

# Refillistic

## What problem are you trying to solve?

1. Increase of single use plastic package pollution although consumers only need what is inside. Our investigations in different parts of Sweden show that most residents do not take their empty plastic packages to recycling centers after they consumed the product inside. They throw single use plastic packages away into the garbage in the common laundry room. And many common laundry room cleaners do not recycle the empty plastic packages either.

2. Production and recycling costs and impacts of single use plastic packages. On Alibaba.com plastic liquid laundry detergent bottle packaging price is between 0.30-0.80 US\$. Plastics production and the incineration of plastic waste give rise globally to approximately 400 million tones of CO2 a year. Globally, 5 to 13 million tones of plastics (1.5 to 4 % of global plastics production) end up in the oceans every year. Around 25.8 million tones of plastic waste are generated in Europe every year. Less than 30% of such waste is collected for recycling. They are the consumers who pays for unnecessary single use plastic packages' economical and environmental costs.

3. Transportation, logistic and retail costs and impacts of the products. According to the Importance of Shelf Space research from UMEÅ university; Most of the manufacturers are ready to pay significant premiums to get the premium place in the store. Manufacturers usually spend 40 to 50% of their advertising budget on trade promotion. Transportation and logistics-related costs as a percentage of sales range from 9% to 14% depending on the industry sector for companies who do not adopt a logistics efficiency management approach. According to the State of Logistics report for 2013, the logistics cost percentages of the GDP were 8.5% in 2012. These percentage ranges include all logistics-related expenses such as warehousing, dedicated personnel, and transportation expense. Transportation costs alone comprise the vast majority of this expense for most companies.

## How do you plan to solve the problem?

First business plan: Consumers can purchase various liquid (detergent, softener, disinfection, soap, dish soap, etc..) from our refilling machines in their common laundry rooms (In Sweden) or other common areas (in Nordics countries, Europe and World) and refill their empty bottles more than one time. They purchase the products with their bank card or mobile (Swish). They purchase what, where, how and when they need it. Consumers don't need single use plastic and their unnecessary impacts. They need what inside.

Refillistic acts as the middle agent of liquid products. We will sell those liquid products with a profit margin through our refilling machines placed in common laundry rooms/common areas. Product manufacturers will deliver the product in cans to the cleaning company warehouse. So, Transportation and logistics to different groceries and shelf space costs will reduce. The intermediate function will be performed by the cleaning companies which clean those laundry rooms. The cleaning companies will hold the responsibility of delivering the home and fabric care liquid products into the designated laundry room on the regular schedule from their warehouses. Task carried out by the cleaning companies will include refilling machines with reusable plastic cans when machines send the signal through its IoT based platform. Housing companies will earn affiliate commissions from product sales in their common

laundry rooms. Thus, residents will reduce their monthly fees by just buying our product. Cleaning companies will be paid for the task carried out. Since the Refillistic model kills two birds in one shot, Consumers CO2 footprint, cost & organization requirement of recycling, energy requirements for recycling will decrease.

Our revenue model motto "Giving is winning". We give product manufacturers the possibility to sell their products in a sustainable, environmental, consumers friendly and economical way in the right place. We give to householders an opportunity to have an extra income or cleaner of the laundry rooms. We give consumers to buy cheaper (because of the reduces costs), smoother, environmental friendlier purchase experience than usual one. We give to all participants (including consumers) be part of reducing plastic in our environment. In later stages, we can produce and sell refilling machines to Groceries for selling their own brands (Ica Basic, Coop Extra, Garant, etc.) and to laundry product manufacturers (Unilever, P&G, etc.) for selling their product in Groceries, centrums, shops and malls and we will get revenue from machine selling, maintenance and provide consulting service to these companies.

There will be screens in refilling machines where consumer can see guidelines and motivating messages when they purchase, for example, "Thanks for helping us to reduce plastics". Each of our partners will get data about how much CO2 has been reduced by their contribution. So, they can share how much plastic decreased with their help.

Refilling machines with IoT which can inform responsible person for changing the container when it is empty or for do the maintenance. According to 46elks workshops and their personal sending sms in a certain situation is possible. IoT and SMS system give automation and freedom to the refilling machines. Even an application (Name suggestion: FantasticRefillistic) can be made to make the payment, share the daily saved CO2 information or new products that consumers can purchase on the refilling machines.

Smart cities need smart solutions, but it also requires solidarity. Let's give consumers smarter consumers alternatives.

## **How do you plan to make this solution a reality? Do you have an action plan?**

Plato would say I neither know nor think that I know until I test something if he was alive today. We want to test our business model to get more affirmative or dis-affirmative evidence, facts and proofs. First plan to test our solution in the real market and get feedback from customers/users/partners as soon as possible. We plan to produce at least 5 different prototypes and place them in different housing companies' common laundry rooms/common areas. Production, transportation and maintenance (including refilling the machines) costs of machines will be our responsibility in the test stage.

We need to develop a website (domain and design are done) and meet investors with the feedbacks, data and results of tests. We will make a plan for legal advices to make agreements with the housing companies. Next year goal is to see a decreasing number of plastics packaged with liquid home and fabric care products.

We have designed our first prototype with the help of Ideaction accelerator program and Toolspace organizations. We also have worked on different refilling machine alternatives. We know how our products and services will look like. Technology is not the issue. It is doable, valuable and similar examples such as ice cream, cola refilling machines) are exists everywhere. There are similar refilling

machines, shops in the world (Indonesia, USA, Czechia, Chile, Guiana, Korea, etc). <http://ecopod.us/> is only one of them. But we want to build refilling machines according to customer needs and Nordic standards.

We will apply Innovative startup first stage and VisionFonden Helsingborg soon. We continuously look for investors in different platforms such as DanBan, impact+, Sting, UIC and etc. We have a plan to reach Unilever as our partner through [www.theunileverfoundry.com](http://www.theunileverfoundry.com). They are open to collaborate with startups. We can also have help from Ignite Sweden to make new partnerships. We plan to work with NGO's and social companies to spread our vision and mission. We want to solve these challenges because we want to make a profit, but we believe in society and each part of society can make a profit from the result of we do. Our goal in the first year to sign strong and profitable partnerships, make a prototype and test our business model in the real market (hopefully first in Helsingborg because they look like an innovative city). According to our Production Manager; X-Road community is the perfect solution and easy to apply to our refilling machines in the future. All data can be used safe and right way.

Nordic smart city hackathon can help us to find good partners, volunteers, professionals or better future dreamers. We already share and work on everything that hackathon wants to deliver. There are countless of opportunities for whom are ready to see.

## Why is your solution innovative?

Existing laundry product refilling machine businesses locate their machines in kiosks, malls or busy places but consumers need to bring their empty bottle with them to refill or buy another single use plastic packages which is sold beside the refilling machines one time and use the detergents with the same costs. Operational and transport costs of the laundry care products are still exist in their solution because they run their business as usual.

Laundry equipment manufacturers such as Electrolux, PODAB have different solution like dosing pump system. Some of machines like Whirlpool Load & Go has big laundry detergent container. However they hardly involve stakeholders to be a part of their solution. They offer the product and expect consumers to buy because it is environmental friendly alternative which is unfortunately not true in many case. And what happen to the plastic package when they refill their container? It goes to the garbage again and never used again. Consumers cannot reuse plastic packages and production cost of plastic packages is still on the consumers' shoulders.

Our business model allows us to have profitable partnerships for all participants with. Our partners will be the laundry care manufacturer (Unilever, P&G, etc.), housing companies (HSB, Svenska Bostäder, etc.) and cleaning companies that clean laundry rooms where refilling machines are in. The manufacturer will deliver the products in big refillable plastic cans to the agreed cleaning companies' warehouses. The cleaning companies refill our refilling machines when necessary. Refillistic creates a different circular economy and has a great shared value by collaboration, triple win situations and a sustainable business model. The housing companies can win free cleanings of their laundry rooms or an extra income if they let us be in their common laundry rooms. And cleaning companies will be paid for each refilling of the machines and for the extra cleaning by us. Consumers can avoid using plastic packages only once; They also get rid of production, recycling, transportation, logistic and retails' costs and making negative impacts on their environment. And they can purchase same product but with a cheaper, sustainable and smoother purchase experience. We give product manufacturers a possibly to sell their products in a sustainable, environmental, consumers friendly and economical way in the right place. The key will be

cooperation, collaboration, partnership, creating shared values and win-win situations. Doing good and making profits are possible with solidarity. Humanity is the responsible of the pollution, but humanity can be the solution with the right motivation, solidarity, collaboration, and creativity. Most important goal will be changing consuming behaviors. If we can make a habit to use any single use product/package more than one time, impact will become independent from our solutions. The solution lays in the problem; Why waste/recycle if consumers can reuse, if organizations/companies can collaborate, if each participant can reduce their costs? No need for production, transportation, logistic of single use plastic packages. No retail costs for the product manufacturer. It is pure product purchase experience with a better pricing for the consumers. Let's give the consumers what, where, how and when they need it.

## How scalable is your solution?

When we change consumers behaviors to use any single use product/package more than one time, impact will become independent from our solutions. Thus, we can create different solutions for different single use package problems in the future. Why not a cold coke could be refilled in a beach with a used bottle? We see a huge demand for change in the world. For example Greta Thunberg is still demonstrating every Friday. UN's SDG are screaming for creativity. And we are the right team to meet those demands by our knowledge, experience, desire and vision. Now it's time to use our potential for fighting together against the climate change. We hear our world crying everyday, don't you hear?

According to Insight Intelligens report (2019); Almost every Swedes sees sustainability as important (95%). 66% see it as very important to a very large extent. Women to a greater extent (75%) than men (57%) think it is important. Those who to the greatest extent see sustainability as important are women between the ages of 16 and 29. With these statistics, we are sure that we have a perfect customer profile and we are in a right country to start a sustainable and environmentally friendly business. The majority of Swedes answer that companies' sustainability work affects them to a fairly or very large extent(58%). Women respond in larger to the extent that they are affected by it (65%) than men (52%). The target group that to the greatest extent answer that it affects them are women between 65 to 70 years (77%). Nordic consumers are eager to use sustainable solutions!

Nordic countries (especially Sweden) are the right place to start this business because there is an unique opportunity in here: Common areas such as common laundry rooms. Another opportunity is similar behavioral habits. Nordic consumers care much about the environment. Nordic and most of the European consumers are used to reuse different products. For instance, plastic bags, clothes, rechargeable vehicles etc. They carry their bags to the groceries to avoid buying unnecessary plastic bags. With the right motivation and messages, they can bring their empty bottles to common laundry rooms or other common areas. We target first liquid laundry product (detergent and softener) market. All common laundry room users are our customers in Nordics. More specifically, environmentalists and working-class, elder people, lethargic, time-starved persons.

According to report by Allied Market Research, the global liquid detergent market size was valued at \$27,405 million in 2017 and is projected to reach \$40,482 million by 2025, growing at a CAGR of 5.2% from 2018 to 2025.

Around 30 millions lives in Nordic countries. Can you guess how many of them not use any liquid products? None! Unfortunately we don't have specific numbers of Nordic market but we are sure that the market for the liquid products (first laundry care products and later any liquid product such as

disinfection, oat-soy milk, coke, alcohol free drinks, etc) have huge possibilities. Every citizens can use our various refilling machines. Because they already paying for the liquid product, not for the single use plastic packages, they can jump easily our offer. We have possibility to change regular consuming habits. In future, you might no need to go to groceries to buy the product, just find the nearby refilling machine and purchase your product cheaper and environmental friendly way. Beside for growing in the Nordic countries by designing various refilling machines for different liquid products, we can grow in every growing cities, new areas and every corner. OMG! Science fiction novels are becoming reality, Refilling machines will control the Nordic countries!

### **How does your solution make an impact?**

Let's have some calculations and assumptions: 2 members family who uses 4 times common laundry room consume approximately A+ 900ml detergent package in 5 weeks. This means Refillistic will reduce around 400 gr plastic package per 5 week and per family. In Sweden, 69 % used a common laundry room percent of the Tenants' Association's members in 2012 (Hem&Hyra's survey).

When should we recycle if we can reduce the waste by using the same product more than once? If you motivate the people reusing products, isn't this a creating circular economy? Can we mention Clean transport, If we transport a product with someone is already going to same direction? How about reducing the plastic in the environment for protecting our oceans? Technological adaptation is necessary for sustainable cities, right?

Total assumption, Refillistic can make disappear many big plastic mountains first in Sweden and later in the whole Nordic countries and last hopefully in the World!

### **Is your solution built on prototype or is it a conceptual solution?**

Prototype

### **Link to your pitch video (on Youtube, Google Drive or Vimeo)**

<https://youtu.be/pSuu49acfO8>