

**AN EMPIRICAL STUDY ON PERCEIVED SERVICE QUALITY OF
THE TRANSPORTATION INDUSTRY IN LAO PDR**

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by

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APPROVAL PAGE

This dissertation which is an original work undertaken by Mr. Akhom Praseuth in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Business Administration is in accordance with the regulations governing the preparation and presentation of dissertation at the Graduate School in Korea Maritime University, Republic of Korea.

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국문 초록

본 연구의 목적은 서비스품질 모형(SERVQUAL)을 이용하여 라오스 운송사업 서비스의 지각된 품질을 검증하였다. 본 연구는 기대된 서비스 품질과 지각된 서비스 품질의 두 요소를 분석하고 있으며, 이 두 요소간의 관계도 조사되었다.

내륙국인 라오스는 전국에 걸친 유통활동과 연결된 운송이 점차로 중요한 역할을 하고 있다. 고객은 수용할 서비스 품질에 관한 기대를 높이고 있으며 운송회사는 고객의 기대에 부응하기 위하여 노력하고 있다. 고객과 운송회사간의 관계는 운송회사의 경영에 있어서 고객이 서비스 품질을 어떻게 정의하고 있는가에 관한 이해를 증진시키는 공간이라고 가정할 수 있다. 고객의 지각과 기대를 확인하는 것은 기업이 고객에게 봉사하고 고객의 만족을 높일 수 있는 기회를 확인할 수 있도록 하는 것이다.

본 연구에 있어 응답표본 구성은 라오스의 수도 비엔티안에서 도로운송서비스 사용자를 대상으로 하여 설문조사를 하였다. 본 연구조사는 SERVQUAL 모형을 도구로 하여 정보수집을 하였으며, 데이터분석은 기술적, 통계적 분석을 위하여 SPSS 11.0 사용하였다. 기술적분석은 빈도분석과 백분율을 사용하여 표본의 일반적 특성을 확인하였다. 분산분석(ANOVA)과 t-test 를 통하여 각 범주의 기대와 지각간의 관계적 유의성을 검증하였다

분석의 결과에 의하면 본 연구에서 설정된 3가지 가설을 모두 지지하는 것으로 밝혀졌다.

가설 1 : 서비스품질의 기대와 지각은 모든 범주에서 통계적으로 유의한 차이가 있다.

가설 2 : 응답자의 인구통계학적 특성과 운송회사가 제공한 서비스 품질의 지각 간의 관계에는 통계적으로 유의한 차이가 있다.

가설 3 : 응답자의 인구통계학적 특성과 기대된 서비스 품질간의 관계에는 통계적으로 유의한 차이가 있다.

또한 서비스 품질의 측면에서는 정의 차이가 없는 것으로 조사되었다. 18개의 설문 항목 모두에 있어서 서비스품질이 고객의 기대에 미치지 못하고 있다. 고객들은 일반적으로 제공된 서비스에 관하여 만족스러워 하고 있지 못하다. 고객 만족을 증대시키는 가장 중요한 범주는 것은 신뢰성이며, 다음으로 중요한 것들은 응답성, 공감성, 유형성과 확실성인 것으로 조사되었다.

분석 결과를 통해 다음과 같은 결과가 도출되었다.

- (1) 범주들의 전반적인 차이를 평가하여 보면 라오스 도로운송회사의 서비스 품질향상에 대한 요구가 있음을 명백히 알 수 있으며, 특히 신뢰성과 응답성은 서비스 품질 향상에 필요한 중요한 두 개의 범주이다.
- (2) 전략적 입장에서 운송회사의 경영자는 고객의 만족과 고객 충성도 예측에 있어서 5 가지 서비스 품질 범주와 관련된 중요성을 결정할 수 있다. 이렇게 함으로써 운송회사 경영자는 주의를 기울여야 될 서비스 품질의 범주를 결정할 수 있다.
- (3) 경쟁적 관점에서 운송회사 경영자는 기록의 오류 감소와 같은 개선이 필요한 영역을 고려하여야 하며, 그리고 고객의 요구에 반응할 수 있도록 항상 준비하여야 할 것이다. 이를 위해 경영자는 처음부터 고객이 서비스를 적절히 받을 수 있도록 하여, 고객의 마음속에 최상의 만족감을 심어주도록 하여야 할 것이다.
- (4) 서비스를 향상시키기 위해 목표설정, 서비스의 표준, 서비스 청사진과 마케팅의 측면에서 라오스 운송회사 경영자는 많은 노력을 기울여야 할 필요가 있는 것으로 나타났다.

향후의 연구는 라오스 서비스 산업 전반에 걸친 보다 많은 표본을 대상으로 수행되어야 할 것이다. 덧붙여, 향후 연구는 경영자의 기대와 사용자의 기대 수준이 미치는 영향에 중점이 두어져야 할 것이다.

ABSTRACT

The purpose of this study is to utilize a service quality model (SERVQUAL) to examine the perceived quality of the transportation industry services in Lao PDR. This research was conducted to analyze two factors: expected and perceived service quality. The relationship between these two factors was also analyzed.

Lao PDR as a landlocked country, transportation is playing an increasingly important role linking the distribution activities throughout the country. Customers have increased expectations concerning the quality of service they receive and transportation companies are struggling to meet these expectations. This relationship between customers and transportation companies would suggest that there is room for improvement in transportation company management and understanding how customers define service quality. Identifying customer perceptions and expectations may enable management to serve the customer and identify opportunities to increase customer satisfaction.

The sample in this study consists of respondents who are users of road transportation services in the city of Vientiane, capital of Lao PDR by the use of a questionnaire method. The survey used the SERVQUAL instrument for gathering information. Data analysis is employed descriptive and statistical analysis using

SPSS Version 11.0. A descriptive statistics, simple frequency and hundredth part percentage is conducted to test general characteristics of the sample. The ANOVA and t-test were used to test the significance relationship between expectation and perception for each dimension.

Based on the results of the analysis, support was found for all of the three hypotheses proposed in this study. H1: There is a statistical significant difference in all dimensions between expectations and perceptions of service quality. H2: There is a statistical significant relationship between respondents' demographic variables and their perceptions regarding quality of service provided by transportation companies. H3: There is a statistical significant relationship between respondents' demographic variables and their expectations regarding quality of service provided by transportation companies.

The result also shows that none of the aspects of service quality has positive gap score. All of the 18 statements indicate that the quality of service falls short of the customer's expectation; customers are generally dissatisfied with the provided service. The priority or rank ordering as showed "Reliability" as being the most important dimension in order to satisfy customers, followed in turn by "Responsiveness", "Empathy", "Tangibles", and "Assurance".

The results of the analysis led to the following conclusions:

- (1) By evaluating the overall gap of the dimensions it is clear that there is a need to improve the quality of road transportation company services in the Lao PDR, particularly reliability and responsiveness are two main dimensions in need of improvement.
- (2) From a strategic standpoint, transportation company managers can determine the relative importance of the five service quality dimensions in predicting customer satisfaction and customer loyalty. By doing so, transportation company managers can determine which service quality dimension they should pay most attention to.
- (3) From a competitive standpoint, transportation company managers should consider areas in need of improvement that appear to reduce errors in records, always be ready to respond to customers' requests, performing service rightly from the first time, and having the customer's best satisfaction at heart.
- (4) In order to improve service performance, Lao transportation company managers should concentrate on such aspects as goal-setting, service standardization, service blueprinting, and marketing.

Further research is to be conducted by taking a larger sample covering other service industries. In addition, further research should focus on the impact of the management's expectation and the user's expectation levels as well.

CHAPTER I

INTRODUCTION

1.1 INTRODUCTION

Lao PDR as a landlocked country, transportation is playing an increasingly important role linking the distribution activities throughout the country. This allows the flow, both of goods and people smoothly, supporting, promoting and distributing development, as well as facilitating mobility among activities in all aspects of life throughout the country. To strengthen the unity of Lao PDR, and service quality is one of the most important problems facing management today. Interest in the measurement of service quality is thus understandably high. To be aware of the customers' expectations and perceptions is most important for the transportation company management. Service quality is one of the strongest competitive factors today.

The importance of service quality in any service industry cannot be disputed. Recent economic and technological changes affecting the transportation industry have made service quality a major concern for carriers alike. The adequate delivery of service quality of transportation company services can be one of the key factors in increasing Lao PDR's trade competitiveness. Customers have

increased expectations concerning the quality of service they receive and transportation companies are struggling to meet these expectations (Hopkins et. al, 1993). This relationship between customers and transportation companies would suggest that there is room for improvement in transportation company management and understanding how customers define service quality. In fact, the success of transportation industry in the Lao PDR has become increasingly dependent on the quality of service provided in order to satisfy customer demand (Vithaya, 2003).

To deliver better service to customers, transportation companies need to understand customers' needs and expectations (Aksoy et al., 2003). Understanding what consumers expect from a service organization is important because expectations provide a standard of comparison against which consumers can judge an organization's performance (Jin and Julie, 2000). Unfortunately, there is no research conducted in the Lao PDR concerning the providing and monitoring of service quality, and especially concerning transportation services. The service quality concept in the Lao PDR has received inadequate attention as a research issue, even as the importance of service quality in transportation has become more noticeable. Vithaya (2003) found that customer demographic variables influenced the individual's subjective rating of satisfaction with a product or service, but Vithaya was unable to specify which organizational variables influenced the

provision of high quality service.

Measuring service quality is quite different from measuring product quality because service involves the customer in the experience. Up to date, probably the most significant contribution toward the development of a quantitative yardstick for assessing a firm's service quality is the work conducted by Parasuraman, Zeithaml and Berry (1985). They developed a measuring instrument, called SERVQUAL, to measure customer perceptions of service quality. The SERVQUAL questionnaire elicits two parallel sets of data. Scores are obtained for customer's expectation (E) and also for their perceptions of the actual performance (P) of the service quality. The smaller the discrepancy (difference), the more neutral the satisfaction response. The larger positive discrepancy (performance greatly exceeds expectations) the greater the degree of satisfaction. Parasuraman, et al (1985) identified five distinct "gaps". Gap 1 is the discrepancies between management's perception of consumers expectation and consumer's expectations; Gap 2 is the discrepancies between management's perceptions and firm service quality specification; Gap 3 is the discrepancies between service quality specifications and service delivery; Gap 4 is the discrepancies between service delivery and external communication, and Gap 5 is the discrepancies between expected and perceived service. This study will focus on Gap 5, which is a direct reflection of Gaps 1-4. This means that the smaller

discrepancies observed in Gaps 1-4, the more favorably consumers will evaluate service quality.

The purpose of this study is to utilize a service quality model (SERVQUAL) to examine the perceived quality of the transportation company services in Lao PDR. To achieve this, the expectations of the customer should be determined and the gap between the expected service and the perceived quality of service should be identified. Then the difference between expectations and actual quality can be narrowed or eliminated through effective and research-based management decisions.

1.2 SCOPE OF THE STUDY

The study consists of a descriptive analysis of the relationship between customer's expectations and perceived service quality of transportation company services in Lao PDR. SERVQUAL, a multiple-item scale for measuring expectations and perceptions of service quality, was the survey instrument used in this study. Data analysis was conducted on the survey data to determine levels of association and significance of difference between variables. The sample for the survey consisted of 75 customers who are users of the transportation company services in Vientiane.

The collected data was coded and entered into the SPSS-Windows statistical package for analysis using statistically appropriate methods (ANOVA and t-tests). Descriptive and non-parametric statistics were computed to determine the relationship relevant to each research hypothesis.

1.3 SIGNIFICANCE OF THE STUDY

The research is significant because it highlighted the need to identify marketing method designed to satisfy customers' expectations for service quality of transportation companies. Thus, the research will provide the information which can be used to improve marketing and service quality for the Lao transportation company managers.

The focus of this research was to determine the relationship between expectations and quality of provided services. However, through measuring customers' preferred service quality items, the research may show which items are most necessary in order to satisfy the customer.

Lastly, the research is significant because an instrument was developed for measuring the customers' expectations and perceptions of service quality of transportation services. This may provide valuable insight into the market

segments, employee performance, and the service problems of transportation services. Identifying customer expectations and perceptions may enable management (a) to better serve the customer; (b) to assess organizational strengths and weaknesses; (c) to identify opportunities to increase consumer satisfaction.

1.4 STRUCTURE OF THESIS

This thesis is divided into five chapters. Chapter one is the introduction of this study. Chapter two reviews the literature on service quality and customer satisfaction. Chapter three presents the methodology to test the hypotheses. Chapter four tests the hypotheses and analyzes the results as the empirical study. Chapter five concludes this thesis and suggests the recommendations for the future study.

CHAPTER 2

LITERATURE REVIEW

Because this study focuses on the service quality in the transportation industry in Lao PDR experienced by customers, it is necessary first to provide a brief description overview of the current economic situation and transportation industry. And then we will discuss the consumer service relevant to managing transportation services, service quality and customer satisfaction, concept of service quality, measuring service quality and SERVQUAL.

2.1 OVERVIEW OF THE CURRENT ECONOMIC SITUATION AND TRANSPORTATION INDUSTRY IN LAO PDR

The Lao People's Democratic Republic (Lao PDR) is a landlocked country with a population of 6 million people – small relative to its land area of 236,800 squares kilometers. In the absence of a railway system and access to the sea, the Lao PDR depends heavily on the road network, followed by civil aviation. Although transportation demand is growing at about 10 percent per year to support economic growth of about 6.2 percent per year. The road network carries 90 percent of freight and 85 percent of passenger traffic (Asian Development Bank, 2001).

<Table 2.1> Structure of output in percentage of GDP

Sector	2000	2001	2002	2003
Agriculture	52.5	51.2	50.4	48.6
Industry	22.9	23.7	24.7	25.9
Service	24.6	25.1	25.0	25.5
- Transportation	5.8	5.9	6.1	6.3

Source: Asian Development Bank, Key Indicators 2004.

Table 2.1 shows the structure of output in percentage of GDP. The economic base is agriculture with permanent agriculture in the lowland plains and shifting agriculture in the mountainous regions. Agriculture (including livestock, fisheries and forestry) accounts for 48.6 percent of the Gross Domestic Product, employs 80 percent of the labor force and constitutes 75 percent of the value of exports, mostly through coffee and wood production. The industrial sector, which includes manufacturing, construction and electricity, represents 25.9 percent while the services sector, which includes trade, transportation, finance and public administration, represents 25.5 percent. One of the most important industries in Lao PDR found within the service sector is transportation, which in recent years has account for about 7% of the nation's Gross Domestic Product (GDP).

The Lao local trucking fleet in the 8 and 12 metric tons capacity operates largely within Lao PDR. Road conditions do not accommodate the use of heavier capacity vehicles. 44 transportation companies are located in Vientiane, and having a total

of over 768 trucks. They are supervised by the Ministry of Communication, Construction, Post and Transport (UNCTAD, 1995).

Before the deregulation in the transportation service by the Lao Government, all regular customers of commercial goods were used to use the National Road Transportation Company Service, as a state-owned company and the first National Road Transportation Company in Lao PDR, which has dominated the existing demand of customers of commercial goods services.

With the demand for national economic developments, and other aspects of community life, as well as effects of globalization, there had been changes in the business climate of commercial goods services in Lao PDR. The change in the business climate, characterized by the government deregulation in the transportation industry, had created the emergence of new competitors for the National Road Transportation Company. Each of the new transportation companies would be competing in the existing market. Service quality is generally perceived to be tool that could be used to create a competitive advantage that would assist transportation service providers in dealing with the new environment.

<Table 2.2> Freight in tonnage

	1996	1997	1998	1999
Freight ('000 tons)	978	1,029	1,004	1,225
Freight-km (Million)	71.85	94.70	105.37	121.14

Source: ASEAN Road Transport Statistics, 1999.

There has been a marked growth in the service industry over recent year. From table 2.2 indicated that annual freight in tonnage are average more than 1 million tones and this trend is likely to be continued. This has placed greater emphasis on the quality of service offered. If a road transportation company is to be successful, a better service quality must be provided.

Transportation firms are recognizing that improved service quality can serve as a managerial “tool” to differentiate one’s “service offering” from the competition, to enhance customer satisfaction, and to achieve market share and profitability gains (Morash and Ozment, 1994).

2.2 IDENTIFYING CUSTOMER SERVICE DEMANDS

One of the major problems addressed in the literature for satisfying consumer demands is management’s inability to identify what the consumer considers as an

important factor. Zeithaml, Parasuraman, and Berry (1990) conducted an investigation of the gap between consumer needs and management provisions at banking industry in the United States. They found that, although management concentrated on the acquisition of modern and high tech equipment, these dimensions were viewed as relatively unimportant by consumers, and usually tended to meet or exceed their expectations. However, other aspects of service that consumers perceived as important were ignored by the management, that is, facilities scheduling, convenience, and social services.

Angur, Natarajan and Jahera (1999) surveyed the service quality in the banking industry, and found that such issues as parking availability, queuing time, and hours-of-operation were identified to be important determinants of customer satisfaction. According to their findings, for the service to be considered high quality, it must be perceived as important by the consumer, and it must be delivered effectively. Consumers base on their assessment of the facility or service organization on how well it meets their wants. Thus, the initial step in improving service quality is to ascertain the wants of consumers and their evaluation of service delivery. Angur et al, (1999) reported that the information obtained on service quality, delivery, and consumer wants must be invested into improvements that need to be made service delivery, quality, and internal service delivery specifications.

Parasuraman, et al. (1985) found that managers are unreliable sources of information because they tend to target the delivery of services to the wants of focus groups. However, discrepancies in the identification of items, item prioritization, and the desired level of performance for each item still existed. Management's lack of insight into the wants of consumers has been found by other researcher as well (Schneider and Bowen, 1985).

Service contact employees may be better equipped than management to identify the wants of consumers, due to the physical and psychological proximity of service contact employees to consumers (Schneider and Bowen, 1985). Schneider and Bowen (1985) found that customers and service contact employees share common perceptions of the quality of the service perceived, but there is evidence that employees and customers may disagree about the cause for the high or low perception.

2.3 NEEDS OF CONSUMERS

The wants of the consumer must be ascertained by the organization to effectively deliver the services. Not all consumers want the same things. Sasser, et al. (1978) categorized services into consumer and corporate services. Consumer services are based on low-skilled and routine services, while corporate services are based on

knowledge, expertise, and competencies of the provider.

Different consumers have different needs. This is based on both demographic and experiential differences. Thus, to effectively provide services, the wants of the different segments of consumers must be identified. After establishing the appropriate market segmentation, the core services of the organization must be determined, and they must be described to the interest market segments. Alternatively, the needs of consumers can be identified first, and market segmentation can be ascertained through statistical regression. This will help target the provision of service to each market.

Quality improvement and control programs must recognize differences in market segment expectations to maximize a provision for the various segments. The common bases for market segmentation are demographic, psychographics, product usage rates, product benefits, and quality perceptions.

Employees form an important part of both the service organization and service delivery. Thus, meeting the wants and needs of employees is as important as meeting those of consumers. Satisfaction of employees on both the working environment and conditions helps to increase employees' morale, thus to decrease turnover, to absenteeism, and to the quality of service rendered (Choo, 1998).

Employees have greater confidence in the firm if it is able to demonstrate that it cares about both the employee and the consumer. But, there is a need to ensure that the perception of contact service employees is the same as customers'. This can be attained by administering the same service quality test instrument to both employees and consumers (Cina, 1990). If a discrepancy in perception exists, an employee education is needed.

2.4 BENEFITS OF SERVICE EVALUATION

The key to creating a perception of high service quality is to ensure that perceived service quality and delivery meets or exceeds consumers' expectations. This must be ascertained through an evaluation of consumers' perceptions of the service delivery performance.

Discrepancies between the desired level of performance and the perceived level of performance will identify the opportunities and limitations for (a) marketing the plan, and (b) instituting improvements in service quality (Choo, 1998).

In evaluating consumers' expectations and their perception of service quality, Choo (1998) identified the following discrepancies:

Competitive vulnerability. The dimension is viewed as an important

determinant to the consumer but the delivery of the service by the provider is low.

Competitive strength. Consumers like the way which the service is offered and the manner in which it is presented.

Irrelevant superiority. Services which are unimportant to consumers are delivered with high quality.

Relative indifference. There is both a low expectation and delivery of the same service.

Gray zone. The dimension is perceived as average. (See p. 17)

The zone that the service organization falls into indicates the type of managerial action needed. For example, to enhance its marketability, an organization may promote its competitive strength. Thus, the positive aspects of the service organization can be improved and communicated to the consumer. On the other hand, irrelevant superiority will need to be eliminated due to lack of economic viability. Alternately, consumers can be educated as to the importance of the service, creating a need for the service.

Gray zone services indicate a need to (a) improve current services, and (b) extend offerings by adding new services. Services also may be repositioned in consumers' perceptions, and specific employee training needs will be identified.

If service delivery performance is inadequate, management must determine the cause for the discrepancy between expectations and perceptions. Parasuraman, et al. (1985) suggested several reasons for inadequate service quality: (a) customer expectations and management perceptions; (b) management perceptions and specifications; (c) perception of unfeasibility; (d) standardization of service; (e) goal setting; (f) service blueprinting; and (g) service quality specifications and service delivery; (h) service delivery and external communications; (i) expected service and perceived service. Each of these factors is discussed in detail below.

(a) Customer Expectations and Management Perceptions

This is the difference between what customers want and what managers believe they want. This may be due to: (a) lack of market research orientation, such as insufficient market research, inadequate use of research finding, or lack of interaction between management and customers; (b) inadequate communication between contact personnel and management; and (c) too many levels of management.

(b) Management Perceptions and Specifications

In this situation, management is fairly astute in perceiving the wants of customers

but has failed to establish performance standards that mirror the management's perception. This is usually a result of (a) a lack of commitment and dedication on the part of top management; (b) the perception of unfeasibility; (c) inadequate task standardization; and (d) absence of goal setting.

(c) Perception of Unfeasibility

This result from a managerial mindset that may or may not be related to the actual constraints of the organization, and from short-term, narrow thinking on the part of managers, "an unwillingness to think creatively and optimistically about customers needs" (Zeithaml, et al. 1990, p.77).

(d) Standardization of Service

Levin and Hubert (1976) stated that the standardization of services can be through (a) substitution of personal contact and human effort with hard technology (such as automatic teller machines); (b) improvement in work methods or soft technology (such as salad bars or buffets); and (c) a combination of these two methods.

(e) Goal Setting

Upon identifying consumer's wants, goals must be set on the basis of the priority of wants. However, the interpretation of wants by employees is not necessarily the same as the interpretation of wants by consumers. To avoid such ambiguity, it has been suggested that pertinent goals be defined, and the processes leading to the realization of the goals be outlined. Guidelines may be written, for example, for what a courteous employee should and should not do. Providing employees with a well-developed repertoire of responses and contingency approaches, and asking them about factors that prevent them from providing high quality service, are means that will increase the realization of the goals.

(f) Service Blueprinting

When translating external customer service expectations into internal service delivery specifications, the service must be visualized from the customer's perspective. After the blueprint is drawn, activities, tasks, and steps must be classified according to the degree that they require technical skills, equipment, tools, personal interaction, interpretation of consumer input, and flexibility of response to enhance the clarity of the communication (Vithaya, 2003). Support

services, customer-contact jobs, physical facilities, equipment, and procedures are analyzed in terms of their impact on the customer's service quality experience (Vithaya, 2003). The barriers to acceptable levels of service quality are identified for redesigning (Vithaya, 2003).

(g) Service Quality Specifications and Service Delivery

Service quality specifications and service delivery refer to situations where contact personnel are unwilling or unable to meet established performance standards. The key contributing factors identified by Parasuraman et al. (1990) are:

Role ambiguity where the employees are uncertain about what they are expected to do.

Role conflict where employees cannot meet all of the internal and external demands of consumers they serve.

Poor employee-job fit is the result of a poor match between the skills of employees and the job.

Poor technology-job fit is a result of inadequate tools and technology for employees to use.

Inappropriate supervisory control systems are a result of evaluation when the reward system is poor.

Lack of perceived control result from employees having a lack of

flexibility in the job.

Lack of teamwork between, as well as within, department in the service system design and delivery is a significant factor in the prevention of quality service delivery. (p. 44)

The provision of quality service in accordance with established performance standards is outlined below:

1. Everyone in the organization must know the importance of delivering high quality service and how they fit into the organization's plan for providing this high quality service.
2. Service roles and standards must be set and defined in terms of consumers' expectations and the level of service that employees should provide.

When employees are included in the standard-setting process, acceptance and commitment to achieving the goals is increased. The participation of employees will also help to make the ideas more workable and realistic.

Role conflict is lessened if an employee knows what to do. Because of the diversity and multitude of demands placed on service workers, delivery of all aspects of service is at times impossible. This requires establishing priorities in performance standards to decrease potential role conflict. When employees share

information about consumers, they can better understand these priorities. Allowing employees to influence the level of service they provide will help to reduce role conflict.

From a study of consumer satisfaction of management, Young and Lee (1994) suggested the following conclusions:

1. A complete examination of the position of the company was necessary. This included the strengths and weakness, as well as an analysis of the competitors.
2. A collective effort must be made by the company to satisfy the consumer.
3. Employees must be satisfied because satisfied employees ensure satisfied consumers.
4. The type of management leadership that was necessary was one which was directed toward customer satisfaction and stimulates innovations.
5. Job-oriented management should be directed toward ensuring customer satisfaction.

Standards can only be established if they are supported with adequate and appropriate resources, such as technology, adequate staff, qualified and trained personnel, information systems, and equipment.

Although initial contact employees may lack technical or other expertise, their role is important because they provide the first contact with potential consumer. Once standards are established, they must be enforced, if they are enforced, employees will be motivated to provide a higher level of service. Providing feedback on the performance of employees is an important motivational factor. Zeithaml, et al (1990) said that using performance measurement systems that focus on the consumer in addition to internal efficiency is one way to clearly support the service quality priority. However, the employees must be told in advance how their performance will be evaluated, and rewards must be given for the delivery of high quality service.

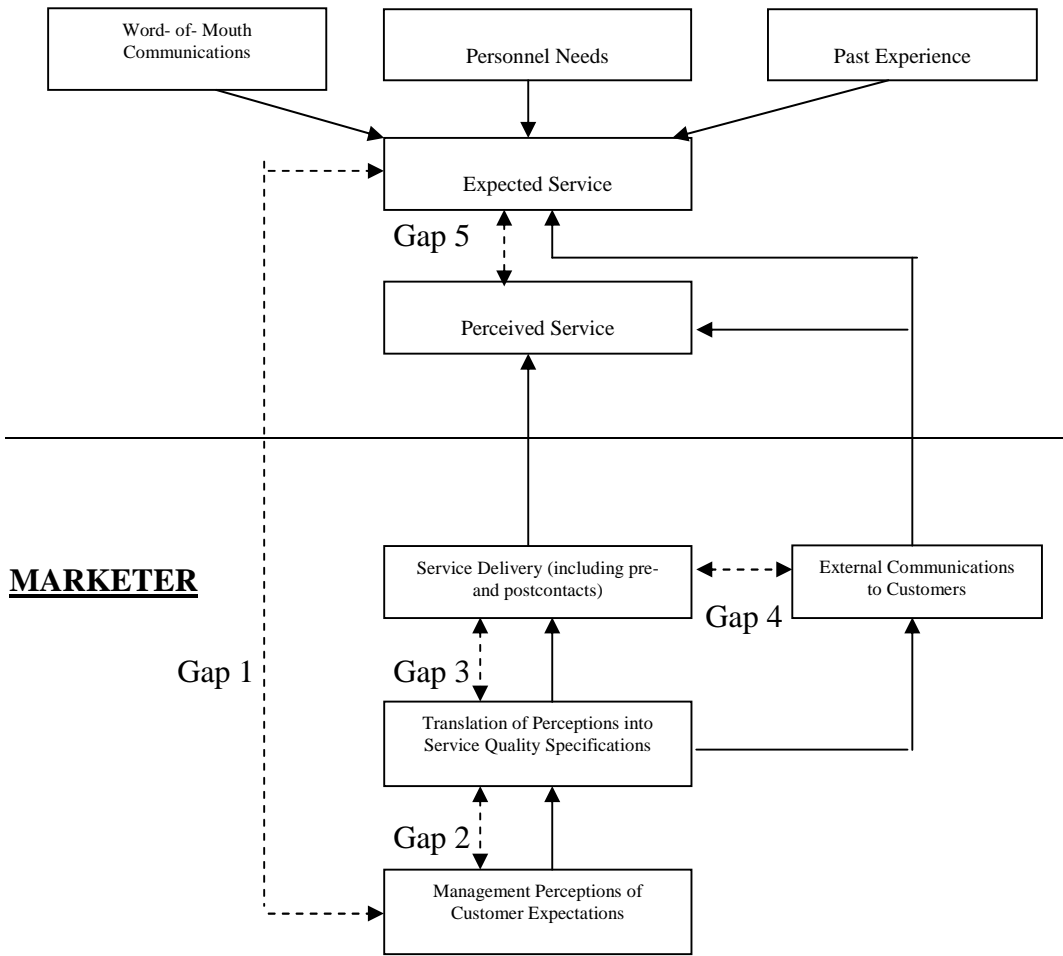
(h) Service Delivery and External Communications

The lack of communication between marketing, human resources, and operations results in the service provider breaking its promises. This also happens when service providers neglect activities that are occurring behind the scenes to increase the quality of service being delivered. Furthermore, service providers often fail to tell consumer about the facets of the service they find problematic (Zeithaml, et al, 1990).

(i) Expected Service and Perceived Service

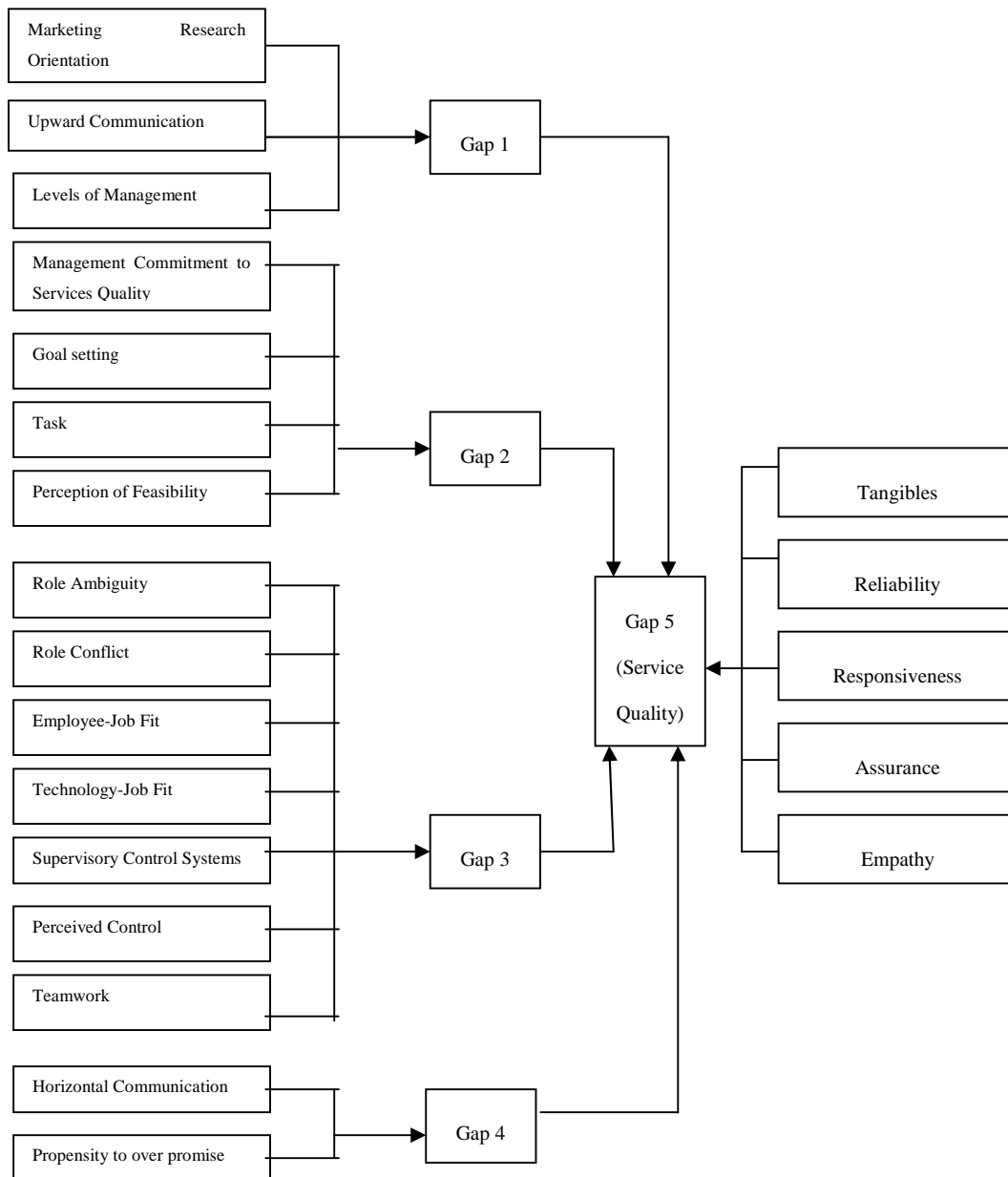
Often, perceived quality of service does not meet consumers' expectations. The difference between expected and perceived service cause gaps (Zeithaml et al, 1990), as summarized in Figures 2.1 and 2.2.

CUSTOMER



<Figure 2.1> Conceptual model of service quality

Source: Zeithaml, Parasuraman, and Berry (Fall, 1985), p. 44.



<Figure 2.2> The extended model of service quality

Source: Zeithaml, Parasuraman, and Berry (1990), p. 131.

2.5 SERVICE QUALITY AND CUSTOMER SATISFACTION

Many authors posit very clearly that service quality is regarded mostly as an antecedent of satisfaction (Cronin and Taylor, 1992; Olshavsky, 1985). Cronin and Taylor (1992) founded that satisfaction is super ordinate to quality - that quality is one the service dimensions which are factored into the consumer's satisfaction judgment. Cronin and Taylor (1992) reported that un their structural analysis for the causal relations among satisfaction, overall service quality and purchase intention, the coefficient of path for service quality to satisfaction/ to purchase intention appeared to be all significant while the coefficients of path for satisfaction to service quality/ to purchase intention were insignificant.

Oliver (1981) summarized current thinking on satisfaction in the following definition: “[Satisfaction is a] summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience”. (p. 27)

Oliver (1981) summarized the transaction-specific nature of satisfaction, and differentiates it from attitude, as follows: “Attitude is the consumer's relatively enduring affective orientation for a product, store or process (e.g., customer service) while satisfaction is the emotional reaction following a disconfirmation

experience which acts on the base attitude level and is consumption-specific. Attitude is therefore measured in terms more general to product or store and is less situational oriented. (p. 42)

Consistent with the distinction between attitude and satisfaction, is a distinction between service quality and satisfaction: perceived service quality is a global judgment, or attitude, relating to the superiority of the service, whereas satisfaction is related to a specific transaction. The differences between service quality and satisfaction (Oliver, 1993), as summarized in table 2.3.

<Table 2.3> Comparison of the service quality and satisfaction concepts

Comparison dimension	Service quality	Service satisfaction
- Attributes or dimensions	- Specific to quality judgments	- Potentially all salient dimensions
- Expectation referent	- Ideal, "excellence"	- Predictive, norms, need, etc
- Experience-dependency	- Not required; can be externally mediated	- Required
- Other conceptual antecedents	- Communications	- Equity, attribution, emotion, etc

Source: Oliver (1993), p. 76

The employees of transportation companies have an important role as the face-to-face service providers to the customers. Therefore, it seems only natural that employee satisfaction promotes customer satisfaction. The product that

transportation company offers to its' customers is a combination of tangible products and intangible services. For the reason that the main product is intangible, the role of quality service, as the generator of customer satisfaction, is emphasized.

Hanan and Karp (1989, ix-xiv) focus on customer satisfaction as a revenue generator. They argue that customer satisfaction is the ultimate product of every organization. People think that they are making products, but they are really making satisfied customers. People may think that they are producing services, but they are really producing satisfied customers. If the products and services do not satisfy, there will be no producing them for much longer. Customer satisfaction is the ultimate objective of every organization. It is neither to produce nor to service, but to satisfy the needs that drive customers to do business.

According to Hanan and Karp (1989, ix-xiv), satisfaction is the value that has been added to the product of the organization. A satisfied customer is one who receives significant added value from a supplier, not simply products and services. A satisfactory supplier, in turn, is one, who gives significant added value to the customer, not simply goods and services. You should not interpret having satisfied customers because you are better. Customers are satisfied because you have made them better. What satisfies customers is the improvement that they see in themselves.

Hanan and Karp (1989, ix-xiv) claim that customer satisfaction is the only meaningful competitive advantage. A satisfied customer comes back and becomes a repeat customer. He will buy in volume over time and will form a foundation of demand base. It is the satisfied and dedicated customers that guarantee the success of the organization. The profit that the organization makes is the ultimate test of satisfying customers. It is also the ultimate reward (Hanan and Karp 1989, ix-xiv).

2.6 THE CONCEPT OF SERVICE QUALITY

Services have four unique characteristics that differentiate them from commodities, namely, intangibility, heterogeneity, inseparability and perishability. Most services are intangible in that they do not take on a physical form. Therefore, most services cannot be measured and verified in advance of sale to assure quality. Parasuraman et al., (1985) stated several interesting themes regarding service quality. “(1) Service quality is more difficult for the consumer to evaluate than goods quality. (2) Service quality perceptions result from a comparison of consumer expectations with actual service performance. (3) Quality evaluations are not made solely on the outcome of a service; they also involve evaluations of the process of service delivery” (p. 42). Secondly, services are heavily reliant upon personal interaction between the service provider and the consumer. The presence of a human service provider and the associated personal interaction

creates variability in the service provision for each individual consumer. These inherent inconsistencies in service delivery can interfere with the provision of consistent and reliable service and with the formation of consumer trust. The third characteristic that separates services from commodities is the inability to separate the consumer from the service provider in the completion of a service transaction. Finally, services cannot be held for future use. They are perishable and cannot be inventoried. These characteristics make tracking and measuring consumer perceptions of service quality and satisfaction in service industries difficult.

Many researchers (Cronin and Taylor, 1992; Olshavsky, 1985) understood quality as a form similar to attitude in many ways, which is the overall assessment of manufactured goods. They also revealed that quality acts as a comprehensive or global value when measuring consumer satisfaction. In addition, there was a study done by Parasuraman et al. (1985) supporting the above notion, carried out in a total of twelve focus group interviews with consumers of four different services areas, such as banking, credit card, securities brokerage, and product repair and maintenance.

Leading researchers in the field of quality marketing attempted to understand the characteristics of services and what providers should possess in order to project a high quality service articulated by their customers. Regardless of the business type,

the customers carried similar criteria to assess service quality. They made a conclusion that consumers' perceived service quality is a different concept from their satisfaction level, and service quality can be known by measuring the gaps between consumers' expectation and their performance (Zeithaml and Berry, 2003). There have been a large number of researchers interested in developing service quality; they believe it is a form of attitude, connected but not equivalent to the level of the customers' satisfaction (Cronin & Taylor, 1992; Oliver, 1993). Bitner et al. (1990) defined "service quality" as the consumers' overall impression of the relative inferiority/superiority of the organization and its services. He observed that in most services, the customer formulates his perception of actual service quality during his interaction with the contact personnel of the firm. Hence, service quality is highly dependent on the performance of employees. Bitner et al. (1990) suggested that both service quality and satisfaction affirms the importance of the quality of customer/employee interactions with services. A close examination of the scale items for each service quality dimension reveals that a majority of all the items are related directly to the human interaction element of service delivery.

2.7 MEASUREMENT SERVICE QUALITY AND SERVQUAL

Service quality is judged by customers. User satisfaction is directly related to how

small the difference between customers' expectations and perceptions is. All features of services that add value to customers and improve customer satisfaction also improve customers' perceived service quality. Thus, it is very important for firms to understand what customers expect, factors of services that cause satisfaction and the ones that cause dissatisfaction, order winning and qualifying factors. What companies continuously need to do is to measure their service quality and then perform necessary actions to improve the quality. At this point, choosing the appropriate quality measurement method is very critical.

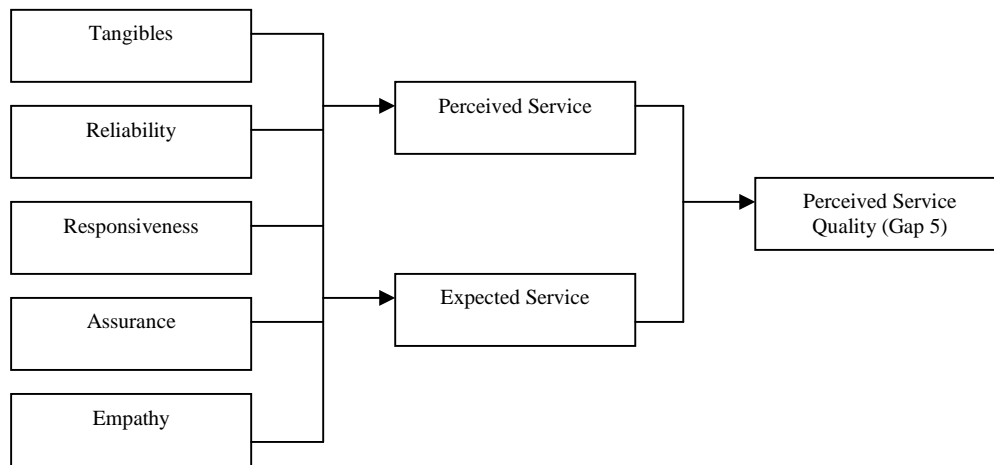
The most widely used and discussed service quality measurement instrument is SERVQUAL. The initial instrument was proposed by Parasuraman et al. Later, other researchers contributed to the development and improvement of the instrument.

In SERVQUAL, the difference between customers' expectations and perceptions is called Gap 5. Gap 5 symbolizes deficiencies in the service provided by the firm. The ultimate goal is to make Gap 5 as small as possible either by managing customers' expectations or by improving offered service quality. Gap 5 is evaluated using four other gaps: Gap 1 to Gap 4. The meanings of these gaps are summarized in table 2.4.

<Table 2.4> Meaning of Gap 1 to Gap 4

Gap ID	Meaning
Gap 1	Misunderstanding what customers want,
Gap 2	Inappropriate service quality standards set up,
Gap 3	Difference between set up service quality standards and what is actually delivered,
Gap 4	Causing customers expect more than what is actually delivered.

Source: Parasuraman et al., 1990.



<Figure 2.3> The research model based on the SERVQUAL.

Figure 2.3 the SERVQUAL model is the instrument proposed to measure Gap 5 (Parasuraman et al. 1988). The instrument consists of 45 statements: 22 to measure expectations, 22 to measure perceptions, and 1 to measure overall service quality. There are 22 items and two similar questions about each item are asked to

the participants; one for expected service quality and one for perceived service quality. In SERVQUAL, expectations are defined as how customers think the same service would be offered by an excellent service provider.

There are five dimensions underlying SERVQUAL and these five dimensions cover 22 items of the instrument. These dimensions are and their corresponding meanings are given in table 2.5.

<Table 2.5> Dimension list of SERVQUAL measurement instrument

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
Empathy	Caring, individualized attention the service dependably and accurately

Source: Parasuraman et al., 1990.

For each dimension, a gap score G, which represents how well the service provider performs in that dimension, is calculated. The formula for G is:

$$G = P - E$$

Where P is the average perceptions grade of a dimension obtained from perceptions grades of a subset of 22 SERVQUAL items whose elements are

related to that dimension and E is the average expectations grade of a dimension obtained from expectations grades of the same subset. In SERVQUAL there are 4, 5, 4, 4 and 5 items related to tangibles, reliability, responsiveness, assurance, and empathy respectively. Items of SERVQUAL instrument are listed in table 2.6. Participants are asked to state how much they agree with each of 44 statements. They rate each statement by giving a point between 1 and 7 where 1 mean strongly disagree and 7 means strongly agree, and any point in between means partial agreement or partial disagreement. For example, for item T1 participants rate two questions: (1) Expectations (E): A service provider should have up-to-date equipment, (2) Perceptions (P): Service provider X has up-to-date equipment. Then, G is calculated as $P - E$.

SERVQUAL is based on focus group research. Parasuraman and his colleagues started with 10 dimensions and 97 items. After testing this initial model with a sample of service users, the items were re-evaluated, overlapping items were removed and SERVQUAL with 45 statements is developed. Many researchers believe that SERVQUAL is valid and reliable to use in many different industries and service sectors as long as necessary minor wording changes or item eliminations and additions are made (Zeithaml et al., 1990).

<Table 2.6> Item list of SERVQUAL measurement instrument

Tangible	T1	Has up-to-date equipment
	T2	Physical facilities are visual appealing
	T3	Employees are neat in appearance
	T4	Materials are visually appealing
Reliability	Rel 1	When promises to do something, it does so
	Rel 2	Shows sincere interest in solving your problems
	Rel 3	Performs the service right the first time
	Rel 4	Provides services at the time it promises
	Rel 5	Keeps accurate records
Responsiveness	Res 1	Tells you when the service will be performed
	Res 2	Gives prompt service
	Res 3	Always willing to help
	Res 4	Never too busy to respond to your requests
Assurance	A1	Employees can be trusted
	A2	Feel safe in your transactions with employees
	A3	Consistently courteous
	A4	Has knowledge to answer your questions
Empathy	E1	Gives individual attention
	E2	Has operating hours convenient to you
	E3	Employees give personal attention
	E4	Has your best interest at heart
	E5	Employees understand your specific needs

Source: Parasuraman et al., 1990.

SERVQUAL is very popular because there is a lot of advantage of using it. First of all, expectations of users are learnt and this helps managers to understand in which areas they do not perform well enough. They can use results to find ways to manage customers' expectations so that customers begin to expect what is feasible.

The result can be used for benchmarking with competitors in the same industry or other firms from other industries that offer high-quality services. Managers also obtain demographic information about customers and evaluate each SERVQUAL score according to each participant's characteristics.

2.8 SUMMARY

The escalating importance of customer service, an increased number of transportation companies have attempted to improve their service strategy and the need to conduct marketing and performance improvement programs was necessary in the Lao PDR. However, consumers have not been satisfied with services. One of the major problems addressed in the literature for satisfying consumer demands is management's inability to identify what the consumer sees as important. Such factors as goal-setting, service standardization, service blueprinting, and marketing have been found necessary for Lao transportation company managers in order to improve service. Consumer diversity complicated the attempt to serve customers, because many expectations exist.

Choo (1998) wrote that consumers' wants change as soon as they are identified, as do their opinions, attitudes, values, and beliefs. Different consumers had different needs. This is based on both demographic and experiential differences.

The key to creating a perception of high service quality was to ensure that perceived service quality and delivery meets or exceeds consumers' expectations. This must be ascertained through an evaluation of consumers' perceptions of the service delivery performance.

Parasuraman et al. (1985) suggested several reasons for inadequate service quality: (a) customer expectations and management perceptions; (b) management perceptions and specifications; (c) perception of unfeasibility; (d) standardization of service; (e) goal setting; (f) service blueprinting, and (g) service quality specifications and service delivery; (h) service delivery and external communications; (i) expected service and perceived service.

Bolton and Drew (1991) indicated that perceived service quality is a function of (a) consumer's residual perception of the service quality from the prior period, and (b) his/her level of satisfaction or dissatisfaction with the current level of performance. Satisfaction or dissatisfaction was achieved through the evaluation of a specific transaction.

CHAPTER 3

METHODOLOGY

In order to analyze the relationship between expected and perceived service quality experienced by customers for transportation company services in Lao PDR. SERVQUAL, a multiple-item scale for measuring perceptions and expectations of service quality was the survey instrument used in this study. The collected data was analyzed, and the results provided answers about the research hypotheses.

3.1 RESEARCH HYPOTHESES

Realizing the escalating importance of customer service, an increasing number of transportation companies have attempted to improve their service strategy. The leading group of marketing researchers (Parasuraman et al., 1985) has developed a model of service quality that focuses on possible communication and control gaps within the “consumer-marketer” system, which can lead to a breakdown in service quality. Since transportation is such a vital segment of the Lao PDR’s service economy, it would seem fruitful to examine the companies to discover whether it suffers from a breakdown in service quality.

Customer satisfaction is important because there are significant short- and long-

term costs associated with poor customer service. Short-term dissatisfaction could result in a walkout, whereas long-term dissatisfaction responses might lead to customer defection. When studying service companies, Reichheld and Sasser (1990) measured the economic impact of profit loss due to defecting customers and found that these companies increased profits by almost 100 percent by retaining just 5 percent more of their customers. Not only did losing a customer represent the lost value of the long-term sales potential of that customer, but it also represents the additional costs of replacing that customer.

Webster (1989) examined expectations of professional services (such as lawyers and doctors) and nonprofessional services (other services) using the SERVQUAL scale. Findings revealed that demographic characteristics were important when determining the expected service quality for non-professional services, but not for professional services. This indicated a need to examine demographic characteristics when evaluating service quality in nonprofessional services setting such as transportation company.

According to Webster (1989) and Gagliano and Hathcote (1994) demographic characteristics were a factor in consumers' expectations of non-professional services. Therefore, the first question asked was: Does consumer age, gender, education, income have an effect on expected and perceived service quality in

transportation company? If there was a substantial effect, marketers need to identify which factors are important to better define their target markets.

The general problem was to analyze expected and perceived service quality for customers of the transportation company in the Lao PDR. Demographic characteristic information in Lao PDR is surely lacking. Along with increased nationalism and heavy emphasis on cultural and ethnic identity, consumer ethnocentrism will be a potent force in the global business environment in the years to come. This study, therefore, uses demographic variables (such as gender, age, education, income). The following hypotheses state the relationship between the demographic variables that may influence consumers' perception and expectation on service quality in the transportation company and the relationship between perceived and expected service quality in transportation company services. There are as follows:

H1: There is significant relationship between customers' expectations and perceived quality of service provided.

H2: There is significant relationship between customers' demographic variables and their perceptions regarding quality of service provided.

H3: There is significant relationship between customers' demographic variables and their expectations regarding quality of service provided.

3.2 DEFINITIONS OF TERMS

Expectations: the expressed service preferences of the consumer concerning what the service provider should offer.

Gap: the measured difference between customers' expectations and satisfactions with perceived service quality.

Satisfactions: the level of customers' perceived need gratification related to services perceived, as measured by ratings of services.

Perceptions: the consumer's judgment of the service organization's performance.

Service Quality: the perceived value/propriety of services offered by a service organization, as measured by the association between satisfaction rating and expressed expectations.

3.3 SURVEY INSTRUMENT

For this study, expectations and perceptions of the five dimensions of service quality were measured by 22 statements taken from SERVQUAL (Parasuraman et al, 1988) and then modified to capture more precisely the expectations and perceptions associated with transportation services. Each question uses a seven-point, Likert-type scale, ranging from strongly agreeing to strongly disagreeing.

Collected data was input into the SPSS-windows statistical package for analysis using statistically appropriate methods (ANOVA tests, and t-tests). Reliability coefficients for all dimensions were computed.

3.4 SAMPLE AND DATA COLLECTION

The sample in this study consists of respondents who are users of road transportation services. This study uses a simple random sampling method. A questionnaire was distributed randomly to 90 customers through the three providers (namely; SMT Lao, Lao Freight Forwarder, and TEC) located in Vientiane, the capital of Lao PDR. Out of a total 90 questionnaires, 75 usable responses were returned (83 % responses rate). The questionnaires were sent to the respondents in the beginning of July and the last response was received on

August 20, 2004. The questionnaire consists of three parts (See appendix 1). The first part consists of the respondent's demographic variables. The second and third parts are based on the respondent's expectation and perception of using transportation company services. These parts are important because they measure the respondent's attitude and opinion towards perception and knowledge about transportation company services. In addition, section 2 of part 2 requested that respondents indicate the relative importance of each of these dimensions to their evaluation of service quality, by assigning a total of 100 points among the five dimensions. This allowed a weighted score to be calculated for each service dimension.

3.5 STATISTICAL ANALYSIS

Percentages and frequency distributions were computed. To test of research hypothesis 1, each expectations ranking for each relevant item in the questionnaire was paired with the perceptions ranking for the same item. The ANOVA and t-tests were used to calculate the difference between expectation and perception for each item. Statistical significance was accepted at $p < .05$.

To test of research hypotheses 2 and 3 when the demographic variable was ordinal, the ANOVA test and t-tests were computed. Statistical significance was accepted

at $p < .05$.

3.6 CORRELATION ANALYSIS

A correlation analysis was examined for significant inter relationships within the different groups of factors. Values of $X > 0.350$ and Sig (2 tails) < 0.05 were required. (See table 3.1).

Out of the 22 items, four coefficients were deleted due to their small value 0.35. The important items shaded were deleted based on results of the survey.

3.7 FACTOR ANALYSIS

The factor analysis was conducted to explore the overall dimension of the selection criteria, rather than the specific variable used in the survey; the respondents from the survey were examined by factor analysis using a principal components method followed by varimax rotation with Kaiser Normalization. Using the Scree method of factor determination five factors was determined, which explain 92.87 percent of the variance in the data with an Eigen value of 1.

<Table 3.1> List of dimensions and items for measuring service quality

Dimensions	Items
Tangibles	Up-to-date equipment
	Visually appealing facilities
	Employee who has a neat and professional appearance
	Materials visually appealing
Reliability	Providing service as promised
	Sincere in solving the problem
	Performing service right the first time
	Providing service at the promised time
	Maintain error-free records
Responsiveness	Keeping customers informed about when services will be performed
	Providing prompt service to customers
	Willing to help customers
	Always ready to respond to customers' requests
Assurance	Employees who instill confidence in customers
	Customers feel comfortable interacting with employees
	Employees who are consistently courteous
	Employees who have the knowledge to answer customers' questions
Empathy	Employees who give customers individual attention
	Having business hours convenient to customer
	Having staff who give customers personal attention
	Having the customer's best interest at heart
	Employees who understand the needs of their customers

Note: Items shaded where not included in the final table due to results in the dimension analysis according to respondents in Lao PDR.

The use of the principal components method made it possible to test the hypothesis and five factors were sufficient. Factors loading of 0.611 and greater were used as the determinant of the different variables, which loaded significantly on to the factors. These variables with the associated relevant factors loading denoted by shade color and the coefficient alpha value for the constructs are shown in table 3.2 (Rotated component matrix).

A reliability test was performed through the calculation of Cronbach coefficient alpha for each construct. All alpha results range from 0.7739 to 0.9336, indicating internal consistency of the scales.

<Table 3.2> Rotated component matrix

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Items	Cronbah alpha
SQ1	.008	.206	.000	.003	.961	Up-to-date equipment	0.9336
SQ2	.294	.196	.214	.313	.830	Visually appealing facilities	
SQ3	.358	.189	.250	.533	.666	Employee who has a neat and professional appearance	
SQ4	.882	.009	(.005)	.330	.004	Providing service as promised	0.9050
SQ5	.773	.371	.236	.119	.232	Sincere in solving the problem	
SQ6	.768	.339	.404	(.000)	.178	Performing service right the first time	
SQ7	.684	.651	.003	(.161)	.115	Maintain error-free records	
SQ8	.005	.167	(.007)	.922	.141	Keeping customers informed about when services will be performed	0.8395
SQ9	.171	(.008)	.249	.875	.173	Providing prompt service to customers	
SQ10	(.196)	(.009)	.511	.641	.479	Willing to help customers	
SQ11	.404	.522	.341	.611	(.244)	Always ready to respond to customers' requests	
SQ12	.135	.005	.966	(.000)	.115	Employees who instill confidence in customers	0.7739
SQ13	.005	.257	.921	.205	(.001)	Employees who are consistently courteous	
SQ14	.431	.169	.619	.305	.297	Employees who have the knowledge to answer customers' questions	
SQ15	.188	.881	.305	.248	.007	Employees who give customers individual attention	0.9168
SQ16	.456	.768	.006	.000	.373	Having business hours convenient to customer	
SQ17	.579	.731	.001	(.003)	.292	Having the customer's best interest at heart	
SQ18	.004	.634	.542	.121	.456	Employees who understand the needs of their customers	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

- a. Rotation converged in 9 iterations.

CHAPTER 4

RESULTS

This chapter contains the data for each part of the questionnaire survey instrument to assess the service quality of the transportation companies in Lao PDR. The data were analyzed to answer the research questions 18-items (See Appendix 2) surveyed and the data were examined according to ANOVA and t-tests to determine the difference between expected and perceived service quality for respondents who are users of the transportation company services.

4.1 DESCRIPTIVE DATA

The general problem of the research was to analyze the difference between expected and perceived service quality for respondents who are users of the transportation company services in the Lao PDR.

PART 1

The percentage distributions for independent factors according to the survey sample were as follows:

As shown in table 4.1, the respondents comprised just more men than women. More than 60 percent of the respondents were aged between 31 and 50. About 26.7 percent were aged under 30 and 13.3 percent were aged over 50. The respondents about education were: high school or less, 6.7 percent; college graduate, 46.7 percent, and graduate degree, 46.7 percent.

<Table 4.1> Demographic profile of respondents (N = 75)

	<u>Frequency</u>	<u>Percentage</u>
Sex:		
Male	45	60
Female	30	40
Age:		
Under 30	20	26.7
Between 31-50	45	60
Over 50	10	13.3
Education:		
High school or less	5	6.7
College graduate	35	46.7
Graduate degree	35	46.7
Income:		
Less than 1.000.000 ^a	15	20
Between 1.000.000-2.000.000	20	26.7
Between 2.000.000-5.000.000	40	53.3
More than 5.000.000	0	0

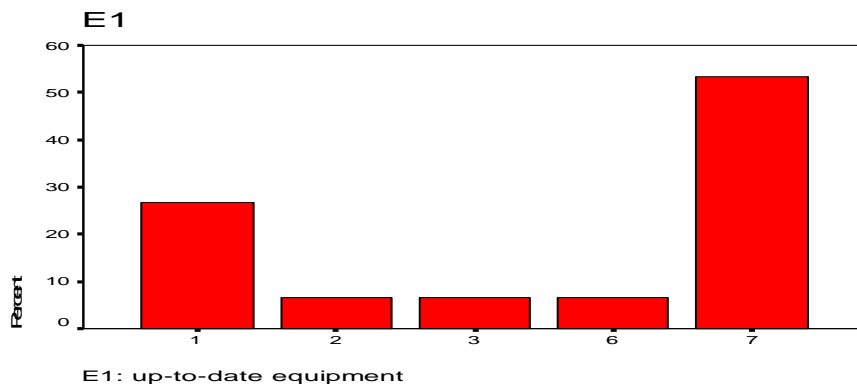
^aNote : 10.000 Lao Kip is equivalent to \$1 USD (in January, 2005)

More than half of the respondents (53.3 percent) had a personal monthly income between 2.000.000 and 5.000.000 Kip about one-quarter had personal monthly income between 1.000.000 and 2.000.000 Kip. Those earning less than 1.000.000 Kip represent 20 percent of the total number of respondents.

PART 2

The percentage distributions for expectation of service quality according to the survey sample are as follows (See Appendix 2), figures 4.1; 4.2; 4.3; 4.4 and 4.5 illustrate the responses.

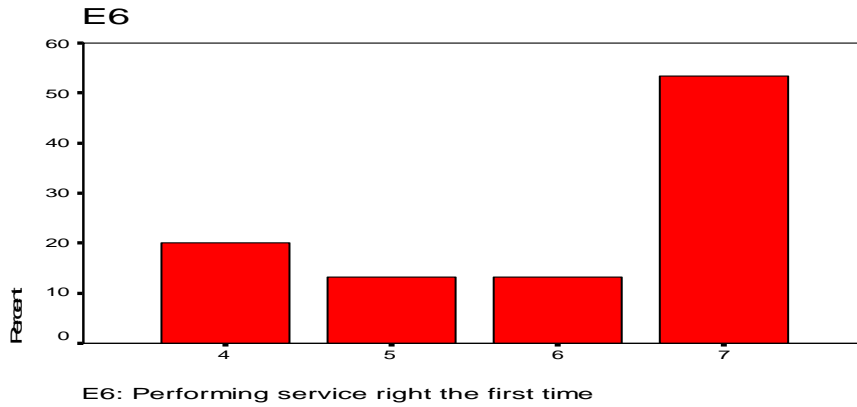
1. The responses about “Up-to-date equipment” are: (1) strongly disagree, 26.7%; (2) 6.7%; (3) 6.7%; (6) 6.7%; (7) strongly agree, 53.3%.



Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.1> Distribution of responses for expectation on up-to-date equipment

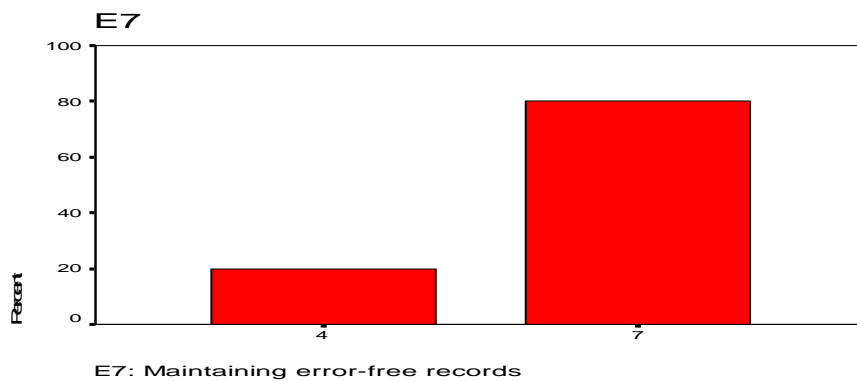
2. The responses about “Performing service right the first time” are: (4) 20%; (5) 13.3%; (6) 13.3%; (7) strongly agree, 53.3%.



Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.2> Distribution of responses for expectation on performing service right the first time

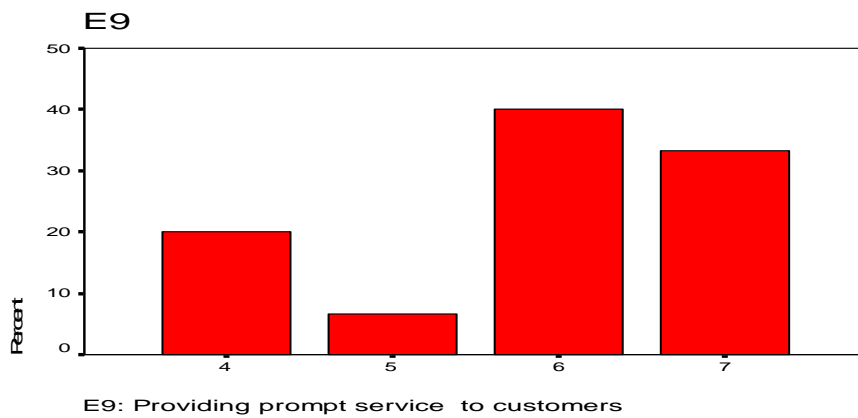
3. The responses about “Maintaining error-free records” are: (4) 20%; (7) strongly agree, 80%.



Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.3> Distribution of responses for expectation on maintaining error-free records

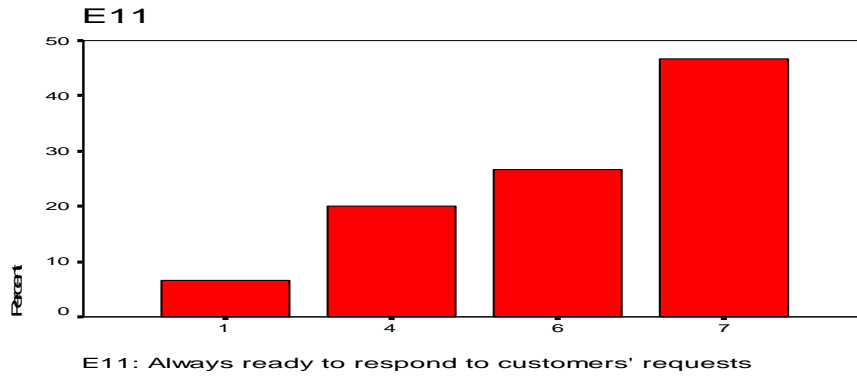
4. The responses about “Providing prompt service to customers” are: (4) 20%; (5) 6.7%; (6) 40%; (7) strongly agree, 33.3%.



Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.4> Distribution of responses for expectation on providing prompt service to customers

5. The responses about “Always ready to respond to customers’ request” are: (1) strongly disagree, 6.7%; (4) 20%; (6) 26.7%; (7) strongly agree, 46.7%.



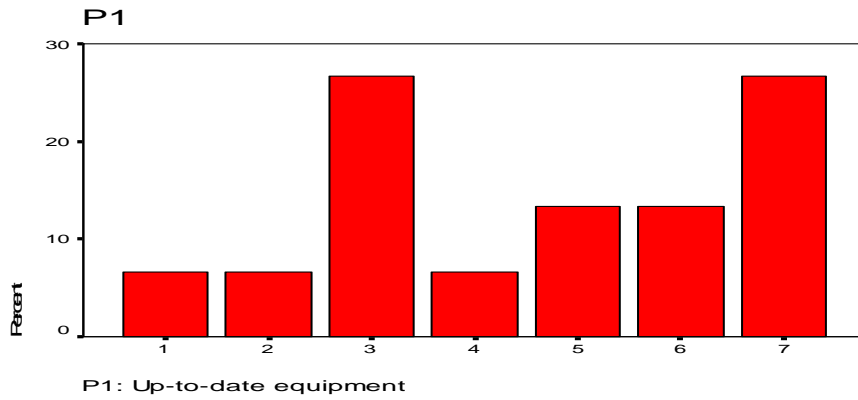
Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.5> Distribution of responses for expectation on always ready to respond to customers' request

PART 3

The percentage distributions for perception of service quality according to the survey sample are as follows (See Appendix 3), figures 4.6; 4.7; 4.8; 4.9 and 4.10 illustrate the responses.

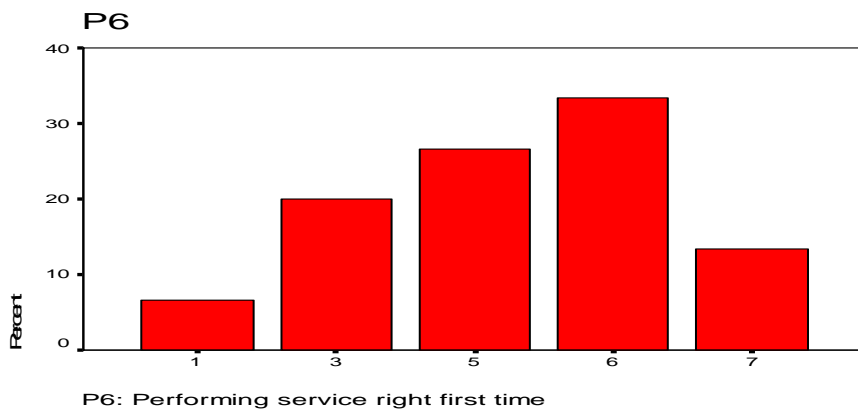
1. The responses about “Up-to-date equipment” are: (1) strongly disagree, 6.7%; (2) 6.7%; (3) 26.7%; (4) 6.7%; (5) 13.3%; (6) 13.3%; (7) strongly agree, 26.7%.



Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.6> Distribution of responses for perception on up-to-date equipment

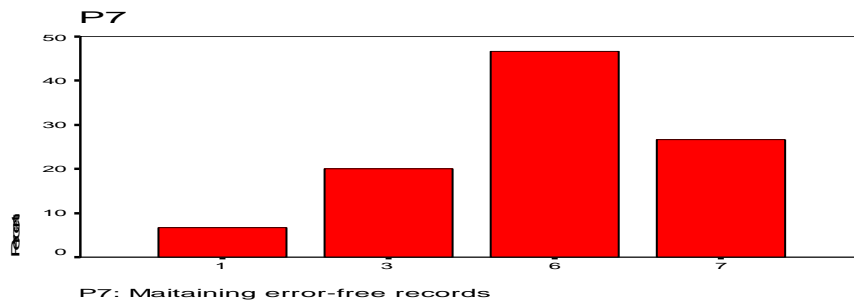
2. The responses about “Performing service right the first time” are: (1) strongly disagree, 6.7%; (3) 20%; (5) 26.7%; (6) 33.3%; (7) strongly agree, 13.3%.



Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.7> Distribution of responses for perception on performing service right the first time

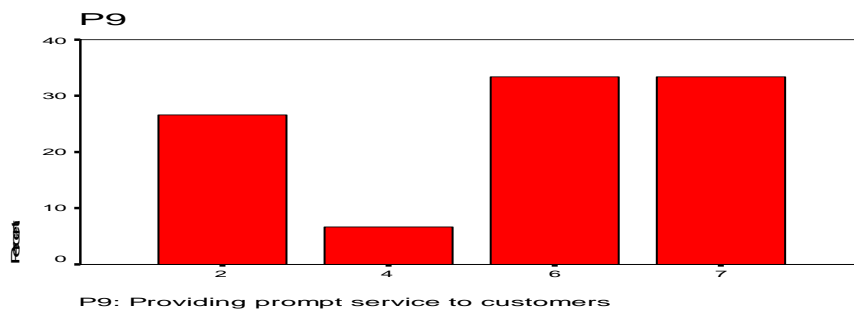
3. The responses about “Maintaining error-free records” are: (1) strongly disagree, 6.7%; (3) 20%; (6) 46.7%; (7) strongly agree, 26.7%.



Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.8> Distribution of responses for perception on maintaining error-free records

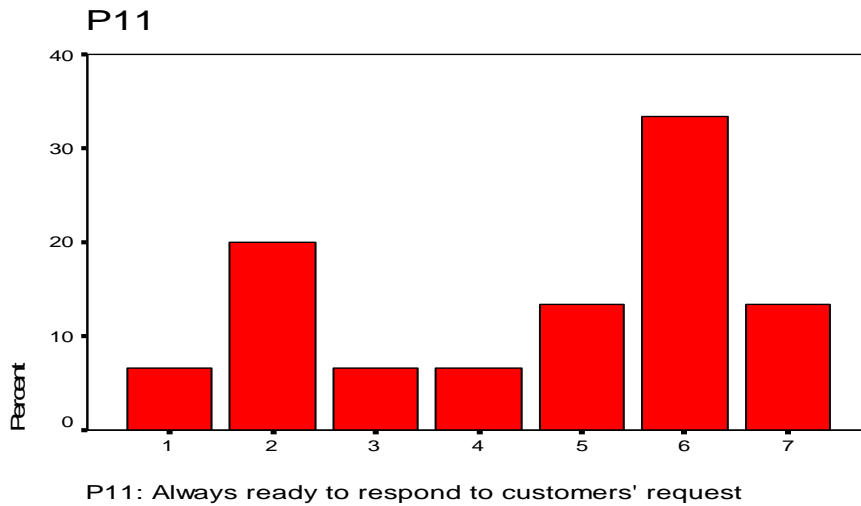
4. The responses about “Providing prompt service to customers” are: (2) 26.7%; (4) 6.7%; (6) 33.3%; (7) strongly agree, 33.3%.



Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.9> Distribution of responses for perception on providing prompt service to customers

5. The responses about “Always ready to respond to customers’ request” are: (1) strongly disagree, 6.7%; (2) 20%; (3) 6.7%; (4) 6.7%; (5) 13.3; (6) 33.3%; (7) strongly agree, 13.3%.



Note: 1) strongly disagree; 2) disagree; 3) partly disagree; 4) neutral opinion; 5) partly agrees; 6) agree; 7) strongly agree.

<Figure 4.10> Distribution of responses for perception on always ready to respond to customers’ request

4.2 THE TEST OF RESEARCH HYPOTHESIS 1

Investigating the expectation and perception of the quality of service (Table 4.2), customers gave the highest expectation score of 6.40 to “Maintain error-free records”, one of the reliability factors. Meanwhile, there was the lowest score of

3.87 to “Visually appealing facilities”, a factor determining the dimension of tangibles. In their perception of the services, the customers collectively gave the highest score of 5.73 to “Employees who instill confidence in customers” under the assurance dimension. The lowest score of 3.73 referred to “Willing to help customers” in the dimension of responsiveness. Hence, comparing the results between customer’s expectation and perception on service quality provides some interesting facts, especially the differences among the 18 statements.

From Table 4.2 customers using transportation company services in general shows higher expectation in the provided services. The total score for expectation given by the customers is slightly higher compared to the perception score.

The findings from Table 4.2 shows that there are some differences in magnitude of gap score among the 18 statements of service quality. The result also shows that none of the aspects of service quality has positive gap score. Visually appealing facilities is the only one feature of service quality in which expectation and perception are equivalent. Seventeen statements indicate that the quality of service falls short of the customer’s expectation; customers are generally dissatisfied with the provided service.

Customer’s expectation level on the transportation company service in every

respect differs from their perception level. Responses to the expectation and perception statements are compared. The difference is computed by subtracting the expectation response from the perception response. If the expectation response is higher than the perception response, the difference will be computed as negative. A negative score indicates the existence of a service quality gap: the service provider could not meet the customers' expectation. A positive score is recorded if the result of performances exceeds customer expectation. A positive score indicates area of strength and a competitive advantage for the service provider.

Nevertheless, each aspect of quality service shows differences with respect to the size of gap score. The list of aspects of quality service is ranked from the highest score to the lowest score.

It is interesting to note that fourteen statements showed the expected and perceived results to be significantly different ($\alpha < .05$). The data supports the first hypothesis – that there is a significant difference in expected and perceived service quality. However, this difference is apparent in fourteen of the eighteen statements. Up-to-date equipment, employees who have the knowledge to answer customers' questions and convenient operation hours showed not a significant difference. Results of the remaining fourteen of the eighteen statements indicate that customers' expectations of service quality are higher than the perceived

service quality are getting from their transportation companies. This would imply a large gap between service expectation and service receipt, and could arguably be the basis for customer service problems within the transportation industry. According to table 4.2 the statement with the largest mean difference expectation and perception is “always ready to respond to customers’ requests”. This may suggest that transportation company cannot respond to customers’ request. Our result is different from Hopkins et al., (1993) which found the “carrier delivers on promises” to be the largest mean difference expectation and perception.

<Table 4.2> Comparison of mean responses for expectation, perception, and gap scores among users of transportation company services

Aspect of service quality	E scores	P scores	Gap scores	t-value	Sig.	Priority
Tangibles						
1. Up-to-date equipment	4.73	4.60	-0.13	-.510	.611	16
2. Visually appealing facilities	3.87	3.87	0.00	.000	1.000	17
3. Employee who has a neat and professional appearance	5.00	4.07	-0.93	-4.639	.000 ^a	5
Reliability						
4. Providing service as promised	5.66	4.93	-0.73	-3.183	.002 ^a	11
5. Sincere in solving the problem	5.80	5.00	-0.80	-3.913	.000 ^a	9
6. Performing service right the first time	6.00	4.93	-1.07	-5.555	.000 ^a	3
7. Maintaining error-free records	6.40	5.33	-1.07	-6.607	.000 ^a	2
Responsiveness						
8. Keeping customers informed about when services will be performed	5.80	5.33	-0.47	-4.539	.000 ^a	6
9. Providing prompt service to customers	5.87	5.13	-0.73	-4.020	.000 ^a	8
10. Willing to help customers	4.27	3.73	-0.53	-3.059	.003 ^a	12
11. Always ready to respond to customers' requests	5.73	4.53	-1.20	-8.447	.000 ^a	1
Assurance						
12. Employees who instill confidence in customers	6.13	5.73	-0.40	-4.301	.000 ^a	7
13. Employees who are consistently courteous	5.87	5.46	-0.40	-3.913	.000 ^a	9
14. Employees who have the knowledge to answer customers' questions	4.73	4.60	-0.13	-.595	.554	15
Empathy						
15. Employees who give customers individual attention	5.60	5.13	-0.47	-3.692	.000 ^a	10
16. Having business hours convenient to customer	5.47	5.33	-0.13	-1.055	.295	14
17. Having the customer's best interest at heart	5.40	4.47	-0.93	-4.984	.000 ^a	4
18. Employees who understand the needs of their customers	5.13	4.73	-0.40	-2.118	.038 ^a	13

Note: E = Expectations; P = Perceptions.

Priority is obtained based on the discrepancy between expectations and perceptions. The bigger gap score, the more serious the service quality shortfall for the consumer viewpoint.

^aSignificant level at alpha < .05.

<Table 4.3> Differences in mean between perception and expectation levels of service quality

Service quality dimension	P	E	Gap	t-value	P value	Priority
Tangibles Appearance of physical facilities, equipment, personnel, and communication material	4.18	4.53	-0.35	-1.58	.118	4
Reliability Ability to perform the promised service dependably and accurately	5.05	5.96	-0.91	-5.23	.000 ^a	1
Responsiveness Willingness to help customer and provide prompt service	4.68	5.41	-0.73	-5.81	.000 ^a	2
Assurance Knowledge and courtesy of employees and their ability to convey trust and confidence	5.26	5.57	-0.31	-2.46	.016 ^a	5
Empathy Caring individual attention the firm provides to its customers	4.91	5.40	-0.48	-3.37	.001 ^a	3

Note: Priority is obtained based on the gap score (i.e., the discrepancy between expectations and perceptions).

The bigger gap score, the more serious the service quality shortfall for the consumer viewpoint.

^a Significant level at $P < .05$.

Table 4.3 shows the mean gap scores of dimensions for the total sample. From the table, it is to be noted that the higher the gap score, the more serious is the shortfall in the service quality from the customers' viewpoint. In this case, the most serious dimension is "reliability" with a gap score of -0.91 (the highest gap score). The second is "responsiveness" with a gap score of -0.73. Finally, the smallest gap is found in "assurance," which has the lowest gap score of -0.31. Our result is consistent with Zeithaml et al. (1990) which found the reliability dimension to be the most essential factor. In general, there are significant

differences among the four dimensions.

In order to get a clearer picture of the perception of the respondents, it is important to examine the customers' ranking of different dimensions. In SERVQUAL instrument, respondents were asked to rank the five service quality dimensions, by dividing up to 100 points among five dimensions in terms of personal importance. The relative importance of the service quality dimensions indicated by the weighted scores in table 4.4 was confirmed directly when respondents were invited to identify the most important, the second most important and the least important dimensions. From the table 4.4, the most important dimension is "reliability" with a high percentage of 53.3. The second most important dimension is "responsiveness" with a percentage of 54.7. Finally, the least important dimension is "assurance" which has the percentage of 38.7. To compare the weighted, 100 divided the percentage of each service quality dimensions. However, the rank ordering as showed "Reliability" as being the most important dimension, followed in turn by "Responsiveness", "Empathy", "Tangibles", and "Assurance". The weighted quality scores indicates that improve reliability and responsiveness would contribute most to raising customers' perceptions of the service experience. That is, if resources are limited, management would benefit most from concentrating on these two areas. Staff may need to be recruited, trained or encouraged to be more caring, willing to help customers and offer more

prompt service. In addition, management could improve operational controls so that the service is consistently delivered as ordered or promised.

<Table 4.4> Most and least important SERVQUAL dimensions

Service quality dimension	Weighted quality	Rank	Most important		Second important		Least important	
			frequency	%	frequency	%	frequency	%
Tangibles	.163	4	4	5.3	5	6.7	24	32
Reliability	.268	1	40	53.3	8	10.7	2	2.7
Responsiveness	.213	2	15	20	41	54.7	5	6.7
Assurance	.149	5	1	1.3	2	2.7	29	38.7
Empathy	.206	3	15	20	19	25.3	15	20

Note: Rank is obtained based on the weighted figure. Higher percentage reflects the most important service quality dimension from consumer viewpoint.

4.3 THE TEST OF RESEARCH HYPOTHESIS 2

Gender

Table 4.5 shows the results relevant to the relationship between gender and their perceptions of service quality. Gender includes male and female. According to t-

test, there was no statistical significant difference in the following items: (1) Employees who are consistently courteous. There was no mean difference between gender and their perceptions for these 1 service quality items. There was a statistically significant difference in the other 1 service quality items.

<Table 4.5> Relationship between gender and perception of service quality

	Male	Female	t-value	Sig. (2-tailed)
P1	3.89	5.67	-4.541	.000 ^a
P2	2.67	5.67	-6.659	.000 ^a
P3	3.00	5.67	-6.471	.000 ^a
P4	3.78	6.67	-8.247	.000 ^a
P5	4.00	6.50	-8.876	.000 ^a
P6	4.11	6.17	-7.904	.000 ^a
P7	4.67	6.33	-5.178	.000 ^a
P8	4.67	6.33	-5.024	.000 ^a
P9	4.44	6.17	-4.433	.000 ^a
P10	2.89	5.00	-6.553	.000 ^a
P11	3.78	5.67	-4.988	.000 ^a
P12	5.33	6.33	-5.132	.000 ^a
P13	5.44	5.50	-.222	.825
P14	3.89	5.67	-5.425	.000 ^a
P15	4.67	5.83	-4.170	.000 ^a
P16	4.67	6.33	-4.989	.000 ^a
P17	3.89	5.33	-4.024	.000 ^a
P18	3.44	6.67	-10.505	.000 ^a

^a Significant level at $P < .05$.

The lowest means for the male were in the following items: (1) Visually appealing facilities; (2) Willing to help customers; (3) Employee who has neat and professional appearance. Therefore, the female showed higher mean ratings than male in their perceptions.

Age

Table 4.6 shows the results relevant to the relationship between age and their perceptions of service quality. Age includes: (1) under 30 years old; (2) between 31-50 years old; (3) over 50 years old. According to ANOVA test, there was no statistical significant difference in the following items: (1) Providing service as promised; (2) Sincere in solving the problem; (3) Performing service right the first time; (4) Maintaining error-free records; (5) Employees who instill confidence in customers. There was no mean difference between age and their perceptions for these 5 service quality items. There was a statistically significant difference in other 5 service quality items.

The lowest means for the age under 30 years old were in the following items: (1) Performing service right the first time; (2) Sincere in solving the problem.

The lowest means for the age between 31-50 years old were in the following

items: (1) Visually appealing facilities; (2) Willing to help customers; (3) Employee who has a neat and professional appearance; (4) Always ready to respond to customers' requests.

<Table 4.6> Relationship between age and perception of service quality

	Age under 30	Between 31-50	Age over 50	F-value	Sig. (2-tailed)
P1	5.50	4.33	4.00	3.125	.050 ^a
P2	5.25	3.11	4.50	6.784	.002 ^a
P3	5.25	3.56	4.00	3.928	.024 ^a
P4	5.25	4.56	6.00	1.954	.149
P5	4.75	5.00	5.50	.527	.593
P6	4.50	5.00	5.50	1.306	.277
P7	5.25	5.11	6.50	2.492	.090
P8	6.50	4.78	5.50	7.258	.001 ^a
P9	6.50	4.78	4.00	7.960	.001 ^a
P10	5.00	3.11	4.00	9.802	.000 ^a
P11	5.50	3.89	5.50	6.952	.002 ^a
P12	5.50	5.78	6.00	.821	.444
P13	6.00	5.11	6.00	6.878	.002 ^a
P14	5.75	4.00	5.00	10.361	.000 ^a
P15	5.75	4.67	6.00	7.248	.001 ^a
P16	5.75	4.89	6.50	5.478	.006 ^a
P17	5.00	4.00	5.50	4.052	.022 ^a
P18	5.00	4.22	6.50	4.989	.009 ^a

^a Significant level at $P < .05$.

The lowest means for the age over 50 years old were in the following items: (1) Up-to-date equipment; (2) Employee who has neat and professional appearance;

(3) Providing prompt service to customers; (4) Willing to help customers; (5) Visually appealing facilities.

Education

Table 4.7 shows the results relevant to the relationship between education and their perceptions of service quality. Education includes: (1) high school or less; (2) college graduate; (3) graduate degree. According to ANOVA, there was no statistically significant difference in the following items: (1) Maintaining error-free records; (2) Employees who have the knowledge to answer customers' questions. There was no mean difference between education and their perceptions for these 2 service quality items. There was a statistically significant difference in other 2 service quality items.

The lowest means for the high school or less were in the following items: (1) Visually appealing facilities; (2) Willing to help customers; (3) Employees who understand the needs of their customers.

The lowest means for the college graduate were in the following items: (1) Visually appealing facilities; (2) Willing to help customers.

The lowest means for the graduate degree were in the following items: (1) Employee who has neat and professional appearance; (2) Always ready to respond to customers' requests; (3) Providing service as promised; (4) Willing to help customers; (5) Having the customer's best interest at heart.

<Table 4.7> Relationship between education and perception of service quality

	High school or less	College graduate	Graduate degree	F-value	Sig. (2-tailed)
P1	7.00	4.86	4.00	6.442	.003 ^a
P2	1.00	4.14	4.00	4.158	.020 ^a
P3	7.00	4.71	3.00	11.431	.000 ^a
P4	7.00	5.86	3.71	13.206	.000 ^a
P5	7.00	5.57	4.14	10.141	.000 ^a
P6	7.00	5.14	4.43	6.625	.002 ^a
P7	7.00	5.43	5.00	2.850	.064
P8	7.00	6.43	4.00	33.067	.000 ^a
P9	7.00	6.00	4.00	14.509	.000 ^a
P10	1.00	4.14	3.71	8.131	.001 ^a
P11	7.00	5.57	3.14	31.985	.000 ^a
P12	7.00	6.14	5.14	16.039	.000 ^a
P13	7.00	5.71	5.00	11.540	.000 ^a
P14	5.00	4.71	4.43	.420	.658
P15	7.00	5.86	4.14	32.116	.000 ^a
P16	7.00	6.00	4.43	15.093	.000 ^a
P17	7.00	4.86	3.71	10.230	.000 ^a
P18	2.00	5.71	4.14	10.648	.000 ^a

^a Significant level at $P < .05$.

Monthly income

Table 4.8 shows the results relevant to the relationship between monthly income and their perceptions of service quality. Monthly income include: (1) less than 1.000.000 Kip; (2) between 1.000.000-2.000.000 Kip; (3) between 2.000.000-5.000.000 Kip; (4) more than 5.000.000 Kip. According to ANOVA, there was no statistical significant difference in the following items: (1) Visually appealing facilities; (2) Maintaining error-free records; (3) Employees who understand the needs of their customers. There was no mean difference between monthly income and their perceptions for these 3 service quality items. There was a statistically significant difference in the other 3 service quality items.

The lowest means for the income less than 1.000.000 Kip were in the following items: (1) Willing to help customers; (2) Visually appealing facilities.

The lowest means for the income between 1.000.000-2.000.000 Kip were in the following items: (1) Visually appealing facilities; (2) Up-to-date equipment; (3) Employee who has neat and professional appearance; (4) Performing service right the first time; (5) Willing to help customers; (6) Having the customer's best interest at heart.

<Table 4.8> Relationship between monthly income and perception of service quality

	Less than 1.000.000 Kip	1.000.000- 2.000.000 Kip	2.000.000- 5.000.000 Kip	F-value	Sig. (2-tailed)
P1	7.00	4.50	3.75	24.104	.000 ^a
P2	3.67	4.25	3.75	.346	.709
P3	6.33	4.75	2.88	19.718	.000 ^a
P4	7.00	5.25	4.00	12.804	.000 ^a
P5	7.00	5.00	4.25	16.732	.000 ^a
P6	6.33	4.75	4.50	8.098	.001 ^a
P7	6.33	5.00	5.13	2.997	.056
P8	7.00	6.50	4.13	38.387	.000 ^a
P9	7.00	6.50	3.75	41.979	.000 ^a
P10	3.00	4.75	3.50	5.463	.006 ^a
P11	6.33	5.50	3.38	25.965	.000 ^a
P12	7.00	5.75	5.25	23.473	.000 ^a
P13	5.67	6.00	5.13	5.077	.009 ^a
P14	4.33	5.50	4.25	4.538	.014 ^a
P15	6.33	5.75	4.38	19.485	.000 ^a
P16	7.00	5.50	4.63	16.688	.000 ^a
P17	5.67	4.75	3.88	6.049	.004 ^a
P18	5.33	5.00	4.38	1.221	.301

^a Significant level at $P < .05$.

The lowest means for the income between 2.000.000-5.000.000 Kip were in the following items: (1) Employee who has a neat and professional appearance; (2) Always ready to respond to customers' requests; (3) Willing to help customers; (4) Providing prompt service to customers; (5) Up-to-date equipment; (6) Visually appealing facilities; (7) Having the customer's best interest at heart.

4.4 THE TEST OF RESEARCH HYPOTHESIS 3

Gender

Table 4.9 shows the results relevant to the relationship between gender and their expectations of service quality. Gender includes male and female. According to t-test, there was no statistical significant difference in the following items: (1) Employees who have the knowledge to answer customers' questions; (2) Employees who are consistently courteous; (3) Performing service right the first time. There was no mean difference between gender and their perceptions for these 3 service quality items. There was a statistically significant difference in the other 3 service quality items.

The lowest means for the male were in the following items: (1) Visually appealing facilities; (2) Willing to help customers; (3) Up-to-date equipment.

The lowest means for the female were in the following items: (1) Employees who have the knowledge to answer customers' questions; (2) Visually appealing facilities; (3) Willing to help customers; (4) Employees who are consistently courteous. Therefore, the female showed higher mean ratings than male in their expectations.

<Table 4.9> Relationship between gender and expectation of service quality

	Male	Female	t-value	Sig. (2-tailed)
E1	3.78	6.17	-4.645	.000 ^a
E2	3.00	5.17	-4.488	.000 ^a
E3	4.11	6.33	-5.856	.000 ^a
E4	5.33	6.17	-2.529	.014 ^a
E5	5.22	6.67	-4.627	.000 ^a
E6	5.89	6.17	-1.047	.299
E7	6.00	7.00	-4.690	.000 ^a
E8	5.22	6.67	-5.197	.000 ^a
E9	5.56	6.33	-3.726	.000 ^a
E10	3.56	5.33	-3.736	.000 ^a
E11	5.11	6.67	-5.165	.000 ^a
E12	5.78	6.67	-3.898	.000 ^a
E13	5.89	5.83	.171	.865
E14	4.44	5.17	-1.300	.198
E15	5.00	6.50	-5.504	.000 ^a
E16	4.67	6.67	-6.067	.000 ^a
E17	4.89	6.17	-3.717	.001 ^a
E18	4.00	6.83	-9.159	.000 ^a

^a Significant level at $P < .05$.

Age

Table 4.10 shows the results relevant to the relationship between age and their expectations of service quality. Age includes: (1) under 30 years old; (2) between

31-50 years old; (3) over 50 years old. According to ANOVA, there was a statistically significant difference in all items between age and their expectations of service quality.

<Table 4.10> Relationship between age and expectation of service quality

	Age under 30	Between 31-50	Age over 50	F-value	Sig. (2-tailed)
E1	5.75	3.89	6.50	6.562	.002 ^a
E2	5.00	2.67	7.00	27.168	.000 ^a
E3	5.75	4.22	7.00	10.802	.000 ^a
E4	6.25	5.22	6.50	4.683	.012 ^a
E5	6.75	5.11	7.00	11.516	.000 ^a
E6	6.75	5.44	7.00	16.898	.000 ^a
E7	7.00	6.00	7.00	7.200	.001 ^a
E8	6.25	5.44	6.50	3.149	.049 ^a
E9	6.25	5.56	6.50	5.261	.007 ^a
E10	5.25	3.33	6.50	13.635	.000 ^a
E11	6.50	5.11	7.00	9.608	.000 ^a
E12	6.50	5.78	7.00	6.165	.003 ^a
E13	6.75	5.22	7.00	18.541	.000 ^a
E14	7.00	3.33	6.50	41.548	.000 ^a
E15	6.25	5.11	6.50	6.523	.002 ^a
E16	6.25	4.78	7.00	9.286	.000 ^a
E17	6.50	4.67	6.50	11.028	.000 ^a
E18	6.00	4.44	6.50	7.244	.001 ^a

^a Significant level at $P < .05$.

The lowest means for the age under 30 years old were in the following items: (1)

Visually appealing facilities; (2) Willing to help customers.

The lowest means for the age between 31-50 years old were in the following items: (1) Visually appealing facilities; (2) Employees who have the knowledge to answer customers' questions; (3) Willing to help customers; (4) Up-to-date equipment. Therefore, the older showed higher mean ratings than younger in their expectations.

Education

Table 4.11 shows the results relevant to the relationship between education and their expectations of service quality. Education includes: (1) high school or less; (2) college graduate; (3) graduate degree. According to ANOVA, there was a statistically significant difference in all items between education and their expectations of service quality.

The lowest means for the high school or less were in the following items: (1) Visually appealing facilities; (2) Willing to help customers; (3) Employees who have the knowledge to answer customers' questions; (4) Employees who understand the needs of their customers.

The lowest means for the college graduate were in the following items: (1) Visually appealing facilities; (2) Willing to help customers.

<Table 4.11> Relationship between education and expectation of service quality

	High school or less	College graduate	Graduate degree	F-value	Sig. (2-tailed)
E1	7.00	6.29	2.86	26.961	.000 ^a
E2	1.00	4.71	3.43	7.181	.001 ^a
E3	7.00	6.00	3.71	17.887	.000 ^a
E4	7.00	6.00	5.14	4.623	.013 ^a
E5	7.00	6.57	4.86	13.074	.000 ^a
E6	7.00	6.29	5.57	5.373	.007 ^a
E7	7.00	7.00	5.71	14.400	.000 ^a
E8	7.00	6.57	4.86	17.330	.000 ^a
E9	7.00	6.57	5.00	46.756	.000 ^a
E10	1.00	4.86	4.14	7.242	.001 ^a
E11	7.00	6.57	4.71	17.035	.000 ^a
E12	7.00	6.71	5.43	15.668	.000 ^a
E13	7.00	6.14	5.43	4.633	.013 ^a
E14	1.00	5.57	4.43	11.070	.000 ^a
E15	7.00	6.57	4.43	37.534	.000 ^a
E16	7.00	6.43	4.29	18.018	.000 ^a
E17	7.00	6.43	4.14	24.763	.000 ^a
E18	2.00	6.71	4.00	44.412	.000 ^a

^a Significant level at $P < .05$.

The lowest means for the graduate degree were in the following items: (1) Up-to-date equipment; (2) Visually appealing facilities; (3) Employee who has neat and professional appearance.

Monthly income

Table 4.12 shows the results relevant to the relationship between monthly income and their expectations of service quality. Monthly income include: (1) less than 1.000.000 Kip; (2) between 1.000.000-2.000.000 Kip; (3) between 2.000.000-5.000.000 Kip; (4) more than 5.000.000 Kip. According to ANOVA, there was no statistical significant difference in the following items: (1) Providing service as promised. There was no mean difference between monthly income and their perceptions for these 1 service quality items. There was a statistically significant difference in the other 1 service quality items.

The lowest means for the income less than 1.000.000 Kip were in the following items: (1) Employees who have the knowledge to answer customers' questions; (2) Willing to help customers; (3) Visually appealing facilities.

The lowest means for the income between 1.000.000-2.000.000 Kip were in the following items: (1) Visually appealing facilities; (2) Willing to help customers; (3) Up-to-date equipment.

The lowest means for the income between 2.000.000-5.000.000 Kip were in the following items: (1) Up-to-date equipment; (2) Visually appealing facilities.

<Table 4.12> Relationship between income and expectation of service quality

	Less than 1.000.000 Kip	1.000.000- 2.000.000 Kip	2.000.000- 5.000.000 kip	F-value	Sig. (2-tailed)
E1	7.00	5.75	3.38	16.551	.000 ^a
E2	2.33	5.00	3.88	5.810	.005 ^a
E3	5.67	6.25	4.13	9.090	.000 ^a
E4	5.67	6.25	5.38	1.971	.147
E5	6.33	6.75	5.13	8.043	.001 ^a
E6	5.67	6.75	5.75	5.868	.004 ^a
E7	7.00	7.00	5.88	10.080	.000 ^a
E8	7.00	6.25	5.13	11.435	.000 ^a
E9	6.33	6.75	5.25	22.479	.000 ^a
E10	2.33	5.25	4.50	8.808	.000 ^a
E11	6.33	6.75	5.00	10.252	.000 ^a
E12	6.33	7.00	5.63	11.299	.000 ^a
E13	5.00	7.00	5.63	14.234	.000 ^a
E14	1.67	7.00	4.75	51.383	.000 ^a
E15	6.33	6.75	4.75	19.924	.000 ^a
E16	6.33	6.50	4.63	10.080	.000 ^a
E17	6.33	6.50	4.50	13.317	.000 ^a
E18	5.33	6.50	4.38	8.197	.001 ^a

^a Significant level at $P < .05$.

4.5 DISCUSSION

Based on the results of the analyses, support was found for all of the three hypotheses proposed in this study. A simple t-test was conducted to determine whether there is a significant relationship between perception and expectation

level of service quality. The results were displayed in table 4.3. Analysis of differences provided evidence that mean differences occurred between perceptions and expectations among the Laotian customers in transportation company services. However, the priority or rank ordering as showed “Reliability” as being the most important dimension, followed in turn by “Responsiveness”, “Empathy”, “Tangibles”, and “Assurance”. None of the service quality dimensions had a positive SERVQUAL scores, suggesting that the transportation companies in this study did not meet or exceed customer’s expectations.

Identifying and understanding the gaps will be a first step in allowing individual transportation companies to focus their attention on areas specially needing attention. Results of this study suggest that transportation companies did not understand what customers expect from transportation companies. This implies not enough communication between the customers and transportation companies, a definite weakness for the industry. There seems to be a breakdown somewhere on the transportation company side. The transportation companies know what service quality the customers expect, and yet it would seem that the transportation companies are not providing that quality of service to the customers. Why is this happening? Do the transportation companies feel it too costly, or are they failing to translate what they know of customers’ expectation into measurable quality standards and specifications that their employees can follow? Or are transportation

companies not communicating standards and specifications clearly to their employees? These questions remain to be answered by the individual transportation company.

The size of expected and perceived (gap 5) is consistent with the literature that states that customer expectations of service quality are not being met. This research suggests that the gap includes many features of service quality that appear not to meet expectation and points to many areas in need of improvement. The most conspicuous offender is in the areas of respond to customers' requests. By concentrating on keeping their respond to customers' requests, transportation companies may be able to improve the service quality they offer their customers. Because the keeping of respond to customers' requests is important in shaping customer expectations, a small improvement in this area could make a significant difference in the customers' perception of service quality. Focusing on this one area may afford transportation companies dramatic results in their effort to improve service quality. This in turn may translate into a significant positive impact on profits.

Several other features of service quality bear investigation. The data indicate that visually appealing facilities is equivalent by the customers, and is of less interest to the transportation company. To better meet customers' expectations,

transportation companies should emphasize other service features in lieu of visually appealing facilities. Other areas in need of improvement that appear to reduce errors in records, always be ready to respond to customers' requests, performing service right the first time, having the customer's best interest at heart. Again, future studies should focus on each of these areas to discover the fastest and most efficient methods for improvement.

It is important to note that this study assumes that the respondents are characteristic of the industry as a whole, individual customer and transportation companies may vary in how well they conform to these results. Nonetheless, it is useful for all transportation companies to address these issues within their organizations to ensure that the service quality they provide is the best that they can possibly provide, given their individual constraints.

Identifying consumer perceptions may enable management to assess organizational strengths and weaknesses. The strengths are as follows: (1) Visually appealing facilities. The weaknesses are as follows: (1) Always ready to respond to customers' requests; (2) Maintaining error-free records; (3) Performing service right the first time; (4) Having the customer's best interest at heart; (5) Employee who has a neat and professional appearance.

There are many more weaknesses than strengths in the transportation company management. The strengths should be maintained and the five weaknesses should be corrected.

This research provided insight into market segments, employee performance, and service problems at transportation companies. Identifying consumer perceptions and expectations may enable management to serve the consumer and to identify opportunities to increase consumer satisfaction. The ranking by respondents' expectation scores are as follows: (1) Always ready to respond to customers' requests; (2) Maintaining error-free records; (3) Performing service right the first time; (4) Having the customer's best interest at heart; (5) Employee who has a neat and professional appearance; (6) Keeping customers informed about when services will be performed; (7) Employees who instill confidence in customers; (8) Providing prompt service to customers; (9) Sincere in solving the problem; (10) Employees who are consistently courteous; (11) Employees who give customers individual attention; (12) Providing service as promised; (13) Willing to help customers; (14) Employees who understand the needs of their customers; (15) Having business hours convenient to customer; (16) Employees who have the knowledge to answer customers' questions; (17) Up-to-date equipment; (18) Visually appealing facilities. Therefore, the managers of transportation companies should consider the problems that respondents indicated to improve their

transportation services.

The focus of this research was to determine the respondents' expectation in service quality. The research indicated items that are most important in order to satisfy respondents.

1. The first item of respondents' dissatisfaction was the always ready to respond to customers' requests ($t = -8.447$). When measuring respondents' expectation score to develop transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

2. The second item of respondents' dissatisfaction was the maintaining error-free records ($t = -6.607$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

3. The third item of respondents' dissatisfaction was the performing service right the first time ($t = -5.555$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

4. The fourth item of respondents' dissatisfaction was the having the customer's best interest at heart ($t = -4.984$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

5. The fifth item of respondents' dissatisfaction was the employee who has a neat and professional appearance ($t = -4.639$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

6. The sixth item of respondents' dissatisfaction was the keeping customers informed about when services will be performed ($t = -4.539$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

7. The seventh item of respondents' dissatisfaction was the employees who instill confidence in customers ($t = -4.301$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

8. The eighth item of respondents' dissatisfaction was the providing prompt service to customers ($t = -4.020$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

9. The ninth item of respondents' dissatisfaction was the sincere in solving the problem ($t = -3.913$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

10. The tenth item of respondents' dissatisfaction was the employees who are consistently courteous ($t = -3.913$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: age, education and monthly income.

11. The eleventh item of respondents' dissatisfaction was the employees who give customers individual attention ($t = -3.692$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

12. The twelfth item of respondents' dissatisfaction was the providing service as promised ($t = -3.182$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education.

13. The thirteenth item of respondents' dissatisfaction was the willing to help customers ($t = -3.059$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

14. The fourteenth item of respondents' dissatisfaction was the employees who understand the needs of their customers ($t = -2.118$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

15. The fifteenth item of respondents' dissatisfaction was the having business hours convenient to customer ($t = -1.055$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

16. The sixteenth item of respondents' dissatisfaction was the employees who have the knowledge to answer customers' questions ($t = -0.595$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: age, education and monthly income.

17. The seventeenth item of respondents' dissatisfaction was the up-to-date equipment ($t = -0.510$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

18. The eighteenth item of respondents' dissatisfaction was the visually appealing facilities ($t = 0.000$). When measuring respondents' expectation score to improve transportation services, the following demographic variables should be considered: gender, age, education and monthly income.

The current study provides some useful insights for managerial action:

First, it is hoped that the results will prompt individual transportation companies to constantly monitor their customers' expectations and make sure they know how well they are being met. One way to do this would be to administer the

SERVQUAL instrument regularly or develop a questionnaire. The results from the questionnaire could be used in conjunction with customer comments and other sources of information to tell the transportation company how well it is doing.

Secondly, from a strategic standpoint, transportation company managers can determine the relative importance of the five service quality dimensions in predicting customer satisfaction and customer loyalty. By doing so, transportation company managers can determine which service quality dimension they should pay most attention to.

Third, multi-branch transportation companies can use the current scale to evaluate service quality delivered to customers in different branches and also track the relative performance of various branches over time.

Fourth, transportation company managers can employ the service quality scale to identify distinct customer clusters or segments with varying perceptions about service quality. Cluster profiles can provide valuable information on how to approach each segment for quality improvement initiatives. Focusing marketing efforts on the unhappy cluster(s), for instance, may provide immediate relief for reducing defection rates (Brady and Cronin, 2001).

Fifth, the service quality scale can also be administered to frontline employees and their customers simultaneously to compare customer perceptions of service quality with frontline employee perceptions.

Finally, from a competitive standpoint, transportation company managers can use the existing scale to assess their strengths/weaknesses relative to competitors across service quality dimensions.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The research was conducted to analyze two factors, expected service quality and perceived service quality, for customers of transportation companies in Lao PDR.

5.1 CONCLUSIONS

Concerning the test of research hypotheses, the following conclusions were reached:

1. The test of research hypothesis 1: There is a statistical significant difference between expectations and perceptions of service quality.
2. The test of research hypothesis 2: There is a statistically significant relationship between respondents' demographic variables and their perceptions regarding quality of service perceived at transportation company services.
3. The test of research hypothesis 3: There is a statistically significant relationship between respondents' demographic variables and their expectations regarding quality of service at transportation company services.

4. There are some differences in magnitude of gap score among the 18 statements of service quality. The result also shows that none of the aspects of service quality has positive gap score. Almost of the 18 statements indicate that the quality of service falls short of the customer's expectation; customers are generally dissatisfied with the provided service.

5.2 RECOMMENDATIONS

The following recommendations are made:

1. The study has demonstrated that it is possible to measure service quality, even in labour intensive establishments such as transportation services. Furthermore, the SERVQUAL instrument has been found to provide a relatively simple and inexpensive means of doing this and this implies that interested parties can regularly conduct service assessments, which Parasuraman et al. (1988) advocate as necessary to service improvement.
2. The results of the study indicate that the measurement of service quality has many potential benefits for transportation providers. Identifying customers' expectations and perceptions of service quality for a particular establishment allows the management to make its marketing efforts to ensure and meet customers' expectations. This includes identifying, prioritizing and improving areas of service weakness and ensuring that

valuable resources are allocated in the most effective areas.

3. By evaluating the overall gap of the dimensions it is clear that there is a need to improve the quality of transportation company services in the Lao PDR, particularly reliability and responsiveness are two main dimensions in need of improvement. That is, if resources are limited, management would benefit most from concentrating on these two areas. Staff may need to be recruited, trained or encouraged to be more caring, willing to help customers and offer more prompt service. In addition, management could improve operational controls so that the service is consistently delivered as ordered or promised.
4. This study does provide critical information that transportation companies can use for providing their services. Certain aspects of service quality will arise from customers with exceptionally high expectations. The importance of service quality dimensions, such as reliability and responsiveness, are evidence of this. Reliability is the ability to perform the promised service dependably and accurately. It is the most outcome-oriented and the clearest to define and measure. Responsiveness, willingness to help customer and provide prompt service, is an outcome-timeliness that can be more objectively measured against customer expectation. However, on the behavioral aspect, the willingness of employees to help customers is also important. To compete more

efficiently and effectively in the marketplace, transportation companies must be sensitive in meeting customer's expectations for reliability and responsiveness.

5. The following items should be considered in evaluating transportation company services: (1) always ready to respond to customers' requests; (2) maintaining error-free records; (3) performing service right the first time; (4) having the customer's best interest at heart; (5) employee who has a neat and professional appearance.
6. In considering items to be improved, the following items should be considered: (1) always ready to respond to customers' requests; (2) maintaining error-free records; (3) performing service right the first time; (4) having the customer's best interest at heart; (5) employee who has a neat and professional appearance; (6) keeping customers informed about when services will be performed; (7) employees who instill confidence in customers; (8) providing prompt service to customers; (9) sincere in solving the problem; (10) employees who are consistently courteous; (11) employees who give customers individual attention; (12) providing service as promised; (13) willing to help customers; (14) employees who understand the needs of their customers; (15) having convenient business hours to customer; (16) employees who have the knowledge to answer customers' questions; (17) up-to-date equipment.

7. Ways should be planned to improve service quality and transportation management.
8. Study of transportation services in other countries may provide ways to develop and improve transportation services in the Lao PDR.

By concentrating on the problems disclosed in this study, and evaluating their performance relative to the findings, individual transportation companies should be able to discover ways to improve their service quality. A finding of future research is to be conducted by a larger sample covering other service industries. In addition, further research should focus on the impact of the management's expectation and the user's expectation and help to pinpoint problem areas better and to offer definitive solutions to the improvement of service quality in the transportation industry. This in turn will enhance the profitability of the industry as a whole.

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APPENDICES

APPENDIX 1: SERVQUAL QUESTIONNAIRE INSTRUCTIONS

Dear Respondent,

Please read the following instructions closely and fill out this questionnaire

There are three parts of the questionnaire: Part 1 is designed to obtain information about respondents. You are requested to complete Part 2 of the questionnaire which measures your **expectations of service** from the road transportation company that you are dealing with. Upon completion of this questionnaire, please kindly send it back to me in the stamped addressed envelope.

Part 3 of the questionnaire may be available to you. This too, is to be completed and returned to me in the stamped addressed envelope at your earliest convenience.

Thank you for assessing in this research project.

PART 1 **General Questions**

Please mark X at the appropriate answer.

1. Age: under 30 ___ ; 31 to 50 ___ ; over 50 ___.
2. Gender: Male ___ ; Female _____
3. Education: High school or less ___ ; College graduate ___ ; Graduate degree ___

4. Monthly income: less than 1.000.000 Kip __; 1.000.000-2.000.000 Kip __;
2.000.000-5.000.000 Kip __; over 5.000.000 Kip __ .

PART 2

Directions: Based on your experience as a consumer of hospitality (road transportation) service, please think about the kind of road transportation that would deliver excellent quality of service. Think about the kind of road transportation company which you would be pleased to patronize. Please show the extent to which you think such a road transportation would possess the feature described in each statement. If you feel a feature is not at all essential for an excellent carrier such as the one you have in mind, circle the number 1. If you feel a feature is absolutely essential for an excellent carrier, circle number 7. If your feelings are less strong, circle one of the numbers in the middle. There are no rights or wrong answers-all I am interested in is the number that truly reflects your feelings regarding the carrier that would deliver excellent quality of service.

Items statements

E1	Excellent road transportation companies will have modern equipments.	1	2	3	4	5	6	7
E2	The physical facilities at excellent road transportation companies will be visual appealing.	1	2	3	4	5	6	7
E3	The staff at excellent road transportation companies will be neat appealing.	1	2	3	4	5	6	7
E4	Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent road transportation companies.	1	2	3	4	5	6	7
E5	When excellent road transportation companies promise to do something by a certain time they will do so.	1	2	3	4	5	6	7

E6	When a customer has a problem, excellent road transportation companies will show a sincere interest in solving it.	1	2	3	4	5	6	7
E7	Excellent road transportation companies will perform the service right the first time.	1	2	3	4	5	6	7
E8	Excellent road transportation companies will provide their services at the time they promise to do.	1	2	3	4	5	6	7
E9	Excellent road transportation companies will insist on error-free records.	1	2	3	4	5	6	7
E10	The staff in an excellent road transportation companies will tell customers exactly when services will be performed.	1	2	3	4	5	6	7
E11	The staff of an excellent road transportation companies will give prompt services to customers.	1	2	3	4	5	6	7
E12	The staff of an excellent road transportation companies will always be willing to help customers.	1	2	3	4	5	6	7
E13	The staff of an excellent road transportation companies will never be too busy to respond to customers' requests.	1	2	3	4	5	6	7
E14	The behavior of the staff of an excellent road transportation companies will instill confidence in customers.	1	2	3	4	5	6	7
E15	The customers of excellent road transportation companies will feel safe in their transaction.	1	2	3	4	5	6	7
E16	The staff of an excellent road transportation companies will be consistently courteous with customers.	1	2	3	4	5	6	7
E17	The staff of an excellent road transportation companies will have the knowledge to answer customers' questions.	1	2	3	4	5	6	7
E18	Excellent road transportation companies will give customers individual attention.	1	2	3	4	5	6	7
E19	Excellent road transportation will have operating hours convenient to all their customers.	1	2	3	4	5	6	7
E20	Excellent road transportation companies will have staffs who give customers personal attention.	1	2	3	4	5	6	7
E21	Excellent road transportation companies will have the customers' best interests at heart.	1	2	3	4	5	6	7
E22	The staff of an excellent road transportation companies will understand the specific needs of their customers.	1	2	3	4	5	6	7

PART 2: Section 2

Directions: Listed below are five features pertaining to (name of road transportation), and the service it offers. I would like to know how important each of these features is to you when you evaluate the road transportation's quality of service. Please allocate a total of 100 points among the five features according to how important each feature is to you - the more important a feature is to you, the more points you should allocate it. Please ensure that the points you have allocated to the five features add up to 100 points.

1. The appearance of the road transportation's physical facilities, equipments personnel and communication materialspoints
 2. The road transportation's ability to perform the promised service dependably and accuratelypoints
 3. The road transportation's willingness to help customers and provide prompt servicepoints
 4. The knowledge and courtesy of the road transportation's staff and their ability to convey trust and confidencepoints
 5. The caring, individualized attention the road transportation provides to its customerspoints
- TOTAL points allocates 100 points

Please enter the feature number

- Which feature among the above is most important to you?
- Which feature is second most important to you?
- Which feature is the least important to you?

PART 3

Instructions for completing this questionnaire

Dear Respondent

Please read the following instructions closely and fill out this questionnaire

This is Part 3 of the questionnaire. It is to be completed only after you have left the road transportation company. Please kindly send the completed questionnaire back to me in the stamped addressed envelope at your earliest convenience.

Thank you for assessing in this research project.

Directions: The following set of statements related to your feelings about the road transportation company you have attended. For each statement, please show the extent to which you believe the road transportation has the feature described by the statement. Once again, circling a 1 means that you strongly disagree that the carrier has that feature, and circling a 7 means that you strongly agree. You may circle any of the numbers in the middle to show how strong your feelings are. There are no rights or wrong answers-all I am interested in is the number that best shows your perceptions about the road transportation which has treated you.

Items statements

P1	The road transportation company has modern-looking equipment.	1	2	3	4	5	6	7
P2	The physical facilities in the road transportation company are visually appealing.	1	2	3	4	5	6	7
P3	The staffs in the road transportation company are neat appealing.	1	2	3	4	5	6	7
P4	Materials associated with the service (such as pamphlets or statements) are visually appealing in road transportation company.	1	2	3	4	5	6	7

P5	When the road transportation company promises to do something by a certain time it does so.	1	2	3	4	5	6	7
P6	When a customer has a problem, the road transportation company shows a sincere interest in solving it.	1	2	3	4	5	6	7
P7	The road transportation company performs the service right the first time.	1	2	3	4	5	6	7
P8	The road transportation company provides its services at the time it promises to do so.	1	2	3	4	5	6	7
P9	The road transportation company insists on error-free records.	1	2	3	4	5	6	7
P10	The staff in the road transportation company tells you exactly when services will be performed.	1	2	3	4	5	6	7
P11	The staff in the road transportation company gives prompt service to customers.	1	2	3	4	5	6	7
P12	The staff in the road transportation company is always willing to help customers.	1	2	3	4	5	6	7
P13	The staff in the road transportation company is never being too busy to respond to yours' requests.	1	2	3	4	5	6	7
P14	The behavior of staff in the road transportation company instills confidence in you.	1	2	3	4	5	6	7
P15	You feel safe in your transactions with the road transportation company.	1	2	3	4	5	6	7
P16	The staffs in the road transportation company are consistently courteous to you.	1	2	3	4	5	6	7
P17	The staffs in the road transportation company have the knowledge to answer yours' questions.	1	2	3	4	5	6	7
P18	The road transportation company gives you individual attention.	1	2	3	4	5	6	7
P19	The road transportation company has operating hours convenient to all its customers.	1	2	3	4	5	6	7
P20	The road transportation company has staffs who give you personal attention.	1	2	3	4	5	6	7
P21	The road transportation company has yours' best interests at heart.	1	2	3	4	5	6	7
P22	The staffs of the road transportation company understand your specific needs.	1	2	3	4	5	6	7

Thank you for the time that you have spent in completing this questionnaire.

**APPENDIX 2: THE PERCENTAGE DISTRIBUTIONS FOR
EXPECTATION OF SERVICE QUALITY**

1. Excellence transportation companies will have modern equipments.

	Frequency	Percent
1: Strongly disagree	20	26.7%
2: Disagree	5	6.7%
3: Partly disagree	5	6.7%
4: Neutral opinion	0	0%
5: Partly agree	0	0%
6: Agree	5	6.7%
7: Strongly agree	40	53.3%
Total	75	100%

2. The physical facilities at excellence transportation companies will be visual appealing.

	Frequency	Percent
1: Strongly disagree	25	33.3%
2: Disagree	0	0%
3: Partly disagree	10	13.3%
4: Neutral opinion	10	13.3%
5: Partly agree	5	6.7%
6: Agree	5	6.7%
7: Strongly agree	20	26.7%
Total	75	100%

3. The staff at excellence transportation companies will be neat appealing.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	15	20%
3: Partly disagree	0	0%
4: Neutral opinion	0	0%
5: Partly agree	20	26.7%
6: Agree	5	6.7%
7: Strongly agree	30	40%
Total	75	100%

4. When excellence transportation companies promise to do something by a certain time they will do so.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	5	6.7%
5: Partly agree	25	33.3%
6: Agree	5	6.7%
7: Strongly agree	35	46.7%
Total	75	100%

5. When a customer has a problem, excellent transportation companies will show a sincere interest in solving it.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	15	20%
5: Partly agree	0	0%
6: Agree	15	20%
7: Strongly agree	40	53.3%
Total	75	100%

6. Excellent transportation companies will perform the service right the first time.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	15	20%
5: Partly agree	10	13.3%
6: Agree	10	13.3%
7: Strongly agree	40	53.3%
Total	75	100%

7. Excellent transportation companies will insist on error-free records.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	15	20%
5: Partly agree	0	0%
6: Agree	0	0%
7: Strongly agree	60	80%
Total	75	100%

8. The staff in an excellent transportation companies will tell customers exactly when services will be performed.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	15	20%
4: Neutral opinion	0	0%
5: Partly agree	10	13.3%
6: Agree	10	13.3%
7: Strongly agree	40	53.3%
Total	75	100%

9. The staff of an excellent transportation companies will give prompt services to customers.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	15	20%
5: Partly agree	5	6.7%
6: Agree	30	40%
7: Strongly agree	25	33.3%
Total	75	100%

10. The staff of an excellent transportation companies will always be willing to help customers.

	Frequency	Percent
1: Strongly disagree	10	13.3%
2: Disagree	15	20%
3: Partly disagree	10	13.3%
4: Neutral opinion	5	6.7%
5: Partly agree	0	0%
6: Agree	15	20%
7: Strongly agree	20	26.7%
Total	75	100%

11. The staff of an excellent transportation companies will never be too busy to respond to customers' requests.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	15	20%
5: Partly agree	0	0%
6: Agree	20	26.7%
7: Strongly agree	35	46.7%
Total	75	100%

12. The behavior of the staff of an excellent transportation companies will instill confidence in customers.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	15	20%
5: Partly agree	5	6.7%
6: Agree	10	13.3%
7: Strongly agree	45	60%
Total	75	100%

13. The staff of an excellent transportation companies will be consistently courteous with customers.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	25	33.3%
5: Partly agree	0	0%
6: Agree	10	13.3%
7: Strongly agree	40	53.3%
Total	75	100%

14. The staff of an excellent transportation companies will have the knowledge to answer customers' questions.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	15	20%
3: Partly disagree	15	20%
4: Neutral opinion	0	0%
5: Partly agree	0	0%
6: Agree	5	6.7%
7: Strongly agree	35	46.7%
Total	75	100%

15. Excellent transportation companies will give customers individual attention.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	15	20%
4: Neutral opinion	5	6.7%
5: Partly agree	5	6.7%
6: Agree	20	26.7%
7: Strongly agree	30	40%
Total	75	100%

16. Excellent transportation will have operating hours convenient to all their customers.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	0	0%
3: Partly disagree	15	20%
4: Neutral opinion	0	0%
5: Partly agree	5	6.7%
6: Agree	15	20%
7: Strongly agree	35	46.7%
Total	75	100%

17. Excellent transportation companies will have the customers' best interests at heart.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	0	0%
3: Partly disagree	15	20%
4: Neutral opinion	0	0%
5: Partly agree	0	0%
6: Agree	30	40%
7: Strongly agree	25	33.3%
Total	75	100%

18. The staff of an excellent transportation companies will understand the specific needs of their customers.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	5	6.7%
3: Partly disagree	15	20%
4: Neutral opinion	0	0%
5: Partly agree	10	13.3%
6: Agree	5	6.7%
7: Strongly agree	35	46.7%
Total	75	100%

APPENDIX 3: THE PERCENTAGE DISTRIBUTIONS FOR PERCEPTIONS OF SERVICE QUALITY

1. The transportation company has modern-looking equipment.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	5	6.7%
3: Partly disagree	20	26.7%
4: Neutral opinion	5	6.7%
5: Partly agree	10	13.3%
6: Agree	10	13.3%
7: Strongly agree	20	26.7%
Total	75	100%

2. The physical facilities in the transportation company are visually appealing.

	Frequency	Percent
1: Strongly disagree	15	20%
2: Disagree	20	26.7%
3: Partly disagree	5	6.7%
4: Neutral opinion	0	0%
5: Partly agree	10	13.3%
6: Agree	5	6.7%
7: Strongly agree	20	26.7%
Total	75	100%

3. The staffs in the transportation company are neat appealing.

	Frequency	Percent
1: Strongly disagree	20	26.7%
2: Disagree	5	6.7%
3: Partly disagree	10	13.3%
4: Neutral opinion	0	0%
5: Partly agree	5	6.7%
6: Agree	25	33.3%
7: Strongly agree	10	13.3%
Total	75	100%

4. When the transportation company promises to do something by a certain time it does so.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	20	26.7%
3: Partly disagree	0	0%
4: Neutral opinion	0	0%
5: Partly agree	0	0%
6: Agree	25	33.3%
7: Strongly agree	25	33.3%
Total	75	100%

5. When a customer has a problem, the transportation company shows a sincere interest in solving it.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	0	0%
3: Partly disagree	20	26.7%
4: Neutral opinion	0	0%
5: Partly agree	10	13.3%
6: Agree	20	26.7%
7: Strongly agree	20	26.7%
Total	75	100%

6. The transportation company performs the service right the first time.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	0	0%
3: Partly disagree	15	20%
4: Neutral opinion	0	0%
5: Partly agree	20	26.7%
6: Agree	25	33.3%
7: Strongly agree	10	13.3%
Total	75	100%

7. The transportation company insists on error-free records.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	0	0%
3: Partly disagree	15	20%
4: Neutral opinion	0	0%
5: Partly agree	0	0%
6: Agree	35	46.7%
7: Strongly agree	20	26.7%
Total	75	100%

8. The staff in the transportation company tells you exactly when services will be performed.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	15	20%
3: Partly disagree	0	0%
4: Neutral opinion	0	0%
5: Partly agree	15	20%
6: Agree	20	26.7%
7: Strongly agree	25	33.3%
Total	75	100%

9. The staff in the transportation company gives prompt service to customers.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	20	26.7%
3: Partly disagree	0	0%
4: Neutral opinion	5	6.7%
5: Partly agree	0	0%
6: Agree	25	33.3%
7: Strongly agree	25	33.3%
Total	75	100%

10. The staff in the transportation company is always willing to help customers.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	25	33.3%
3: Partly disagree	0	0%
4: Neutral opinion	20	26.7%
5: Partly agree	10	13.3%
6: Agree	10	13.3%
7: Strongly agree	5	6.7%
Total	75	100%

11. The staff in the transportation company is never being too busy to respond to yours' requests.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	15	20%
3: Partly disagree	5	6.7%
4: Neutral opinion	5	6.7%
5: Partly agree	10	13.3%
6: Agree	25	33.3%
7: Strongly agree	10	13.3%
Total	75	100%

12. The behavior of staff in the transportation company instills confidence in you.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	15	20%
5: Partly agree	10	13.3%
6: Agree	30	40%
7: Strongly agree	20	26.7%
Total	75	100%

13. The staffs in the transportation company are consistently courteous to you.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	20	26.7%
5: Partly agree	15	20%
6: Agree	25	33.3%
7: Strongly agree	15	20%
Total	75	100%

14. The staffs in the transportation company have the knowledge to answer yours' questions.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	5	6.7%
3: Partly disagree	20	26.7%
4: Neutral opinion	15	20%
5: Partly agree	10	13.3%
6: Agree	10	13.3%
7: Strongly agree	15	20%
Total	75	100%

15. The transportation company gives you individual attention.

	Frequency	Percent
1: Strongly disagree	0	0%
2: Disagree	0	0%
3: Partly disagree	15	20%
4: Neutral opinion	15	20%
5: Partly agree	0	0%
6: Agree	35	46.7%
7: Strongly agree	10	13.3%
Total	75	100%

16. The transportation company has operating hours convenient to all its customers.

	Frequency	Percent
1: Strongly disagree	5	6.7%
2: Disagree	0	0%
3: Partly disagree	0	0%
4: Neutral opinion	15	20%
5: Partly agree	20	26.7%
6: Agree	10	13.3%
7: Strongly agree	25	33.3%
Total	75	100%

17. The transportation company has yours' best interests at heart.

	Frequency	Percent
1: Strongly disagree	10	13.3%
2: Disagree	0	0%
3: Partly disagree	15	20%
4: Neutral opinion	5	6.7%
5: Partly agree	20	26.7%
6: Agree	15	20%
7: Strongly agree	10	13.3%
Total	75	100%

18. The staffs of the transportation company understand your specific needs.

	Frequency	Percent
1: Strongly disagree	10	13.3%
2: Disagree	5	6.7%
3: Partly disagree	15	20%
4: Neutral opinion	0	0%
5: Partly agree	0	0%
6: Agree	25	33.3%
7: Strongly agree	20	26.7%
Total	75	100%