

CHAPTER III. RESEARCH METHDOLOGY

This chapter gives an overview of the plan of the study in terms of the research method, research framework, subjects, research procedures, and instrument and data analysis.

The main purpose of the study was to explore the critical factors that motivating learners' will to participate in Web-based training program. To fulfill this inquiry, this research adopted the in-depth interview technique.

Research Framework

According to the purposes of this research, generalizing a framework of research, the framework is presented in Figure 3.1.

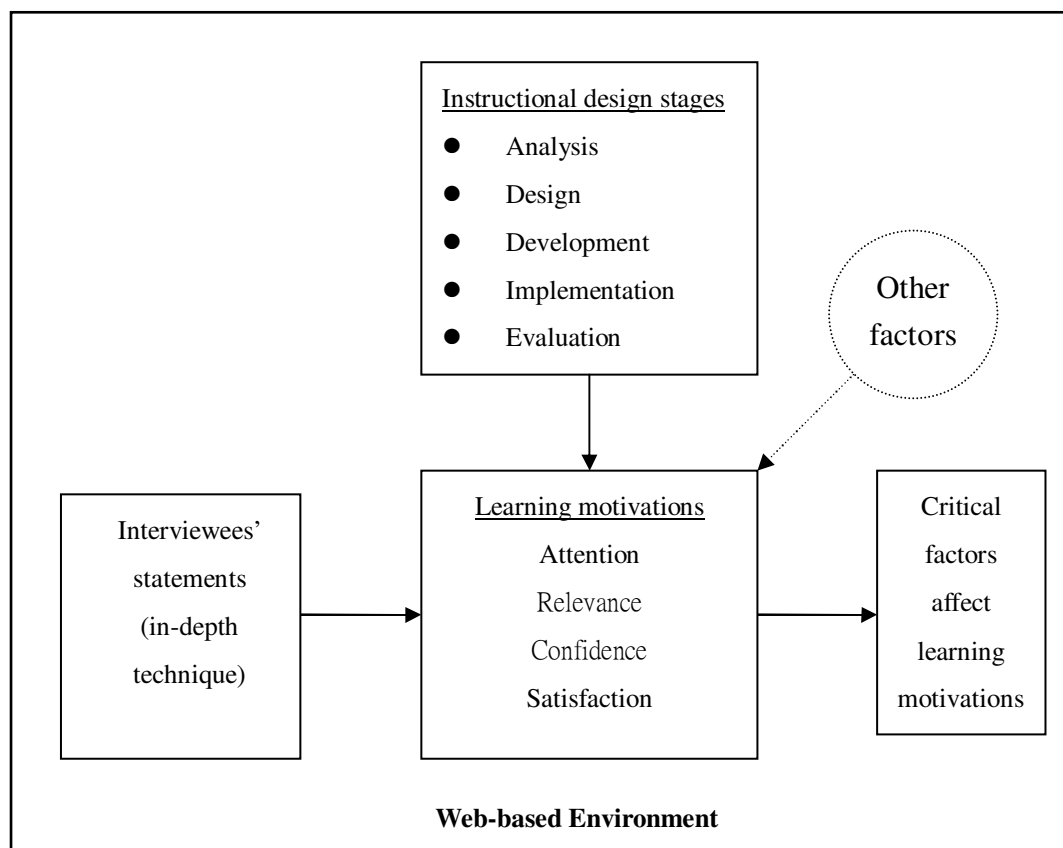


Figure 3.1. Research Framework.

Research Method

In this qualitative study, the researcher has adopted literature review and in-depth interview technique as the main research methods to identify critical factors affecting adult learners participating in training courses in the future.

Literature Review

After setting up research purposes, the researcher systematically and continuously collecting, studying and analyzing all the related papers and studies, the five main points of literature review are included in this study:

- Definition and Concept of WBT
- Learning Instructional Design in WBT
- Learning Motivation Theories
- Motivational Theories for Adult Learning
- Relevance Study

In-depth Interview

In-depth, qualitative interviews are excellent tools to use in planning and evaluating extension programs. An in-depth interview is an open-ended, discovery-oriented method that is well suited for describing both program processes and outcomes from the perspective of the target audience or key stakeholder. The goal of the interview is to deeply explore the respondent's point of view, feelings and perspectives. In this sense, in-depth interviews yield information (Guion²)

In essence, in-depth interviews involve not only asking questions, but the systematic recording and documenting of responses coupled with intense probing for deeper meaning and understanding of the responses. Thus, in-depth interviewing often requires repeated interview sessions with the target audience under study. Unlike

focus group interviews, in-depth interviews occur with one individual at a time to provide a more involving experience:

Kvale (1996) details seven stages of conducting in-depth interviews. They include thematizing, designing, interviewing, transcribing, analyzing, verifying, and reporting. Each step will be briefly examined below with strategies for implementation.

Instruments

Development of In-depth Interview Questionnaires

This study is conducted through in-depth interview technique, to complete it successfully, the researcher has developed interview outline and mailed to interviewees before interviews. The design of the study included questionnaires and let these interviewees understand the interview questions and the research purposes beforehand.

To gathered and collect deepgoing information, in the process of interview, the researcher adopted semi-structured interview technique to implement it. In the process of interviews, the researcher asked questions in the way of flexibility and along with the interview outline.

At the first stage, the researcher contacted with interviewees for primary interview and tried to make interviewees understand the points of the interviews; besides, to help interviewees could figure out the ambiguous questions, and the researcher corrected the interview outline and questions at the same time.

Three main areas of the interviews are as follows:

- Background Questions: Including interviewees' background of WBT, and the WBT adoption backgrounds of case companies.
- Critical factors to WBT in instructional design: Including analysis phase, design phase, development phase, implementation phase, and evaluation phase.
- Difficulties in developing and implementing WBT process.

Subjects

The participants on the interviewee panel for this study meet the qualifications and represent the three kinds of panelists.

Case Company selection

The research focus is on WBT development and implementation situations in corporations in Taiwan, thus, the case companies should be local ones and these case companies' industries are different from one another. Besides, the time they adopted WBT must over than one year and that would be qualified.

One way of selection of case companies was the case companies must be included in the top 500 companies in service industry or in the top 1000 companies in manufacturing industry in the past three years in Taiwan.

Table 3.1. *Industrial Ranking of Case Companies*

Case Company	Business Area	Ranking		
		2004	2005	2006
A	Financial Service Industry	Top 100	Top 100	Top 100
B	Technology Industry	Top 500	Top 500	Top 500
C	Manufacturing Service Industry	Top 100	Top 100	Top 100

From all these companies, the researcher selected case companies from those who joined in governmental subvention plan and have won prize and reward as well in different industries. Those companies passed strict standards and have become the outstanding representatives in WBT development. A stands for case company A, B

stands for case company B, and C stands for case company C.

The background of these case companies are described in the following paragraph:

Company A is a local financial service company that is headquartered in Taiwan and was established in 1977; the branches are located in North America, China, East Asia, and South Asia. They provide diversified financial service like leasing and car renting business and so on.

Company B is also a local technology company established in 1983. The main products of it are computer related, electronic, recreational and audiovisual products. Their branch offices are located in Taiwan (headquarter), Germany, USA, and UK, Hong Kong, and China.

Company C is a local motor manufacturing company that sells motors and provides motor repair service. This company was founded in 1946 and there are plenty stores and motor repair shops distributed in Taiwan.

Table 3.2. *Background of Case Companies*

Company	Category	Establishing Year	Business Area	Number of Employees	Assets
A	Local Company	1977	Financial Service Industry	800	8,200,000,000 NTD.
B	Local Company	1983	Technology Industry	370	2,432,000,000 NTD.
C	Local Company	1946	Manufacturing Service Industry	2100	400,000,000. NTD.

Interviewee Selection

The interviewee panel for the study consists of all experienced designer of WBT program from varied industries, and they are learners, and if the interviewee is the lecturer would be better. The selection of the interviewee seeks to include businesses from different sectors and industries, including IT, financial and service industry, and manufacturing and service industry in Taiwan. And those participants are WBT designers, instructors and also learners concurrently. As for the position or title does not matter, only full experience is enough.

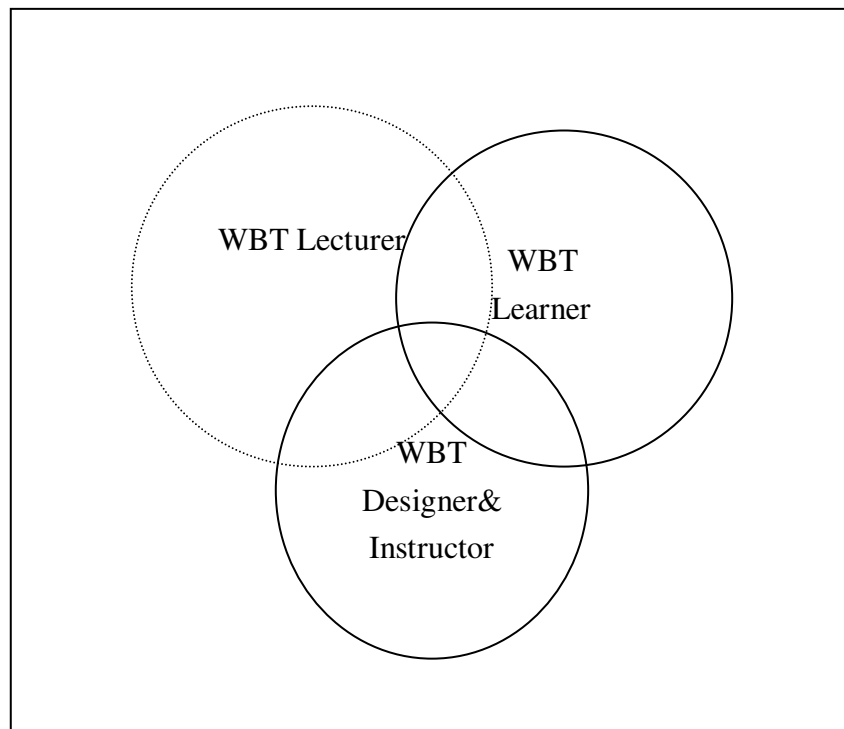


Figure 3.2. Qualifications of Interviewees

Besides, these interviewees were all majored in human resource or training fields, and they also worked in human resource department in their company for at least two years. The interviewees' qualification contents are revealed as following table 3.3.

Table 3.3. *Backgrounds of Interviewees*

Company	Business Area	Interviewee's Department	Interviewee's Major	Position	Seniority (in WBT)
A	Financial Service Industry	Human Resources Department	Human Resource Management Development	Assistant Manager	2
B	Technology Industry	Human Resources Department	Human Resource Management	Commissioner	2
C	Manufacturing Service Industry	Human Resources Department	Human Resource Development	Section Chief	3

Data Analysis

In the process of interviewing, active listening, patience, flexibility, and audio recording are ways of collecting data, after data collection, transcribing is the next step, and it involves creating a written text of the interviews. This step involves bringing together all of my information-gathering approaches into one written form.

Analyzing is the following step, and this important step involves determining the meaning in the information gathered in relation to the purpose of the study. The researcher has studied the important information and look for themes, commonalities, and patterns to try to make sense of the information. The steps of analysis are: inductive category coding and simultaneous comparing of units of meaning across categories, and then refinement of categories, and the next one is exploration of relationship and patterns across categories, and the final step is integration of data yielding and setting being studied.

The researcher identified three levels of what the data revealed,

- All the case companies identified the factors are critical factors.
- Two case companies identified the factors are important factors.
- Only one of the case companies identified the factors are factors to learners' motivation.

Research Procedure

This research proceeded in the following steps, as shown in Figure 3.2.

1. Collection of relevant literature

The researcher based on the research of interests to do comprehensive studies on Web-based training and instructional design and learning motivations of learner.

2. Identification of research topic and purpose

The research directions and scope were further clarified through repetitive discussion with the advisor and relevant literature review.

3. Draft of research proposal

To carry out the research in a strict and progressive manner, a draft of research proposal was necessary.

4. Examination of research proposal

Rectify the research direction or plan by convening a research proposal meeting, where useful suggestions from experts or scholars were collected.

5. Review of relevant literature

In-depth literature review around Web-based training and instructional design and learning motivations of learner served as fundamentals of this research and framed the skeleton of the questionnaire.

6. Design of the interview outline

After the research framework was developed, the questionnaire was drafted in

responsive to the research purposes. In addition to the suggestions from the advisor and committees, industry professionals and field experts were consulted with regard to the viability of the questionnaire. With all those feedback pool, the questionnaire was refined and then adopted as the research instrument – the in-depth interview technique.

7. Data Analysis and presentation of the research findings

The research was conducted via several stages of the researcher asking questions, undertaking analysis, and providing feedback, until when a consensus was reached, which was the nature of the in-depth interview study. The conclusions of the research were come up with and concrete suggestions provided for both future research and practices.

8. Draft of master thesis

The research process and findings were transformed into a written form--the draft of master thesis, and an oral defense of the master thesis held with the permission of thesis advisor.

9. Submission of completed thesis

With the agreement of the thesis committee, this research was completed and submitted.

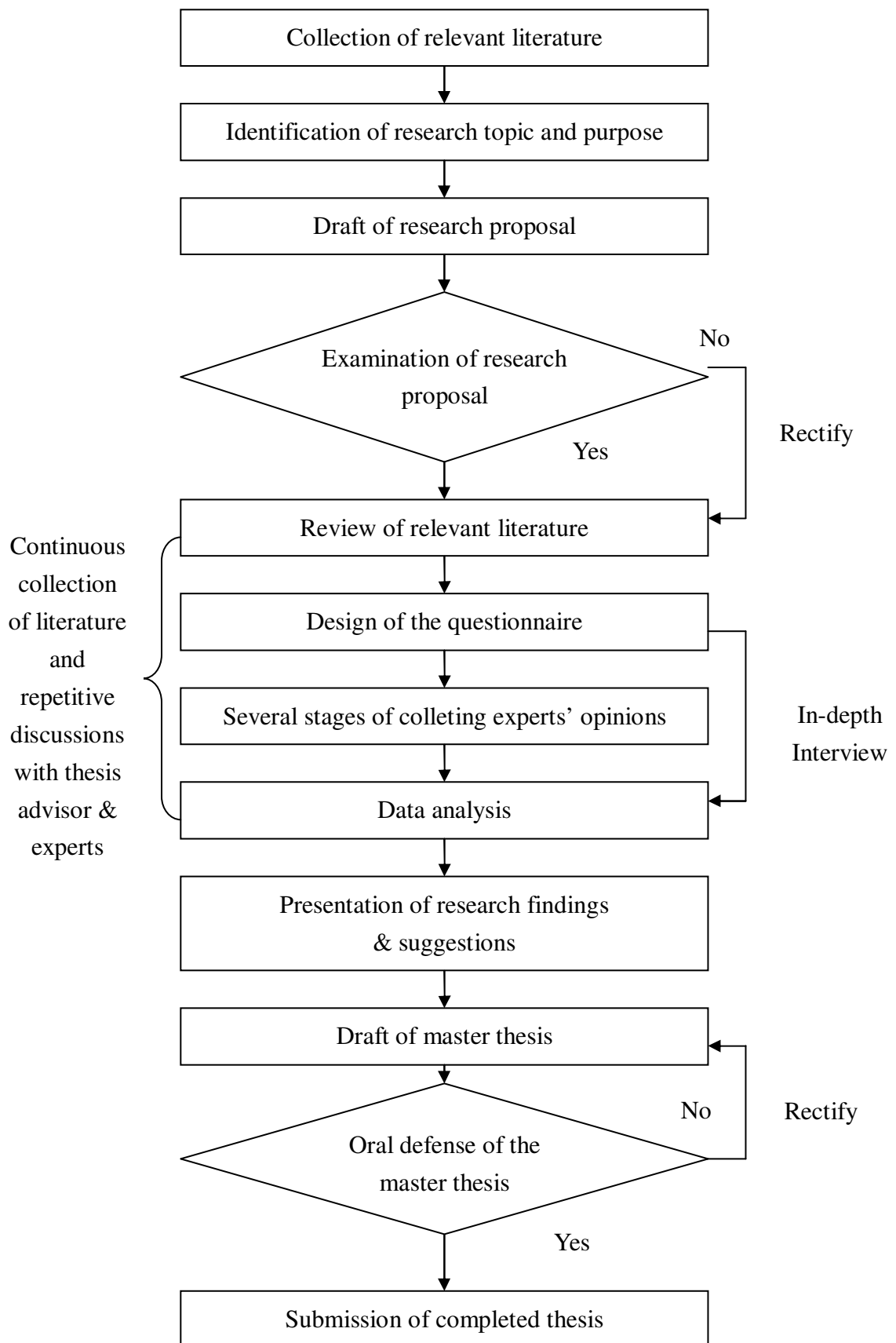


Figure 3.3. The Procedure of This Study