

CHALLENGES AND SOLUTIONS:
AN ANALYSIS OF ISSUES RELATED TO KSRTC IN MALABAR

Submitted to Kannur University

In the partial fulfillment for the award of the degree of

BACHELOR OF SCIENCE

IN

STATISTICS

Submitted by

Name :

Register number :



DEPARTMENT OF STATISTICS
SIR SYED COLLEGE, TALIPARAMBA
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CERTIFICATE

This is to certify that Mr/Ms.....,Register number.....,Department of Statistics, Sir Syed College Taliparamba has done the project entitled “**Challenges And Solutions :An Analysis of issues related to KSRTC in Malabar**” Submitted to Kannur University for partial fulfillment for the award of Degree of Bachelor of Science in Statistics during the Academic year 2020-2023.

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Above all, I owe my gratitude to the almighty for showering abundant blessings upon me and I express my gratitude to my beloved parents and friends.

Taliparamba,

20-04-2023.

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INTRODUCTION

KSRTC is a major public transport service provider in the state of Kerala and is responsible for catering to the needs of millions of passengers every day.

KSRTC (Kerala State Road Transport Corporation) is a state-owned bus service in the Indian state of Kerala. Like any other organization, KSRTC faces a range of challenges that can impact its operations and overall performance.

Increasing competition from private bus operators and ride-hailing services, Rising fuel prices and maintenance costs, Difficulties in managing a large fleet of buses and drivers, Inefficiencies in route planning and scheduling, Safety and security concerns for passengers are some of the challenges faced by the KSRTC services.

The project will focus on collecting and analysing statistical data related to the operations of KSRTC, identifying the major issues and challenges faced by the corporation, and suggesting possible solutions to address these issues. The project will also examine the operational issues faced by KSRTC, such as the maintenance of its fleet, the quality of its services, and the efficiency of its operations. This analysis will help identify any major operational challenges faced by the corporation.

AIMS AND OBJECTIVES

➤ **Aim**

To study the service-related issues of KSRTC (Kerala State Road Transportation Cooperation).

➤ **Objectives**

The following points are mainly addressed in this study:

- To examine the Gender of KSRTC employees.
- To examine the age distribution of KSRTC employees.
- To examine the income distribution of KSRTC employees.
- To compare the opinion of passengers and employees regarding the reason for financial crisis of KSRTC.
- To compare the opinion of passengers and employees regarding the solution to overcome financial crisis of KSRTC.
- To examine the suggestions of passengers to improve KSRTC.
- To compare the opinion of passengers and employees regarding the ticket rates.
- To examine the type of service required according to employees and passengers.
- To examine the relationship between the average monthly income and working hours.
- To examine the relationship between monthly income and experience of employees.
- To examine the relationship between the monthly income and Gender.
- To examine the relationship between the Job satisfaction and Health issues during duty hours.
- To examine the relationship between the Job satisfaction and Sleep cycle.

- To examine the relationship between the Sleep cycle and health issues.
- To examine the relationship between the Job in KSRTC and educational qualification.
- To examine the relationship between fuel price hike and changes to KSRTC revenue before and after covid 19.
- To examine the relationship between service satisfaction and safe travelling.
- To examine the whether there is any significant difference between drivers salary and conductor salary.
- To check the dependency of service satisfaction on safe travelling, ticket rate opinion , clear and helpful communication with passengers.

MATERIALS AND METHODS

Data and Methodology:

For the study we have relied on the data obtained from KSRTC employees and passengers in Kannur and Calicut district. Among 3 depots in Kannur district we have enumerated 36 employees and 84 passenger data .From Calicut district we have enumerated 45 employees and 38 passengers data.

Study period:

The survey started on February 2023 and completed on February 28 2023.

Schedule:

Data collection is taken place by online survey using google form. Various questions regarding the issues faced by KSRTC employees and passengers are asked using this questionnaire. Schedule is attached last to the project .

DATA EXPLORATION

For the data analysis, we used the following options in SPSS.

1. Univariate analysis

- **PIE DIAGRAM:** A circle is constructed and then is sliced up into distinct sectors, one for each different data values. The area of each sector is meant to represent the relative frequency of the values.

SPSS COMMAND:

Graphs→ Legacy dialogues→ Pie→ Send the variable to their corresponding dialogue box→ OK

- **BAR DIAGRAM:** Bar chart are popular type of graph used to display a frequency distribution for nominal or ordinal data. In a bar chart the various categories in which the observations fall are represented along a horizontal axis. A vertical bar is drawn above each category within that class . A bar should be equal width and separated from one another so as not to imply continuity.

SPSS COMMAND:

Graphs→ Legacy dialogues→ Bar→ Send the variable to their corresponding dialogue box→ OK

- **HISTOGRAM:** Histogram differ from a bar graph. In a histogram no spaces are allowed between the bars unless categories with zero frequency occur. Eliminating the spaces between bars in a histogram makes a graph convey a feeling of continuity that reflect the ordinal nature of the variable.

SPSS COMMAND:

Graphs→ Legacy dialogues→ Histogram→ Send the variable to their corresponding dialogue box→ OK

R STUDIO COMMAND:

hist()

- **FREQUENCY TABLE:** The frequency table can be arranged according to the actual values in the data or according to the count of those values, and the table can be arranged in their ascending or descending order.

SPSS COMMAND:

Analyse → Descriptive Statistics → Frequencies → Transform the variable to their corresponding dialogue box → OK

2. Bivariate analysis.

- **CROSS TABULATION AND CHI-SQUARE TEST:** The cross-tabulation approach is especially used when the data are in the nominal form. Cross tabs generate contingency from nominal or ordinal data under which we classify each variable in these categories. Chi-square yields the linear-by-linear association test.

SPSS COMMAND:

Analyse → Descriptive Statistics → Cross tabs → Statistics → Chi square → continue → Send the variable to their corresponding dialogue box → OK

3. Box Plot

A boxplot is a standardized way of displaying the distribution of data based on a five number summary (“minimum”, first quartile [Q1], median, third quartile [Q3] and “maximum”). It can tell you about your outliers and what their values are.

R STUDIO COMMAND:

Boxplot ()

4. Scatter Plot

A scatter plot is a graphical representation of the relationship between two numerical variables. It consists of a set of points that are plotted on a two-dimensional coordinate system, where one variable is represented on the x-axis and the other variable is represented on the y-axis.

R STUDIO COMMAND:

plot()

5. chi-squared Test

The chi-squared test is a statistical test used to determine whether there is a significant association between two categorical variables. It is used to test the null hypothesis that there is no association between the variables.

R STUDIO COMMAND:

```
chisq.test()
```

SPSS COMMAND:

Analyze→Descriptive Statistics→Frequencies→Transform the variable to their corresponding dialogue box→OK

6. Correlation

Correlation refers to a statistical measure that shows the strength and direction of the relationship between two variables. It is commonly used in research to determine whether and how two variables are related to each other.

R STUDIO COMMAND:

```
cor()
```

7. Binary logistic regression

Binary logistic regression is a statistical method used to model the relationship between a binary dependent variable (also known as the outcome or response variable) and one or more independent variables (also known as predictor variables or covariates). The dependent variable can only have two possible outcomes, typically coded as 0 or 1.

The logistic regression equation can be expressed as follows:

$$\text{logit}(p) = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots + \beta_kX_k$$

SPSS COMMAND:

Analyse → Regression → Binary logistic → send their variable to their corresponding dialogue box → ok

8. Regression fitting

Regression fitting refers to the process of finding the best-fitting line or curve that describes the relationship between two or more variables. The objective is to find a mathematical equation that can predict the value of one variable (dependent variable) based on the values of one or more other variables (independent variables).

R STUDIO COMMAND:

lm()

lm stands for linear model

9. t test

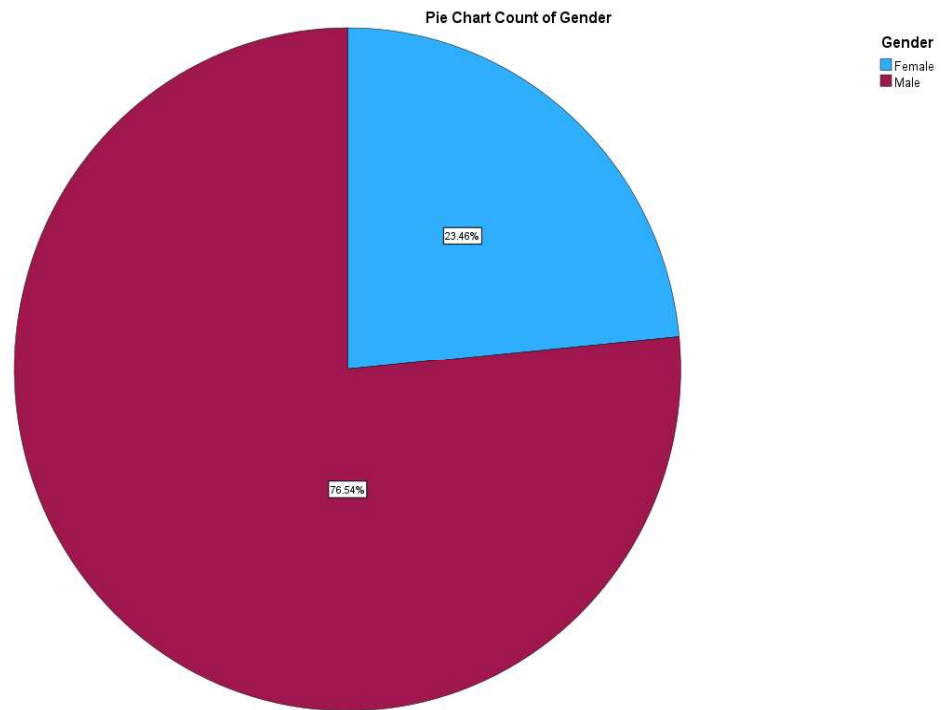
T test, also known as Student's t-test, is a statistical hypothesis test that is used to determine whether there is a significant difference between the means of two groups. It is a parametric test that assumes that the data is normally distributed and that the variances of the two groups are equal.

R STUDIO COMMAND:

t.test ()

ANALYSIS OF DATA

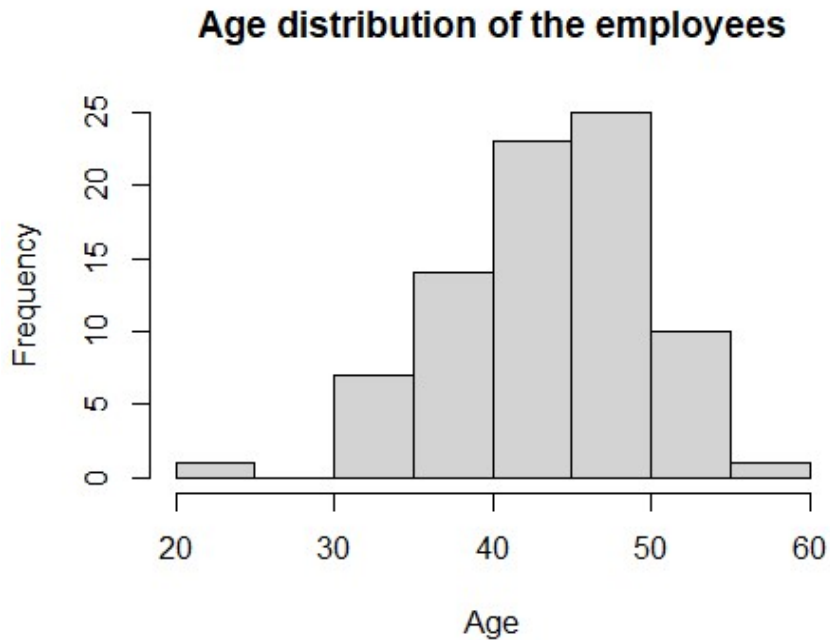
1) Gender



Conclusion

76.54% are male and 23.46% are female .

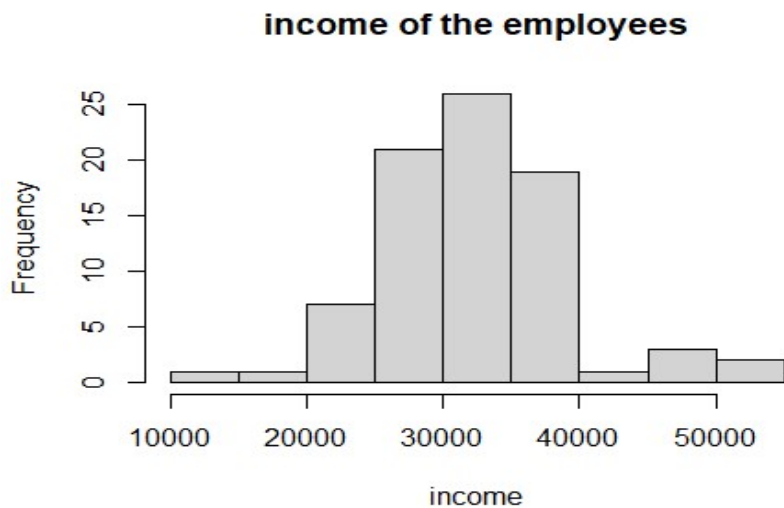
2. DISTRIBUTION OF AGE



Conclusion

Out of 81 samples, the employees are more in the age between 45-50.

3. DISTRIBUTION OF INCOME

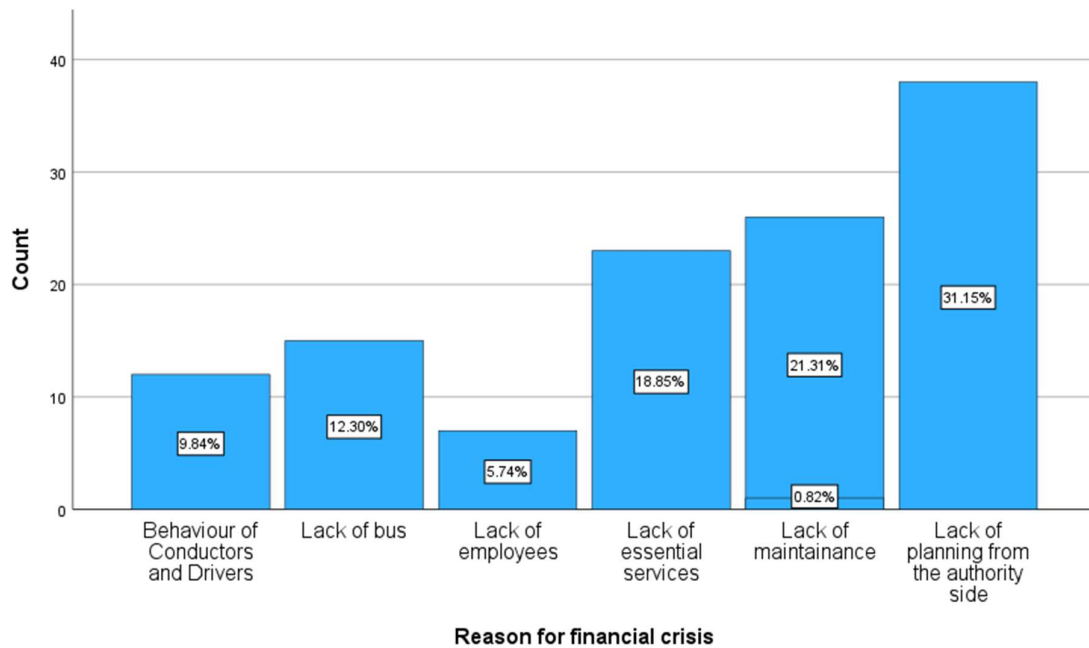


Conclusion

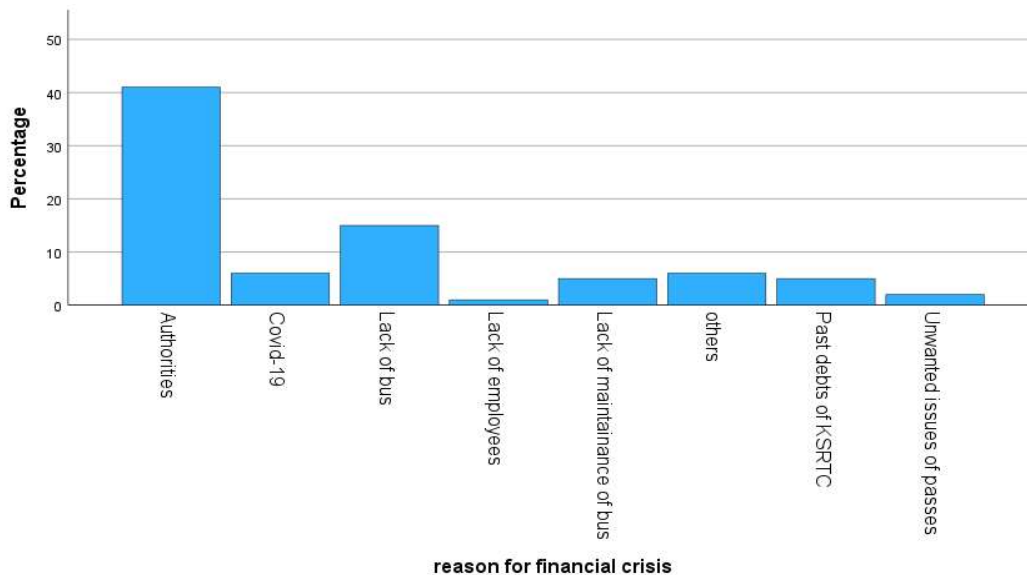
The salary per month of the employees are more between 30,000 and 35,000.

4. REASON FOR FINANCIAL CRISIS

PASSENGERS



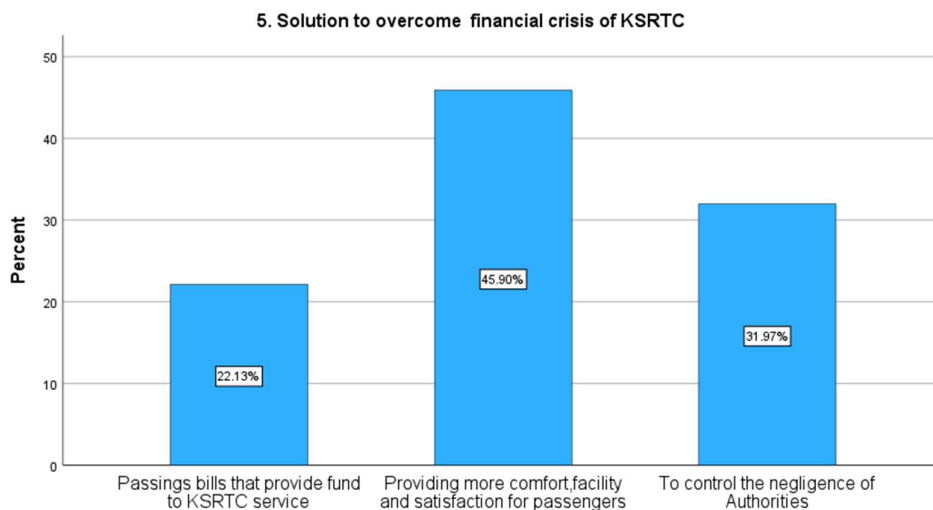
EMPLOYEES



Conclusion

According to the passengers and employees Major reason behind the financial crisis of KSRTC is Lack of planning from the authority side.

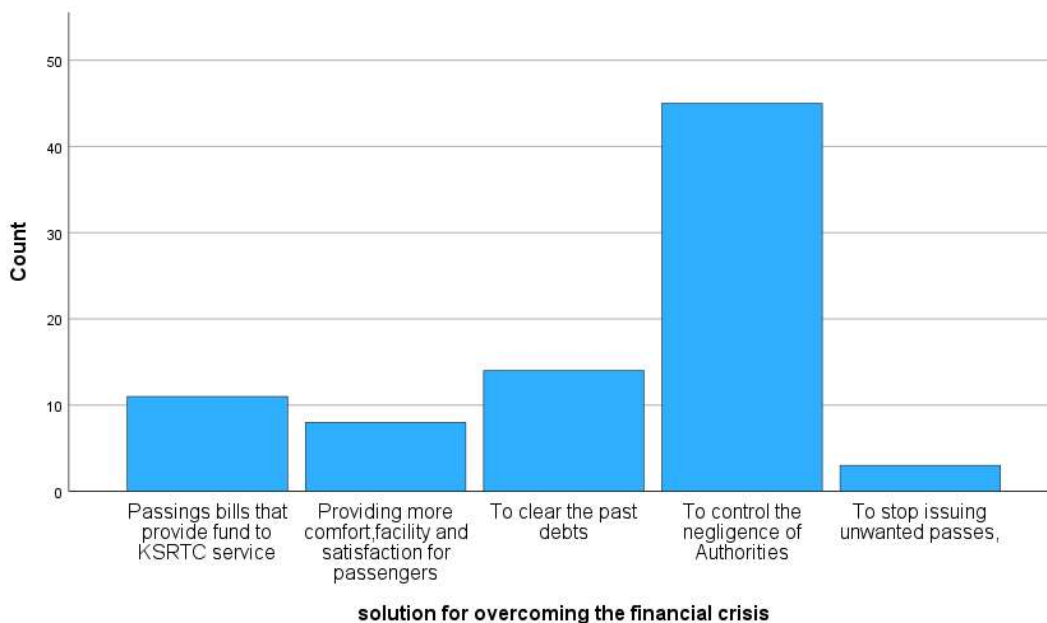
5. SOLUTION TO OVERCOME FINANCIAL CRISIS OF KSRTC (PASSENGER & EMPLOYEES)



5. Solution to overcome financial crisis of KSRTC

Conclusion

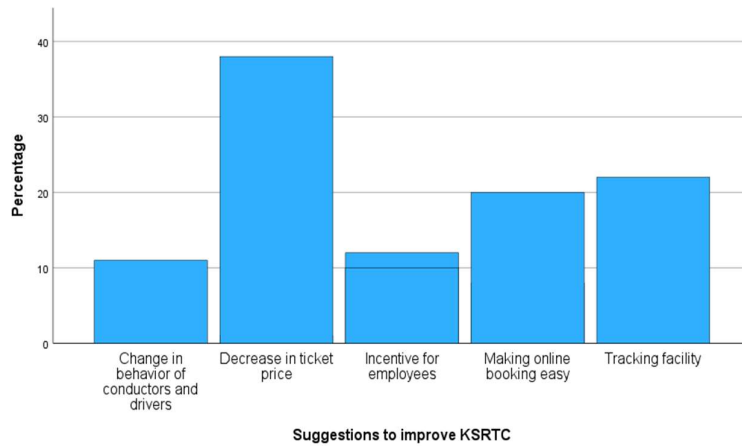
According to the passengers providing more comfort, facility and satisfaction for passengers is the solution to overcome financial crisis of KSRTC.



Conclusion

According to the employees controlling the negligence of authorities is the best solution to overcome the financial crisis of KSRTC.

6. SUGGESTIONS TO IMPROVE KSRTC

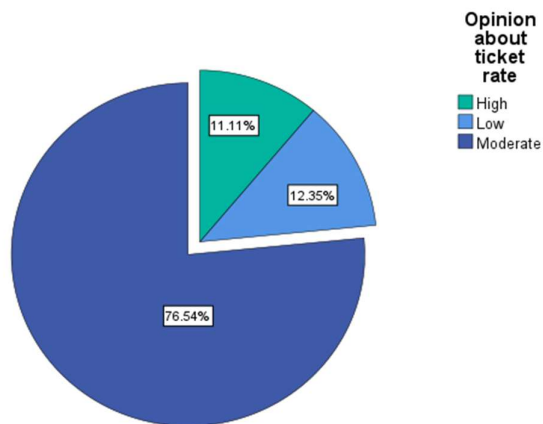


Conclusion

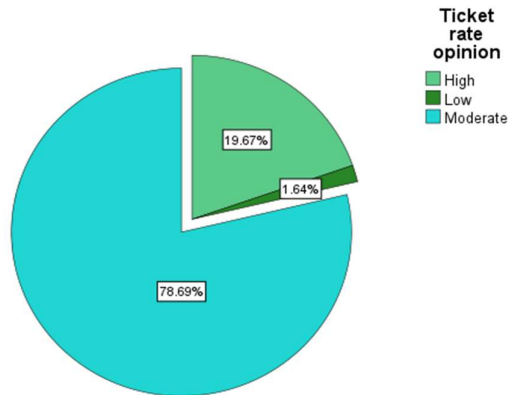
According to the passengers decreasing the ticket price is the best method to improve KSRTC service.

7. OPINION ABOUT TICKET RATE

EMPLOYEES



PASSENGERS



Conclusion

According to the KSRTC employees and passengers ticket price is moderate.

8. DISRIPTIVE STATISTICS

Statistics	Age	experience	average monthly salary
	81	81	81
	0	0	0
Mean	44.07	10.53	32977.53
Std. Deviation	6.220	5.179	6815.906
Variance	38.694	26.827	46456581.327
Range	32	24	42000
Minimum	24	1	10000
Maximum	56	25	52000

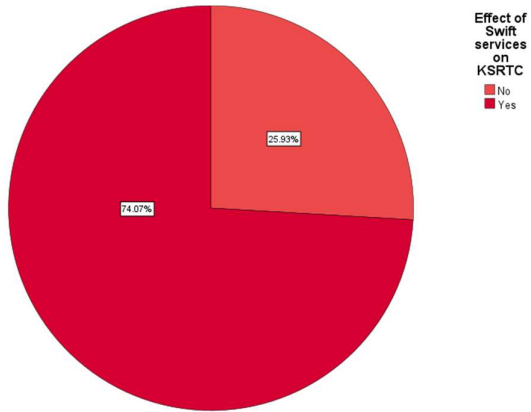
Conclusion

From the data, we get the mean age of employees =44

Their average monthly income is 32977

Their average length of service 10-11 years

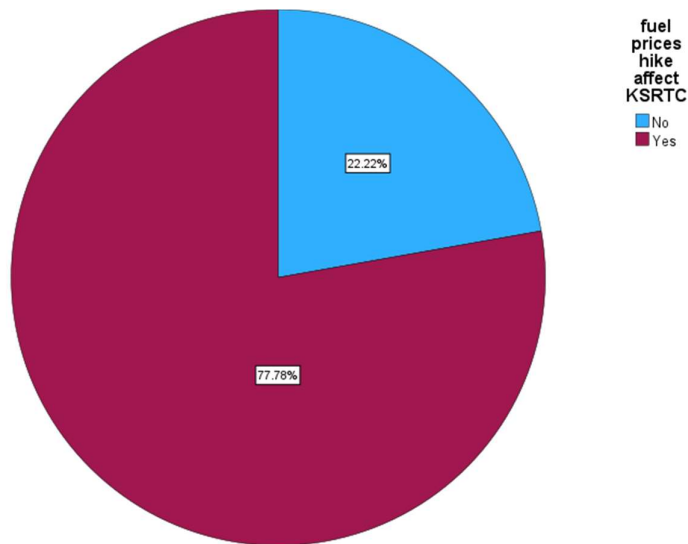
9. EFFECT OF SWIFT ON KSRTC



Conclusion

74.04% of the employees believe that swift service affects KSRTC.

10. EFFECT OF PRICE HIKE IN FUEL

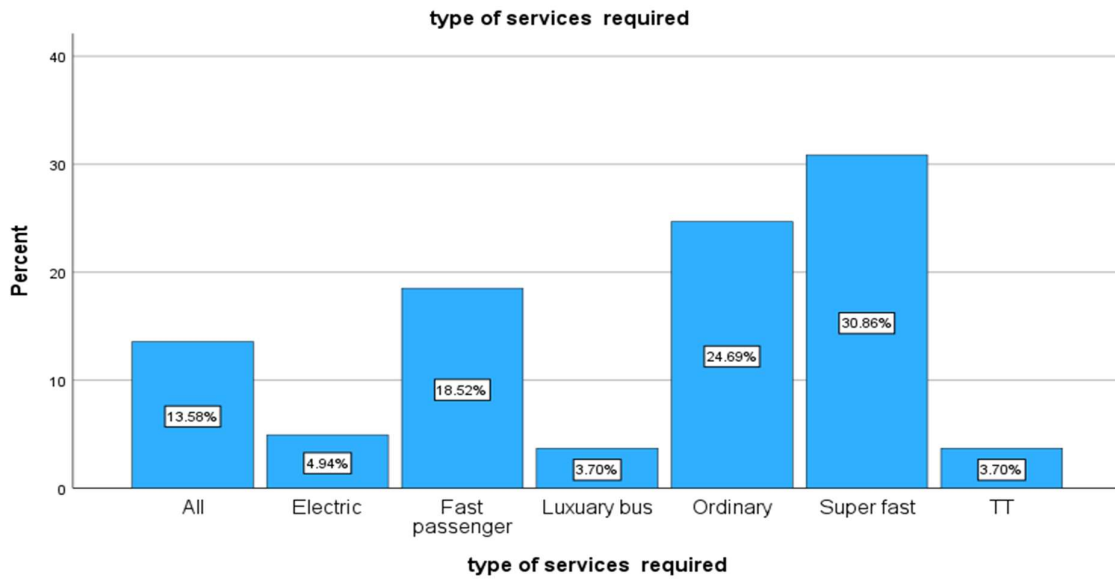


Conclusion

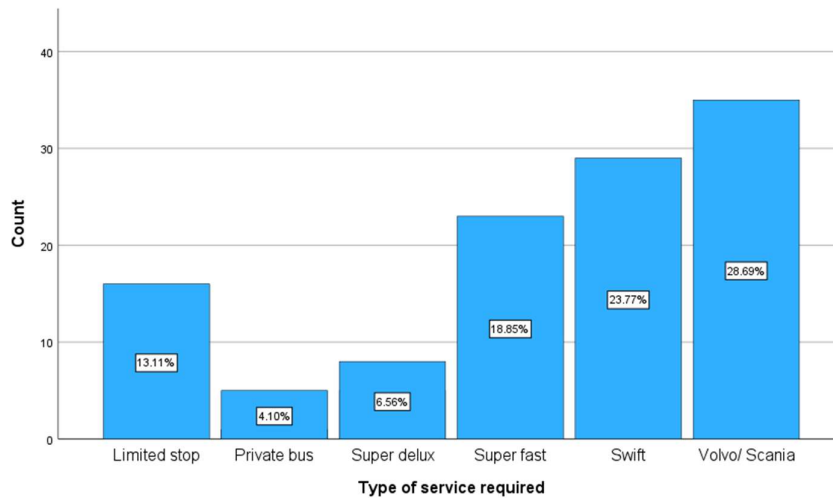
The effect of price hike in fuel affect the KSRTC service at a rate of 74.78%.

11. TYPE OF SERVICES REQUIRED

EMPLOYEES



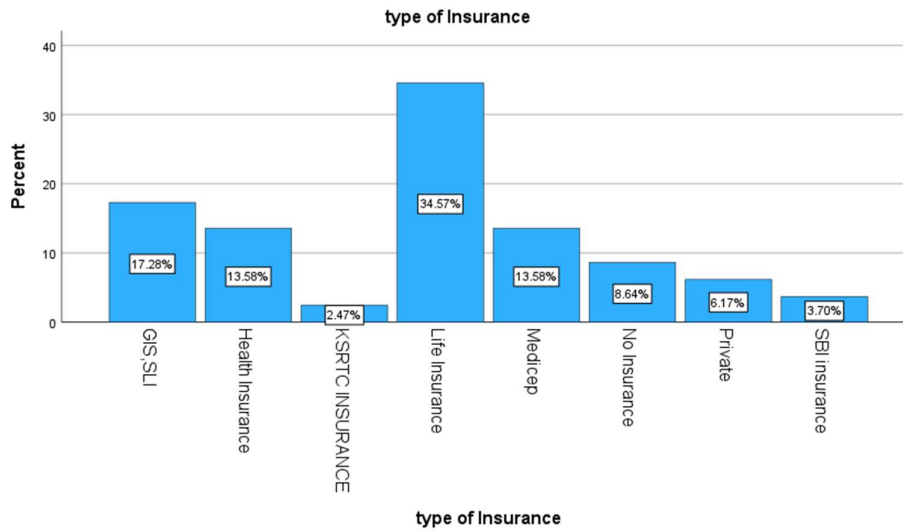
PASSENGERS



Conclusion

According to employees, Super-fast & ordinary are the most required buses.
According to passengers Volvo/Scania are the most required buses.

12. TYPE OF INSURANCE

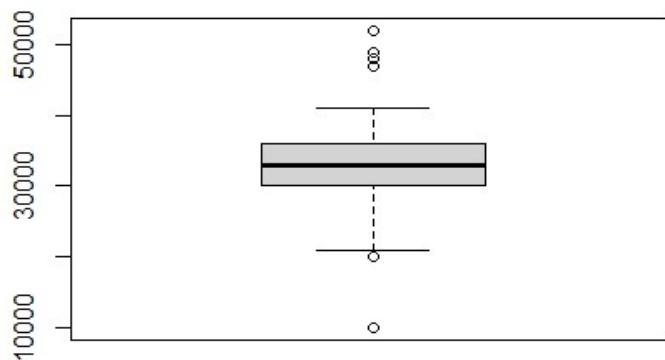


Conclusion

Majority of the KSRTC employees (34.57%) holds life insurance.

Minority of the KSRTC employees (2.47 %) hold KSRTC insurance .

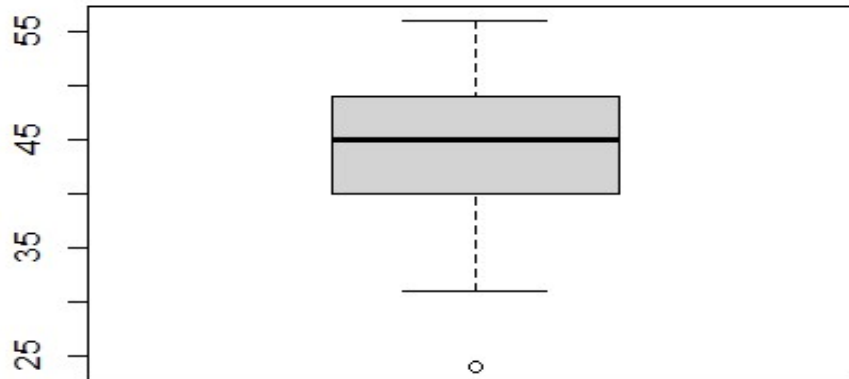
13. NORMALITY OF SALARY



Conclusion

Negatively skewed.

14. NORMALITY OF AGE

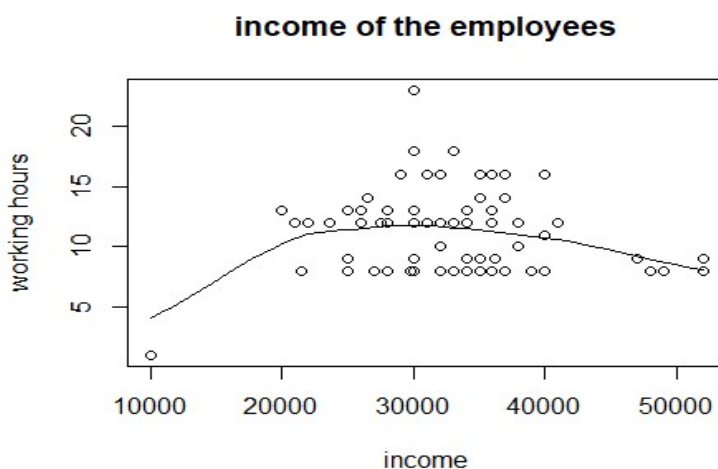


Conclusion

Negatively skewed

CORRELATION ANALYSIS

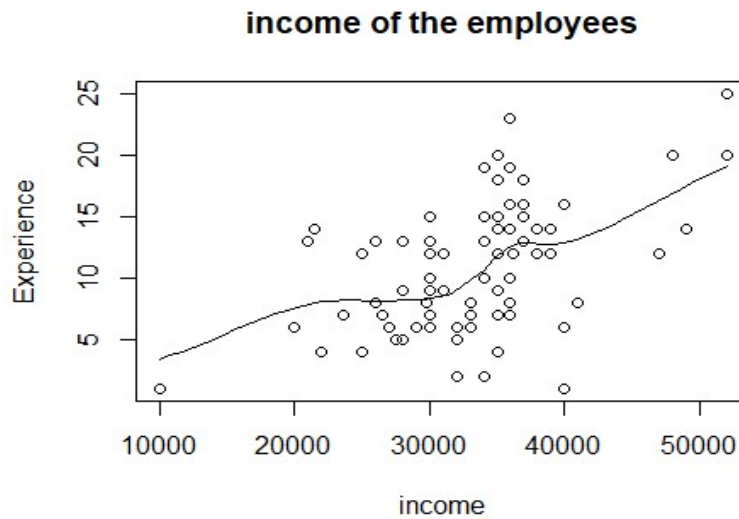
1) Income vs working hour



Conclusion

Working hours does not validate income of the employees.

2) Income vs experience of the employees



Conclusion

Average monthly salary increases as experience increases.

ASSOCIATION BETWEEN DIFFERENT ATTRIBUTE

1. Job satisfaction vs Health issues during duty hours.

H_0 : There is no association between job satisfaction and Health issues during duty hours.

Pearson's Chi-squared test with Yates' continuity correction
X-squared = 1.2547, df = 1, p-value = 0.2626

Conclusion

Since P value is greater than 0.05, we fail to reject H_0 .

Therefore, there is no association between job satisfaction and Health issues during duty hours.

2. Job satisfaction vs sleep cycle

H_0 : There is no association between job satisfaction and sleep cycle.

Pearson's Chi-squared test with Yates' continuity correction
X-squared = 6.4288, df = 1, p-value = 0.01123

Conclusion

Since P value is less than 0.05, we reject H_0 .

Therefore, there is an association between job satisfaction and sleep cycle.

3. Sleep cycle vs health issues

H_0 : There is no association between sleep cycle and health issues.

Pearson's Chi-squared test with Yates' continuity correction

X-squared = 3.7103, df = 1, p-value = 0.05408

Conclusion

Since P value is greater than 0.05, we fail to reject H_0 .

Therefore, there is no association between sleep cycle and health issues during duty hours.

4. Job in KSRTC vs educational qualification

H_0 : There is no association between Job in KSRTC and educational qualification

Pearson's Chi-squared test

X-squared = 30.944, df = 8, p-value = 0.0001438

Conclusion

Since P value is less than 0.05, we reject H_0 .

Therefore, there is an association between Job in KSRTC and educational qualification.

5. Fuel price hike vs changes to KSRTC revenue before and after covid 19

H_0 : There is no association between fuel price hike and changes to KSRTC revenue before and after covid 19

Pearson's Chi-squared test with Yates' continuity correction

X-squared = 5.0625, df = 1, p-value = 0.02445

Conclusion

Since P value is less than 0.05, we reject H_0 .

Therefore, there is an association between fuel price hike and changes to KSRTC revenue before and after covid 19.

6. Service satisfaction vs Safe travelling

H_0 : There is no association between Service satisfaction and safe travelling.

Service satisfaction * 1.Safe Travelling Crosstabulation

Count

		1.Safe Travelling		Total
		No	Yes	
9. Service satisfaction	No	24	23	47
	Yes	2	73	75
Total		26	96	122

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	40.357 ^a	1	.000
Continuity Correction ^b	37.522	1	.000
Likelihood Ratio	42.827	1	.000

Conclusion

Since P value is less than 0.05, we reject H_0 .

Therefore, there is an association between Service satisfaction and safe travelling.

7. Binary logistic regression (Service satisfaction)

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	122	100.0
	Missing Cases	0	.0
	Total	122	100.0
Unselected Cases		0	.0
Total		122	100.0

Dependent Variable Encoding

Original Value	Internal Value
0	0

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	45.195	3	<.001
	Block	45.195	3	<.001
	Model	45.195	3	<.001

INFERENCE:

H_0 : Adding the variables (service satisfaction, customer service rate, safe travelling, ticket rate opinion) to the model has not significantly increased to predict the decision. Here chi-square value = 45.195, df = 3, $p < 0.01$.

Since the model has a significant predictor performance.

Therefore, H_0 is rejected.

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	117.449 ^a	.310	.420

INFERENCE:

42% are significant for this model.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	10.640	5	.059

Contingency Table for Hosmer and Lemeshow Test

		9. Service satisfction = 0		9. Service satisfction = 1		Total
		Observed	Expected	Observed	Expected	
Step 1	1	12	11.359	0	.641	12
	2	11	11.767	2	1.233	13
	3	5	5.068	7	6.932	12
	4	2	3.492	10	8.508	12
	5	9	7.616	22	23.384	31
	6	5	1.880	4	7.120	9
	7	3	5.818	30	27.182	33

INFERENCE

H_0 : The model adequately fit the data.

The model has also good fit, hence the test could not reject the hypothesis of model appropriateness. As chi-square value is 10.640 and $p=0.59$, hence we fail to reject accordingly.

Classification Table^a

		Predicted		Percentage Correct
		9. Service satisfction		
Observed		0	1	
Step 1	9. Service satisfction 0	24	23	51.1
	1	2	73	97.3
Overall Percentage				79.5

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	1.Safe Travelling	3.479	.780	19.895	1	<.001	32.418
	7.Clear and helpful communication with passengers	-.210	.216	.946	1	.331	.811
	8. Ticket rate opinion	.328	.286	1.316	1	.251	1.389
	Constant	-2.712	1.186	5.233	1	.022	.066

INFERENCE

From the table,

It shows that regression function is

$$-2.712 + 3,479 X_1 - 0.210 X_2 + 0.328 X_3$$

Safe travelling ($p < 0.001$) is added significantly to the model prediction but ticket rate opinion ($p = 0.251$) and Clear and helpful communication with passengers ($p = 0.331$) did not add significantly.

By comparing the odd ratio

'exp' refers to the exponential value of B (odds ratio) is less than 1 for the variable safe travelling. i.e., increasing value of the variable corresponds to increasing odds of events occurrence. It indicates that the odds of having service satisfaction is 32.4 times greater for safe travelling .

- Exp > 1 for the ticket rate opinion , which means that increasing value of the variable corresponds to increasing the odds of event occurrence. i.e., every unit increase in ticket rate opinion is associated with increase in odds of having service satisfaction, which means the odds of having service satisfaction is 1.38 times greater for ticket rate opinion.
- Exp < 1 for the clear and helpful communication with passengers , which means that increasing value of the variable corresponds to decrease the odds of event occurrence. i.e., every unit increase in clear and helpful communication with passengers , is associated with decrease in odds of having service satisfaction, which means the odds of having service satisfaction is 0.811 times lesser for clear and helpful communication with passengers

8. Average monthly salary vs Experience

Simple linear regression: income Vs experience of KSRTC employees

We have to check the linear relationship between income and experience of KSRTC employees in our survey of 81 KSRTC employees with income ranging from 10000 to 52000, where experience is measure on a scale of 1 to 25.

Residuals:

Min	1Q	Median	3Q	Max
-16526.6	-3033.0	-587.7	3058.6	13674.4

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	25849.8	1488.3	17.369	< 2e-16 ***
KSRTC_Employees\$experience	676.8	127.0	5.331	9.03e-07 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 5882 on 79 degrees of freedom

Multiple R-squared: 0.2645, Adjusted R-squared: 0.2552

F-statistic: 28.42 on 1 and 79 DF, p-value: 9.027e-07

INFERENCE

This output table first presents the model residuals.

The coefficient section shows:-

1) The estimates for the model parameters-the value of the y-intercept (in this case 25849.8) and estimated effect of income on experience (676.8)

The fitted model is

$$y=25849.8+676.8x+\epsilon$$

2)The standard error of estimated values

1488.3 127.0

3) The test statistic(tvalue)

17.469. 5.331

4) The p-value (Pr(>|t|)),the probability of finding the given t statistic if the null hypothesis of no relationship were true.

The final three lines are model diagnostics

-the most important thing to note is the p-value (9.027e-07) which will indicate whether the model fits the data well.

Conclusion

From these results ,we can say that there is a significant positive relationship between income and experience of KSRTC employees (p-value<0.001).

9. Monthly salary of male's vs Monthly salary of females

H_0 : There is no significance difference between salary of male employees and salary of female employees

t.test(x,y,alpha=0.01)

Welch Two Sample t-test

data: x and y

t = 1.5097, df = 29.381, p-value = 0.1418

alternative hypothesis: true difference in means is not equal to 0

95 percent confidence interval:

-1047.694 6967.049

sample estimates:

mean of x mean of y

33959.68 31000.00

Conclusion:

Since P value is greater than 0.05, we fail to reject H_0 .

Therefore, there is no significance difference between salary of male employees and salary of female employees.

10. Drivers' salary vs Conductor salary

H_0 : There is no significant difference between the means of salaries of driver and conductor

t.test(x,y)

Welch Two Sample t-test

data: x and y

t = 0.62984, df = 64.142, p-value = 0.531

alternative hypothesis: true difference in means is not equal to 0

95 percent confidence interval:

-1647.171 3164.143

sample estimates:

mean of x mean of y

32637.10 31878.61

Conclusion

Since p value is greater than 0.05 , we fail to reject H_0 .

Therefore, there is no significant difference between the means of salaries of driver and conductor

CONCLUSIONS AND FINDINGS

- 76.54% are male and 23.46% are female .
- Out of 81 samples, the employees are more in the age between 45-50.
- The salary per month of the employees are between 30000 and 35000
- According to the passengers and employees, the major reason behind the financial crisis of KSRTC is lack of planning from the authority side.
- According to the passengers providing more comfort, facility and satisfaction for passengers is the solution to overcome financial crisis of KSRTC.
- According to the employees controlling the negligence of authorities is the best solution to overcome the financial crisis of KSRTC.
- According to the passengers, decreasing the ticket price is the best method to improve KSRTC service.
- According to the KSRTC employees and passengers, ticket rates is moderate.
- From the data ,we get the mean age of employees =44.

Their average monthly income is 32977.

Their average length of service 10-11 years.

- 74.04% of the employees believe that swift service effect KSRTC.
- The effect of price hike in fuel affect KSRTC service at a rate of 74.78%.
- According to employees, super-fast and ordinary are the most required buses.

According to passengers, volvo or scania are the most required buses.

- Majority of the KSRTC employees holds life insurance.
- Working hours does not validate income of the employees.
- Average monthly salary increases as experience increases.

- There is a significant relation between
 - Job in ksrtc and educational qualification.
 - Job satisfaction and sleep cycle.
 - Fuel price hike and changes to KSRTC revenue before and after Covid-19.
 - Service satisfaction and safe travelling.
 - Income and experience of KSRTC employees.

- There is no significant difference between
 - Job satisfaction and health issues during duty hours.
 - Sleep cycle and health issues during duty hours.
 - Salary of male employees and salary of female employees.
 - The means of salaries of driver and conductor.

RECOMMENDATION

Based on the result of this study, following recommendations are made to reduce the service related issues of KSRTC.

- Regular maintenance and upkeep of the buses to ensure they are in good condition and do not break down frequently.
- Use technology to improve service delivery, such as real-time tracking of buses, online ticket booking, and mobile apps for customer support.
- Increase the frequency of buses on popular routes to cater to the demand.
- KSRTC should focus on ensuring the safety of its passengers by adhering to traffic rules and regulations, maintaining buses in good condition, and providing adequate training to its drivers.
- KSRTC should provide competitive compensation packages to attract and retain talented employees. This can include salary increments, bonuses, and benefits such as medical insurance, retirement plans, and paid leave.
- KSRTC should provide health and wellness programs to employees, such as medical checkups, gym memberships, and stress management programs. This can help employees to stay healthy and motivated.

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APPENDIX

SCHEDULE

CHALLENGES AND SOLUTION: AN ANALYSIS OF ISSUES REALTED TO KSRTC

For Employees

1 .Gender

- Male
- female

2. Age

3. Experience

4.Job in KSRTC

- Driver
- Conductor
- Office staff
- Other

5. Average monthly salary

6. Type of bus currently assigned in

- Ordinary bus
- Limited stop
- TT
- Fast passenger
- Super-fast
- Other:

7. Whether in the same bus

- Yes
- No

8. Working hours

9. Payment for over duty

- Yes
- No

10. Density of passengers-day wise

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

11. Fuel prices hike affect KSRTC

- Yes
- No

12. Changes to KSRTC revenue before and after COVID-19

- Yes
- No

13. Reason for financial crisis

- Authorities
- Lack of maintenance of bus
- Covid-19
- Lack of bus
- Unwanted issues of passes
- Past debts of KSRTC
- Others

14. Job satisfaction

- Yes
- No

15. solution for overcoming the financial crisis

- To stop issuing unwanted passes
- No crisis in service sector
- To control the negligence of Authorities
- Providing more comfort, facility and satisfaction for passengers
- To clear the past debts
- Passings bills that provide fund to KSRTC service
- Others

16. Type of service assigned

- Regular
- Stay service
- Night
- Garage

17. sleep cycle

- Below 4 hours
- 4-6 hours
- 6-8 hours

- Above 8 hours
- 18. Driving schedule affect sleep cycle
 - Yes
 - No
- 19. Health issues during duty hours
 - Yes
 - No
- 20. Type of Insurance
 - Medicep
 - GIS,SLI
 - Life Insurance
 - No Insurance
 - SBI insurance
 - Private
 - KSRTC INSURANCE
- 21. Ticket rates (Is it sufficient or not)
 - High
 - Low
 - Moderate
- 22. Type of services required
 - Super-fast
 - Electric
 - Ordinary
 - TT
 - Fast passenger
 - Luxury
 - All
- 23. Suggestions to improve KSRTC
- 24. Educational Qualification
- 25. swift service affecting KSRTC
 - Yes
 - No

For Passengers

1. Safe Travelling
 - Yes
 - No
2. Present problems faced by KSRTC
 - Bus schedules
 - Traffic
 - Safety
 - Cost
3. More required services
 - Volvo/Scania
 - Fast passenger
 - Swift
 - TT
 - Super-fast
 - Ordinary
 - Minnal
 - All
4. Bus preference for long journey
 - Swift
 - Volvo/ Scania
 - Super deluxe
 - Private bus
 - Super-fast
 - Limited stop
5. Solution to overcome financial crisis of KSRTC
 - Providing more comfort, facility and satisfaction for passengers
 - To control the negligence of Authorities
 - Passings bills that provide fund to KSRTC service
6. Proper services to remote area
 - Agree
 - Disagree
 - Neutral
 - Strongly agree
 - Strongly disagree
7. Clear and helpful communication with passengers.
 - Agree
 - Disagree
 - Neutral
 - Strongly agree
 - Strongly disagree
8. Ticket rate opinion
 - High
 - Low
 - Moderate
9. Service satisfaction

- Yes
- No

10. Reason for financial crisis

- Lack of planning from the authority side
- Behavior of Conductors and Drivers
- Lack of bus
- Lack of essential services
- Lack of maintenance
- Lack of employees

11. Customer care service rating

- 1
- 2
- 3
- 4
- 5

12. Mode of booking preference

- Online
- Offline
- Not applicable

13. Online booking issues

- Online payment fails
- Network problems
- Extra tax

14. Rate Easiness of online booking

- 1
- 2
- 3
- 4
- 5

15. Suggestions to improve KSRTC

- Incentive for employees
- Decrease in ticket price
- Making online booking easy
- Change in behavior of conductors and drivers
- Tracking facility