

CYBER TECH ASSISTED POSITIONER IN LOGISTICS & FREIGHT TRANSPORTATION

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Abstract— Since Connecting the world logistically is one of the most crucial processes which enables the country and the people to prosper. The Transits which take hold of the shipments is to be very keenly monitored, implementing a custom Made Tracker Kit in the vehicle of the Transport will do the work which in turn boosts the connectivity. In this research, the Tracker will be connected with the Satellite which Provides the present coordinates of the shipment. As the amount of time longer than the stipulated time the transit delays it creates many discrepancies between the Customer and the Manufacturer which involves the Transit company too. In order to avoid this we will be keeping all the three entities in the Loop providing them the details of the Shipment along with the Status of their Fleet Management which is crucial for the Transit company to cope up with their Vehicles which in turn wouldn't affect the future transits which enables the ultimate Goal which is keeping the World Logistically Connected a accomplishment and not a dream which is to be achieved one day Additionally, the purpose of this research is to use an enhanced Tracker System which constantly feeds the information to the required personnel.

Keywords— Logistically Connected, Custom Made Tracker, Fleet Management, Enhanced Tracker System.

I. INTRODUCTION

In the current Market Basis the Competitor ship for the transits is huge in Scale as there is a lot of Supplements being manufactured as well as being sent across to the whole nation, in some cases even overseas. As the Market Percentile plays a major role in the logistics empire as to top out with the most contribution benefits the entirety of the transport. Using Various methods which include alterations in the electric control system which enables for quicker and more transits to be done by a single commuter is made possible which increases the risk of the shipment destruction which affects the main goal of our idea which is to keep the world logistically connected a hassle. Each every one of us who expects a shipment means we need it delivered as a whole which makes both the consumer and the manufacturer satisfactory

II. PROBLEM FORMULATION

Damaged Shipments, broken products via arrival issues raised against the shipment operator and the customer for the hassles caused by these which in today's everyone for themselves market is an essential criteria which cannot be looked down regardless of what happens in the process of quality check. In the current tech savvy world which we live in each and every parameter is gone through precise scrutiny for the thriving of an uprising Business. There are also few externally affecting parameters which are to be considered during the shipment process which is the probability of the shipment being safely delivered without any factors which affects the transit, for an illustration we can pick on a transit which got stuck or destroyed due to mother nature's powers which include earthquakes, landslides, avalanches, Storms which are few illustrations. This all considered Monitarance of the fleet in a business is a part which is considered as crucial for it to thrive

Fig 1 shows a connected fleet which is relatively simple to keep track of



Fig 1. Connected Fleet

Fig 2 shows a flowchart of how the process proceeds in the backend

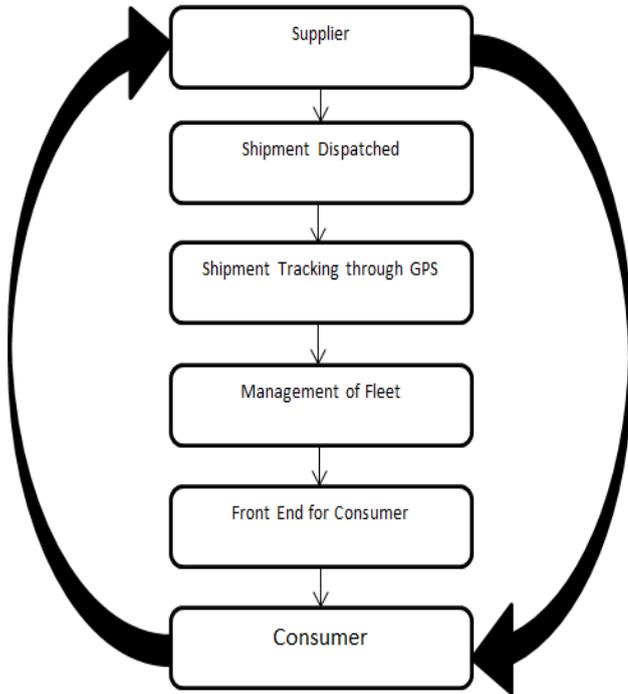


Fig. 2. Flow of Process

III. CONSIDERED DETAIL

A. Driver Safety

A major challenge for the transit agencies are the fear of safety for the drivers which they expect the manufacturers to provide with some safety precautions for the users of their vehicles this in turn helps the agency to keep track of their drivers safety as they are mostly far away from the places of work, As drivers are the lifeline of any transit agency through which they get their income which in further makes them thrive in this cutthroat market of today’s standard which is a feat



Fig 3 Driver Safety

B. Driver Retention

In today’s world without drivers no shipment gets to their desired place and it is a current growing issue in the trucking industry. Stabilizing and increasing driver retention is something to be considered as well because it is important to keep the drivers happy at work which in turn increases the process flow as well as safe delivery of the shipment to the consumer

C. Electronic Logging Device

The Electronic Logging Device (ELD) is a congressional body that went into effect, which requires the commercial operators to record house of service which their drivers clock in order to ensure that the human code of conduct for the drivers to be ensured it is mainly dependent on the region of the service where the transit agency covers. This data is to be paper logged and reduce instances of dangerous driving caused by fatigued drivers. These stipulations are to be duly followed by the transits agency as their operational license depends on these data filed



Fig 4 ELD system

D. Vehicle Acquisition

In order to effectively track and manage all the shipments and the transit these traits extend to the reign of the quantity of the vehicles as well as the physical dimensions of the vehicles which is needed for the work which is to be covered by the transit agency this is to be pre requisites as this sets the base and forming grounds of the agency

E. Connected Services

The transit agency is required to maintain the connectivity between the drivers as well as the transit agency which is crucial for both the drivers as well as the agency as it maintains a cloud record of the data stored and kept as a backup



Fig 5 Connected services

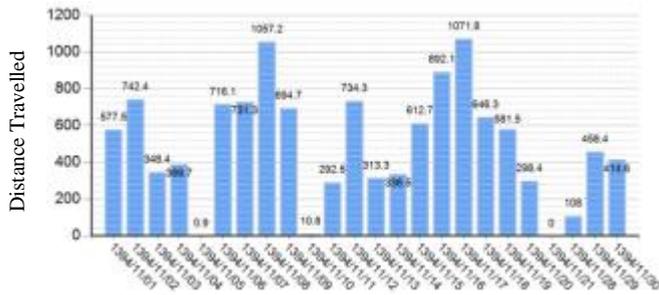


Fig. 6 Distance travelled by the Fleet

Fig 6 shows the distance travelled by each of the vehicles which covers a certain amount of distance in a day ranging from domestic to interstate which gives an overview of how well the shipment is being on the move which in turn helps the agency to collect the data with ease

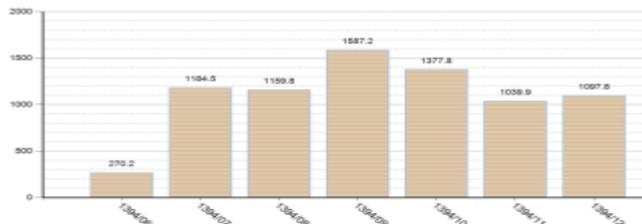


Fig. 7 Distance travelled before refueling

Fig 7 Shows the Distance which is covered by the fleet especially the ones which go for interstate ones where the expenditure on the fuel is also a crucial criteria to account for as it may directly or indirectly affect the company

IV. CONCLUSION

We studied and presented an approach which may be game changer for the trucking industry which plays a major link in the supply chain. This Fleet management system consists of a tracker, data collector, service catalogues, owners data, fleet data, drivers data, collision (sos) emitter in case of any unexpected emergencies, it also has a built in sensor which senses the reason for the stopping of the shipment and categorize it into man made or naturally caused stoppage, fewer models come equipped with a dash cam which will be an easy way to sense and categorize rather than using a sensor and going through a hassle with the data integration. The live tracking is not only entitled for the agency but also the consumer as it gives the consumer a sense of responsibility for their shipment when it comes under their vicinity where the discrepancies with the consumer and the transit agency can be avoided

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