Paper prototype DAF

Idea

The idea is to make an application that can indicate to the truck drivers all kinds of statistics of their trucks, things like when certain parts of the truck are in need of replacement but also tips on how to save fuel by looking at driving style or common routes the take. For example we can use the data to predict tire degradation by looking at tire age and the types of road they usually drive on of course this is a simple example because I don't have knowledge of the exact data we can use.

What problem does it solves?

This basically solves DAF's problem for the use case 'Predict service for trucks' we can use this to send notification to companies or truck drivers with information about predicted wear on specific parts of the truck.

How does it solve this problem?

We are going to train an AI model on relevant data and try to predict when a truck needs repairs or replacements of parts.

Who is it for?

Its both for DAF and their customers, because this way DAF can provide an extra service to their customers and the customers can use their trucks longer because they get notified on time about the condition of their truck.

How is AI/Data used?

We train an AI model on the available data that DAF provides and this way we can (hopefully) make accurate predictions about wear on truck parts. How we train this model is hard to explain for me right now because I'm just getting into AI this semester.

What data is used?

Mostly the dataset provided by DAF and maybe for things like types of road etc. other datasets that provide this type of data.

What is the positive and negative impact?

The positive impact is that trucks live longer because they can replace a part before it completely fails, this way we can assume that less DAF trucks get in accidents because of things like a tire exploding because of wear or other parts that you can't see the status of. Also many customers might find it interesting to see the status of their trucks and how their drivers drive them.

The negative impact could be that if a driver doesn't have the best driving style this will now be information the company can see and therefore decide to fire certain drivers because they break truck parts more easily. Also if truck live longer DAF has less trucks to sell, but this does mean that more DAF parts are replaced.