in the forefront of the discussion (refer to Appendix A). The data from the interviews were analysed using content analysis, performed on individual cases and composed as a summary of the initial finding.

This interview assessed the process of “managing change’ by the local authorities by addressing these key research questions:

1. How effective are the present conservation policies and plans in safeguarding the significance of the sites?
2. What are the strategies and mechanism in monitoring the significance of the heritage sites?
3. What are the problems of being listed as the World Heritage Site by UNESCO?
Sub-questions;
 - a. Is there a formal monitoring system established for the sites?
 - b. What are the monitoring strategies?
 - c. What and how to assess the state of conservation of the properties?
 - d. Is there any benchmark or indicators established for the sites?

- e. How does the administrative identifies the position for organizing the regular monitoring the properties?
- f. How do you overcome the problem arises in monitoring the significance of the properties?

The visit and observation of the physical traces and interviews with the official also revealed that the most threatening factors to WH cities are not only faced by Malacca and George Town, but also at many other WH sites as the cities require development for economic gain.

4.4.4 Site Visits for Documenting Physical Traces

Site visit and observation were also part of the data collection process. Observation evidence is often useful in providing additional information of the real practice of the discipline (Yin, 1989) and behavioral study that occurs in some particular setting or institution (Bailey, 1994). Merriam (1998) further added that observation is the best technique to use when some activity, event, or situation can be observed firsthand, when a fresh perspective is desired or when the participants are not able or willing to discuss the topic under study. She claimed that observation can also provide knowledge of the context, specific incidents and behaviour. It could also give information of which the Researcher was not previously aware.

Site visits are made to George Town and Malacca as the case study and also to other World Heritage Sites in Asian countries, with the Historical Centre of Macao and Historical City of Hoi An as the comparison study. This was carried out to observe the actual monitoring practices on sites, which served as the evidence. Observations were recorded using photographs. The photographs taken acted as the proof to help visualize

the present practices. There were significant problems arose when carrying out these site visit in Historical City of George Town and Historical City of Malacca that are provided in Chapter 2.

The findings from the initial study from visit, interviews, observation and literature reviews have identified the key issues and perspectives of the discipline and help to confirm the direction of the research. It also helps in strategizing the development of the research determining the appropriate research methods and techniques to be employed while searching for the appropriate key indicators for monitoring the heritage values of WH sites in Malaysia.

Following this study, where no standard monitoring exists for managing and monitoring WH sites, further literature review and document analysis explore the possibility of adopting or adapting an international practice in listed sites for monitoring the significance of the cultural properties in Malaysia. The analysis identifies the relationship between similarity of historical and geographical background that contributes to the OUV of the site. A comparison was made between the management conservation of Hoi An and Macao.

The study trips to the selected WH sites are essential for this study, as this form of primary source enables the Researcher to get related information about “managing change” of historical cities in Asia. In this study, the Researcher chose two WH cities in Malaysia as they were recently listed on the World Heritage List of UNESCO. The comparative cases were made to other WH sites. However, the field trips were carried out only at two WH sites in Asia; Historical Centre of Macao and Historical City of Hoi An. (Appendix B)

The field works to Malaysian WH cities were made meaningful by the presence of the officers and experts in this field. During the visits, besides collecting data from the books available and writing notes, the Researcher also took photographs as they were useful for the documentation purposes as discussed in Chapter 1 and 2.

This stage is also made up of results and analyses interviews and the case study in the Malaysian context. It analyses the current status of the conservation management practice in Malaysia and the potential for introducing the proposed monitoring mechanism into the existing systems.

The interviews identify present practice in WH sites in Malaysia, the issues and problems, and the need for key indicators for monitoring the significance of the WH sites in the country. The respondents' knowledge and understanding about the conservation management system and monitoring were also evaluated. Their feedback, comments and suggestions on the proposed monitoring system and its prospect for adoption in the Malaysian context were critically analyzed in the focus group discussion.

Further case study on the monitoring practices in Historical City of Malacca and Historical City of George Town was performed. This establishes an insightful representation of the WH sites monitoring practices there. Literature review, document resources analysis, site visits and observations were performed during case study. This case study is useful in determining the problems and potentials of introducing and implementing the proposed monitoring system in Malaysia's existing conservation provision. The summary from these interviews were discussed in Chapter 1 about the issues and challenges at WH sites.

Thus, analysis of the interviews and the case study identifies the real issues and problems of monitoring the cultural properties in Malaysia and examines the country's crucial need for appropriate system to manage and identify key indicators in monitoring its cultural properties. It forms an initial framework that underlies the potential of developing and introducing the monitoring strategies in the historical sites in Malaysia.

4.4.5. Stage Two: Development of Draft Framework for Monitoring Strategies and Key Indicators

The second stage is generally a stage to develop the draft framework for the monitoring strategies and key indicators. The process of developing and identifying the "proposition" was conducted through workshops attended by the focus group that consists of personnel from various background; administrators (working with government agencies), professionals (architect, engineer, planner), stakeholders, NGOs and academicians/researchers in the conservation field. Workshop #1 was organized by MBMB in 2009 and Workshop #2 was jointly hosted by Think City Sdn. Bhd. and GTWH Inc. in 2011 in George Town.

4.4.4 Focus Group

Various definitions of focus groups appear in the social science literature, but most of them shared common elements, e.g. they are small groups of people who possess certain characteristic and who meet to provide data of a qualitative nature in a focused discussion (Krueger & Casey, 2000). Focus groups explicitly use group interaction or synergy as part of the method where people ask question, exchange anecdotes and comments on each others' experiences and points of view (Kitzinger, 1994) to produce insights data that would be less accessible without the interaction found in the group (Kitzinger, 1995). A moderator, who leads the group through a number of topic and activities, guides the discussion (Tashakkori & Teddlie, 2003).

Focus group approaches are reported to be flexible; “There is nothing sacred or even necessarily correct about the way that focus groups are conducted” (Morgan, 1998, p.255), and dynamic; “Focus group research is certainly not static and the approach and methodology are constantly changing” (Krueger & Casey, 2000, p. ix). Morgan (1997) suggested that the simplest test of whether focus groups are appropriate for research project is to ask how actively and easily the participants would discuss the topic of interest.

The focus group method has only recently been applied into social research (Bryman, 2008). It is particularly suited for exploratory and formative research, generating and formulating hypotheses and exploring beliefs, experiences, opinions, values and concerns of research participants with their own perception system (Kairuz, et al., 2007; Kitzinger & Barbour, 1999; Krueger & Casey, 2000). According to Tashallori and Teddie (2003, p.309), focus group can be used to “inform the development of questionnaire and interviews” or “later in a sequential methods research study to help researchers better understand and interpret information and findings resulting from the earlier use of other data collection methods” (Tashakki & Teddlie, 2003 :309). However, Greenbaum (1998:69) reminded that “focus group methodology is not designed to provide projectable results to a larger universe because the participants are not necessarily selected at random and because the sample size of the groups is small.”

Most focus group studies used purposive sampling frame, where participants may be “drawn together specially for the research” (Wilkinson, 1995, p.222), or selected to reflect a range of total study population (Kitzinger, 1995). A purposive sample “target individuals who are particularly knowledgeable about the issues under investigation” (Chamliss & Schutt, 2009 : 1230). Therefore, fifty six (56) persons from various

background of conservation management were purposefully selected as participants of a focus group discussion.

According to Kitziinger (1995), focus group studies can consist of anything between half a dozen to over fifty groups, depending on the aims of the project and the resources available. These local experts consist of consultants, owners, administrators, academicians and researchers currently involved in the conservation projects in Malaysia, specifically in Malacca and George Town. However, three focus groups were used mainly based on the three strategies in cultural properties identified in the research in general, while three focus groups were used mainly based on three criteria identified in the outstanding universal value (OUV) in this research. Therefore, the average number of participants in a group was eight with one participant was assigned as the group moderator (lecturer-cum-postgraduate, student at UM). Each group was asked to seek through consensus about the essential strategy identified in the framework by retaining, adding, omitting or modifying the strategy suggested by the Researcher. This decision was compiled and analysed to inform on how the initial proposal by the Researcher should be refined. Since each group's findings were based on consensus and distinctive, no statistical software programme was used in the analytical process. As a result, 10 strategies and 36 indicators were identified and Stage 2 questionnaire survey was subsequently developed as the product of this stage.

Two workshops were conducted during the period of the study as shown in Table 4.1 below. The table also displays the outcome of the workshop achieved for seeking an appropriate cultural values for monitoring strategies.

Table 4.1 : Schedule of workshops and outcome of the focus group

Item	Workshop	Date	Participants	Consolidate	Outcome from Focus Group	
					Strategy (s)	Indicator (s)
1	Workshop on Monitoring Strategies World Heritage Sites of Malacca, MBMB, Malacca	19 th August 2009	27	❖ Urban form ❖ Heritage building ❖ Shophouses	10	36
2	Workshop on Monitoring Strategies to Evaluate and Assess Monitoring Indicators and Fire Risk Preparedness in George Town. Jointly Hosted by Think City Sdn Bhd and GTWH Inc.	12 th February 2011	29	❖ Urban form ❖ Heritage building	11	58
	Total	2	56		11	58

The focus groups session began with a welcoming address and presentation of the research background in brief. The objectives and the procedures of the session were also mentioned. The session was conducted in the setting of round table arrangement. The initial draft framework was read line by line and clarifications were made if necessary. There was two-way discussions between participants and Researchers.

These three values are: 1) architecture and urban form; and 2) building heritage (intangible culture); and 3) shophouses and townhouses.

The strategy behind these group was to ensure that each monitoring and indicators specified in Stage 2 of the framework could be fitted into one of the group. Additionally, these values were believed to ease the process of grouping the participants

that are primarily based on their expert field. Two discussion groups were conducted in the workshop for the study. The first discussion group was arranged with MBMB at Malacca and the second discussion group was organized GTWH Inc. in George Town.

The data from the workshop was compiled and analysed to inform how the proposal should be refined. Below are the steps taken to refine the development of the questionnaire survey as a pilot study:

1. Reword or refine the strategy as suggested by the groups;
2. Omit strategy which were not necessary;
3. Add strategy suggested by the focus groups which are not covered by the initial proposal; and
4. Retain other strategy which were agreed without any amendments.

With regards to indicators for strategies proposed, this focus groups were involved in commenting and proposing new strategies and indicators.

i. Focus Group #1

Twenty seven participants were involved in the workshop conducted with clear objective to identify relevant strategies in monitoring the state of conservation of cultural properties at WH cities in Malaysia, which was held in Malacca at MBMB on 19th August 2009. The focus group consists of personnel from various background; administrators (working with government agencies), professionals (architect, engineer, planner), stakeholders, NGOs and academicians/researchers in the conservation field. Initially, there were three criteria recognized under UNESCO in 2008 for listing; the architecture and urban form, multi-cultural tangible and intangible heritage and architecture of shophouses and townhouses (UNESCO, 2008). The workshop identified the relevant themes in the monitoring strategies for both WH cities in Malaysia. These themes were ; 1) urban form; and urban fabric; and 2) heritage buildings (religious structures and shophouses/ townhouses).

ii. Focus Group #2

The aim of the workshop #2 held on 12th February 2011 at George Town was to finalize the development of questionnaires for both WH cities of Malacca and George Town. 29 participants involved were from various backgrounds, which include administrators (architects, engineers, planners, technical personnel), professionals, stakeholders, NGOs and academicians/researchers in the conservation field. The participants were guided to answer the survey questionnaires and comments were identified to improve the survey on the subject matter.

A total of fifty six (56) persons participated in the focus group discussion Round I (27) and Round II (29). They were identified and invited by the local authority to the workshops. Therefore, the average of number of participants in a group was nine. Each group was facilitated by a moderator (academician cum researcher with architecture and urban design background). This number agreed to Greenbau (1998), who mentioned that it is most common to use “10 people for a full group and 5 of 6 for mini group”. The use of small groups was preferred in this research because it was believed that more in-depth information from each individual can be gained. Detailed explanations on the overall group discussion process are provided in Chapter 5.

With regards to the indicators for the proposed strategies, these focus groups were involved in commenting and proposing new strategies and indicators. Table 4.1 shows the results of the discussions.

There are eleven monitoring strategies identified through several rounds of workshops and survey questionnaires done at both WH cities. Six (6) monitoring strategies were

identified for monitoring the authenticity and integrity for urban form and urban fabric and five (5) monitoring strategies for heritage building were proposed for WH sites.

4.4.7 Questionnaire Survey

This small quantitative technique of research by questionnaire-based survey was considered the second level of primary data collection for the research. The questionnaires were distributed to participants (mostly people with interest in conservation of heritage) at three conferences held between 2010 and 2011. Table 4.4 shows the schedule of the conducted s

Table 4.2: Schedule of questionnaire survey distributed

Item	Date	Location	Respondents	Category
Survey #1	17 th January 2010	George Town, Penang Seminar on Built Heritage, GTWH Inc. Penang	18/30 (60%)	Con. Adm.:10 Prof.: 2 Stakeholders: 2 Others: 4
Survey #2	8 th July 2010	Malacca Seminar on World Heritage Site (Malacca WH City): Sustainability of WH sites, Renaissance Malacca Hotel	15/40 (37.5%)	Con. Adm.:3 Prof.: 3 Stakeholders: 4 Others: 5
Survey #3	12 th February 2011	George Town, Penang Workshop on Monitoring Strategies to Evaluate and Assess Monitoring Indicators and Fire Risk Preparedness in George Town. Jointly Hosted by Think City Sdn Bhd and GTWH Inc.	25/29 (86.2%)	Con. Adm.:12 Prof.: 5 Stakeholders: 5 Others: 5
Total				58/99 (58.5%)

Survey questionnaires #1 and #3 were conducted at WH office in George Town in 2010 and 2011 respectively, while questionnaires were distributed at Survey #2 at Malacca in 2010.

Ten (10) monitoring strategies and thirty six (36) indicators were designed in the survey questionnaires. The survey was looking for the simple answer: Agree/Not Agree or Not Sure. At the end of the survey, the respondents were allowed to put any comments for

improvements of the survey. Table 4.2 displays the percentage of respondents for survey questionnaires locally. The particular of the respondents were checked to ensure there was double participations in this exercises.

i. Survey # 1

30 sets of questionnaire were distributed in Seminar on Built Heritage organized by GTWH Inc. held on 17th January 2010 in George Town, Penang. 16 sets were returned after the seminar and 2 sets were received by postage. The total number of respondents for Round #1 were 18 out of 30, which was 60%. Out of 18 respondents; 40% respondents were officials or professionals involved in the conservation activities. The others were either NGOs or stakeholders.

ii. Survey #2

The survey was conducted at the Seminar of World Heritage Sites (Malacca Heritage City) held in Malacca on 8th July 2010. 40 sets of questionnaires were given to the participants. The result of the survey received was considerably low. 15 sets were returned (37.5%). However, the respondents were not only professionals and stakeholders but also academicians and students in architecture study.

iii. Survey #3

The survey was carried out in the workshop where small groups were identified (selected people in the conservation field) by the Researcher with joint arrangement with GWH Incorporation and Think City on 12th February 2011 in Penang. The percentage of the respondents was the highest among the surveys as tabulated in Table 4.4, which was 25 out of 29 (86.2%) respondents. The questionnaires were read to the participants for better understanding and to clarify the objective of the Researcher for each item. This survey was considered as a final survey since

the participants involved not only representing WH city of George Town but also people that experienced in managing WH city of Malacca.

The total survey questionnaires for respondents at three (3) locations were fifty eight (58). This number was significant to the Researcher to develop a new survey questionnaire for validation by the experts.

The method of questionnaire survey for focus group provides the consensus of the exploratory to be identified for the subject matters. This allows to proceed to the next step of developing questionnaire survey for Delphi technique. The questionnaire was designed to get consensus from local people on how they perceived in sustaining the status of WH sites through monitoring the heritage values of the cultural properties (refer to Appendix B: Expert Survey Round 1).

It is a quite common experience that designing the questionnaire is easier than its execution. A major problem when carrying out a survey is the respondents' lack of participation, especially in our society. There are many ways of approaching the subject, for example, by postage, self-administrated questionnaire or face-to face interview, as deemed appropriate depending on the prevailing circumstance.

4.4.8 Analysis on Survey

The questionnaire is a relatively quick and effective way of gathering information. The analysis of the data are discussed in Chapter 5. It is a quite common experience that designing the questionnaire is easier than its execution. A major problem when carrying out a survey is the respondents' lack of participation, especially in our society (refer to Table 5.1, Chapter 5).

Experience with the local respondents that cannot attend the focus group discussion enable the Researcher to consider the appropriateness and relevancy of this research design. The questionnaire survey helped to increase the confidence to proceed with the validation and at the same time enhances the credibility and reliability of this study. As a result, the Researcher modified Draft 2 of the framework, which is to be extended to the experts for the verifications in September 2011 using the Delphi technique.

4.4.9 Stage 3: Verification of Framework for Proposed Monitoring Strategies and Key Indicators for the WH sites in Malaysia

The purpose of Stage Three is to finalize the draft framework based on the outcomes from the local participations of Stage Two. The process of verification is conducted through questionnaire by adopting Delphi technique and involved the identified local and international experts in the field of conservation management. The First Round of questions commenced from the second week of September 2011 and the analysis of both rounds (Round I and Round II of Delphi) was finally completed at the end February 2012.

4.5 The Delphi Method

According to Dalkey et al. (1972), the first significant use of Delphi method took place in 1953 and it was initially applied to establish the consensus among a group of experts concerning urgent defense problems, in terms of forecasting defense technology needs and estimating future dates for the predicted occurrence of social and technological advances. Sackman (1975:11) noted:

Delphi is an attempt to elicit expert's opinion in a systematic manner for useful result. It usually involves iterative questionnaire administered to individual experts in the manner of protecting the anonymity of their responses. Feedback of the result accompanies each iteration of

questionnaires, which continues until convergence of opinion, or in a point of determining returns, is reached. The end product is a consensus of experts, including their commentary on each of the questionnaire items, usually organized as a written report by the Delphi investigation. Sackman (1975:11)

The Delphi method has its own unique characteristic and distinguishes it from other group interaction techniques. The method has three basic features, which are: a) anonymity; b) iteration with controlled feedback; and c) statistic group response (Dalkey et al.,1972). To maximize the effectiveness and increase the likelihood of obtaining true and honest opinions from the experts using the Delphi technique, three principles should be considered: i) the expert must be selected wisely; ii) the proper conditions under which their performance must be evaluated wisely; and iii) if several of the experts hold a similar opinion or judgment, considerable caution must be used in deriving a solitary combined position for the entire Delphi panel (Canterino, 1990).

The format for Delphi investigation is usually the same. Bruno (1976: p.245-6) described the procedures as follows;

First, a group of experts are selected and each member completes a special designed and structured questionnaire. Second, the responses of each individual on the questionnaire are reported (usually inter –quartile range are given), and the panels are asked to re-evaluate their response based upon information provided by the analysis of responses. Third, the entire cycle is repeated: if some experts are not in the middle quartile range, they can be asked to justify their estimates or to provide other member of the committee with information they poses that justified their extreme (out of range of the middle two quartiles) response. Bruno (1976: p.245-6)

Respondents might also be asked to present reasons for revision of their original estimates. In addition, they might be asked to critique reasons presented by their members of the group and to specify which arguments

were convicting and why. These arguments and counter-arguments would then be summarized in writing and included in the decision framework for each individual in the next round.

Thus, the Delphi method can serve as an excellent tool for projecting and forecasting future trends. In the context of this research, the Delphi method is used to confirm the practicality of the pre-tested monitoring strategies and key indicators framework being established from the qualitative based method and case study approach in other WH sites. Furthermore, Delphi results can serve to guide the design of monitoring strategies and key indicators framework for the acquisition of World Heritage Sites of Malacca and George Town, as well as predicted the best practice to other heritage towns in Malaysia. In this context, Delbecq, Van de Ven and Gusafan (1975:84) mentioned that:

When properly executed, employing Delphi method can produce summary results that are more current and relevant than investigations using other methods of research. Delphi can provide a more updated exchange of scientific or technique information than a literature search by drawing upon the current knowledge of experts (Delbecq, Van de Ven and Gusafan, 1975:84).

The selection of experts for this research is based on the following criteria:

- i) The experts must possess relatively vast knowledge and experiences in the related field of the studies or are active in conservation management research, e.g. in cultural property of WH Sites, heritage conservation, legal aspects in regard to heritage, researchers in conservation of heritage researches, professionals in conservation of heritage (architects, planners and conservationists), related NGOs, as well as those who are officially appointed to represent stakeholders. Thus, twenty nine (29) experts are identified internationally and locally to participate in

the research that are chosen from UNESCO, ICOMOS, ICCROM and local authorities (MBMB and MPPP).

- ii) The experts are required to involve in 2 or 3 rounds of structured survey (via electronic medium) as their pre-agreeable and commitment to this requirement is prerequisite and very important.

With regards to the reliability of the Delphi method, Dalkey et al. (1972) took into account group responses and the representative of the experts. He also found that group responses are more reliable than individual opinions. However, according to Canterino (1990) with respect to the representatives of experts on the panel, not all experts can always agree on certain issues. There is always a possibility of two groups giving different forecasts, judgments, decisions or opinions. If this were to occur often, then Delphi method could be represented as being somewhat unreliable.

The key to successful Delphi study lies in the selection of experts or panels (Gordon, 1994). According to Huss (1990), the two critical steps in a Delphi study are the design of the questionnaire and the selection of experts. Most studies used panels of 15 to 35 people (Gordon, 1994; Brooks, 1979; Dalkey et al., 1972). As the number of panel is usually small, Delphi method is not intended to produce statically significant results. In other words, the results provided by any panel do not predict the response of a large population.

The method comprehensively analyses and identifies the potential and the appropriate monitoring strategies and indicators for cultural properties currently in the WH sites in Malaysia.

The target respondents are the officials at local authorities and manager at WH heritage sites for the first questionnaire, while second questionnaire is intended to the focus group that participated at the identified seminar for conservation of heritage held locally (Malacca and George Town). The third questionnaire is designed for the experts from international as well as national level - from ICCROM, ICOMOS and UNESCO. The schedule for the verification and validation is in Table 4.3.

Table 4.3: Verification and validation schedule

Date \ Steps	2008	2009	2010	2011-2012
Phase 1 Qualitative	Q1: (N=5) conservation manager/experts, 100% Valid returned			
Phase 2 Local survey quantitative			Q2 : (N=99) , 58 Valid Returned	
Phase 3 Experts survey				Q3: (N=29). 11 at N=11 Valid returned

The prerequisite conditions in the selection of the respondents for the respective officials involved in managing the WH sites, they must experience in managing conservation change at the recognized WH site locally or internationally. The selections are discussed in Chapter 7. The rationale of this qualitative approach is as suggested by Sarantakos (1998), which is to allow inductive generalizations of the research findings to be made. Furthermore, the purpose of small qualitative approach is to explore perception or opinions of the people on certain issues under study, and the use of questionnaire is the best instrument to achieve this objective (Bernard, 2000; May, 1997; Ackroyd & Hughes, 1983).

The final questionnaire from of four parts are: (1) respondents' background; (2) monitoring strategies for urban form and urban fabric and heritage buildings; (3)

indicators for urban form and urban fabric; and (4) indicators for heritage buildings, with the second and third part consisted of the core survey items. These items used three types of scale: Agree, Not Agree and Not sure. The reason for adopting the three-point scale gives general level of perception towards issues, whereas five-point scale explores medium level of perception towards an issue of the study, and thus not giving burden to respondents to answer the questionnaire (Verma & Mallick, 1999; Barbie, 1998; Sarantokos, 1993; Kidder & Judd, 1999).

The final questionnaire form consisted of four parts: (1) background; (2) monitoring strategies for urban form and urban fabric and heritage buildings; (3) indicators for urban form and urban fabric; and (4) indicators for heritage buildings, with the third and fourth part considered the core survey items. These items were performance indicators grouped under 11 strategies and 58 indicators. The analysis is presented in Chapter 6.

4.6 Summary

This research applies qualitative methodology, Delphi method and case study to achieve its research objectives as describe in Figure 4.1. and Research Process as shown in Table 4.4 . The research model was developed based on the literature survey and discussion at local and international levels about sustaining the authenticity and integrity of cultural properties at Malacca and George Town.

This chapter has presented the research process, method of data collection and results of data analysis. Strategy framework was debated, agreed upon and even further added by experts if found missing. Additionally, in some strategies, appropriate indicators were proposed. Chapter 5 will discuss on the data analysis for Stage Two (local outcome) and followed by validation of the survey by the experts in Chapter 6.

**To insert
Figure 4.2**