



INFORMATION AND COMMUNICATION TECHNOLOGIES : IMPACT ON
THE PLANNING COSTS OF EXHIBITIONS-A CASE STUDY OF CHENGDU,
SICHUAN PROVINCE, P.R. CHINA

by
XIANG LI

A Thesis submitted in partial fulfillment
of the requirement for the degree of

Master of Business Administration in Tourism Management

Graduate School of Business
Assumption University
Bangkok, Thailand

December, 2006

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ACCEPTANCE

This dissertation was prepared under the direction of the candidate's Advisor and Committee Members/Examiners. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Master of Arts in Tourism Management in the Graduate School of Tourism Management of Assumption University of Thailand.

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Abstract

The meeting, incentives, convention, and exhibition (MICE) sector is one of the fastest growing segments in world tourism. The exhibition industry is one of four sectors in the MICE industry. Chengdu is the economic, political and cultural center of Sichuan province which is located in the west of china and is featured by the endowment of places of historic figures and cultural heritage and an abundance of tourist resources. Currently, Chengdu is making attempts to be “the fourth exhibition city in China” following Beijing, Shanghai and Guangzhou.

In addition, ICT has a great effect on the MICE through previous scholars' studies. The economy and social environment in Chengdu are fit for the development of an exhibition industry, but it's not enough for using ICT. During the planning process of the exhibition planning company, they didn't make full use of ICT and therefore the cost increased. Therefore, researchers started to study website technology, database technology, and computerized design technology.

The researcher collects data from documentation, archival records and interviews, and he uses case studies to analyze data. Website technology, database technology, and computerized design technology respectively correspond with planning companies' advertisement costs, statistics cost and computerized design costs. According to the reality of professional exhibitions in Chengdu, the researcher visited the 6 companies of 34 professional exhibition planning companies. The respondents were all middle-level managers or high-level managers of these companies.

The researcher analyzes data by comparing the exhibition planning companies before and after the application of information and communication technologies to study the change of company's planning cost. He found that website technology, database technology, and computerized design technology all have a great effect on the cost of exhibitions, and the main technologies in which ICT has an effect on the planning costs of exhibitions in Chengdu. Meanwhile, they also found that website

technology, database technology, and computerized design technology's scope of effect, increasing or decreasing.

Through study, aiming at ICT affecting the planning cost and connecting with the level of exhibitions in Chengdu, the researcher has some recommendations and reached the purpose of study.



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CHAPTER 1

GENERALITIES OF THE STUDY

1.1 Introduction to the MICE Industry

The meeting, incentives, convention, and exhibition (MICE) sector is one of the fastest growing segments in world tourism. The rate of their growth has been particularly pronounced within the Asia Pacific region (Muqubal, 1997; Dwyer & Mistilis, 1997). In particular, conventions and meetings are growing so fast and becoming lucrative areas of the tourism industry. According to international business standards, conventions and meetings range in size from small meetings of 5 to 25 people, to conferences for up to 200 delegates, and conventions attracting in excess of 4,000 people incorporating world-class exhibitions. A large part of the continuous day-to-day business is in the provision of meetings facilities for a range of corporate, government and association delegates. These meetings are held in venues such as hotels, resorts and conference centers in capital cities, regional towns and rural areas (Wiley & Sons, 2002). Despite the relatively young MICE industry, there is little doubt that the rapid growth of the MICE industry has occurred on a global scale (TTI, 2000).

As to the development of international conventions, it varies from case to case. In 1996, 50% of international conventions were held in Europe, 15% in Asia, 11% in North America, 10% in the Asia/Pacific region, 6% in the Middle and South America, and 2% in Africa (Figure 1.1). And in 2003, the proportion of international conventions is 62% in Europe, 16% in Asia, 10% in North America, 6% in Latin America, 4% in Asia\pacific region, and 2% in Africa, according to the statistics from ICCA (Figure 1.2). From the above statistics, the researcher can conclude that the tour destinations of meetings and conventions are usually in the countries or cities whose economy is developed rather than undeveloped countries. Except for the developing country and Europe-America, international conventions are held rarely in other places. According to the relevant source, the GDP of the countries, which are among the top ten of the number holding international conventions, is above 10,000 US dollars

Figure 1.1 Statistics from ICCA (1996)

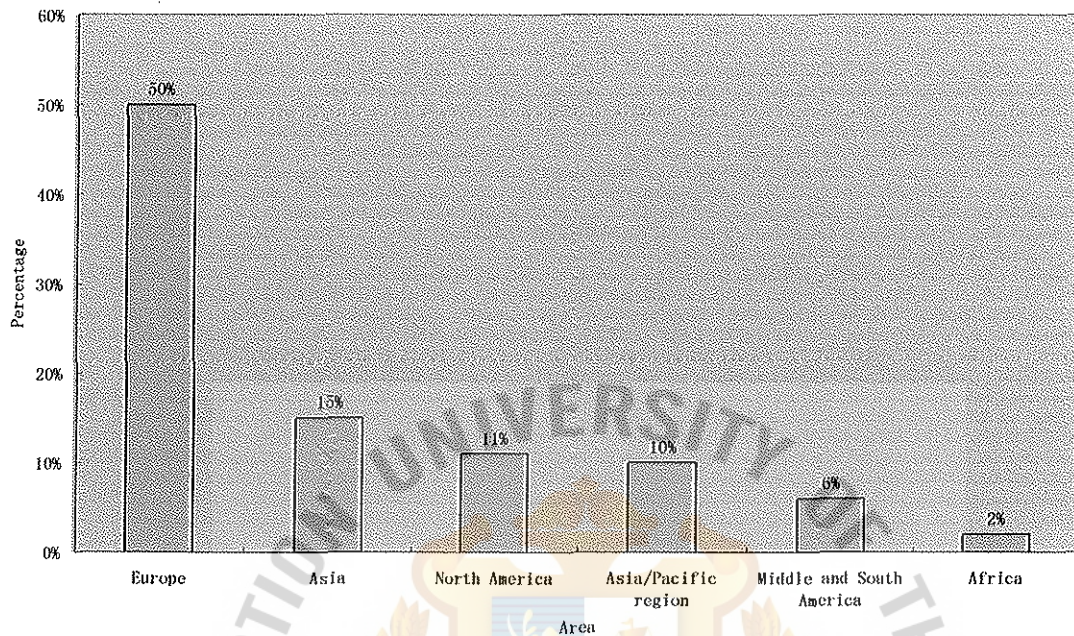
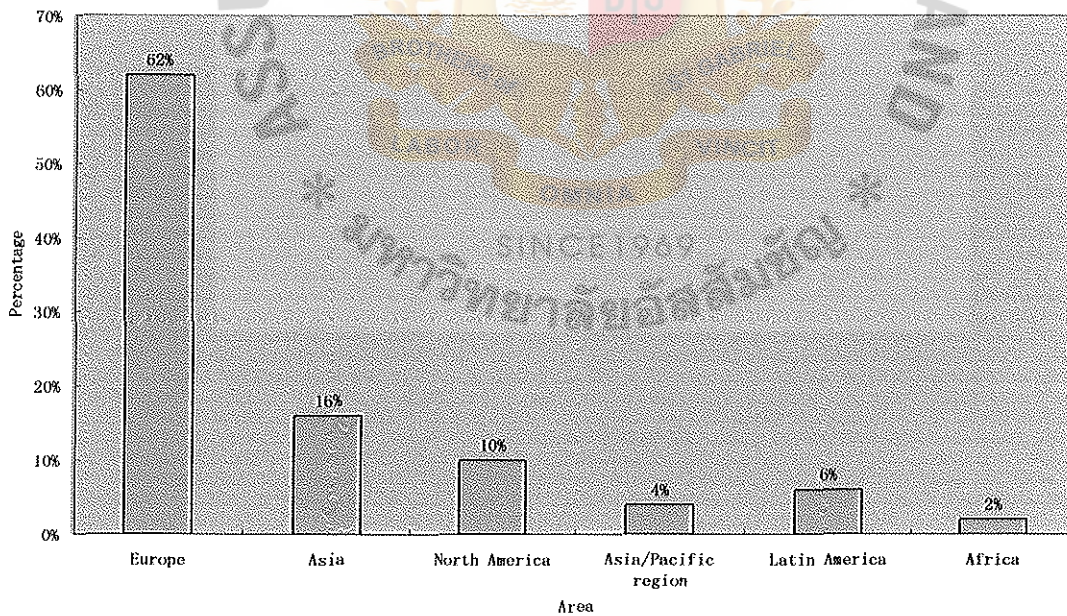


Figure 1.2 Statistics from ICCA (2003)



The exhibition industry is one of four sectors in the MICE industry. Being with the development of the exhibition industry, Europe is the cradle of the world exhibition industry and also is expert in the current exhibition industry. In this region, Germany, Italy, France and Britain have already been the main country for business

exhibitions. The market for European business tourism will increase by 3.7% every year from 2003 and might reach 380 billion US dollars at the end of 2010, according to the forecasts of relevant experts. America and Canada are the other two forces in this field. In these two countries, they hold over 10,000 exhibitions every year and the exhibitions attract 1,200,000 exhibitors and 15,000,000 visitors (Liu, D.K., 2004). The level of the development of the exhibition industry in Asia is much lower than in Europe and North America, but higher than Africa and Latin America. The relevant data revealed in the European exhibition industry is desirable. What's more, the numbers of exhibitors and visitors have decreased in recent years. However, the worldwide organizers of exhibitions have had great confidence again because of the rapid development of the exhibition industry in Asia. The level of the development of the exhibition industry in Oceania is lower than in Europe and America, but the scale is smaller than Asia's. In this region, its main force is in Australia. They hold over 300 large exhibitions, which attract about 50,000 exhibitors and 6,600,000 visitors. According to the statistics, during the professional exhibitions in Australia, the average visitor's expenditure is 700 Australian dollars in the city, including accommodation, dining, entertainment, shopping, traffic and the like and becoming a vital part of tourism income, whether visitors are from abroad or not (Tourism Australia, 2004). In the countries of Latin America, it is estimated that the total income of the exhibition industry is 2 billion US dollars, mainly from Brazil and Argentina. And the development of the exhibition industry in Africa is similar to that in Latin America, mainly in South Africa and Egypt (www.zwhz.com).

Exhibitions and Tourism: The exhibition industry is also an important part of the world tourism industry. Thus, many countries pay more attention to the development of exhibitions. In the last five years, exhibition industry develops rapidly. As a result, people in tourism generally pay attention to the exhibition industry. Holding an exhibition can appeal to a lot of tourists and improve the development of the relevant industry. For instance, airline companies, hotels, shopping and so on. To airline companies, the holding of exhibitions can increase the passenger flow of planes and improve profits for the company. For the hotel industry, the holding of

exhibitions may attract more relevant people and travelers. The increase of tourists directly affects the occupation rate, and improves the development of the catering trade. According to the uncompleted statistics, the occupation rate usually can rise 30% about normal due to exhibitions. In addition, the increasing of tourists and rising of local celebrities can improve the amount of consumers and the shopping environment.

It may raise the earning and improve the development of tourism. Additionally, the development of tourism can appeal to tourists and create a better environment for the exhibition industry.

1.2 MICE situation in China

The development of the exhibition industry in China is just beginning. However the rate of its development is higher than the gross domestic product (GDP). In 2001, the country held 2,387 exhibitions. In 2002, China held 3,075 exhibitions. In 2003, China held 3,298 exhibitions. The exhibition items of 2002 in numbers increased 28.92% from that of 2001 and 2003 also got a rise of 28.82%. (Li, 2005). With the rapid development of the exhibition industry and its efforts, local governments pay more attention to this field and create an environment controlled by the government. Under the influence of local government, many enterprises start to build the association of exhibition industry. During "the Ninth Five-year Plan", the number of exhibition venues increased quickly. The size of the exhibition venue is less than 800,000 square kilometers. But at the end of 2001, it increased to 5,160,000 square kilometers. (Research Department of Beijing Government, 2002).

By May of 2002, fourteen units in China have taken part in International Congress & Convention Association (ICCA). In addition, several cities have gained advantages in the exhibition industry. At present, Shanghai, Beijing, and Guangzhou are the centers of international exhibitions.

After China joined the WTO, in 2004, the number of exhibitions held in China was 3,560 and the total size of exhibitions is 12,000,000 square kilometers. Among

them, international exhibition accounted for 50% and attracted 6,000,000 visitors. Furthermore, the total amount of trade reached about 20 billion Renminbi (RMB). In 2005, the total income from exhibitions exceeded 6.5 billion RMB, and brought 40 to 50 billion RMB in relevant profits.

Table 1.1 The number of exhibitions in China (2001-2004)

Year	2001	2002	2003	2004
the number of exhibitions in China	2087	3075	3298	3560

Dai (2005) presented: there are several weaknesses in the development of the MICE industry in China.

A. The development of the market is not satisfied.

1. There are no complete service systems.

Nowadays, both MICE industry and governments in China pay more attention to Destination Management Companies (DMC), while they all know a little about professional convention organizers (PCO) that is significant to the MICE industry.

2. Governments control the development of the MICE tourism. Factors of administration impact an development of MICE.

Governments control the development of MICE tourism will lead to not enough specification of the market, mainly take part in the building of exhibition halls and the like, paying little attention to set up the management system and service system.

3. Nowadays the exhibition market is still a single buyers' market in China.

The big cities of China have not become international metropolis, so the audiences of the exhibitions are mostly domestic guests. Therefore, the exhibitions that are not aimed at the domestic buyers usually cannot be hold in China.

4. The MICE industry has not become the independent industry.

B. The need of improvements of environment

1. Uncompleted laws

The Chinese tourism administrative department has not developed the MICE tourism through the laws and regulations from the angle of expanding international tourism. Present there is only one law 'Management on holding hoarder exhibition for economic

trade activities' promulgated by international economic trade cooperation department on 22nd Sep.1995.

2. Many complicated processes

In the examinable and approved processes of holding exhibitions, the man-made factors are too many; the procedure for examining and approved are complex, for some the time of examining and approving is even above one year.

3. The need for improvements of cities' environment

C. Emphasis on exhibition rather than convention

At present, the studies about the MICE industry in many places in China pay more attention to the exhibition, not the convention or meeting.

D. Few exhibitions of international brands

The country or region whose MICE industry is developed in the world mostly hold world-famous exhibitions, such as The Milan international Exhibition, Paris Exhibition and so on. But in China, most exhibitions except the Guangzhou Trade Exhibition are temporary and domestic.

E. Lack of study about MICE.

Nowadays, the study about MICE tourism industry is still in the primary level and has not the same idea about the different parts of the MICE tourism industry. The most important problem is that it doesn't build up the scientific series of the statistical norm system, which leads to a confusion of statistics and impossible to analyze the scope and profits of the MICE industry.

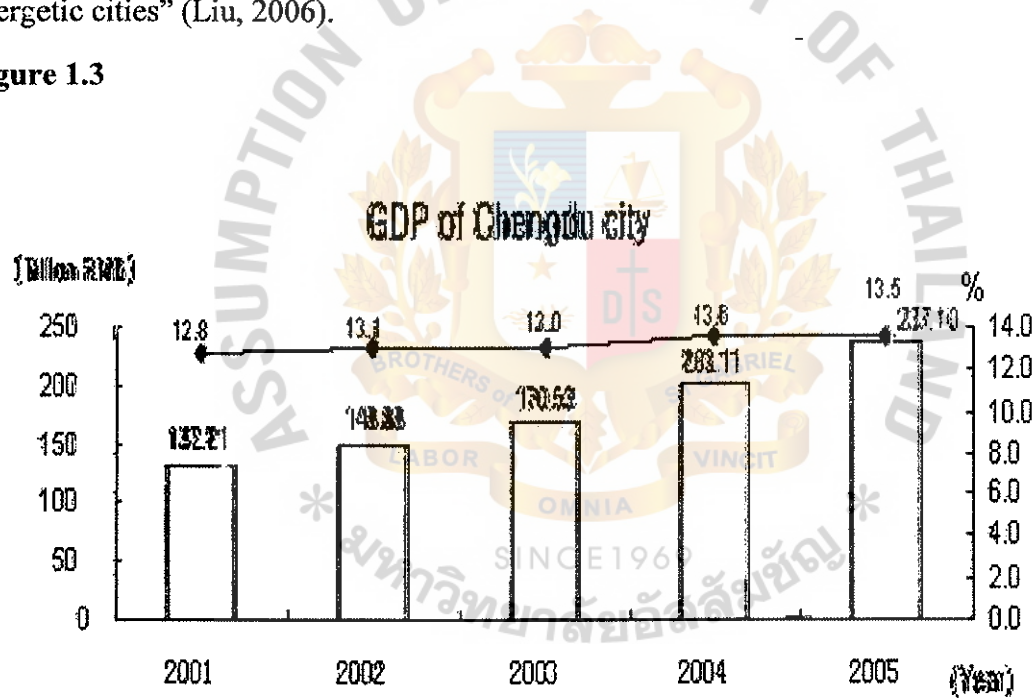
1.3 The exhibition environment in Chengdu City

Chengdu is the economic, political and cultural center of Sichuan province which is located in the west of china and is featured by the endowment of places of historic figures and cultural heritage and the abundance of tourist resources that includes the national and regional places of interests, forest gardens, cultural relics, and the conservational regions for natural views (See Appendix C). At present, Chengdu has three professional exhibition halls- Sichuan exhibition hall, Chengdu

Exhibition Center of International Conference and Chengdu New Exhibition Center of International Conference. Currently, Chengdu is making attempts to be “the fourth city of exhibition in China” following Beijing, Shanghai and Guangzhou.

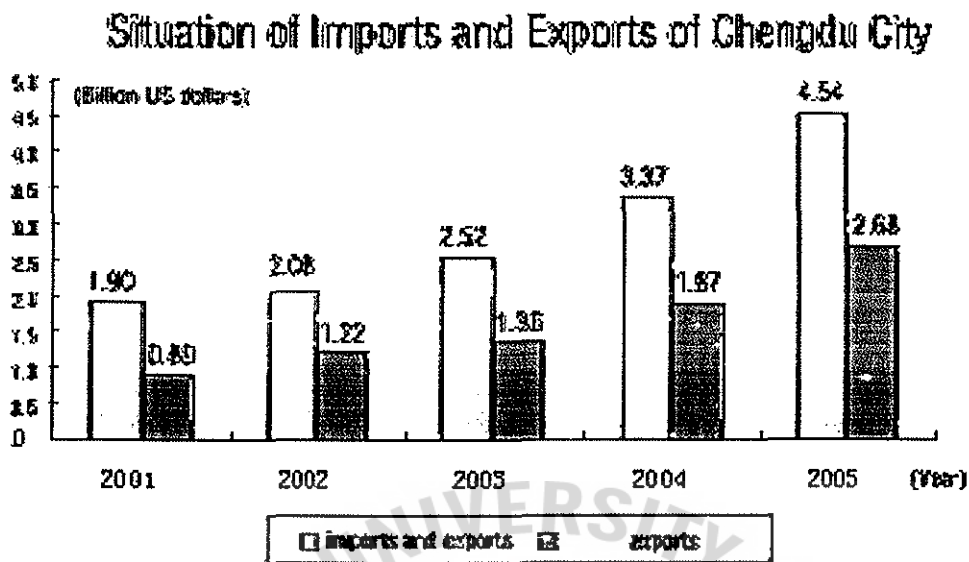
Chengdu has long been the economic center of Western China for its GDP, economic growth rate and the proportion of tertiary industry as well as its first rate of economic activity and opening level among the whole country or Western China. At present, most countries and regions have had enterprises with investments in Chengdu, and over 60 firms out of the Fortune 500 have invested or have set up agents in Chengdu. What’s more, it has set up business relationships with many foreign cities and domestic cities. It also was evaluated “the one of the CCTV top ten economically energetic cities” (Liu, 2006).

Figure 1.3



(www.cdstats.chengdu.gov.cn)

Figure 1.4



During “The Tenth Five-year Plan”, the total imports and export is 14.39 billion US dollars and is 1.9 times higher than that in “Ninth Five-year Plan”. The total imports are 8.02 US dollars and 2 times that of “Ninth Five-year Plan”. The total exports are 6.38 US dollars and 1.9 times that of “Ninth Five-year Plan”. The improvement of the economy relied on the international market being highly developed; the proportion of foreign trade was 10.2% to 15.3% from 2002 to 2005. With the rapid development of tourism, the number of tourists reached 36,696,000. Income reached 102.46 billion RMB in five years and 2.4 times that of “Ninth Five-year Plan” (Statistic bureau of Chengdu, 2005).

Introduction of main exhibition venue

Table 1.2 Statistics of professional exhibition venues in Chengdu (until June 2006)

Name of exhibition halls	Size	Numbers of exhibition unit
Sichuan Exhibition halls	Internal size is 23,000 m ²	More than 600 units
Chengdu Exhibition Center of International Conference	Internal exhibition size is 55,000 m ² , external Exhibition size is 13,000 m ²	More than 2400 units
Chengdu Century City-International Exhibition Center Hall	Total Construction size is 1,150,000 m ²	More than 3000 units

Annotation: The unit of exhibition is standardized (the specification: 3m*3m)

Chengdu exhibition has been developed to a certain scale and experiences have been accumulated. Amongst these exhibitions of significance is the Sugar and Alcohol Trading Conference which was held by Chengdu Merchants Trading Office for more than one decade. With the passing of time, its scale is bigger and bigger and its influence is larger and larger.

Table 1.3 Shows the estimated statistics of the representative conferences and exhibitions of Chengdu

The Abbreviation of Exhibition	The Full Name of Exhibition	Name of Conference
NSATC	National Sugar and Alcohol Trading Conference	The Western Forum of China
NTPCCM	New Technology and Products Conference in Chinese Medicine	International Life-being Conference
CWE	Chinese Western Exhibition	Chinese and French Economic Forum

The development of the MICE industry is closely connected with the use of ICT. The use of ICT can increase the effectiveness of exhibitions. There are the following factors:

1. The arrangement of the exhibition place: Previously, the light planning of the exhibition place was rather dull; the style of it was also fixed. When ICT has applied to the MICE industry, some exhibition with special need can use the computer to control the brightness-darkness, color and so on.

2. The effect of advertisements: During the immature stage of ICT, the advertising of exhibitions mainly used language narration. Owing to the development of ICT and in order to make the audience comprehend the product directly, the exhibitions at present mainly give public to people through the vivid, imaged 3-D pictures and sound tapes.

3. The quality of professional exhibitions: Certain professional exhibitions in Chengdu, such as medicine, electronic information, thanks to the development of ICT, can make the new products of exhibition imitate or directly simulate before the audience.

1.4 Information and Communication Technologies and Exhibitions

The industry has gladly taken on new technology, and the impact has been advancing not only in the area of the equipment used to present conference data and information, but also in the provision of different styles of conferences through the use of video conferencing facilities. At an operational level, the uptake of Information Technology has been seen within the office management system of conference organizers, at convention and exhibition registrations and within venue convention sales and service offices.

In accordance with the mature international exhibition industry, the influence of new modern technology is mainly in new material and new technology. Among them, to update the facilities of exhibition venues, innovate the exhibition platform design and renovate material, meanwhile to improve the management of technological intelligence and ability, combine web technology to realize shared information to drop costs to promote market research, introduce advertisements to Internet, which are the direction of development of the exhibition industry. In addition, as a new industry

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which concentrates on information communications, the exhibition industry in China confronts immense transformations and challenges. With Internet, exhibition industry development has a close relationship with the electronic business. Many mechanisms of the exhibition industry and companies have fully realized the profound efforts of Internet and will plan to set up some professional exhibition webs. Now, based on several traditions in the exhibition web, it will take advantage of the web technology before work and advertisement, communications and sharing between information about exhibitions, and analyzing the statistics after exhibitions and after-service. It really brings the Internet and traditions into the exhibition and is more useful compared to the simple exhibition within Internet (<http://blog.mofcom.gov.cn/index.shtml>).

Therefore, people must focus on Information and Communication Technology which is needed for the development of the exhibition industry.

1.5 Statement of the problem

The economy and social environment in Chengdu are fit for the development of the exhibition industry, but it's not enough for using ICT. The major exhibitions are traditional ones which seldom apply to ICT such as artificial intelligence exhibition, spaceflight exhibition due to their high technology. During the planning process of the exhibition planning company, they didn't make full use of ICT and therefore the costs increased. For instance, planning is usually man-made, thus it will not only reduce the efficiency of work, but also hardly reach the goals. With the development of ICT, electronic business will become the trend of modern business in the future. (Mistilis, 1999). MICE industry, as a new industry, is widely influenced by the Information and Communication Technology (Davidson, 2002). Web technology and database technology will also influence the planning of exhibitions in Chengdu.

Based on the current situation of the MICE industry combined with the environment of Chengdu detailed exhibitions and the real application of ICT practiced in the exhibition planning, the researcher sums up the some problems. Such as: the

planning of exhibition companies, when they conduct planning for exhibitions, computerized design is not applied sufficiently, which directly increases the planning costs; the advertising of exhibitions is only confined within the formation of radio broadcasting, television and newspaper which are not spread broadly enough and in depth; consequently, the effect of advertising for exhibitions is not realized; resulting from the inadequate application of ICT, the level of Chengdu exhibitions is not high.

1.6 Research Objectives

1. To analyze the main areas in which ICT has an effect on the planning costs of exhibitions by comparing the cost before and after when applying to ICT.
2. Using ICT to promote the quality of Chengdu exhibitions in the advertising costs, statistics cost and design costs.

1.7 Scope of the Research

The range of both technology and exhibition's planning is very large, including many factors. This time, the researcher's main study is ICT, including three factors: Website technology, database technology and computerized design. The study of exhibition costs is mainly to study the influences of advertisements, statistics and design costs.

For target respondents, the researcher chiefly conducted interviews with six managers who are in the middle or high level in the exhibition planning company. The region of study is mainly in Chengdu in Sichuan province of China.

1.8 Limitations of the Research

First of all, according to the present conditions of development of exhibitions in China, large-scale exhibitions are usually held by the Chinese government or local governments. So it's difficult to directly reach the exhibition plans held by governments. Thus, the scope of my study is aimed at part of the exhibition planning

companies rather than the whole.

Secondly, a number of sources are Chinese because the place and scope of research is in China. As a result, many sources have to be translated.

Thirdly, due to some investigations that likely refer to the business's top secret, it's less likely to collect specific information. So the researcher only gathers the information through interviews.

Lastly, through careful research, the researcher has acknowledged the influence of ICT for planning costs, but only in Chengdu. In addition, for different countries and different regions, it varies from case to case.

1.9 Significance of the Study

The aim of the planner is profit; therefore the key to the question is how to get a high profit through cost reduction. This study enables people to understand the attributes of cost planning of exhibitions, as well as recognizing new technology.

Through the study, the study provides the theoretical basis for the exhibition planning companies in China and makes use of the ICT. This research also can be a guide for the other provinces of China.

1.10 Definitions of Terms

For uniformity and clarity of understanding of some words in this research, the following terms as applied in the research are defined as follows:

Advertisement

It is a paid public announcement appearing in the media. (Motto, 2002)

Cost

Something of value, usually an amount of money, given up in exchange for something else, usually goods or services. (www.ots.treas.gov) Here it refers to investment to exhibition. Such as labor, cost of exhibition.

Convention

Meeting organized by those working in the same field, industry, and association whereby delegates meet each other for the purpose of exchanging ideas, knowledge, and information (Wattanakulsiri, 2004).

Computerized design

Utilize the computerized technology to actualize the ideas or schemes into a creative and detailed operation and production scenarios. (Translated to www.translucidmedia.com/cn/)

Database

In order to use the data efficiently and conveniently, reforming the data and information. (Translated to www.translucidmedia.com/cn/)

Exhibition

Events that gather in a single location, usually in an exhibition center or convention center (Rutherford, 1990). It is often used in promotion sales, merchandises' demonstration.

Incentive

A reward scheme whereby company pay for tips or vacations for employees (Wattanakulsiri, 2004).

ICT

It is the catch-all phrase used to describe a range of technologies for gathering, storing, retrieving, processing, analyzing and transmitting information. Advances in ICT have progressively reduced the costs of managing information, enabling individuals and organizations to undertake information-related tasks much more efficiently, and to introduce innovations in products, processes and organizational structures. (Peter Beattie MP, 2006) Such as website, database and so on.

MICE

Meeting, Incentive, Convention and Exhibition.

Meeting

It is a gathering of groups or organization for a specific purpose (Wattanakulsiri, 2004).

Planning

The systematic arrangement of tasks to accomplish an objective (Gido & Clements, 1999). It mainly focuses on the planning of exhibition.

QQ

One talking tool by Internet and it is popular in Chinese (www.qq.com).

Responsiveness

The ability to deal effectively with complaints and promptness of the service (Parasuraman et al., 1988).

Statistic

Any numerical summary measure based on data from a sample; contrasts with a parameter which is based on data from a population (Fortune, 1999) Here it relates to statistics on investment and materials to exhibition.

Tenth Five-year Plan

Especially during the “Five-year plan” conducted by Chinese government, between 2001 and 2005. (www.news.xinhuanet.com)

Website

The entire collection of web pages and other information (such as images, sound, and video files, etc.) that are made available through what appears to users as a single web server. (Translated to www.snooble.com)

CHAPTER II

REVIEW OF LITERATURE AND RELATED STUDIES

This chapter provides a review of literature related to the background of ICT and planning costs and specifically introduces the influence and significance of ICT in Exhibition and planning costs, relevant with the contribution of others made in this field will be discussed conducive to an appreciation of the relationship of ICT and the planning costs of exhibitions and provide the theoretical resources for the later research.

2.1 Exhibition

Exhibitions refer to expositions, trade shows or trade fairs. They are demonstrations of something of beauty, value or particular interest to a targeted audience or customers in general (Levison, 1997). It is also a marketplace in which potential customers come to sellers (Seekings, 1997). Meanwhile, exhibitions are events that gather people together in a single location, usually in an exhibition center, or convention center. They are a group of suppliers or exhibitors who set up physical demonstrations and of their products and services designed to a given industry discipline (Rutherford, 1990). Holding the exhibition can appeal to a lot of tourists and improve the development of the relevant industry. For instance, airline companies, hotels, shopping. It may raise the earnings and improve the development of tourism. Additionally, the development of tourism can appeal to tourists and create the superior environment for the exhibition industry.

Waterhouse (1987, P.5) stated that an exhibition is one item in a company's overall communications and marketing programme and should be planned well in advance as part of your long term corporate marketing strategy. Objectives of the organizing authority for any exhibition are to attract large numbers of people to attend the event in order to see what is on show. Numbers alone are not important. It is the

quality of the visitors which counts; whether they are the type of people you want to meet and whether they contain, among them, potential buyers of the potential buyers of the products or services you wish to market.

Maitland(1997, P. 2) suggested that there are many benefits to be derived from exhibitions at a show. Typically held on an annual or bi-annual basis, it is an exciting, looked-forward-to event: everyone is wondering what it will be like, who shall be there, what will be different and new, what may happen and so on. An exhibition is a direct, face-to-face medium. You can meet past, present and prospective customers and talk, discuss products and services, ask and answer questions, negotiate, judge reactions and establish real, human relationships with them.

2.1.1 Types of Exhibition

According to the range and modalities of the exhibition, they can be categorized as trade exhibition, public exhibition and association exhibitions.

Trade exhibitions (Industry exhibition): These are often called business or technical events. They are typically aimed at either everyone within a particular trade or industry or to a specific group (or groups) across a range of different industries (Maitland, 1997). This exhibition is rarely open to the public, qualified visitor walking the aisles, and almost always held on weekdays (Seekings, 1997).

Public exhibitions: These exhibitions usually are created by an exhibition organizer or promoter, who may run a few dozen exhibitions a year. Public exhibitions target specific regions and lifestyles. They are often held on the weekend and attract a wide variety of visitors. Weirich (1992) claimed that a public exhibition, the largest and fastest growing segment of the exhibition, is widely advertised through both the print and television media.

Association exhibitions: These are an exhibition that individual companies organize to demonstrate their products to a selected or invited audience. They are usually held in conjunction with national and regional meetings of a professional or trade association. They are organized during the convention of the association which tends to attract people with similar ideals and goals (Lawson, 2000).

China National Statistics Department (1985) made suggestion for the departmental classification of the national economy which is the primary basis of Chinese classification exhibitions.

According to the scale of the exhibitions, it can be categorized as International, National, Regional, Local Exhibition and Exclusive Exhibition which is held by only one company. The scale means the size and scale of the exhibitors and visitors who spread over the international, national, regional or the local places, rather than the scale of the exhibition place.

According to the time of the exhibition, it can be identified into regular and irregular exhibition. Regular exhibition includes the annual four-time exhibition, the annual two-time exhibition, the annual exhibition, and the exhibition once in two years. The irregular exhibition depends on needs: long-term and short-term. The long term can be held for three months, half a year and sometimes may be held conventionally. The short-term normally is no more than one month.

According to the size of the exhibition place, it can be classified as an inside and outdoor exhibition. The inside exhibition is mainly used for normal products' exhibition, such as textile exhibitions and electronics exhibitions. Outdoors is often used in the super large or super weighty products, such as aviation exhibitions and mineral equipment exhibitions. The exhibition which is held in different places alternately is called a tournament exhibition. A special one is the mobile exhibition, which exhibits airplanes, boats, trains and automobiles (<http://www.2t2.cn/>).

2.1.2 The Advantages of Exhibitions

Weirich (1992) claimed that the main purpose of exhibitions consisted of sales recognition, finding new customers, launching new customers, launching new products, providing new information about the company product, public awareness, media attention, and brand name recognition. This concurs with the findings of Sind and Kitzing (1997).

Seekings (1997), Levinson (1997), and Allen (2000) who claimed that the main advantages of trade and commercial exhibitions consisted of sales leads,

time-keeper, cost-effective, human and business transactions, technology distribution, and examination of multiple products.

Exhibitions provide a forum for sales leads, contacts with influential press, dealers, and distributors, image building and market intelligence. Exhibitions indicate the change and vitalities of those particular industries they associate with, signaling their growth and productivity. They are a powerful, flexible, cost-effective way of launching new products, penetrating new markets, reinforcing existing customer interest and maintaining or increasing market share. They provide face-to-face marketing that are the vital parts of marketing mix, alongside direct selling, advertising, direct mail and the internet. The exhibitors can talk to visitors to obtain feedback on what new products or technologies the market is seeking. Business transactions resulting from exhibitions and their related activities in organizing such events are significant revenue to the country. The direct revenue of the exhibition industry comes from activities along the value chain of organizing exhibition events and the resulting revenues generated from exhibitors, particularly foreign exhibitors. Intangible outcomes of exhibition are those concerning technology distribution, exhibitors also have the opportunity of evaluating their competitors' products and promotional activities possibly to see a new competitive product for the first time (Seekings, 1997; Levinson, 1997; Allen, 2000).

2.2 Definition of Information and Communication Technologies

Information and Communication Technology (ICT) is the catch-all phrase used to describe a range of technologies for gathering, storing, retrieving, processing, analyzing and transmitting information. Advances in ICT have progressively enabled individuals and organizations to undertake information-related tasks much more efficiently and effectively, and to introduce innovations in products, processes and organizational structures ([www. smartstate.qld.gov.au](http://www.smartstate.qld.gov.au)).

ICT has grown more important over the past few years as it exerts a significant impact on production and foreign trade, particularly exports, and thus

boosts economic growth. This age of information and knowledge witnesses a great ICT revolution. ICT has become a backbone and a leading sector in many developed economies. The developing countries struggle hard to follow in the footsteps of the developed countries, especially as the digital divide is getting wider (NBE - Economic Bulletin).

Pigato (2001) suggested that ICT includes both information infrastructures –wires, transmitters, and computers – and information technology, i.e. the applications and contents that travel through these infrastructures.

NORAD (2002) also proposed that ICT include three channels: (1).Information channels such as the World Wide Web, online databases, electronic documents, management and accounting systems, intranet, etc.(2).Communication channels such as e-mail, electronic discussion groups, electronic conferences, the use of cell phones, etc. (3).Hardware and software used to generate, prepare, transmit and store data, such as computers, radio, TV, computer programmes/tools, etc.

Namibia Government (2006) offers different perspective, suggestion that ICT includes computers, audio visual systems, broadcast receiving systems and telecommunications systems, media such as compact discs and videodiscs, microcomputer-based laboratories, the Internet, virtual learning centers, local and wide area networks (wired and wireless), instructional software, printed media, educational television, voice mail, e-mail, satellite communication, VCRs, cable TV, conventional and interactive radio (Source: Ministry of Higher Education, Training and Employment Creation & Ministry of Basic Education, Sport and Culture in Namibia: ICT Policy for Education).

Lee (2004) Set of activities that facilitates the processing, transmission, and display of information by electronic means.

UN- Economic and Social Commission for Western Asia (ESCWA) ICT can be defined simply as follows: the ICT sector includes all the technological, economic, academic and regulatory activities relating to the technologies enabling individuals and organizations to process and transfer information anytime and anywhere faster and more effectively.

2.3 Development of ICT

From the advent of ICT to the rocketing development of information technology at present, ICT has experienced major revolutions many times. Table 2.1 specifically describes the developing process of ICT which has made great contribution to human beings civilization and technology.

Table 2.1

The Chronological Development of ICT

Transmitting signs via wires. The first public message was sent via Telegram in May 1844. This date marks the effective beginning of the telecommunication age.	1833
Sending the first telegram	1837
The introduction of the telephone	1876
Studying the possibility of wireless transaction.	1895
Introducing the TV all over the world	1920
Setting the telecommunication mathematical theory being the theoretical base for the new digital telecommunication.	1942
Developing telecommunication via satellites (Telstar).	1966
Establishing the first mobile telecommunication network.	1977
Introducing the first computer modem.	1979
Approving a basic network protocol as a standard, resulting in the appearance of the Internet.	1982
Developing the world wide web concept in the Nuclear Studies and Research Centre.	1989
The appearance of the MP3, Real Audio and MPEG standards to distribute animated visual and audio services via the Internet through Napster and Real Player programmes.	1995
Introducing the Wireless Applications Protocol (WAP).	1997

Source: The Economic & Social Committee for Western Europe (ESCWA) (2003)

After the 21st century, ICT was developed so quickly. Especially between 2003 and 2005, ICT is making progress all over the world at quite a high rate. Table 2.2 illustrates the main distribution of ICT and its tendency to increase.

Table 2.2

Estimates of ICT growth worldwide during 2003-2005

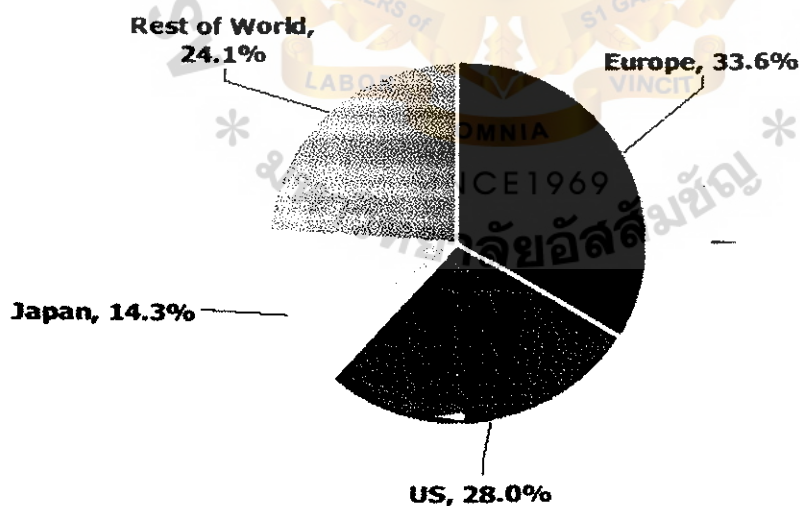
Region	Growth rate (%)		
	2003	2004	2005
World	1.4	4.3	6.0
Western Europe	0.8	3.1	4.4
United States	0.0	2.9	5.0
Japan	-0.8	2.2	3.8
Other regions of the world	4.8	8.3	10.1

Source: EITO (2004).

Based on the statistical study and analysis of the ICT market done by the European Information Technology Observatory (EITO) in 2006, Figure 2.1 reflects the main distribution of the ICT market.

Figure 2.1

Worldwide ICT market by region, 2006



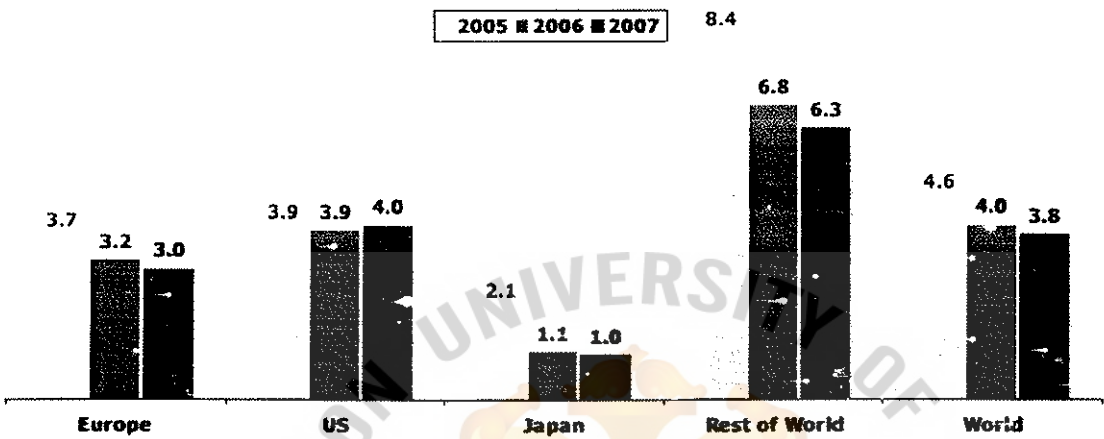
Source: EITO (2006).

The European Information Technology Observatory (2006) concluded Worldwide ICT market annual growth 2005-2007 according to the data of the previous years. From Figure 2.2, it is easily known that the US. ICT market is

relatively stable.

Figure 2.2

Worldwide ICT market annual growth 2005-2007, in %



Source: EITO (2006).

2.4 Previous Studies on ICT Applications and MICE industry

Mistilis & Dwyer (1999) talked about the three tourism sections in their research, they proposed: For MICE tourism, IT is an additional information connection needed between the MICE organizer and each of these three sections of contact. In other words, information would need to flow between a meeting, exhibition, or conference organizer and travelers (that is, meeting, conference, or incentive delegates, exhibition attendees), travel intermediaries, and travel suppliers. They employ Figure 2.3 to depict the role that a conference organizer might play in altering information flows between demanders and suppliers.

Figure 2.3 Information Flow for MICE Tourism

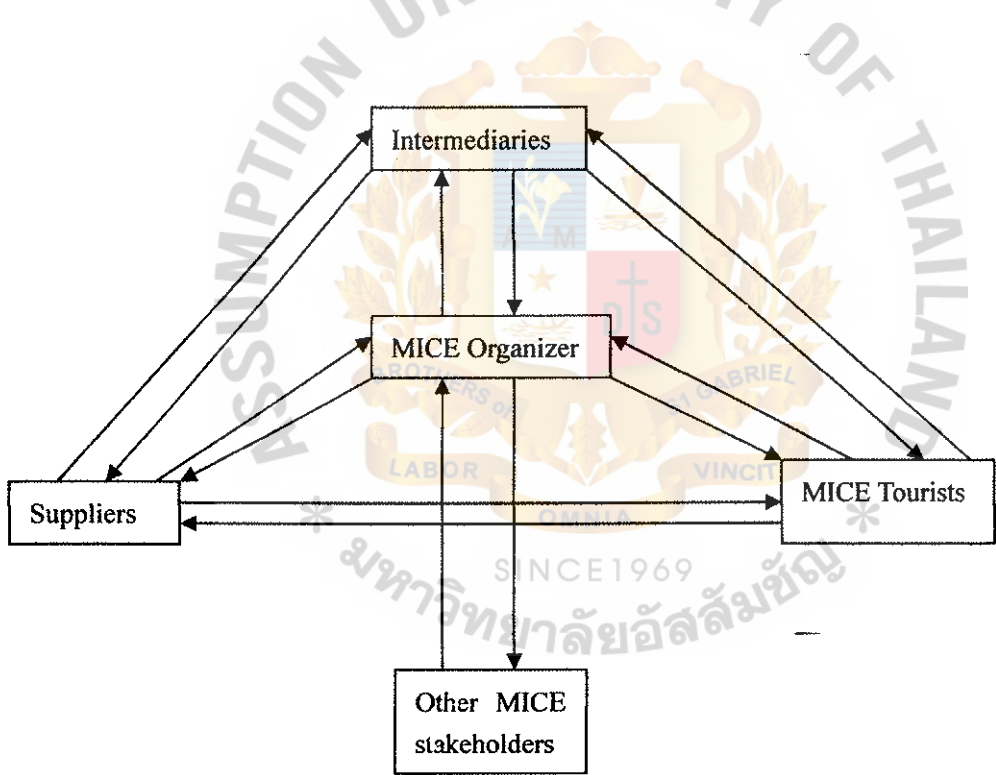


Figure 2.3 mainly demonstrates the process of information transfer in MICE and in detail delivers the relationship among intermediaries, Suppliers, MICE tourists, organizers and other stakeholders which emphasize the role of MICE organizers in the MICE industry.

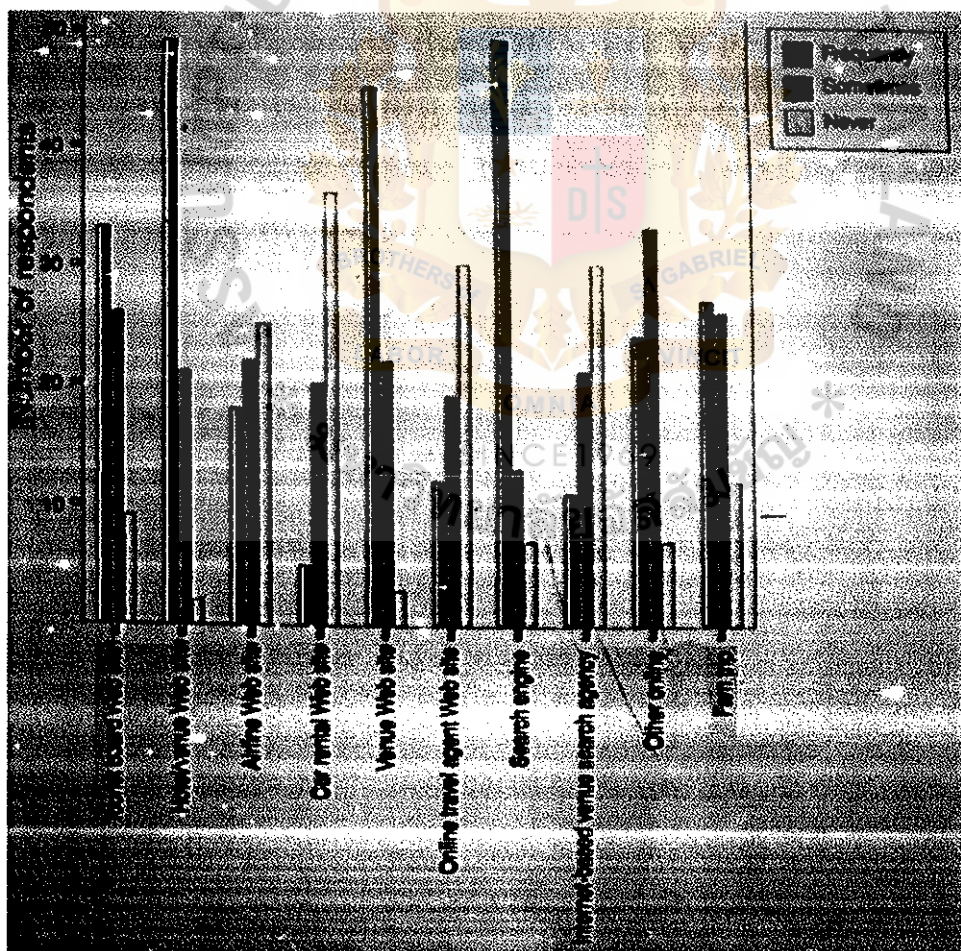
The following paragraphs discuss the information flows in the tourism industry sector.

Website Technology and MICE industry:

Davidson, Alford & Seaton (2002) discussed that the MICE sectors have welcomed the advances in the ICT and have utilized it to the maximum and indicated its growth obstacles with regard to the adoption of these products and services and finally discusses the results of the survey which was conducted on the extent of use of current and future use of ICT in the European MICE sectors.

For the ICT tools' impact on planning and booking events, ICT is an increasing range of online options open to the event planner for obtaining further information about a potential destination and its services. Web sites belonging to the hotel and venue for the event and general Internet search engines are the most frequently visited sources (See Figure 2.4)

Figure 2.4 Use of event planning and booking tools, 2002



Cheung & Law (2002) mainly study Virtual MICE promotion: A Comparison of the Official Web Sites in Hong Kong and Singapore". After they researched Hong

Kong Convention and Exhibition Bureau (HKCEB) and Singapore Exhibition and Convention Bureau (SECB) Web sites , they concluded its managerial implications. The managerial implications of the HKCEB and SECB Web sites on marketing are multifold. First, both cities now have access to methods of promoting their MICE industries virtually. In other words, their Web sites can serve as publicity networks and marketing intermediaries which offer a direct communications link to their potential customers. However, looking more closely at the market segmentations, the discussed Websites employ dissimilar market segmentations, appears to be a repository of information, whereas its Singaporean counterpart can be considered an online distribution channel. The wide range of information available to Web users, together with the provision of virtual linkages to specific reservation systems, enables the SECB Web site to capture a broader level of MICE market segments. In addition to the differences in types of available information, the SECB's design is more user-friendly in terms of logical arrangement and direct process. Its overall better physical Web environment fits itself exactly the marketing principles of designing and managing products. Unfortunately, having repeatedly made different attempts, the researchers still received connection errors in some of the HKCEB Web site's virtual links. Apparently, there are some technical problems in the corresponding Web servers.

Lau, Milne & Johnston (2005) researched how information and communication technologies (ICT), and particularly the World Wide Web (Web), can enhance the role that MICE properties play in local economic development (LED) by conducting a web audit of the present MICE websites in New Zealand and their in depth interviews with the major industry players proved that the linkages and its external relationships were the major drawbacks in the present environment of New Zealand's MICE sector and the current designs and implementation of the websites were not helping in overcoming the weaknesses.

They have argued that more attention must be paid to the links between MICE and local economic development and that it is essential to better understand the potential role that ICT, and particularly the Web, can play in facilitating these links.

Their in-depth interviews with industry players show quite clearly that industry players feel linkages and external relationships are a weak point in the current structure and organization of the New Zealand MICE sector, and that current web design and implementation are not assisting in overcoming these weaknesses as much as they could. They have used the case of Te Kahurangi (New Zealand Tourism Research Institute, 2001) to show that there is potential to begin to think of the Web as a tool to both improve MICE facility performance and local economic/community linkages.

Ha & Love (2005) discuss the design factors associated with the Convention and Visitors Bureau (CVB) websites which have become an important organization in the business of tourism. A study was conducted by requesting to fill in questionnaires by the professionals of the Members of the Meeting Professionals Association (MPI) and the Professional convention management association (PCMA) in 2002. They gathered data on the general usage of the internet and the CVB websites, its content, its attributes and demographic details

For general use of Internet and CVB Websites, over half (52%) of the respondents reported using the Internet two hours or less per day. The most frequently used Internet activities are business email (95.5%), meeting related transactions (55%), surfing for hotel site selection (37.1%); the least frequently used actions are submitting Request for Proposal (RFP) (10.4%) and surfing for personal entertainment (7.4%). The majority of respondents (78.5%) had used a CVB website in the meeting planning process in the past year. Almost half of the subjects (44.1%) used CVB websites less than once a month and 25.2% visited websites two to three times per month. The majority of respondents reported using CVB websites for planning a meeting or convention. The results found that the factors of Information quality, Ease of Use, Experience and Business processes and interactivity were very important in the opinions of the professionals for the CVB websites for its content and design.

Myung, Morrison & Taylor (2005) Meeting planners are now frequently using the Web as a resource for finding site information, while the Internet has also

become increasingly important on the supply side of the convention and exhibition business as a marketing tool. Meeting planners are increasing their productivity by utilizing the Internet.

The authors in their research discuss the present situation in the digital destination marketing and find out its overall performance and effectiveness of convention and visitors bureau (CVB) and convention / Exhibition (CE) websites of the U.S and the U.K based upon the modified balanced Score Card (BSC) approach. The results proved that the websites in both countries had its relative strengths and weaknesses even when they were able to strategize using the same.

There is the same problem in the ICT environment of MICE in Chengdu. According to the condition of Chengdu, Internet and Website technology have applied largely. In former research theories, scholars have talked about these condition many times. The Researcher should study the influence of Website technology towards the exhibition cost according to the true condition of Chengdu and the former theories.

Database Technology and MICE industry:

Edgar (2002) made an analysis of GITEX which was the most successful ICT exhibition held in the Dubai World Trade Center on the 7th of Oct, 2001. In the research of Exhibitor benefits, the author pointed out that the level of details provided by the virtual event's database, and the fact they are recorded and transferred electronically, can translate to quicker response times that focus specifically on a prospective customer's needs as expressed through his/her actions in the virtual exhibition. Exhibitors can access detailed reports at any time on a daily basis. By logging into the system with a unique code, they are provided access to a range of report possibilities. So the usage of database technology is very important in the Exhibition industry.

Myung, Morrison & Taylor (2005) proposed the concept of the Electronically Linked Convention Information Database (EL CID). In the context of convention and exhibition websites, the key inputs are the blocks of information held on a centralized database.

Through the above study theories, Database technology has already become the key tool in ICTs. According to the true condition of Chengdu, researcher should study the influence of Database technology towards the exhibition cost.

Computerized design Technology and MICE industry:

Edgar (2002) made an analysis of GITECH which was the most successful ICT exhibition held in the Dubai World Trade Center on the 7th of Oct, 2001. He focuses specifically on the Virtual GITECH 2001 event, which adopted a 3-dimensional virtual reality approach. And he also proposed customized design. A fully customized design includes all of the features of the premier line, in addition to video streaming, multiple links, images, and product data sheets. The limit is two 3-D product designs, although for additional fees, other products can be presented in this manner. One of the main selling features of customized design is that it enables the exhibitor to transfer the look of the company stand at the terrestrial event to the virtual environment.

Through Edgar's above study, computerized design technology has already become the trend of the development of high technology in future. Meanwhile, it has become the basic theory of the MICE industry. Thus researcher plans to study from the computerized design technology.

Identifiable relationships between these authors' lists of quality attributes can be seen in Table 2.3.

Table 2.3 The following are the topics of ICT which are focused on by authors from their research

Authors	Year	Topics of ICT involved
Mistilis & Dwyer	1999	Information Technology, Internet
Davidson, Alford & Seaton	2002	Website Technology, Internet Technology
Cheung & Law	2002	Website Technology
Edgar	2002	3-dimensional Computerized design Technology, Database Technology
Lau, Milne & Johnston	2005	Website Technology
Ha & Love	2005	Website Technology
Myung, Morrison & Taylor	2005	Website Technology, Database Technology

In accordance with these theories, the researcher can find that ICTs not only have a great influence on other factors, but also affects the MICE industry. ICTs are promoting many factors of MICE; what's more, they have become a new engine for the quality of the MICE industry and the efficiency of planning companies. From the table, it is ICTs' sectors of application in MICE industry. Website technology, among them, is a current technology widely studied by experts, moreover it affects a lot of factors. Chengdu is a city which is full of activity. What's more, it has a superior exhibition environment. The above scholars' theories have become the basic theories of the MICE industry in Chengdu.

As a result, the researcher will plan to study the planning costs of exhibitions that are affected by website technology, database technology and computerized design technology according to the above reasons.

2.5 Planning costs of Exhibitions

2.5.1 Planning of Exhibitions

Planning involves deciding what needs to be done, by whom and by when. It can be defined as 'the systematic arrangement of tasks to accomplish an objective' (Gido & Clements, 1999). John Wiley & Sons (1986) said that planning is the process

of setting goals and developing a strategy for achieving them. Every person and organization is involved in some form of planning. A plan helps to set and establish priorities that can assist in the scheduling of activities. The role of planning and, in particular, project planning, organization and scheduling of a MICE event (Wiley & Sons, 2002).

Wiley & Sons (2002) MICE organizations follow the traditional planning processes at both a strategic and operational level.

Strategic plan: A strategic plan identifies the importance of planning and goal setting as tools for determining where a company wants to go and how it wants to get there. It is a planning process that is directed towards setting and establishing the organization's mission and vision statement, its objectives and the process for potential achievement. A strategic plan usually is prepared for a period of three to five years and can be considered as the long-term plan for an organization.

Operational plan: An operational plan focuses on both the planning and maintenance of the work flows that make up the operational system of a business. It verifies how the financial resources, human resources, materials, and so on, are to be monitored to ensure the most effective completion of the tasks. An operational plan is the first step in the coordination of the employees, their work and work groups within an organization. Operational planning is concerned mainly with scheduling and establishing timetables and milestones for the completion of tasks and activities.

Project plan: A project involves a sequence of choices or decisions that either commit or utilize resources over a period of time. To achieve success in undertaking a project, it is important to prepare a plan. The satisfactory achievement of the plan means that everything that is required is done at the right time with efficient use of the necessary resources.

2.5.2 Definition of Cost

Waterhouse (1987) the costs of mounting an exhibition are difficult to assess in totality, there are so many different costing areas of which space rental forms a minor part. In the simplest terms the costs are divided into two areas-direct costs,

those that involve the placing of orders with other companies which will be accounted for through your company' books in the usual way, and indirect costs, those that involve the expenditure of time and effort by your own staff in preparation for, and at the exhibition. Indirect costs also include all expenses and other costs incurred by your company or its staff on work concerned with the exhibition and its promotion.

Schmidgall (2004) cost, considered as an expense, is the reduction of an asset, generally for the ultimate purpose of increasing revenues. Costs include cost of food sold, labor expense, supplies expenses, utilities expenses, marketing expenses, rent expenses, depreciation expenses, insurance expenses, and many others.

When Powers, Adams & Mills (1984) talks about computer information system development, they deemed: Costs include two types: (1). **Tangible Costs:** include the cost of new equipment, stated either in terms of purchase price or pay out over the useful life of the system. Tangible costs are often converted to operational terms. (2). **Intangible Costs:** are those that cannot be easily pinpointed in terms of money. However, intangible costs often are readily identifiable.

Deakin & Maher (1984) believed costs are represented in the accounting system by outlays of cash, promises to pay cash in the future, and the expiration of the value of an asset. These include the cost of inventory, the costs of increasing sales volume, the costs saved from closing a branch office, and the like.

According to the definitions of cost, the researcher deems that the cost is the investment to business activity except of the benefit of the company, such as time and money. This study mainly refers to economic sites.

2.5.3 Planning Costs

According to the definitions of planning and costs, planning cost is something of value, usually an amount of money and time, given up in exchange for the systematic arrangement of tasks to accomplish an objective. For exhibitions, planning cost is planning input in planning processing of an exhibition, such as advertising costss, efficiency of the plan, and statistical cost.

For the exhibition industry, the process of planning mainly includes:

1. The wide publicity before and after the exhibitions

The advertisement and publicity is the main task of exhibition companies before and after the exhibitions. These companies use many different kinds of methods to publicize the information about the exhibitions, which aims to increase the effect of exhibition.

2. Various advanced ways which can be carried out to improve the quality of exhibitions

In order to design the perfect programme of exhibition, the planning company may use a lot of ways, such as Information Technology, the new material of exhibition and so on. The exhibitions may achieve better result by using these new technologies.

3. Statistics in the process of exhibitions

The planning companies must collect the data and statistics to both publicity and the using of new technologies, such as financial affairs, amount of people, parameter of technologies and so on.

The following is the definition about the advertisement, statistics and design.

Partial areas involved in the planning cost

Advertisement: Advertising is paid non-personal communication from an identified sponsor using mass media to persuade or influence an audience (Wells, Burnett, and Moriarty, 1992). Advertising includes six elements as follows:

1. Advertising is a paid form of communication, although some forms of advertising, such as public service, use donated space and time.
2. Not only is the message paid for, but also the sponsor is identified.
3. In some cases the point of the message is simply to make consumers aware of the product or company, although most advertising tries to persuade or influence the consumer to do something.
4. The messages are conveyed through many different kinds of mass media.
5. Reaching a large audience of potential consumers
6. It is also nonpersonal, even though advertising is a form of mass communication.

Brannen (1983) mentioned the significance of advertising and sales promotion in the

market. As is usually known, the cost of commercial advertising and propagandizing.

Statistics: It is the science of designing studies, gathering data, and then classifying, summarizing, interpreting, and presenting these data to support the decisions that are needed (Sanders, 1995). Ergle (1995) said that Statistics is a set of methods used to collect, organize, analyze, and interpret data.

Design: It is the human power to conceive, plan, and realize products that serve human beings in the accomplishment of any individual or collective purpose. Pelly (2000) said that design is a compelling and strategic transformative force in providing solutions to the social, technological, economic, political and cultural issues that are impacting our world. It provides a fusion of innovation, beauty, function and responsibility that leads to an enhanced quality of life for all human kind. It is the physical manifestation of change. As a result, the design cost is of great importance to the cost of the exhibition.

Therefore, the companies must invest a lot of money during the process of advertisement, statistics and designs, and the money belongs to the planning cost of exhibitions. The researcher studied the planning cost of exhibition, i.e., the advertising costs, the statistics costs and design costs of these companies.

2.6 Relationship of the ICTs to the Planning Costs of Exhibitions

Through the above study, the researcher has acknowledged the exhibition, ICTs and planning costs. With regard to the review of many scholars and experts, we can conclude that ICTs play a vital role in the planning costs.

Davidson, Alford & Seaton (2002) and Cheung & Law (2002) have analyzed the applied facts of Website technology. Among them, Davidson, Alford & Seaton (2002) argue that ICT tools affect planning and booking events. Cheung & Law (2002) analyzed the website's power and influence of HKCEB and SECB, and then concluded that website appeal to the public and improves the marketing. It can be seen from their study that Website technology can make the costs lower.

Mistilis & Dwyer (1999) point out in their report: technology is developing

so fast, often the budgeting, completed two years before the event takes place, does not include a particular technological development subsequently reduced in cost. Sheldon (1997) also analyzed the effect of MICE toward IT needs, and showed the influence of costs and benefits with regard to the new technology.

Thus, with the rapid development of the MICE industry, how to improve the quality of exhibitions and vigorously make the exhibition costs lower is becoming a new trend. It's important for planning companies in Chengdu to make the exhibition costs lower. The different areas of ICTs will improve the relevant factors of exhibition planning. Certainly, ICTs have a great influence on exhibition cost.



CHAPTER III

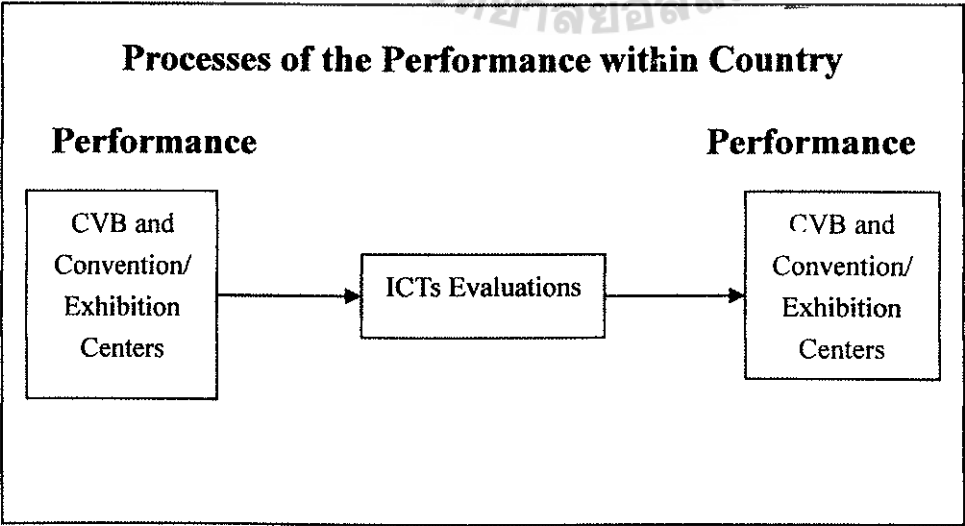
RESEARCH FRAMEWORKS

This chapter focuses on the conceptual framework, which includes the independent variables, the dependent variables and the research propositions. In addition, it talks about the operationalization of Interview for research.

3.1 Theoretical Framework

A theoretical framework is a conceptual mode which represents how one theorizes the relationship among several factors that have been identified as important to the problems. It discusses the relationship among the variables that are deemed to be integral to the dynamics of the situation being investigated (Zikmund, 2000). According to theories discussed in Chapter 2, many researchers have studied the impact of ICT to MICE. Among them, Myung, Morrison & Taylor (2005) in the report “The effectiveness of Convention and Exhibition Websites”, made a study of Website Technology, Database Technology. They researched using the Internet in Planning Meetings, especially the importance of Website Evaluations. The research is conducted in the following processes, as shown the following Figure 3.1.

Figure 3.1



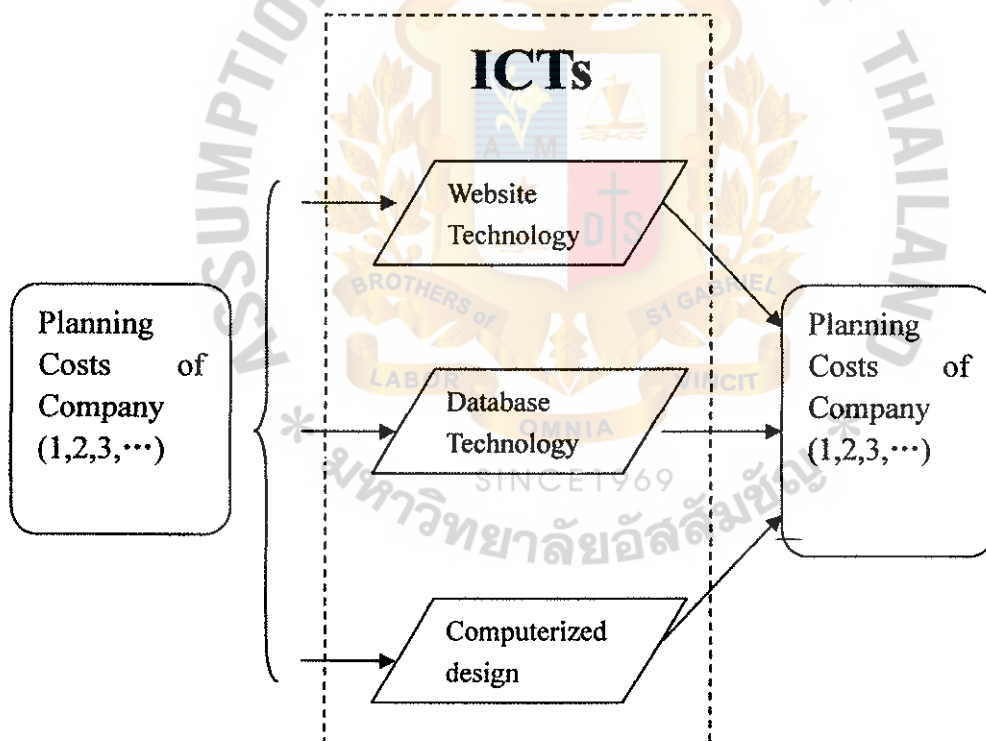
In addition, the research of Davidson, Alford & Seaton (2002), Ha & Love (2005) all adopt the methods of comparison and illustration to consider the impact of ICTs on MICE.

3.2 Conceptual Framework

Based on the studies discussed in Chapter 2 and Study methods (Myung, Morrison & Taylor, 2005), the conceptual framework for my study plan is shown in Figure 3.2.

Figure 3.2 Conceptual Framework

Study planning companies of Exhibitions for Chengdu City



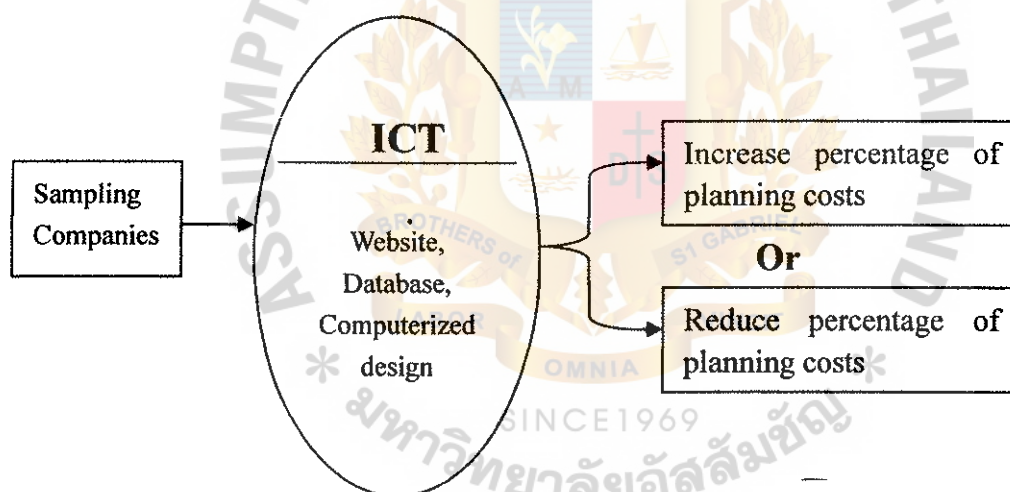
Explanation of Conceptual Framework

According to Figure 3.2, the researcher mainly studies the influence of ICTs on planning costs in Chengdu, China. Through the theories of chapter 2, the researcher can find several scholars who all study from Website technology, Database technology and computerized design technology to discuss the influence of ICTs on

MICE. As a result, the researcher also chooses these factors to study the planning costs of exhibitions. According to the cost theories, these areas of ICTs can be applied to the advertisements, statistics and designs at exhibitions.

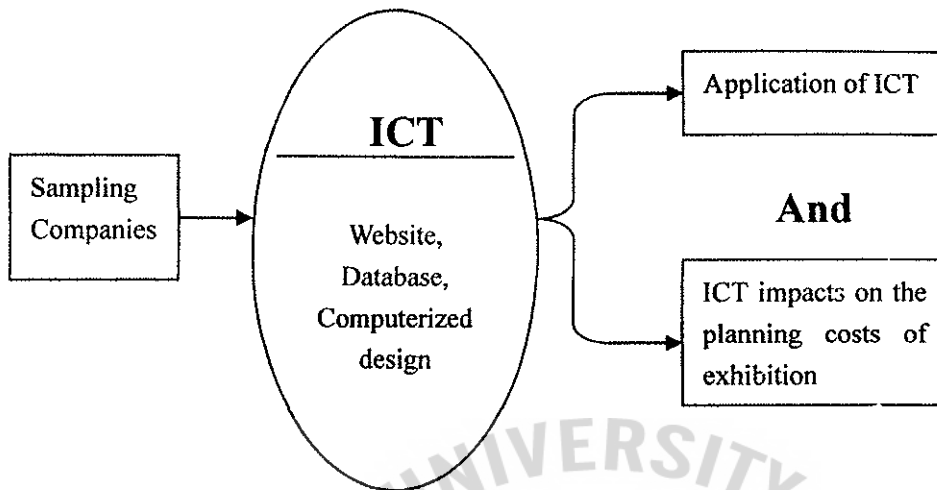
In the research methodology, to realize the reliability of the researching result, two methods are adopted: the qualitative analysis and the quantitative analysis. The nature of qualitative data makes them less reliable than qualitative data (Kirk & Miller, 1986). In the conceptual framework of this researcher, these two approaches are both involved. This study, the quantitative analysis is mainly conducting the statistics of the planning cost of the sampling companies and getting the analysis results according to the planning costs change rate. The basic structure is shown in Figure 3.3.

Figure 3.3



Qualitative research relies on researcher to see his data upon request (Kirk & Miller, 1986). In this research, the qualitative analysis is to infer the change of the planning cost influenced by the application of ICT in Chengdu exhibition via observation for the change of planning cost pre-and-post application of ICT in the same companies. The basic structure is shown as Figure 3.4.

Figure 3.4



Therefore, the researcher will realize the research purpose from the qualitative and quantitative perspective. The researcher chose some professional planning companies to research and compares the situation with and without using information and communication technologies or compares this technology with many different kinds of technologies. Finally, the researcher will know whether ICTs have affected the planning costs of exhibitions and which factors are the most important, further, if these factors to make planning costs higher or lower.

3.3 Research Propositions

For this study, ICTs include three sections. Based on the above conceptual framework, research proposition statements were formulated as follows:

Research proposition one:

Whether the application of website technology has impacted on exhibition planning costs in Chengdu or not?

Research proposition two:

Whether the application of database technology has impacted on exhibition planning costs in Chengdu or not?

Research proposition three:

Whether the application of computerized design technology has impacted on exhibition planning costs in Chengdu or not?

3.4 Operationalization of Interview

According to the needs of the study, the researcher mainly uses interviews to collect information and analysis from planning companies of exhibitions in the Chengdu case study and the answers of the respondents. According to the chapter 2 theories, researcher studies the related costs of exhibition from three sections of ICTs. In Table 3.1, the researcher interviewed initially from a website, database and computerized design involves the 12 sections.



Table 3.1

Concept	Conceptual Definition	Operational Component
Website Technology	Advertising technology of special features which can be used to display the information in the formation of a variety of electronic pages.	<ol style="list-style-type: none"> 1.advertising before exhibition 2.supply function information of exhibition 3.update information during exhibition 4.feedback of recommendation 5.operation after exhibition
Database Technology	A technology which is able to organize huge data according to a certain mathematical mode so that can be retrieved conveniently.	<ol style="list-style-type: none"> 1. Provide referring data and information. 2. Sum up the data in exhibition. 3. Analyze and Process the data in exhibition. 4. Store the data and information
Computerized design Technology	Utilize the computerized technology to actualize the ideas or schemes.	<ol style="list-style-type: none"> 1. Design the drawing advertisement. 2. Replace the hand-made design of the computerized design. 3. Synthesize intelligently the variable designing scenarios.

CHAPTER IV

RESEARCH METHODOLOGY

This chapter focuses on the research methodology of the study. The researcher mainly introduces the case study method. This chapter includes five sections. The first section discusses the research method used. The second section provides respondents and sampling procedures. The third section talks about research instruments. The fourth section is gathering procedures of information and data. The fifth section is data analysis.

4.1 Method of Research Used

In the city of Chengdu in China, It is not appropriate to use the questionnaire to collect information, since there are only 34 professional exhibition planning companies (Chengdu Enterprise Credit, 2006). Researchers use case study to collect information to study the effect of ICTs on the planning costs of exhibitions.

Yin (1994) presented: Data collection for case studies can rely on many sources of evidence. Six main sources of evidence include documentation, archival records, interviews, direct observations, participant-observation, and physical artifacts. These six sources have their comparative strengths and weaknesses.

Table 4.1 Six Sources of Evidence: Strengths and Weaknesses (Yin, 1994)

Source of Evidence	Strengths	Weaknesses
Documentation	<ul style="list-style-type: none"> • stable-can be reviewed repeatedly • unobtrusive-not created as a result of the case study • exact-contains exact names, references, and details of an event • broad coverage-long span of time, many events, and many settings 	<ul style="list-style-type: none"> • irretrievability-can be low • biased selectivity, if collection is incomplete • reporting bias-reflects (unknown) bias of author • access-may be deliberately blocked
Archival Records	<ul style="list-style-type: none"> • [Same as above for documentation] • precise and quantitative 	<ul style="list-style-type: none"> • [Same as above for documentation] • accessibility due to privacy reasons
Interviews	<ul style="list-style-type: none"> • target-focuses directly on the case study topic • insightful-provides perceived causal inferences 	<ul style="list-style-type: none"> • bias due to poorly constructed questions • response bias • inaccuracies due to poor recall • reflexivity-interviewee gives what interviewer wants to hear
Direct Observations	<ul style="list-style-type: none"> • reality-covers events in real time • contextual-covers context of event 	<ul style="list-style-type: none"> • time-consuming • selectivity-unless broad coverage • reflexivity-event may proceed differently because it is being observed • cost-hours needs by human observers
Participant Observation	<ul style="list-style-type: none"> • [Same as above for direct observations] • insightful into interpersonal behavior and motives 	<ul style="list-style-type: none"> • [Same as above for direct observations] • bias due to investigator's manipulation of events
Physical Artifacts	<ul style="list-style-type: none"> • insightful into cultural features • insightful into technical operations 	<ul style="list-style-type: none"> • selectivity • availability

According to the promotions applied in various ways by companies in Chengdu researcher regards it reliable to apply the documentation and easily to get, another one is that the documentations are stable and can be reviewed repeatedly, in

which exact-contains exact names, references, and details of an event as well. The figures in the documentation are exact and believable. Finally, the researcher aims at the target companies by collecting their related information. So the researcher will mainly use documentation, archival records and interviews. Documentation and archival reach results mainly through case studies of planning cost of professional exhibition planning companies in Chengdu. Meanwhile, the researcher interviews the middle and high-level managements of companies, who provided the first hand information and details about the companies which are undoubtful validity. Therefore, to the researcher, the main information got from interviewees is supportable and analyzed. Interviews can be collected and will be first-hand materials. The case study is preferred in examining contemporary events, but when the relevant behaviors cannot be manipulated. The case study relies on many of the same techniques as history, but it adds two sources of evidence not usually included in the historian's repertoire: direct observation and systematic interviewing (Yin, 1994).

Using the method of documentation and archival records, the researcher analyzed the instance in the facet of ICTs in some of the exhibition planning companies in Chengdu. In addition, the results of the interviews provide bases for research.

4.2 Respondents and Sampling Procedures

4.2.1 Target Population

The interview is an essential source of case study evidence because most case studies are about human affairs. These human affairs should be reported and interpreted through the eyes of specific interviewees, and well-informed respondents can provide important insights into a situation. They also can provide shortcuts to the prior history of the situation, helping the researcher to identify other relevant sources of evidence (Yin, 1994). In this study, the researcher's visitorial objects are the company as a unit. And the researcher will take a purposive sample to make a study of some of professional exhibition planning companies in Chengdu.

In this interview, it will be aimed at the managers who are in the middle or high level in the exhibition planning company. Firstly they are very familiar with the management and development of the company. Secondly, they are also familiar with the planning costs. So the researcher chooses them.

4.2.2 Purposive Sampling Procedure and Size

According to chapter 2 and chapter 3, the researcher makes the conclusion by comparing the exhibition planning companies before and after the application of information and communication technologies to study the change in the company’s planning cost. The time was controlled within 3 years. But there are many factors which contribute to the planning costs. To avoid the disturbance of exterior factors, and enhance the data and information’s validity, the researcher fixes on the sample companies from Table 4.2.

Table 4.2 (Until July 3, 2006)

Registered Capital	Amount of Companies
Less than 500,000 RMB	12
500,000 RMB	12
More than 500,000 RMB	10
Total	34

(Source: Chengdu Enterprise Credit)

As Table 4.2, shows, there are 34 professional exhibition planning companies. In these companies, as for the company’s scope and economic strength, there are 12 companies whose registered capital is below 500,000 RMB, 12 companies whose registered capital is 500,000 RMB, and 10 companies whose registered capital is above 500,000 RMB. According to the Industrial and Commercial Bureau’s static data in Chengdu, in these 34 companies, there are 2 companies whose scopes are large, and their registered capital is more than 2 million RMB.

In this study, the researcher main studies ICTs’ impact planning costs on exhibitions. But as for the professional exhibition planning companies whose scopes

are bigger or smaller, planning costs are restricted by many factors. In other words, a lot of factors are contributed to the planning costs, such as the number of employees and economic strength of the big corporation, and market channel or scope for the small company and so on. So the researcher's sample is selected from the professional exhibition planning companies whose registered capital is about 500,000 RMB. This is because these companies scope is very similar, and their economic strengths are comparable. In addition, these companies' hardware equipment and updated technology are not very different form each other and they are affected little by other factors. Interview's samples are 6 of these 12 companies whose registered capital is 500,000 RMB. And these companies' proportion in professional exhibition planning companies is showed in the Table 4.3.

Table 4.3 Rate of interview samples

The number of interview's samples	6
The proportion in planning companies of exhibition whose registered capital is 500,000 RMB	50%
The proportion in all planning companies of exhibition	17.65%

The research's Conceptual Framework is used by way of comparison, so they found the effect which has been taken by using parts of technologies of ICTs in professional planning companies in Chengdu. In the aspect of samples, the researcher should choose the company whose work experience is over 2 years. This is because the market development of these companies is apt to maturation. Until July 3, 2006, Table 4.4 has showed the names and founding time of 12 companies whose registered capital is 500,000 RMB.

Table 4.4

No.	Name	Registration Number	Founding Time
1	Chengdu Huaxia dragon exhibition Service Corporation	5101002009068	Oct 23,2001
2	Chengdu Xiexing trade corporation	5101062001858	Sep 28,2000
3	Chengdu Meige exhibition Corporation	5101062007597	Nov 5,2003
4	Chengdu Huayu exhibition planning Corporation	5101072002660	Sep 6,2000
5	Chengdu Fanttong service Corporation	5101072023302	May 18,2006
6	Sichuan Zhongli advertisement transmitting Corporation	5101092005391	Feb 23,2004
7	Chengdu Xinhe Industry Corporation	5101002007688	Jan 18,2001
8	Chengdu Lulan wedding comity Corporation	5101052016662	Nov 16,2004
9	Sichuan Tianqiao literature transmitting Corporation	5101072017386	May 18,2005
10	Chengdu Yongle appliance chain Corporation—the Filiale of Wannianchang	5101081901528	Aug 31,2004
11	Chengdu Shijixin advertising Corporation	5101092006191	Aug 19,2004
12	Chengdu Yinglai literature transmitting Corporation	5101092006949	Mar 30,2005

(Source: Translated to Chengdu Enterprise Credit)

According to the founding time of each company in Table 4.4, until July 2006, the researcher chose Chengdu Huaxia dragon exhibition Service Corporation, Chengdu Xiexing trade corporation, Chengdu Meige exhibition Corporation, Chengdu Huayu exhibition planning Corporation , Sichuan Zhongli advertisement transmitting Corporation and Chengdu Xinhe Industry Corporation as the interview's samples. In this research, the researcher primarily chooses a manager in the middle or high level from each company in these sample professional exhibition planning companies. And they at least have stayed in their companies for over 2 years, because they know the company's planning costs and the development of their companies more.

Learning from above information the researcher chooses these six companies as the target ones, the reasons as following:

1. The researcher's sample is selected from the professional exhibition planning companies whose registered capital is about 500,000 RMB. This is because these companies scope is very similar, and their economic strengths are comparable. In addition, these companies' hardware equipment and updated technology are not very different from each other and they are affected little by other factors.
2. The researcher should choose the company whose work experience is over 2 years. This is because the market development of these companies is apt to maturation.
3. In this research, the researcher primarily chooses a manager in the middle or high level from each company in these sample professional exhibition planning companies. And they at least have stayed in their companies for over 2 years, because they know the company's planning costs and the development of their companies more.

In addition, according to the data of Chengdu statistical bureau in 2005, from April to June 2005, there were in total 37 exhibitions held in Chengdu city. Among them, the six sample companies in all professional planning companies that hold market shares are listed under Table 4.5.

Table 4.5 Sampling planning companies hold market share in exhibition of Chengdu (April, 2005—June, 2005)

Professional Exhibition Company	Market share (%)
Chengdu Huaxia dragon exhibition Service Corporation	6.83
Chengdu Xiexing trade corporation	13.28
Chengdu Meige exhibition Corporation	4.19
Chengdu Huayu exhibition planning Corporation	10.21
Sichuan Zhongli advertisement transmitting Corporation	9.47
Chengdu Xinhe Industry Corporation	12.77
Total (%)	56.75

Source: Chengdu Exhibition (www.cdexpo.cn)

From Table 4.5, the six sample planning companies of the exhibition held more than 50% market share in Chengdu exhibition industry, which represents the holistic level of Chengdu.

4.3 Research Instruments

The researcher will use the combined ways of documentation, archival records and interview to study ICT's impact on planning costs of exhibitions in Chengdu. As to the collection of material information and data, the researcher will use the form of the interview to study sample companies. So the researcher can know more about the effect of ICTs on planning costs of exhibitions, and on which sections.

For the study area of ICTs, according to chapter 2, the researcher started to study in website technology, database technology, and computerized design technology. From the results of the documentation, archival records and interviews, the researcher gained the information which the thesis needs. Meanwhile, by using the comparison way, researcher could judge that the actual result is the same as the research proposition theory which has been shown in chapter 3.

As to the research's actual management, the researcher's interview was divided into 2 parts.

Part 1: General Information about the company

In this part, the researcher can understand the general situation of the sample companies and the interview's objects, including the number of employees, the position of the interview's objectives, and work experience.

Part 2: ICTs impact on Planning Costs

In this part, the researcher primarily studied the actual area of ICT, the researcher started from the explanations of respondents, to grasp first-hand information and data of the information and communication technologies impact on planning costs of exhibitions.

1. Using website technology as the starting point, he studied the effects that websites have on the planning costs of exhibitions. And the researcher will pay special attention to the effects of the company's advertising costs. The researcher believed the advertising costs should put the first place in the process of planning exhibition. At present the advertisements mainly promoted by website. For example, the National Sugar and Alcohol Trading Conference in Chengdu focuses on the website to promote

its products.

2. Using database technology as the starting point, he studied the effects that database has on the planning costs of exhibitions. And the researcher will pay special attention to the effects of the company's statistics costs. The researcher believed the statistics costs should put the important place in the process of organizing exhibition. At present, the task of statistics is mainly high efficient by database technology.

3. Using computerized design technology as the starting point, he studied the effects that computerized design has on the planning costs of exhibitions. And the researcher will pay special attention to the effects of the company's design costs. To get a satisfactory design currently many exhibition companies still greatly use computerized design technology due to its improvement on quality of advertisement. For a simple example, the companies could create best pictures with computerized design technology in tourism commodity exhibition. Additionally, the computer could show three-dimensional model pictures to make people well-know the nature of such medicine in the exhibition. Moreover, it can make more profits for the companies.

4. Based on the effects of the planning costs, which is caused by the above three ICTs, the researcher can realize other parts of ICTs that influence the planning costs. And the researcher can conclude the main parts of the planning costs of the exhibition under the influence of ICTs through the interview.

4.4 Gathering Procedures of Information

In this study, information was collected from both primary and secondary sources. To collect the primary information, the researcher mainly collected primary information by interview. There are six Exhibition planning companies in total. And the researcher plans to do the interview in August and September, 2006.

According to the actual conditions, the researcher does the interview by the following two methods:

1. The researcher does the interview by telephone.

A telephone interview is an interview conducted over the telephone. It is

makes sure that the content does not involve the business confidentiality of the companies, and the data obtained by the research will be also kept in the company and the data is only for scholarly research purpose for the researcher. When they come to an agreement, they will decide the time of telephone interview. Before the formal interview, the things need to be prepared including pen and paper and so on.

During the call:

Researcher may adjust the time during the telephone interviews more than one hour. The interviewees should understand the research before the telephone interview. Therefore, the collected data is more valid. In addition, during the interview, make sure the researcher smiles. Make sure the researcher speaks as clearly as possible and does not drink, smoke or eat during the call. Also, avoid saying things such as: "erm...." In addition, in the process of the telephone interview, the researcher should try to induce the respondents to elaborate their answers in order to get richer information concerning the questions.

Confirming the data in the last period of research:

Goetz and Le Compte (1984) claim that "collecting data for long periods provides opportunities for continual data analysis and comparison to refine constructs and to ensure the match between scientific categories and participant reality". In the process of the data analysis, the researcher will confront many new questions, for example: The staff which work in different companies has different wages, the computer equipment expense, different company's material expense and so on. According to more telephone interviews, the data which the researcher collects is more effective, more reasonable.

2. The researcher does the interview on the Internet. The researcher communicates them by serious kinds of software such as e-mail, QQ, MSN, and so on.

The secondary information was taken from several sources including journals, articles, and magazines from academic textbooks via Internet and libraries, previous research reports, documents of various organizations.

According to the information collected from interview, the researcher will put

CHAPTER V

PRESENTATION OF DATA AND CRITICAL DISCUSSION OF RESULTS

This chapter reports the results of the interviews (Appendix A) based on the procedure discussed in Chapter 4. According to the specific situation of exhibition in Chengdu, the researcher did an interview with six sampling companies from August to September in 2006. It covers a lot of data collected to compare to show the differences of the planning costs before and after the use of ICT and the data was studied case by case. According to the research propositions (from research proposition 1 to research proposition 3 in chapter 3), website technology, database technology and computerized design technology were compared to find out what are the main factors which influence advertising costs, statistics costs and design costs for exhibitions using ICT.

5.1 Description of selected companies

From the documentation, here is a list of the general professional exhibition companies available.

Company 1: Chengdu Huaxia dragon exhibition Service Corporation

Company 2: Chengdu Xiexing trade corporation

Company 3: Chengdu Meige exhibition Corporation

Company 4: Chengdu Huayu exhibition planning Corporation

Company 5: Sichuan Zhongli advertisement transmitting Corporation

Company 6: Chengdu Xinhe Industry Corporation

Table 5.1 General information of selected companies

Items	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
Number of employees (person)	3	6	4	5	3	6
Registered Capital (RMB)	500,000 RMB	500,000 RMB	500,000 RMB	500,000 RMB	500,000 RMB	500,000 RMB
Length of operation (Year)	4	6	4	5	3	6
Type of company	Private organization	Private organization	Private organization	Private organization	Private organization	Private organization
Type of exhibition	Trade exhibition & Local exhibition	Trade exhibition, Regional exhibition & Local exhibition	Trade exhibition & Local exhibition	Trade exhibition, Regional exhibition & Local exhibition	Trade exhibition & Local exhibition	Trade exhibition, Regional exhibition & Local exhibition

The researcher collects the general information of selected companies and key informant as following Table 5.2.

Table 5.2 General information of selected companies and key informants

Items	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
Number of employees (person)	3	6	4	5	3	6
Registered Capital (RMB)	500,000 RMB	500,000 RMB	500,000 RMB	500,000 RMB	500,000 RMB	500,000 RMB
Length of operation (Year)	4	6	4	5	3	6
Position of key informant	General manager	Marketing manager	General manager	Service manager	Accountant	Project manager
Nationality of key informant	Chinese	Chinese	Chinese	Chinese	Chinese	Chinese
Gender of the key informant	Male	Male	Male	Female	Female	Male
Work experience of key informant (Year)	4	3	2	3	2	3
Type of company	Private organization	Private organization	Private organization	Private organization	Private organization	Private organization
Type of exhibition	Trade exhibition & Local exhibition	Trade exhibition, Regional exhibition & Local exhibition	Trade exhibition & Local exhibition	Trade exhibition, Regional exhibition & Local exhibition	Trade exhibition & Local exhibition	Trade exhibition, Regional exhibition & Local exhibition

The researcher proves the validity of the Table 5.1 on basis of the Table 5.2 by the comparison of the result of interview and documentation, which therefore strengthens the validity of data in documentation. The following Table 5.2, it delivers respectively nine items including the number of employees, registered capital, length of operations, the position of key informants, the nationality of key informants, the gender of the key informant, the work experience of key informants, types of company, and types of exhibitions. In six professional planning exhibition companies, there are two companies where females accepted the interview and there are four companies where the male accepted the interview. The people accepting the interview are middle or high governors, who have more than two-years working experience and know the planning cost circumstances of the company very well. The registered capital of these six companies is 500,000 RMB, the properties are private organizations, and the scope of the main business is in the region of domestic and local areas which are in accordance with the demand of the research.

5.2 Content Analysis

The data of this research is mainly gathered from the interview. Respondents have their own special features and advantages now. The data is mainly collected in the form of the case, while, the data is analyzed with the way of comparing before and after using the ICT.

The data was mainly collected from website technology, database technology and computerized design technology. As to the planning costs of exhibitions, three realms of ICT belong respectively to the advertising costs, statistics costs and design costs. Through analysis and comparison of the data, they were carried on to research in the propositions.

As a conclusion from the interviews, generally the advertising costs of planning, the data statistics cost and the computerized designing costs after the application of ICT have been more or less decreased within these six companies.

1. Advertising costs:

Before ICT's application, advertising was usually by means of the telephone, posting in the newspapers and pamphlet distribution. Amongst these means, making phone calls was mainly used to contact inter-departments and inter-groups and the cost was counted according to the local standard telephone cost. The cost of advertising in the newspaper depends on the size of the pictures and the contents that are put in the newspapers. And different newspapers publishers charge different prices. Distributing the pamphlets is the easiest way and costs less. On the pamphlets are the advertising information which are intended to be distributed to potential customers and the cost of this type of advertising is affected by the quality of the paper used for the pamphlets. Besides these costs, advertising costs also include other kinds of cost, such as transportation and rental fees.

After the utilization of ICT, advertising costs also have to cover website designing costs, website domain name costs and website maintenance costs, the website secure software costs and the website hardware's costs.

2. Statistics costs:

If ICT is not applied to data collection, but is replaced by manpower, then, wages and salaries costs and materials costs should be counted in the statistics costs.

In contrast, if the database technology has been utilized in the data-collecting process, higher time efficiency and accuracy may be easily achieved. Because now the costs mainly cover the depreciation of computers, the electricity bills and expenses of computer software purchase. As for the expenses with software purchases, the companies have two options, to buy pirated or the authorized ones.

3. Design costs:

Before using ICT, the designing of exhibition advertising or the layout of the site are drawn by hand, the company's design costs mainly include the cost of materials (paper, painting material, Mark pen, etc.) and labor. Handwork is fast, but the effect is not very good.

After the employment of computerized design technology, the exhibition planning company needs to purchase computer software and painting materials.

Therefore, the cost includes the cost of software, computer depreciation, electricity, painting materials and labor. Besides, the exhibition planning company has to ask the advertising company to make an advertising board or a Nano picture from the effect chart designed. The exhibition planning company provides the pictures and messages only, and pays them.

Research proposition one:

Whether the application of website technology has impacted on exhibition planning costs in Chengdu or not?

Based on questions of the interview and the collected data, the researcher sums up the impact of website technology on exhibition companies.

Table 5.3 Website technology impact on exhibition companies interviewed.

Website		Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
Has website technology ever been used? (Yes/No)		Yes	Yes	Yes	Yes	Yes	Yes
If yes, which type of website technology was involved?		Website	Website, e-news	Advertisement online website	Website, forum	website service	Website
Application functions by website technology	Function a	Yes	No	Yes	Yes	No	Yes
	Function b	Yes	Yes	Yes	Yes	Yes	Yes
	Function c	Yes	Yes	Yes	Yes	Yes	Yes
	Function d	Yes	Yes	Yes	Yes	Yes	Yes
	Function e	Search information, drumbeating	Search information, drumbeating	Search information, contact with exhibitors	Payment online, search news	Download fodders, search	Search, drumbeating

Note:

In Table 5.3 , Function a, Function b, Function c, Function d and Function e are the options for website technology in terms of the interview questions (Appendix A),

which represent respectively the following:

Function a: To introduce departmental functions at the exhibition

Before the exhibition, the website displayed the fundamental situation for the customers to acknowledge its constitution.

Function b: To update information during the exhibition

It is able to update the news and latest information about the exhibition synchronically to make promotions when organised.

Function c: To acquire feedback and process it immediately during the exhibition

The visitors could give feedback in their evaluation to exhibitors by website immediately at the time of the exhibition.

Function d: To operate and distribute information after the exhibition

It can also deal with new advertisements related to exhibition after accomplishment of exhibition.

Function e: Others

The aim of Table 5.3 is the demonstration of how sampling companies use website technology. According to the statistics in Table 5.3, website technology mainly has four functions:

1. To update information during the exhibition
2. To acquire feedback and process it immediately during the exhibition
3. To operate and distribute information after the exhibition
4. To search.

Table 5.4 The impact of website technology on planning costs

	Advertising cost	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
Before use of website technology	Contact by telephone RMB/month	400	600	450	500	500	700
	Advertising by newspaper/ magazine: RMB/month	500	700	680	800	1000	850
	Advertising by pamphlets: RMB/month	2000	2000	3000	2500	3500	2000
	Website RMB/month	—	—	—	—	—	—
	Others (transportation, rental, etc.) RMB/month	100	200	200	250	150	200
	Total B ¥:RMB	3000	3500	4230	4050	5150	3750
After use of website technology	Contact by telephone RMB/month	300	450	350	250	300	250
	Advertising by newspaper/ magazine: RMB/month	0	0	0	0	0	300
	Advertising by pamphlets: RMB/month	100	0	400	0	0	200
	Website RMB/month	600	800	700	900	700	550
	Others (maintenance, etc.) RMB/month	100	100	150	200	200	100
	Total A ¥:RMB	1100	1350	1600	1350	1200	1400
Compare	Reduce percentage= (Total B-TotalA) /Total B * 100%	63.33 %	61.43 %	62.17 %	66.67 %	76.70 %	62.67 %

From Table 5.3, there are six companies having used website technology which have raised special functions and have influenced their exhibition. Meanwhile, according to Table 5.4, the advertising costs reduce by 61.43%~76.70% after the company used website technology. Among them, these six companies did the advertising in newspapers and pamphlets before using website technology. Company 5 pays more money for newspaper and pamphlets than the other five companies. After using website technology, the advertising costs mainly focus on the website's quality, and its change along with the website's quality change.

Consequently, the researcher can conclude that the application of website technology has a positive impact on exhibition planning costs in Chengdu, which was proved to be consistent with the research proposition.



Research proposition two:

Whether the application of database technology has impacted on exhibition planning costs in Chengdu or not?

Based on questions in the interview and the collected data, the researcher sums up database technology impacts on exhibition companies.

Table 5.5 Database technology impact on exhibition companies interviewed.

Database		Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
Has database technology ever been used? (Yes/No)		Yes	Yes	Yes	Yes	Yes	Yes
If yes, which type of database technology was involved?		Access	Access	Access, SQL sever2000	Access, SQL sever2000	Access	Access
Application functions by website technology	Function a	Yes	Yes	Yes	Yes	Yes	Yes
	Function b	Yes	Yes	Yes	Yes	Yes	Yes
	Function c	Yes	No	Yes	No	Yes	Yes
	Function d	Yes	Yes	Yes	Yes	Yes	Yes
	Function e	—	—	Exhibition Management System	—	—	—

Note:

In Table 5.5 , Function a, Function b, Function c, Function d and Function e are the options for database technology in terms of the interview questions (Appendix A), which represent the following:

Function a: To provide a reference for the planning of the exhibition

The exhibition planning companies are able to take advantage of database technology to categorise the items of exhibition for themselves.

Function b: To sum up the data from the exhibition

The companies calculated cost data related to certain projects particularly materials and technologies.

Function c: To analyze and process the exhibition data for finding the credibility of data

The companies can analyze and clarify the statistics in real time. Such as classifying and calculating the data, and arranging the data sequences.

Function d: To backup the data and information

The exhibition companies are not only capable of saving data, words and pictures but also can backup kinds of digital information for the purpose of saving labor and materials.

Function e: Others

The aim of Table 5.5 is the demonstration of how sampling companies use database technology. Among them, Access and SQL sever 2000 are two different database technologies; they have different operating ways and results. SQL sever 2000 is better than Access in terms of the security of the database while the SQL sever 2000 is more complicated than Access in terms of operation. According to the statistics of Table 5.5, database technology mainly has these functions:

1. To provide a reference for the planning of the exhibition
2. To sum up the data from the exhibition
3. To backup the data and information

Table 5.6 The impact of database technology on planning costs

	Statistics cost	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
Before use of database technology	Material RMB/month	10	30	20	25	15	20
	Wage (accountant) RMB/month	600	800	700	900	800	1000
	Software fee RMB/month	—	—	—	—	—	—
	Others (board wages, etc.) RMB/month	50	0	20	0	50	50
	Total B ¥:RMB	660	830	740	925	865	1070
After use of database technology	Material RMB/month	10	30	20	25	15	20
	Wage (accountant) RMB/month	0	0	0	0	0	0
	Software fee RMB/month	10	5	80	200	20	300
	Others (maintenance, hardware depreciation, etc.) RMB/month	200	150	200	300	200	400
	Total A ¥:RMB	220	185	300	525	235	720
Compare	Reduce percentage= (TotalB-TotalA) /Total B * 100%	66.67 %	77.71 %	59.46 %	43.24 %	72.83 %	32.71 %

From Table 5.5, there are six companies which have used database technology in the exhibition. Meanwhile, according to Table 5.6, the statistics cost reduced 32.71%~77.71% after the company used database technology. Among them, the reason why company 2 is the one with the biggest reduction of costs is that the company paid less money for software. Thus, the company decreased the costs. About

Company 6, the reason for small amount of cost reduction is that he pays the more money for the wages of laboures and software than any other companies.

Consequently, the researcher can conclude that the application of database technology has a positive impact on exhibition planning costs in Chengdu, which was proved to be consistent with the research proposition.



Research proposition three:

Whether the application of computerized design technology has impacted on exhibition planning costs in Chengdu or not?

Based on questions in the interview and collected data, the researcher sums up computerized design technology impacts on exhibition companies.

Table 5.7 Computerized design technology impact on exhibition companies interviewed

Computerized design		Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
Has computerized design technology ever been used? (Yes/No)		Yes	Yes	Yes	Yes	Yes	Yes
If yes, which type of computerized design technology was involved?		Photoshop 3D Max	CAD 3D Max	Photoshop, CAD, 3D Max, ImageReady,	Photoshop, CAD, 3D Max, MPC, Company Management System(CMS)	Photoshop CAD 3D Max	Photoshop CAD 3D Max
Application functions by computerized design technology	Function a	Yes	Yes	Yes	Yes	Yes	Yes
	Function b	Yes	Yes	Yes	Yes	Yes	Yes
	Function c	No	No	Yes	No	No	No
	Function d	—	—	Video advertisement	—	—	—

Note:

In Table 5.7, Function a, Function b, Function c and Function d are the options for computerized design technology in terms of the interview questions (Appendix A), which represent respectively the following:

Function a: To design graphical advertising

The companies have the ability to design advertising photographs acceptable and intuitional with computerized design technology.

Function b: To replace manual drawing by computerized drawing

The computerized design could take the place of manual drawing to auto-work out three-dimensional photographs effectively and immediately.

Function c: To synthesize the previous excellent planning cases into new planning scenarios

The companies are capable of extracting previous cases, classic advertising photos and digital documents to auto-synthesize new ones on the basis of exhibition demand.

Function d: Others

The aim of Table 5.7 is the demonstration of how sampling companies use computerized design technology. Among them, Photoshop is professional software which handles the pictures and a most popular technology which handles the plane figures. CAD is a kind of technology handling the engineering figures. 3D Max is the main software making three-dimensional figures nowadays. According to the statistics in Table 5.7, computerized design technology mainly has two functions:

1. To design graphical advertising
2. To replace manual drawing by computerized drawing

Table 5.8 The impact of computerized design technology on planning costs

	Design cost	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
Before use of computerized design technology	Wage RMB/month	1000	1200	1100	1500	900	1200
	Encapsulation of finished products RMB/month	\	\	\	\	\	\
	Material cost RMB/month	250	200	400	200	300	400
	Others (rental, transportation, tec.) RMB/month	100	200	200	200	300	200
	Total B ¥:RMB	1350	1600	1700	1900	1500	1800
After use of computerized design technology	Wage RMB/month	1800	2000	2400	2200	2000	2000
	Encapsulation of finished products RMB/month	320	480	520	480	400	500
	Material RMB/month	900	1000	1500	1000	800	1500
	Others (computer depreciation, electricity, etc.) RMB/month	1200	1600	2100	1800	1500	1600
	Total A ¥:RMB	4220	5080	6520	5448	4700	5600
Compare	Increase percentage= (Total A-Total B) /Total B * 100%	212.59 %	217.50 %	283.53 %	186.74 %	213.33 %	211.11 %

From Table 5.7, there are six companies which have used computerized design technology in the exhibitions. Meanwhile, according to Table 5.8, the design cost increased 186.74% ~ 283.53% after the company used computerized design

technology. Among them, the reason why company 3 is the one with the biggest increase of costs is that the company pays more money for wages and materials for the tools used in computerized design technology.

Consequently, the researcher can conclude that the application of computerized design technology has a negative impact on exhibition planning costs in Chengdu, which was proved to be consistent with the research proposition.

Although planning cost was increased with applying to computerized design technology, to get a satisfactory design currently the exhibition companies still greatly use computerized design technology due to its improvement on quality of advertisement. For a simple example, the companies are able to best pictures with computerized design technology in terms of local special characteristic in tourism commodity exhibition. Additionally, the computer could show three-dimensional model pictures to make people well-know the nature of such medicine in the exhibition. Meanwhile, it can make more profits for the companies.

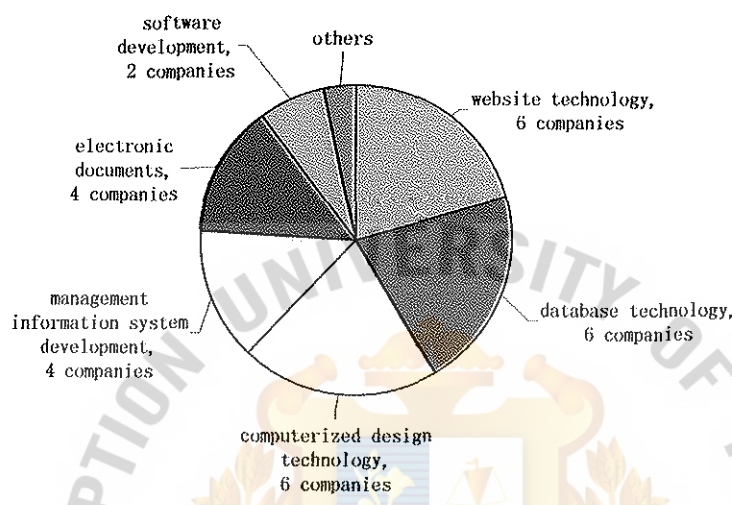
After analyzing the three research propositions respectively, according to the data collected in these six companies above, there are also other technologies influencing the planning cost in ICTs apart from website technology, database technology and computerized design technology as seen from Table 5.9.

Table 5.9 The main areas of technology influencing the planning costs in ICT through interview.

Company	the main technologies influencing the planning cost in ICT
Company1	website, database, design, software development, electronic documents, others
Company2	website, database, design, management information system development, electronic documents, others
Company3	website, database, design, management information system development, electronic documents, others
Company4	website, database, design, software development, management information system development, others
Company5	website, database, design, electronic documents, others
Company6	website, database, design, management information system development, others

According to the data collected in these six sample companies from Table 5.9, the researcher designed Figure 5.1.

Figure 5.1 The ratio figure of elements used in the area of technology in ICT influencing planning cost.



From Figure 5.1, website, database and computerized design technologies have influenced all sample companies in the interviews. The other information and communication technologies of influence in these companies include: management information system development (four companies), electronic documents technology (four companies), software development (two companies) and others. Therefore, besides the three aspects studied above, management information system development and electronic documents technology also influence the planning costs of the company.

According to Table 5.4, Table 5.6 and Table 5.8, researcher concludes Table 5.10.

Table 5.10 Comparison of the impact of three technologies on planning costs of exhibition

ICT	Reduce cost (%)	Increase cost (%)
Website technology	61.43~76.70	
Database technology	32.71~77.71	
Computerized design technology		186.74~283.53

From Table 5.4 and Table 5.6, the researcher can compare and analyze the main technologies of reduce planning costs.

Table 5.11 Comparison of two main technologies for reducing costs

Planning company	Reduce cost by Website technology (%)	Reduce cost by database technology (%)
C1: Chengdu Huaxia dragon exhibition Service Corporation	63.33	66.67
C2: Chengdu Xiexing trade corporation	61.43	77.71
C3: Chengdu Meige exhibition Corporation	62.17	59.46
C4: Chengdu Huayu exhibition planning Corporation	66.67	43.24
C5: Sichuan Zhongli advertisement transmitting Corporation	76.70	72.83
C6: Chengdu Xinhe Industry Corporation	62.67	32.71
Average reduced rate in planning costs (%) (C1+C2+C3+C4+C5+C6)/6	74.63	61.13

From Table 5.10, the researcher discovered: for planning companies of exhibition in Chengdu, computerized design technology of ICT is the most important for planning costs. Generally, comparing the cost before with after the application of computerized design technology, the planning costs of exhibitions can increase between 186.74% and 283.53%. Computerized design technology will have increased the exhibition planning costs and have the greatest influence on the costs in ICT in the long-term future.

In addition, for the other technologies with reduced costs, it is the economic way to save the most with website technology which can reduce by 74.63% on average the planning costs in Table 5.11. Website technology will have decreased the exhibition planning costs in the long-term future.



CHAPTER VI

SUMMARY FINDINGS, CONCLUSION AND RECOMMENDATIONS

This chapter is divided into four sections. The first section presents a summary of findings of the research. The second section presents the conclusion of the study. The third section discusses the recommendations, and the last section provides suggestions for further study.

6.1 Summary of Findings

6.1.1 Features of the respondents

The interview objects of this study are the six exhibition planning companies in Chengdu. The registered capital of all these six companies is about 500,000 RMB; their employee's number from 3 to 6, the average number is 5. And the style of these companies is private organization; they all have been established until now for over 2 years. The people who received the interview are all middle-level governors or general managers, and they all have over two years' work experience, so they understand the planning costs of the company very well. Among them, there are 2 females and 4 males. They enable the results of this interview to have a scientific nature according to their material experience and the financing data of the company.

6.1.2 Perceptions of the respondents towards ICT impact on planning costs of exhibition

According to the results of the interviews, all six respondents considered that many technologies of ICT impact on the planning costs of the exhibitions. From Figure 5.1, there are three sections which are applied universally in the planning costs of exhibitions in Chengdu, they are respectively website technology, database technology and computerized design technology. From Table 5.10, the researcher can judge that computerized design technology has the biggest effect on planning costs in

all technologies of ICT, but its cost has increased. Website technology and database technology reduce the planning costs of exhibition.

They unified their own experience and thought that the design of exhibitions obtained a better effect, though the planning costs increased with computerized design technology. Computerized design technology advanced the design's efficiency, and reduced the abstract feeling. And as a result of the cost increase and the effect of quality enhancement, the corresponding expense for design increased too, so the company's profit increased.

6.1.3 Summary of Research

The researcher used the comparison method to analyze these six sample companies. Research proposition one to three were analyzed by using cost comparisons in order to answer the question: have applications of website technology, database technology and computerized design technology impacted on exhibition planning costs in Chengdu? The summary of the results from the contents analysis is shown in Table 6.1 as follows:

Table 6.1 Summary of results from content analysis

Research proposition		Impact on planning costs	Result
Research Proposition 1	Whether the application of website technology has impacted on exhibition planning costs in Chengdu or not?	The advertising costs reduces 61.43% ~ 76.70% after the company used website technology.	Proved
Research Proposition 2	Whether the application of database technology has impacted on exhibition planning costs in Chengdu or not?	The statistics cost reduces 32.71%~ 77.71% after the company used database technology.	Proved
Research Proposition 3	Whether the application of computerized design technology has impacted on exhibition planning costs in Chengdu or not?	The design cost increase 186.74% ~ 283.53% after the company used computerized design technology.	Proved

The results of case study analysis as shown in Table 6.1 indicated that the more they use website technology, less the planning costs of exhibitions, that the more they use database technology, less the planning costs of exhibitions. While, the more they use computerized design technology, the greater the planning costs of exhibitions.

In addition, from Table 6.1, the researcher can know what influence had been taken in planning of exhibition, such as advertising costs, statistics costs and design

costs from the three kinds of technologies of ICT. And the researcher can see whether the different technologies of ICT increase the costs or reduce the costs, as well as the cost range variation generally.

6.2 Conclusion of Results based on the Research Objectives

This study mainly aimed at researching the present professional exhibition planning companies in Chengdu. Chengdu Enterprise Credit (July 3, 2006) shows: Chengdu has 34 professional exhibition planning companies. The factors which affect the planning costs vary according to the different scopes of companies and different setting times. So the researcher chose the 12 companies whose registered capital is 500,000 RMB. Then, parts of these 12 companies have just been set up and hence aren't fit for the needs of this study. The researcher compares and analyzes the influences of the planning costs before and after the application of ICT through the case study. Therefore, the 6 companies of these 12 companies are suitable for the needs of the study and the operation time is over two years. According to Table 2.3 of chapter 2, when the previous scholars study the effect of IT on the MICE industry, they study mainly from the three technologies. So the researcher studies from websites, databases and computerized design technology, and the researcher collects or analyzes the data from advertising costs, statistics costs and design costs.

According to the research objectives and research propositions as presented in chapter 1 and chapter 3, the data analyses and findings are elaborated as follows:

The first objective was to analyze the main areas in which ICT has an effect on the planning costs of exhibitions to compare the cost before and after the application of ICT.

Based on the data and information in the interviews, and the case study of sample companies, it can reach the findings from Figure 5.1: Firstly, in ICT, website, database and computer design technologies all have an effect on the planning costs of exhibitions, and they mainly affect the planning costs of exhibitions. Secondly, management information system development technology, electronic documents

technology, software development technology also have an effect on planning costs of exhibitions. Among them, computerized design technology is the most important for planning costs. Generally, comparing the cost before with after the application of computerized design technology, the planning costs of exhibitions can increase between 186.74% and 283.53%. With regard to lowering the cost of ICT, comparing the cost before with after the application of website technology and database technology, the planning costs of exhibitions can decrease between 61.43% and 76.70% or between 32.71% and 77.71%

The second objective was to use ICT to promote the quality of Chengdu exhibitions in advertising costs, statistics costs and designing costs.

In ICT, website technology also can reduce the advertising costs of exhibitions. According to the statistics in Table 5.2, website technology mainly has four functions:

1. To update information during the exhibition
2. To acquire feedback and process it immediately during the exhibition
3. To operate and distribute information after the exhibition
4. To Search.

Database technology also can reduce the statistics costs of exhibitions. According to the statistics in Table 5.5, database technology mainly has three functions:

1. To provide a reference for the planning of the exhibition
2. To sum up the data from the exhibition
3. To backup the data and information

In ICT, website and database technologies, the main technologies for lowering planning costs, have an active effect on advertising and statistics used by the planning companies, increase work productivity and reach better results.

In Table 5.9 and Table 5.10, computerized design technology has the greatest effect on the planning costs of exhibitions, but increases the costs. According to the statistics in Table 5.7, computerized design technology mainly has two functions:

1. To design graphical advertising
2. To replace manual drawing by computerized drawing

The researcher analyzes from the case study: its significance for the MICE industry in Chengdu of China to use ICT. The ICT has had different effects on the different parts of the MICE industry. In order to increase the quality of the exhibition and reduce the planning costs, the planning companies should widely use website technology and database technology of ICT and duly use computerized design technology.

6.3 Recommendations

The exhibition industry is one of the most important sectors in the tourism industry which brings in a lot of revenue to China. As a metropolis in the southwest of China, Chengdu is not only trying to improve the quality of exhibitions, but also reduce the planning costs. According to this study, the researcher found that the application of ICT has a great effect on planning costs. For example, it is obvious that computerized design technology affects the planning costs most, but the cost is subsequently increased. Website technology and database technology are the most effective measures to reduce the extent of planning costs.

Compared to chapter 5, the researcher gives different recommendations on different situations and proposes some solutions.

As to the application of computerized design technology, computerized design technology take first place in the design costs of planning companies. The researcher discovered that material expenses have risen sharply after using computerized design technology in Table 5.8, that thanks to that the level of technology is increasing; that the wages of designers are higher than before. Another reason to make the costs rise is almost every exhibition planning company can only complete the designs work in terms of computerized design in Chengdu, and then other advertising and decorating firms make this into a product, which adds a lot of extra costs. The researcher has recommendations for this: firstly, Chengdu is the center of political, economics and culture in Sichuan province in China, the metropolis in the southwest of china, which has many materials companies and factories. As for material expenses, they can keep

a long time contact with local material factory owners, which can cut the processing of purchasing materials and reduce the material costs. Secondly, they should focus on training in computer technology. Finally, the constitution of the self-governed product line of the company, by which way enable the strategic assignments can be achieved independently, accordingly reduces costs for other projects such as advertising and decorating firms.

For website technology, it is one of the chief aspects which affect the planning costs of exhibitions. The researcher combined the result of interviews, in Table 5.4, and found: The company should train website technicians on its own, after using website technology, which can reduce the costs of managing websites. Besides, owing to the fast development of internet technology, planning companies could download software about websites to save purchasing software costs.

For database technology, referring to the statistics analysis in table 5.0, the researcher discovered: the planning company's statistics costs drop dramatically as a result of using database technology. However, database technology costs are mainly composed of technicians' wages and software costs. According to this, the researcher suggests: Above all, the planning company should have his own professional technologists to manage the database. In addition, considering the fact of the company, they can make use of a database management system which its own technologists design and develop. Because these can not only improve work efficiency, but also decrease purchasing software costs.

It is shown from the study that, ICT affects the planning costs of Chengdu exhibitions most. But it also indicates that professional exhibition planning companies should focus on website technology and database technology in advertising and statistics. Additionally, it should make use of computerized design technology appropriately. At the same time, combined with the other technologies of ICT, it should improve the quality of exhibitions as well as reduce the exhibition costs.

6.4 Further Research

This research study was conducted to find out the relationship between Information and Communication Technology (ICT) and planning costs of exhibitions in Chengdu. The research results support the research proposition of the theory. Therefore, the researcher recommends that future researchers should analyse other uses for sectors of ICT. For instance, future researchers can make detailed research in the area of management information system development and electronic documents technology.

The researcher's study is only restricted to Chengdu's exhibition planning companies. So future researchers can select other areas. For the planning costs, besides advertising costs, statistics costs and design costs, future researchers can study about other costs of exhibitions.

In addition, exhibitions belong to the MICE industry. Therefore, future researchers can research Meetings, Incentives and Conventions from website technology, database technology and computerized design technology.

In a word, the researcher expects future research can provide a theoretical basis for the development of the exhibition industry and the MICE industry to develop tourism.

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- www.2t2.cn
- www.glwlhz.com
- www.51ky.com
- www.ly321.com
- www.cdstats.chengdu.gov.cn
- www.blog.mofcom.gov.cn
- www.translucidmedia.com
- www.answers.com
- www.thecvstore.net



APPENDIX A

(Interview Question – English)



Assumption University of Thailand

MBA-TRM

Purpose of Survey: This survey will provide the theoretical evidence for the Chengdu exhibition in China. Thank you for accepting to do this interview. Your answers will offer key information for this research and will be very helpful to the researcher, and individual answers will be kept confidential.

Researcher: Li Xiang, MBA-TRM, mainly researches MICE industry and e-commerce in tourism.

Education background:

1. From September.2005 to now: Researcher as a MBA-TRM student in Assumption University of Thailand.
2. From September.2001 to July.2005: Engineering Bachelor of Computer Science and Technology in Southwest Jiao tong University of China.

Topic of Thesis: Information and Communication Technologies (ICT): Impact on the planning costs of exhibitions — A case study of Chengdu, Sichuan Province, P.R. China

Advisor: Mrs. Jutamas Wisansing (Ph. D, New Zealand)

Annotation: This research will generally analyze the marketplace of Chengdu, China and it will not refer to corporate confidential information. So please do not worry. If any, you can refuse to answer.

Researcher Contact:

Tel: 0066-67824700

E-mail: yidaitianjiaosean01@yahoo.com

QQ: 264834318

Questions of Interview

A. General Information about the company:

1. Status of Company:
(number of employees_____)
2. Respondent:
(position_____years of employment_____)

B. Influence of ICTs:

1. Website Technology:

- (1). Does your company use website technology?_____
What kinds of website technologies are utilized by the company?_____
- (2). What kind of areas of the exhibition do you think can website technology be applied to?
 - a. To introduce departmental functions at the exhibition
 - b. To update information during the exhibition
 - c. To acquire feedback and process it immediately during the exhibition
 - d. To operate and distribute information after the exhibition
 - e. Others_____
- (3). After the adoption of website technology, what kind of effect do you think is made on the costs of corporate public relation and advertising?

2.Database Technology:

- (1). Does your company use database technology?_____
What kinds of database technologies are utilized by the company?_____
- (2). What kind of areas of the exhibition do you think can the database technology be applied to?
 - a. To provide a reference for the planning of the exhibition
 - b. To sum up the data from the exhibition
 - c. To analyze and process the exhibition data for finding the credibility of data
 - d. To backup the data and information
 - e. Others_____
- (3). After the adoption of the database technology, what kind of effect do you think is made on the costs of corporate statistics?

3. Computerized design Technology:

- (1). Does your company use computerized design technology? For example, Photoshop, 3D Max_____
What kinds of computerized design technologies are utilized by the company?_____

- (2). What areas of the exhibition do you think can the computerized design technology be applied to?
- a. To design graphical advertising
 - b. To replace manual drawing by computerized drawing
 - c. To synthesize the previous excellent planning cases into new planning scenarios.
 - d. Others _____
- (3). After the adoption of computerized design technology, what kind of effect do you think is made on the expenditure of corporate design?

4. Except for the above three factors, what other information and communication technology also can influence the planning costs of exhibitions? Among those, which technology has the most significance?

5. As an insider, what do you suggest for the improvement of Chengdu exhibitions? And how can ICT help improve it?



APPENDIX B

(Interview Question – Chinese)



Assumption University of Thailand

MBA-TRM

研究目的：促进中泰两国会展事业的交流与发展，为中国成都市展销会（展览）的发展提供理论依据。感谢贵公司接收研究者的访问，您的回答将为本次研究提供关键的信息，也是对研究者最大的支持，并且您的回答都将被列为机密。

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2001 年 9 月—2005 年 7 月：中国西南交通大学计算机科学与技术专业，工学学士；

2005 年 9 月—至今：泰国易三仓大学 (Assumption University) 旅游工商管理专业 (MBA-TRM) 管理学硕士在读。

论文题目：ICT 对中国成都市展销会（展览）策划成本的影响

导师介绍：Dr. Jutamas Wisansing，新西兰会展旅游及酒店管理专家，泰国易三仓大学旅游系系主任

备 注：本次研究是从整体上分析中国成都展销会（展览）市场，不涉及到公司商业秘密，敬请放心，如有涉及，可拒绝对答！

研究者联系方式：

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E-mail: yidaitianjiaosean01@yahoo.com

QQ: 264834318

访 问 内 容

A. 关于公司的外部信息：

1. 贵公司概况：

（人数_____）

2. 被采访者情况：

（职位_____ 工作时间_____）

B. ICT 的影响：

1. 网页技术：

(1). 贵公司采用过网页技术吗？_____ 哪些类型网页技术？_____

(2). 您认为网页技术主要可以应用在展销会（展览）策划的哪些方面呢？

- 对展销会各部门的功能进行介绍
- 会展期间，对最新的信息随时更新
- 会展期间，接收反馈意见，即时处理
- 展会结束以后，信息的操作与发布

e. 其它_____

(3). 您认为在采用网页技术前后, 对公司宣传、广告方面的成本有影响吗?

2. 数据库技术:

(1). 贵公司采用过数据库技术吗? _____ 哪些类型数据库技术? _____

(2). 您认为数据库技术主要可以应用在展销会(展览)策划的哪些方面呢?

a. 提供数据信息供展销会(展览)策划参考

b. 展销会(展览)数据的统计

c. 展销会(展览)数据的分析和处理

d. 数据、资料的备份

e. 其它_____

(3). 您认为在采用数据库技术前后, 对公司统计方面的成本有影响吗?

3. 电脑设计技术:

(1). 贵公司采用过电脑设计技术吗? 例如: photoshop, 3D MAX 等等。
哪些类型电脑设计技术? _____

(2). 您认为电脑设计技术主要可以应用在展销会(展览)策划的哪些方面呢?

a. 图形广告的设计

b. 电脑制作代替手工制作

c. 将以前的“经典策划”通过电脑自动的合成新的策划方案

d. 其它_____

(3). 您认为在采用电脑设计技术前后, 对公司设计方面的成本有影响吗?

4. 除以上三个方面之外, 您认为在电子信息技术中还有哪些方面对展销会(展览)的策划成本有影响? 其中, 什么技术影响最大?

5. 作为业内人士, 您对提高成都市展销会(展览)的质量, 有什么建议? 您觉得怎么通过 ICT 对其提高?





APPENDIX D

The Table of Exchange Rate





BANK OF CHINA (BOC) EXCHANGE RATE

Date: 2006/11/15 Renminbi (RMB)

Currency Name	Buying Rate	Cash Buying Rate	Selling Rate	Middle Rate
GBP	1485.79	1454.46	1497.72	1492.51
HKD	100.85	100.05	101.24	101.11
USD	785.12	778.94	788.27	787.15
CHF	630.08	616.8	635.14	
SGD	502.98	492.37	507.02	
SEK	110.86	108.52	111.75	
DKK	134.63	131.79	135.71	
NOK	122.03	119.45	123.01	
JPY	6.6573	6.5169	6.7108	6.6895
CAD	688.54	674.02	694.07	
AUD	600.09	587.44	604.91	
EUR	1003.99	982.82	1012.05	1008.39
MOP	98.29	97.46	98.66	
PHP	15.68	15.35	15.81	
THB	21.44	20.99	21.62	
NZD	518.39		522.56	
		0.7942	0.8545	

