



## **Customer Satisfaction towards Bottled Water Industry Using Servqual Dimension**

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### **ABSTRACT**

The aim of the study is to assess the customer satisfaction towards bottled water company using service quality. The bottled water industry has been growing rapidly in recent years. For this study survey and direct interview was conducted with customers. The survey instrument was based on the SERVQUAL model, which measures service quality based on five dimensions: reliability, responsiveness, assurance, empathy and tangibles. The respondents were 140 customers those are using bottled water in Kallakurichi city. The result of the study indicate that the overall service quality provided by the bottled water industry to enhance customer satisfaction.

**Keywords:** Bottled Water Industry, Service Quality, Customer Satisfaction.

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### **INTRODUCTION**

The bottled water industry refers to the production and sale of packaged water in bottles or other containers for consumption. Bottled water can come from various sources, including natural springs, municipal water supplies and purified tap water. The bottled water industry has experienced significant growth over the past few decades, with consumers increasingly opting for bottled water over tap water due to concerns about water quality, convenience and taste. In addition, the rise of health and wellness trends has led to increased demand for bottled water as a healthier alternative to sugary drinks. The global bottled water market is dominated by a few large multinational companies, including Nestle, PepsiCo and Coca – Cola, which account for a significant share of the market. However, there are also many smaller and regional companies that produce and sell bottled water.

Despite its popularity, the bottled water industry has faced criticism and controversy over its environmental impact, particularly regarding the use of plastic bottles and the carbon footprint associated with transportation. As a result, there has been a growing movement towards more sustainable packaging option and efforts to reduce the industry's environmental impact.

The bottled water industry is a sector of the beverage industry that involves the manufacturing, packaging and distribution of bottled water. Bottled water is a widely consumed beverage that is sold in plastic or glass bottles, and it is typically sourced from springs, wells or municipal water supplies. The industry is highly competitive, with companies for market share through product innovation, branding and advertising. There are several types of bottled water available on the market, including spring water, purified water, mineral water and flavored water.

### **SERVQUAL**

SERVQUAL is a widely used method for measuring the quality of service provided by organizations. The name "SERVQUAL" is derived from "Service Quality", and it was introduced in the 1980's by Zeithaml, Parasuraman and Berry as a means of evaluating customer satisfaction with service quality. The SERVQUAL method is based on the premise that customers evaluate the quality of service based on five dimensions. They are,

### **TANGIBLES**

This refers to the physical aspects of a service such as the appearance of the facilities, equipment and personnel. It includes factors such as cleanliness, modernity and the appearance of staff.

### **RELIABILITY**

This dimension refers to the ability of the service provider to perform the promised service consistently and accurately. It includes factors such as the dependability of the service, the ability to provide service when promised, and the accuracy of the service.

### **RESPONSIVENESS**

This dimension refers to the willingness of the service provider to help customers and provide prompt service. It includes factors such as the speed of service, the willingness of staff to help, and the ability to handle customer complaints.

#### ASSURANCE

This dimension refers to the knowledge, courtesy and professionalism of the service provider and their ability to inspire trust and confidence on customers. It includes factors such as the competence of the service provider, their ability to communicate effectively and their level of knowledge.

#### EMPATHY

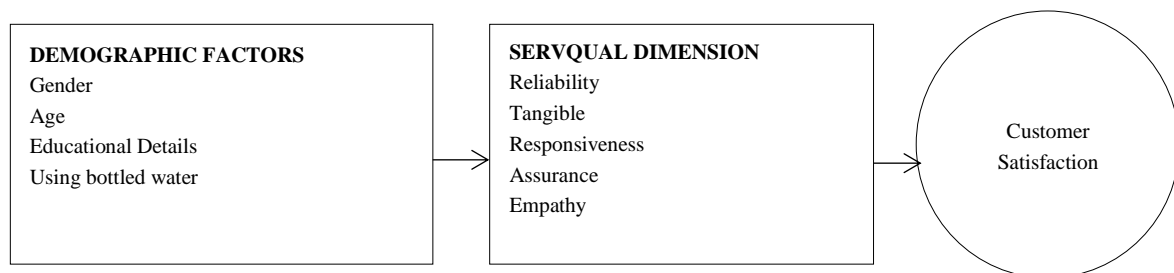
This dimension refers to the caring, individualized attention that the service provider gives to customers. It includes factors such as the ability of staff to understand and anticipate customer needs, the level of personalized attention given to customers and the level of concern shown for customer's welfare.

These dimensions are used to assess customer expectations of service quality and to compare them with their perceptions of the actual service delivered. The SERVQUAL model provides a framework for understanding customer perceptions of service quality, identifying areas for improvement and measuring the effectiveness of service quality initiatives.

### OBJECTIVES OF THE STUDY

- To investigate how demographic variables (such as age, gender and educational) may influence customer satisfaction with bottled water.
- To assess the reliability, responsiveness, assurance, empathy and tangibility dimensions of service quality in the bottled water industry.
- To examine the relationship between service quality and customer satisfaction in the bottled water industry.

### FRAMEWORK OF THE STUDY



### LITERATURE REVIEW

**Pita Castelo, Jose, Dr.,(2000)** says that customer satisfaction and dissatisfaction using service quality are some of the most concepts in marketing. The main objective of this research is to find relationship between satisfaction and dissatisfaction in retail shop.

**Bikramjit Singh hundal (2015)** aimed to evaluate the passenger satisfaction on Indian Railway using service quality. The result of the paper indicates that a larger gap has been found in Reliability and Assurance dimensions of Railway service quality and determining satisfaction of passengers are basic facilities, safety and security, punctuality and employee behavior towards passengers.

**Muhammad Nadzmi Muhammad Idlan (2021)** study focuses on the relationship between service quality, fares and safety with customer satisfaction of ferry service in Langkawi. It helps the industry to develop the business model that is more feasible for higher customer satisfaction.

**Marco Alberto Valenzo-Jimenez (2019)** is to evaluate the public transportation system service in the city of Morelia, Mexico.

**Aleksander Sladkowski, Maria Ciesla and Krupa (2018)** show the differences that exist between the perceived and delivered quality of services provided by enterprises and TUL method. The main goal of the paper was to examine the effectiveness of the method in the transport company.

**Meilina Mohamad Kamil, Ayuni Soraya Azman, Suhaila Abdul Hanan** this allows the growing interest in the transportation business and to measure the quality of services.

**Aleksandra GulC (2016)** this paper is based on the research method literature review and critical analysis of the research achievement.

### RESEARCH METHODOLOGY

The researcher is using both types of primary data and secondary data, which is collected from customers in Kallakurichi city. The primary data was collected through the structured questionnaire from the respondents. The secondary data have been collected from research books, journals and websites.

## RESEARCH DESIGN

The research design is analytical and descriptive method. The sampling technique used is non-probability convenience sampling method and the sample size of the study is 140 respondents.

## STATISTICAL TOOLS

The data collected is analyzed and interpreted properly to find the result of the research work and statistical tools used for analyze the data like simple percentage with the help of the SPSS (version 29).

## LIMITATION OF THE STUDY

- The sample was geographical limited. If data collected from other areas may procedure different results.
- Limited period of time to collect the data.

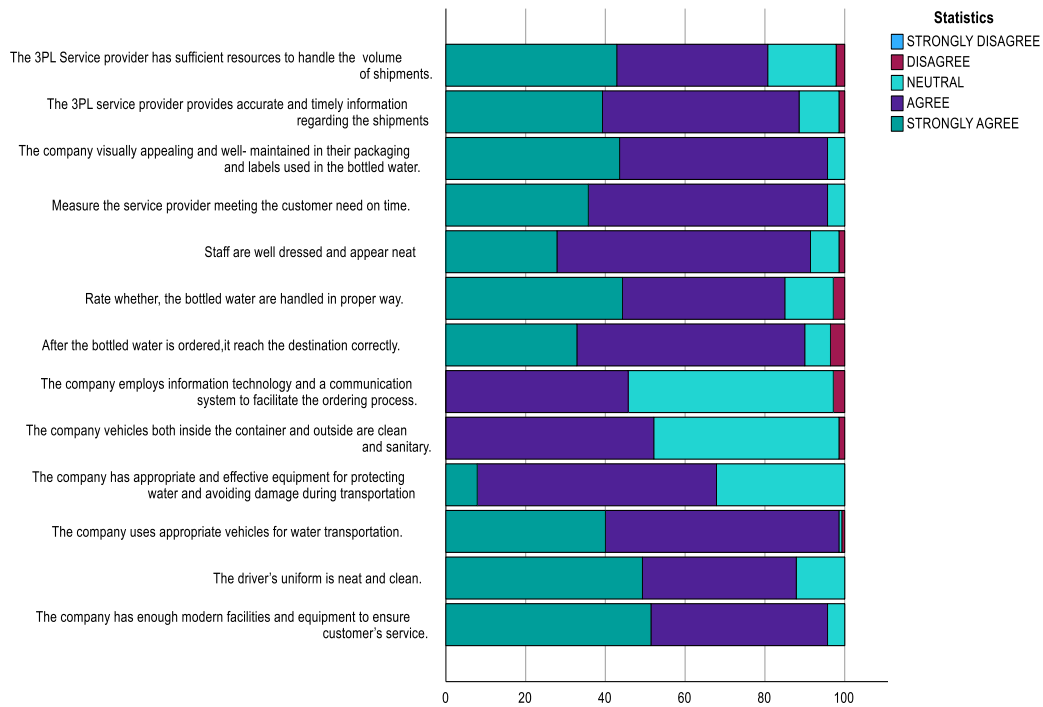
## ANALYSIS AND INTERPRETATION

The responses of the customers are valued in this analysis to find the satisfaction of the bottled water and percentage of the respondents' satisfaction regarding to the various components using SPSS version 29.

### TANGIBLE

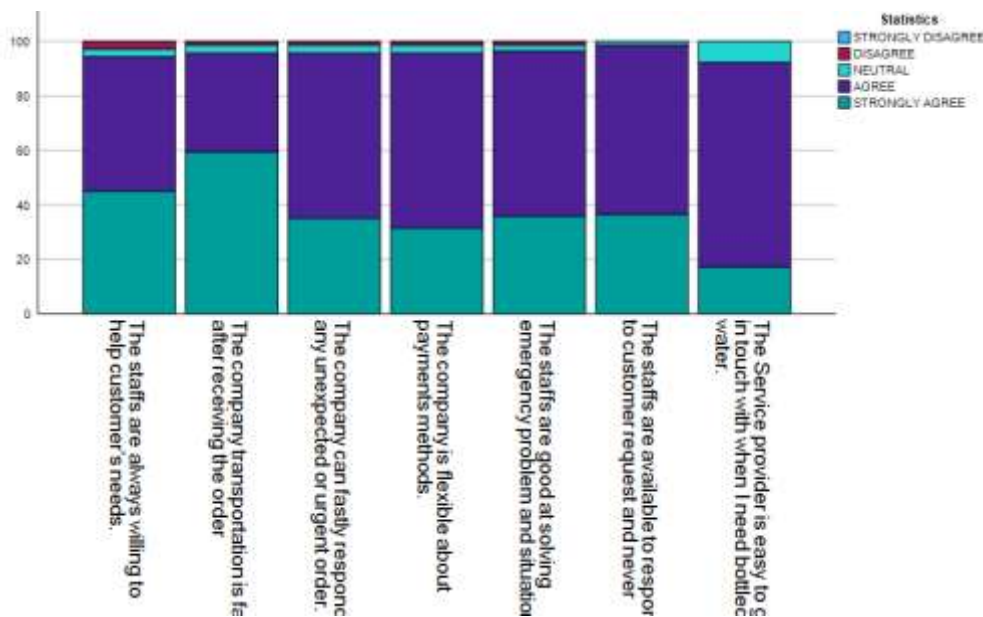
<b>LIKERT SCALE</b>	The company has enough modern facilities and equipment to ensure customer's service.	The driver's uniform is neat and clean.	The company uses appropriate vehicles for water transportation.	The company has appropriate and effective equipment for protecting water and avoiding damage during transportation
STRONGLY DISAGREE	0.0%	0.0%	0.0%	0.0%
DISAGREE	0.0%	0.0%	0.7%	0.0%
NEUTRAL	4.3%	12.1%	0.7%	32.1%
AGREE	44.3%	38.6%	58.6%	60.0%
STRONGLY AGREE	51.4%	49.3%	40.0%	7.9%
	The company vehicles both inside the container and outside are clean and sanitary.	The company employs information technology and a communication system to facilitate the ordering process.	After the bottled water is ordered, it reach the destination correctly.	Rate whether, the bottled water are handled in proper way.
STRONGLY DISAGREE	0.0%	0.0%	0.0%	0.0%
DISAGREE	1.4%	2.9%	3.6%	2.9%
NEUTRAL	46.4%	51.4%	6.4%	12.1%
AGREE	52.1%	45.7%	57.1%	40.7%
STRONGLY AGREE	0.0%	0.0%	32.9%	44.3%
	Staff are well dressed and appear neat	Measure the service provider meeting the customer need on time.	The company visually appealing and well-maintained in their packaging and labels used in the bottled water.	The 3PL service provider provides accurate and timely information regarding the shipments
STRONGLY DISAGREE	0.0%	0.0%	0.0%	0.0%
DISAGREE	1.4%	0.0%	0.0%	1.4%
NEUTRAL	7.1%	4.3%	4.3%	10.0%
AGREE	63.6%	60.0%	52.1%	49.3%
STRONGLY AGREE	27.9%	35.7%	43.6%	39.3%
	The 3PL Service provider has sufficient resources to handle the volume of shipments.			
STRONGLY DISAGREE	0.0%			

DISAGREE	2.1%
NEUTRAL	17.1%
AGREE	37.9%
STRONGLY AGREE	42.9%



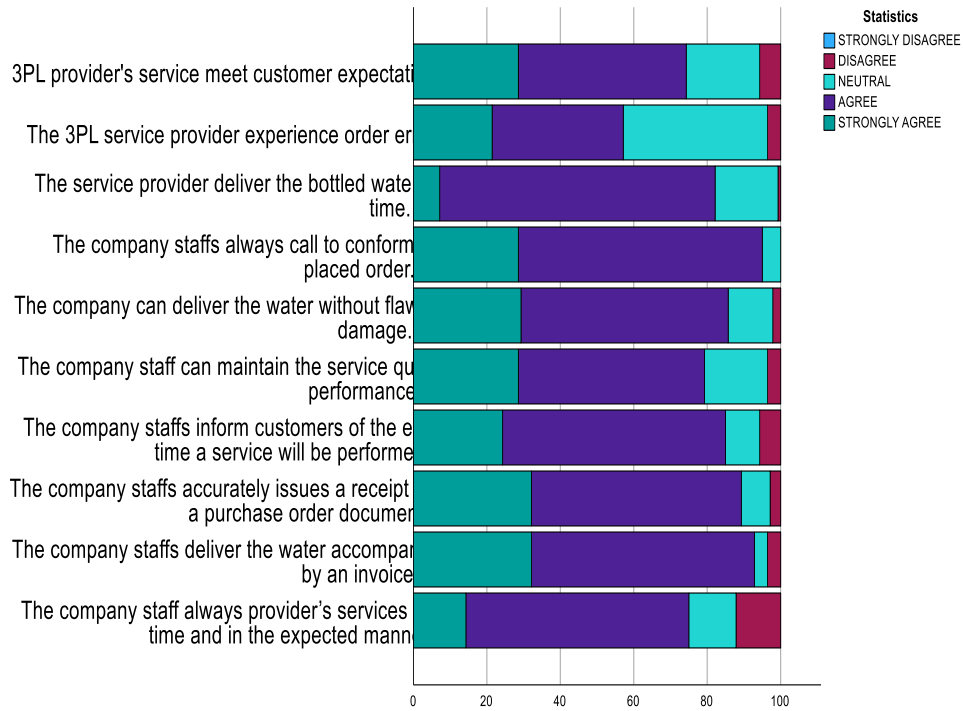
**RESPONSIVENESS**

	The staffs are always willing to help customer's needs.	The company transportation is fast after receiving the order	The company can fastly respond to any unexpected or urgent order.	The company is flexible about payments methods.
STRONGLY DISAGREE	0.0%	0.0%	0.0%	0.0%
DISAGREE	2.9%	1.4%	1.4%	1.4%
NEUTRAL	2.9%	2.9%	2.9%	2.9%
AGREE	49.3%	36.4%	60.7%	64.3%
STRONGLY AGREE	45.0%	59.3%	35.0%	31.4%
	The staffs are good at solving emergency problem and situation.	The staffs are available to respond to customer request and never	The Service provider is easy to get in touch with when I need bottled water.	
STRONGLY DISAGREE	0.0%	0.0%	0.0%	
DISAGREE	1.4%	0.0%	0.0%	
NEUTRAL	2.1%	1.4%	7.9%	
AGREE	60.7%	62.1%	75.0%	
STRONGLY AGREE	35.7%	36.4%	17.1%	



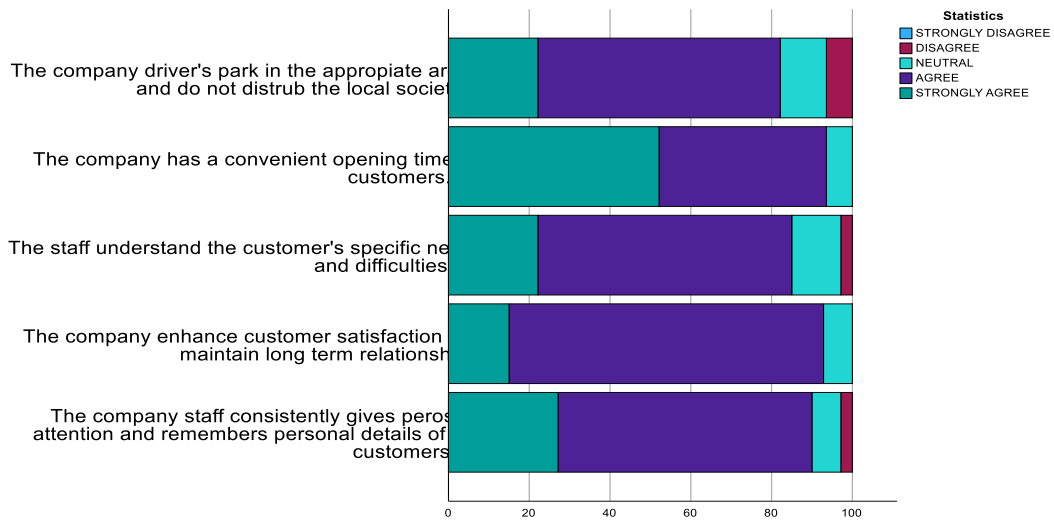
**RELIABILITY**

	The company staff always provider's services on -time and in the expected manner.	The company staffs deliver the water accompanied by an invoice.	The company staffs accurately issues a receipt and a purchase order document.	The company staffs inform customers of the exact time a service will be performed.
STRONGLY DISAGREE	0.0%	0.0%	0.0%	0.0%
DISAGREE	12.1%	3.6%	2.9%	5.7%
NEUTRAL	12.9%	3.6%	7.9%	9.3%
AGREE	60.7%	60.7%	57.1%	60.7%
STRONGLY AGREE	14.3%	32.1%	32.1%	24.3%
	The company staff can maintain the service quality performance	The company can deliver the water without flaws or damage.	The company staffs always call to conform the placed order.	The service provider deliver the bottled water on time.
STRONGLY DISAGREE	0.0%	0.0%	0.0%	0.0%
DISAGREE	3.6%	2.1%	0.0%	0.7%
NEUTRAL	17.1%	12.1%	5.0%	17.1%
AGREE	50.7%	56.4%	66.4%	75.0%
STRONGLY AGREE	28.6%	29.3%	28.6%	7.1%
	The 3PL service provider experience order error.	3PL provider's service meet customer expectation.		
STRONGLY DISAGREE	0.0%	0.0%		
DISAGREE	3.6%	5.7%		
NEUTRAL	39.3%	20.0%		
AGREE	35.7%	45.7%		
STRONGLY AGREE	21.4%	28.6%		



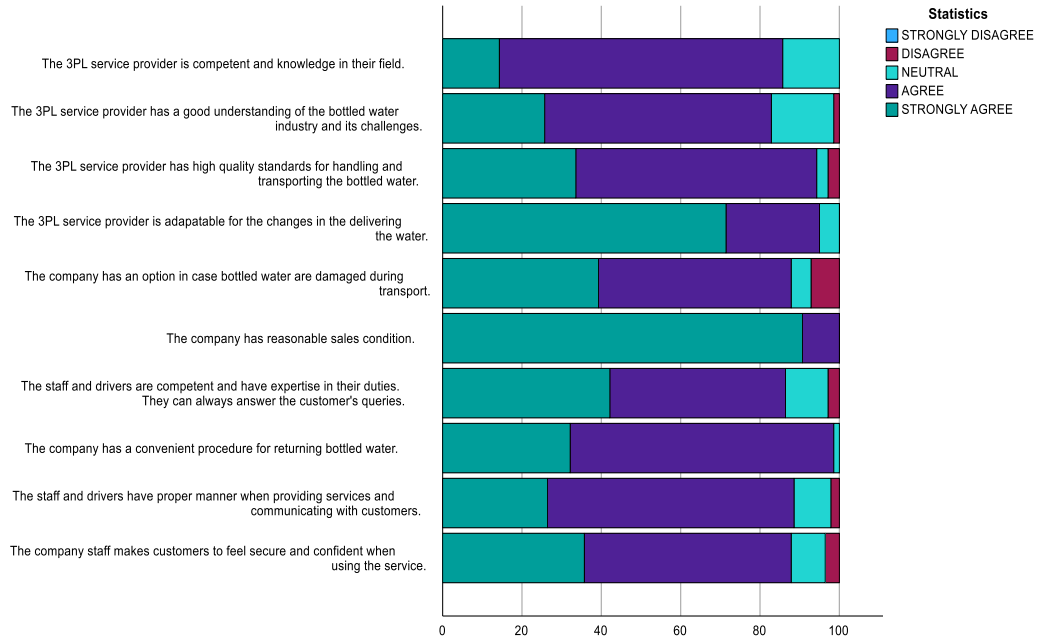
**EMPATHY**

	The company staff consistently gives personal attention and remembers personal details of the customers	The company enhance customer satisfaction and maintain long term relationship	The staff understand the customer's specific needs and difficulties.	The company has a convenient opening time for customers.
STRONGLY DISAGREE	0.0%	0.0%	0.0%	0.0%
DISAGREE	2.9%	0.0%	2.9%	0.0%
NEUTRAL	7.1%	7.1%	12.1%	6.4%
AGREE	62.9%	77.9%	62.9%	41.4%
STRONGLY AGREE	27.1%	15.0%	22.1%	52.1%
	The company driver's park in the appropriate areas and do not disturb the local society .			
STRONGLY DISAGREE	0.0%			
DISAGREE	6.4%			
NEUTRAL	11.4%			
AGREE	60.0%			
STRONGLY AGREE	22.1%			



**ASSURANCE**

	The company staff makes customers to feel secure and confident when using the service.	The staff and drivers have proper manner when providing services and communicating with customers.	The company has a convenient procedure for returning bottled water.	The staff and drivers are competent and have expertise in their duties. They can always answer the customer's queries.
STRONGLY DISAGREE	0.0%	0.0%	0.0%	0.0%
DISAGREE	3.6%	2.1%	0.0%	2.9%
NEUTRAL	8.6%	9.3%	1.4%	10.7%
AGREE	52.1%	62.1%	66.4%	44.3%
STRONGLY AGREE	35.7%	26.4%	32.1%	42.1%
	The company has reasonable sales condition.	The company has an option in case bottled water are damaged during transport.	The 3PL service provider is adaptable for the changes in the delivering the water.	The 3PL service provider has high quality standards for handling and transporting the bottled water.
STRONGLY DISAGREE	0.0%	0.0%	0.0%	0.0%
DISAGREE	0.0%	7.1%	0.0%	2.9%
NEUTRAL	0.0%	5.0%	5.0%	2.9%
AGREE	9.3%	48.6%	23.6%	60.7%
STRONGLY AGREE	90.7%	39.3%	71.4%	33.6%
	The 3PL service provider has a good understanding of the bottled water industry and its challenges.	The 3PL service provider is competent and knowledge in their field.		
STRONGLY DISAGREE	0.0%	0.0%		
DISAGREE	1.4%	0.0%		
NEUTRAL	15.7%	14.3%		
AGREE	57.1%	71.4%		
STRONGLY AGREE	25.7%	14.3%		



**FACTOR ANALYSIS RESULT**

	1	2	3	4	5	6	7	8	9	10	11	12
e4	-.858											
p5	.831											
r10	.787											
p6	.771											
p4	.771											
t13	.748											
r3	.709				.412							
r9	.702											
a5	-.617											
r4	.568											
p3	.557											
a3	-.473		.468		.414							
p7		.841										
t4		.678										
p1	.454	.656										
t11	.436	.578										
r7		.548										
a4		-.538										
r5		.529										
t6	.509	.529										
t10		.496						.492				
a1			.715									
t3			.697									
a2	-.522		.588									
p2	.482		.531									
e5			.525									
t9	.419		.434									
e2				-.812								
a8		-.501		-.697								
t7	.470			.569								
t12				.530								
t1				.434			-.411					
a10					.827							
t2					.792							



e3					-.751							
r6						.720						
r2	.461					.550						
r8							.715					
e1							.485					-.469
a7			.430	-.424			.444					
a6								.850				
t5									.806			
a9				-.459					-.537			
r1	.482									.709		
t8										.657		

#### RELIABILITY TEST OF THE QUESTIONNAIRE

RELIABILITY STATISTICS					
CRONBACH' ALPA	TANGIBLE	RELIABILITY	RESPONSIVENESS	ASSURANCE	EMPATHY
	.768	.816	.788	.487	-.348

#### FINDING

The following findings are prepared on the basis on the analysis

- Majority 51% of the respondents strongly agree that the company staff consistently gives personal attention and remembers personal details of the customers.
- Majority 49% of the respondents strongly agree that the driver's uniform is neat and clean.
- Majority 60% of the respondents agree that the company uses appropriate vehicles for water transportation.
- Majority 60% of the respondents agree that the company has appropriate and effective equipment for protecting water and avoiding damage during transportation.
- Majority 52% of the respondents agree that the company vehicles both inside the container and outside are clean and sanitary.
- Majority 51% of the respondents agree that the company employs information technology and a communication system to facilitate the ordering process.
- Majority 57% of the respondents agree that after the bottled water is ordered, it reach the destination correctly.
- Majority 44% of the respondents agree that whether, the bottled water are handled in proper way.
- Majority 64% of the respondents agree that staff are well dressed and appear neat.
- Majority 60% of the respondents agree that measure the service provider meeting the customer need on time.
- Majority 52% of the respondents agree that the company visually appealing and well- maintained in their packaging and labels used in the bottled water.
- Majority 49% of the respondents agree that the 3PL service provider provides accurate and timely information regarding the shipments.
- Majority 43% of the respondents strongly agree that the 3PL Service provider has sufficient resources to handle the volume of shipments.
- Majority 49% of the respondents agree that the staffs are always willing to help customer's needs.
- Majority 59% of the respondents strongly agree that the company transportation is fast after receiving the order.
- Majority 61% of the respondents agree that the company can fastly respond to any unexpected or urgent order.
- Majority 64% of the respondents agree that the company is flexible about payments methods.
- Majority 61% of the respondents agree that the staffs are good at solving emergency problem and situation.
- Majority 62% of the respondents agree that the staffs are available to respond to customer request and never.
- Majority 75% of the respondents agree that service provider is easy to get in touch with when I need bottled water.
- Majority 61% of the respondents agree that the company staff always provider's services on -time and in the expected manner.

- Majority 61% of the respondents agree that the company staffs deliver the water accompanied by an invoice.
- Majority 57% of the respondents agree that the company staffs accurately issues a receipt and a purchase order document.
- Majority 60% of the respondents agree that the company staffs inform customers of the exact time a service will be performed and finished.
- Majority 50% of the respondents agree that the company staff can maintain the service quality performance.
- Majority 56% of the respondents agree that the company can deliver the water without flaws or damage.
- Majority 66% of the respondents agree that the company staffs always calls to confirm the placed order.
- Majority 75% of the respondents agree that service provider deliver the bottled water on time.
- Majority 39% of the respondents neutral that the 3pl service provider experience order error.
- Majority 45% of the respondents agree that 3pl provider's service meet customer expectation.
- Majority 52% of the respondents agree that the company staff makes customers to feel secure and confident when using the service.
- Majority 62% of the respondents agree that the staff and drivers have proper manner when providing services and communicating with customers.
- Majority 66% of the respondents agree that the company has a convenient procedure for returning goods.
- Majority 44% of the respondents agree that they can always answer the customer's queries.
- Majority 90% of the respondents strongly agree that the company has reasonable sales conditions.
- Majority 49% of the respondents agree that the company has an option in case bottled water is damaged during transport.
- Majority 71% of the respondents strongly agree that the 3pl service provider is adaptable for the changes in the delivering the water.
- Majority 61% of the respondents agree that the 3pl service provider has high quality standards for handling and transporting the bottled water.
- Majority 57% of the respondents agree that the 3PL service provider has a good understanding of the bottled water industry and its challenges.
- Majority 71% of the respondents agree that the 3PL service provider is competent and knowledge in their field.
- Majority 63% of the respondents agree that bottled water industry staff consistently gives personal attention and remembers personal details of the customer.
- Majority 77% of the respondents agree that bottled water industry enhance customer satisfaction and maintain long - term relationship.
- Majority 63% of the respondents agree that the staff understand the customer's specific needs and difficulties.
- Majority 52% of the respondents strongly agree that the company has a convenient opening time for customers.
- Majority 60% of the respondents agree that the company's drivers park in appropriate areas and do not disturb the local society.

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## CONCLUSION

The variables related to bottled water industry are reliability, assurance, responsiveness, tangible and empathy. Reliability, tangible and responsiveness are successfully achieved in customer satisfaction towards bottled water. Negative relationship between empathy and customer satisfaction. Assurance on customer satisfaction is very negligible.

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