



## Business model

# PRODUCT LIFE EXTENSION

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- If there is no longer any use for the product, it can be sold onward.

A company can create a service where a customer may return the product when it is broken or no longer needed. The company then repairs and/or updates the product and can sell it forward for a lower price. Both the company and its customers can benefit from a considerable financial gain.

When a product has a long lifecycle, the customer needs to buy a new product less frequently and the company can save on material costs. Products are also manufactured less in this case. This saves natural resources and energy, and the production causes less harm for the environment.

Source: Sitra





## 3 STEP IT

*3 Step IT leases office equipment to organisations. After the leasing period, the equipment is serviced and sold. Extending the useful life of equipment is an integral part of the business model.*



### Problem

Used IT office devices are often disposed of as waste even when they have residual value and could be used in less demanding settings instead of expensive new equipment. Manufacturing new equipment consumes vast amounts of resources. However, there are data security concerns related to reselling old equipment.

### Solution: IT equipment life-cycle management as a service

3 Step IT has developed a life-cycle management service that makes reusing old IT equipment easier. The service comprises three stages: acquisition, management and repurposing. Equipment received from companies undergoes a process that ensures data security, including the destruction of data held on the devices. Over 95% of equipment can be reused.

### Revenue logic and benefits to 3 Step IT

Organisations buy a service that includes the financing of IT equipment, equipment database management and the equipment replacement service. Returned equipment is resold by 3 Step IT. The company is one of the largest sellers of used IT equipment in Europe.

### Benefits to customers and end users

The service offers an easy way for offices to have well-functioning IT equipment that is replaced as needed. Efficient life-cycle management saves IT costs and users' working time. The customer pays for use instead of ownership, which means that the costs are predictable and allocated across the actual useful life. Customers can opt for used computers, and responsible life-cycle management of IT equipment can be included in the company's environmental programme. The data security of old disposed equipment is guaranteed.

*Source: Sitra (2019): The most interesting companies in the circular economy in Finland. [www.sitra.fi](http://www.sitra.fi)*





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# UPHOLSTERERS

*There are many pieces of furniture considered to be of great value – both sentimental and monetary – that are passed down through generations of families. But maintaining furniture means restoration work, and a good upholsterer can help preserve items for future generations.*



## Problem

Most pieces of furniture reach the end of their life cycle too soon, ending up at a recycling centre or being incinerated. Manufacturing new furniture always consumes natural resources and energy. New furniture is often considered better than old but its materials and joints may be of poor quality. Often it may even be impossible to repair furniture because of its poor quality. Even a high price is no guarantee of high quality.

## Solution: professional care from upholsterers breathes new life into furniture

Upholsterers are often small-scale entrepreneurs that specialise in prolonging the life of old pieces of furniture. A customer will send a request for a quote to an upholsterer and agree on special requests, choice of fabric and the timetable for the work. For example, upholstering a basic sofa will take at most five working days, and often the work can be done within a few months of contacting the professional. A transportation company will pick up the item from the customer and return it once the work is done. For example, one sofa that is reused will save the equivalent of driving 240 km in an average car.

## Revenue model and benefits for the upholsterer

The upholsterer receives income from the design service and from upholstering furniture. The duration and price for redoing the upholstering are determined on a case-by-case basis. Upholsterers are the circular economy professionals of the interior decoration business and are experiencing growing demand.

## Benefits to the customer and end user

Often the upholsterer's customer is a household or a business. The professional upholsterer can extend the mileage of a customer's furniture, and the customer has the chance to make special requests and receive a unique result with little extra effort. The customer can trust they will get long lasting, unique, high quality furniture.

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Source: Sitra





# SWAPPIE

*You don't have to buy everything as new, not even mobile phones. Swappie services and sells used smart phones. The used phone has a guarantee and it costs less than a new one.*



## Problem

In Western countries, people purchase new mobile phones on average every 18 months, which often means that old phones lie around in drawers or are otherwise unrecycled. Electronic waste disposed of incorrectly is one of the most problematic waste types. Additionally, rare materials and natural resources are wasted if devices end up at a landfill instead of being recycled. The production of new mobile phones, in turn, uses up resources and increases greenhouse gas emissions. From the consumer's perspective, another problem is the continuous rise in the prices of new phones.

## Solution: a marketplace for used smart phones

Swappie purchases used phones from companies and private individuals, services them and puts them up for resale. Phones sold to Swappie can be either fully functional or they can be in an inoperable condition – before their resale a technical analysis is run on the phones indicating their condition and potential damages. Phones can nearly always be reused; they can either be used for spare parts or be repaired for resale. Phones that are unfit for the Finnish market are sent abroad via other recycling services. Unusable phones are taken to electronic waste disposal points. Extending a mobile phone's service life from 1.8 years to 4.5 years can help halve the carbon footprint of the phone's life cycle.

## Revenue logic and benefits for Swappie

Swappie's revenue logic is based on the revenue earned from the resale of phones. The company's business activities are profitable because of optimised technological analyses and a specialisation in certain products: iPhones. The company pays suppliers for used phones.

## Benefits to customers and end users

Customers benefit from the smaller purchase price of a used phone, the warranty offered for the products and the transparency of Swappie's activities: the customer knows what they are purchasing. The customer can also earn money by selling their old phone to the company.

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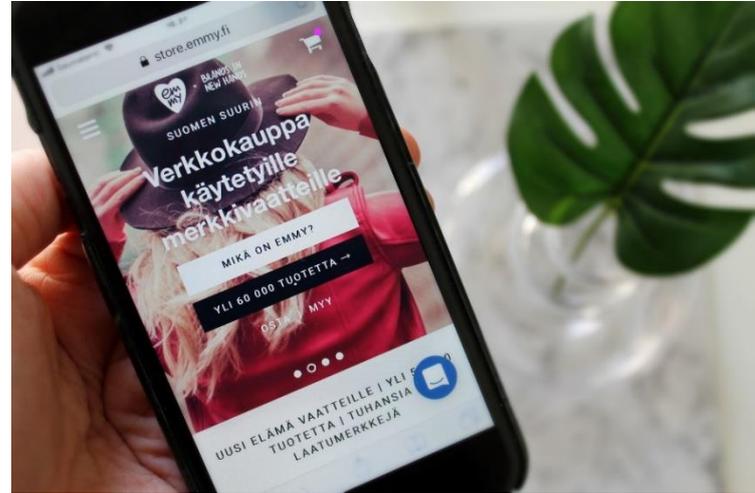
Source: Sitra





## EMMY

*Emmy.fi offers an easy and transparent way to sell and buy used clothes. Saleable products are easy to obtain, and consumers can buy products from multiple sellers at once. By solving crucial problems for consumers, Emmy.fi helps to ensure that high-quality garments remain in use instead of being discarded.*



### Problem

Clothing manufacturing consumes vast amounts of water, land and chemicals and causes greenhouse gas emissions. Cheap clothes often have a short useful life, whereas quality items are in high demand even when used. From the point of view of the environmental load of the textile industry, the functioning of the aftermarket is a crucial factor. However, the sale and purchase of used clothes from second-hand stores and online marketplaces can be a hassle. Many consumers do not sell their old clothes even if they believe in recycling.

### Solution: turnkey model for selling used clothing

Emmy offers consumers a convenient way to sell high-quality used clothes. The clothes can be dropped off at a collection point or sent to Emmy by post. Saleable products are photographed and priced on behalf of the consumer and entered in the online system. The products are then sold via the Emmy online store. Buyers have a 14-day cooling-off period on purchased products.

### Revenue logic and benefits to Emmy

Emmy pays the seller the sold price minus Emmy's commission and delivery charges. Since Emmy only pays out on sold items, the business model is low risk, although work hours are spent on all items regardless of whether they sell or not. Buyers pay a delivery charge for any purchases under €49.

### Benefits to customers and end users

Sellers save a lot of time and effort compared with other reselling solutions: they don't have to price or photograph the clothes themselves, and they can send a number of items for sale in one go. Buyers can save money by buying used designer clothes instead of new ones. High-quality items can be passed on many times. Emmy has partnership agreements in place for its collection points with retailers such as the Stockmann department store.

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# VALTRA

*Valtra has managed to create a new and profitable business from remanufacturing used gearboxes, making good use of their technicians' professional expertise. The customer quickly receives a new gearbox to replace a broken one. A deposit scheme has been created to ensure the return of old gearboxes.*



## Problem

Value is lost when used tractor gearboxes are taken out of use. Manufacturing new gearboxes consumes a large amount of resources.

## Solution: remanufactured Valtra Reman gearboxes for tractors

Used gearboxes are returned to the factory to be dismantled, cleaned and refitted with new parts to replace worn or damaged ones. Remanufacturing uses approximately 95% less energy than manufacturing a new product. The gearboxes are assembled, tested and painted like new products. Customers can choose from several different models, which are quickly available direct from the warehouse.

## Revenue model and benefits for Valtra

Remanufacturing gearboxes accounts for a significant portion of Valtra's business and is very profitable. When ordering a Reman gearbox, the customer pays a deposit which is approximately 50% of the gearbox price. This deposit is repaid to the customer upon return of the old gearbox. Close co-operation and sharing information during product development help to improve products. The valuable expertise of Valtra's technicians generates new added value while saving the customer money and time.

## Benefits to customers and end users

The remanufactured Reman gearbox is 30-40% cheaper than a new product. The updated, like-new gearbox can be quickly installed in the customer's tractor. Dealers and maintenance technicians enjoy easily scheduled and faster repair times. Valtra pays the delivery costs and offers a warranty for the proper function of the remanufactured gearboxes.

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# PONSSE

*Ponsse's services extend the useful life of machinery and save significant amounts of materials and energy alike. The company refurbishes used forestry equipment parts and sells them to its customers with warranty coverage. In addition, Ponsse offers power packs that boost up and modernise the machines.*



## Problem

The manufacture and purchase of forest machines involves large investments. The requirements related to the harvesting of forests and the specifications of forest machinery develop quickly, which means that new machine models are constantly being produced for the market. New spare parts can be difficult to come by for older machinery, which quickly fall out of date. The manufacture of new machines and spare parts uses a great deal of metals and other resources.

## Solution: a customer needs-specific spare-parts range

Ponsse has productised a range of spare parts for various customer needs. In addition to selling new original spare parts, Ponsse offers its customers parts serviced at factories, budget parts and performance packages. According to various estimates, factory servicing decreases energy consumption, materials use and greenhouse gas emissions compared to the manufacture of new parts.

## Revenue logic and benefits for Ponsse

In addition to forest machinery, Ponsse sells its own parts and maintenance packages. Additionally, the company repairs old parts bought back from its customers, so these parts are reusable, and their resale benefits both the company and its customers. The company has authorised suppliers around the world that sell spare parts and maintain the company's machines. The services offered to customers have been formulated in ready packages which make the work of the global maintenance network easier.

## Benefits to customers and end users

A customer can extend a machine's service life by updating it with performance packages, so it is up to date, or by purchasing budget parts or parts serviced at factories. The latter makes it possible to also offer an extensive range of spare parts for older machines. Additionally, the customer is compensated for old machine parts, which Ponsse buys back from its customers for servicing and resale.

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## EKOX OY

*Many organisations dispose of IT and office equipment that is still in good working order and nowhere near obsolete. Ekox is aiming to resolve this problem by servicing equipment for reuse in high volumes. Customers get equipment that is cheaper than buying new devices.*



### Problem

Companies and organisations continuously dispose of reusable IT and office technology. Instead of reusing these, they purchase new expensive equipment. As a result, the usable equipment is taken to landfills. The manufacture of new technical equipment consumes non-renewable resources and produces emissions.

### Solution: IT equipment for reuse

Ekox services IT equipment for reuse and empties equipment hard drives while taking into account information security. The company's Noutoturva service collects equipment from the customer, sorts it according to its condition and clears the data off the equipment. Customers can purchase or rent serviced equipment via the Ekone service. The lisi service, in turn, allows customers to purchase the electronics of an office, building site or event venue. The electronics packages are installed and ready to use. By extending the service life of a laptop from three years to seven years the carbon footprint of the device can be up to halved.

### Revenue logic and benefits to Ekox

Ekox's revenue comes from servicing equipment, the sale of serviced equipment and equipment rental. Customers who want their equipment back after it has been serviced pay a fee for testing and servicing. If the customer does not claim the equipment back within 60 days, it is sold on the service portal.

### Benefits to customers and end users

Reused equipment is a cost effective and ecological option for customers. Pre-owned serviced equipment is considerably cheaper than new equipment. A pre-owned device is suitable for many purposes. Ekox collects equipment directly from the customer, which means that the customer organisation does not have to arrange recycling or storage. Customers can check the portal to see what types of equipment they have handed over, print a report of collected equipment and choose which devices they would like to receive back from Ekox.

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# COBBLER SERVICES

*The environmental effects of clothes and textiles have been discussed greatly, but shoes are often overlooked. Some of the materials used in making shoes are even more harmful for the environment than those used in the textile industry. Expanding the lifecycle of shoes reduces harmful environmental effects. A professional cobbler or leather worker can extend a shoe's life considerably – with a low cost.*



## Problem

New shoes are nowadays mass produced, and the quality is poor. The larger proportion of the shoe industry and leather tanning plants are located in developing countries. However, only a few shoe importers are aware of the production chain of their products and from where their leather originates. The biggest environmental impact of the shoe industry is caused by materials, especially leather tanning, which is a slow process consuming a large amount of water and chemicals. The waste water from leather tanning is high in chemicals and the process produces great amounts of waste.

## Solution: The cobblers' expertise increasing the life of shoes

Many people fall in love with shoes that they have worn for years. Cobblers are small entrepreneurs, who ensure the long term use of shoes. Cobblers can also custom make unique shoes, which is both ethical and sustainable. The service and repair of shoes extends the life of a shoe by many years.

## Revenue logic and benefits to cobblers

Cobblers get their income from repairing and servicing shoes as well as making new shoes. A cobbler's work is two fold: a quick service in which the required repairs are made while the customer waits, mostly focusing on heel tags and soles. In more traditional function, a cobbler repairs or upgrades leather products according to the customer's wishes. In addition, a leather worker can make shoes, bags, belts and other leather products custom made.

## Benefits to customers

By repairing old shoes and leather products, customers can use them and save money from acquiring new products. The customers can also order unique products specially made according to their wishes. Professional cobblers can make durable, unique, high quality shoes for their customers.

Source: SYKLI Environmental School of Finland (2018)

