

## Measuring Service Quality of the Leisure Winery Industry : A Taiwan Based Study

李瑾玲

觀光與休閒事業管理系

### Abstract

In the recent years, the Taiwanese farmers have been looking for ways to transform their agriculture businesses into money making and to find new relevance in a market, which was altered by Taiwan's entry in the World Trade Organization. In spite of the vast growth and potent potential of the Wine Tourism in Taiwan, presently there is only a modicum of published researches, not to mention that there are no related service quality expectations topics. Thus, the goals of this research are to uncover the diverse levels of tourists' satisfaction on the service quality that was provided in the selected Winery. In addition, to reveal the focal attributes of the Winery which influence the tourists' satisfaction, and investigate the discrepancy between customer's expectation and perception towards the quality of services. This study was using the SERVQUAL instrument in measuring the service quality of the Wine Tourism Industry in Taiwan. The results indicate that the reliability dimension of tourists' perceptions of service quality having the largest gap and the tangibles dimension have the smallest gap. This implies that the tourists place more emphasis on the professional and courteous attitude from the staff of the Winery compared to the tangible visually appealing materials.

Keywords: Leisure Winery, Service Quality, Taiwan

### 1. Introduction

The Wine Tourism has become a significant attraction around the world. Besides providing excellent products and environment, it is also imperative to attain a high level of customer satisfaction in order to attract tourists. In the recent years, after participating in the WTO, the Taiwan's Government aggressively encourages the farmers to obtain the wine-manufacturing license, which will certify them as wine-maker. Hence, would enable the farmers to commence in the Wine Tourism Industry, and also to aid in the expansion of their business. When comparing to the internationally well-known and also on the large scale of Wineries which contain hundreds of years in history; whereas Taiwan's Wine Tourism Industry is still in the bud stage and waiting for the gradual growth. Although, the Taiwan's wine products are improving, yet they fall short to grasp what the consumers really want and how-to attract the Tourists.

The development of this study follows PZB's SERVQUAL model. It is the most popular standardized questionnaire to measure service quality. The SERVQUAL service quality attributes were used to measure the quality of service, and the overall visitor satisfaction of the tourists' products and services in the Wine Tourism Industry. A sample of 200 tourists will be asked to complete the questionnaires. Factor analysis revealed five service dimensions such as tangibles, assurance, reliability, responsiveness, and empathy. The results will show the tourists' distinction between the five service dimensions and a hierarchy of service quality expectations and perceptions. In addition, the findings will also show the expectation values exceeded perception values in the 22 attributes. Hence, it will generate a negative gap which indicating the tourists' perception of service quality was not meeting the tourists' expectations of service quality.

Even though the Wine Tourism business is still new in Taiwan, it is still important to be able to define the service quality, identify the dimensions of the service quality for customers. As a result, for this study, service quality is taken as the difference between what tourists expect from each of the service quality attributes and what the tourist actually perceives to have received while visiting the Winery. That is, if the tourists' initial perceptions of service quality exceeded their expectations of service quality, then the Winery is considered as providing high quality service; vice versa, if the tourists' expectations of service quality exceeded their initial perceptions of service quality, then the Winery is considered as providing low quality service. Hence, the findings of this study should be a good reference for the Wine Tourism Industry to improve their service quality.

## 2. Tourist Satisfaction

### 2.1 *The SERVQUAL Model*

In the recent years, the dramatic growth of service industry is one of the major trends in the world. In today's competitive marketplace, quality service has become the chief factor in competition. On the subject of the Consumer Psychology's viewpoint, the customer's level of satisfaction on a product or service is the key factor of whether a customer is willing to give repeat business. It is also the significant element for service industry to remain in business (Huang, 2003). Derive from the service industry's advertising, the customers form service expectations, by word of mouth, and based on their past experiences, they would in turn compare the perceived service against the expected service. Realistically, if the perceived service is below the expected service, the customers will feel disappointed. On the other hand, if the perceived service meets or exceeds their expectations, they will be willing to patronize again (Kotler, 2003).

The research applied the SERVQUAL instruments, which is developed by Parasuraman, Zeithaml, and Berry (1988, 1991). It is a multiple item instrument designed to measure customer expectations and perceptions of service quality in service and retailing organizations. As the overlap found between dimensions, the original ten dimensions were collapsed into five dimensions. The final SERVQUAL consists of 22 items pertaining to expectations and perceptions (Parasurman et al 1988). They are Tangibles (physical facilities, equipment, and appearance of personnel), Reliability (ability to perform the promised service dependably and accurately), Responsiveness (willingness to help customers and provide prompt service), Assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence), and Empathy (caring, individualized attention the firm provides its customers). The last two Assurance and Empathy dimensions contain items, which represented seven original dimensions: communication, credibility, security, competence, courtesy, understanding/knowing customers, and access.

The SERVQUAL instrument has emerged as the most popular standardized questionnaire to measure service quality (Akbaba, 2005). However, there were seldom research applied the SERVQUAL model to tourism industry. In the recent years, there is progressively more service quality research focus on the tourism industry. In fact, the SERVQUAL model has been widely applied in measuring customer satisfaction in different service-oriented industry such as hotel, airline, travel agency, museum, theme park, restaurant, resort, tourism center, park and recreation place (Chiang, 2004).

### 2.2 *The Application of SERVQUAL in the Service Industry*

An adapted version of the SERVQUAL instrument was used in Ecotourist (Khan, 2003) and national park (Akama & Kieti, 2003). In the former, only the expectation items were adapted to measure. The factor analysis revealed six service dimensions of eco-tangibles, assurance, reliability, responsiveness, empathy, and tangibles. Eco-tangibles had the highest mean score followed by assurance, reliability, responsiveness, empathy, and tangibles. The findings of the national park study revealed that the service quality gaps of the seven dimensions which included tangibles, reliability, responsiveness, assurance, empathy, price and perceived value were positive. That is, overwhelming majority of the international tourists were satisfied by the quality of the park's nature attractions and the services provided by the employees.

Some of the researches based on different industries showed different results. Lee and Hing (1995) assessed the usefulness and application of the SERVQUAL instrument in measuring and comparing the service quality of the fine dining restaurants. The findings of the study revealed that assurance, and reliability were the highest expectations and the tangibles was the lowest. Lam and Zhang (1999) assessed customers' expectations and perceptions of service provided by travel agents. The results showed that the customers' perceptions of service quality fell short of their expectations, with the reliability dimension having the largest gap. Kassim and Bojei (2002) investigated the service gaps in the telemarketing industry. The findings of the study revealed that the tangibles had the highest expectation mean score followed by assurance, responsiveness, empathy, and reliability.

Gilbert and Wong (2003) measured and compared differences in passengers' expectations of the desired airline service quality in terms of the dimensions of reliability, assurance, facilities employees, flight patterns, customization and responsiveness. The findings indicated that passengers consistently rank assurance as the most important service dimension. Akbaba (2005) named five service quality dimensions as tangibles, adequacy in service supply, understanding and caring, assurance, and convenience to investigate the customer's service quality expectations of business hotels. The findings showed that business travelers had the highest expectations for the dimension of convenience, and the understanding and caring is the lowest.

### 3. Research Method

The Dahu Village Chateau is one of the nine fruit Wineries in Taiwan sponsored by the Council of Agriculture (COA) under a special project to help Taiwanese agricultural products develop new markets. The government and the local farmers association opened it in December 2002 and is still a new operation, however, it can be the first recognized Winery among the other fruit Wineries. Dahu Village Chateau operates on a small scale; only six kinds of different alcoholic density of strawberry and plum wine are produced there. Right next door is a shop providing locally made ice cream, wine and souvenirs. There is also a new grand opening "strawberry culture museum" with agriculture product POP area, the exhibition area, strawberry cultivate display area, the restaurant, and the air garden. Due to the fact that the Dahu Village Chateau is well-known, the first recognized winery among the other fruit Wineries, have held award-winning records, and as well as produced award-winning products in Taiwan; we have decided to conduct the field surveys during the period of June to July of 2006 using the Winery as the primary target.

A convenience sampling approach was employed and a total of 200 structured questionnaires will be distributed to the tourists. Of these 200 questionnaires, 80 were not included in the analysis because of the incompleteness. Therefore, there were 120

questionnaires usable for further analysis. Basically, the design of the structured questionnaires are based on the 22 SERVQUAL attributes that will be grouped into five dimensions. However, after a review of the literature, some attributes were reworded to make them more applicable to the Wine Tourism Industry, besides, in order to construct the research more efficiently for the Winery tourism and to avoid causing confusion of the respondents. Hence, the items labels and wording has to be modified a little bit from the original questionnaires that was developed by PZB .

A focus group was conducted to check the wording and comprehension of the items used in the measurement. To evaluate the level of tourist satisfaction, the Likert-type scale was used to measure the items. Therefore, respondents were asked to circle a value ranging from the scale 1 –Strongly disagree (Much less satisfied) to 5—Strongly agree (Much more satisfied). The five point scale was also different from the SERVQUAL scale which had seven-point scale.

The service quality score for each of the 22 attributes will be calculated by using the following formula: “Service Quality Score=Perception Score –Expectation Score”

By using this formula, it will demonstrate the Gap. If it turns out to be a negative gap, it will indicate the tourist perceived service quality is not meeting the tourist’s expectations. If it turns out a positive gap, it will indicate the tourist perceived service quality is exceeding the tourist perceptions.

The SPSS version 11.0 statistical software was used to analyze the data. Besides using the description statistic technique to understand the basic attributes of the sample, the paired-sample t-test was carried out to test the significant difference between the two means of expectations and perceptions. Interpretation of the results will be done at 5% level of significance. If  $p < 0.05$ , then it is considered as being significant.

In spite of the vast growth and potent potential of the Wine Tourism in Taiwan, presently there is only a modicum of published researches, not to mention that there are no related service quality expectations topics. Due to the fact that Taiwan’s Wine Tourism Industry is still in the bud stage and waiting for the gradual growth; hence it is difficult to collect enough information and secondary data. Nevertheless, this study may be used as exploratory research of the Winery service quality that is based on the PZB model.

#### 4. Findings

Descriptive statistical methods were used to research tourists’ expectations and perceptions of the service. Table 1 shows the means, standard deviations, the gaps, and p values obtained through the evaluation of data. The gap scores for each attributes were calculated by deducting the expectation means from the perception means. A positive score indicated that, tourist perceived service quality was exceeding the tourist perceptions. However, a negative gap showed that, tourist perceived service quality was not meeting the tourist’s expectations. The paired-sample t-test between the respective expectation means and perception means of all the 22 attributes showed that they were significantly different. In general, there were highly significant differences among the dimensions.

The findings showed that the customers gave the highest expectation score of 4.07 for “employees tell exactly when service will be”, “employees always be willing to help”, and “employees are well-trained and have knowledge to answer questions”. Furthermore, “keep

service related record accurately” got the lowest scores of 3.60. Compared to perception of quality of service, the customers gave the highest score of 4.19 for “consistently courteous with the customer”. The lowest score of 3.28 referred to “listening and providing accurate information”. Overall, the result revealed that the responsibilities and assurance were the highest expectations, followed by empathy, reliability, and the tangibles was the lowest. Besides, the reliability dimension having the largest gap and the tangibles dimension have the smallest gap. This implies that the Winery tourists place more emphasis on the professional and courteous attitude from the staff of the Winery compared to the tangible visually appealing materials.

Table 1. Service Quality Dimensions Analysis

Attributes	Expectation mean (SD)	Perception Mean (SD)	Gap	P value
<i>Tangibles</i>				
Materials visually appealing	3.67 (0.47)	3.83 (0.51)	0.16	.000
Visual attractive and appealing of natural attractions	3.93 (0.50)	4.06 (0.47)	0.13	.000
Neat appearance of employees	3.64 (0.48)	3.75 (0.51)	0.11	.000
Facilities keep with the services provided	3.73 (0.48)	3.78 (0.52)	0.05	.000
<i>Reliability</i>				
Providing services at the promised time	3.76 (0.50)	3.78 (0.53)	0.02	.000
Employees handle tourist problem promptly	3.73 (0.48)	3.60 (0.49)	- 0.13	.010
The event is dependable	4.00 (0.42)	4.10 (0.45)	0.10	.000
Listening and providing accurate information	3.91 (0.49)	3.28 (0.52)	- 0.63	.006
Keep service related record accurately	3.60 (0.49)	3.56 (0.50)	- 0.04	.000
<i>Responsibilities</i>				
Employees tell exactly when service will be	4.07 (0.44)	3.94 (0.49)	- 0.13	.000
Employees give prompt service	4.03 (0.51)	4.08 (0.53)	0.05	.000
Employees always be willing to help	4.07 (0.46)	4.18 (0.43)	0.11	.000
Employees never too busy to help	3.94 (0.49)	3.88 (0.51)	- 0.06	.000
<i>Assurance</i>				
Instill confidence in customers via professional employees	4.03 (0.35)	3.84 (0.49)	- 0.19	.000
Feel safe and secure in their transaction	4.00 (0.43)	4.07 (0.31)	0.07	.000
Consistently courteous with the customer	4.01 (0.42)	4.19 (0.44)	0.18	.000
Employees are well-trained and have knowledge to answer questions	4.07 (0.46)	3.93 (0.48)	- 0.14	.000
<i>Empathy</i>				
Providing personal attention	3.87 (0.55)	3.78 (0.58)	- 0.09	.000
Understand the specific needs	3.82 (0.50)	3.70 (0.53)	- 0.12	.000
Convenient operating hours	3.83 (0.44)	3.87 (0.41)	0.04	.000
Convenient location of facilities and equipment	3.90 (0.42)	3.90 (0.43)	0.00	.000
Event arrangement based on customer’s requirement	4.06 (0.47)	4.10 (0.42)	0.04	.000

## 5. Conclusion

Needless to say, it is imperative to identify the specific expectations of the tourists, the dimensions of the service quality which tourists make their quality evaluations. Having knowledge on these areas would help the managers to improve the service quality in the Wine Tourism Industry. This study revealed that the Leisure Winery's customers had the highest expectations for the dimension of responsibilities, followed by assurance, empathy, reliability, and the tangibles, respectively. When analyzed at attributes level, "employees tell exactly when service will be", "employees always be willing to help", and "employees are well-trained and have knowledge to answer questions" attributes received the highest expectation mean score, followed by "event arrangement based on customer's requirement", "employees give prompt service", and "instill confidence in customers via professional employees", respectively. "Keep service related record accurately" received the least expectation mean score. A detailed analysis of expectation, perception and gap mean scores of the attributes could help the managers of the Winery in finding out the weak part of services and improving the services to meet customer's expectations.

In Taiwan, the Wineries are still a relatively new operation, and the human power of research and development, quality control, marketing, and management are still in shortage. However, the problem cannot be ignored. The employees of the Winery are not properly trained and thus are not capable of delivering quality service. Hence, the development of a good training program should be their first priority. Besides the training from the Food Nutrition Department of well-recognized colleges, the Taiwan Government also ought to appoint Leisure Management Department of well-known colleges to educate the Winery operator and its staff on the subject of the tourism business; to assist them on the setting up the internal orientation and training, or offer their employees the opportunity to take related college courses. Although, for most of them, the Wine Tourism operation is not the one with which they are familiar with. Nonetheless, identifying the expectation of the tourists and services quality are the chief secrets of the Leisure Winery's success, which need to be implemented now in Taiwan to ensure its Winery's prosperity future.

## References

- Akbaba, A., "Measuring Service Quality in the Hotel Industry: A Study in a Business Hotel in Turkey," *International Journal of Hospitality Management*, In Press, Available online December 2005.
- Akama, J. S., and Kieti, D.M, "Measuring Tourist Satisfaction with Kenya's Wildlife Safari: A Case Study of Tasavo West National Park," *Tourism Management*, Vol.24, No.1, pp.73-81 (2003).
- Chiang, I. F., "The Relationship among Service Quality, Satisfaction and Behavior Intention of Ecotourism: A Case Study of Trail Eco-tour in Sun-Moon Lake," Master Thesis, Department of Leisure Management, Chaoyang University of Technology, Taichung, Taiwan (2004).
- Gilbert, D., and Wong, R. K.C., "Passenger Expectations and Airline Services: A Hong Kong Based Study," *Tourism Management*, Vol.24, No.5, pp.519-532 (2003).
- Huang, H. C., *Service Marketing*, 1<sup>st</sup> Ed., Tsang Hai Book Publishing Co, Taichung, Taiwan,

pp.89-90 (2003).

Kassim, N. M., and Bojei, J., "Service Quality: Gaps in the Malaysian Telemarketing Industry," *Journal of Business Research*, Vol.55, pp.845-852 (2002).

Khan, M., "ECOSERV," *Annals of Tourism Research*, Vol. 30, No.1, pp. 109-124 (2003).

Kotler, P., *Marketing Management*, 11<sup>th</sup> Ed., Prentice Hall, Upper Saddle River, New Jersey, pp. 455-456 (2003).

Kotler, P., Bowen, J., and Makens J., *Marketing for Hospitality and Tourism*, 3<sup>rd</sup> Ed., Upper Saddle River, New Jersey, pp.401-432 (2003).

Lam, T., and Zhang, H.Q., "Service Quality of Travel Agents: The Case of Travel Agents in Hong Kong," *Tourism Management*, Vol.20, No. 3, pp.341-349 (1999).

Lee, Y. L., and Hing, N., "Measuring Quality in Restaurant Operations: An Application of the SERVQUAL Instrument," *International Journal of Hospitality Management*, Vol.14, No.3/4, pp.293-310 (1995).

Lin, Y. T., "A Study of Building the Measure Indicators to Amusement Quality and Development of Amusement Satisfaction Model: An Example of Domestic Private Theme Parks," Master Thesis, Graduate School of Management Sciences, Aletheia University, Taipei, Taiwan (2004).

Parasuraman, A., Zeithaml V.A., and Berry L. L., "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, Vol.64, No.1, pp.12-40 (1988).

Parasuraman, A., Zeithaml V.A., and Berry L. L., "Refinement and Reassessment of the SERVQUAL Scale," *Journal of Retailing*, Vol.67, No.4, pp.420-449 (1991).

Taylor, S. A., and Cronin Jr. J.J., "An Empirical Assessment of the SERVPERF Scale," *Journal of Marketing*, pp.52-68 (1994).

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