

Post Assignment

Thomas More

Belgium

Sustainable Transportation – Sustainable Aftersales
Spring 2022



Sustainable Transportation



Funded by the
European Union

TABLE OF CONTENTS

1	Introduction	3
2	Renault Valckenier Zaventem.....	4
2.1	About the company Renault Valckeniers Zaventem	4
2.2	Aftersales company functions	5
2.2.1	Business model.....	5
2.2.2	Work process	7
2.2.3	Overview of workshop layout and equipment.....	8
2.2.4	Body repair services and equipment.....	9
2.2.5	Electric car charging infrastructure.....	10
2.3	Waste management.....	11
2.4	Inspection	12
2.5	Conclusion:	12
3	Hedin Automotive	13
3.1	The Company	13
3.2	Income of the company	13
3.3	Workshop process	14
3.4	Work Process	15
3.4.1	Sustainability:.....	15
3.5	Workshop layout	16
3.6	Body repair:	16
3.7	Electric charging	16
4	Renault Meulders	17
4.1	BUSINESS.....	17
4.2	SALES	18
4.3	WORKSHOP	18
5	BIBLIOGRAPHY.....	20

1 Introduction

In this report we will discuss some local workshops. We will discuss a few different workshops and brands because we have the opportunities. First we will discuss a Renault workshop. Then we will discuss Hedin Automotive, a Mercedes-benz repair shop, and for the final workshop we will discuss Renault Meulders. This can give an idea about the different styles of the workshops and their way of doing things.

2 Renault Valckenier Zaventem

2.1 About the company Renault Valckeniers Zaventem

The following amount of personnel worked at the time of visit:

Mechanics: 9

Sales: 2

Reception: 1

Warehouse: 1

Workshop Chef: 1

Sellers: 2

Delivery: 1

Alpine exclusive sales: 1

This is a family company from the year 1967.

It sells Renault, Dacia and Alpine Sportscars.

Besides sales and after sales they offer many different services like:

- PRO+: is intended for self-employed persons with vans. Analysis and replace delivery truck 24/24h.
- Alpine drive out
- Paint protection
- Maintenance contracts with a replace car
- Leasing
- Financing



2.2 Aftersales company functions

2.2.1 Business model

The company has of course income by selling cars. The company sells about 50-60 cars per month. Especially in the month January where in Belgium is the auto salon in Brussels, where new car models are presented. But most income is from after sales sector. A total of 25% of all the sales in one year are done during January.

The special about this company, is that there sale not only Renault cars, but also Dacia and the Alpine sportscars. The typical customers are very different. Even that the Alpine cars section is divided from the Renault/Dacia one and is almost a different company. There shares the same building, bosses and even sometimes mechanics to maintain the cars. That means that the typical customer depends on were they go inside the building. Where Dacia cars are sold from about €10000, Renault is about €30000 to €40000 and Alpine cars are about €70000. The customers are very different and needs a different service approach.



2.2.2 Work process

Following programs are used in the company:

EVA, SPR, SRP (Système de pieces de re-charge) and Sale Care program.

All the mechanics have tablets where they can access different information and give information to the customer, so they can follow the maintenance during the work progress.

A minimum of paper is used, and the customer is satisfied with the application to follow the work that is done on its car.

Customers are always asked and may give feedback for any service the company provides to them. The customer needs to give than a point out of 10 to the company. If the score is good, the year-end bonus is also better.

The customer makes an appointment, based on the defect, the vehicle will remain in the workshop for a few days or will be picked up by the customer the same day.

The customer comes to the appointment. Mobile number will be noted to contact the visitor when the vehicle is ready.

The license plate is used as a reference throughout the order.

All data can be found in an international system based on chassis number. Maintenance and repairs to the vehicle are automatically passed on.

Orders are subdivided by color as follows:



Green = customers that wait for their car

Black = customers that leave the car behind

Red = bodywork

Not more than 2 orders per hour per mechanic during the day

All the cars are maintained and repaired with the most precautions.

The car is given back or is driven back to the customer.

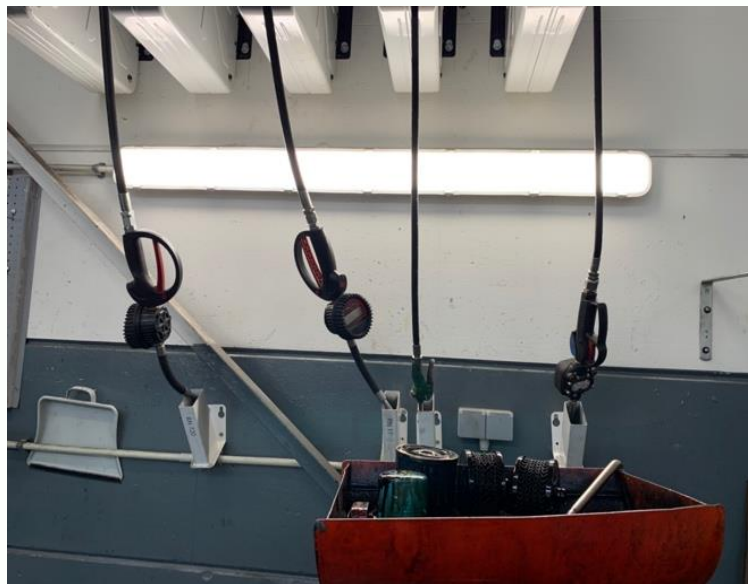
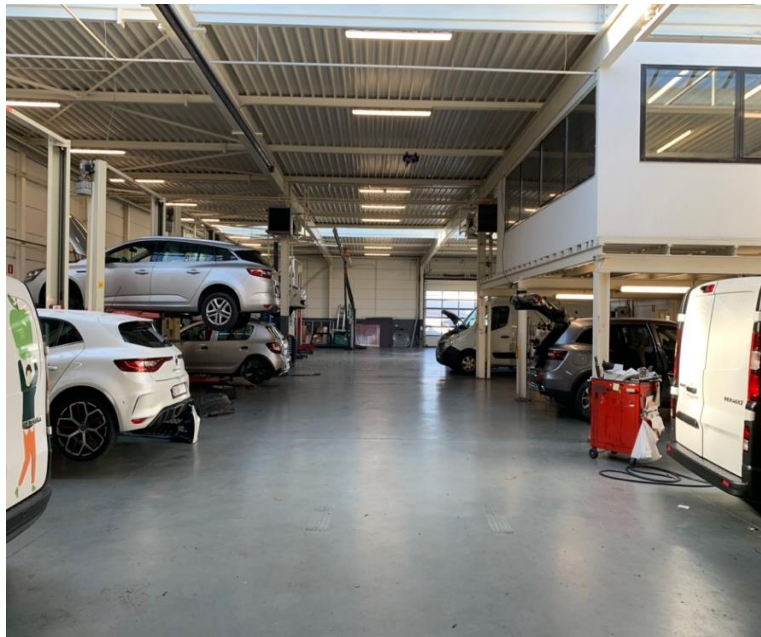
2.2.3 Overview of workshop layout and equipment

The workshop is clean and well organized.

Electric and hybrid vehicles are only maintained by trained mechanics with the right authorization to work with high voltages.

The number of lifts is more than enough to handle the workload during the day. A tube system is used for all the fluids in the maintained cars.

The productivity for maintenance is often more than 125%.



2.2.4 Body repair services and equipment

The body repair is not done by this company in Zaventem. The cars are moved to the same company but in a different location to do the body repairing or restoration. Even with the car movement, the body repairs are often done within one week.

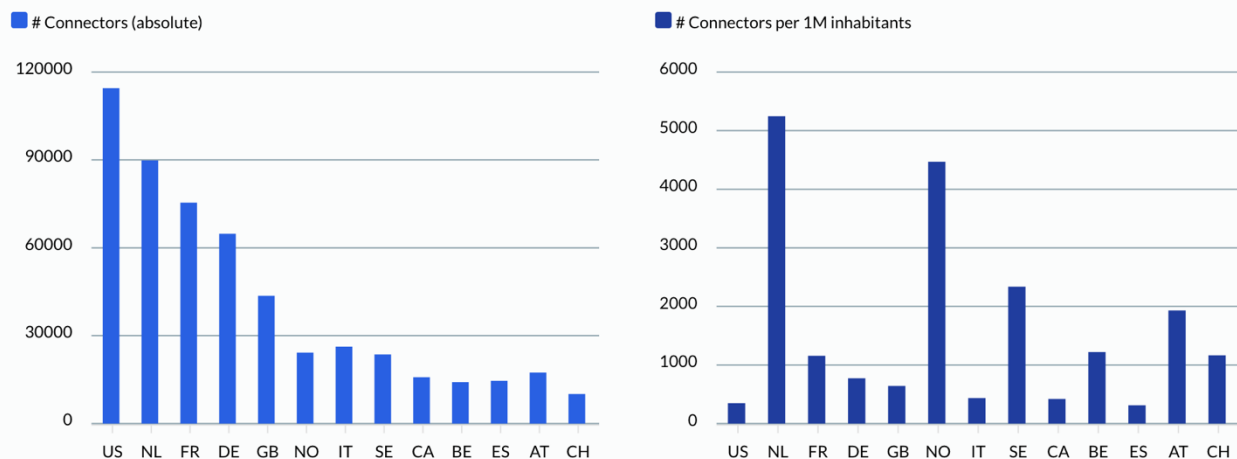
A paint protect service is provided.

2.2.5 Electric car charging infrastructure

The company is located in Brussels Zaventem. That means the heart of Belgium where the best infrastructure in the country is located for charging stations. The company itself has several free charging stations for the customers in front of their building. The company offers electric replace cars during the maintenance on the customers car is taken care off.

15379 connectors for 11521238 inhabitants (in the year 2021). Belgium is on the 12st place on the most electricity charging stations in the world. Because Belgium is a small country, that brings is on place 5 when it comes to charging stations per inhabitant.

Top countries and # of connectors per capita



2.3 Waste management

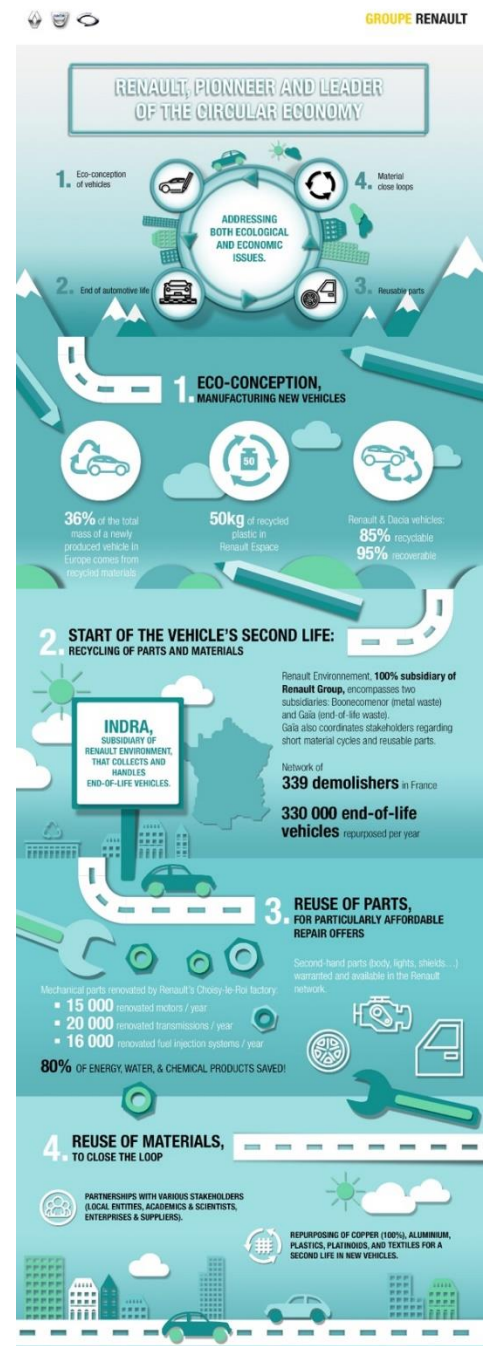
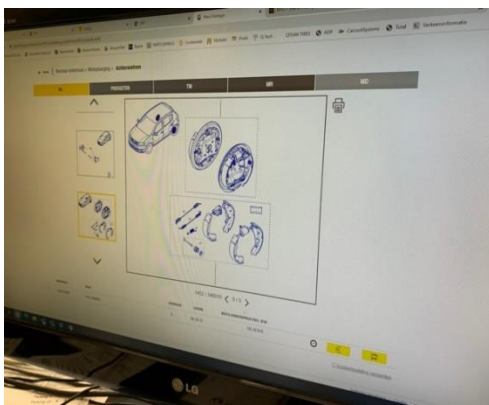
The company follows the regulatory guidance and take their waste to be recycled in the best way possible.

The Renault group have a really fascinating circular economy work progress. See for more information picture right and visit the site mentioned in the bibliography section of this work.

“Renault also reconditions or remanufactures used parts, which are collected in the sales network, sorted and refurbished. This activity adheres to a strict industrial process: involving complete dismantling, cleaning, sorting, refurbishment and replacement of faulty or worn parts, reassembly and inspection.”

They have a list of over 2000 parts that can by refurbished, saving money for the customer and take outstanding improvement to the sustainable aftersales sector.

This process is not only for cars that have ended their automotive life, but also parts that are taken off during a maintenance are not “throwed away”, but are send back to the factory. The parts are inspected for diagnostic of wear of the used parts and are refurbished afterwards.



2.4 Inspection

The inspection is independent in Belgium. When a car needs to pass the annual inspection, the car is first inspected in the workplace and then driven to the local inspection station in Zaventem Brussels.



2.5 Conclusion:

During the years and with experience the company has found a perfect balance in service quality. The Renault group have a really fascinating circular economy work progress with an outstanding improvement to the sustainable aftersales sector.

3 Hedin Automotive



3.1 The Company

In Belgium, the company has 15 Mercedes Benz dealerships, each of them managed independently, but within the guidelines of the main group Hedin.

This particular establishment consists of 30 people, from which 16 are technicians, 4 sellers, 4 at the desk and after sales, one car expert, one at PDI, workshop manager, site manager, and two remaining in charge of warehouse.

3.2 Income of the company

The company has different products and services, in order of importance:

After sales: this represents the main flux of income of the company. It includes all services offered by the workshop, mostly service and maintenance but also repairs.

Warranties and care packages: the dealership offers every time someone buys a new car extended warranties and something called “complete care” subscriptions.

Sales: selling new vehicles is also an important side, but due to really low margins and the relative low number of cars sold being this a premium brand its mainly purpose is to get new customers that after buying a car will be coming back for maintenance and repairs.

Spare parts: besides from the parts that are needed to perform the services and reparations of cars that come into the workshop, parts can be also purchased in the warehouse of the building.

3.3 Workshop process

Customer makes an appointment.

At the said date and time, when the client comes he can talk with one of the people at the front desk to discuss the problems and what he desires to have done to the car. At this step, the employee will enter into the computer all of the clients and car information and will ask to the customer to explain everything. All of this is printed out as some kind of contract, that the client must read to ensure everything is clear and correct and then he has to sign it. The signature is of use for the garage to have a record of what the customer asked for.

The file created is then scanned and uploaded to the system to keep a history of everything done to the car through the years.

The customer will then hand over the keys of the vehicle. They will be placed in a chart along with all documentation needed for the technicians and handed over to the workshop manager. He will decide which technician will perform the job and when.

Start and finish of the work is indicated by the technician in the system.

Once the job is done, the technician will take a test drive to make sure everything is as expected.

The system registers how much every work took and is compared to expected times that Mercedes considers normal. With this, a chart of the efficiency of every worker can be maintained.

The manager will double check every car and then sign a conformity and enter the information into the system. The chart then returns to the front desk.

When the reception receives the chart, they will notify the customer to come to pick-up the vehicle.

3.4 Work Process

As a Mercedes Benz company they use the proprietary Xentry softwares, that includes everything they need: part identification and ordering, diagnostics, VIN number reading, tracking of services, etc.

3.4.1 Sustainability:

As everything comes from the same ordering site, delivery can be better planned to reduce travel costs.

Residues are not managed in any special way, but fluids are contained separately and not treated as common trash. For solid waste there are containers for normal trash and other for metallic pieces. The latter are collected by foreign people, but the dealership does not ask where they're taken.

Although everything is digitalized for recording purposes, paper is still widely used by mechanics and also to show customers. Normally there are only prints of the official documents, not copies of them.



3.5 Workshop layout

2 zones, one for maintenance and simple repairs, other for diagnostics and longer tasks. Every technician has their own toolbox for the frequent use stuff, but there is also a wall full of special tools for everyone to access if needed. They have also a tyre changing machine in the back.

High voltage electrics are taken in a similar way as other vehicles, but the technicians that work on them are only the most experienced ones.

3.6 Body repair:

Handled inside the same workshop, no contracts with near by businesses.

3.7 Electric charging

In the parking lot there are chargers. Inside there are also some chargers, but those are not fast chargers and are used only during diagnostics and repair tasks.

4 Renault Meulders



This company is a medium sized garage/showroom with 10 employees. There's 4 people working in sales of the cars, 1 receptionist and 5 mechanics working at the company. It's a family owned business with 5 of the 10 employees being descendants of the founder of the company 3 generations ago. The most important aspect of their company is having a good relation with their customers. As they are now building a more modern showroom, the sustainability aspect will become much more prominent as the full roof will be covered in solar panels which will make it energy neutral.

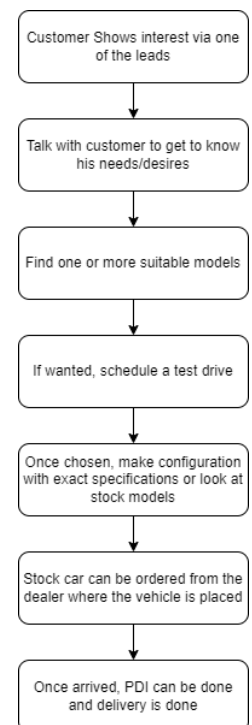
4.1 BUSINESS

The sales department works with a stock system divided over the neighbouring Renault showrooms all through the region. When a car is sold or required for a test drive, it can be transported from the other garage the next day. As with most garages, the profit isn't made in the sales department, so they try to keep their clients and offer them some more services. One of these is renting out cars as replacement car or passenger vans for example for going on holiday. This makes it a lot easier for customers as they could bring in their car and while it's being repaired/serviced, they can rent a replacement vehicle to get to their work or where they need to be. The vehicles you see below are only a fraction of their fleet. You can rent everything from a big van (Renault Master) to the newest full EV of Dacia (Dacia Spring).



4.2 SALES

In the graphic you can see the workflow of the sales. Shortly summarized, when the customer contacts the company or shows interest via one of the leads, one of the sales advisors talks with the customer to get to know their needs. Based on this knowledge, a suitable vehicle model can be picked, if the client wishes a test drive, this is also possible. When the customer is convinced about the model, a configuration can be made with the exact engine and options the client wishes. The car is then ordered and shipped over to the dealer. Once the car has arrived, options like a roof rack or heavy duty floor mats can be mounted.



4.3 WORKSHOP

The workshop is the place where all the repairs and maintenance is done. This workshop is more to the old side but still functions perfectly.

It is equipped with four standard 2 post lifts built into the shop floor to maximize working space. To work on heavier industrial vehicles, the shop also has a heavier 4 post lift to be able to carry the weight. Every mechanic is equipped with his own extensive tool cart, at every lift there's also a wall panel with basic special tools so the mechanics don't need to look around the shop for a special tool. To prevent waste, the shop is equipped with 2 oil pumps connected to filling hoses at every lift. This prevents the waste of plastic by having a big tank with oil instead. As electric cars are becoming more and more popular, they aren't

really prepared for it yet as they don't really have the infrastructure, tools and probably knowledge for it yet. However, for now there isn't really a need for it yet as these electric cars are a lot less likely to come into the shop for maintenance and/or failures. For now, they still use external people if some EV repair or diagnose is needed. They don't have any chargers either, but there are a few possible charging stations in proximity.

As they have their own bodyshop, they can do repairs for both their brands and other brands. Mostly this is just prepping and painting the new parts to replace the broken body panels after an accident.

As for workshop waste management, I think there is still a lot of improvement as most of their waste just goes into one container. As far as I know, only tires and oil/liquids are separated.



5 BIBLIOGRAPHY

<https://www.valckenier.be/nl/renault>

<https://www.renaultgroup.com/en/news-on-air/news/renault-actively-developing-circular-economy-throughout-vehicles-life-cycle/>