1. White goods demonstrator

1.1. White goods demonstrator overview

In taking the circular approach, Gorenje is developing and implementing a pay-per-wash offering in four European countries including Slovenia, Austria, Denmark and the Netherlands. The washing machine selected for the deployment is the ASKO85 professional model, a built-to-last smart washing machine. Gorenje is taking a systemic approach integrating business model, product design and supply chain while exploiting the potential of ICT as system-enabler (see Figure 1). The washing machine is designed for high durability and reuse capacity in order to facilitate multiple product lifecycles. Moreover, incorporation of smart technology design for connectivity will allow for tracing and tracking the product throughout the multiple lifecycles and monitor operational and user data to enable prompt servicing and repair. After each use cycle, the washing machine will be brought to as-new condition as part of the value recovery activity and redistributed to serve another customer. Gorenje is setting up necessary reverse logistics infrastructure for recovery and redistribution of the machines and creating dedicated service organizations that are able to provide the service proactively in each market. An IoT based platform that enables connection between machines and value chain actors is being developed. The platform will monitor operational and usage data as well as process and streamline the data to appropriate stakeholders. The IoT platform will also exploit technologies such as Machine Learning and Augmented Reality to assist predictive maintenance, service and refurbishment operations.

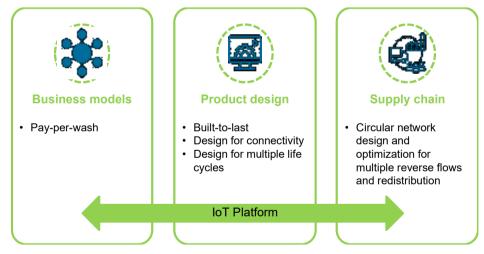


Figure 1: White goods demonstrator overview

1.2. Comparative study of competitors in PSS

For the development of marketing and pricing strategies, the knowledge about the existing competition in the market is necessary. Comparative studies and analysis both of subjects in the market and several geographical markets are helpful for different marketing decisions, especially when entering new territory or entering existing market with the new product. Findings are used to decide on positioning strategies and about the necessity to adapt some tools and processes or to be possible to standardize them (Boddewyn, 1981).

Except the analysis of competitors in the relevant four countries within the ReCiPSS project for the Gorenje demonstrator where some competition exists, the following texts contains also the





overview of prices of the laundromat self-services and prices of washing machines to purchase – the lowest and the most expensive for the 7-9kg capacity, frontloaded washing machines, energy class A+++. Such overview enables to know some limits that could lead to the price perception of renting and paying per wash in the individual countries, despite the fact that pricing is influenced by many other factors.

In the chapter, first some basic information about the situation in the individual market and about the companies important and/or interesting for the comparison and analysis is presented. A more structured and detailed overview of the concrete practices is given in the form of tables in **Chyba! Nenalezen zdroj odkazů.**.

This comparative study has many limitations due to the problems with availability of information within the individual markets. Most of the needed data and information for the comprehensive analysis either do not exist at all or they are not possible to access free of charge. In addition, language barriers of the research team members posed a challenge to collect needed inputs despite the effort to use dictionaries, translate key words and texts when found on web sites for all four markets taken into account.

1.2.1. Austria

1.2.1.1 Home appliances renting: General overview of the market

Media started to document diverse renting option of home appliances and consumer goods more than 15 years ago¹ in a relation of the "Mieten statt Kaufen" initiative that resulted in the largest network of retailers offering the renting option (for details see **Chyba! Nenalezen zdroj odkazů.**, **Chyba! Nenalezen zdroj odkazů.**). The newspaper Der Standard² published probably first news in 2005 and informed about the first initiatives of Miele and Siemens. According to the manager of Siemens Bosch Haushaltsgeräte Österreich, this company had tested renting of washing machines and dryers for five years with 250-280 appliances per month to be rented. In 2005, Miele has also started to test Austrian market (with the communicated aim to be number one in this market that time) with the 10-years length of contract. However, since 2005 there are no information published.

In Austria, renting of the following specific product groups is offered extensively:

- Electronic gadgets³;
- Electronic fun-vehicles/alternative mobility (e.g. scooters etc.)⁴;
- Large online shops have involved in renting 1-2 years ago utilizing the services of specialized companies (e.g. OTTO Österreich cooperates with Gover company, one of the European leaders in renting-commerce)⁵. Similarly, other major players in online shopping Mediamarkt/Saturn (see chapter 1.2.1.2.3). What is essential, they enable renting of limited product categories (consumer electronic is a typical example; OTTO offers 373 items for renting, which a negligible fraction of the products provided⁶ and washing machines are excluded);
- Tools for house and garden⁷;

⁷ e.g. <u>https://www.obi.at/mietgeraete/kategorieuebersicht/;</u> <u>https://www.bauhaus.at/leistungen/leihservice</u>



¹ https://vbgv1.orf.at/stories/138739

² https://www.derstandard.at/story/2219849/die-waschmaschine-zum-mieten

³ e. g. gearflix.com

⁴ <u>https://www.xrent.at/</u>

⁵ https://www.unito.at/Presse/Pressemitteilungen/7-10-2019-OTTO_Grover

⁶ https://www.unito.at/Presse/Pressemitteilungen/10-04-2019



- Cleaning equipment (Kärcher)⁸;
- Sports equipment and dress (Hervis)⁹;
- Furniture by Ikea¹⁰;
- Carsharing¹¹;
- Different products;¹²
- There is also an activity on C2C: The usetwice.at is a platform for C2C short-term renting of an immense variety of small-size products. The washing machines are not offered currently¹³.

The shops and service providers define the target segment for renting based on market research as people between 20 and 35 years¹⁴. Market analysis by OTTO retail proved that Austrian consumer market is ready for renting business model¹⁵.

The research of Vienna University of Economics and Business¹⁶ suggests the washing frequency in Austrians as follows: Once a week – 31%, twice 41%, and daily 10% - the rest of population less often. The washing itself brings slightly more fun to women than men; for both genders, it is rather neutral activity. At the same time, 1/3 of Austrian consumers have a negative attitude to smart homes (50% is positive). Men are more interested and knowledgeable about smart homes topics.

1.2.1.2 Overview of companies in the market

The Austrian market for washing machines is rather special in terms of concentration of some activities, specifically communication of the possibility to rent washing machines instead of buying and of the concentration of contacts to the outlets where renting is possible across the country.

There are only two organisations in Austria, which communicate renting of washing machines to a wide audience as their main communication appeal and so position themselves, despite the fact that the second one described further is focused more on repair. The one is managing the above-mentioned initiative "Mieten statt Kaufen" (established and owned by the profit oriented company CLUB.WEISS Handels-GmbH) and R.U.S.Z, an Austrian Work Integration Social Enterprise, sponsored by the Viennese municipality.

Besides these two companies, there is one very important player on the market being one of the biggest retailers in the Austrian market and the biggest one selling electronic and home appliances¹⁷ who as the only one from the list of the 100 top companies offers also renting of products. It is the retailer MediaMarkt – part of the German group CECONOMY. The group has over 1,000 stores in Europe and leads the market in eight of its 14 countries of operation, mostly

¹⁷https://www.handelsverband.at/fileadmin/content/Presse_Publikationen/Presseaussendungen/2018/20180205_ studie_austriantop100retailers/HV_AustrianTop100Retailers2019.pdf



⁸ <u>https://www.kaercher.com/at/services/professional/kaercher-mietgeraete.html</u>

⁹ https://www.cash.at/handel/digital/ski-leihe-ab-8-euro-pro-tag-14685

¹⁰ https://www.salzburg24.at/news/oesterreich/ikea-will-moebel-vermieten-83406853

¹¹ https://www.thelocal.at/20140617/car-sharing-options-growing-fast-in-vienna

¹² erento.com

¹³ <u>https://www.usetwice.at/</u>

¹⁴ https://salzburg.orf.at/v2/news/stories/2829097/

¹⁵ https://issuu.com/handelsverband_austria/docs/retail_2017_2

¹⁶ https://www.wu.ac.at/mcore/research/im-fokus

in so-called DACH countries – Germany, Austria, Switzerland and Hungary.¹⁸ MediaMarkt is also the market leader in Netherlands.

Due to the very strong presence in the Austrian market and due to the offer of leasing, this company is also part of the study in more detail in the text further. Perception of prices, which this company charges could be a benchmark for the Austrian market.

There are also many individual cases when retailers offer also renting of washing machines (as stated above). Many of them are local shops serving local or regional markets.

1.2.1.2.1 Mieten statt Kaufen

Mieten statt Kaufen¹⁹ is so called middleman (one stop) that enables the renting of selected washing machine – it is the third party in contract between customer and (independent) retailers. The largest provider of the renting service on the Austrian market (the only one on a nation-scale level) with the number of customers 29000 throughout the years. The company offers various home appliances provided by several OEMs. Apart from washing machines, the offer contains dryers, fridges, dishwashers, cookers, freezers, vacuum cleaners and coffee machines. Approx. 174 places/retailers across whole Austria make the network delivering and maintaining the products²⁰. Contracts are always signed at the retailers and concrete information about the terms of contract (e.g. length) for renting are also available at retailers. Based on the interviews with the manager of Mieten statt Kaufen and 6 retailers (April 2020), washing machines become the property of customers after the end of renting period. If the customers do not want them anymore, it is possible to collect them for recycling. Sometimes customers donate washing machine to the charity. The only way to finish the contract earlier is to pay the rest of the sum for the washing machine.

According to the interviews, there is almost no difference between customers based on their age or income group. Customers want to have high quality product with full long-term guarantee and no hassles²¹.

With the communication the stress is put on easiness (all-inclusive), fixed pricing paid at the end of a month, flexible termination of a contract and the latest technology – after 5.5 years (66 months), they replace old for new WM. The company promises quick reaction to customer call, as they are in customer's neighbour, but no specification of the reaction time is provided. A list and map of retailers is available.

1.2.1.2.2 *R.U.S.Z*

Repair- and Service Center R.U.S.Z²² (Reparatur- und Servicezentrum R.U.S.Z) was established in 1998 and is focused on reprocessing, repairing, and servicing of used products. All sustainable goals (economic, ecological and social) are pursued by this organization. According to Lechner and Reimann (2015) company reprocesses/repairs of about 8,000 used products/year. Within the social activity, the company reintegrates the permanently unemployed persons. Within the Vienna district, the company offers **collection of the home appliances for €9**. During Thursdays'

²² https://rusz.at/



¹⁸ <u>https://www.ceconomy.de/media/scope_ratings_ceconomy_rating_report_2019_jul.pdf</u>

¹⁹ https://www.mietenstattkaufen.info/

²⁰ Many of the retailers do not provide any information about the possibility to rent.

²¹ Transcript of the interview is available in **Chyba! Nenalezen zdroj odkazů.**, **Chyba! Nenalezen zdroj odkazů.** Names of retailers are not published in the deliverable

afternoon company also runs a repair café (Reparaturcafé Schraube). R.U.S.Z. operates locally in Vienna (the second location in Gratz is closed down).

R.U.S.Z. repairs almost all categories and types of appliances except some brands (e.g. Apple) or some specific categories (e.g. scanners, printers, car radios). Repair and other related costs differ in they are realized in shop or on-site with customers. If in shop, the company charges €39 for the cost estimate. If customer agrees with the repair, he pays €35/15 minutes of work. If customer decides for the on-site visit, online form must be filled in. In this case the company charges €96 (for travel and 30 minutes of work). Every additional 15 minutes of work is charged with €35. If the on-site visit is outside of Vienna (up to 20 km), there is another additional cost of €48.

The company currently rents only washing machines and dryers. Customer has to call or to send an email for the appointment. Identification card has to be shown for the contract setting. The price for monthly renting is ≤ 18 for the private customers and ≤ 35 for the professional and for both categories of customer a one-time deposit of ≤ 350 must be paid. For delivery and professional connection another ≤ 96 is charged.

R.U.S.Z. also runs e-shop with spare parts and offers second-hand refurbished and remanufactured home appliances for sale. Customers who are interested in purchase of the second hand appliances have to visit shop personally in Vienna. The date of visit is possible to arranged via the website online form. No products are shown or offered online. Free repair or a replacement with a new machine within three days after the announcement of the problem with machine is promised by the company. Customer also receives an annual check, which also serves to adjust the rental price to the frequency of use (e.g. washing less than 4 times a week is cheaper and vice versa)²³. However, there is no information about how does it work with the renting further on the website.

With communication towards customers the company profiles itself as repair professionals. Renting is a supplementary service. As other activities of R.U.S.Z are related to circularity, many messages (presented on website and social media) address circularity topics both general and R.U.S.Z specific. In their communication, the company probably addresses the offer of a competitor - mietenstattkaufen.info and point out that its option to washing machine takeover by the user after 66 months is not rational, as the conventional WM requires expensive repairs at this age.

1.2.1.2.3 MediaMarkt

MediaMarkt²⁴ is the Austrian subsidiary of the multinational corporation with the headquarter in Germany CECONOMY. With an online shop and 37 brick and mortar shops), it covers whole market. Besides the MediaMarket, there is also a sister company in Austria – Saturn, which sells high-tech products.²⁵ Company does not offer any refurbished products; only new products are in the offer except the sale of products from the shops' expositions. It is a typical mass sales oriented company that sells also through leasing. This means that customer becomes an owner of the product after he pays off whole sum.

The company is very strong not only in the coverage of the market, but also with the awareness of customers and image. Positioning is strongly supported with advertising and especially sales promotion that uses many tools. It cooperates with several partners to offer financing, repairs and logistics services. With the offer of the own mobile phone tariffs and the promotion of

²⁵ https://mediamarktsaturn.at/de/saturn-oesterreich/



²³ <u>https://rusz.at/leistungen/geratemiete/</u>

²⁴ <u>https://mediamarktsaturn.at/de/produkte-services-leistungen/</u>



membership in Club towards customers, the CRM (Customer Relationship Management) is probably on a rather high level.

The strong sales focus also means that the offer is divided into the individual products and services (with the individual prices) and customer is "navigated" to combine products in some form of packages where the combination is sometimes cheaper, but many times not. This means that no free services (except the personal help and advisory in the shops and by the telephone or Facebook) are there for customers.

Web page of the e-shop, despite the amount of the information, is very friendly to go through: Structure is logical and well-arranged and the information is easily accessible.

MediaMarkt²⁶ offers renting of washing machines within a 12 months contract for the cheapest brand Indesit (8kg, energy class A+++) at €24.08 (full price is €288.90)²⁷ and the most expensive for the same capacity and energy class for €77.45 (full price is €1549) for Electrolux Professional²⁸. MediaMarkt charges also delivery and other service costs. For washing machines, the delivery is for €34.90; €40 is for the installation and collection of the old device, if also individual configuration and appliance connection is purchased – the price is €80 (+ old device collection). If no installation but only the old device collection is purchased together with the delivery, €19.90 is charged.

1.2.1.3 Analysis of laundromats prices

A Google search indicates that laundromats are popular in Austria. For instance, company GREEN & CLEAN HAS 14 outlets in Vienna and 1 outlet in Graz (and other 3 in Italy)²⁹.

Prices for the wash are as below:

- €2/7kg with the special bubblecard (detergent included)³⁰(Innsbruck)
- €5/7kg + €1 for detergent³¹ (only in Vienna)
- €5,66/8kg without detergent and with the special app + €1,43/50g detergent (special app)³² same prices in Vienna and Graz

1.2.1.4 Prices of washing machines

Washing machines with 7kg load, frontloaded and energy class A+++ could be purchased from $\notin 239^{33}$, smart washing machines of the same energy class and load capacity from $\notin 277$, the most expensive washing machine (same capacity and energy class) is for $\notin 2789.00$ (cheaper offer) and $\notin 3499$ with other retailer)³⁴. For the 8 kg capacity washing machine and energy class A++ the

²⁷ https://www.mediamarkt.at/de/product/_indesit-waschmaschine-ewe-81484-b-1471314.html

²⁸ <u>https://www.mediamarkt.at/de/product/_electrolux-professional-waschmaschine-mypro-we170p-mit-</u>

339.99&sortKey=minPrice

³⁴ <u>https://www.idealo.at/preisvergleich/ProductCategory/1941F849076-1731085-7710903.html?p=0.0-</u> 339.99&sortKey=minPrice



²⁶ https://ecommercenews.eu/amazon-enters-austrian-retail-top-10-for-first-time/

⁽https://www.ceconomy.de/media/scope_ratings_ceconomy_rating_report_2019_jul.pdf

laugenpumpe-und-8-kg-fassungsverm%C3%B6gen-1665202.html

²⁹ <u>https://www.greenandclean.store/</u>

³⁰ <u>https://www.bubblepoint.com/fuerstenweg.php</u>

³¹ <u>http://www.dr-wash.com/preise/</u>

³² <u>https://www.greenandclean.store/waescherei-preisliste-2020/</u>

³³ <u>https://www.idealo.at/preisvergleich/ProductCategory/1941F849076-1731085.html?p=0.0-</u>



price range from €264.60 for not well-known brand through €264.85 (Amica)³⁵ to €1559. Prices for Gorenje ranges from €287.90 to €529.

Gorenje brand, 8 kg, energy class A+++ is from **€28.33/month** (the full price is €339,90) ³⁶ or higher quality Gorenje brand (same capacity, same energy class, but more functions) for **€44.08/month – 12 months contract** or **€26.45 – 20 months** contract (full price is €529)³⁷. No company has been found that offers pay per wash (or alternative names) scheme in the Austrian market.

1.2.2. Denmark

Four companies were found that rent washing machine at the Danish market. Four companies differ substantially in terms of size, market coverage, product range and other characteristics as will be presented further. Except one example – see below - no pay per use or pay per wash (or pay per service) business model with washing machines exists in the market according the available information. A detailed analysis of the comparative study of the competitors is reported in **Chyba! Nenalezen zdroj odkazů.**, Table 6.

1.2.2.1 *L'EASY*

L'EASY³⁸ is a leasing company that leases everything for home. Besides leasing, the company also offers loans and rent products. Company was established more than 35 years ago and it offers services in Denmark, Sweden, Norway and the Netherlands (from 2006)³⁹. However, in the Netherlands, the company does not sell any products currently, nor offers any services, only some online advisory.⁴⁰ L'EASY from the beginning started to rent washing machines and only after several years, the portfolio of products has started to grow. Company employs approximately 550 employees⁴¹. L'EASY A/S is part of the 3C Holding group, which is owned by the founder of the company Niels Thorborg. The group also includes 3C Venture A/S with interests in a number of companies. The head office and Danish call centre are located in the centre of Odense. In Denmark, the company runs three warehouses in Odense, Hobro and Tåstrup⁴².

The company is strongly focused on their core business – leasing. Renting is only a "by product". Unfortunately, there are no information about the share of renting or leasing and about trends.

L'EASY tests – as a solution to problem of the business customer – pay per wash approach with the individual consumers but via the aforementioned business customer. Pay per wash is used with washing machines that are used by the inhabitants of apartments, which are maintained by one small cooperative AB Woltersgade in Denmark⁴³.

⁴³ https://www.leasybusiness.dk/om-leasy-business/kundecases/ab-woltersgade/



³⁵ <u>https://www.idealo.at/preisvergleich/ProductCategory/1941F1731085-1952847.html?p=0.0-339.99&sortKey=minPrice</u>

³⁶ <u>https://www.mediamarkt.at/de/product/ gorenje-waschmaschine-we-843-p-wei%C3%9F-</u> <u>1704909.html#finanzierung</u>

³⁷ <u>https://www.mediamarkt.at/de/product/_gorenje-waschvollautomat-inkl-antivibrations-und-</u> d%C3%A4mpfungsmatte-60x60cm-1777224.html#finanzierung

³⁸ <u>https://www.leasy.dk/</u>

³⁹ https://www.leasy.com/

⁴⁰ https://www.leasy.nl/

⁴¹ <u>https://www.leasy.nl/de-geschiedenis.aspx</u>

⁴² https://www.leasy.nl/over-leasy/informatie-over-leasy.aspx



1.2.2.2 Køb & Lej Direkte A/S

Køb & Lej Direkte A/S⁴⁴ has more than 20 years of experience in the rental of home appliances, and in the market they are known by the name Lej Direct A/S. It is the regional company, however with the network of servicemen across the country – according the information on website. There is almost no information available about the business of this company both on the own website and in Google.

1.2.2.3 Jensen & Vestergaard

Jensen & Vestergaard⁴⁵ is a small company (founded in 2015) with only two persons – founder who was employed with the company L'EASY before with rather sustainability focused thinking and belief in the remanufacturing and refurbishing of products according their communication. Company sells, rents, leases and services products – home appliances. On 1st March 2020 this company overtook another one company – Hobro Appliance Services⁴⁶. With this acquisition the hops in the development of its market and service deliveries⁴⁷.

1.2.2.4 EL 99 ApS

EL 99⁴⁸ is company, which is the member of the European biggest chain of independent retailers selling electronics – Euronics International⁴⁹. EL 99 – within the Euronics – is also a sales partner of Elsalg – the biggest Danish retail chain of the independent retailers with about 25 years history and 150 stores across whole Denmark⁵⁰. EL 99 serves mostly market of the North West Zealand region in Denmark. It rents products sold by the Elsalg – offer of the EL 99 is dependent on the offer of this retail chain.

1.2.2.5 Analysis of laundromats prices

Laundromats are relatively widespread across Denmark with more outlets in University cities and towns. Prices for the wash range from 30 DKK (app. \leq 4) for wash (7-8 kg) + 6 DKK (app. \leq 0,80) for detergent⁵¹ to 45 DKK (app. \leq 6) (detergent included) for wash (7 kg)⁵².

1.2.2.6 Prices of washing machines

Prices for washing machines with 7 kg capacity and A+++ energy class, frontloaded start from 1859 DKK (app. €249,20)⁵³ - Beko washing machine. For 8 kg prices start from 1197 DKK (app. €160.5) – brand Gram and 2222 DKK (app. €298) - brand Siemens⁵⁴. The most expensive 8 kg washing machine is for 12999 DKK (app. €1743) – Electrolux.

a65e576ce120?fbclid=IwAR00hvPIE2brtJzPI7rjBH6DNv3hOWpIgke-tl3QFmhU4M5HdwiUgUWhUKQ

⁵³<u>https://www.pricerunner.dk/cl/14/Vaskemaskiner?attr_2000045=2006939&attr_2000046=47528940#s_62=7_8</u> ⁵⁴ <u>https://www.pricerunner.dk/cl/14/Vaskemaskiner?attr_2000046=47528940#s_62=8_8</u>



⁴⁴ https://www.lejdirekte.dk/

⁴⁵ <u>https://jensenogvestergaard.dk/</u>

⁴⁶ <u>https://hobroavis.dk/nyheder/hobro-hvidevare-service-opkoebt/b1e01372-a7de-45af-a53d-</u>

 ⁴⁷ <u>https://hobroavis.dk/nyheder/hobro-hvidevare-service-opkoebt/b1e01372-a7de-45af-a53d-a65e576ce120</u>
 ⁴⁸ <u>https://el-99.dk/lej-hvidevarer.aspx</u>

⁴⁹http://www.euronics.com/fileadmin/user_upload/news/2016/EURONICS_International_company_portrait_EN.pd f

⁵⁰ <u>https://elsalg.dk/</u>

⁵¹ <u>http://laundromat.dk/#features</u> or <u>http://vaskeriget.dk/</u>

⁵² https://vaskecenter.dk/moentvaskeri/



Prices for Asko washing machines (8 kg capacity and same energy class) start from 6995 DKK (app. \notin 938)⁵⁵. According to the Danish version of the price comparison online service pricerunner.dk Asko branded machines with A+++ energy class (and 8 kg capacity) belong to the most expensive in the market. 261 washing machines have price lower than the cheapest Asko and together with 10 listed Asko washing machines (8 kg, A+++) there are 46 washing machines of other brands with price ranging from 6519 DKK (\notin 874) (as the cheapest prices) to the above mentioned Electrolux. The most expensive Asko WM is for 10695 DKK (\notin 1434)⁵⁶.

1.2.3. Netherlands

1.2.3.1 Direct competitors

There are only two "direct competitors" with the pay per wash payment schemes at present. The others offer only renting (see 3.2.3.2).

However, we decided to put among this group also one more company, which currently offers only renting (indirect competition). More specifically, BlueMovement, an initiative from Bosch, is elaborated in more details. There are several reasons. First, strong focus on non-ownership, refurbishing and remanufacturing within the sustainable theme is strongly presented with the company. Second, with the attitude of Bosch to circular economy and with the rather simple offer and clear demonstration and testing features of the BlueMovement business it is not so difficult to test also pay per wash. This is also supported by the technical and ICT capabilities of Bosch that can be applied to this case⁵⁷. Third, Bosch also claims the need to keep ownership of products as the OEM for the successful circular economy. A detailed analysis of the comparative study of the direct competitors is reported in **Chyba! Nenalezen zdroj odkazů.**

1.2.3.1.1 Bundles

Bundles⁵⁸ is the first company (established in 2014) trying to enter and develop the market with the pay per use business model in Netherlands. Company presents itself as a software and service company that enables home appliance suppliers to offer their products as a service. According to Marcel Peters, CEO and founder of Bundles, Miele was the first partner for testing innovative circular business model (as company targets manufacturers and service providers, Miele is considered as a customer⁵⁹). Washing machine, dryer and dishwasher business is partly funded by Miele, there is no information about the coffee machine and mattresses business. What exactly means to be "partly funded" is also not clear from the online-published information. Bundles probably purchases appliances and costs are funded through earnings and money from crowdfunding and peer2peer lending⁶⁰. The Bundles platform business as such is funded by the founders, an impact investment fund and some informal investors. Company rather intensively search for investors. There is a link to the information and discussion on the

<u>crowdfunding-2/</u>) and Morse (2015) crowdfunding has several benefits, for instance it serves as a marketing tool, helps to gain loyal customers, can be used as the efficient and effective brainstorming of the new ideas and it is a free Public Relations tool



⁵⁵https://www.pricerunner.dk/cl/14/Vaskemaskiner?man_id=147&attr_2000045=2006939&attr_2000046=475289 40#s_62=7_8

⁵⁶ https://www.pricerunner.dk/cl/14/Vaskemaskiner?man_id=147&attr_2000046=47528940#s_62=8_9

⁵⁷ <u>https://docs.bosch-iot-suite.com/hub/</u>

⁵⁸ https://bundles.nl/

⁵⁹ https://internetofbusiness.com/bundles-laundry-iot-supply-chain/

⁶⁰ According to Forbes (<u>https://www.forbes.com/sites/tanyaprive/2012/10/12/top-10-benefits-of-</u>



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Dutch version of the company website 61 and Linkedin communication is almost only about investment 62 .

Probably in 2017⁶³, the founder Marcel Peters in the interview for the Cambridge Innovation Institute (Boston, USA) (website devoted to the internet of business news) alleged future ambitions of Bundles laundry business: "By the end of 2018 the Bundles software and services should be used in three cash flow positive businesses. By the end of 2020 Bundles will be the leading platform for subscriptions (from a consumer perspective) and the leading software provider for appliance subscription businesses."⁶⁴

In the first half of 2014 when this business has started, 15 washing machines were put into the market⁶⁵. In 2017, 650 appliances (except washing machines also dryers and dishwashers) have been installed in the households⁶⁶. According to the information from the web of Bundles, currently (April 2020) the company has more than 2500 subscribers. This information is available only if customer orders a subscription and it is the same for all the product categories except matrasses (there is no information of this kind).

In 2018, Bundles won an online orientation study (200 consumers participated) on washing machine lease (also BlueMovement was included). Bundles as the winner was found more often in comparison to the other participated companies during the orientation on the web⁶⁷. Information at the web Smart City Embassy⁶⁸ states that Bundles demonstrates its operations in Miele Experience Center in Vianen, Netherlands⁶⁹.

When ordering product, the customer can apply also a discount code. There is no information about the deals campaign on the web. However, when googling, the information can be found that in May 2020, 3 coupons sparing together about 35% of price are available with Kortings coupons codes⁷⁰. Bundles probably offers also newsletter subscription discount – information is available with Coupon-Kortingscode.nl – but the link to the website (instructions) does not lead to the Bundles web and newsletter subscription⁷¹.

Marketing communication was rather intensive at the start of the company and is still presented as one example of good practice within the circular economy approach (in EU documents, scientific papers and articles, books). In addition, partnership with the Dutch governmental and non-governmental initiatives, probably to some extent, helps to promote business of Bundles. However, information that Bundles publishes on the web are very confusing – when reading both language versions as they are rather different.

Bundles has placed advertising button on the website⁷² Verbouwkosten.com within the article the article compares costs, benefits and disadvantages of renting and purchasing washing machines. This is a website that targets people who want to renovate their homes. Website

⁷² https://www.verbouwkosten.com/wasmachine-huren-leasen/



⁶¹ https://bundles.nl/bundlesinvest

⁶² https://www.linkedin.com/company/bundles/

⁶³ there is no date available on the page with the interview

⁶⁴ https://internetofbusiness.com/bundles-laundry-iot-supply-chain/

⁶⁵ <u>https://www.fastcompany.com/3029726/the-newest-piece-of-the-sharing-economy-a-subscription-service-for-washing-machines</u>

⁶⁶ <u>https://internetofbusiness.com/bundles-laundry-iot-supply-chain/</u>

⁶⁷ <u>https://www.wuaglobal.com/sparks/bundles-nl-wins-online-orientation-study-on-washing-machine-lease/</u>

⁶⁸ Founders of Smart City Embassy are Amsterdam Smart City, independent network of more than 500 members worldwide for the intelligent, sustainable and social mobility Connekt (<u>https://www.connekt.nl/over-connekt/</u>) and Dutch Ministry of Infrastructure and Water

⁶⁹ <u>http://www.smartcityembassy.nl/initiative/circular-washing/</u>

⁷⁰ https://www.kortingscouponcodes.nl/kortingscodes-bundles

⁷¹ <u>http://www.coupon-kortingscode.nl/coupon/bundles-nl-nieuwsbrief-aanbieding/</u>

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offers many advices, reviews and information for the renovators that could help them to save costs⁷³.

1.2.3.1.2 Homie

Homie⁷⁴ is the second Dutch provider of pay per wash business model, nevertheless the only one in its pure form (as the main competitor – the other Dutch company Bundles that presents itself as the pay-per use/wash service applies a combination of renting and paying per wash. Homie is a spin-off of the Technical University Delft, one of several start-ups and innovative enterprises, which are supported and promoted by this University under "Delft Enterprises" initiative⁷⁵.

Homie clearly communicates that its business is a form of testing the viability and also sustainability of this circular economy approach to fulfill consumer needs. Customers do not pay simply "for a wash" but for a washing with some concrete temperature – from 20° to 90 °C and this is the way how they can contribute to the environmental sustainability and to spare costs for washing. Thus, the main aims of this company is –besides the profitability – to design circular economy business and so promotes circular economy ideology.

Very little information about the development of the business could be found as being published and freely available. Yet, Homie did market expansion (from only few localities to the whole Netherlands) and the recruitments of new employees (e.g. logistics manager in February 2020⁷⁶).

Probably well-managed internet marketing communication (besides other capabilities) helps Homie to go on with the business. Several of recommended internet marketing activities are realized. First, social media support (e.g. from the impact marketing agency Rainbow Collection that helps Homie with the content marketing)⁷⁷, quality and quantity of backlinks (e.g. from TU Delft, ABN AMRO), title (or the name of the company), website structure and the rule 25:75 with the text-to-code ratio could be detected at least.

1.2.3.1.3 BlueMovement

BlueMovement⁷⁸ is the pilot project of Bosch (BSH - Bosch-SiemensHaushaltgeräten, former BSH Bosch und Siemens Hausgeräte GmbH, now BSH Hausgeräte GmbH) testing the market acceptance of the digital product as a service with the IoT function⁷⁹. Company divides the offer of washing machines into 3 categories: Basic, Classic and Premium and differentiates the offer with the status/quality of washing machine, auto dose and detergent in the package.

There is almost no information available in 2020 about this initiative except active web for renting the washing machine and only very scarce information about the novelty of such an approach of renting very energy efficient washing machine instead of buying, collecting, refurbishing, giving the second life, using spare parts and recycling and reusing of discarded

⁷⁹ <u>https://www.welt.de/wirtschaft/article191771353/Waschmaschinen-Bosch-Siemens-Hausgeraete-leidet-unter-</u> Chinas-Schwaeche.html



⁷³ https://www.verbouwkosten.com/over/

⁷⁴ <u>https://www.homiepayperuse.com/</u>

⁷⁵ <u>http://www.delftenterprises.nl/wat-we-doen/</u>

⁷⁶ https://www.indeed.nl/Logistiek-vacatures-in-Delft?advn=2923299149664622&vjk=7872a6322bd084c3

⁷⁷https://www.facebook.com/RainbowcollectionNL/photos/a.586211904745418/2995618347138083/?type=3&the ater

⁷⁸ https://www.bluemovement.nl/



products by Bosch as a way to circular economy.^{80,81} The last reference should be given attention to from another point, specifically for marketing strategy. BlueMovement is extremely poorly communicated to the target customers and if it is, so in rather an ineffective way. The aforementioned reference is an interview in the magazine Corporatiegids published by the company CorporatieMedia which aim is to help housing companies to run their business. The design of BlueMovement web is more appropriate for the final consumer than B2B customers. Another example of communication is an article in the newspaper Het Parool, the daily newspaper distributed in Amsterdam. In this article, BluMovement is presented as the option to rent washing machine instead of buying and Bundles just a line below as the option to rent coffee machine⁸².

1.2.3.2 Indirect competitors

There are many companies offering renting of washing machines in the Netherlands. Some of them offer the services across whole country, some only locally or regionally (e.g. huurwachsmachine.nl⁸³ which offers only three brands and prices for months starting at €9.99 with one-time installation and administration costs of €29.90 and minimum duration of contract for 6 months. Repair and delivery is free. In Amsterdam, Groningen and Leuwarden there is for instance company Wassautomatenverhuur.nl offering 13 different brands and quality of WMs with prices ranging from €11/month to €22/month in case of 4 and 5 years contract (based on the quality and other features of the washing machines) or in case of a 1-year contract from €15.27 to €27⁸⁴. The company promises to repair washing machines within 3 working days across whole Netherlands.

Witgoedverhuur.nl offers renting from $\pounds 11.50$ /month for 4 years' contract or for the same simplest WM for $\pounds 16$ /month in case of 1-year contract, $\pounds 23.50$ /month for 1-year contract in case of the most expensive WM from Samsung. Time to repair is 3-4 days and company charges $\pounds 25$ for administration costs. Minimum contract duration is 12 months. It is possible to buy an aquastop for $\pounds 15^{85}$.

MediaMarkt, already presented in the Austrian market also offers leasing (not renting) in the Netherlands. With 49 shops (also 50 shops are reported with the other information) it is very big player at the Dutch market (the ninth position among all categories of products in 2018 for all types of retailers – both brick and mortar and online⁸⁶) and its prices - together with CoolBlue (see further) also creates so called "reference price" for the market. The overall costs are rather high. For instance, in case of the cheapest 8 kg washing machine, energy class A+++ with the price for sale €299, the total price in case of leasing is €395.82 – after 54 months long contract, interest rate or annual percentage rate is 13.5% and monthly payment is €7.33 with free delivery and collection of an old device⁸⁷. Free delivery is only during working days, on Saturdays and Sundays the fee is $€20^{88}$. There is no information about other services with washing machines available.

⁸⁸ https://klantenservice.mediamarkt.nl/app/answers/detail/a id/9018/c/2238



⁸⁰ <u>https://assets.bosch.com/media/global/sustainability/reporting_and_data/2018/bosch-nachhaltigkeitsbericht-</u> 2018-spotlights.pdf

⁸¹https://www.corporatiegids.nl/nl/nieuws/ren_van_de_keuken_bsh_transitie_naar_duurzaam_wonen_versnellen -3852

⁸² https://www.parool.nl/nieuws/waarom-nog-kopen-huur-gewoon-een-bed-en-bank~bf5c6f88/

⁸³ https://www.huurwasmachine.nl/over-ons/

⁸⁴ https://www.wasmachinehurenamsterdam.nl/wasmachine-huren

⁸⁵ <u>https://witgoedverhuur.nl/producten/wasmachine-huren/</u>

⁸⁶ <u>https://www.retail-index.com/Countries/ToprankingretailersintheNetherlands.aspx</u>

⁸⁷ https://www.mediamarkt.nl/nl/product/_sharp-esgfb8143w3bx-1517026.html



CoolBlue (one of the biggest Dutch retailer with electronics⁸⁹) offers currently 10 washing machines for rent from \pounds 14.99 per month to \pounds 25.99 per months (washing machines from 7 to 10 kg, all energy class A+++). CoolBlue requires at least 1-year contract, delivery and moving is free. One-off costs of \pounds 49 must be paid before the delivery. After 1-year service it can be cancelled free of charge. If product is broken, it is promised to be replaced within 48 hours. Installation should be paid for \pounds 19.95. In addition, a special Service Package for 5-years guarantee could be purchased for \pounds 89 or \pounds 134.90 for more expensive products. Free repair is only for 2 years guarantee, if the Service Package is not purchased. However, the call-off costs and research costs must be paid also with the 1-year contract and/or 2-years guarantee, but not with the Service Package⁹⁰. Customer rating is either very bad⁹¹ or average⁹² for this company especially when any problems must be solved.

In the following text, only 6 companies are presented (together with the detailed analysis of their offer and marketing). These 6 companies present an overview of the most typical characteristics of the Dutch market with washing machine renting. A detailed analysis of the comparative study of the indirect competitors is reported in **Chyba! Nenalezen zdroj odkazů.**, Table 7.

One of the 6 companies offers also possibility not to rent washing machine but to pay according the use. Because no concrete information about the payment and related conditions are presented and so no comparison can be made within the group of direct competitors, company is included into the indirect competitors. Another reason is that the information about this approach is rather hidden to the customer.

1.2.3.2.1 Dixons

Dixon⁹³ is an e-shop specialized only in renting various product categories. Before it was the retail chain selling products in bricks and mortar shops⁹⁴. According the information from consumentenbond.nl from 2016, in 2015 Dixons went bankrupt but made a restart under new owner Phone House. Rates are considered rather high making customers pay 2 to 3 times the purchase price of the product over the entire term of the contract⁹⁵. Reviews in trustpilot.nl from the period before bankrupt are extremely bad⁹⁶ (there are no available reviews related to its new business model). Dixons offers products and realizes all accompanied services except subscription. This is done with the partner of Dixons, company Elbuco (with many years of experience with leasing the products). This fact is introduced in the terms of contracts.

1.2.3.2.2 Skala.nl

Skala.nl⁹⁷ was founded in 1973 as one of the first rental shops in Netherlands. It offers household and electronic appliances for both end consumers and business customers as for instance housing associations and care institutions. Skala.nl is a part of company Elbuco, B.V. together with another company – SmartStudentDeals (see below)⁹⁸. Except offering discounts and reviews on various websites, almost nothing is published about this company. However, they

⁹⁸ https://www.skala.nl/zakelijk-huren



⁸⁹ https://ecommercenews.eu/companies/coolblue/

⁹⁰ https://www.coolblue.nl/product/768183/lg-fh4j5tn8-direct-drive.html#1847928159

⁹¹ <u>https://www.ervaringen.nl/coolblue.nl</u>

⁹² https://www.kieskeurig.nl/winkels/coolblue.nl/reviews

⁹³ <u>https://www.dixons.nl/wasmachines</u>

⁹⁴ https://retailtrends.nl/item/51781/de-kansen-van-lease-en-waarom-dixons-het-anders-gaat-doen

⁹⁵ https://www.consumentenbond.nl/tv/huren-bij-het-nieuwe-dixons-bijzonder-duur

⁹⁶ <u>https://nl.trustpilot.com/review/www.dixons.nl</u>

⁹⁷ https://www.skala.nl



work intensively on their mobile e-commerce and have hired an agency for this process.⁹⁹ The company is very passive on social media, e.g. in Facebook the last information is from November 2019. Elbuco B.V. is a Dutch company that facilitates, finance and provide services and maintenance within leasing business for more than 45 years in the Netherlands and Belgium¹⁰⁰. Atag Benelux cooperates with Elbuco B.V. in Netherlands – according to the information available Elbuco B.V. belongs to the dealers of Atag¹⁰¹.

1.2.3.2.3 SmartStudentDeals

As introduced above, SmartStudentDeals¹⁰² offers the same products and services as Skala.nl; the only difference is that this company is focused solely on students living in student houses. It is also very difficult to find more information about this company. However, apart from renting it also does some market research and research focused on cleanliness (and washing habits of Dutch students¹⁰³. More information is available within the blog of SmartStudentDeals and according to the survey (1000 students as respondents), it is the Dutch female student who washes substantially more often in comparison to the Dutch male student (93.7% of female students wash regularly, while 1 of three male students never)¹⁰⁴.

1.2.3.2.4 Splash lease

Splash lease¹⁰⁵ is another Dutch leasing and renting company that focuses mostly on students and partly also on rental of washing machines, fridges and other appliances to housing agencies, communes, and student residences companies with about 30 years long history. This information is not clear from the first page of website, when only the students living in student houses are targeted. The company presents itself as offering the affordable renting of white goods for students across whole Netherlands and promises no worries with the costs of repair and failures and deliveries, so the students can concentrate on studying and relax.

1.2.3.2.5 VerhuurWhitgoed

VerhuurWhitgoed¹⁰⁶ is also a company targeting primarily students, being active on the market more than 30 years. Company claims that it has the cheapest price of renting white goods¹⁰⁷. VerhuurWhitgoed is also offering pay according to use¹⁰⁸ (as Pay4use in the main menu on the front page). The arguments for this service is the lower intensity of washing (for a while) or offering economically washing for the hotel guests if they stay for longer time. What is not very clear is if this service is offered both to the B2B and to final consumer.

If customers choose this option, they receive a tablet with a pre-installed software package upon delivery. Payments before wash could be easily made through the program in the tablet. After the payment, the device (washing machine or dryer) is automatically unlocked and washing can be done. Program also offers to create an account for repeated use to which the user can deposit credit. In this case, the price is lower. Unfortunately, no concrete information is available and in case of interest the customer has to call or write an email.

¹⁰⁸ https://www.verhuurwitgoed.nl/betalen-naar-gebruik



⁹⁹ https://www.happyidiots.nl/blog/een-mobile-adwords-strategie-voor-2015

¹⁰⁰ https://www.elbuco.nl/over-ons/

¹⁰¹ <u>https://www.atag.nl/store/Dealer1Pos389/details</u>

¹⁰² https://www.smartstudentdeals.nl/witgoed/wasmachines

¹⁰³ https://mannennieuws.nl/persbericht-vrouwen-was-nederlandse-man/

¹⁰⁴ https://www.smartstudentdeals.nl/blog/post/man-verschoont-bed-vaker-dan-vrouw.html

¹⁰⁵ <u>https://www.splash.nl/student/?lang=E</u>

¹⁰⁶ <u>https://www.verhuurwitgoed.nl/home</u>

¹⁰⁷ <u>https://www.verhuurwitgoed.nl/home</u>



1.2.3.2.6 Wasgoed.com

Last company from the list targeted at students and offering services in several cities and towns across the Netherlands. There is also another segment – expats - to whom the company offers renting. On the front page, it states that only in Leeuwarden, but in reality also in Amsterdam¹⁰⁹. Both prices and offer differentiate for these two segments to some extent. Nevertheless, it is very difficult to state precisely the costs for services as the information differ substantially in the Dutch and in the English version of web. Company also states it provides services to the self-employed persons and small and middle-sized business¹¹⁰. Information about segment of expats and segment of the entrepreneurs is given only in Dutch and not in English, what is quite surprising in case of expats¹¹¹. Wasgoed.com is also a dealer for Atag Benelux¹¹².

1.2.3.3 Analysis of laundromats prices

Laundromats in Netherland are concentrated in the biggest cities and only very rarely in some other areas. Prices start from €4.50/per washing machine of 6.5kg capacity + €0.50 for detergent¹¹³ or **€5** for 7 kg capacity + **€0.60** for detergent or washing powder and **€0.40** for softener¹¹⁴, in Amsterdam also for **€5.50** for 6 kg capacity washing machine + **€0.60** for detergent¹¹⁵.

1.2.3.4 *Prices of washing machines*

Prices for washing machines frontloaded, energy class A+++ and 7-8 kg capacity start from €299 for 7 kg capacity machine¹¹⁶and from €279 for 8 kg capacity (brand Proline which according the UKwhitgoods.uk does not exist anymore¹¹⁷)¹¹⁸ and €299,99 for 8 kg machine for Sharp brand¹¹⁹. The most expensive washing machine is about €1995 (Spirit)¹²⁰.

Asko cheapest washing machine (8 kg, energy class A+++) is from €999¹²¹ and the most expensive with the same capacity and energy class is for €1299¹²².

Dutch market also offers more A+++ (-10 and 30%) washing machines than it is in other three markets.

1.2.4. Slovenia

For Slovenia it was not possible to find any information about renting of washing machines. However, renting of other types of products is quite common.

 ¹²¹ <u>https://www.kieskeurig.nl/wasmachine/product/3691172-asko-classic-w2086cw-wasmachine/prijzen</u>
 ¹²² <u>https://www.kieskeurig.nl/wasmachine/product/3956892-asko-logic-w4086cs-wasmachine/prijzen</u>



¹⁰⁹ https://en.wasgoed.com/city-amsterdam/expat

¹¹⁰ <u>https://www.wasgoed.com/</u>

¹¹¹ <u>https://en.wasgoed.com/</u>

¹¹² https://www.atag.nl/store/Dealer1Pos1967/details

¹¹³ <u>https://www.handywash.nl/</u>

¹¹⁴ <u>http://www.wasserij-stomerijkepil.nl/voorbeeld-pagina/</u>

¹¹⁵ <u>http://www.elanwashomatic.com/</u>

¹¹⁶ <u>https://www.coolblue.nl/wasmachines/vulgewicht:7-7.999,8-8.999/energieklasse:a+++-50,a+++-40,a+++-</u>

^{30,}a+++-20,a+++-10,a+++/type-wasmachine:voorlader?sorteren=laagste-prijs&pagina=1

¹¹⁷ <u>https://www.ukwhitegoods.co.uk/help/about-the-appliance-industry/manufacturer-information/2782-proline-domestic-appliances</u>

¹¹⁸ <u>https://www.bol.com/nl/l/wasmachines/N/11064/filter N/11128+11127/?sort=price0&rating=all</u>

¹¹⁹ <u>https://www.mediamarkt.nl/nl/product/_sharp-esgfb8143w3bx-1517026.html</u>

¹²⁰<u>https://www.bol.com/nl/s/?page=1&searchtext=wasmachine&view=list&filter_N=11128+36176&sort=price1&rating=all</u>



Classic trekking bikes renting prices range from ≤ 10 /half day, ≤ 15 full day to ≤ 100 /week¹²³, renting of sports equipment is offered for instance by the retailer Hervis¹²⁴ (prices for skis for 1 day range from $\leq 11,99$, for the whole season from $\leq 59,99$; prices for electric bike from $\leq 24,99$ for 1 day and $\leq 49,99$ for 3-days weekend).

In case of students, the prices for student dormitories range between €80 – €160 in Ljubljana, €100 – €170 in Maribor, and around €100 in Primorska. The rent for residential apartments with double bedrooms cost between €100 – €130 in Ljubljana, €90 – €120 in Maribor and €100 – €150 in Primorska. Single bedroom flats could be rented for €120 – €160 in Ljubljana, €120 – €150 in Maribor and €140 – €180 in Primorska¹²⁵. Prices for apartments (whole) cost from app. €300 - 350^{126 127}.

1.2.4.1 Analysis of laundromats prices

There are both chains (international, e.g. Speed Queen) and independent providers of the laundromats across the country with the highest number in Ljubljana and on the coast, nevertheless they are present in every bigger town. The average price is ≤ 4 (high quality Italian detergent included) for 9 kg capacity washing machines.

1.2.4.2 Prices of washing machines

Prices for washing machines in the comparable category of energy class A+++, frontloaded and capacity 8 kg range from €377.90 for the brand Candy¹²⁸, and the most expensive of the same capacity and energy class is for €1009 for the brand Bosch¹²⁹. The lowest price for Gorenje brand (same energy class and capacity) is from €399.90 and the price range finishes with €599.90¹³⁰.

1.2.5. Learnings from comparative study of competitors

As can be seen from the overview, the least developed (or even underdeveloped) market for the use and result oriented product service systems in case of washing machines (and other white goods) is Slovenia where no company has started yet both the service of renting and pay per use (wash, cycle). On the opposite, within the four analyzed markets the most developed (even probably mature) market for renting is the Netherlands, where only 2 existing companies offer the pay per use approach.

If we compare prices for self-service laundries and for the cheapest and most expensive washing machine (Table 1) (considering same capacity and energy class), there are no differences among markets for price per wash in laundries (the Austrian lowest price is for the local provider and for loyal customers). However, price range for washing machines show substantial differences.

¹²⁹ <u>https://www.merkur.si/aparati/bela-tehnika/pralni-stroji/?m_atribut_35%5B0%5D=A%2B%2B%2B}10%25&m_atribut_35%5B1%5D=A%2B%2B%2B&product_list_order=price</u>

^{10%25&}amp;m_atribut_35%5B1%5D=A%2B%2B%2B&m_atribut_489=POLNJENJE+SPREDAJ&manufacturer=GORENJE&product_list_order=price



¹²³ https://www.rentabike.si/prices

¹²⁴ https://www.hervis.si/store/najem sportne opreme

¹²⁵ <u>https://www.studyabroadguide.com/studying-in-slovenia/#Cost_of_Living_in_Slovenia</u>

¹²⁶http://realestate.si21.com/Realestate_offer/for_rent.k2/stanovanje.v1/garsonjera.t2/Slovenija.d194/p1.html?so rt=c&ord=desc

¹²⁷ https://www.nepremicnine.net/

¹²⁸https://www.ideo.si/pralni_stroji?cena=interval&cena_od=194.9&cena_do=1233.9&2%5B%5D=8&35=interval&3 5_od=6&35_do=13&34=interval&34_od=800&34_do=1600&36=interval&36_od=32.3&36_do=85&3=interval&3_o d=109&3_do=236&88=interval&88_od=5720&88_do=13200&328=interval&328_od=47&328_do=77&329=interval &329_od=58&329_do=85&sortiranje=cenejsi

¹³⁰ https://www.merkur.si/aparati/bela-tehnika/pralni-stroji/?m_atribut_35%5B0%5D=A%2B%2B%2B-

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The highest price from the category of the least expensive washing machines was found in Slovenia, while the cheapest price from this category was detected in Austria and the difference is more than €100. On the contrary, there are almost no differences between the prices in Denmark and Netherlands with a little more expensive prices in the Netherlands, with the bigger assortment of washing machines for high prices. In Netherlands there is also more intensive competition of retailers with washing machines. The lowest price form the category of the most expensive washing machines is again in Slovenia – and the opposite – the same as above again in Austria with the substantia difference between prices. The geographical proximity between countries even may lead to the question why Slovenians do not purchase low-end washing machines in Austria and Austrians do not purchase high-end prices in Slovenia. High prices in Austria are understandable on one side (bigger assortment) and on the other side surprising due to the more intensive competition.

In **Austria** where Asko brand is not present, **communication of Asko** must reflect the fact that it is a brand produced by Gorenje. In addition, prices for Gorenje in this market are rather low. Building image should be focused on the origin of Asko brand, knowledge and expertise and professional product as well as price charged for sale.

In the Danish and Dutch **markets** stress is on the fact that solid and professional and super high quality Asko washing machine is also for renting and/or pay per wash could work. Asko is positioned as premium brand already.

In **Slovenia** a combination of the Scandinavian origin, Gorenje production, premium brand, and high quality should be used to develop awareness and image.

Here only some deduction to Slovenian market about pay per wash are made, the rest will be discussed later on. Price for the self-service laundry, which is relatively frequent in Ljubljana, but also available across whole country, is ≤ 4 (with detergent and electricity and water consumption). The price for wash with the pay per wash approach should not be too much higher from this level (this means that for the average 3-4 washes per week, the costs for pay per wash should be charged with approx. $\leq 16 - 20$ per month), however the brand and service positioning together with the first-on-the market strategy can change this argument.

A brief overview of the prices of the self-service laundries, prices for washing machines sold by the retailers and also prices for the Asko and Gorenje washing machines in the four countries chosen for the demonstration is presented in the Table 1.

Country	Prices for self-service laundry*	Cheapest price of WM (A+++, 8 kg)	Most expensive of WM (A+++, 8 kg)	Asko/Gorenje WM price from – to (A+++, 8 kg)
Austria	€2** - €6	€239 - €277	€2789.00 (or €3499)	no/ for Gorenje €287.90 - €529
Denmark	€4.80 - €6	€299.90	€1743	€938 - €1434
Netherlands	€5 - €6.10	€299,99	€1995	€999 - €1299
Slovenia	€4	€377.90	€1009	no/for Gorenje €399.90 - €599.90

Table 1: Overview of prices for the self-service laundry and washing machines

*capacity is different and difficult to unify (from 6-9 kg)

**(with special card)





1.2.5.1 *Austria*

In **Austria** the prices for renting and leasing are from €15,90 (see Table 2). But what can influence the perception of renting and also pay per wash amount could be the cost of leasing which is to pay with the biggest Austrian retailer MediaMarkt, where the cheapest monthly amount is €21.08 and because this is currently (April-May 2020) communicated as a sales promotion due to the 30 years Anniversary of the market presence, probably the amount is even higher. Number of washing machine types to be leased is rather high with MediaMarkt, which means that the demand exists despite not very favourable conditions in comparison with Mieten statt Kaufen. We can only deduce that the reasons are probably in the very intensive communication of Media Markt, very strong presence and coverage, effective and efficient positioning and growing number of customer in Austria buying online^{131, 132}.

When taking into consideration the prices for renting and the prices for laundromats, the estimated price for renting the Asko washing machine could be about $\leq 18 - \leq 24$ /month or a combination of renting and paying for a wash - $\leq 10 - \leq 12$ /month and $\leq 0,75 - \leq 1,25$ for a wash or $\leq 1,5 - \leq 1,95$ only for a wash. In this case, some minimum number of washes should be "required".

Competitive time for repair is within 1-2 days. Length of contract is minimum 1 year as the standard one in Austria. It is very difficult to deal with the deposit as the MediaMarkt has very strict conditions for leasing. An interplay between deposit and other terms of contracts could lead to asking for some amount.

According to the interviews done with the retailers –members of the initiative Mieten statt Kaufen and manager of this initiative the demand for renting washing machine is growing. Sustainability is not very much stressed and communicated with renting of home appliances in Austria; it is more the way of how to satisfy the demand for the high quality and new appliances without the initial investment and of getting rid of taking care for repair as the main themes communicated in the market.

To promote access-based model, some basic free services should be in the package. Delivery, installation, and repair as it is in the Dutch market with the direct competitors can have positive perception. Discounts are very popular in Austrian market. Social media presence is very important and also reviews from customers. Consumers' rights and safety movement is quite strong in this country and consumers are aware of their rights. Consumers in Austria are used to the fact that Sunday is not working day. An English website could be an advantage as the "competitors" do not have ones and there are many foreigners in Austria speaking English (and not speaking German). Communication appeals should stress quality, convenience and sustainability/circularity.

¹³² https://www.expandeco.com/en/ecommerce-in-austria-part-1



¹³¹ https://www.statista.com/outlook/243/128/ecommerce/austria

Austria	Mieten statt Kaufen	R.U.S.Z	MediaMarkt
Rent per month	€15,90 - €32	€18*	€24.08/12 months contract - €129.08/12 months contract
Length of contract	66 months	1 year	12 or 20 months
Deposit	N/A	€350	no
		delivery and professional installation € 96	• delivery €34.90
			 delivery, installation and collection of old device €40
Extra fees	(installation; collection;		 delivery and installation, connection and configuration + collection of old device €80
	detergent)		"Smart protect" device protection for 5 years – from €55 to €210 (depends on the price of WM) (repair for material and production errors, free hotline for questions regarding processing and on-site service)
Discounts	no	20% ¹³³	many
Time for repair	promptly	3 WD**	N/A
	repair	repair	no
	replacement (NW***)	replacement	
Free products and		yearly control of the	
services	replacement for new (after 66 months)	use of WM and maintenance (could lead to the price reduction)	

Table 2: Comparative study of competitors in Austria

*monthly rent can be reduced if less than 4x/week washes

** WD = working days

*** NW = not working

1.2.5.2 Denmark

Based on the data in Table 3, the whole-country players are better for making some conclusions. As the costs for service are very high in Denmark, decision about the deposit, registration fee and minimum length of contract must be evaluated mutually. Registration fee is probably

¹³³ the socially disadvantaged people get a discount of 20 % on all services and products (Lechner and Reiman, 2015, p. 6)





standard practice. With time to repair Denmark may be the right country together with the Netherlands to test three models – Gold, Silver and Bronze (and different revenues).

Danish market is rather underdeveloped with renting washing machines, but the competition is very different (common to the Austrian market). It is also rather expensive market and with the presence of Asko brand as a traditional Scandinavian brand.

Based on the data and information from the comparison of competitors, following prices are suggested: if renting washing machine app. ≤ 25 may be charged. The combination of renting and pay per wash can go to app. ≤ 20 /month for renting plus app. $\leq 1,25$ to app. $\leq 1,75$ for a wash. If only pay per wash, app. $\leq 1,50$ to app. ≤ 2 may be accepted. Registration fee or deposit is possible to charge as well and fees for some extra services could be taken into the consideration.

Similar to the Austrian market, sustainability is not the appeal used by the companies. Price, costs and services should attract customers. Danish are mixed in their attitudes to sustainability. Traditionally as being Scandinavians, their attitude and behaviour is very positive but probably less than in Austria according to the percentage of consumers who say that sustainability impacts their buying decision¹³⁴. Costs and quality of services and Scandinavian brand (as mentioned above) could work as appeals in communication. Common to Austria, English language may attract foreign students and expats, as well as some Danish people. Social media presence and reviews can also help to create the competitive advantage. Discounts are probably also a standard.

Denmark	L'EASY	Køb & Lej Direkte	Jensen & Vestergaard	EL 99
Rent per month	€20 - € 43	€22.25 – €34.30	€16 – €134	from €27
Length of contract	6 months (?)	1 year	N/A	N/A
Deposit	N/A	N/A	N/A	N/A
Extra fees	delivery and installation €107 registration fee €66.40	registration fee €40	N/A	N/A
Discounts	Extra offer if club membership (?)	N/A	N/A	N/A
Time for repair	N/A	fast	N/A	fast
Free products and services	N/A	repair (?)	N/A	delivery

Table 3: Comparative study of competitors in Denmark

? – no clear information is available on the websites of companies

1.2.5.3 The Netherlands

Dutch market is to some extent ready for pay per wash without too intensive communication explaining this model. However, it is also the market with the most difficult situation for entering

¹³⁴ http://csr-raadgivning.dk/wp-content/uploads/2018/09/Sustainable-Brand-Index-Official-Report-2018-DK.pdf





due to very strong competition regarding renting washing machine, that has built up price reference on the very low level (see APPENDIXES

Table 4 and Table 5). Thus, if considering renting fees, they could be chargedslightly below or around $\in 20$. The combination of renting and pay per wash can go to app. $\in 12$ /month for renting plus app. $\in 1$ to app. $\in 1,75$ for a wash. If only pay per wash, app. $\in 1,50$ to app. $\in 2$ may be accepted. Common to Denmark a registration fee or deposit is possible to charge. However, the offer of free services the Dutch consumers are used to is high and so some extra services has to be thought through.

Costs, convenience, environment/sustainability, a Scandinavian brand, "professional quality", and IoT is the mix of appeals probably working in this market. Discounts or some sales promotion campaigns, reviews, very fast responses to questions, complaints are "a must". English should be a standard.



2. Environmental scanning and market analysis -Gorenje

The ambition related to the new circular business model for washing machines is in line with strategic aims of Gorenje in two areas: to help minimise the environmental impact of both Gorenje's production and products and to strengthen the Gorenje's position as an innovative and premium producer. In 2017, the revenue share of innovative products and premium brands reached nearly 30 per cent (Gorenje group, annual report, 2017). This chapter will first discuss the main facts, environmental forces and trends that will affect washing machine and laundry business in the four markets (Austria, Denmark, Netherlands and Slovenia)¹³⁵ that are relevant for the RECiPSS project. It further presents the results from the empirical survey realized in these countries.

2.1. External environment

ReCiPSS

As in other industries/markets, the competition in the washing machine (WM) market is tough. Besides traditional producers, the companies focusing on lower segments by low price strategy have strengthened their position by remarkable production quality improvement and as such they became relevant actors on the mid-range market for WM. In other words, the price/value ratio they offer is a clear order winner for potential customers.

In this situation, the smart households' equipment seems to be a promising segment: According to the GfK research (GfK, 2018), the market for smart washing machines (in Europe) was growing over-proportionally thanks to the connectivity factor, which enables a surcharge of 50 per cent compared to conventional products.

Smart appliances can provide additional value to their consumers in many ways – due to the sensors and the Internet connectivity new functions can be provided as well as new business models, which includes sharing or renting/leasing¹³⁶/pay-per-use. The alternative ownership models can appeal to heterogeneous consumer groups, with specific motivation and requirements.

Based on business experience, the consumers, in general, assess the renting and leasing by economic criteria in the first place. The purely altruistic motives are of lesser impact, despite what consumers sometimes claim. More realistic view on decision criteria (excluding the price) are as follows: environmental and health effect on consumer's family and consumer him/herself, direct economic effect (lower water and energy consumption), and the altruistic/societal effects as least important. The order of decision criteria may reflect the consumers' real understanding of the eco-products in general.

At the same time, it is risky to perceive consumers as a single homogenous group. For instance, the cross-cultural differences are apparent: In Europe alone, the business models need to take the fact into account that the ownership prevails dominantly in southern European countries as

¹³⁶ In this report both concepts – renting and leasing – are used due to the fact that the innovative business model of Gorenje with the pay per use (wash) solution can be a part of both approaches. According to the <u>www.businessdictionary</u>.com (<u>http://www.businessdictionary.com/article/1063/lease-vs-rent-d1412/</u>)</u> renting in comparison to leasing involves a shorter time period and a less formal agreement and is preferred by customers usually for the temporary needs.



¹³⁵ Data and information about the four markets freely available come from different sources and have different structure and character.

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apparent in high rates of houses/flats ownership compared to the north countries. Another difficulty related to consumer understanding: the consumer behaviour concerning washing machines is very different from other household equipment such as kitchen appliances and that knowledge cannot be applied in the context of washing machines mechanically.

The consumers who consider a washing machine renting/leasing instead of the ownership, expect more than just an access to the machine: the renting/leasing of a tangible product needs to be supplemented by some additional services for consumers. From the business point of view, such value-added service constitutes the order winners.

As customers change the washing machine on very special occasions only (such as fatal breakdowns, residence change, or during a complete upgrade of the kitchen/bathroom), their requirements on the product quality have increased; at the same time this means the higher demand for longer-lasting products (the average length of WM usage is around 10 years according to GFK study).

There is also a rationale behind that: the purchasing cost makes smaller part of total cost of ownership for the consumer, so higher purchasing (forefront cost) are compensated by lower operating cost in the future (Saccani et al., 2017). The longer product life should be accompanied by longer warranties.

The focus on longer lasting WM makes sense also from the technical side: In this case, the production costs are higher by approx. 70 %, but the duration of use is extended by (far) more than 70%.

The aspects outlined above raise the question of product remanufacturing as a viable strategy.

Remanufacturing (and other reprocessing options) will probably play a more important role shortly because of the raw material scarcity, which is and which will further be reflected in increasing prices. The implementation of remanufacturing into the production represents a complex change, as it relates to diverse aspects of business processes and relationships. It includes among others:

- Technical aspects (adjustments to product design, redesign of reverse logistics/closing the loop in supply chain...),
- Legislation issues (diverse approach to waste across countries, technical requirements/norms e.g. to sell products in 90 countries, Gorenje needs the approx. 200 certificates now).
- Consumer perception: remanufacturing raises concerns for user safety of the used/remanufactured product. Product exterior cannot be demerged on visible parts (scratches...) or be smelly (which indicates cleanness in consumers' perception).

At the same time, some technical burdens for remanufacturing and for renting/leasing business models are eased by recent ICT technology advances (wireless sensors, the blockchain,...).

Competition and renting/leasing and pay per use models

The four markets in which the demonstration of the new PSS model will be implemented are very different in terms of the market development and/or a "product life cycle" when talking about renting/leasing as such and pay per wash (pay per use, or access-based models).

The most mature market with both models (renting/leasing-based or fixed fee model without pay per wash and a purely pay per wash model) is the Netherlands. Three start-ups offering one or both of these models serve the market and one big retailer with brick-and-mortar shop and



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e-shop offers solely leasing (probably more retailers do the same). These companies differ in many aspects. The first company in the market (established in 2014) - Bundles - with both the pay per wash model and renting/leasing/fixed fee is substantially supported by Miele company (the washing machines are Miele) and by an accelerator programme funding. Bundles offer its products across the whole Netherlands. Two other start-up companies were established both in 2017. Bluemovement is supported by Bosch GmbH and (so Bosch washing machines are serviced). Homie is a spinoff of the TU Delft and works with Zanussi brand. CoolBlue is a big retailer. In addition to the differences in founders and supporters or owners, year of beginning the business, market coverage, and brands they work with, these companies also differ in their product range. Homie has only 1 type of washing machine and solely offers a pay per wash model, while Bundles provides 2 types of washing machines with two types of product/services packages. The premium washing machine (Premium) is offered only with an auto-dose and includes detergent. A basic machine (Basic) is provided without auto-dose and detergent. Both machines are offered as fixed fee or a combination of fixed fee and pay per wash. BlueMovement offers 3 types of washing machines, however only leasing and no pay per wash model. In their subscription-based models, CoolBlue offers only leasing and 2 types of washing machines. Companies have very different systems of deposits, times for contract and conditions for deposit return and of course in other payments. For instance, Homie does not require any monthly fees (and probably even no deposit, but this information is not available at their webpage which is the only channel for the entry information), while the competitor Bundles requires monthly fees also in the case of pay per wash. Bundles offers a discount price if customers rent 2 or more appliances. BlueMovement enables to use discount coupons and also up to 35 euro cashback via https://www.cashbackxl.nl. Differences are also in delivery times. Bundles communicates in Dutch, English and German, Homie in Dutch and English, while BlueMovement only in Dutch, CoolBlue Dutch and English. To give a little bit broader picture regards the market position of the start-ups (CoolBlue is not evaluated), numbers of Facebook followers and likes are introduced (30th April 2019): Bundles - 2652 likes and 2699 followers, BlueMovement - 2652 likes and 2699 followers and Homie – 145 likes and 150 followers.

Austrian and Danish markets are rather well developed in case of subscription (renting/leasing) of home appliances (washing machines included) – many retailers or special service organizations offer this possibility. No business with pay per wash (or use) was detected. The least mature market is Slovenia.

Even though the French market is not involved in ReCiPSS project, one case is relevant. Company Lokéo, established already in 2009 is the leading player with very broad product portfolio which business is only in renting home appliances and other products. They have 59 different types of several different brands of the washing machine in their offer. However, no pay per wash model is offered.

2.1.1. Austria

GOVERNMENT

There has been a living public discussion about circular economy issues in Austria under the umbrella term of Kreislaufwirtschaft for many years, yet the term of the circular economy is a present in the discourse too. An overview of successful Austrian projects was summarised in 2016's document: Regionale Kreislaufwirtschaft - Inputpapier für die Implementierung von RESET2020 (RepaNet, 2016), which suggested several circular model solutions that could be applied on regional level by different actors: for the enterprises the most promising approaches included the slowing down of product loops, cascading principle, renting and repairing among others.





Generally, the Austrians position in circulatory initiatives and achievements is very good. In a recent ranking of the EU-countries, Austria took a 9-th position in countries circularity, but with mixed results – whereas it excels in food waste, recycling and trading of recyclable raw materials, it is behind the EU average in private investment into circularity and in patents (Hervey, 2018).

Austria belongs to countries that applied the pay as you throw the system (usage-pricing; payment for the waste according to its weight). Such a system is running in 17 EU-countries, but in three of them only it is applied in all municipalities and Austria belongs to them (Circular Future (n.d.). The EU's 2020 municipal waste recycling target has been already reached (European Commision, 2019), which confirm good position of the country in terms of waste management and recycling also due to government initiatives such as imposing the Austrian Recycled Construction Materials Regulation and starting the waste prevention program (Bundes-Abfallwirtschaftsplan) (European Commision, 2017).

According to The Environmental Implementation Review, Austria focuses on reuse activities in its transition towards a circular economy. In 2018 also an Austria's Circular Futures Platform was launched.

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In the Austrian economy, the proportion of secondary raw materials in processed materials amount to 8.5% and the share of recycled materials in interim outputs made 16.8% (Jacobi et al., 2018). Some facts suggest that the waste separation is not enough for circular economy transition: out of the material pre-processed by industry, 9 per cent is recycled, the rest 91 per cent are virgin materials. The environment is encumbered with 10 tons of waste per person per year. The recycling is based on rather simple technologies (Initiative Wachstum im Wandel, 2019).

The Eurostat data for Computer and personal and household goods repair suggest that repair activities are less frequent than in Austria compared to other EU-countries (it should be noted. However, that the economic impact of repair activities is marginal even in the states that dominate in this statistic – in Croatia or in the Czech Republic it makes 0.3 % of economic value added without financial sector) (Eurostat, 2018).

On the other hand, Austria is a front-runner when it comes to product reuse – Austrian government-supported network is well developed and offers a second-hand product of high-quality (European Environment Agency, 2017).

CUSTOMERS – smart home and washing

The Austrians belong to the IoT fans: in 2016 surveyed GfK market research agency, Austria ranked on 14-th position worldwide in so-called the Connected consumer index. This index measures the extent to which the consumers are connected to the Internet through various appliances. The extent of smart home appliances in Austria is eight times greater than the global average and three times than the West Europe average (GfK, 2018).

Austrians' attitude to a smart home is positive (52 % compared to 14.6% of negative responses); however, it does not mean the positive perception is shared among all groups equally. Males and the younger generation are more positive about smart homes. In terms of smart product risks, the consumers are afraid of the collection of private data and hackers' attacks.

When it comes to washing machines, the findings are a bit contradictory: Out of 15 product groups listed in the consumer survey, the smart washing machine took the fourth position among the most frequently used smart products (after TV, motion sensors, and smoke sensor) (Marktmeinungmensch, 2017). However, when being asked about smart product purchase





intention (during the next three years), the washing machine took 13th position only with 5.8 % consumers intending the purchase.

The average lifespan of a washing machine in Austrian household is 8.3 years, but it has a decreasing tendency, as the span was 11.9 in a survey conducted four years earlier. Speaking about consumers' view on home appliances lifespan/durability in general, the satisfaction prevails (45 per cent against 30 per cent of unsatisfied) (Wieser and Tröger, 2015).

The market research also indicates a higher preference of Austrians towards larger-capacity appliances (although the most common ones are medium-sized washing machines with a capacity of 6.0-8 kg (Euromonitor, 2019a). The price per wash is decreasing as a result of cheaper laundry care products (due to private labels and frequent sales promotions) (Euromonitor, 2019b).

In a typical Austrian household, the washing is males' responsibility (Nielsen, 2017). Even if women see washing in a more positive light than men, it is not an entertaining activity for any gender (Marktmeinungmensch, 2018).

Preferences of washing machines features and functions are depicted in the following Figure 2 (Euromonitor International Analyst Pulse Survey, 2015).

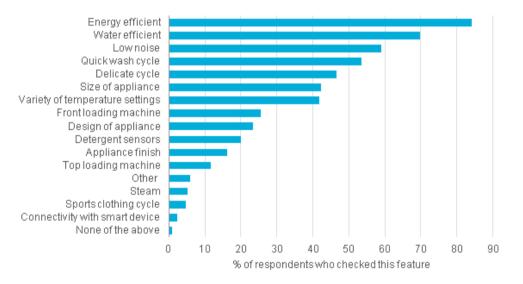


Figure 2: Preferences of washing machines features and functions

2.1.2. Denmark

GOVERNMENT

Danish government initiatives toward a circular economy

To accelerates the transition towards the circular economy last year Danish government launched the new strategy, which follows the recommendations (formulated in four main areas: the circular value chain, design, and production, consumption and recycling) of the government's Advisory Board on circular economy (State of Green, 2019). To help companies to accelerate their circular progress, the Danish government has set aside **EUR 16 million with six focus areas and 15 initiatives** (e.g., strengthen the companies as the motivating force for the circular transition; support the circular economy through data and digitalisation; enhance the circular economy through design; change consumption patterns through circular economy;



create a well-functioning market for waste and reused goods; generate more value from buildings and biomass) (Food nation, 2019; MFVM, 2019).

All those initiatives have stemmed from results of case study on Denmark, conducted by the Ellen MacArthur Foundation, which showed that introducing the circular economic principles to the Danish economy would:

- Increase GDP by 0.8 1.4 %
- Reduce consumption of selected resources by up to 50 %
- Reduce the Danish carbon footprint by 3-7 %
- Create 7 000 13 000 jobs by 2035

Moreover, according to DAKOFA¹³⁷ (2019) more and more companies are becoming aware of the significant growth opportunities in the circular economy. Danish companies are developing pioneering circular economy solutions that benefit the environment, climate and economy. In 2015, Denmark was even awarded the World Economic Forum's Young Global Leaders award 'The Circulars' for being a global front-runner in exploiting the potential for a circular economy (Copcap, 2015).

All these initiatives indicate that there is huge potential for companies to implement a circular business model

Danish government and digitalization

According to Digital Economy and Society Index (DESI) Denmark continues to occupy the position as EU's most digital country. Since Denmark government is aware of the huge potential of the tech ecosystem, in 2018 it allocated 134 million EUR to initiatives running until 2025 as a part of a new "Digital Growth Strategy." The strategy contains 38 concrete initiatives, which aim to secure and enhance Denmark's position as an attractive digital hub by providing a boost to the Danish tech ecosystem and improve conditions for businesses to be able to utilize the full benefits of new technologies. In this context, Brian Mikkelsen (Danish Minister of Industry, Business and Financial Affairs) states that: "The government wants Denmark as a digital frontrunner, where all Danes get a share of the benefits of digitalization. The new technologies can make us richer as a nation and has the potential to improve our environment, healthcare, and lives in many ways. We have to utilize that opportunity and bring Denmark into the digital future." (Christensen, 2018a; Christensen, 2018b).

As regards comparison with 2017, Denmark has experienced a growth in the percentage of ICT specialists and Denmark continues to be on the forefront when it comes to the use of technology by businesses. Danish businesses are increasingly embracing digital technologies, such as cloud computing (38%) and social media (29%) (Christensen, 2018).

In the context of the **circular economy**, researchers at DTU¹³⁸ have developed a new digital tool that can help manufacturing companies in their transition to a circular economy. This tool is targeted at manufacturing firms from all industries without a difference in size. Thanks to sharing strengths and opportunities and benchmark against other companies from the same or other industries, Danish companies may be able to optimize their circular economy initiatives and thus better utilize their raw materials or residual products (Frederiksen, 2018). To digitally enhance SMEs, Danish EPA has launched a website to help small- and medium-sized companies

¹³⁸ Technical University of Denmark



¹³⁷ Waste and Resource Network Denmark



to participate in the circular economy. It is supposed to provide information on greener production and how this can be used in marketing a business (CW Research, 2019).

ECONOMY

Danish economy and future forecast

Denmark has a prosperous economy, which stems from economic results. In 2018, the country recorded a GDP growth of 2% according to IMF estimates, with forecasts of 1.9% and 1.8% for 2019 and 2020, respectively. The national Ministry of Finance and FocusEconomics analysts are however slightly more conservative and expect growth of 1.7% in 2019, which is down 0.1 percentage points from last month's forecast, and 1.6% in 2020 (FocusEconomics, 2019; Nordea, 2019).

Although, it is expected that in total the economy should strengthen this year - driven by stillsolid domestic demand amid a tight labour market and robust wage gains, uncertainty regarding this year's election can pose big risks. According to the latest polls suggest the Social Democrats—headed by Mette Frederiksen—hold a commanding lead ahead of general elections which must be held by 17 June, and the centre-left bloc is on course for a parliamentary majority. A centre-left victory is unlikely to change the current prudent fiscal stance significantly and will likely have a minimal impact on growth prospects this year (FocusEconomics, 2019).

Danish business scene

According to the World Competitive Yearbook 2018, Denmark ranks 6th in the top most competitive business nations and is considered to be one of the greenest countries in the world. This is confirmed by the latest moves on the Danish business scene also reveal another key strength: the eagerness of local start-ups to embrace **the circular economy model**. Moreover, apart from public recycling programs, the preference for a waste-free future can also be seen in recent business practices (Young Upstarts, 2019).

In 2017, the Danish Environmental Protection Agency conducted a survey and based on responses from 610 small and medium-sized companies state that:

- 9 out of 10 small and medium-sized companies think the circular economy is beneficial and want to be part of the change.
- 56% of the companies are already focusing on reducing their use of raw materials and the production of waste.
- 88% of companies have a positive attitude towards a circular economy.
- 51% of the companies feel that their knowledge of a circular economy is inadequate.
- 53% believe that there is business potential in a circular economy (State of Green, 2017).

Danish market with washing machines

Since the Danish housing market continues to prosper and increase between 2017 and 2018 by 0.6 %, the market with washing machines is also growing. Thanks to this the home laundry appliances have become the particularly competitive category in Denmark. Moreover, between two main factors influencing purchasing decisions in 2018 belong price and energy efficiency.

Since Denmark put a lot of attention to new technologies, it is not surprising that connected home laundry appliances have started to become a topic of conversation in 2018. Moreover, the results of Euromonitor's survey show that more than half of the respondents knew about the connectivity features between washing machines and smartphones. This suggests a clear increase compared to 2017, especially among older age groups (Euromonitor, 2019).

Denmark's washing machine competitors:





The majority position is held by **Samsung**, who belongs between the first movers implementing the latest technological advancements in home laundry appliances. They recently launched the new Quickdrive range which perfectly fits with current customers' trends: The washing time is half that of the average, which is a big plus in the hectic lifestyles of Danish consumers and it also resonates with the convenience trend. Moreover, **BSH's Siemens brand** put emphasis on technology and connectivity when it comes to marketing its home laundry appliances. Its Home Connect app puts full control of its connected consumer appliances in the hands of tech-savvy customers through their smartphones.

CUSTOMERS

Danish consumers

Denmark has enjoyed a relatively steady growth in population; however, in recent years it has been increasing. That is the consequence of the higher number of not only births but also immigrants (make up 13.3 % of the population). In 2019, Denmark has an estimated population of 5.78 million, according to the latest census figures and another growth is expected in the future. According to the forecast, there will be roughly over 6 million people living in Denmark by 2028. As regards population density, it is 136 per Km2, which ranks 86th in the world (World Population Review, 2018).

The Figure 3 shows the development of the total population in Denmark by age. In 2018, people from 20 to 39 years old (1,46 million) formed the two the largest groups among Danish inhabitants, followed by age group 0 to 19 years old (1.31 million). The median age of the population is of 42.2 years. Thanks to a nearly equal number of the old and young Danish population, the same distribution is also expected for the future (Statista, 2019).



Figure 3: Total population in Denmark from 2007 to 2018, by age group (in millions)

It is not surprising that Denmark, as the most digital country in EU, has one of the most advanced information societies in the world. Danish consumers quickly adopt new technologies and high-tech products, which stems from their openness to change and risks. They are also considered to be highly-skilled customers with innovating and critique point of view. With regards to purchasing behaviour, despite the fact that Danish consumers are opened to change and risks, when they are buying a product, they are rather conservative. They favour products from companies that have been operating in the country for a long time, which speaks for well and long-established companies. Danish consumers also have high expectation, especially in the



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case of product quality (the highest rate in Europe). Moreover, they put a lot of attention on health, the environment, ethics towards animals and taste (Banco Santander, 2019).

Despite a high level of income tax, Danish consumers generally enjoy one of the best qualities of life in the world - high connectivity with modern infrastructure. This also reflects consumers purchasing power. According to the latest analysis, on average, Danish households enjoy a disposable income of about USD 65 000 a year, 70% of which is used for consumption. Based on this, it may be said, that the average Danish consumer is relatively well-off. Moreover, Danes had also been repaying their mortgages at the fastest pace in a decade. Thanks to this, their Research&Development and innovative capabilities, production, quality management have large amounts of discretionary income to consumption (Euromonitor, 2018). According to the latest available data, in the fourth quarter of 2018, consumers spending counted 233101 DKK Million, and until 2020 it is expected its growth to 248152.00 DKK Million (Trading economics, 2019).

Positive forecasts on the Danish market in case of consumer spending are also supported by consumers' confidence. Despite the fact that the consumer confidence index went down slightly to 3.7 points from 3.8 points in March 2019, Danish consumers are still optimistic. According to Burke (2019) April's dip was mainly driven by consumers' less positive view of their personal financial situation over the next 12 months. Moreover, consumers grew increasingly pessimistic about making major purchases. Since the purchase of a washing machine is not considered to be such a large purchase, the washing machine market can be expected to be unaffected.

Widespread use of technologies in Denmark is also supported by the internet access. Culpin (2018) estimates that there are about 5.4 million Internet users in Denmark, which represent 97% of the total population. Latest available data show that over two-thirds of these regularly use the internet for shopping, meaning there is a large potential for selling product through eshop.

Consumers and renting

Denmark is rated as one of the most "livable" locations in the world, where every month over 1000 people move into the Greater Copenhagen region alone. Since the cities are no growing so fast the removers are facing problems with finding a place for living. And thus, it is then no wonder that rent is one of the most discussed subjects in Denmark. Charlies Roof (2019) even describes the Danish rental market as incredibly complex, competitive and completely crazy.

Since people rent both type of houses - furnished as well as unfurnished, there is a big potential for renting household appliances such as washing machines, dryers, dishwashers, etc., which new removers will need.

Consumers and the sharing economy

According to Marton (2018), there is 10% of the population being participated in the sharing economy in some form in Denmark. The small participation in the Danish sharing economy also confirms survey conducted by NS Gallup for Nordea Denmark, which shows that only very small percentage of the population engages in sharing economy transactions by providing their own assets and services and using other people's assets and services (Fjalland, and Landbo, 2017). This result is surprising because as similar to other EU's countries, in Denmark are widespread platforms such as Airbnb, UberPop, BlaBlacar, Deliveroo, GoMore, DriveNow and Resecond, through them consumers share private homes, cars, clothes, and so on.

Since the government realized the great potential of sharing economy when it comes to securing a better use of resources and giving consumers opportunities, the Danish government





announced a sharing economy strategy according to Levring and Wienberg (2017). Denmark wants to bring the so-called sharing economy into its legal codex so that companies like Uber and Airbnb can be absorbed into the Scandinavian welfare model. In this context business Minister Brian Mikkelsen said: "If you want people to understand the prospects, in terms of new jobs and new technology, then it also has to contribute to the financing of the welfare society we live in."

Consumers and IoT

Martin Lobel, CEO of Teracom, said: "*The interest for IoT solutions and the demand for Internet-of-things connectivity is growing dramatically in Denmark*" (Ryan (2019). This also confirms the latest statistic which shows that the Internet is the only media platform whose share of daily users is increasing. In 2017 the Internet was even more by most Danes on a daily basis (88% of the population aged 16-89) (EPRA, 2018).

As regards smart devices, Danish consumers prefer the electronics offering convenience and connectivity, such as wireless products, and wearables and novelty products at a reasonable price. The new attention is paid to the electronics goods that are more connected and to be able to merge as many services as possible into one device such as wireless speakers and smartphones (Euromonitor, 2019). The importance of smartphones also confirms the latest statistic, according to them, Denmark has the highest penetration of smartphones in the world - with 77% of the population using a smartphone. This is reflected in the e-commerce industry, with one in four online purchases in Denmark made using a cell phone. This pointed out that the seller website, especially e-shops should be adapted to the mobile interface as well (Ecommerce News, 2019).

Consumer interest in connected home devices does not remain behind. Danish consumers more and more own a home camera, surveillance system or smart home appliance (Statistica, 2019).

2.1.3. Netherlands

GOVERNMENT

Netherlands government initiatives toward a circular economy

Netherlands government is taking various measures (fostering legislation and regulations, intelligent market incentives, financing, knowledge and innovation, international cooperation) to encourage the transition to a circular economy (for more information read Government of Netherlands, 2019a).

Government:

- seeks to develop further the legislation and regulations that encourage innovation, which includes rules promoting a sharing economy.
- encourages producers to use raw materials that can be reused more often.
- invests in entrepreneurs who are active in the fields of renewable energy, energy saving and reducing CO2 emissions.
- stimulates the creation of knowledge networks and different ways of exchanging knowledge.
- works with other countries as much as possible, in the European Union and also in the United Nations.





In September 2016 the Netherlands government launched wide programme for a Circular Economy. It has selected five economic sectors and value chains that will be the first to switch to a circular economy. These sectors (biomass and food, plastics, manufacturing industry, construction sector, consumer goods) are important to the Dutch economy and have a big impact on the environment. As regards the **manufacturing industry**, the government wants to make the business community more aware of the vulnerability of natural resources. By 2050 many critical materials will have to be reused and recycled, including scarce raw materials like 'rare earth' metals (Government of Netherlands, 2019b).

Netherlands government and digitalization

According to "*Dutch Digitalisation Strategy*" report the Netherlands is in an excellent position to capitalise on the economic and social opportunities created by digitalization. They have a world-class digital infrastructure. Wi-Fi and Bluetooth were invented in the Netherlands. The AMS-IX, one of the most important internet exchange points in the world, is located in the Netherlands. Moreover, the Netherlands has a highly educated workforce at an international level, and Dutch consumers often lead the way in embracing new digital applications (Government of Netherlands, 2019c).

ECONOMY

Netherlands economy and future forecast

Dutch economy grows at a dynamic pace: growth was estimated at 2.8% of GDP in 2018 driven primarily by domestic demand, but the pace of expansion is expected to ease from 2.6% and 2.3% in the next couple of years mainly due to slowing private consumption and investment (IMF).

Since the external environment becomes more challenging, defined by lingering global trade tensions and Brexit-related uncertainties, it is expected that economic growth will moderate and grow by 1.7% in 2019 and 1.6% in 2020 (FocusEconomics, 2019a).

Services sector account for over 70.3% of national revenue and employ 81.4% of the workforce. The services sector is focused mainly on transportation, distribution, logistics, banking and insurance, water engineering and new technologies (Nordea, 2019).

Dutch market with washing machines

As the focus is now on energy efficiency in most appliances (reflecting consumers' demand), there was a shift also towards energy efficient automatic dryers, automatic washing machines, and automatic washer dryers.

In 2018 there were price reductions, especially for automatic washing machines where volume sales were declining, and manufacturers were trying to push volumes using attractive prices (Euromonitor, 2019).

Nederland's washing machine main competitors:

- 1) Whirlpool Nederland
 - In 2018 it registered disappointing results in home laundry appliances, with volume sales declining. The company seems unable to stabilize after its restructuring in 2015.

2) Samsung Nederland BV

 the fastest growing player in home laundry appliances in 2018 in the Netherlands





 the leading player in automatic washer dryers and offers a wide range of models to choose

3) Electrolux Home Products

- enjoyed marginal retail volume growth in 2018 partly because of its focus on the greater specific value offered by AEG-Electrolux and less on the economic Zanussi-Electrolux.
- 4) Miele
 - It is the only remaining manufacturer that uses 100% reusable or recyclable materials.

New trends in the laundry market

The rapid development of digital technology has been unlocking better and longer use of the product. The idea of an 'Internet of Things' (IoT) has captured public attention and permeates the mainstream tech and business media. Dutch start-up, Bundles, is demonstrating the benefits of a holistic view by applying IoT technology to the laundry (Ellen MacArthur Foundation, 2019). Laundry leaders such as P&G, Unilever and Henkel are not staying behind. They are responding to consumer's changing needs and demands and aiming to save consumers time with premeasured or all-in-one offerings. Moreover, they are using collaboration with start-ups, who deliver soap to consumers' homes or who create new mobile apps offering additional services to customers (Geller, 2018). A similar approach is also used by Bundles, however, as regards coffee machines - customers subscribe to the use of a high-quality coffee machine and automatic delivery of coffee beans, based on personal preferences and amount of coffee usage.

\Rightarrow Future potential:

Since the consumer demands products which save their time and are environmentally sustainable, it worthy of considering this market-niche. A consumer might subscribe to the use of high-quality washing machine and delivery of laundry detergent, based on their preferences (aroma, type – gel/powder, type of cloths – white/black/color, for sensitive skin, for babies, etc.).

Moreover, members of the Board for Washing Excellence have created a whitepaper of what can be expected through 2030 looking at four categories in the laundry cleaning process. There are stated only examples (for review see Hydrofinity, 2018).

- 1) Mechanical action Smart Laundry Technology
- 2) Chemical action A Different Approach to Detergent
- 3) Temperature effect Reducing the Use of Resources
- 4) Time savings Reducing the Use of Resources

CUSTOMERS

Dutch consumers

The Netherlands is one of the world's most densely populated nations and similar to most western European countries has an ageing population. Figure 4 captures the household composition from 2016 to 2060 (Statista, 2019). The forecast indicates that composition will change very slightly in the following years. As regards population density, in 2018 it was reported at 506 sq. Km (StatisticsTimes, 2019).





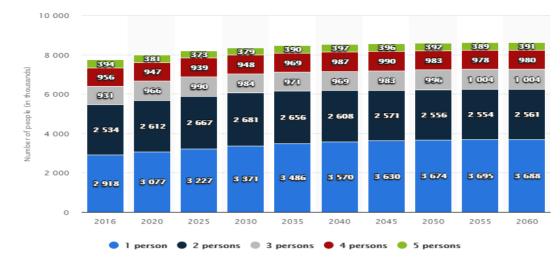


Figure 4: Forecast of the household composition in the Netherlands from 2016 to 2060, by number of people in the household (in 1,000s)

The Dutch population has been found to be among the happiest in the world. Dutch consumers are enjoying a comfortable standard of living, with a buoyant economy, low unemployment and a generous pensions system, which helps to maintain demand for a range of discretionary products and services (Euromonitor, 2018). Despite this general positivism, last year has brought a pessimistic especially as regards households' financial situation, which lasts until this year. Customer sentiment index dropped further in March of this year, which resulted in a decrease in consumers' willingness to buy. On the other hand, private consumption is expanding at 1.6% in 2019, which is unchanged from last month's estimate. In 2020, the panel expects private consumption to grow 1.7% (FocusEconomics, 2019b).

Dutch consumers are characterized by caution and are very sensitive to prices and special offers. Also, quality is also an important factor influencing their purchase behaviour. Therefore, they are willing to pay a premium price for a product of higher quality. Dutch customers prefer practical, healthy and sustainable products, which reflect their greater interest in social responsibility. Moreover, younger consumers are embracing mindfulness and betterment, which may be reflected in their buying habits. Interesting enough, consumers of all ages are questioning ownership as flexible, minimalist living gains popularity (Angus, 2018).

Dutch consumers are also highly connected online and social relationships are extremely important to them. This new trend lasts, which confirms also Rene Djuricek, Owner of Netherlands-based Meesterslijpers, who says, "The days of customers using only email and telephone to contact businesses are over. Customers want to contact a business the same way they contact their friends and family." (Metselaar, 2019). Thus, technology has become critical to consumer behaviour changes, especially mobile technologies and internet access (NVC, 2019). This also results in the way how Dutch businesses do customer service. They started to incorporate new customer service tools, improve customer care overall, and forge more human relationships with customers on channels, which the customers prefer. Interestingly enough, the channels like chat, Twitter and WhatsApp will grow significantly. Through chat, firms can connect with potential customers it would not connect with otherwise (Metselaar, 2019).

Consumers and renting

ReCiPSS

Consumer habits are changing quite often nowadays. Following on from the house, apartment and vehicle rentals, the rental business has now spread to household goods such as electrical appliances, DIY tools, and even clothing. Although the older generations were more reluctant





about renting thing, the need to balance household budgets, greater geographical mobility, and new consumer habits are all reasons why nowadays many people prefer not to invest long term in equipment for the home. Moreover, renting brings many benefits, because in addition to saving on the cost of installation and any necessary repairs, renting a home appliance can enable the consumer to obtain a tailored service (Frontière, 2014).

There are currently several successful business models such as NeoSquat (Startup rents out furniture) or Bundles (Startup rents out washing machines), home appliance renting which seems to indicate that this is a promising business with numerous advantages.

Consumers and the sharing economy

There are numerous sharing economy initiatives across the Netherlands. For example, Amsterdam has created dozens of new digital platforms encouraging citizens to participate in the sharing economy. In addition, the digital application contributes to concerted effort to reduce waste and remove one per cent of all cars from roads in Europe.

Sharing is popular in many services like food and drink, accommodation, renting cars, etc. From the public sector's point of view, sharing and collaboration are valuable tools in the drive towards achieving a sustainable and friendly city. Nanette Schippers¹³⁹ in the context of sharing economy said: "'Everything indicates that people continue sharing because of a whole bunch of other reasons such as a sustainable society. Now, we know who is willing to share – those between the ages of 20 and 45 are more likely to share. But our role is to expand this group to include low-income groups and the elderly. We want a pro-active, open attitude which understands the sharing initiative and helps everyone." (Apolitical, 2019).

Consumers and IoT

• The European IoT market is still growing – in 2018, there are around 11 billion connected 'things,' where 60-65% are consumer devices.

The Netherlands is one of the leaders in capability and initiatives within Europe. According to Statistics Netherlands report, smartphones (85 % of all households) and laptops (78 % of all households) were the most frequently used internet devices used by households in 2017. Dutch older adults are increasingly active in using smart devices, which indicate the potential of a IoT market in the Netherlands. On the other hand, GfK research pointed out that the interest in adopting smart home solutions was declining in 2018 compared to 2017 (less than 50% of the people claim to be interested). Between benefits associated with smart home solutions for the Dutch consumers belong the ability to save energy and the convenience of being able to control your devices from anywhere. And, the barriers preventing people from adopting the trend are cost and privacy issues (Siliconcanals, 2018)

Therefore, to promote IoT services, CBI¹⁴⁰ (2019) highlights that good communication between customer and service provider is essential. Unclear communication may cause misunderstandings and disagreements, which can lead to disputes.

Customers and laundry

¹⁴⁰ We are part of the Netherlands Enterprise Agency and are funded by the Netherlands Ministry of Foreign Affairs.



¹³⁹ Program manager, sharing economy for innovation office, at the government of Amsterdam



Recent launched Unilever's market research shows, that generation of millennials (age 22-37 years), who earn more than a quarter of the world's income, have a different approach to laundry than other age groups. They are less loyal to traditional brands and have new demands, including those products, save time and be environmentally sustainable. Moreover, many young customers want to spend as little time as possible on laundry. In this context, 36-year-old Olivia Tusinski said that "washing too often wears your clothes out faster" and that she doesn't like to waste water or energy (Geller, 2018).

Additionally, the majority of millennials consists of students, who are living in rented houses and do not consider buying white goods (such as washing machine) but rent it along with the home. An example is Splash Lease, who rents/leases out washing machines, dryers, etc. (included delivery and repairs) to students and student houses all over the Netherlands from \notin 9,- per month (Splash Lease, 2019).

With regards to customer preferences when choosing a washing machine, a recent survey conducted by Euromonitor International (Figure 5) revealed that the most important features for consumers were energy and water efficiency, which were followed by features that increased convenience, such as time-saving features, while design and appearance features and other more technological advances interested consumers less (Euromonitor International Analyst Pulse Survey, 2015). Therefore, it is important to highlight to consumers' needs and not only promote technological prowess (Baus, 2015).

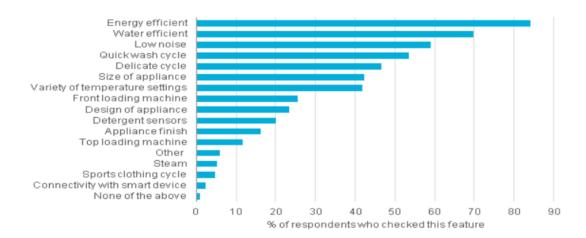


Figure 5: What features do consumers consider most important in washing machines?

2.1.4. Slovenia

GOVERNMENT and ECONOMY

For the further development in Slovenia, the Circular Economy Roadmap of Slovenia that was officially launched in May 2018, is of high relevance. The Roadmap is based on principles of collaboration and co-creation among different stakeholders. Potential ways of transition in Slovenia include product-service systems, sharing, or switching from consumers to users' approach. Digitization, including blockchain technologies, is seen among key enablers in the roadmap.

To assess the readiness of Slovenia for circulatory transition, two rankings are of relevance: Slovenia reached the 6th position in the EU Eco-innovation Index for 2017 (the European Commission, 2017) as *"the Slovenian Government significantly strengthened its support and activities related with circular change"*. Slovenia also took 7th position in circularity among 28



EU-countries, although the results are mixed: Slovenia over performs other countries in food waste processing, recycling and trading of recyclable raw materials, but it lacks in private investment into circularity and in patents (Hervey, 2018).

The latest achievements of Slovenia in circularity transition was summarized by The Environmental Implementation Review as follows:

- "Slovenia has adopted new spatial planning legislation (the Spatial Planning Act and the Construction Act) to become fully compliant with EU law on environmental assessment and access to justice.
- On nature conservation, Slovenia has made good progress in mapping and assessing its ecosystem services.
- Slovenia has strengthened its economic instruments to increase the budget available for residual waste treatment." (European Commission, 2019).

Slovenian institutions are also partnering European projects promoting CE, such as MOVECO (Mobilising Institutional Learning for Better Exploitation of Research and Innovation for the Circular Economy) in the Danube region.

Nevertheless, some problems and barriers still exist. A recent study focused on the view and readiness of Slovenian small and medium enterprises. The SMEs complained about the inadequate fiscal policy set by the government, and they also felt a lack of interest and readiness among consumers' payment of higher prices associated with pro-circular products. Other barriers relate to little information and knowledge of circularity among all groups of stakeholders (Širec et al., 2018).

The understanding the CE itself is rather limited: In a pilot survey, 68% of companies claimed to have heard about the CE, but they did not know what means while 20% of the Slovenian companies have heard of the circular economy and know the concept well (Baggia, 2017).

CUSTOMERS

In the adoption of smart home appliance, the Slovenian consumer are fans of IoT technologies: the presence of smart home products in their households is above the average for Central Europe, it is even higher than it is in the typical or average west-European household, but, e.g. Austrians adopted the smart home appliances three times more often than Slovenians (GfK, 2018) however; in older survey, Slovenians expressed more willingness for smart home appliances than Austrians (Mert et al., 2009).

Besides digitization, the sharing economy is another circularity enabler that is established in Slovenia – in the form of small online platforms that are extremely popular. "The issue has been a "hot topic" in the media since 2015 when the government intensified its efforts to start the debate on legal reforms to accommodate foreign sharing economy companies in Slovenia" (Cost Association, 2019). The legislation in Slovenia is a burden for sharing economy services in accommodations, especially (Grifoni et al, 2018).

Some data suggest that environmental awareness is limited: Majority of Slovenian consumers consider material composition when buying apparel, while only a small percentage consider ecolabels and the environmental impact (Žurga and Forte Tavčer, 2014). The willingness to buy green electricity showed to be moderated by age and education, and environmental awareness too, but the most powerful factor is the income (Zoric and Hrovatin, 2012). The value system of Slovenians is quite traditional; thus, the environment (e.g. the value of clean air) is important, but some other environmental-awareness related factors are of lesser importance (such as social cohesion, equality, green food) (Redek et al, 2012).



APPENDIXES

Table 4: Comparative study of direct competitors in Netherlands

Netherlands	Homie	Bundles	Blue Movement
Price/Rent per month	 Cold wash programme: €0.75/wash 20°C wash programme: €0.85/wash 30°C wash programme: €1.00/wash 40°C wash programme*: €1.50/wash 60°C wash programme*: €2.00/wash 90°C wash programme: €2.50/wash *using the ECO-setting will save €0.25 on the regular wash price Drain and spin programmes: free 	 Miele Washing Classic (but limited availability): €14.95 + €0.40 per cycle - 7 kg Miele Washing All-in: €16.95 + €1 per cycle + detergent 8 kg (for 0-15 cycles per month) €22.95 + €0.60 per cycle + detergent 8 kg (for more than 15 cycles per month) 	For Basic:• € 9,99/month/6 years• €16.99 p/month/2 years• €20.99 p/month/3 monthsFor Comfort:• € 12.99 /month/6 years• €19.99 p/month/2 years• €23.99 p/month/3 monthsFor Premium:€18.99/month (price stated at Bosch webpage)• €19.99 p/month/6 years• €26.99/month/2 years€30.99/month/3 months
Length of contract	6 months minimum	5 years	3 months, 2 and 6 years
Deposit	no	€75 (but €89 in English version of FAQ)	€75 returned after the end 5 years contract and collection
Extra fees	 if the WM is 30 days offline, charge for every 30 days is €25.00 €75 if the contract terminates before 6 months of use 	in the case of the contract termination before the end of contracts moving fee € 125 (in English version) and € 89 in Dutch version	€75 in case of the cancellation within 2 years (not valid for a 3 months' subscription) – moving and refurbishing costs (?)



Netherlands	Homie	Bundles	Blue Movement
Discounts	first-time users - all their usage for free during the first month after installation	 when ordering customer could apply a discount code (no more information) if more than one product rented, some price discount is offered (€2 - €5) 	discounts (even 50%) on subscriptions and cashback
Time for repair	reasonable timeframe	within 24 hours a call	within 3 WD (before a remote trial)
Free products and services	 delivery installation repairs replacement if the WM is not repairable moving collection email about consumption patterns/month 	 delivery installation repairs detergent Miele, Ariel, or Seepje replacement of WM replacement of WM at its life-end collection monthly review of the use data online checking of the use tips and advice online 	 delivery installation repair and maintenance intermediate piece if also dryers is rented collection of old WM moving – if only once a year and subscription continues for another 6 months after the move

Table 5: Comparative study of indirect competitors in Netherlands

Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
Rent per month	from €11 p/m/5 years to €26.50 p/month/1 year	from €10 p/m/5 years to €32 p/m/1 year	from €10 p/m/5kg capacity and refurbished through €16 p/m/8 kg to <u>€24</u> <u>p/m/8 kg capacity</u> ; and	from €1 (first six months/month, then normal rent – not information about this deal) to	from €11/ to €20.50 p/m web is prepared to differentiate prices according	from €24 p/m/7years (7kg) to €44 p/m/7 years (10 kg)



Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
			<pre>€26 p/m/8 kg. in English version for expat (Leeuwarden) from €18/month/8 kg to €24/month/8 kg; in Amsterdam from €18/month/8 kg to €26/month/8 kg</pre>	otherwise from €19.95 p/m/10 years to €37.95 p/m/5 years <i>Refurbished: from</i> €14.95 p/m/10 years through €17.95 p/m/7 years to €19.95 p/m/5 years or €27.95 p/m/5 years contract (the most expensive one – 2 months free)	the length of contract (1-5 years) and if student or private consumer – but it does not work – only one price	
Length of contract	1, 2, 3, 4 or 5 years	1, 2, 3, 4 or 5 years	minimum 1 year	5, 7, 10 (also for refurbished products)	minimum 1 year	5 or 7 years
Deposit	N/A	N/A	N/A	N/A	N/A	N/A
Extra fees	 when moving N/A waterlock €25 administration fee at the beginning of contract €29 Probably paid services (not clear from the published information): periodical maintenance exchange-service in case 	N/A	if outside Leeuwarden a one- off €20 charge for delivery in cash	detergent for €3.50 (no information about the quantity or quality)	when moving N/A	N/A



Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
	of any changes in the customer's situation.					
Discounts	 sales promotion in April 2020: all products free for 2 months with a minimum of 3 years' rent if multiple appliances rented, lower costs (this information is rather hidden) 	in the case of the change of the provider, after the cancellation to show copy of the cancellation and then completely free use for the first 3 months	N/A	rather complicated program of sales promotion when new customers are brought	N/A	if subscribed also to partner Consumid, €5 monthly discount for the rent for one whole year
Time for repair	N/A	N/A	fast	within 24 hours WD after the announcement – if made till 12:00 (also for the replacement for the new product)	1-3 days	within 24 hours WD after the announcement – if made till 12:00 (also for the replacement for the new product)
Free products and services	 delivery and installation repair collection of an old WM exchange of product if not possible to repair no deposit (claim) 	 delivery and installation repair collection of an old WM exchange of product if not possible to repair no deposit (claim) 	 delivery and installation (till 24 hours) repairs and maintenance disposal of old products no deposit 	 delivery installation repairs and maintenance replacement if product if the repair is not possible when moving 	 delivery Installation maintenance 	 delivery installation repairs and maintenance replacement if product if the repair is not possible when moving



Table 6: Comparative study of competitors in Denmark

Denmark	L'EASY	Køb & Lej Direkte	Jensen & Vestergaard	EL 99
year of the establishment	1985	app. 2000	probably 4 years ago – 2016 (not stated)	app. 1995
target segment(s)	no specific	no specific	no specific	no specific
market coverage	whole country (+ some activities in Sweden, Norway and the Netherlands – very limited)	regional	local - regional	regional
PRODUCTS AND SERVICES				
Products to rent (except washing machines)	computers, TVs and LCds, cameras, phones, furniture and home appliances (dryers, fridges, dishwashers, stoves, freezers, microwave ovens)	dryers, stoves, fridges, dishwashers, cookers, freezers, wine coolers	dryers (potentially also stoves, fridges, but no items offered in April 2020)	dryers, cookers, dishwasher, freezer, fridges and fridge / freezers, vacuum cleaners and kitchen appliances
Pay per use (wash)	no (except one specific case)	no	no	no
washing machines - brands	AEG, Electrolux, Zanussi	AEG, Bosch, Electrolux, Siemens, Zanussi	AEG, Bauknecht, Bosch, Electrolux, Grundig, LG, Miele, Siemens	AEG,Bosch, Candy, Electrolux, Gram, Gorenje, Indesit, LG, Miele, Samsung, Scandomestic, Sharp, Siemens, SMEG, Whirlpool and Zanussi (Elsalg offer)
washing machine - types	8 washing machines of different energy classes, all frontloaded	9 washing machines	app. 15 washing machines – most of them probably refurbished	app. 150 washing machines (Elsalg offer)
smart washing machines	some smart functions	some smart functions	some have some smart functions	some smart functions
refurbished/remanufactured	no	no	yes	no
Cleanliness statement	no	no	no	no



Denmark	L'EASY	Køb & Lej Direkte	Jensen & Vestergaard	EL 99
Services (with renting) FREE	no information	probably repair (no information only some in the terms of contract	no information	delivery
Time to repair	no information	at very short notice (partner AHS)	no information	fast (no concrete information)
Extra services (with renting) PAID	 registration fee of 495 DKK (app. €66.40) which is due together with the first month's rent. delivery and installing 795 DKK (app. €107) 	 registration fee 298 DKK (app. €40) 	no information	no information
Contract terms				
• duration	not stated precisely, but probably from 6 months	at least 12 months	no information	no information
• termination	probably according the contract (not stated)	with one month's written notice until the end of a month	no information	no information
• conditions	Applicant must not be registered in RKI (Danish Register for bad payers), must be 18 years of age and must meet criteria for overall credit rating. All calculations are based on HomeBanking	 home insurance is mentioned in the contract terms nothing else stated except in case of violation of contract 	no information	no information
PRICE OF RENTING	from 150 DKK (app. €20) /month (Zanussi, A+++, 7 kg) to 320 DKK (app. €43/month) (AEG A+++(- 65%) 9kg)	from 166 DKK (app. €22.25)/month (special offer/6kg) through 246 DKK (app. €33/month) to 256 DKK (app. €34.30/month) – for 3kg capacity Electrolux	from 120 DKK (app. €16) to 1000 DKK (app. €134) – professional Miele 6kg capacity - probably per month	from about 199 DKK (app. €27)per month (no other information is available)
Payments				
• time	monthly	monthly	monthly probably – no information	not stated, probably monthly



Denmark	L´EASY	Køb & Lej Direkte	Jensen & Vestergaard	EL 99
• methods	probably direct debit – no information	direct debit	no information	direct debit
■ other				link (top of the front page) to the Danish direct debit scheme Betalingsservice to fill in the form for payments arrangement ¹⁴¹
DISTRIBUTION				
place of distribution	web and 3 shops (but opening hours are not clear)	own shop with opening hours	shop (but no opening hours and web	own shop with opening hours
method of "purchase"	e-shop	 filling the form online – ordering concrete item after "putting to the basket" telephone, online form and email for service – link to the web of the partner AHS 	 choice of product on web, filling online form with contacts probably also personal presence of customer in the shop 	
deliveries	deliveries by company across whole Denmark or own pick-up (free of fees) from shop	deliveries by company (but not clearly stated)	not stated – probably delivery by the company	probably by the company
■ repair and maintenance	·	repairs via their partner AHS		not clear, probably organized by company
COMMUNICATION				
direction	direct with customers	direct with customers (both B2B and B2C) indirect – link to the service partner	direct with customers	direct with customers and indirect – link to the offer of Elsalg

¹⁴¹

https://www.betalingsservice.dk/DOB/BS?id=3&pbs=09310088&pbscheck=KQ6Br5XTscptOCzeDGA9IA%3D%3D&dbnr=&dbgr=00001&repeatKundeNr=false&kundenrLabel=Kundenr.&version =2&t=



Denmark	L´EASY	Køb & Lej Direkte	Jensen & Vestergaard	EL 99
language	Danish	Danish	Danish	Danish
contacts	telephone, mail, address, many online forms	address, telephone, mail	telephone, email, address, contact online form on the front page	address, telephone, mail
Appeals				
• Main appeal	"Buy without interests" (not related to renting)	"We have the best rental offers"	"Jensen & Vestergaard – leasing, sale and rent of hard home appliances"	"At EL-99 you always get professional advice & service from our competent Employees"
• Other appeals and promises	no special related to renting	"offer of the month" – direct link on the top of the front web page	"Our service is always ready! Just give us a call at one of the numbers below - Then you will definitely get hold of us."	 "we can make it cheap to make a home appliances rental. Therefore, renting appliances can be the right solution for you. Should we help you with your home appliances rental? Rent a washing machine with us - rent appliances with us and we will help you throughout the process, we will be ready to offer you a cheap price, as well as a good deal that will make you confident in your decision."
Reviews from customers	link to Trustpilot	no	yes	no
Link to the web with reviews	yes – Trustpilot rating 4,5 from 5 based on 5381 reviews	on FB (independent on company - no link) – rating is 3.8 from 5	no	no
Newsletter	yes – only members of L'EASY EXTRA club (not sure if valid also for renting	no	no	no
Social media	FB (14659 likes and 14273 followers), youtube (521 subscriberrs - 12 videos – ads	FB (605 likes and 601 followers in April 2020)	FB (911likes and 911 followers in April 2020 – rapid increase from about	FBbut not working (link from the front page)



Denmark	L'EASY	Køb & Lej Direkte	Jensen & Vestergaard	EL 99
	 – 3-5 years old with several thousand views each) 		500 in March 2020), youtube (2 videos, 2 subscribers and about several tens to 200 views 3 years ago)	
other	 loyalty membership promotion for members of L'EASY EXTRA club – if participating in satisfaction surveys even extra offers Hotline Support dictionary E-signing guide maintenance tips questions and answers in case of complaint many ways are offered by company on its web some customers (Trustpilot) consider the prices of services too high 	 with the link "about us" only legal conditions of renting are available link to the "Hints"and there link to their partner' website (Aktiv hvidevareservise – AHS <u>https://www.ahs.dk/tips-raad/</u>) to find advices. AHS is the repair and maintenance service provider across whole Denmark (with service departments across country) for AEG, Bloomberg, Bosch, Brandt, Electrolux, Hoover, Gorenje, LG, Miele, Samsung, Siemens, SMEG, Whirlpool and Zanussi brand) 	 as the first company in Denmark they use also sign language for sales and consulting web page – some links direct visitor to not existing pages very vague information about renting 	 link (from the top of the front page) to the flyer with the product description (pdf) very vague information about the offer, conditions, process of ordering and servicing

Table 7: Comparative study of indirect competitors in Netherlands

Netherlands	Sp	lash Lease		Smart student deals		Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
year of establishment	the	1989		2013		not introduced	1973	1985	2016 (as an e-shop)
target segment(s)	stu	dents living Ident houses a bbably also busine	in and ss	students living student houses	in	students, expats, B2B (depends on the region)	no specific	students (and private consumers – this is hidden among information), but in case of pay for use	no specific





Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
					also business – e.g hotel owner)	
market coverage	whole Netherlands	whole Netherlands	Leeuwarden Groningen Amsterdam Haarlem Utrecht Zwolle	whole Netherlands (not stated)	whole Netherlands	probably whole Netherlands (not specified)
PRODUCTS AND SERVICES						
Products to rent (except washing machines)	dryers, fridges, stoves	TVs and LCDs, white goods (dryers, fridges, dishwashers, stoves, freezes, audio, gaming, packets of products	dryers, dishwashers, fridges	Tvs and LCDs, gaming products, computers, bikes and e-bikes, white goods (dryers, fridges, dishwaters, freezes, stoves)	dryers, dishwashers, fridges, gas stove and packets - combi	fridges, washing machines, dryers, televisions, e-bike, sunshine panels, laptops
Pay per use (wash)	no	no	no	no	they offer this possibility – no concrete information (link at the top of the main page)	no
washing machines - brands	AEG, Bauknecht, Bosch, Indesit, Huismodel, Samsung, Whirlpool	no brand, Bosch, LG, Samsung, Whirlpool	AEG, Beko, Bosch, Zanussi and no brand	Bosch, LG, Samsung, Whirlpool	LG and other WM without information	AEG, Bosch, Samsung, Siemens
washing machine - types	8 types of WMs from 5- 8 kg, one toploaded	9 types of WMs from7 to 9 kg, A+++ energy class	3-4 types of washing machines- depends on location (different energy class and capacity)	15 types of WMs, 7-9 kg capacity, energy class A+++, some WMs are "demo" (Bosch and Whirlpool)	12 types of WMs	11 types of washing machines, energy class A+++, capacity from 7 to 10 kg, frontloaded
Smart washing machines	some smart functions	some smart functions	some smart functions	some smart functions	some smart functions	some smart functions
Refurbished/remanufact ured	no information	yes	yes (only 1)	yes, 12 types of WMs – special link to the refurbished products	no	no



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Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
Cleanliness statement	no	yes	no	no, despite relatively many information about the refurbished products ¹⁴²	no	no
Services (with renting) FREE	 delivery and installation repair collection of an old WM exchange of product if not possible to repair 	 delivery and installation repair collection of an old WM exchange of product if not possible to repair 	 delivery and installation (till 24 hours) repairs and maintenance disposal of old products 	same as Dixons	deliveryInstallationmaintenance	 delivery installation repairs and maintenance replacement if product if the repair is not possible when moving to some other place – free moving
deposit	no deposit (claim)	no deposit (claim)	no deposit	no information	no information	no information
Time to repair	no information	no information	fast (no concrete information)	same as Dixons	1-3 days	within 24 hours working days after the announcement – if made till 12:00 (also for the replacement for the new product)
						serviceman takes always new appliance with him
Extra services/products (with renting) PAID	 when moving – fee not introduced 	no information	if outside Leeuwarden a one-off €20 charge for	detergent for €3.50 (no information about the	when moving – fee - not introduced	no information
	 waterlock €25 administration fee at the beginning of contract – €29 Probably paid services (not clear): 		delivery in cash	quantity or quality)		

¹⁴² https://www.skala.nl/blog/post/alles-over-refurbished-producten.html





Netherlands	Splash Lease periodical maintenance is possible and the possibility of an exchange-service in case of any changes in the customer's situation.	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
Contract terms • duration	1, 2, 3, 4 or 5 years	1, 2, 3, 4 or 5 years	minimum 1 year	5, 7, 10 (also for refurbished products)	minimum 1 year	5 or 7 years
• termination	after the minimum rental period of the contract, there is one month notice	after the minimum rental period of the contract, there is one month notice	after one year within one month cancellation period	the same as Dixons	after the minimum rental period of the contract, there is one month notice	 With the end of contract After 3 years (5 years contract) and after 4 years (7 years contract) the contract can be changed. It is possible to finish the contract before the deadline if enough of the term has expired. When exactly, that depends on the subscription type – no more concrete information is available. It is possible only to switch to other product.
• conditions	• it is possible to buy WM after the end of contract	Subscriptions are made with partner Elbuco	no information	Subscriptions are made with partner Elbuco	insurance	 no transfer of contract is possible



Stude stude PRICE OF RENTING ● from year €26 cont • if m rente (this		from €10/month/5 years contract to €32/month/1 year contract	depends on the locality and if <u>student</u> or expatand if also refurbished WM, e.g. for students in Leeuwarden the cheapest rent is from €10/month for 5kg	from €1 (first six month/month, then normal rent – not information about this deal)	from €11/ to €20.50/month web is prepared to differentiate prices	 Reliability of customer is checked by company Subscriptions are made with partner Elbuco From: €24/month/7years (Siemens, 7kg), €25/month/7 years (AEG, 8 kg) and
year €26. cont • if n rente (this	ars contract to 5.50/month/1 year htract multiple appliances ted, lower costs is information is	years contract to €32/month/1 year	and if <u>student</u> or expatand if also refurbished WM, e.g. for students in Leeuwarden the cheapest rent is from	month/month, then normal rent – not information about this	€20.50/month web is prepared to	From: €24/month/7years (Siemens, 7kg), €25/month/7 years
Payments			€10/month for Skg capacity and refurbished WM through €16/month for 8 kg to €24/month and 8 kg capacity; in other towns prices start from €16/month, 8 kg and finish with €26/month, 8 kg. But in English version of the web the prices and the offer is rather different. E.g. for expat (Leeeuwarden) the prices range from €18/month, 8 kg to €24/month, 8 kg to €24/month, 8 kg to €26/month, 8 kg probably no differences if longer renting period – no information	otherwise from €19.95/month/10 years contract to €37.95/month/5 years contract Refurbished: from €14.95/month/10 years contract, through €17.95/month/7 years contract to €19.95/month/5 years contract or €27.95/month/5 years contract (the most expensive one - 2 months free)	according the length of contract (1-5 years) and if student or private consumer – but it does not work – only one price	<pre>€29/month/5 years (Siemens, 7 kg) and € 32/month/5 years (AEG, 8 kg) to €32/month/7 years and €37/month 5 years (Samsung, 8 kg) and €44/month/7 years (Samsung 10 kg) if subscribed also to partner Consumid, €5 monthly discount for the rent for one whole year</pre>



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Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
monthly	monthly	monthly	monthly	monthly	monthly
direct debit	direct debit	direct debit	direct debit	direct debit	Probably direct debit (not stated)
web	web	web	web	web	web
Online form to fill in after choosing the product	Online form to fill in after choosing the product	Online form to fill in after choosing the product	Online form to fill in after choosing the product	Online form to fill in after choosing the product	Online form to fill in after choosing the product
by the company (logistics partner)	by the company	by company	by company	by company	by the company
by company (not specified)	by company (not specified)	by company (not specified)	by company (not specified)	by company (not specified)	by company (not specified)
direct	direct	direct	direct	direct	direct
Dutch, English	Dutch	Dutch, English	Dutch	Dutch	Dutch
telephone, whatsapp, email, address, online forms	telephone, online forms, email, address, fax	telephone, mail, WhatsApp (from 9:00- 21:00), online chat – only from Dutch version of web – prolinked to FB, messenger	telephone, email (answer within 2 days), address, online forms call centre from 8.30 till 17:00 working days) FB (answer within 1	Online form, telephone, address, mil	telephone (call centre from 8:30-15:00 working days) and contact forms online email (somehow hidden)
		customer service from 9:00til 21:00 every day	days)		
		all needed forms (also for the change of contract, address, complaints etc. online)			
	monthly direct debit web Online form to fill in after choosing the product by the company (logistics partner) by company (not specified) direct Dutch, English telephone, whatsapp, email, address, online	dealsmonthlymonthlydirect debitdirect debitdirect debitdirect debitwebwebOnline form to fill in after choosing the productOnline form to fill in after choosing the productby the company (logistics partner)by the company specified)by company (not specified)by company (not specified)directdirectDutch, EnglishDutchtelephone, whatsapp, email, address, onlinetelephone, online forms, email, address,	dealsmonthlymonthlymonthlydirect debitdirect debitdirect debitdirect debitdirect debitdirect debitwebwebwebOnline form to fill in after choosing the productOnline form to fill in after choosing the productOnline form to fill in after choosing the productby the company (logistics partner)by the company by the company (not specified)by company (not specified)by company (not specified)directdirectdirectdirectdirectdirectdirectdirectDutch, EnglishDutchDutch, EnglishUtch, Englishformsfax21:00), online chat – only from Dutch version of web – prolinked to FB, messengersessengercustomer service from 9:00til 21:00 every dayall needed forms (also for the change of contract, address, complaints etc.	dealsmonthlymonthlymonthlymonthlydirect debitdirect debitdirect debitdirect debitwebwebwebwebOnline form to fill in after choosing the productOnline form to fill in after choosing the productOnline form to fill in after choosing the productOnline form to fill in after choosing the productby the company (logistics partner)by the company specified)by company specified)by company specified)by company specified)by company (not telephone, whatsapp, formsDutchDutch, EnglishDutchtelephone, whatsapp, faxtelephone, online from Dutch version of web – prolinked to FB, messenger customer service from 9:00til 21:00 every daytelephone, email tarset.call centre from 8:30 till tarset.directline needed forms (also for the change of contract, address, complaints etc.FB (answer within 1 days)	dealsmonthlymonthlymonthlymonthlymonthlydirect debitdirect debitdirect debitdirect debitdirect debitdirect debitdirect debitdirect debitwebwebwebwebwebOnline form to fill in after choosing the productOnline form to fill in after choosing the



D2.2-Circular business model development and implementation plan

Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
• Main appeal	"Cheap rental for students Washing machines, dryers and more from €9,- p/m"	 "Why rent from SmartStudentDeals.n I? Experience the convenience The newest products Wide range of A brands Small amount per month Large purchase for a small amount per month 100% service guarantee Our devices come with a full service guarantee" 	"Require white goods? Your rental solution". Fixed monthly rate"	 "Why rent from Skala? Experience the convenience The newest products Wide range of A brands Small amount per month Large purchase for a small amount per month 100% service guarantee Our devices come with a full service guarantee" (it is the same as with Smart student deals) 	"Why buy white goods when you can also rent them cheaply? The rental includes delivery, installation and maintenance!"	"A subscription to almost everything From e-bike to OLED TV Pay only for use"
Other appeals and promises	Our most popularproducts(photos, basicdescription and pricesfrom"Eco-friendly:Paperless officeWe are proud to haveour "paperless office".With that we havesaved quite some treesover the years. Just likeyou, we find it veryimportant to beconcerned about theearth and other people.	share with your housemates smartly and cheaply	"No killer contracts No surprises, after one year terminable each month Free disposal We'll take care of your old white goods Top notch Our customers rate us with an average of 9,3"	"Spring makes you smile" (special logo)	Rental of all your household white goods! Competitive prices Fast delivery Free transfer of contracts. Free placement Rent your washing machine easily and cheaply If you are going to live in rooms to study, you have to arrange a lot, especially if you do not go to your parents every weekend. You	



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Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed Dixons
	By minimalizing our paperwork we can proudly say that we work eco-friendly. And you must admit: sending an e-mail is much more easy than sending a letter, right? Think about our (green) future We only purchase efficient, eco-friendly equipment. For example: our Samsung washing machine has				must therefore ensure that your clothes are clean again. A good washing machine is an expensive device, all from a well-known brand such as LG, Bosch, AEG, Bauknecht, Zanussi or other well-known brand. And with a cheap second-hand, it is likely that it will break quickly. In addition, old
	energylabel A+++ and all our refrigerators are eco-friendly. When we find our equipment too old to use, we just recycle them! In this way we collaborate in the circular economy and we maximize the recyclability of our equipment! UNIQUE WITH SPLASH!				machines use a lot of electricity and water. Renting a washing machine is a cheap and environmentally conscious solution. We are specialists in washing machine rental to students. We do this throughout the Netherlands, from
	 Almost everything in stock Throughout the whole of The Netherlands Free transport of old device 				Groningen to Maastricht. You can choose from various machines that we deliver and install at home. If the machine breaks down, we will repair it for free. Usually within a day, but certainly within



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Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
	 No payments at delivery 				three days you can wash again.	
	 No additional fee Free connection 				Renting a washing machine is not	
	 Free repairs Arrange everything online 				expensive You already rent a	
					washing machine for 11 euros per month. It gets even cheaper if	
					you share the machine with more	
					people. For example, you can place the washing machine in	
					the communal kitchen and share the costs	
					together. That is not a problem for us.	
					Flexible and fast Our washing machine rental is very flexible.	
					If you move, you can transfer the contract	
					to one of your housemates free of charge. If you want to	
					bring the machine yourself, that is also	
					possible, for a small fee we even move it	
					for you. You can easily report malfunctions via the website or	
					with a telephone call. As a student you	
					cannot rent a washing machine everywhere,	

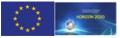


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Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
					but it is our specialty. White goods rental is guaranteed to be the best and the cheapest.	
Reviews from customers	only stars – as an advantage - satisfaction	only number and link	Yes 9,5 from 10 based on 440 reviews	only information about the level of satisfaction at kyijoh – company claism wrong web (com and not nl) and wrong or old evaluation and number of reviews (9 from 10 and 2507 reviews	no	no
Link to the web with reviews	yes - link to kiyjoh.com	yes - link to kiyjoh.com	yes - link to klantevertellen	no	no	no
Reviews (with the highest number of reviews) April 2020)	8,8 from10 - 898 reviews (kiyjoh.com) 8,8 from 10 – 748 reviews (detelefoongids.nl)	8,3 from 10 – 108 reviews (kiyjoh.com)	9,5 from 10 based on 440 reviews (klantevertellen)	8,8 from 10 – 2802 reviews (kiyjoh.com)	not found	3,7 from 5 – 1301 reviews (FB) 2,3 from 5 – 2013 reviews (trustpilot.com)
Newsletter	no	no	no	yes	no	no
Social media	FB (4152 likes, 4123 followers in April 2020), instagram (177 followers in April 2020)	no	FB (886 likes, 895 following in April 2020)	FB (3472 likes, 3526 followers in April 2020 – in the contacts on the front page)	Fb, youtube, twitter – not working	No – no link from web, but company has FB ¹⁴³ (94196 likes and 91926 followers in April 2020)
other	• Sales promotion in April 2020: All products free for 2 months. With a minimum of 3 years' rent	 link to "smart deal" cheapest special offer" in the case of the change of the 	confusing information about renting prices – different in Dutch and in English	 special link to the refurbished products on the main page – top sales promotion: rather complicated 		web looks very professionally, but there is almost no information about the company

¹⁴³ <u>https://www.facebook.com/Dixons.nl/?_tn_=%2Cd%2CP-R&eid=ARDBy1baKYBdT4E0qY8GH4dJa3aRBkWVv0ViDxL057imXQA1WnUJU8dJr8pxgyDf9KT6_WmurkXyd05i</u>



Netherlands	Splash Lease	Smart student deals	Wasgoed.com	Skala.nl	VerhuurWitgoed	Dixons
	 brands' logos (co- 	provider and		program of sales		
	branding) on the page	becoming a		promotion when new		
	below the offering	customer of Smart student deals, after		customers are brought		
	(they do not	the cancellation to				
	correspond fully to the	show copy of the				
	offering – for choice	cancellation and				
		then completely free				
	Wijid 🤷 8 MAA 🔒 LG 🥏	use for the first 3 months				
		months				
	 Offering a sponsorship 					
	(suggestions should be					
	sent for the decision) –					
	9 organizations (mostly					
	students'associations -					
	https://www.splash.nl/					
	student/sponsoring)					
	 Blog (only in Dutch) 					
	https://www.splash.nl/					
	student/blog					
	Online application for					
	the info about the date of the delivery – (to 4					
	countries? NL,					
	Germany, Belgium and					
	Luxemburg:					
	https://www.splash.nl/					
	student/delivery-info					
	 not same information 					
	in Dutch and English					





D2.2-Circular business model development and implementation plan

