

Observation ON august Month dataset

Overall bs4 vs BS6 model analysis

My Observation:

let's start with the analysis on BS6 vs BS4 model , by determining how much percent of car which comes to service center which is bs4 or bs6 , help us to use diagnostic tool which help us in reducing the time in diagnosing the car and determining underlying problems , In the overall dataset we concluded that total in September dataset have 1127 customer comes to service center , July month have 11162 customers, and in the august month have 1181 , so totally 3470 customer in past three months , In the dataset , BS4 model are around 1187 count which is around 34.2% and BS6 models are around 2283 count which is around 65.7% , from this i can observe that we can able to reduce significant amount of time in diagnostic the car and finding any problems in the sensor of cars which the technician or person who owned cannot see , it might avoid unnecessary consequence in the future

Rewritten version from ChatGPT:

Abstract:

In this analysis, we explore the distribution of BS4 and BS6 model vehicles visiting a service center over a three-month period. The primary aim is to assess the potential advantages of utilizing diagnostic tools for efficient diagnosis and detection of hidden car issues. We found that out of a total of 3,470 customer visits in September, July, and August, 65.7% were BS6 models, while 34.2% were BS4 models. This distribution has significant implications for reducing diagnostic time and preventing future issues.

Detail:

Data Overview:

Total customer visits to the service center over three months: 3,470.

Monthly distribution of visits: September (1,127), July (1,162), and August (1,181).

Proportion of BS4 and BS6 Models:

BS4 models accounted for approximately 34.2% of total visits (1,187 visits).

BS6 models constituted about 65.7% of total visits (2,283 visits).

Implications:

Reduced Diagnostic Time: The high prevalence of BS6 models, which often feature advanced diagnostic systems, suggests the potential for reduced diagnostic time. These systems can quickly identify hidden problems, including sensor issues, which may go unnoticed by technicians or car owners.

Preventing Future Consequences: Rapid detection of issues through advanced diagnostic tools can help prevent future consequences. Early intervention can mitigate minor issues from developing into major, costly repairs.

Key Insights:

Proportion of BS4 and BS6 Models:

BS4 models make up approximately 34.2% of the total visits, while BS6 models constitute around 65.7%. This distribution reflects a significant presence of newer BS6 models.

Potential for Diagnostic Efficiency:

The prevalence of BS6 models suggests the potential for significant improvements in diagnostic efficiency. These models typically incorporate advanced diagnostic systems, enabling faster problem detection.

Preventing Future Consequences:

Swift detection of issues, including those related to sensors, through advanced diagnostic tools can help avoid unforeseen consequences in the future, potentially preventing minor issues from evolving into more severe and costly problems.

Underlying Information:

Total Customer Visits:

Over the past three months, there were a total of 3,470 customer visits to the service center. The visits were distributed across the months as follows: September (1,127), July (1,162), and August (1,181).

BS4 vs. BS6 Model Counts:

The dataset contained 1,187 visits by BS4 models, which represents approximately 34.2% of the total visits. In contrast, there were 2,283 visits by BS6 models, making up about 65.7% of the total visits.

Implication of Diagnostic Tools:

The higher count of BS6 models in service visits implies a potential reduction in diagnostic time due to the advanced diagnostic capabilities of these vehicles. These tools can identify issues, including sensor-related problems, which might go unnoticed by technicians or car owners.

Importance of Timely Diagnosis:

Swift identification of problems is crucial, as it can prevent future issues and related consequences. Early intervention through advanced diagnostic tools can help in addressing minor issues before they escalate into more significant and costly repairs.

AUGUST month dataset analysis:

let's move to the analysis is done on the august month dataset, in this month were 1181 visited the service center, ACC - 83

BANDP -191

CCP- 6

FR1- 77

FR2 - 78

FR3 -59

FR4 -1

PMS - 489

RR -164

SC - 2

TV1 -3

WASH - 13

WMOS -15 so the PMS is most accessed service of all , second to that BANDP service and RR service , tec...
and totally 16 technician where worked in this month

and totally 16 technician where worked in this month							Row Labels	ACC	BANDP	CCP	FR1	FR2
FR3	FR4	PMS	RR	SC	TV1	WASH	WMOS	(blank)	Grand Total			
DINESHBAABU K				1	1	2		3				
		7										
FAZALUTHEEN R 6		188										
1			195									
JANARDHANAN V		11			8	6	2		54	18		
1			100									
JAVITHBASHA P 1				3	2	3		17	5			1
		32										
JEROLDRAJ S		3		8	4	9		57	15			
2	4		102									
PALANI R		13	2		2			9	48			
3		77										
RAHUL V		7		8	13	6		54	16			
3			107									
SANTHANAM L 10				12	11	11		98	11	1		1
1			156									
SANTHOSHKUMAR B		5			14	12	8		59	8		
2			108									
SELVA MANI P 2						1		8	2			
		13										
SELVAKUMAR S					1							
		1										
SUBRAMANI P 4				2	5	1	1	41	12			
		66										
THIRUMURUGAN A		7			17	16	10		51	14		
1	1		117									

VADIVEL S	8	1	6	2	4	5		13	7	
1	7		54							
VENKATESHWARAN S	4				2	1		2	1	1
1			12							
VISVA S 2					1		23	7		1
	34									

let's move to the service. Start with ACC service: in the ACC service where 75% of 83 visits were done with less 1 hour. but from my observation i saw 8 customer service where taken 4days to 175 hours .

BANDP service: in the bandp service where contain 191 visits, from my observation this is one of the service which took long time in service , 32 % of customer took 500 to 200 hours to get their car get serviced , 27% of customer took 199 to 101 hours to get their car serviced , around 32 % of them done in 100 to 18 hours of time , 7% of them done in less than 12 hours .

FR1 service: In the service , total of 77 visits and in the service i approximately able to conclude that may be one model could take average of 17.30 hrs. to get the service done , From my observation , i do not see any much of time consume in this service .

FR2 service : In the service , total of 76 visits and in the service i approximately able to conclude that may be one model could take average of 4.52 hrs. to get the service done , i do not see any much of time consume in this service .

FR3 Service: In the service , total of 64 visits and in the service i approximately able to conclude that may be one model could take average of 8 hrs. to get the service done , i do not see any much of time consume in this service . i eliminated 1 outlier.

WMOS service : In the service , total of 15 visits and in the service i approximately able to conclude that may be one model could take average of less1 hrs. to get the service done , i do not see any much of time consume in this service .

Wash Service type: In the service , total of 13 visits and in the service i approximately able to conclude that may be one model could take average of less than 1 hrs. to get the service done , i do not see any much of time consume in this service .

TV1 Service: In the service, total of 3 visits and in the service i approximately able to conclude that may be one model could take average less 1 hrs. to get the service done , i do not see any much of time consume in this service . but few car waited for 5 hours

SC service type:

In the service, total of 2 visits and in the service i approximately able to conclude that may be one model could take average of less 1 hrs. to get the service done, i do not see any much of time consume in this service .

PMS service type: In the service, total of 489 visits and in the service, i classify it to two types of service that less than 24 hours and more than 24 hours. Service which done with a day are 331 out of 489 , with is around 66% and in that 61 % of them done less 12 hours , in the service which taken more 24 hours to get service are 158 visits in that more 2 days are 18% , 3 days are 5% and more 4 days are 8 %

RR service type : In the service , total of 164 visits and in the service , i classify it to two types of service that less than 24 hours , done in average of 6 hours and more than 24 hours . 44 % are service takes more than a day and 66 % are done within a day.

Rewritten version from ChatGPT:

Abstract:

The analysis focuses on service center data from August, with 1,181 customer visits across various service types. The goal is to understand service time dynamics, specifically in terms of service durations and outliers. The analysis covers service types such as ACC, BANDP, FR1, FR2, FR3, WMOS, Wash, TV1, PMS, and RR.

Detail:

ACC Service:

75% of the 83 ACC service visits were completed in less than 1 hour.

Notably, 8 customers experienced service times ranging from 4 days to 175 hours, revealing outliers in service duration.

BANDP Service:

This service had 191 visits, and the service times showed significant variability.

Approximately 32% of customers experienced service times of 500 to 200 hours.

27% of customers took 199 to 101 hours.

Around 32% of customers had their service done in 100 to 18 hours.

7% of customers experienced service times of less than 12 hours.

FR1 Service:

With 77 visits, the service appeared to have an average duration of approximately 17.30 hours per model.

However, overall, the service did not seem to have extended service times.

FR2 Service:

With 78 visits, one model had an average service duration of about 4.52 hours.

Similar to FR1, the service didn't exhibit significant time consumption.

FR3 Service:

There were 59 visits, and one model had an average service duration of around 8 hours.

No significant time consumption was observed, except for the elimination of one outlier.

WMOS Service:

With 15 visits, one model had an average service duration of less than 1 hour.

The service didn't show significant time consumption.

Wash Service:

There were 13 visits, and one model had an average service duration of less than 1 hour.

The service displayed minimal time consumption.

TV1 Service:

Only 3 visits were recorded for TV1 service, with an average service duration of less than 1 hour.

However, a few customers experienced longer service times, up to 5 hours.

PMS Service:

This was the most accessed service with 489 visits.

It was classified into two categories: less than 24 hours and more than 24 hours.

66% of visits were completed within a day, with 61% taking less than 12 hours.

The remaining 34% of visits took more than 24 hours, including 18% in 2 days, 5% in 3 days, and 8% in more than 4 days.

RR Service:

With 164 visits to the RR service, it was also classified into two categories: less than 24 hours and more than 24 hours.

44% of service visits took more than a day.

66% of visits were completed within a day, with an average service duration of 6 hours.

Key Insights:

Service Time Variability: Service time varied widely across different service types, with some showing minimal time consumption and others having extended durations.

Outliers: Outliers were observed in ACC service with service times ranging from 4 days to 175 hours, indicating the need for outlier detection and management.

PMS Service Efficiency: The PMS service was the most accessed, with a significant portion completed within a day. Optimizing service times could further improve customer satisfaction.

Resource Allocation: Understanding the varying service times can help allocate resources more efficiently, especially for service types like BANDP and RR that showed extended durations.

Underlying Information:

The dataset for August contained 1,181 customer visits to the service center.

The service types analyzed include ACC, BANDP, FR1, FR2, FR3, WMOS, Wash, TV1, PMS, and RR.

Detailed breakdowns of service time distributions and averages were provided for each service type, along with the identification of outliers in the ACC service.