

Car Service Station

Source: designed by Martin Roshkev

Transfer the following verbal description into an EPC:

- a) The process starts with the arrival of a client with a car. Once the client is already in the office, the front office clerk checks the existing appointments.
- b) If no appointment exists, the front office clerk tries to determine what sort of problem the customer has with his vehicle and once the possible problem has been determined and records about it have been made, the front office clerk checks the local IT system, using the created records to determine which division(s) is/are responsible for this kind of problem. After one or several divisions has/have been found in the system, the front office clerk checks for free capacities. On the other hand, if the customer already has an appointment, the the following process is described in d).
- c) For the case that free capacities are available, please follow d) too. If no free capacities are available, the front office clerk checks the schedule for free dates. Once the calendar with appointments has been checked, the front office clerk suggests an appointment. If the customer agrees, the process continues with the storage of the damaged car, described in d). Customers, who decline the offer, leave the service station and the process is over. There is also a possible case when a customer agrees to make an appointment, but doesn't come back.
- d) The office clerk stores the car. To perform this task he needs a car number and customer data to enter them in the local IT system. After the car has been stored, the process continues with the actual repair (process navigation "Repairs", described in e)). Once the repair(s) has/have been done, the front office clerk gives the car to the customer (the local IT system is used). At the same time, the accounting department issues a bill using customer and car data, as well as information about the repair work provided (the system is Accounting & Management). Finally, when the both processes are completed, the customer leaves the service station.
- e) Once the car has been stored, the front office clerk uses the IT system to determine the next car to be sent for repair (schedule records, car number and division data are entered). Thereafter he has to check if the car is clean. For cars that need cleansing, the front office dispatches them to an in-house car wash. Then the front office determines the division responsible for the car. The three possible problems may refer to painting & exterior problems, engine problems or electrical problems. A single car can visit one or multiple divisions that responsible for different kind of problems.
- f) For cars with painting/exterior problems, the automotive paints division at first determines the work scope. The vehicle either needs whole new body paint, or only particular parts need to be painted. When the second case applies, the automotive paints division dismounts the chosen parts and, at the same time, makes records about them in the IT system. Once the car is prepared by the division (for this process they need car parts and automotive paints as inputs), they can conduct the paint job.
- g) For cars with engine problems, the mechanical repairs division firstly examines the car engine. Depending on the damage and the number of damaged parts, the parts are either repaired, or new parts are needed, or both cases apply for different damaged parts. For repairable parts, the mechanical repairs division uses specialized manufacturer's software and repairs the single parts. In the second case, the division purchases new parts directly from supplier (specialized software used). Once the parts have been repaired or the new parts have

been delivered, they have to be installed. When the engine is ready, the mechanics start it up. If the engine works properly, the problem is solved. In any other case a problem still exists and the mechanical repairs division has to examine the engine once more, performing all steps again.

h) For cars with electrical problems, the electrical repairs division finds the problem using specialized manufacturer's software (that is needed at every step) for the particular car brand. When the problem is found, the electrical repairs division performs the repair. Afterwards, they inspect if everything works properly. A successful repair means that the work in this division is done. In any other case, the repair has been unsuccessful and has to be performed again.

i) After completion of the work in any of the three divisions, the quality control division performs a quality check. If problems still exist or another repair has to be done, the car is sent back to the front office to determine the division that will proceed with it. Alternatively, if the car is ready, the front office clerk stores the car.









