**A3 Template for problem solving.**

**Title: Auto repair software for providing status and documentation to customers**

**Problem statement: (2 times)**  
 Customers of auto repair shops often do not know the state of their car unless a phone call is made to the mechanic and when the car is going to be fixed the cost is often estimated rather than calculated.

**Target Users: (2 times)**

* People that have an issue with their car and want to fix or check it
* Mechanics who’s job is to fix the customers car

These hire us to implement a better communication medium for both parties that increase quality of life and enables an accurate process detailing of the car’s fix and/or check.

(5 times)

Why? More often than not the mechanic or company providing the service has busy schedules and calls may not get answered.

Why? Estimates may not be accurately provided due to lack of guidelines and proper cost-work pricing.

Why? Companies/mechanics lack documentation resources to provide status of ongoing jobs.

Why? Tools available are not robust enough/provide the interface needed to allow the communication of status, pricing and other things in the same place

Why? There is no way to measure progress accurately

**Counter Measures: (3 times)**

* Implement an application that tracks progress of the vehicle in the form of status reports (daily/weekly depending on the issue).
* Implement a cost estimation/calculator based on fixed processes that can be personalized by the mechanic or company to better estimate the different jobs done for the customer.

**Constraints: (4 times)**

* The software has to have an easy to manage and clean UI to allow for people of all generations (old, young, etc) to understand the different process’ without clogging the area with unnecessary information.
* The software has to be web based so that it is not os dependant
* The software has to be available for both mobile and computers
* The software needs some sort of authentication method for users to track their vehicle

**New User Experience (1 time)**

* Customers will no longer have to rely on phone calls to keep track of their vehicle
* Companies/mechanics can now properly provide cost estimates based on historical/documented data and not approximations of time-work done
* Documentation on the process and status is easier to track and maintain with everything in one place for companies

**Validation and measurement plan:** We are sure that the problem is solved when we see an increase in satisfaction from the customer be it through reviews or comments made by the customers. With an increase in satisfaction customers will also recommend the place(s) that have implemented the software to friends and an increase in customers will also be a quantitative way to measure effectiveness.

**Cost of delay**

The companies would lose an opportunity to provide a good customer service as well as lose time and quality in the process of documentation and price estimation with the chance of providing wrong pricing leading to customer dissatisfaction.