A Feasibility Study for a Quick-Service Restaurant

in Chengdu, China

by

Hui Guo

A Research Paper

Submitted in Partial Fulfillment of the

Requirements for the

Master of Science Degree

in

Hospitality and Tourism

Approved: 3 Semester Credits

Brian Bergquist,   Ph.D.

The Graduate School

University of Wisconsin-Stout

June, 2006

The Graduate School
University of Wisconsin-Stout
Menomonie, WI

Author: Guo, Hui

Title: *A Feasibility Study for a Quick-Service Restaurant in Chengdu, China*

Graduate Degree/ Major: MS Hospitality and Tourism

Research Adviser: Brian Bergquist, Ph.D.

Month/Year: June, 2006

Number of Pages: 59

Style Manual Used: American Psychological Association, 5th edition

ABSTRACT

The purpose of the study is to determine the feasibility of opening a fast-food restaurant selling toufunao in Jingyang living area, Wuhou District in the city of Chengdu. Toufunao is a local food extremely popular in the city of Leshan in Sichuan Province of China, but toufunao hasn't enjoyed the same popularity as other types of Leshan food have in Chengdu. The study will first look at the literature with regard to restaurant feasibility study, and then follow the four steps proposed by the literature to conduct the feasibility study of the proposed restaurant. Market area, site selection, competition and financial analysis are made through observational research, surveys and literature review, and results of the analysis are concluded.

The Graduate School

University of Wisconsin-Stout

Menomonie, WI

Acknowledgments

I want to extend my sincere thanks to Dr. Brian Bergquist for his consent to be my thesis advisor, his time and hard work advising on my thesis progress and his valuable suggestions without which I could never complete my thesis. I also want to extend my thanks to my husand for his help with conducting surveys and formatting my thesis, and his encouragement when I was not making progress with my research. Thank my parents for their support for quitting my job in China and furthering education in US.

TABLE OF CONTENTS

List of Tables

Chapter 1 Introduction

The paper is to present a proposal for a master's thesis which seeks to conduct a feasibility study for a fast-food restaurant selling toufunao in Jinyang Road, Jinyang Living Area, Wuhou District, Chengdu, the capital city in Sichuan Province.

Toufunao is a famous food in Leshan, a town with 200,000 people located 130 km South to Chengdu, the capital city of Sichuan Province with 4, 170,000 people. It is a hot and spicy soup made out of toufu, starch, rice noodles, fried soybeans and varieties of seasoning, and it is usually eaten with niuroubing, which is like a beef sandwich. The combination of beef, bread, toufu, starch, rice noodles and varieties of seasonings provides balanced nutrition containing protein, carbohydrate and calorie. The soup and niuroubing can be prepared in large amount and saved by sitting them on holding pan, thus reducing the serving time to only around 30 seconds. The cost of the food is very low and is only around 10 cents. 30-second preparing time, balanced nutrition and low cost makes the food an ideal candidate for fast food.

Despite toufunao's popularity in Leshan, it hasn't found its presence in Chengdu, yet. However, food oiginated in Leshan has already gained a good reputation in Chengdu, and Leshan, as a result is considered one of the best cities to go for good food for people in Chengdu. Two types of food originated in Leshan, have already been well accepted by people in Chengdu. They are boboji and shaokao.

Boboji are small pieces of precooked meat and vegetables skewered on thin bamboo sticks and then soaked in a specially-made source for hours before serving. Boboji is premade and can be served upon order. When boboji is served, a bobo, a Chinese word for a big bowl, contains both the source and the skews of meat and

vegetables, will be brought to the table. Then people will eat meat and vegetables off the bamboo sticks, which makes the eating experience not only a convenient one but also full of fun. Boboji didn't enter the Chengdu market until the beginning of this century, and have developed very fast in the market since then. Leshan, as the place where the type of food originated from, is added to the names of certain boboji places as an indicator of the genuineness of the food and a brand to attract customers. The price of boboji on Chengdu market is 6.25 cents per skewer, and is mainly sold on a shabby food stands and served on shabby tables in the open air on the streets. Despite the unpleasant eating environment, people still come in groups of three or four and each group consumes several hundred skewers of meat and vegetable.

Shaokao are small pieces of uncooked meat and vegetables skewed on bamboo sticks, and then grilled on burning charcoal while a variety of spices are added onto the meat and vegetables. Unlike boboji, shaokao is not premade, but fresh meat and vegetables have to be grilled for around 5 minutes before serving. It was introduced to the city in the 1990s, thus more shaokao places can be seen on the Chengdu market than boboji. Exactly same as boboji, Leshan is also added to certain shaokao places as an indicator of the genuineness of the food and as a brand to attract customers. The price of shaokao is also 6.25 cents per skewer, and is also sold on the food stands but usually without tables, since compared with boboji, shaokao is less juicy thus is usually ordered as to-go food and is eaten while people is on their way.

Toufunao and shaokao are both considered as xiaochi, meaning food eaten between meals. However, toufunao itself and the way it is served decide that it can be eaten both as xiaochi and meals, which means potentially higher market demand.

The proposed study seeks to decide the feasibility of opening a quick-service restaurant with only toufunao and niuroubing as its menu in Jinyang Road of Wuhou District in Chengdu, the shopping area of Jinyang living areas. The following discussion will provide the reader with an understanding of the background of the study, the purpose of this study, reasons why this topic was important and methods selected for data collection and analysis.

Statement of Problem

The purpose of the study is to determine the feasibility of opening a fast food restaurant in Jinyang Road, Wuhou District, Chengdu, China. Data will be collected through observational research method and through a survey distributed to potential customers in Chengdu, China.

Research Objectives

The following questions will be answered after the completion of the research:

1) What area can be identified as the market area of the proposed restaurant?

2) What is the customer profile of the market area of the restaurant, such as population size, consumer spending patterns and average household income, etc?

3) Who are the competitors of the proposed resturant and how are they doing?

4) Which of the chosen locations is the most desirable one based on restaurant site selection guidelines?

5) Will the proposed restaurant be able to gain profit with the proposed pricing, operation hours, the estimated restaurant turn over rate, and estimated controllable and uncontrollable expenses?

Assumptions of the Study

In view of the successful entry of boboji and shaokao into Chengdu market, established popularity of toufunao in Leshan local market, and the fact that toufunao can be both xiaochi and regular meals, an assumption can be made that a fast food restaurant specializing in toufunao and niuroubing and located in jinyang road, Wuhou District, Chengdu, where 60,000 people currently live can be a success as well.

Definition of Terms

The following terms are listed and emphasized to give clarity to the reader in reading the research:

Accessibility: road capability and adequate ingress and egress of the proposed restaurant site.

Customer profile: information of the customers of the proposed restaurant regarding their ages, incomes, occupations, their reasons for visiting the restaurant, and their frequency of their visit

Demography: the statistical study of people and their characteristics.

Enclosed mall: a shopping center entirely inside a roofed structure, so that entrance to the mall is controlled by a limited number of entrances and most stores are accessible only via interior corridors

Direct competition: the food service facilities that are competing directly with a specific menu of the proposed restaurant

Generative area: concentrations that attract people and automobile activity

Indirect competition: the food service facilities that are not competing directly with a specific menu of the proposed restaurant

Market area: the geographical area from which a business draws its customers

Seat turnover rate: The number of times each restaurant seat is occupied by

different patrons during a particular meal period.

Chapter II Literature Review

National Restaurant Association divides a restaurant feasibility study into five steps, which are 1) identifying market area and gathering of demographic data such as age, sex, income, dining-out habits and other characteristics of potential customers 2) concept development, which involves using the data about the population in the market area and forming and evaluating a restaurant concept that fits the area's needs and preferences. 3) site analysis, a process to determine whether the characteristic of the site and the competitive environment around the restaurant will support such a concept. 4) competitor analysis, which involves investigating competitors in the market area through a competitor analysis worksheet. 5) financial analysis, a process of specifying revenue-generating criteria, computing estimated average-check and revenue figures, estimating operating expenses, analyzing and interpreting the financial statement, and finally, developing an implementation plan.
(http://www.restaurant.org/rusa/magArticle.cfm?ArticleID=294) The chapter will include published knowledge that correlates with the five steps excluding step two, because in this study the concept has already be firstly chosen, thus including four sections. The first section will look at literature about how a trade area or market area should be determined, literature of the demographic characteristics and consumers□ spending patterns of the market area. The second section will comprise literature about competition analysis, and the third section will include literature about site-selection analysis for a start-up restaurant, and the last section will include literature of financial analysis.

Market Area

Before any research can be done, the market area of the proposed business must be identified to go further in the exploring process. A market area is defined by Melaniphy(1992) as the area from which a unit can expect to capture approximately 85% of its business. (P56).

For an established restaurant business, it is not hard to get market area information. Surveys can be made to gather information about where the customers are from, and plots on the maps can be made to give a clear of picture of the market area or trade area. (Melaniphy, 1992). On the other hand, it is hard to predict the market area of a proposed restaurant because no information as to where the customers are from is available for a future restaurant. But this information can be collected by gathering such information from vehicle stickers, license plate, competitors' customer☐interview, mailed-back questionnaire from competitive facilities. (Melaniphy, 1992)

However, in this study, market area can be easily identified since the proposed site will be located right across the street of a big enclosed shopping mall and customers of the restaurant will be mostly customers of the shopping mall. Thus the market area of the supermarket will be the same as that of the restaurant. The shopping mall is now still under construction and all businesses are scheduled to open on Oct.1st in 2006, the national day of China. The following discussion will first identify the market area of the shopping mall and analyze the characteristics of the market area, and then describe the future development of the market area of the proposed restaurant.

A. Market Area Identification

The site of the three-floor and altogether 50,000 square meters (538,213 square feet) shopping mall is located in Jinyang living area, Wuhou District, Chengdu on the "T" corner of Jinyang Road and Jingji Road in the west of Chengdu. Jingji Road is now still under construction and will be completed in May of 2006. Jinyang Road is a six-lane road extending to the bordering Shuangliu county, and traffic flow of the road is as high as 64 motor vehicles (including cars, taxes and buses) per minute during non-peak time.(observed at 16:25 Beijing Time on Jan. 20,2006). The four-lane Jingji road to be completed in May will connect Jinyang Road and Wuhou Road. Wuhou Road extends to Wuhou High-Tech West Zone, a state-level high-tech area which host 214 companies. The nearest supermarket for residents in Jinyang living area is twenty-minute bus ride plus bus waiting time ranging from none to half an hour. However, the establishment of Bailian, the shopping mall under construction is located within walking distance of most housing projects in the living area and five-minute bus ride of a few housing projects. Thus all housing projects in Jinyang living area can be identified as market area of the shopping mall.

Jinyang living area is one living area of Wuhou District, one of five Districts in Chengdu. Jinyang livng area was first developed in the year of 1996, when the country first initiated the housing reform policy. The widely called Five Big Gardens, which refers to the five housing projects located in the northern part of Jinyang living area, namely Zhongyang Garden, Huangjia Garden, Mingliu Garden, Hongyun Garden, Jiada Garden, are the first group of housing projects built to sell in Chengdu after the implementation of housing reform in China. Following the first group of housing

projects, four projects were built in the area at the beginning of this century, and they are

Haitian Ge, Chuiti Chunxiao, Jiaoda Courtyard, and Huisuo Garden. After September of

2004, eleven new housing projects in this area started construction and is now put on the

market, which are Ruitai Jincheng, Yihe Yaju, Xinyuan Jiayuan, Shuirun Tixiang,

Jinyang Yingzuo, Jiangyuan Caiting, Lijing Huating, Huaxiang Tingyuan, Zhuyun Tianfu,

Xiejia Guitian and Xinling. There are currently 60,000 people living in Jinyang living

area, but after all of the newly-built housing projects are occupied with residents, the total

living capacity of this area within a five-minute bus ride to the shopping mall will be

100,000 people. (http://www.028028.net/shownews.asp?id=169)

However, according to Li Kui of Wanda Property Development Company,

(http://www.yipu.com.cn/info/mall/kfsw/2004-8-19%5C20040819C141718.html), a

shopping center with an areage of 3000 square meters needs no more than 10,000 people,

with an areage from 3,000-10,000 square meters(from 32,293 square feet to 107624

square feet) needs 100,000 to 300,000 people, and with an areage of more than 30,000

square meters (322,927 square feet) needs no more than 300,000 people. The shopping

mall under construction has an areage of 50,000 square meters (538213 square feet), thus

it needs more than 300,000 people. With a total population of 100,000, the market area of

the shopping mall is not able to support the shopping mall, but it is big enough to support

a fast-food restaurant sitting across the street from the shopping mall on Jinyang Road.

Thus, Jinyang living area, which is within 1.5 kilo meters' radius to the proposed

restaurant site, and currently lives around 60,000 people with a potential to grow up to

100,000 can be identified as the market area of the restaurant.

B. Population Profile, and Consumer Spending Pattern of the Market Area

After determining the market area of the restaurant, the following paragraphs will look at literature of the demographic profile and consumer spending pattern of market area.

Demographic profile of the people in the proposed site is essential in determining whether or not to open a restaurant in a proposed site. Demographic profile includes the total population in the market area, the number of employed persons, working women, income level, population age, housing and family structure. Among all the different aspects of demographic profile, total population of certain area reveals some information of the area in question, but it is the population profile, especially income distribution and age distribution, that reveals the information needed by any business person to make their decision. As Melaniphy (1992) indicated, "what matters is not the total number but rather the characteristics of those people." "A more realistic way of expressing population needs is to determine how many people you should have in the appropriate age and income categories." (P116). " In more than 30 years of evaluating and selecting locations, I have found age and income to be the most sensitive demographic elements in identifying the right opportunities."(P117). It can be found from Melaniphy (1992)'s statements that age and income distribution reveals the most how much eating-out need there is among the researched population. Thus, in this case study, the researcher will focus on the two most important aspects of demographic characteristics, age and income distribution and also discuss other related demographic features.

According to National Restaurant Association (1998),"in addition to the basic information on your potential customers gained through demographic studies, you will

need to know more about their habits of eating away from home." But how to determine

their eating-out behavior, National Restaurant Association (1998) provides the following

guidelines based on different types of restaurants and their targeted market segment.

"a. The average person (8 years and older) eats out 4.1 times a week

b. Singles and married couples with no children eat out more frequently than

families with children."

c. As income increases, consumers eat away from home more frequently

d. People 18 to 24 year old eat out more often than other age groups.

e. households with a working female eat out more frequently than those with a non-

working female."

Matching up these guidelines with demographic characteristics information

provides the clue to the consumer spending behavior.

In this study, population profile and consumer spending pattern will be collected

mainly through surveys due to the lack of such statistics from the government..

C. Future Development of Market Area

Despite the continuing growth of the area, the living infrastructure in Jinyang living

area is not desirable at all. There are only one primary school, one bank and some

independent front store businesses, but there are no middle schools, kindergartens,

hospitals, post offices and shopping center in the area. The ten roads within the living

area are either bumpy and dusty or dead-end roads. Wuhou District government

announced its plan at the end of 2004 to invest one billion yuan (125 million US dollars)

into the improvement of living infrastructure in the area, which includes building two

middle schools, four primary schools, seven kindergartens, one hospital, three public

restrooms, two garbage transferring centers, one post office, and two agricultural product

market, and building ten more roads and repairing ten old roads within the living area.

The investment is supposed to completely change the living condition of the area and

make the living conditions in this area comparable to Shuangnan living area, area living

area in Wuhou District selected as the best living area in 2004 by Chengdu city dwellers,

within three years from then.

(http://house.scol.com.cn/html/2004/09/005001001_476641.shtml)

The housing price is souring after the government's announcement. When Five Big

Garden was just put on market in 1996, the selling price was then around 800 yuan (100

dollars) per square meter, but in the year of 2004, the price of the second-hand

apartments in the area was already 1,600 yuan (200 US dollars) per square meter and

apartments of new housing projects are selling at the price of 2,400 yuan (300 US

dollars) per square meter. However, compared with Shuangnan living area, the best

selected in 2004 by Chengdu city dweller, the average housing price of Jinyang living

area was around 1,000 yuan (125 US dollars) per square meter, or 38.5% lower in 2004.

The essential reason of the low price rate of the projects is that the living infrastructure of

this area is not well developed. After the announcement of the government investment

plan, the housing price in Jinyang living area has been increasing at a higher rate than the

city average. In the last month of 2005, the price of new housing projects in this area was

3750 yuan (469 US dollars) per square meter, when in Shuangnan it was around 4500

yuan (562 US dollars). The difference was narrowed down to 750 yuan (94 US dollars)

or 17 percent, compared with 1,000 yuan (125 US dollars) and 38.5% in 2004.

(http://www.028028.net/shownews.asp?id=169)

The soaring housing price in Jinyang living area, which is identified as the primary market area of the shopping mall, the continuing addition of new projects into the living area after the end of 2004 when the government announced its investment plan and the popularity of the new projects among apartment buyers indicate that Jinyang living area is going to attract more residents with middle-to-high income level. This provides an increasing market demand for xiaochi and fast-food in this area.

Site Selection Analysis

After all the market area identification, population characteristics and consumer spending pattern, and competition analysis have been made, the next step to be made is to decide which specific place the proposed restaurant should be located, or " identify locational opportunities within the area delineated." (Melaniphy,1992, P264,) There is a wide range of literature concerning site selection, and all the literature agrees that site selection is essential to the success of any retail business, including restaurant business. Nobody emphasized the importance of site selection more than Salvaneschi (1996). He indicated in his book that

"When you see a retail business struggling and on the verge of bankruptcy, it is not because the location didn't have people with a median income of $32,000 or that the age group was 40-45 instead of 35-45. These subtleties are important, but they are relative. The real reason for low sales is that the location lacks one or more of the essential location factors." (P 108)

What criteria should be applied to evaluate a proposed site for a restaurant? Walker&Lunderg (2005)'s site selection criteria checklist is as follows,

"a. Demographics of the area: age, occupation, religion, nationality, race, family size, educational level, average income of individuals and families

b. Visibility from a major highway

c. Accessibility from a major highway

d. Number of potential customers passing by the restaurant (potential customers might be only travelers going through a community, drivers, local workers)

e. Distance from potential market

f. Desirability of surroundings" (P81)

Salvangeschi says, "When looking for the right location for your retail business, you must consider essential location factors, including: visibility, accessibility, regional exposure, high density, growth, operational convenience, safety and security, adequate parking."(P107) There is some difference between the site selection criteria checklist between Walker&Lunderg (2005) and Salvangeschi, but they complement each other with their different emphasis. In this case study, a specific check-list (Walker&Lunderg, 2005, P95) and Fast Food Site Selection Guidelines (Melaniphy, 1992, P266) will be combined and adjusted to evaluate the proposed site.

Competition analysis

Competition analysis seems to be easy but it is because of the mentality towards competition analysis that makes a lot of unsuccessful businesses. Competition analysis is not just randomly choosing the restaurants that is located to the proposed restaurant, and have a rough idea of what the competitors are like, but to carefully choose the direct and

indirect competitors, and analyze all the aspects of the restaurants ranging from exterior appearance to traffic counts.

According to Mallaniply, competitors can be further divided into direct competitors and indirect competitors. "Direct competition represents those food service facilities that are competing directly with a specific menu. For example, a steak and lobster restaurant operation is directly competitive with other steak and lobster operations, and a fast food hamburger facility is directly competitive with other fast food hamburger facility". (Melaniphy, 1992, P149) "Indirect competition represents competition that is less direct such as a steak restaurant compared with a fish restaurant, or a fast food chicken operation compared with a pizzeria."(Melaniphy, 1992, P149). Salvaneschi(1996), former vice president of McDonald's and of Kentucky Fried Chick had a different approach towards competition, but it does provides another perspective of looking at competition. He indicates that two kinds of analyses should be done when sizing up the competition in an area you have tentatively selected for your own site. First, complete the competitor's location analysis. Second, complete the competitor's strategy analysis. (P15). The location analysis can be conducted as following:

"From the outside, evaluate whether the facility is properly located and attractive. From inside, judge the layout of the store and its merchandising, pricing, personnel training and attitudes, inventory level, cleanliness, lighting, and the number of people walking out of the store without any purchased merchandise." (Salvaneschi, 1996, P15)

Competitor's strategy analysis can be done through "a straight interview with the manager or owner and with some of the employees", and "analyze the advertising of your top competitor" (Salvaneschi, 1996, P17). In this case study, observation and interview

with store employees are going to be made to collect competitors' information, but analysis of competitors' advertisements is impossible to be done due the fact that none of the competitors have any advertising. Restaurant competition analysis worksheet (NRA, 1998) will be adopted to collect competitors' data.

Pro Forma Financial Statement

After all the previous researches have been made, the final step of the feasibility study comes to the Pro Forma Financial Statement. The pro forma statement "presents the estimated projected revenues and expenses for a proposed or existing business over a certain period of time in the future." So basically this analysis answered the question "Can we earn money?", and it provides "a quantitative assessment of the sites potential." (NRA,1998, P51,). Four steps are usually utilized to develop a pro forma financial statement, which are, "1. Specify revenue-generating criteria. 2. Estimate average checks and revenues. 3. Estimate expenses. 4. Analyze and interpret the income statement." Revenue-generating criteria are the proposed prices, operating hours, customer volumes, seat turnover rate, average check rate, and etc basis operating conditions that can be used to calculate potential revenue. (NRA, 1998, P52). In the same way, the expenses can be calculated by dividing it into controllable expenses, which usually includes direct payroll cost, employee benefits, direct operating expenses, music and entertainment, marketing, utilities, administrative cost, and repairs and maintenance, and uncontrollable expenses, which usually includes rent, insurance, and taxes. With all the figure of estimated expenses and revenues, Melaniphy(1992)'s criteria can be used to determine whether a restaurant is able to gain profit or not.

"For the restaurant or fast-food operator who is not considering a 'watering hole', rent, as a percentage of sales, should usually be about 6%, although occasionally it may be as high as 8%. Total occupancy costs (rent plus maintenance and taxes) should not be more than 10 to 12%. In the initial years, the percentage of rent to sales may be between 8% and 10% because of the high cost of setting up a new business. However, by the third year, the percentage to sales should be between 5% and 6%. With rent, real estate taxes, insurance, maintenance, and any local use taxes, the total percentage to sales should not exceed 10% to 12%."

Chapter III Methodology

The nature of the research determines that both primary research and secondary research should be conducted to collect information needed for the feasibility study. Observational research method will be used to collect the information regarding competition and site selection, and a survey will be conducted to collect information concerning consumer's spending pattern. In view of the different research methods, this chapter will include information about how research subjects will be selected, what data collection instrument will be used to conduct the survey and the observational research, what procedures will be followed to collect the data, and what sample selection criteria will be applied, and how the collected data will be analyzed. Limitations of method, sample and procedures will also be addressed at the end of the discussion.

Subject Selection and Description:

Observational research method will be used to conduct the competition and site selection research. Features of the proposed sites will be evaluated by applying all the twenty-four items on the location information checklist (See appendix 1), and the one with the most ideal location feature will be chosen to be the restaurant site.

Direct competitors and indirect competitors will be identified, and observational research will be conducted in the direct competitors' restaurant, and information such as location, turnover rate, operation hours, and average check price will be collected. (See appendix 3). Surveys will be conducted to collect consumer spending pattern and market potential data. The subjects of the survey will be passers-by at the intersection near the proposed location. Passers-by will be chosen based on a five-minute interval.

Instrumentation:

Site selection criteria checklist (See appendix 1) and Restaurant Competition Analysis Worksheet (See appendix 4) will be used to collect observational research information.

A questionnaire will be used to collect consumer spending behavior information (See appendix 7). The questionnaire was created by the researcher for the sole purpose of this study. The first three questions(question 1-3) on the questionnaires are designed to find out how much money residents within the market area spend on their three meals, thus to guide the pricing strategy of the proposed restaurant. The next three questions (question 4-6) are designed to find out where people usually have their breakfast, lunch and supper respectively. The next question (question 7) is designed to find out how much money residents within the market area usually spend on xiaochi, thus to decide how big the xiaochi market is within the market area. The next two questions (question 8-9) are designed to find out the population information of residents within the market area. Question 10 is designed to find out whether there is an established reputation of toufunao among people within the market area. The next six questions (question 11-16) are designed to find out approximately how much percentage of people within the market area have ever eaten toufunao before, and whether people who have ever eaten toufunao will have a positive or negative feeling toward the food, including the price, the appearance and the taste of the food, and whether people who haven't eaten toufunao before will be interested in trying the food. The next three questions (question 17-19) are designed to find out how much percentage of people within the market area have ever eaten niuroubing before and their expected price of such type of food. Question 20 is

designed to find out whether people would like to eat the food both as xiaochi and regular meals. Question 21 is designed to find out how many times people will possibly eat the food within one week. The rest of the questions are designed to find out the percentage of people within this market from Leshan and their tendency to eat the local food from their hometown, thus to determine how big the Leshaners' market is.

Data Collection Procedures:

The location data was collected through a period of one week from January 9th to January 15th. Site visits are made to collect information such as site features, and phone calls are made to the property development company to collect information such as water, energy and natural gas supply. Observational research was done at 8:00 am, 12:00 pm and 6:00 pm from January 16th to January 22nd to collect information of traffic flow at a different time of a day.

Competitors' data was collected again through a one-week period from January 2 to January 8. Data was collected by eating in the competitors' restaurants at lunch and dinner on different days of the week.

The survey was conducted through a 7-day period from 4:00pm to 7:00pm from Feb 13th to Feb 19th. The researcher stood at the intersection area of Jinyang road and Jinyan road and completed 20 surveys each day. It took approximately 5 minutes completing the survey, thus, a five minute interval was applied before the next subject starts to do the survey in order to ensure unbiased sample selection. If the selected subject chose not to do the survey, the research immediately moved on to the next subject. The researcher explained to the selected passers-by before they were asked to do the survey that the survey would be done as partial completion of her research paper, and their

response will be kept confidential. It was also explained to the researcher that they would get the ballpoint pen as a reward for their participation in the survey.

Data Analysis

A number of statistical analyses were used in this consumer spending pattern study and market potential study. The Statistical Program for Social Sciences, version 10.0 (SPSS, 2002) was used to analyze the data. Due to the nominal nature of all the questions on the questionnaire, only descriptive statistics analysis will be made to find out the consumer spending pattern and market potential data.

Limitations

The limitation of the research includes the following two points:

a. The way that the survey is conducted, which is that the researcher gives out the survey, stand by the selected subject, and wait until the survey is completed might make the subject very conscious of themselves. Thus, they might choose the higher amount of money than they actually spend for their meals, etc, because they don't want the researcher know that they can't afford meals of higher cost.

b. Again, due to the fact that the researcher will stand by to wait until the selected subject finish their survey, asking about family income will make the subjects more aware of security issue when revealing their family income. As a result, no family income questions are asked in the questionnaire, and no such information can be collected.

Chapter IV: Results

Since three researches have been done to collect information concerning sites, competitors and consumer spending patterns, the following result analysis will be conducted in the corresponding three areas: competition analysis, site selection, and consumer spending pattern and market potential research.

Competition Analysis Result.

There are around 45 restaurants (observed on January 4th) in Jinyang living area and 21 of them are scattered around the six streets on the southern side of Jinyang road, while 24 of them concentrated on Jinyan road, the only street on the northern side of Jinyang living area, and the intersection area of Jinyang road and Jinyan. There will be no competition from restaurants located in the southern side of Jinyang road for the restaurant on the chosen site. There are altogether three up-scale restaurants, seven mid-scale and eleven fast-food restaurants in the northern side of Jinyang road. There is no direction competition for the proposed restaurant in this area because no restaurant in the area is selling toufunao. However, there are eleven in direct competitors in the area selling various types of fast food ranging from fried rice, fried rice noodles, dumplings, and so on. The competition analysis will look at a wide range of aspects such as the service, quality, interior and exterior appearance of the five restaurants which are closest to the proposed restaurant.

From the information collected (see appendix 4), it can be found that Jiuzhiding is the most competitive one among all of the five competitors. Jiuzhiding has the highest average check, but it also has the highest turn over rate and the highest daily sales. Its success can be contributed to its pleasant eating environment, which is composed of

adequate lighting and color, green plants, beautiful decorations, clean tables and floors and spacious set-up. Servers and chefs of the restaurant are all wearing uniforms and hat. The interview of seven Jingzhiding customers shows that people eat in the restaurant not because they like the food in the restaurant, but because they feel safer eating in Jingzhiding because they can see how their food is made and the atmosphere in the restaurant is also very pleasant. Four out of six customers mentioned in the interview that the food in the restaurant doesn't taste very good except fried rice noodles. (interview made on January 5th, 2006 outside the restaurant).

Compared with the Jiuzhiding, the other restaurants are either dirty or untidy, inadequately lighted or decorated, and none of the five restaurants require employees wearing hat and uniform. The research shows that the food quality of Pagaimian and Yuntun is of higher quality, but Jiuzhiding still has the highest seat turnover rate. The fact shows that with the improvement of people's living standard, restaurant hygiene and overall atmosphere are now becoming an important factor of people's decision as to where to eat. The research result shows that Jiuzhiding will be the most competitive one among all of the five competitors, and the proposed restaurant must take measures to build the overall atmosphere of the restaurant, and set up effective restaurant regulations to ensure a clean and tidy restaurant environment.

Site Selection Result

Applying all the site selection criteria on the proposed sites, the researcher found out the following facts concerning the site.

The total area of the proposed site is 21 square meters, with a 3 meter site frontage, and it is a mechanical building. There is a big area of around 200 square meters right in

front of the building of the proposed site, so it is 10 meters away from the bicycle track on the road. After inquiry of the property development company of the building and the Wuhou District Development Office, businesses of the building have no rights to use the open area for any business purpose, including putting their advertising board and setting up tables onto the open area.(Telephone calls made to Wuhou District Development Office on January 9th, and personal visit made to the housing development company on the same day).

The average afternoon traffic (observed from 12:00pm to 7:00pm observed on January 10th) on Jinyang road, which is a six-lane main road is 51 vehicles per minute, and 9 people per minute. A bus stop is around 20 meters away from where the proposed restaurant is located. Jinyang road didn't have a median in this area. However, there is no traffic lights either in the intersection of Jingji Road and Jinyang Road. It is said that a new traffic road will be built there, however the hearabout is hard to be confirmed through the traffic department of the city. For now, there are white strips in the intersection for pedestrians to cross the road, but compared with traffic lights, it is still not as convenient for pedestrians across the proposed restaurant to cross the street.

There is no posted speed limit on Jiangyang road, but the city's limitation put on vehicles driving between the second and the third ring road is 40 kilometers per hour, but due to the problem in the law enforcement, the average driving speed of vehicles on the road is around 60 kilometers per hour, making it hard for the proposed restaurant to attract consumers on the these vehicle. There is no car parking facility available in the proposed site, which is suitable for such a fast-food restaurant establishment because the

restaurant is targeted toward people with medium income, whose major transportation is still bicycles and buses.

Since it is a new building, it is well equipped with draining and sewage system, and with internet access and cable. However, there is no natural gas available in the building, which will make the energy supply either electricity or liquefied gas, and both will increase the food cost. There is also no exiting structure in the proposed site, which makes the restaurant decoration much easier.

It is still unknown what businesses will be open next door to the proposed site within the same building, and at this stage it is hard to gain information of what businesses will be open near to the proposed site within the same building. The offering price of the proposed site is 3,000 yuan (375 US dollars per month)

The same observation was also made to anther location, which is also on the northern side of Jinyang road, but around 300 meters further east towards the direction of urban Chengdu. It is located on the corner of Jinyang road and Jinyang road, a community road where around 300,000 people get in and out of their housing projects everyday. The vehicle traffic is exactly the same as that of proposed site No. 1, however, there is a big difference in terms of the passers-by traffic of the proposed site No. 2. The afternoon traffic on the northern side of Jinyanroad (from 12:00pm to 7:00pm observed on January 10th) is 32 people per minute, which is around four times that of proposed site No.1. The total area of the site is 18 square meters, which is almost the same as that of site No.1. The site frontage is around 3 meters in width and 6 meters in length. There is no open area in front of this site and it is right next to the side walk. The nearest bus stop is around 10 meters away.

However, since the site is located around 400 meters away from the shopping mall, the market area of the site can't be identified as the whole Jinyang Living area. Instead, only some of the housing projects in the northern side of Jinyang road, which includes Haitiange, Xiejiaguitian, Cuidichunxiao, Zhongyang Huayuan (project one and project two), Huangjia Huayuan, Jiaoda Huayuan and Mingliu Huayuan, where around 30,000 people lives can be identified as the market area of the proposed site No.2. A traffic light is on the intersection of the Jinyang road and Jinyan road, which make it easier for pedestrians on the other side of the road to cross the street. What's more, a college of around 1,200 students and a housing project where around 2,100 people lives are located right across the street, which increase the market area population by 3,300 people.

There is no parking area within the restaurant area, either, which is not a serious issue in the city because only a very small fraction of the residents have cars. There are no existing structures either in this site and all properties from previous ownership are removable. Drainage, water supply, electricity supply and natural gas are all available in the site, but because it is an old building, there is no cable and internet access available in the site, which makes restaurant entertainment impossible. The adjacent stores are two restaurant businesses. There are also one bank, one copy service and one bike store near the proposed site within the same building, which have no harm on the restaurant business, at all. The offering price of the site is 2500 yuan(312 US dollars).

To draw a conclusion of all the facts found out with regard to the two proposed site, it is concluded that proposed site No.2 is a better choice for the proposed restaurant. Three facts are not ideal for the proposed site No. 1. 1) The traffic flow is not high enough to support a restaurant at least for now. Even though the vehicle traffic flow is

very desirable, since the vehicle speed is very high and there is no parking facility available within or near the proposed restaurant site, it is hard for vehicle passengers and drivers to stop by the restaurant. However, the passers-by traffic is only 9 people per minute, which is not desirable at all. 2) There is no natural gas supply in the proposed site, which will increase the food cost because the cost of liquefied gas and electricity are both higher than natural gas. 3) Since it is unknown what businesses will open right next door to the proposed site, there is a risk that the nearby businesses will be a business producing odor or noise, which will deter potential consumers from eating in the proposed restaurant.

Compared with site No.1, site No.2 has a much higher traffic flow, a natural gas supply and it also has known adjacent businesses. However, because site No.2 is not located closer to the shopping mall, the market area is narrower compared to site No.1. Only 8 housing projects on the northern side of Jinyang road and one housing project and one college are the market area of the restaurant, while site No.1 has the whole Jinyang living area with around 20 housing projects, as its market area. Despite the comparatively wider market area of proposed site No.1, proposed site No.2 is the choice to be made to establish the restaurant due to the fast-food nature of the restaurant. Site No.2 is located at 34,000 people's way back home when these people get off the bus, and 30,000 people's way to work when they walk to the bus stop.(calculated by multiplying the total number of apartments whose residents will have to walk by the restaurant by three, an average household size in China). However, site No.1 is located at only 16,000 people's way back home when these people get off the bus, and 6,000 people's way to work when they walk to the bus stop. (calculated by multiplying the total number of apartments

whose residents will have to walk by the restaurant by three, an average household size in China). The comparison shows that site No.2 is located at a more convenient location where much more people have to pass by everyday. The wider market area brought by Bailian shopping mall will help to bring more customers to site No.1, but people who travel to and back from their workplace are most likely to become customers of the proposed fast-food restaurant instead of customers of the shopping mall. Thus site No.2 is chosen as the location of the proposed restaurant.

Consumer Spending Pattern and Market Potential Research Result.

As stated in the previous discussion, the survey was conducted from 4:00 pm to 7:00 pm through a 7 day period from Feb. 13th to Feb.19th , and altogether 140 questionnaires were distributed and returned. The high response rate could be contributed to the way that the survey was conducted and the incentive of ball-pointed pen as a reward for completing the questionnaire. The following paragraphs will analyze the results of the survey and seek out the implications of the results.

As discussed in the research instrumentation paragraphs, the first three questions (question 1-3) are designed to find out how much money residents in Jingyang living area usually spend on their three meals, and the result can be seen from the table 1, 2 and 3. It can be seen from these tables that 57.1 percent of respondents spend less than two yuan on their breakfast, but they are more generous on their lunch and meals because 67.1 percent of respondents spend 3-4 yuan on their lunch and 62.1 percent of them spend more than 5 yuan on their dinner. These numbers are extremely important in terms of guiding the pricing strategy of the proposed restaurant.

Table 1 How much do you usually spend on your breakfast?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under two yuan	80	57.1	57.1	57.1
	2-3	38	27.1	27.1	84.3
	3-4	13	9.3	9.3	93.6
	more than 4	9	6.4	6.4	100.0
	Total	140	100.0	100.0	

Table 2 How much do you usually spend on your lunch?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under 3	8	5.7	5.7	5.7
	3-4	94	67.1	67.1	72.9
	4-5	17	12.1	12.1	85.0
	more than 5	21	15.0	15.0	100.0
	Total	140	100.0	100.0	

Table 3 How much do you usually spend on your supper?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under 3	4	2.9	2.9	2.9
	3-4	18	12.9	12.9	15.7
	4-5	31	22.1	22.1	37.9
	more than 5	87	62.1	62.1	100.0
	Total	140	100.0	100.0	

Table 4, 5 and 6 gives out information as to where the respondents usually have their three meals. The result is a little pessimistic because the number shows that 68.6 percent of the respondents have their breakfast at their home, 56.4 percent of them have their lunch in restaurants near their workplace and 62.9 percent of them have their supper at home. As a fast-food restaurant located in the Jingyang living area, these numbers

shows no future for a fast-food restaurant, but when the total population of 60,000 people

is taken into consideration, the 24.3 percent of people having their breakfast, 14.3 percent

of people having their lunch, and 32.9 percent of people having their supper in restaurants

near their home also predicts a big market for a fast-food restaurant.

Table 4 Where do you usually have your breakfast during the work days?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	home	96	68.6	68.6	68.6
	restaurant near home	34	24.3	24.3	92.9
	restaurant near workplace	10	7.1	7.1	100.0
	Total	140	100.0	100.0	

Table 5 Where do you usually have your lunch during the work days?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	home	21	15.0	15.0	15.0
	home to workplace	20	14.3	14.3	29.3
	restaurant near home	20	14.3	14.3	43.6
	restaurant near workplace	79	56.4	56.4	100.0
	Total	140	100.0	100.0	

Table 6 Where do you usually have your supper during the work days?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	home	88	62.9	62.9	62.9
	near home	46	32.9	32.9	95.7
	near workplace	6	4.3	4.3	100.0
	Total	140	100.0	100.0	

Since toufunao can be eaten both as xiaochi and meal, question 7 is designed to find out how big the xiaochi market is within the market area. Table 7 indicates that around half of the respondents spend less than one yuan on xiaochi, while only17.9 percent,15.7 percent, 8.6 percent of the respondents spend 2-3yuan, 3-4 yuan and 4-5 yuan respectively on xiaochi, and only 5 percent of the respondents spend more than 5 yuan on xiaochi. These numbers show that toufunao can't enjoy good sales as xiaochi during non-meal hours because people in this area don't spend much on xiaochi.

Tabel 7 How much do you usually pay for Xiaochi?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under 1	74	52.9	52.9	52.9
	2-3	25	17.9	17.9	70.7
	3-4	22	15.7	15.7	86.4
	4-5	12	8.6	8.6	95.0
	more than 5	7	5.0	5.0	100.0
	Total	140	100.0	100.0	

Table 8 and 9 are designed to find out the population characteristics of the respondents. Surprisingly, Table 8 shows that the total percentage of people between 23 to 40 accounts for 87.1 percent of all respondents. This can be partially caused by a sampling bias because aged people are more conservative in their attitude toward surveys and more unwilling to take the surveys. What's more, the researcher also conscientiously avoided young kids because their participation into the survey should be allowed by their parents according to IRB policy of UW-Stout, which in this study is completely impossible. However, the extremely high percent of people aged between 23-40 can also

be explained by the fact that housing price and rental price of this area was relatively low compared to other areas of the city, thus newly college graduates are likely to rent houses in this area, and young and middle-aged couples with medium income are likely to buy houses in the area. So, excluding the research error caused by sampling bias, it can also be concluded that majority of the people living in the area aged between 23 and 40. Tables 9 shows that there are relatively more males than females among the respondents.

Table 8 How old are you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under 18	1	.7	.7	.7
	18-23	1	.7	.7	1.4
	23-30	80	57.1	57.1	58.6
	30-40	42	30.0	30.0	88.6
	40-50	12	8.6	8.6	97.1
	50-60	3	2.1	2.1	99.3
	More than 60	1	.7	.7	100.0
	Total	140	100.0	100.0	

Table 9 What is your sexuality?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	76	54.3	54.3	54.3
	female	64	45.7	45.7	100.0
	Total	140	100.0	100.0	

Table 10 shows that 34.3 percent of people have already heard about toufunao before, which means one out of three people has heard about toufunao in the area. This is also an unexpected high percentage, which is an indicator of an established name and

positive word-of-mouth effect. It can be seen from Table 11 that among all the

respondents, 78.6 percent of them don't know that there is a difference between the two

types of toufunao, and among the respondents who have ever heard about toufunao,

which means that the promotion and advertising before the start-up of the restaurant

should distinguish leshan toufunao from the locally known toufunao.

Table 10 Have you heard about Leshan Niuhua toufunao?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	48	34.3	34.3	34.3
	no	92	65.7	65.7	100.0
	Total	140	100.0	100.0	

Table 11 Do you know that there is a difference between Leshan toufunao and Chengdu toufunao?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	30	21.4	62.5	62.5
	no	18	12.9	37.5	100.0
	Total	48	34.3	100.0	
Missing		92	65.7		
Total		140	100.0		

Table 12 shows that 22.9 percent of the total respondents have ever eaten toufunao.

Table 13 shows that among those who haven't eaten toufunao, 88 percent of them says

that they would like to try the food if there is such a restaurant selling such food near

their home. The result implies that the restaurant will attract a big group of customers

with a trial spirit, and as long as the restaurant provides high-quality food, good service

and pleasant atmosphere at a reasonable price, it will be able to have them returned.

Table 12 Have you ever eaten Leshan Niuhua toufunao?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	32	22.9	22.9	22.9
	no	108	77.1	77.1	100.0
	Total	140	100.0	100.0	

Table 13 If you haven't eaten Leshan Niuhua toufunao, but there is one selling such type of food near your home, will you go and try how it is like?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	95	67.9	88.0	88.0
	no	13	9.3	12.0	100.0
	Total	108	77.1	100.0	
Missing		32	22.9		
Total		140	100.0		

Table 14, 15 presents a very optimistic picture for the toufunao restaurant, since of all the 32 people who have ever eaten Leshan toufunao before, 91 percent of them says that they like the food very much, and 97 percent of them think that 2 yuan per middle bowl is an adequate price for the food. The researcher is concerned that people in Chengdu might not like the dark and dirty look of toufunao, but surprisingly enough, only 3 percent of them indicate that he doesn't like the look of Leshan toufunao, but all of the others says the look of the food is just fine.

Table 14 If you have eaten toufunao, how do you like its taste? If you haven't eaten toufunao, skip this item.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	good	29	20.7	90.6	90.6
	not good	3	2.1	9.4	100.0

Total	32	22.9	100.0	
Missing		108	77.1	
Total		140	100.0	

Table 15 If you have eaten toufunao, what do you think of the price 2 yuan/middle bowl? If you haven't eaten toufunao, skip this item.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	fine	31	22.1	96.9	96.9
	expensive	1	.7	3.1	100.0
	Total	32	22.9	100.0	
Missing		108	77.1		
Total		140	100.0		

Table 16 If you have eaten toufunao, how do you like its appearance? If you haven't eaten toufunao, skip this item.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	terrible	1	.7	3.0	3.0
	fine	32	22.9	97.0	100.0
	Total	33	23.6	100.0	
Missing		107	76.4		
Total		140	100.0		

Table 17, 18 and 19 are designed to find information about niuroubing. Just as

toufunao, among all of the 140 respondents, only 21.4 percent of them have ever eaten

niuroubing. However, surprisingly not even one person indicates that he or she doesn't

like niuroubing, and all of these people who have ever eaten niuroubing indicate that 2

yuan per niuroubing is an adequate price for them.

Table 17 Have you eaten niuroubing?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	30	21.4	21.4	21.4
	no	110	78.6	78.6	100.0
	Total	140	100.0	100.0	

Table 18 If you have eaten niuroubing, do you like niuroubing? If you haven't eaten niuroubing, please skip this item.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	31	22.1	100.0	100.0
Missing		109	77.9		
Total		140	100.0		

Table 19 If you have eaten niuroubing, how do you think of the price of 2 yuan/one niuroubing? If you haven't eaten niuroubing, please skip this item.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	fine	31	22.1	100.0	100.0
Missing		109	77.9		
Total		140	100.0		

Due to the fact that the toufunao is basically a soup and traditionally soup can't be consumed as a meal in Chinese culture, it is assumed that people won't like to consume toufunao and niuroubing as a meal. However, Table 20 shows that even though 20 percent of those who have eaten both the food are unlikely to consume them as a meal, a majority of 80 percent says that they can take the combination as a meal. This also presents an optimistic future for the development of the proposed restaurant since one middle bowl of toufunao and one niuroubing cost around 4 yuan, which exactly falls within the price expectation of potential customers' lunch and dinner expenses.

Table 20 If you have eaten both toufunao and niuroubing, do you think that the combination will make a meal?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	12	8.6	80.0	80.0
	no	3	2.1	20.0	100.0
	Total	15	10.7	100.0	
Missing		125	89.3		
Total		140	100.0		

Table 21 shows that of the 29 people who likes toufunao, 75.9 percent of them will

like to eat the food up to three times per week and 10.3 percent of them will like to eat

the food more than three times per week. This predicates a very high percentage of

frequent guests if the restaurant provides what the customers want.

Table 21 If you like toufunao, how many times do you think that you will like to eat per week?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	One time	4	2.9	13.8	13.8
	Up to three times	22	15.7	75.9	89.7
	more than three times	3	2.1	10.3	100.0
	Total	29	20.7	100.0	
Missing		111	79.3		
Total		140	100.0		

Table 22 shows that 7.9 percent of the total respondents are from Leshan, and all of

these people from Leshan love Leshan toufunao and all of them indicate the desire to eat

tufunao if there is one near their home. Multiplying the 7.9 percent with the total

population of 60,000 currently living in this area, this makes a total of 4830 people from

Leshan, who are most likely to become frequent visitors to the restaurant.

Table 22 Are you from Leshan?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	11	7.9	7.9	7.9
	No	129	92.1	92.1	100.0
	Total	140	100.0	100.0	

Table 23 If you are from Leshan, do you like doufunao from Leshan? If you are not from Leshan, please skip this item.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	11	7.9	100.0	100.0
Missing		129	92.1		
Total		140	100.0		

Table 24 If you like toufunao from leshan, and there is such a restaurant selling such a type of food near your home, will you go and eat in the restaurant a lot? If you don't like toufunao, please skip this item.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	11	7.9	100.0	100.0
Missing		129	92.1		
Total		140	100.0		

To conclude, the result of the survey answered all of the unknown questions and

eliminated all of the uncertainties with regard to opening this new restaurant within the

proposed market area. The survey result shows that customers will be satisfied with the

proposed pricing of the food, and there is an established reputation of toufunao within the

market area. The survey result also shows that even though most of people living within

the market area still have their three meals at their home, however, given the large

population base of the market area, there will still be a large number of potential customers. What's more, the Leshaners' strong desire to eat the food, and the non-Leshaners' willingness to try the food, present a very optimistic picture for the development of the planned restaurant.

Financial analysis result.

Based on the survey result, 2 yuan per bowl and 2 yuan per niuroubing is an adequate price for all people who have ever eaten this type of food. Since some people might not eat both niuroubing and toufunao, it is assumed that 3 yuan as an average food check rate for this proposed restaurant and 1.5 yuan as an average beverage check rate. The restaurant operation hour will be from 10:00 am-12:00 pm and the turnover rate of weekdays is assumed to be 4 during the 10:00am-2:00pm lunch hour and 6 during the 4:00pm-8:00pm dinner hour based on the observation of the competitors' restaurant and the quick service nature of the restaurant, and the turnover rate of weekends is assumed to be 3 during the 10:00am-2:00pm lunch hour and 4 during the 4:00pm-8:00pm dinner hour. The beverage turnover rate is assumed to be one fourth of the food turnover rate accordingly, which assumes that one out of four people dining in the restaurant order drinks. See appendix 5 for the calculation of monthly lunch and dinner revenues.

Cost of food sales is based on a 30% percentage out of total sales, and cost of beverage sales is based on a 20% percentage out of total sales. The controllable cost is divided into employee payroll, employee food, advertising and promotion, and utilities. The only fixed expense of the proposed restaurant is the monthly rent of 3,000 yuan. Calculated by subtracting the cost of sales, controllable expenses and fixed expenses from the total revenue, the earnings before interest, appreciation and tax is 12,816 yuan.

See appendix 6 for the monthly Pro Forma Financial Statement.

Chapter V Discussion

The research paper analyzed the literature concerning restaurant feasibility study,

and then based on the guidance of the literature carefully analyzed the different aspects

of starting up a restaurant business, which are market area, consumer spending pattern,

competition analysis, site evaluation and finally financial statement. The research came

to the following conclusions in terms of the five research objectives set up at the

beginning of the research paper.

1) The market area of the restaurant is identified as the Jingyang living area, which

is identical to the market area of a new shopping mall scheduled to open on Oct. 1st,

2004. The market area features a total of 20 housing projects, a current population of

60,000 and a designed population of 100,000.

2) The survey result shows some aspects of the customer profile of the market area

of the restaurant, but some key features of customer profile such as household income

information can't be obtained from this survey due to the privacy protection policy of

University of Wisconsin-Stout. They can't be obtained from other sources due to the lack

of public access to government statistics in China. However, the survey does show some

other very important aspects of customer profile. For example, it shows that people living

in this area usually spend 2 yuan on their breakfast, 3-4 yuan on their lunch and 5 yuan

on their dinner. It also shows that they usually eat their three meals at their homes instead

of restaurants. And also, as a xiaochi, light meals eaten between meals, toufunao doesn't

have good market potential because people living in this area don't spend much on

xiaochi. The survey result also clearly indicated that people aged from 23 to 40 accounts

for a high percentage of the population, which serves as a guideline to issues such as

restaurant decoration style, music and uniform styles. Other results from the survey such as the high percentage of people who wants to try the food, and high percentage of people who desire to come to eat frequently presents a very optimistic picture for the development of the restaurant.

3) The observational research of all of the 45 restaurants located within the market area shows that Jiuzhiding will be the most competitive one among all of the five competitors because of its medium pricing, pleasant eating environment and cleanness. Thought Jiuzhiding doesn't have the same menu as the proposed restaurant, as an indirect competitor, it poses a huge threat to the future success of proposed restaurant. It can also be learnt from the successful operation of the restaurant that with the improvement of people's living standard, they pay more attention to overall eating environment, composing of the color, decoration, music, inside and outside cleanness of the restaurant, so the proposed restaurant must take measures to build the overall atmosphere of the restaurant.

4) The observational research of two potential sites shows that Site No.2, which is located on the northern side of Jinyang road and on the corner of Jinyang road and Jinyang road, a community road where around 300,000 people get in and out of their housing projects everyday. The site features a traffic light, a lower vehicle driving speed, a higher pedestrian traffic volume per minute and a established shopping area. Thus, Site No.2 was chosen over Site. No1, which is located right across the street from the soon-to-open shopping mall, but doesn't have established gas supply and established traffic lights, and has a higher vehicle driving speed and lower pedestrian traffic volume compared with Site No.1.

5) A pro forma financial analysis was conducted to determine the financial future of the restaurant. Based on a calculation of 3 yuan as an average check rate for food and 1.5 yuan as an average check rate for beverage, restaurant operation hours from 10:00qm-12:00pm, weekday lunch turn over rate of 4 and dinner turnover rate of 6, weekend lunch turn over rate of 3 and dinner turn over rate of 6, it is estimated that the earnings before interest, appreciation and tax will be 12,816 yuan per month.

Limitations

a. Since there is no established restaurant feasibility study in Jinyang living area, Wuhou District, Chengdu, it is not possible to compare and contrast the research results of this research and previous research. Also it is not practical for the researcher to have access to other restaurant feasibility study material because such materials are generally confidential, thus the survey procedures and instruments are both designed by the researcher with the guidance of teaching materials with regard to restaurant feasibility study.

b. The extreme lack public access of statistical information from Chinese government makes it impossible to get second-hand information concerning population characteristics such as household income, personal occupation etc. in Jingyang living area, but the sensitivity of such information also makes it impossible for the research to gather such information from the survey. Thus information such as household income can only be estimated, and it is impossible to gather occupation information of the residents.

Recommendations

The following recommendations are made based on the limitations of the research.

a. Telephone interview should be made to avoid the direct contact with respondents as the researcher has done in the survey. When the researcher and the respondent are not seeing each other, there is no personal feelings involved in the research and the respondent will feel less pressure to tell the true information concerning their consumption habit such as how much they spend on each meal.

b. The literature review should include a similar restaurant feasibility study so that the researcher is able to compare and contrast the research instruments, procedures, and results, etc.

c. Reliable second-hand information concerning population characteristics should be obtained from non-governmental sources such as consultation companies in order to ensure the accuracy of the research result if it is financially feasible.

References

Andrews, L. (2003). *Buying & selling a restaurant business: for maximum profit*

Ocala, Fl: Atlantic Pub. Group

Arduser, L.(2003). *Restaurant site location: finding, negotiating & securing the*

best food service site for maximum profit   Ocala, Fl: Atlantic Pub. Group

Brown, D. (2003). *The restaurant manager's handbook: how to set up, operate,*

and manage a financially successful food service operation   Ocala, FL:

Atlantic Pub. Group

Eppli, M. J. & John D. B1994.The evolution of shopping center research: a review and

analysis. *The Journal of Real Estate Research.* 9.1:5-32

Fullen, S.(2005). *Opening a restaurant or other food business starter kit : how to*

prepare a restaurant business plan & feasibility study   Ocala, Fl: Atlantic

Pub. Group

Katsigris, C.(2006). *Design and equipment for restaurants and foodservice: a*

management vie.   Hoboken, NJ : John Wiley

Melaniphy (1992). *Restaurant &fast food site selection*   New York, NY: John

Wiley & Sons, Inc.

National Restaurant Association(1998). *Conducting a feasibility study for a new*

restaurant   Washington DC: National Restaurant Association

Restaurant   Market   Analysis   (2003).   Retrieved   January   27th,   2006,   from

http://www.uwex.edu

Salvaneschi, L. (1996). *Location, location, location: how to select the best site for*

your business. Grants Pass, OR: The Oasis Press

Studying Feasibility Studies.(1998). Retrieved December 26, 2005, from

http://www.restaurant.org

Sweeney, K.(2004). *The new restaurant entrepreneur: an inside look at*

restaurant deal-making and other tales from the culinary trenches

Chicago, IL : Dearborn Trade Pub.

Walker, John R.(2005). *The restaurant : from concept to operation* Hoboken,

NJ : John Wiley

购物中心开发理念探.(2004). Retrieved January 4, 2006, from http://www.yipu.com.cn

政府砸进 7 亿，五大花园"换心洗肺"(2004). Retrieved January 5, 2006, from

http://house.scol.com.cn

10 亿医治五大花园, 揭秘武侯区晋阳居住区控制性详规 (2004). Retrieved January 5,

2006, from http://www.028028.net/

观新武侯巨变,领夜财富扩张.(2005). Retrieved on January 5th, 2006, from

http://cd.house.sina.com.cn

Appendix 1: site selection criteria checklist

1. dimensions and total square footage of site :
2. linear footage of site frontages:
3. Distance and direction from nearest major streets:
4. Average afternoon traffic on each frontage street:
5. Number of moving traffic lanes past location, widths, medians:
6. Traffic controls affecting the location:
7. Speed limits of adjacent streets:
8. Visibility from a major highway:
9. Accessibility:
10. On-street parking:
11. topography as regards necessary grading, slope characteristics, streams, brooks, ditches, flood conditions:
12. Drainage:
13. existing structures:
14. type of energy available:
15. sanitary sewer availability:
16. zoning classification; restrictions on hours of operation:
17. use and zoning of adjacent property:
18. building limitations:
19. character of surrounding area within one mile:
20. Populations and income characteristics:
21. agencies requiring plan approval
22. Signage (pole-maximum area, height allowed, setback, building-area allowed, remote entrance signs, area allowed, height allowed):
23. Construction codes:
24. Offering price of property:

Adapted from Walker&Lunderg, 2005, P95 and Melaniphy, 1992, P266

Appendix 2: site selection criteria checklist-----Site No.1

1. dimensions and total square footage of site : *21 square meters*
2. linear footage of site frontages: *3 meter*
3. Distance and direction from nearest major streets: *10 meters*
4. Average afternoon traffic on each frontage street: *60 vehicles/min*
5. Number of moving traffic lanes past location, widths, medians: *6 lane main road, 30 meters, no median*
6. Traffic controls affecting the location: *no traffic lights*
7. Speed limits of adjacent streets: *40 kilometers/hour in the area. However, due to the poor law enforcement, vehicles usually travel at a higher speed up to 60 kilometers/per hour.*
8. Visibility from a major highway: *visible from South, West and East*
9. Accessibility: *Not easily accessible for pedestrians on the opposite side of the restaurant because there are no traffic lights but only white strips near the site. The restaurant is also not easily accessible for pedestrians on the restaurant side because it is 10 meters away from the side walk.*
10. On-street parking: *no on-street parking*
11. topography as regards necessary grading, slope characteristics, streams, brooks, ditches, flood conditions: *flat area*
12. Drainage: *good drainage system*
13. existing structures: *no existing structures*
14. type of energy available: *electricity, no natural gas*
15. sanitary sewer availability: *available*
16. zoning classification; restrictions on hours of operation: *no zoning classification; no restrictions on hours of operation*
17. use and zoning of adjacent property: *unknown*
18. building limitations: *none*
19. character of surrounding area within one mile: *retail areas, living areas*
20. Populations and income characteristics: *60,000 people within the market area. Average household income is estimated to be 20,000 yuan per month*
21. agencies requiring plan approval
    Industrial and Commercial Bureau of Wuhou District
    Taxation Bureau of Wuhou District
    Health Bureau of Wuhou District
22. Signage (pole-maximum area, height allowed, setback, building-area allowed, remote entrance signs, area allowed, height allowed): *Only door sign is allowed*
23. Construction codes: *cement building*
24. Offering price of property: *3000 yuan per month*

Adapted from Walker&Lunderg, 2005, P95 and Melaniphy, 1992, P266

Appendix 3: site selection criteria checklist-----Site No.2

1. dimensions and total square footage of site : *18 square meters*
2. linear footage of site frontages: *3 meter*
3. Distance and direction from nearest major streets: *0 meters*
4. Average afternoon traffic on each frontage street: *60 vehicles/min*
5. Number of moving traffic lanes past location, widths, medians: *6 lane main road, 30 meters, no median*
6. Traffic controls affecting the location: *traffic lights*
7. Speed limits of adjacent streets: *40 kilometers/hour in the area. However, due to the poor law enforcement, vehicles usually travel at a higher speed up to 60 kilometers/per hour.*
8. Visibility from a major highway: *visible from South, West and East*
9. Accessibility: *easily accessible for pedestrians on the opposite side of the restaurant because there are traffic lights. The restaurant is also easily accessible for pedestrians on the restaurant side because it is right beside the sidewalk*
10. On-street parking: *no on-street parking*
11. topography as regards necessary grading, slope characteristics, streams, brooks, ditches, flood conditions: *flat area*
12. Drainage: *good drainage system*
13. existing structures: *existing restaurant facilities*
14. type of energy available: *natural gas, electricity*
15. sanitary sewer availability: *available*
16. zoning classification; restrictions on hours of operation: *no zoning classification; no restrictions on hours of operation*
17. use and zoning of adjacent property: *unknown*
18. building limitations: *none*
19. character of surrounding area within one mile: *retail areas, living areas*
20. Populations and income characteristics: *60,000 people within the market area. Average household income is estimated to be 20,000 yuan per month*
21. agencies requiring plan approval
    Industrial and Commercial Bureau of Wuhou District
    Taxation Bureau of Wuhou District
    Health Bureau of Wuhou District
22. Signage (pole-maximum area, height allowed, setback, building-area allowed, remote entrance signs, area allowed, height allowed): *Only door sign is allowed*
23. Construction codes: *cement building*
24. Offering price of property: *2500 yuan per month*

Adapted from Walker&Lunderg, 2005, P95 and Melaniphy, 1992, P266

Appendix 4: Restaurant Competition Analysis Worksheet

Items	Chao shou	Feichangfen	Jiuzhiding	Pugaimian	Yuntun
Food quality	medium	Medium	One dish high, the others low	high	High
Food variety	Fried rice, rice noodles,flour noodles, dumplings	One specialty	Rice noodles, fried rice noodles, fried rice	Rice noodle of different flavors, a local flour noodle from Rongchang	Steamed jiaozi, yuntun, soups
Num of Seats	50	50	40	30	30
Meal served	Three meals	Three meals	Three meals	Three meals	Three meals
Price	2 yuan- 5 yuan	3yuan-5yuan	1yuan- 12yuan	3yuan-5yuan	1yuan-6yuan
Hours of operation	7:00am-no guests	7:00am-no guests	8:00am-no guests	7:00a m-no guests	7:00am-no guests
Beverage Service	No beverage	No beverage	Soda	no beverage	No beverage
Service Style	Fast-casual	Fast-casual	Fast-casual	Fast-casual	Fast-casual
Atmosphere	Dirty, dark but tidy	Dirty, dark, but tidy	Tidy, clean, bright, artfully decorated	Dirty, untidy	Dirty, untidy
Turnover rate during lunch time	1.5	2.5	4	2.4	2.7
Customer counts	75	125	160	72	81
Special features	A wide variety of food, including flour noodles, rice noodles, fried rice	Extremely quick service	Fried rice noodles, the most beautifully decorated restaurant in the area	Both rice noodles and flour noodles are of special local flavor from Rongchang	All types of food are of special local flavor from Yunnan
Location	Jinyang road, a school right across the road	Corner of Jinyang road and Jinyanroad, near	Jinyang Road	Jinyang road	Jinyang Road

		Bank of China.			
Location features	Main road, near bus station, in-between two fast-food restaurant selling a completely different menu	Main road, near bus station, on the corner of street catering to passers-by on both street.	The street where residents of six housing projects and nearly thirty hundred people get in and out of their homes	The street where residents of six housing projects and nearly thirty hundred people get in and out of their homes	The street where residents of six housing projects and nearly thirty hundred people get in and out of their homes
Accessibility	High	High	High	High	High
Visibility	High	High	High	High	High
Exterior Appearance	No decoration in addition to restaurant sign	No decoration in addition to the restaurant sign	Simple decoration, orange exterior to attract attention of passers-by	No decoration in addition to the restaurant sign	No decoration in addition to the restaurant sign
Interior Appearance	Dark, dirty. Workers are not wearing uniform, hairnet and hat.	Dark, dirty. Workers are not wearing uniform, hairnet and hat.	Whitish table and ivory floor. Tables of different sizes and shapes, French window, servers and chefs wear uniform, one restroom.	Dirty, untidy. Plastic table of very big size. Workers are not wearing uniform, hairnet and hat.	Dirty, untidy. Workers are not wearing uniform, hairnet and hat.
size	25 square meters	20 square meters	40 square meters	20 square meters	20 square meters

Worksheet adapted from NRA, 1998

Appendix 5: Calculation of Lunch and Dinner Revenues per 28 days

Meal: Lunch
Average food checks: 3.00 yuan
Average beverage checks: 1.5 yuan
Seats: 30

Day	Turns/seat	Drinks/seat	Total number of different days	Food Revenues per 28-day period	Beverage Revenues
Monday	4	1	4	1,440	380
Tuesday	4	1	4	1,440	380
Wednesday	4	1	4	1,440	380
Thursday	4	1	4	1,440	380
Friday	4	1	4	1,440	380
Saturday	3	0.75	4	1,080	270
Sunday	3	0.75	4	1,080	270
Totals				9,360	2440

Total lunch revenue: 11,800
worksheet adopted from NRA, 1998, P55

Meal: Dinner
Average food checks: 3.00 yuan
Average beverage checks: 1.5 yuan
Seats: 30

Day	Turns/seat	Drinks/seat	Occurrence	Food Revenues	Beverage Revenues
Monday	6	1.5	4	2,160	540
Tuesday	6	1.5	4	2,160	540
Wednesday	6	1.5	4	2,160	540
Thursday	6	1.5	4	2,160	540
Friday	6	1.5	4	2,160	540
Saturday	4	1	4	1,440	360
Sunday	4	1	4	1,440	360
Totals				13,680	3420

Total dinner revenue: 17,100
Exhibit adapted from NRA, 1998, P55

Appendix 6: Monthly Pro Forma Financial Statement

		Amounts	Ratio
Food sales	lunch	9360	
	dinner	13,680	
	Total food sales	23,040	
Beverage sales	Lunch	2440	
	Dinner	3420	
	Total beverage sales	5860	
Total sales		**28,900**	
Cost of sales	Food	6912	
	Beverage	1172	
Total cost of sales		**8084**	
Gross profit		**20,816**	
Controllable expenses	Direct pay roll	2,500	
	Employee food	1,000	
	Advertising and Promotion	1,000	
	Utilities	500	
Total controllable expenses		**5,000**	
Net Operating Profit		**15,816**	
Fixed expenses	Rent	3,000	
Earnings before Interest, Depreciation and Taxes		**12,816**	

Exhibit adapted from NRA, 1998, P60

Appendix 7: Population Spending Behavior and Market Potential Survey

This research has been approved by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46.

1 . How much do you usually spend on your breakfast?
1) less than 2 yuan
2) 2-3 yuan
3) 3-4 yuan
4) more than 4 yuan

2. How much do you usually spend on your lunch?
1) less than 3 yuan
2) 3-4 yuan
3) 4-5 yuan
4) more than 5 yuan

3. How much do you usually spend on your supper?
1) less than 3 yuan
2) 3-4 yuan
3) 4-5 yuan
4) more than 5 yuan

4. Where do you usually have your breakfast during the work days?
1) at home
2) restaurants near my home
3) restaurants near my workplace

5. Where do you usually have your lunch during the work days?
1) at home
2) restaurants near my home
3) restaurants near my workplace
2) bring lunch to workplace

6. Where do you usually have your supper during the work days?
1) at home
2) restaurants near my home
3) restaurants near my workplace

7. How much do you usually pay for Xiaochi?
1) less than one Yuan
2) 2-3 yuan
3) 3-4 yuan
4) 4-5 yuan
5) more than 5 yuan

8. Your age:
1) under 18
2) from 18-23
3) 23-30
4) 30-40
5) 40-50
6) 50-60
7) more than 60

9. You are
1) male
2) female

10. Have you heard about Leshan Niuhua toufunao?
1) yes, I have heard about it
2) no, I haven't heard about it

11. Do you know that there is a difference between Leshan Niuhua toufunao and Chengdu Toufunao?
1) yes, I know
2) no, I don't know

12. Have you ever eaten Leshan Niuhua toufunao?
1) yes, I have
2) no, I haven't

13. If you haven't eaten Leshan Niuhua toufunao, but there is one selling such type of food near your home, will you go and try how it is like?
1) yes, I will
2) no, I won't

14. If you have eaten toufunao, how do you like its taste? If you haven't eaten toufunao, skip this item.
1) it tastes good
2) it doesn't taste good

15. If you have eaten toufunao, what do you think of the price 2 yuan/middle bowl? If you haven't eaten toufunao, skip this item.
1) it is fine
2) it is high

16. If you have eaten toufunao, how do you like its appearance? If you haven't eaten toufunao, skip this item.
1) it looks terrible
2) it looks fine

17. Have you eaten niuroubing?
1) yes, I have
2) no, I haven't

18. If you have eaten niuroubing, do you like niuroubing? If you haven't eaten niuroubing, please skip this item.
1) yes, I like it
2) no, I don't like it

19. If you have eaten niuroubing, how do you think of the price of 2 yuan/ one niuroubing? If you haven't eaten niuroubing, please skip this item.
1) it is fine
2) it is high

20. If you have eaten both toufunao and niuroubing, do you think that the combination will make a meal?
1) yes, I think so
2) No, I will only eat it as xiaochi

21. If you like toufunao, how many times do you think that you will like to eat per week?
1) once a week
2) up to twice
3) up to three times
4) more than three times

22. Are you from Leshan?
1) yes
2) no

23. If you are from Leshan, do you like doufunao from Leshan? If you are not from Leshan, please skip this item.
1) yes, I like toufunao
2) no, I don't like toufunao

24. If you like toufunao from leshan, and there is such a restaurant selling such a type of food near your home, will you go and eat in the restaurant a lot? If you don't like toufunao, please skip this item.
1) yes, I will
2) no, I won't

1．您早餐花费一般为多少？

1）2元以下

2）2-3元

3）3-4元

4）4元以上

2．您平时午餐花费一般为多少？

1）3元以下

2）3-4元

4）4-5元

5）5元及以上

3．您平时晚餐花费一般为多少

1）3元以下

2）3-4元

4）4-5元

5）5元及以上

4．您工作日早餐多在哪儿吃？

1）在家自己做早餐

2）在家附近买早餐吃

3）在单位附近买早餐吃

5．您工作日午餐多在那儿吃？

1）在家自己做午餐

2）家里做好了带到单位吃

2）在家附近买午餐吃

3）在单位附近买午餐吃

6．您工作日晚餐多在哪儿吃？

1）在家自己做晚餐

2）在家附近吃晚餐

3）在单位附近买晚餐吃

7．您每天大约花多少钱卖小吃吗？

1）1 元以下

2）2-3 元

3）3-4 元

4）4-5 元

5）5 元以上

8．您的年龄段：

1）18 岁以下

2）18-23 岁

3）23-30 岁

4）30-40 岁

5）40-50 岁

6）50-60 岁

7）60 岁以上

9．您的性别：

1）男

2）女

10．您听说过乐山牛华豆腐脑吗？

1）听说过

2）没有听说过

11．您知道乐山牛华豆腐脑和成都街头卖的豆腐脑不一样吗？

1）知道

2）不知道

12．您吃过乐山牛华豆腐脑吗？

1）吃过

2）没有吃过

13．如果您没有吃过乐山牛华豆腐脑，而在您家附近就有一家乐山牛华豆腐脑店，您会去尝尝它是什么味道吗?如果您吃过，请跳过本题。

1）会

2）不会

14．如果您吃过牛华豆腐脑，您觉得它味道怎么样？如果您没有吃过，请跳过这一题。

1）味道好

3）味道不好

15．如果您吃过乐山牛华豆腐脑，您觉得2元/中碗的价位如何？如果您没有吃过，请跳过这一题。

1）合适

2）太高了

16．如果您吃过牛华豆腐脑，您觉得它看起来怎么样？如果您没有吃过，请跳过这一题。

1）看起来很让人不舒服

2）看起来没有什么

17．您吃过牛肉饼/肥肠饼吗？

1）吃过

2）没有吃过

18．你喜欢吃牛肉饼/肥肠饼吗？如果您没有吃过牛肉/肥肠饼，请跳过本题。

1）喜欢

2）不喜欢

19．如果您吃过牛肉饼/肥肠饼，您觉得2元/个的价格如何？

1）合适

2）太高了

20．如果您既吃过豆腐脑又吃过牛肉饼/肥肠饼，您觉得豆腐脑+牛肉饼/牛肉粉可做一顿饭来吃吗？

1）可以

2）我只会把它当作小吃来吃

21．如果您觉得牛华豆腐脑好吃，您一星期可能会吃几次？

1）不超过一次

2）不超过两次

3）不超过三次

4）三次以上

22．您是乐山人吗？

1）是

2）不是

23．如果您是乐山人，请问您爱吃家乡的小吃豆腐脑吗？如果您不是乐山人，请跳过本题。

1）爱吃

2）不爱吃

24．如果您爱吃家乡的小吃豆腐脑，而您家附近就有一家很正宗的乐山牛华豆腐脑店，你会经常去吃吗？如果您不爱吃，请跳过本题。

1）会

2）不会