



## A STUDY ON FLEET MANAGEMENT TOWARDS DRIVER SAFETY IN TAXI CAB SERVICES

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### Abstract

Fleet management is the management of a company's vehicle fleet. Fleet management includes commercial motor vehicles such as cars, vans and trucks. Fleet management can include a range of functions, such as vehicle financing, vehicle maintenance, vehicle telematics, driver management, fuel management and health & safety management. . This can include the management of a fleet of cars, taxi cabs, ships, airplanes, trucks or vans. The term is much more complex than it originally sounds.

Research shows that on average 20 people are killed and a further 250 seriously injured every week, while driving a vehicle for work related purposes. 95% of all road accidents or traffic offending incidences are caused by human error or an inappropriate personal decision. This makes driving one of the most dangerous activities in the India. However, health and safety associated with work-related driving is often unsatisfactory or neglected by employers and employees alike.

The objective of the research paper is to study the driver's safety, driver training and education program and company's utilization of the vehicles. This research paper also find out the distinction between fleet and corporate road safety programs becomes somewhat blurred when there is considerable private use of fleet vehicles. It is the responsibility of the management to take care the drivers which will reflect in their effective maintenance.

**Key Words: Vehicles Management, Drivers Safety, Driver Behavior, Training Program.**

### Introduction

Fleet management is a term used to describe the management of any/all aspects relating to a company's vehicle. Fleet vehicles can be defined as vehicles over which a business has some degree of influence in their selection and operation. Fleet management can include the management of a fleet of cars, taxi cabs, ships, airplanes, trucks or vans. The term is much more complex than it originally sounds.

Fleet management involves not only tracking vehicles, but also driver management, vehicle diagnostics, vehicle maintenance, fuel and speed management, and health and safety tracking. It performs one basic function and that is to minimize the amount of risk that is associated with the management of a fleet of vehicles. It can improve efficiency, productivity, and the cost of operating.

Vehicle trackers are one of the best ways to manage a fleet of vehicles. The whole concept of fleet management will depend on the use of vehicle trackers. The most common type of vehicle tracker chosen today is the Global Positioning System (GPS) unit. Many of today's GPS units now have the capability of connecting right into the vehicles onboard computer to return relevant data to the home office.

While fleet management is usually only thought of in terms of the management of a fleet of cars or trucks, it can also be used for much larger vessels. Many maritime companies use fleet management to track their ships when they are at sea. In these circumstances, there are large fleet management companies that will handle the operations for many large businesses. These companies are responsible for many functions including staffing the ship, maintenance, and other normal daily operations. This unburdens the shipping company's owners of these responsibilities and allows them to focus on other things like cargo booking and other services.

Fleet safety is important, not just for fleet operators, but as a strategic approach to improving the safety of the entire vehicle fleet. Corporate purchasers of vehicles and transport services can specify high safety standards and thus create an economic imperative for providers of vehicles and transport services to meet these standards.

While regulatory mechanisms to improve the safety of vehicles are notoriously slow and constrained by international compatibility issues, using the fleet market to demand particular features will result in a speedier introduction of those features. For volume production reasons, these features are likely to be also offered to private buyers. Seat belt interlocks, alcohol interlocks and intelligent speed limiters are in-vehicle devices which have potential to effectively address the driver behavior issues of nonuse of restraints, drink driving and speeding. One way of promoting their widespread introduction is to



form an alliance of fleet buyers of cars that will gradually start to demand vehicles with these devices. The roles of insurance companies and building partnerships with the automotive industry should not be underestimated.

It is widely accepted that one of the most effective tools that businesses can use are fleet management systems. These systems are great money and time savers, and help companies to be much more efficient. Technology has made fleet management a must have and no company with a fleet of vehicles should be without it.

### **Literature of Review**

Lynn and Lockwood, (1998) speculated that company car drivers might be expected to have more accidents per year than drivers of private cars because they usually drive very high mileages and are sometimes required to drive under time pressures imposed by tight schedules. In addition, because the cars they drive are not their own, they may be less concerned about them.

Downs, Keigan, Maycock and Grayson (1999) conducted interviews and focus groups to determine why British company car drivers have a higher accident risk than the general driving population. Fleet trainers, fleet managers, fleet drivers and the insurance industry were included. This research indicated that the driving culture within an organisation may stress business needs, such as delivery quotas, before safety. It was also found that a strong 'safety culture' within a company will positively impact on safety concerns being addressed more rigorously in that company. In addition, companies with strong safety cultures were found to be more satisfied with the outcomes of safety measures that had been implemented.

Harrison, Fitzgerald, Pronk, and Fildes (1998) found that higher driving speeds were associated with business or work car use, driving a large, relatively new car owned by someone other than the driver, a relatively high level of driving exposure, being on a long trip and driving relatively little in built-up areas.

*Daniel Della-Giustina* reviews about the role of driver in the safety fleet as "Motor carries operators often work alone, at night, and in surroundings they are not familiar with and they are responsible for valuable cargoes. Recent events have focused a great deal of attention on the vulnerability of the nation's infrastructure to major events, including terrorism, accidents in main".

Some studies of road safety measures have involved taxis (as a high-mileage vehicle) but these studies have not been directly interested in taxi safety. For example, Sagberg, Fosser and Saetermo (1997) examined the risk compensation behaviour of taxi drivers who were driving vehicles with airbags and antilock brakes.

### **Scope of the Study**

- To analyze the awareness among the drivers about the fleet management and driving safety.
- To find out the driver's drinking habits and their confidence level of driving.
- To find out the method of conducting pre vehicles trip inspection for Taxi cab vehicles.
- To suggest the company to follow practices to avoid/reduce the accidents.

### **Research Problem**

- The research conducted is mainly for the safety aspects of drivers in fleet management Towards Taxi Cab services in Chennai city. The problems faced by the drivers in road and as well as in their day today life were examined. Their expectations from the company were also analysed.

### **Objective of the Study**

- To study the safety aspects of driver's in fleet management towards Taxi cab services.
- To find out the training and education program provided by the Company to the drivers in Taxi cab Services.
- To find out the driver's view about the strategies followed by the company.
- To find out the driver's expectations from the company, their rate of changing the company, problems faced by them on road.

### **Research Methodology**

#### **Research Design**

The research design used for the study is descriptive. The major purpose of using such a design is description of the state of affairs as it exists at present. The main characteristics of this method are that the researcher has no control over the variables; he/she can only report what happened or what is happening. This type of research is used to measure items such as frequency of shopping, preferences of people or similar data.



**Sampling Design**  
**Sampling Size**

The sampling size of the study Consists of 50 Drivers working in Taxi CAB services in Chennai city.

**Sampling Technique**

The sampling technique used was convenience sampling where sample units are selected only if they can be accessed easily or conveniently. It is a type of non probability sampling where there is no basis for estimating the probability that each item in the population has of being included in the sample.

**Data Collection Method**

Data was collected only through primary source. Primary data was collected through questionnaires, which were administered through face-to-face interview.

**Data Analysis**

**Chi Square Analysis**

**Null Hypothesis:** There is no difference between the problems faced by the driver in the road with respect to their working schedule.

**Alternate Hypothesis:** There is no difference between the problems faced by the driver in the road with respect to their working schedule.

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	96.932 <sup>a</sup>	9	.000
Likelihood Ratio	101.731	9	.000
Linear-by-Linear Association	44.028	1	.000
N of Valid Cases	50		

**Inference:** Here p value is less than (0.05). So we accept null hypothesis .So there is no difference between the problems faced by the driver in the road with respect to their working schedule.

**Pearson Correlation Analysis**

**Descriptive Statistics**

	Mean	Std. Deviation	N
How many kilometres are driven by the drivers per day?	2.32	1.236	50
How can you rate the following parameters which offered by the company? ( Maintenance of fleet)	2.76	1.479	50

**Correlations**

		How many kilometres are driven by the drivers per day?	How can you rate the following parameters which offered by the company? ( Maintenance of fleet)
How many kilometres are driven by the drivers per day?	Pearson	1	.947**
	Sig. (2-tailed)		.000
	N	50	50
How can you rate the following parameters which offered by the company? ( Maintenance of fleet)	Pearson	.947**	1
	Sig. (2-tailed)	.000	
	N	50	50

**Inference:** The kilometres of taxi vehicles driven by the drivers in the road and maintenance of fleet by the company are found to be significantly positive.



### **Findings**

- Using chi square Analysis, p value is less than (0.05). So we accept null hypothesis. So there is no difference between the problems faced by the driver in the road with respect to their working schedule.
- Using Pearson Correlation Analysis, it is found that the kilometers of taxi vehicles driven by the drivers in the road and maintenance of fleet by the company are found to be significantly positive.

### **Suggestions**

- Since the age group (28-30) of drivers were found as 24, and (46-50) of drivers were found as 26, they should be advised to drive the vehicle with most care.
- The drivers who need the training suggested the areas as vehicle efficiency and time management. The company should take steps to provide training in those areas.
- The management should order the drivers not to drive the vehicle when drunk, with carelessness and not to overrule the traffic rules.
- The management can provide rest for the employees at regular time intervals which will result in the effective performance of drivers.

### **Conclusion**

I would like to conclude on this study by saying that effective fleet management of any company lies in the hands of their drivers. It is because they are the ones who are capable of maintaining the vehicle in condition, proper usage of tyres, effective utilization of fuel and delivering the products in time. With most of effective drivers a fleet owner can attain the maximum profit and reduced maintenance cost. It is the responsibility of the management to take care the drivers which will reflect in their effective maintenance. There are certain companies which follows the practice of adopting the driver's children for their study. Thus the safety aspects of drivers play a major role in the effective fleet management.

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