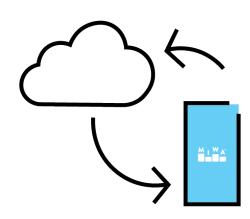


Complete business ecosystem for smart REUSABLE packaging.





Pure sense
Buy food, not packaging.
That's pure shopping.









Pure comfort

Everything is designed for your maximum convenience.

That's Pure shopping.



MIWA introduction

Leading innovation in REUSE

MIWA is a technology company driven by a mission to prevent waste from single-use packaging.

MIWA solution has been recognized and awarded by multiple impact authorities, such as:

- Ellen MacArthur Foundation;
- SGD Awards;
- E.ON Energy Globe Awards;
- EU Social Innovation 2019;

and is presented as a best practice by European Commission and United Nations.



























The problem



Single-use packaging

The world mass consumption and "single use" mentality causes world-scale plastic waste issue.

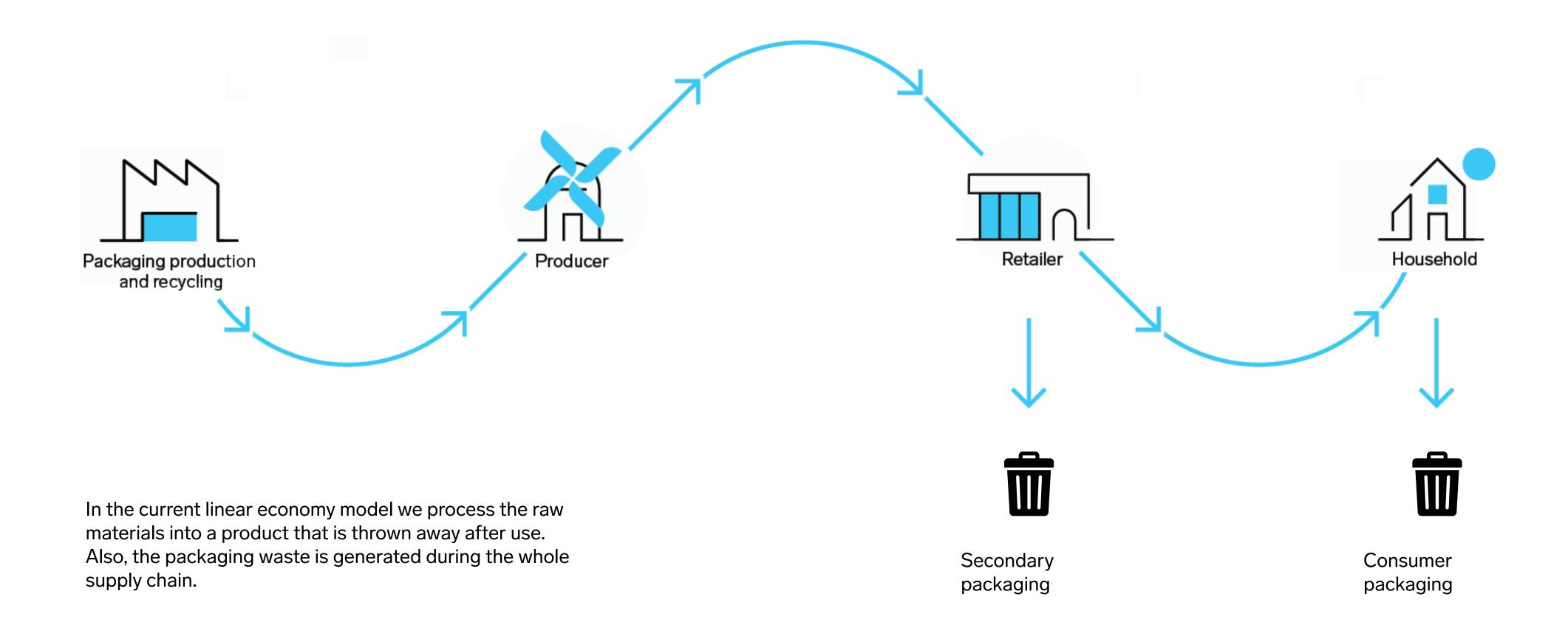
Majority of plastic waste (59% in EU) is generated by packaging. Previously predominant approach based on recycling has shown to be ineffective and became obsolete.

Only 2% of the annual plastic packaging production of 78m tons is recycled into similar quality applications. About 32% of annual production still leaks uncontrollably into the environment.





Classic linear model





We do Reuse



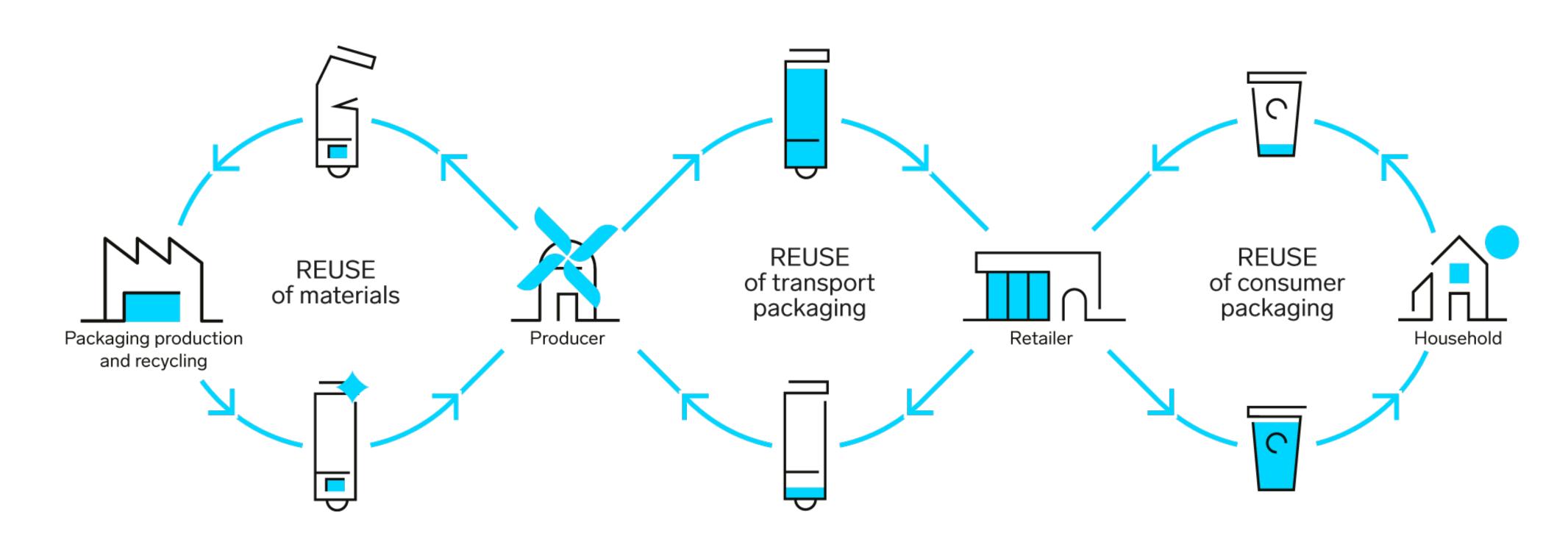
MIWA solution

We redefine package-free solution to make it scalable for the branded producers, major retailers and mainstream consumers while minimizing the package waste not only by the end customer but during the whole supply chain.





MIWA vision



MIWA keeps the future use of materials in mind and ensures collection and recycling of all HW components. In order to achieve even better results, MIWA's goal is to constantly work on material recyclability.

>70%

In comparison to the normal distribution of food in disposable packaging, MIWA can reduce the overall negative environmental impact by up to 71%!



How we do it



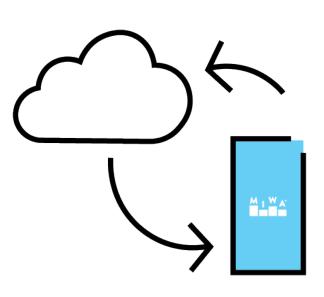
Delivery loop REUSE **REUSE** REUSE of transport packaging of consumer of materials packaging Producer Retailer Household Packaging production and recycling



Technology I







12I reusable capsule

Modular shelf

Information system

Delivery Loop

The 12l Reusable capsule circulates constantly among the manufacturer, the store, and the washing center.

After it's filled, the capsule carries detailed information about the product inside and it protects its freshness throughout the distribution.

When delivered into the store the capsule is placed in the Modular shelf.

Our smart technology ensures the real-time data flow to our Information system which improves the efficiency of logistics and store operation.



Quality assurance

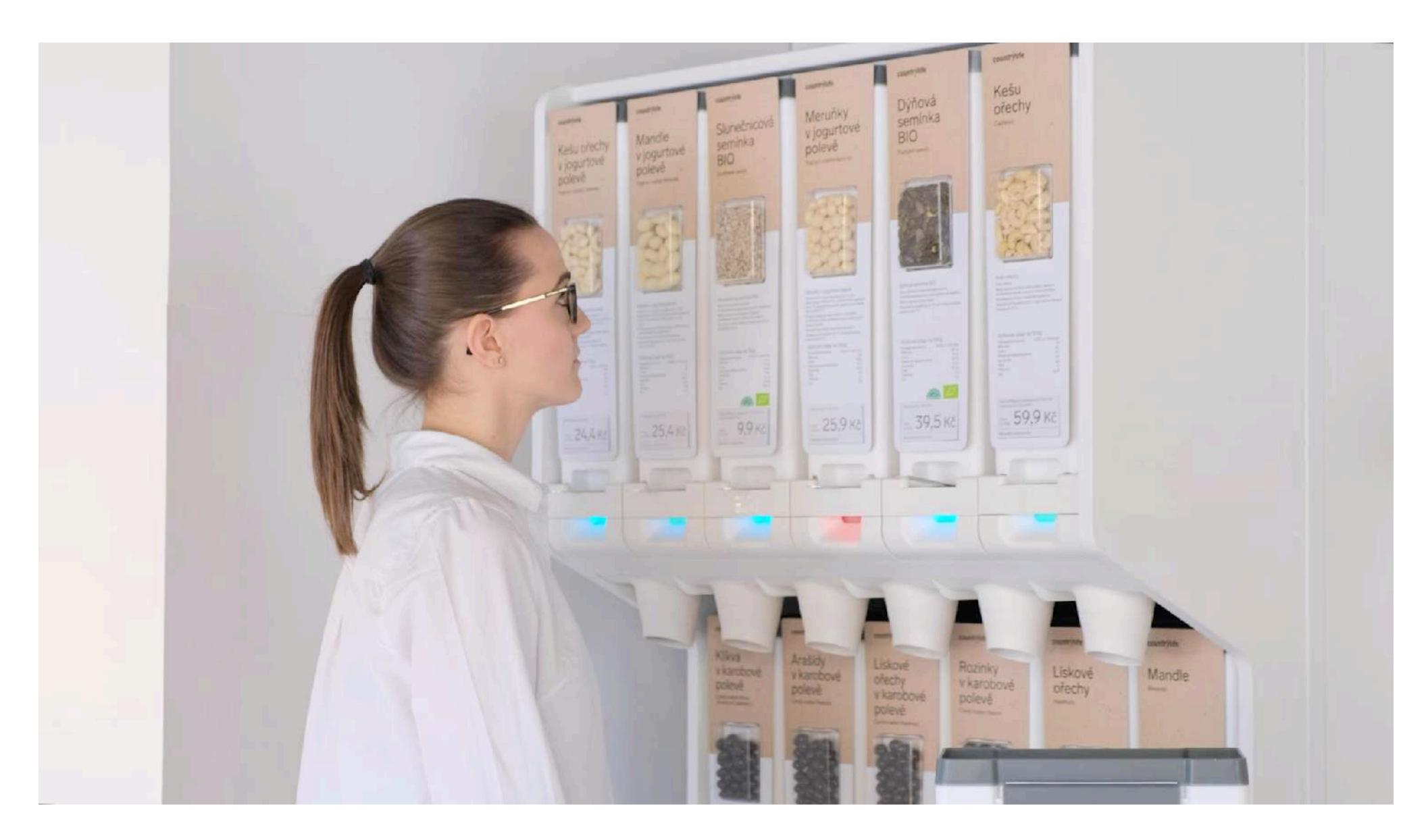
The quality of the product in the capsule, its durability and protection from contamination is ensured by a disposable sanitary pouch in each capsule which is sealed and opened by the valve without any human touch. There is no open manipulation with the goods or any other human touch in MIWA. The valves close the capsules and prevent insect contamination.





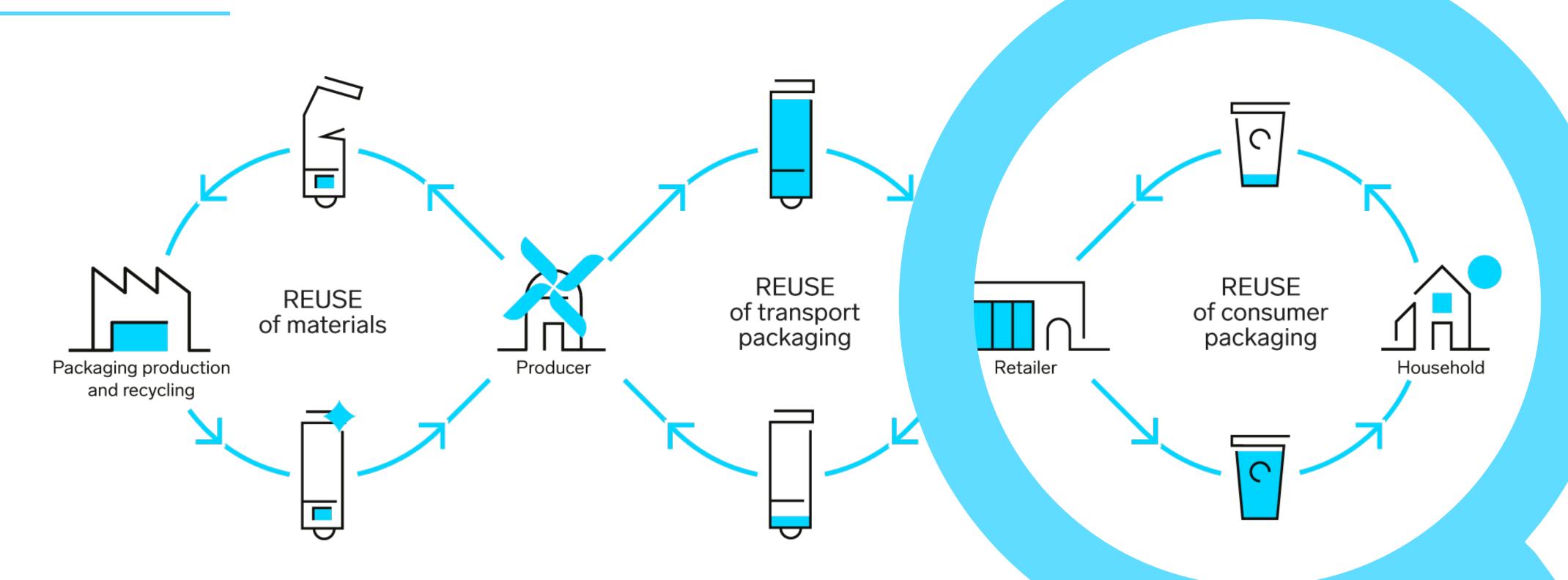
In-store operation







Consumer loop





Technology II







Shopper app

Consumer Loop

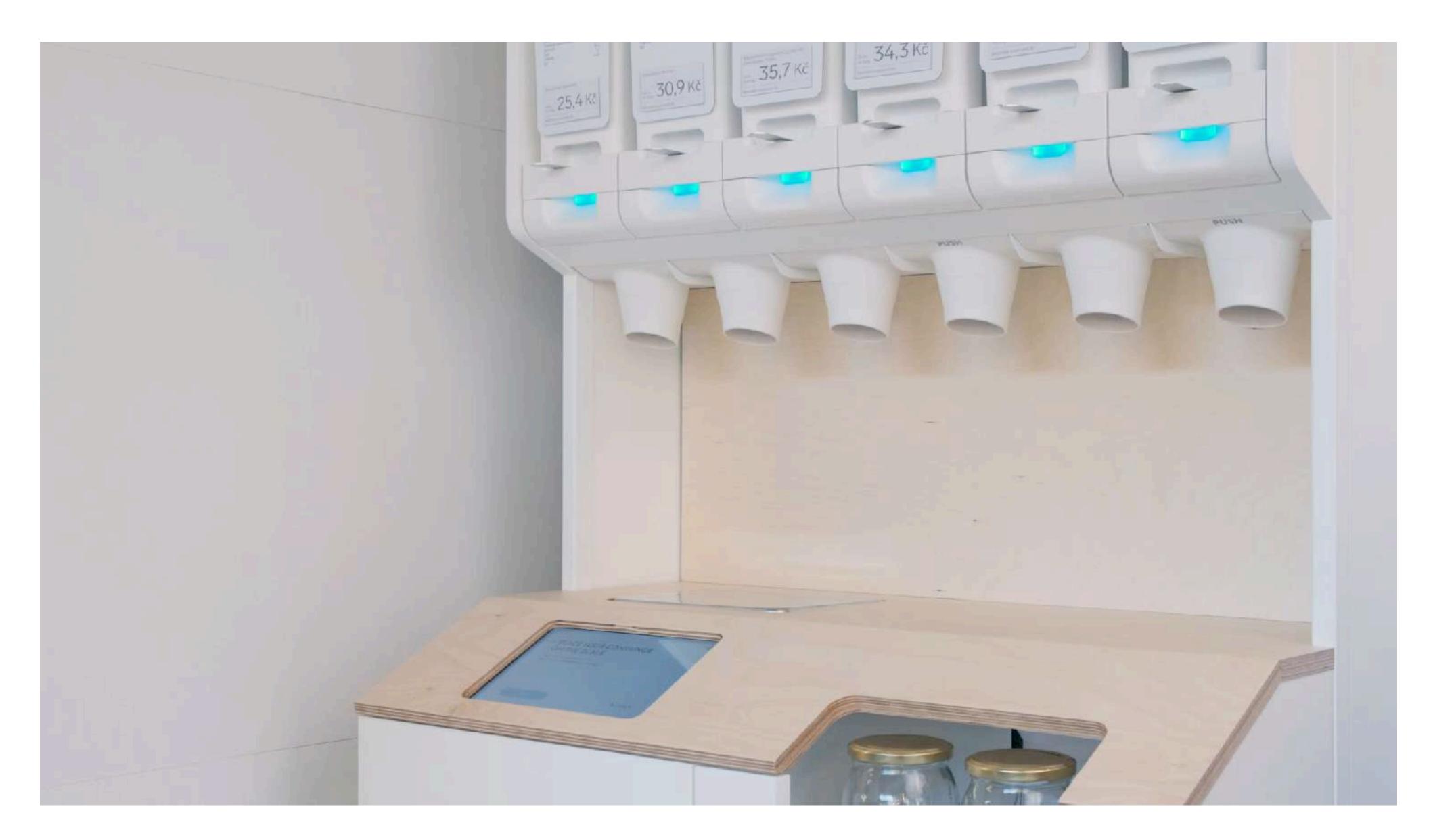
The reusable, stackable and dishwasher safe MIWA cup is equipped with a smart NFC tag that communicates with the dispensers and the cash-desk system, so you do not need to tare it or scan the labels.

The product information is automatically transferred into the Shopper app. You can easily view the information about the producer, expiration date, allergen content or receive some cooking tips and more.



Shopping experience





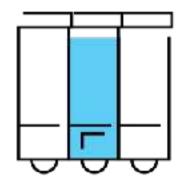


Watch the video: bit.ly/2CypGke

MIWA experience



MIWA experience I



Capsule is placed in the MIWA modular shelf

The producer fills the capsule with the product, seals it and sends it to the store where it is placed in the shelf. The capsule works as a packaging for the logistics but also as a dispensing unit in the store.

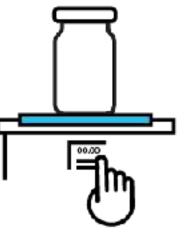
Once the product in the capsule is sold out, the retailer easily replaces the empty capsule with a full one. That means no open manipulation with the product in the store. The empty capsule goes to the washing centre and then to the producer who fills the capsule again.





Choose a container, use your own or take a MIWA cup

The customer can either bring own container, choose a reusable container provided by the retailer or he/she can choose smart reusable MIWA cup, which is hygienic, stackable and dishwasher safe. MIWA cup has NFC tag that communicates with the smart vent so eventually there is no need for taring it first, which makes the shopping experience for the customer even more convenient.



Tare the empty container

If the customer uses own container or the container provided by the retailer, he/she needs to tare it first on the scale at the MIWA modular shelf (no need for printing the label with tara, the information system/tablet remembers the tara).

If the customer uses smart MIWA cup, then there is no need for taring at all. The smart dispenser detects the MIWA cup and the customer can start pouring the product.



MIWA experience II



By pushing the vent up, the customer starts dosing. By releasing the pressure the dosing stops. When desired, the customer can push the vent up to add more product.

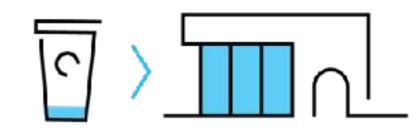
The customer has the option to place the cup with the product on the scale to know the exact current amount of the product and is able to add more if desired.



Pay & Enjoy

If the customer uses his/her own container or the container provided by the retailer, the scale will print the scale tag with all the information about the product (Name of the product, Date of the purchase, Best before date, Tara, Net weight of the purchased product, Price, QR code for more information about the product - recipes etc.). The scale tag contains also a regular EAN code that the retailer uses so that customer can pay for it along with other packaged products at the check-out.

If the customer uses smart MIWA cup he/she has all the information in the MIWA app in the real time. That's why he/she can pay at the check-out by showing the EAN code in the phone.



Back to the store

The customer enjoyed the MIWA wastefree shopping experience and returns back to the store for the next waste-free purchase.





Eliminating barriers for scaling up to modern retail



MIWA Solution



Issues of current systems





- No cleaning, refilling and storage of open products in the store
- Product hygienically sealed
 No open manipulation with the product
- Information system ensures the transfer of product information from producer to consumer
- Barriers for branded producers eliminated
- Modern and convenient shopping experience

- In-store operation hassle
 - Cleaning and refilling containers in store
 - Storage of open products
- Quality guarantee difficulties
 - Open manipulation with the product
 - Shortened expiration (open products)
- Traceability and transfer of product information
- No offer of "branded" goods
- Complex shopping experience
 - Too many steps to get the product

Most frequent questions

Type of solution

Independent & modular

The MIWA modular shelves can stand by themselves and can be placed in the store to create different set-ups - e.g. waste-free shopping aisle, shop-in-shop or to challenge the single use packaging next to the classic shelves.

Easy to implement/ to install

The assembly is done by the MIWA team at the moment but the day to day manipulation with the modules is done by the employees of the stores, since it is easy and quick. Apart from the hardware there is software which can be accessed by MIWA remotely.

Product filling

Products traceability

The information system provides the retailer/producer with the real time data about the stock as well as the amount of the products left in the capsules placed in the modular shelf (and more information about the product - e.g. best before date).

Easy to refill

The employees in the store will easily remove the empty capsule and replace it with a new capsule within a few seconds. Since the capsule is hygienically sealed, there is no risk of contamination of the product because there is no open manipulation.

No competitors

Nestlé can buy the modular shelves so that only Nestlé can exclusively place the product into the capsules.

Bulk dispensers

The bulk dispensers are not transparent in order to ensure the best conditions and the quality guarantee of the product sold in the MIWA system. On the other hand, the real product can be seen in the transparent "product window" to ensure the customer can see the product before buying.

Quality preservation

MIWA is able to guarantee the highest product quality thanks to the sealed inner



Most frequent questions

Hygiene & maintenance **Perfect hygiene** Since the inner pouch is sealed directly by the producer MIWA can guarantee the product quality as well as the high hygiene standard. The cleaning of the capsules is done by the producer / cleaning service, not in the store. The employees of the store only need to take care of the modules as of the regular shelf (e.g. wipe with a wet cloth). Brand communication No competitors The product cards as well as the modules can be branded completely in Nestlé design since the look of the technology is fully customisable. **Shape of the furniture** The shape of the module is standardized but can be branded as Nestlé wishes. **Bulk dispensers** MIWA uses the capsules for dispensing the goods. The capsules are equipped with a product card that can be branded according to Nestlé's needs. **Environment friendly Environmental Impact** In comparison to the normal distribution of food in disposable packaging, MIWA can reduce the overall negative environmental impact by up to 71%! This number doesn't stand only for packaging waste reduction. In this Life Cycle Analysis (LCA), numerous factors are taken into account such as eco-toxicity, fossil fuel consumption, influence on climate change and water consumption. Shopper friendly Easy to understand Simple to use technology that focuses on delivering the most convenient bulk shopping experience. Scale Each module is equipped with a scale, tablet guiding the customers through the steps and with printer which prints the customisable scale tags providing all necessary information about the purchased product.



MIWA in the store

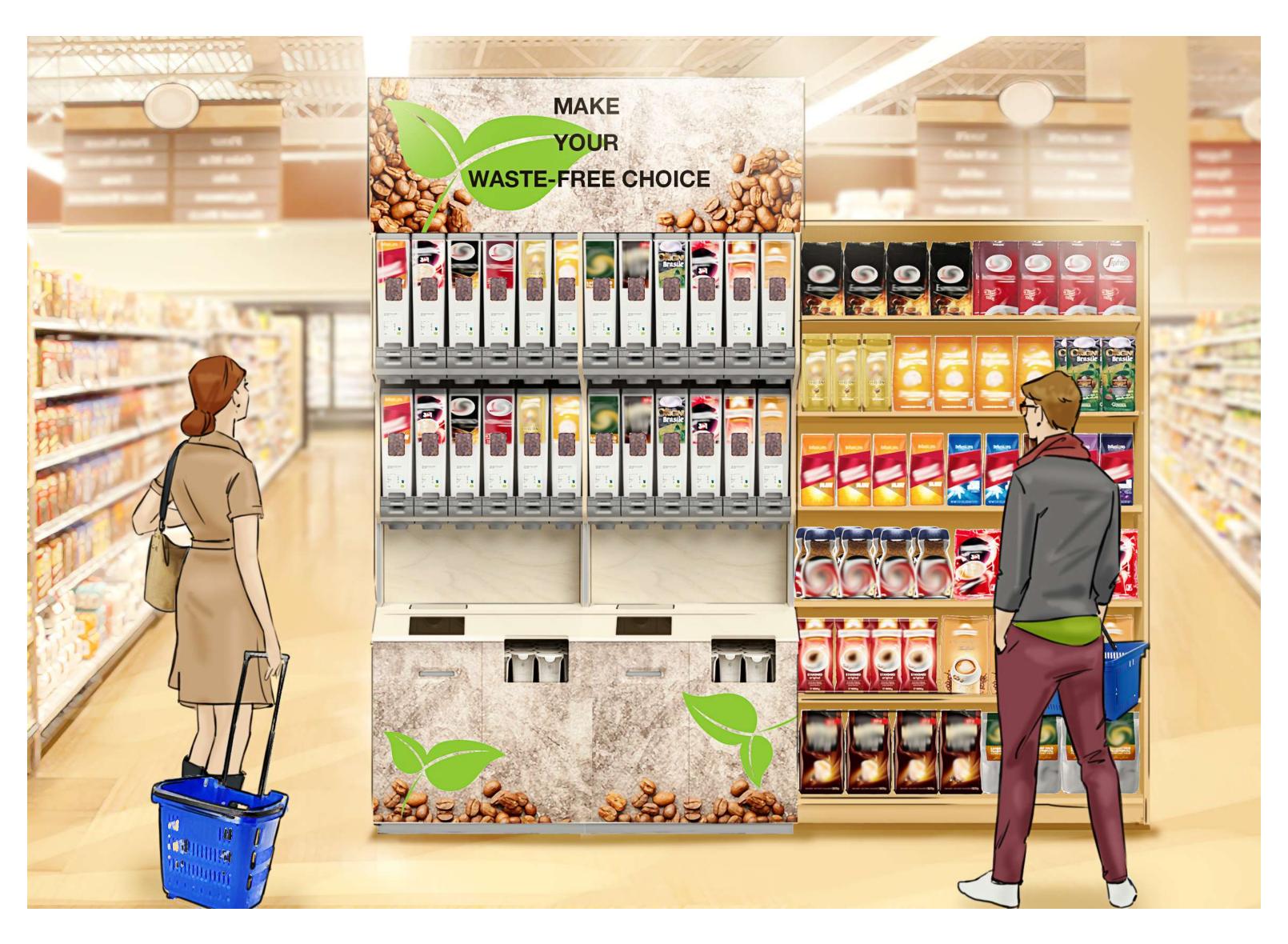


MIWA aisle





MIWA challenging single-use packaging





MIWA farmers' market



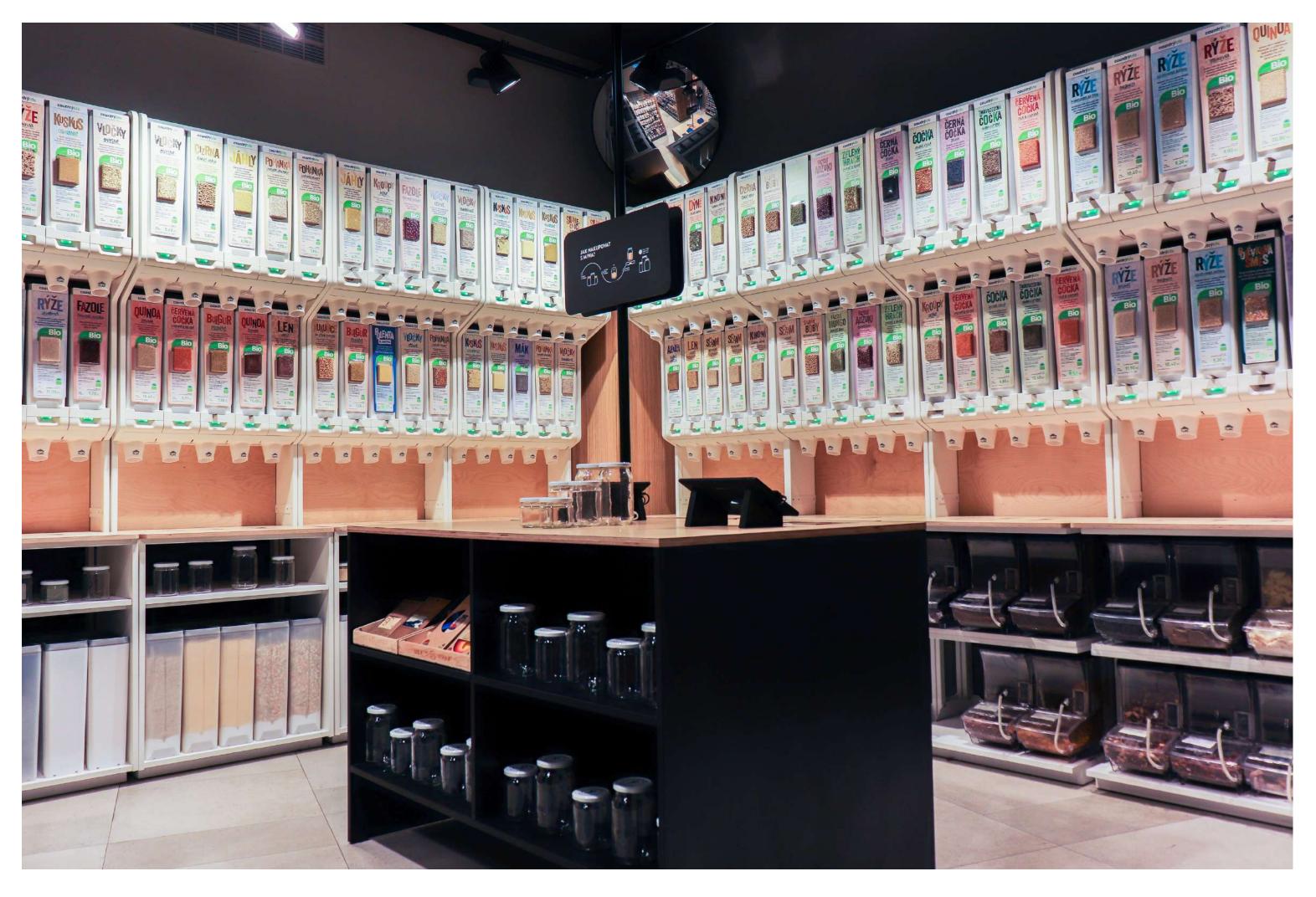


The first implementations



Country Life Letná CZ

Organic Retail Chain





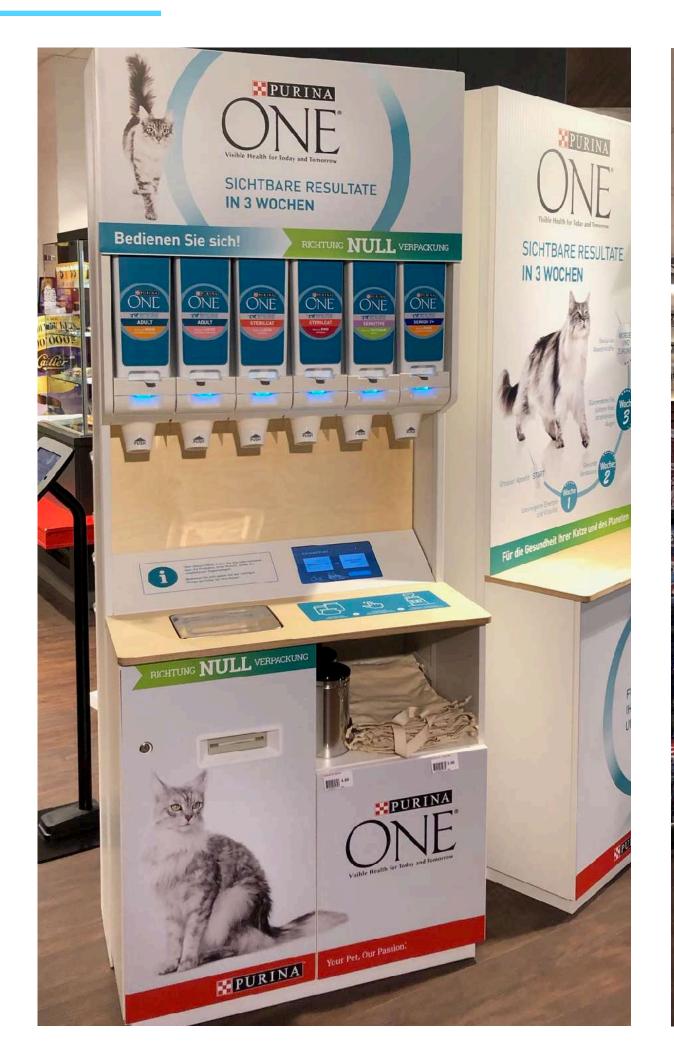
Country Life Melantrichova CZ

Organic Retail Chain





Nestlé Switzerland











Thank you!

www.miwa.eu nikola.stiskalkova@miwa.eu +420 775 419 869



