



How Retail Executives can close the food waste gap?



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In a world grappling with the urgent challenges of sustainability and resource conservation, the retail sector stands at a crossroads

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Facing a critical juncture, the retail sector must urgently address the escalating food waste crisis, with 1.6 billion tons wasted annually, risking not only environmental and economic stability but also the sector's very survival

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Social: What a paradox, while 820 million people suffer from chronic hunger globally, millions of tons of food are wasted

Economy: 1000 billion of \$. This is the price of food waste worldwide, impacting the entire chain (producer, retailer and household), at a moment when food has become the adjustment variable for people

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Root causes of food waste are various and both natural and unnatural, making it hard for retailers to tackle without structural change

Food waste, mainly in developed countries, is different from **food loss**, often occurring in developing countries

Climate change making it hard to predict demand, natural spoilage processes and cultural norms regarding food consumption are the natural causes contributing to food waste

Unnatural causes lead to food waste such as inadequate infrastructure, the lack of knowledge of retailing teams, the outdated ordering systems, the consumers personal preferences

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Examples of companies such as Tesco, Marks & Spencer and Walmart to tackle food waste show the limits of specific initiatives

Educational initiatives by conscious retailers are necessary to raise consciousness but still not enough to tackle food waste

Surprise bags, popular these last years, include consumers but only superficially address the food waste issues of a retailer and fail to meet its ecological and economic challenges

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Being a committed retailers goes by **new processes**, integrated at all levels of the organization and ensuring harmonization, consistency, operational efficiency and a greater involvement of people

p. 85 Developing talent and skills: equipping employees with the knowledge and tools is a strategic step to contribute to waste reduction efforts

Employees are at the heart of the fight against food waste, their commitment and mastering of an efficient gesture to fight food waste everyday is a centerpiece for retailers

Employees are the witnesses of the food waste in shelves: they manage, check quality and can prevent waste but they also are under pressure to ensure sales volume

To benefit from the **efficiency and commitment of employees**, retailers need to give them the good working conditions: meaning, purpose, information and awareness about food waste, dedicated tools and support to guarantee the adoption of an anti-waste gesture on the long-term

03. By building a strategic planning and a roadmap for sustainable and profitable change

p. 103 Strategic planning is a first step to a long-term approach to reducing food waste

The definition of a **long-term strategy** is at the heart of the fight against food waste: it is a global change which needs to be adopted by all the management and insuflated in each layer of the organization

From the current **actions** fighting food waste to the next planned, everything needs to be **thought and integrated** to ensure the change is impactful

To be really prepared and ready for change, a **roadmap** in 10 steps can be followed by retailers, from the need to drive change by a leader, authority figure in the firm, to the new culture to integrate at every level

p. 116 Leveraging technology and process optimization for waste management illustrates the successful implementation of innovative solutions

Automation brought by processes has a lot of benefits, from better productivity to improved motivation for employees: an ideal framework to change

“What gets measured gets managed”:
measure through KPI is an absolute requirement for better management, to build accurate data fabric and adjust actions plans through real live data

p. 121 Ensure a full commitment to the roadmap, by guaranteeing adherence to the strategic plan through leadership and organizational alignment

As change is not an easy path, retailers must **trust an expert** in change transformation: Smartway leads retailers where they should be and with our teams as partners, tomorrow, sustainable is profitable for retailers

The Smartway methodology is a unique value proposition to ensure retailers avoid pitfalls, benefit from the better guidance possible all along this transformative path and guarantee a fully new culture adoption

INTRODUCTION.

In a world grappling with the urgent challenges of sustainability and resource conservation, the retail sector stands at a crossroads.

The alarming rate of food waste, with **1.6 billion tons lost or wasted annually**¹, not only signifies a substantial economic loss but also exacerbates environmental degradation. This white paper, drawing upon insights from leading consultancies like McKinsey and BCG, as well as innovations introduced by Smartway, aims to guide executives in the retail sector through strategic approaches to significantly narrow the food waste gap.

Who, tomorrow, will still want to do their shopping in a supermarket that throws away its products?

It underscores the necessity for immediate, impactful change management strategies within food distribution networks to ensure a sustainable, profitable future. The journey towards reducing food waste is complex, requiring a multi-year commitment to transformation and a steadfast dedication to a meticulously crafted roadmap. By embracing this call to action now, executives have the opportunity to lead their organizations toward a more sustainable and resilient future, mitigating the pressing issue of food waste through strategic innovation and collaborative efforts.

¹
Report from the Food and Agriculture Organization (FAO) of the United Nations

01.

Understanding the food waste challenge and its impacts



01.1

Food waste, like the hidden face of an iceberg, have major unseen and unconsidered impacts examining its environmental, economic and social ramifications

Each year, 1.6 billion tons of food worth about \$1.2 trillion are lost or go to waste: one-third of the total amount of food produced globally. Measured in calories, it means that 775 kcal/person/day are lost in the food supply chain, the equivalent of 12 medium eggs or 26 large carrots every day.²

↓ 1.6 billion tons of food worth about \$1.2 trillion

To put the figure in perspective, that is ten times the mass of the island of Manhattan.

² Article on Nature.com - Global food loss and waste estimates show increasing nutritional and environmental pressures - 2024

On its insightful page dedicated to food waste, BCG projects the world in the future, into the 2030 year.

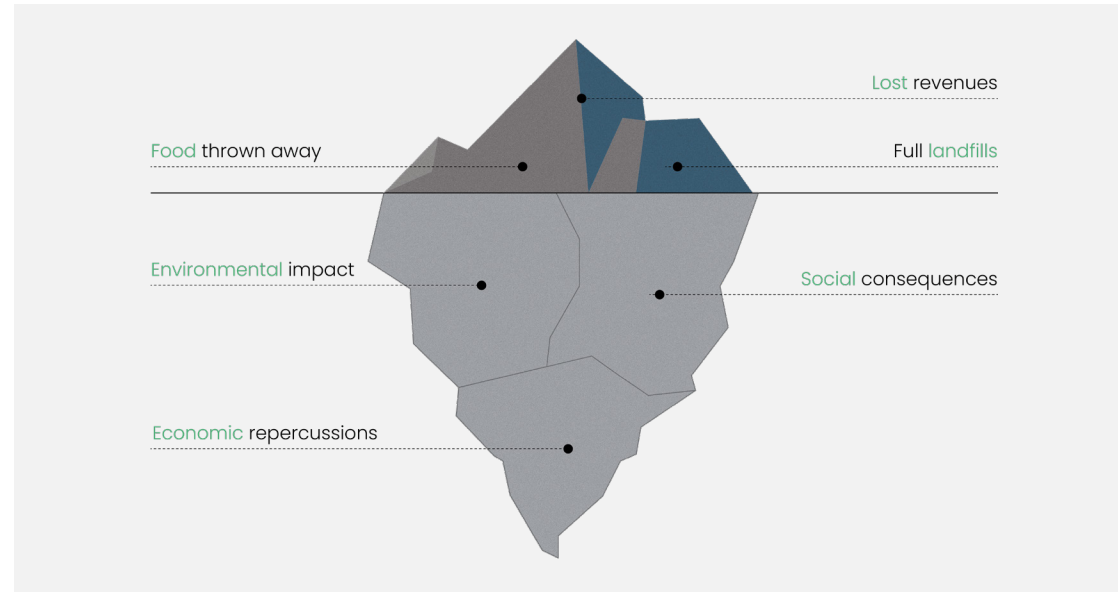
And there's no miracle. In 2030, if the facts don't evolve: it's an amount of 2.1 billion tons of food which will be lost or wasted. That's equal to \$1.5 trillion in wasted value, putting food waste in the top 7% of global economies, relative to Gross Domestic Product (GDP). If food waste were a country, it would be the third-largest emitter of greenhouse gas. Meanwhile, let's remember that more than 840 million people will go hungry... one-tenth of the human population.

≈ 13%

of food produced is lost between harvest and retail³.

≈ 17%

of the world's total food production is wasted in households, food services and at the retail stage⁴.



The consequences of food waste on our resources are one of the driving forces behind our fight, at Smartway.

We remember the powerful cry from the heart of Al Gore, ex vice-president of the United-States and now champion of ecology, in its movie "An Inconvenient Sequel: Truth to Power". He imagines the future generations accusing our own:

What were you thinking? Couldn't you listen to what the scientists were telling you? Couldn't you hear the cries of nature?

3. et 4. Report from the United Nations on the International Day of Awareness on Food Loss and Waste Reduction - 2023

Preserving the resources of our Earth while offering to more people the opportunity to feed themselves correctly is at the heart of our philosophy.

↓ Overview of the situation.

Environment impact: 8 to 10% of the global greenhouse gas emissions released are due to food waste and water, lands and biodiversity are severely harmed⁵

The typical stages of the food production process consist of the food being grown, processed, sorted, packaged, transported, marketed and then eventually sold. Food waste can be identified as occurring at all these stages. When we throw away food, we also throw away the precious resources that went into producing it. This includes the use of land, the natural resources (the three main ones being energy, fuel and water) and the labor, bringing the social cost up even higher to the environment and our biodiversity. Consultative Group on International Agricultural Research said that food waste accounts for one-third of all human-caused greenhouse gas emissions, really contributing negatively to climate change.

For instance, lost or wasted food accounts for 38% of the total energy used in the global food system.⁶

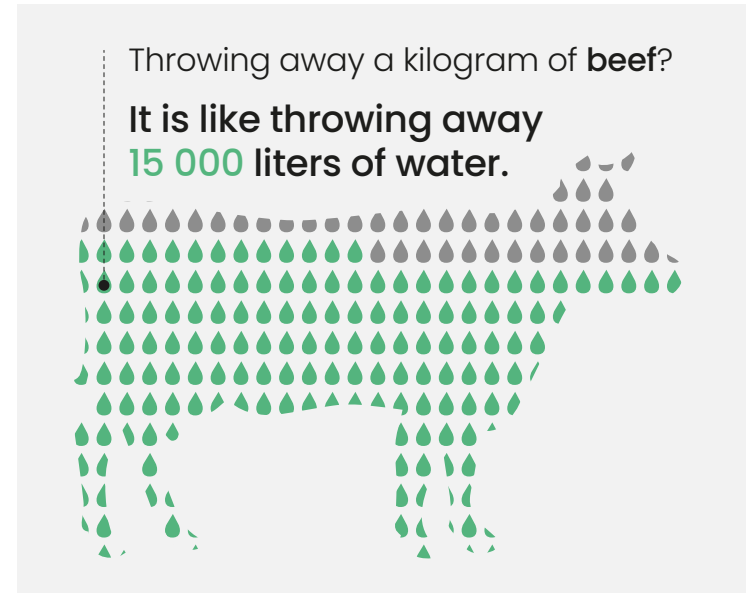
5. Report by the FAO Tackling food loss and waste: A triple win opportunity - 2022

6. Report from the United Nations on the International Day of Awareness on Food Loss and Waste Reduction - 2023

Water

Agriculture, with irrigation, spraying required for crops and water needed for rearing, accounts for 70% of the water used throughout the world⁷. **By wasting food, we are wasting freshwater.** Given that countries have a severe water shortage, conserving freshwater is a global top matter.

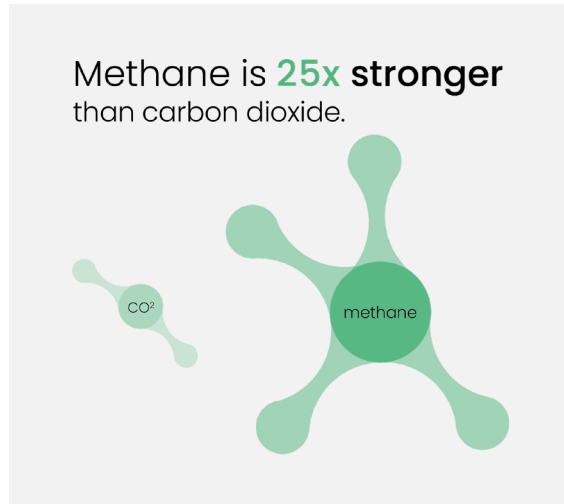
The Natural Resources Defense Council (NRDC) established that **food waste ends up wasting a quarter of our water supply in the form of uneaten food.** The equivalent of 172 billion of \$ in wasted water.



7. Report from the United Nations on the International Day of Awareness on Food Loss and Waste Reduction - 2023

Climate change

When food is thrown away in landfills, it subsequently **releases methane**. Once it is done, **it lingers for 12 years** and traps heat from the sun⁸.



It contributes towards **8 to 10%** of the **global greenhouse gas emissions released**. [earth.org](https://www.earth.org) already pointed out two years ago that if food waste were a country, its greenhouse gas emissions would be the third largest in the world, following the United-States and China.

If every person in the UK wasted no food at home for one day, it could have the same impact on greenhouse gas as planting half a million trees⁹.

According to the World Wildlife Federation, **the production of wasted food in the United-States is equivalent to the greenhouse emissions of 37 million cars**.

Solving food waste is a top priority to start decarbonizing.

8. Article on Earth.org How Does Food Waste Affect the Environment? - 2022

9. [wrap.org.uk](https://www.wrap.org.uk) - 2020

Degradation of land Wasting food has an impact on the physical land itself.



Agriculture uses 11,5 million hectares of the global land surface.

There are two types of land:

Arable (that can grow crops) and non-arable. 900 million hectares of non-arable land is used for livestock to produce meat and dairy products. As meat is in higher demand, more arable landscapes are being converted into pastures for animals to graze, prohibiting anything natural from growing on it.

We are over-stressing land for food production that we waste later in the chain of consumption.

If we continuously degrade the land, it is clear that the ability to yield will diminish overtime.

Harm to biodiversity The food we eat is contributing to the destruction of biodiversity. Fauna and flora are damaged and threatened by the production process, which may end up in the landfills.

↓ **At stake?**

Agriculture and conversion of natural lands:

the lands used for production lead to the destruction of natural habitats, mostly through massive deforestation (like the Amazon). It not only reduces biodiversity but also increases greenhouse gas emissions by removing carbon sinks and replacing them with carbon sources.

Intensive fishing and marine pollution:

The global fish consumption is reportedly rising, yet at the same time places like Europe are discarding up to 60% of fish because they do not meet supermarkets quality standards. A natural disaster, emphasized by the threat that if global warming increases by 2%, the coral reef will be devastated. Food waste can also contain pesticides which harm aquatic life.

Chemicals impacts:

Food waste, which may contain harmful chemicals, can reduce the number of pollinators by destroying their habitats and reducing the availability of food sources.

To sum-up,
food going to
waste ends up
using up to¹⁰



8 to
10% of the global
greenhouse gas
emissions

24% of freshwater

23% of cropland

25% of landfill volume

And that's not all as oil, diesel and other fossil fuels
are consumed as well for food transportation.

10.
Article on sciencedirect Lost food, wasted resources: Global food supply chain losses and their impacts on freshwater,
cropland, and fertiliser use - 2022



Social: what a paradox, while 820 million people suffer from chronic hunger globally, millions of tons of food are wasted¹¹

The cost of food waste is not only paid for by nature, but also by people. Lack of access to food, inability to cope with food inflation: according to the FAO, about **820 million people** suffer from chronic hunger globally, while **2 billion people** suffer from micronutrient deficiencies. The cruel irony is that while millions of people are starving, a vast amount of food is wasted each year.

Indeed, lost and wasted food, mainly in developed countries, represent a missed opportunity to feed the growing world population.

This coexistence of food waste, starvation and malnutrition in our planet is one of the greatest paradoxes of our time.

¹¹. United Nations Report: Global hunger numbers rose to as many as 828 million in 2021 - 2022

↓ At European level, according to the European Parliament's Committee on Agriculture,

up to 50% of edible and harmless food

is unnecessarily depreciated and thrown away in homes, supermarkets and along the entire food chain every year.

Food loss and waste also have a negative impact on **food security and availability** and contribute to higher food prices and speculation, finally impacting the economy.

In developed countries, people face a very different problem compared to starvation. But it's also becoming a health issue. Indeed, in the face of soaring prices, people have to adjust their eating habits. Less quality, sugar added food, fats and oil... This type of nutrition accelerates **the obesity phenomenon**.

What if, instead, we wasted less and offered ugly but still nutritious food that is usually thrown away?

Economy: producer, retailer and household: the financial cost impacts the entire chain, at a moment where food has become the adjustment variable for people

Food waste has significant economic costs, estimated to around 1000 billions of \$ worldwide.



This includes costs to

Producers	who leave produce unharvested
Wholesalers	who discard edible products that do not fit the acceptable size and aesthetic standards
Retailers	who throw away unsold or spoiled products
Households	who waste money because of spoilage, lack of knowledge, over-purchase and confusion about best-before and use-by-dates

The economic functioning is complex and interwoven with many ties. Consumer preferences are one of the factors influencing the behavior of food producers and the generation of waste, as the chosen technology of production and the type of distribution, which counts on the consumption of resources. Food waste in developed countries also affects pricing policy. Higher waste is associated with influencing demand, which leads to an increase in the price level of food stocks. The price of food is also largely linked to environmental causes (drought) and geopolitical events (wars, blockade).

Food waste costs the whole chain, because people have worked to harvest, transport, package, sell the goods... All the products wasted at each step are therefore passed on to the consumer, who, when he buys a product in store, also pays for part of the waste in that price.

Food waste has a direct and negative impact on the income of both farmers and consumers.

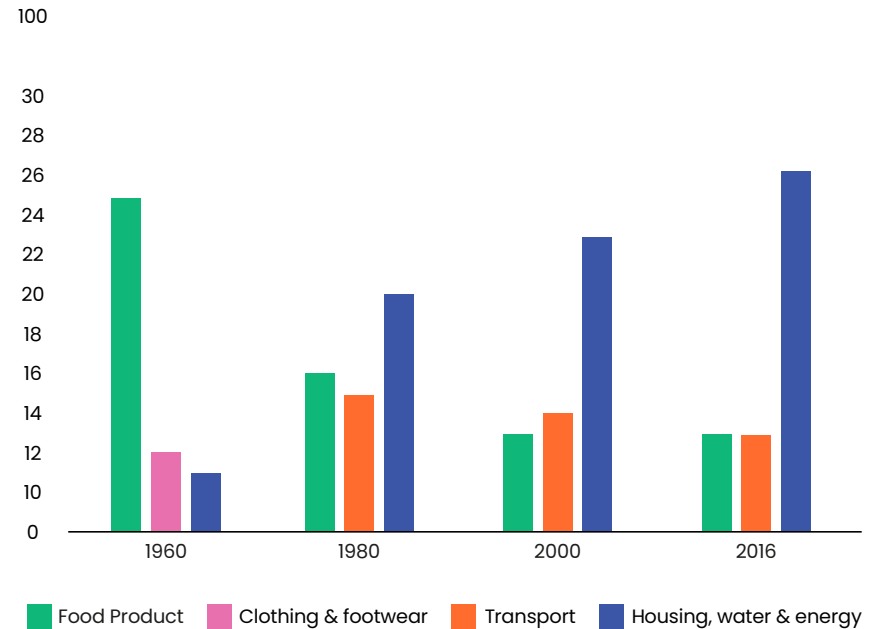
Farmers & food producers

Waste food can lead decision makers of the food chain to cut orders of some given products, ask for new visual standards and quality or renegotiate production, transportation and pricing conditions, giving less revenue for the farmers and producers. The “Hungry farmer paradox” sheds light on the fact that among the million of people suffering from hunger, 80% are farmers, breeders or fishermen. *The same people who feed the world aren’t able to feed themselves.* **What a terrific report.**

Consumers

The figures are edifying as we can see from this graph.

Share of the various consumption items (%)



↓ **Inflation: further pressure for retailers**

Inflation pushed up prices, to more than **20%** on food products, once again hitting consumers’ purchasing power. Under pressure, the retail sector saw its sales volumes decline, and buying shifts towards distributors labels or more affordable products.

This confirms the trends of recent decades:

consumers are unwilling or unable to spend more on food products.

Housing and energy are now the main items of household expenditure.

For more than 12 years, Smartway analyzed the retail industry, its challenges and customers and the change is obvious.

Food has become the adjustment variable for households: it’s on this expenditure item that they arbitrate in their global budget.

Given that many people live on the margins of food insecurity, a reduction in food waste could have an immediate and significant impact on their purchasing power. For them, the priority is clearly to have access to products that are affordable. Food insecurity is often more a question of access (purchasing power and prices of food) than a supply problem.

Given the magnitude of food waste, making profitable investments in reducing waste could be one way of reducing the cost of food.

An average American family of four throws out 1,600 \$ a year in produce. If we multiply that by the typical 18 years that a child lives at home, the parents could pay him a private college.

Stunning. —————>



In addition to the monetary cost of the food wasted, there are additional financial costs associated with collecting, managing and treating the waste.

By eliminating unnecessary food consumption, companies preserve natural resources used in food production as well. This includes the water, gas, fertilizer, pesticides and any other inputs used in food production.

This massive misuse of resources is emerging as a **critical global issue**, with the United Nations Sustainable Development Goals **setting a target of halving food loss and waste by 2030**.

As food waste has significant economic implications for farmers, food producers and consumers, it is clear that our food systems cannot be resilient if they are not **sustainable**. We therefore need to prioritize the **adoption of integrated approaches** designed to close the food waste gap. But first, understanding the root causes of the loss and waste and identifying ways to address them is an essential humanitarian undertaking. **Retail organizations and their decision makers have a key role to play.**



01. 2

Root causes of food waste are various and both natural and unnatural, making it hard for retailers to tackle without structural change

Food waste, mainly in developed countries, is different from food loss, often occurring in developing countries

To identify the root causes, let's first point out the difference between food loss and food waste.

Food loss It occurs before food actually reaches the supermarkets and includes food that is damaged on the farm or during processing, packaging and transport.

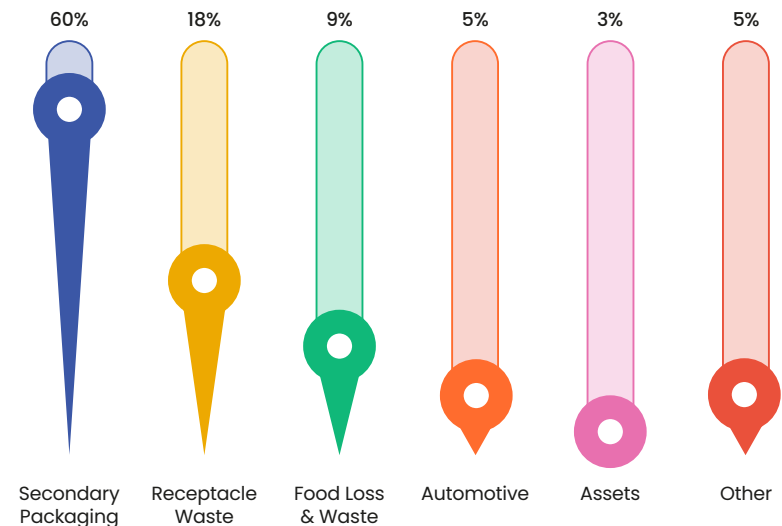
Food waste It occurs at the retail and consumer stages. Food is wasted when it is thrown out because it has reached its expiry date or is considered "ugly" by stores and consumers.



Food loss or waste occur at all steps in the value chain but are most noticeable at the beginning of the food journey (production) and at the end (consumption) and vary depending on the world's area.

In developing countries, the problem concerns the production and transportation of food from farms (food loss) while in developed countries it is most prevalent in the consumption phase, caused by retailers and consumers (food waste).

In its 2023 ESG reporting, Walmart transmitted these figures regarding its sources of waste. 9% are considered food loss and waste. Indeed, Walmart works directly with farmers and producers on some products and can be penalized by some loss from the infrastructure or transportation conditions. Later in the chain of consumption, it's the food waste (coming from retailers and consumers behaviors) who impacts these figures.



Climate change making it hard to predict demand, natural spoilage processes and cultural norms regarding food consumption are the natural causes contributing to food waste

Climate change contributes to food loss and lack of food security.

It makes growing and harvesting cycles less predictable. Nonseasonal frost, early spring and other climatic shifts are significantly impacting both the prices farmers set for their crops as well as their ability to predict the right time to plant and harvest. It thus generates overproduction and overconsumption. Agricultural systems produce more food than necessary to predict uncertain demand. Surpluses are going to waste due to the inability for producers to store or distribute them effectively.

Cultural norms and preferences by country or world area are also involved.

Cultural attitudes towards food, portion sizes and meal patterns can influence consumption habits and contribute to food waste. For example, buffet-style dining encourages overeating and food waste.

The short shelf life of some products is also to be taken into account.

Natural processes like decay, mold and rot can cause food to spoil before it is consumed if they aren't delivered in stores at the right time. Perishable foods such as fruits, vegetables, dairy and meat products have limited shelf life and require proper handling and storage to prevent spoilage. Failure in inventory management can effectively lead to waste.

Unnatural causes lead to food waste such as inadequate infrastructure, the lack of knowledge of retailing teams, the outdated ordering systems and the consumers personal preferences

The infrastructure.

It plays a key role on food waste. Inadequate infrastructure, mainly in developing countries, including poor transportation networks, refrigeration facilities and storage capacity can result in a quicker spoilage and significant waste.

This is linked to the lack of knowledge of retailing teams,

managing the storage and the facilities without enough training and information. They handle all products in the same way and their goal is to be efficient, without taking enough care of the product's life cycle.

The perfect example is an exotic fruit, stored in a refrigeration facility with other species because there is no other space. But this fruit category must be kept at a higher temperature. As a result, the deterioration will be quicker.

Either on the shelf of the store or at the consumer's home.

The ordering systems are at stake.

They were introduced to the retail sector almost 30 years ago... and haven't really changed since or taken into account the evolution of supply chains. However, they are unable to respond to the challenges posed by some types of products, typically fresh ones. The ordering softwares are based on real-time inventory management and demand forecasts. Despite the best efforts, stock levels are not 100% reliable. Some department managers order based on what they see on the shelves and what they have ordered in the past, without really checking whether their stocks are accurate. Ordering system do not integrate the shelf-life freshness on the items and so in this context, it becomes almost impossible to keep a low shrinkage rate.

A figure to illustrate the power of food aesthetics?

A fifth of edible produce that has surface blemishes, grows in unfamiliar shapes or has unique coloration gets discarded from grocery stores. This means that at a retail level, food waste happens in earlier stages only because of appearance.

Imperfect produce is still unloved.

The retail world has set up aesthetic standards decades ago, especially on fruits and vegetables, to avoid losses. Today, products need to meet these criterias (shape, size, color) set by retailers and embedded by consumers.



Personal preferences, obviously, are a big contribution to food waste. And nowadays, the necessity to educate consumers regarding the food waste is a major challenge.

Producers or retailers can't act on the consumer behavior and "control" its buying habits when he is in front of the supermarket's shelves nor validate the storage conditions back home. Some people buy more food than needed or neglect storage.

Furthermore, consumers have very high standards when it comes to shopping. They want choice in shelves and are often frustrated by out-of-stock items, which means complexity for retailers to adapt to various expectations and ensure a maximum filling rate to guarantee consumer satisfaction. All this generates waste for stores.

There is also a subject about understanding dates for consumers.

82% of French people say that they search the shelf for the longest dates on an item and leave the short dates, accelerating waste.

Different norms used to tell consumers when they should eat their products create confusion for some people, in particular between "best-before" and "use-by dates", finally contributing to household food waste. Indeed, 27% of 18/24 year olds sometimes throw away products before their use-by date, according to a conjoint study from Smartway and Opinion Way about food waste in 2023.

The thing is that sometimes, well-intended regulations to protect people from food safety risks have the unintended consequence of taking edible food off the shelves too soon.

It is particularly true in the United-States.



80%

of Americans discard perfectly good and consumable food simply because they misunderstand expiration labels¹²

A massive and harmful waste of resources.

The lack of awareness causes people to be unaware of environmental, social and economic impacts of food waste.

They fear to be sick if they eat something spoiled or about to expire and they finally perpetuate a behavior where they regularly waste food.

¹². Article Food waste in America 2023 from CEO NA - 2023



01. 3

Current efforts and existing measures initiated at different levels don't close the food waste gap and fall short to tackle this society issue

Success to tackle food waste demands commitment and collaboration among the decision makers of the retail sector. Let's take an overview of some of the current initiatives taken and their limits.

Governmental initiatives, such as «Loi Garot» (which partly concerns donations) are useful to set up actions but are not enough to achieve the United Nations' goal of reducing greenhouse gas emissions by 2

This law, initiated in 2016 and a world premiere, is dedicated to the fight against food waste. The text obliges in particular supermarkets of more than 400 square meters to donate their unsold food if they are approached by associations. It prohibits stores from rendering unsold goods unfit for consumption (by bleaching them, for example), under penalty of fine.

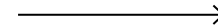
Although this law was intended to introduce a hierarchy of actions to be taken in the fight against food waste, media and distributors have above all grasped the emphasis on the donation framework and the obligation to sign agreements with the associations requiring for unsold goods.

The positive effect is that there's been a lot of awareness-raising and the media have talked about it a lot. Food waste has become a real social issue.

told Bruno Lhoste, author about the subject in 2012.



But this donation program finds its limits¹³



55%

of stores don't donate every day

20%

of collections are made without a refrigerated truck, giving no guarantee of freshness retention

27%

donate only part of their fresh produce

26%

don't even know if the associations who come are approved and the same proportion find it difficult to obtain tax certificates

Finally, stores that don't make donations quote the argument of liability in case of health, administrative or tax problems. This creates more fear of the consequences for retailers, already dealing with numerous challenges.

¹³. Article Loi Garot : où en est l'application des mesures anti-gaspillage ? from Ipsos - 2018

These facts raise the question of the quality of donations and sorting, with associations warning against products arriving already spoiled and the feeling that they become a sorting center.

Finally, with this solution, isn't part of the food waste problem simply shifted elsewhere?

Governments offer various tax incentives to encourage donations, but while they may sometimes seem attractive (in France, for example), they are globally less attractive for retailers than promotional sales.



Examples of companies such as Tesco, Marks & Spencer and Walmart to tackle food waste show the limits of specific initiatives

Companies are more and more aware that they need to step forward as leaders on the issue and implement strategies to reduce food loss and waste.

At Marks & Spencer, they tested the introduction of ethylene-absorbing strips into strawberry packaging, a feature that can extend shelf life by up to 50%. An interesting idea... with impact on nutritional qualities. Tesco, for its part, has experimented with a program called "Buy one, get one free later" that allows customers to pick up their free product when they actually need it. A good way to avoid overstock of some discounted products that will go bad at home.

At Walmart, they encourage suppliers to measure and report food waste through the "Project Gigaton". In 2022, more than 475 suppliers reported food waste reductions.

→ Some big players of the retail sector join forces to make their model evolve and improve the whole chain of distribution : 10x20x30 initiative for North America, Perifem in France... But despite strong ambitions and rallies between retailers, we see in the extra-financial reports that the change is not a major one: results are stable or little improved.

Educational initiatives by conscious retailers are necessary to raise consciousness but still not enough to tackle food waste

Some retailers, aware of the anti-waste subject, are ready to raise consumer consciousness and provide tips for reducing waste at home. This type of educational campaign is essential to get consumers realizing the impacts of this social issue, to change their eating habits and upgrade the storage conditions at home. But while these initiatives can influence consumer behavior, they often lack specificity and customization to the customers' situations. Worse, they may not be followed "in action" in the stores, creating a disappointment for clients.

Again, we're only halfway there.

Surprise bags, popular these last years, include consumers but only superficially address the food waste issues of a retailer and fail to meet its ecological and economic challenges

In a world of ever-increasing ecological awareness, surprise bags have emerged as a promising solution to tackle food waste.

Dedicated apps promise to combine economy and ecology by selling products close to their expiration date or slightly damaged at a reduced price. They highlight the food waste issue in our society, raising awareness and making action possible for every citizen. They are able to quickly rally stores to test them and take even greater action by proposing new solutions.

But if the model relies on the surprise effect while claiming to offer significant savings, what about the pertinence of the product selection as retailers push quantity with short dates but the consumers don't know what's inside? Finally, money spent on unwanted products could be better invested in food usually consumed by the household.

Because of these very strong constraints (no choice, short dates, pick up at a specific place...), the economic model has to be very attractive to the consumers (with substantial discounts). This raises the question of the distributor's economic viability. It's obviously preferable to a dead loss, but other choices are far more interesting in terms of revenues and enable much greater volumes to be handled.



I used to buy one or two surprise bags a week at first. The downside was part of the game: not being able to choose. I often ended up with snacks, sandwiches, chips, things we don't eat at home.

says a French customer.

That's both the beauty and the problem of the offer:

Sometimes I wonder what I'm going to do with my 50 slices of sandwich bread.

another French customer prefers to joke.

↓ Apps that offer surprise bags, while useful in the fight against food waste, also exert **considerable pressure on retailers**, often demanding major discounts on products

up to 70% or more to attract consumers.

While this is advantageous for these ones, it puts a significant financial pressure on retailers, in particular for small local stores with limited profit margins.



The risk with this type of offer is also that some people end up chasing the discount rather than actually buying what they need.

Isabelle Barth, teacher-researcher at Strasbourg University and author of “Voyage au cœur de l’impulsion d’achat” (Journey to the heart of the buying impulse) tell us more:

In marketing, we observe some buyers systematically looking for a good deal. This is called the “treasure hunt”: the shoppers buy it because there’s the surprise effect combined with the promotion, not because they necessarily need it.

So the good deals become overbuying and clearly ask the question of pertinence.

If the concept of these surprise bags is commendable, the initiative finds its limits too. By offering products consumers can’t choose, it is again shifting the problem of food waste by bringing it even more to the households.

And it is not a perennial solution for retailers, which are under pressure to offer minimal prices.

Unefficient «homemade discounts»

Stores try to fight food waste on their own, but these initiatives have not enough frame, impact or follow-up to guarantee success and avoid loss, in terms of products, time and revenues



↓ **First, many stores still check their dates by hand.**

This means that every morning (whenever possible, and sometimes only a few times a week), employees have to check all the products on the shelves to detect if they are approaching their sell-by date. A very time consuming task for teams, not to mention the fact that this repetitive one is not motivating for employees on the tiles, which have to guarantee customer satisfaction.



Then, the “homemade discounts”

In a last-chance gesture to avoid waste, stores have implemented, these last years, “homemade discounts” on products nearing their sell-by date. If the initiative is commendable, the goods are often discounted with a 30% or 50% off markdown sticker, moreover applied by hand by employees.

Stores are already dealing with numerous challenges.

If these initiatives of homemade discounts and regular checking of dates are laudable, they are not enough designed, processed and monitored to be effective in the long run for stores. Moreover, they put pressure on employees, in a context where people retention is already really at stake.

A hazardous technique

It’s not dynamic and profitable for stores, as it reduces chances to recover an ideal margin on the products

It’s not based on data analysis about the products, to see their habitual consumption habits and adjust the new price accordingly

It’s not designed for the actual ordering systems, sometimes with a frontal impact on the ordering system and the storage management

It’s a human decision with limited factors conducting to the discount decision and as it is a human act, it is source of errors

It’s not always possible to really check out these discounted products, which end up staying on the shelves too long

Depending on the markdowns techniques used, reports on these products are badly built or partial and are not really useful to fight against food waste

Retailers need to adopt another way to fight against food waste, more profitable and sustainable.

Environmentally, socially, economically:
the impact of food waste is massive and demonstrates the urgent need for action.

Retailers
account
for 14%
of this
waste

across the entire food consumption chain and therefore have a significant share of responsibility. A distributor's worldwide net income varies between 1% and 3%. And a distributor's worldwide food waste also varies between 1% and 3%.



They throw away the equivalent of their bottom line every year!

To become sustainable and profitable, retailers have no choice but to start a structural transformation of their organization and all their processes.

↓ **Imagine food waste as an iceberg**

Visible face each year, 1.6 billion tons of food worth about \$1.2 trillion are lost or go to waste

one-third of the total amount of food produced globally.

Hidden face which has major unseen and unconsidered impacts

about the environment, the economy and the social spheres.

↓ **Root causes of food waste are various**

Natural causes Climate change makes production harder to plan, some products have a short shelf life and cultural preferences influence waste behavior.

Unnatural causes Inadequate infrastructure, retailing teams lack of knowledge, defaulting ordering systems and consumers personal preferences accelerate food waste.

Current initiatives, such as surprise bags, donation or retailers homemade solutions show their limits, put financial pressure on retailers and can shift part of the food waste problem. They don't close the food waste gap and fall short to tackle this society issue.

We see that, despite strong political pressure, consumer expectations, the exorbitant costs of food waste and numerous initiatives, the subject of food waste has not been «cracked» by retailers. Smartway is convinced that sustainability challenges must necessarily go hand in hand with very strong profitability perspectives.

To become sustainable and profitable, retailers have to start their change now.

Environment impact

- ↘ By wasting food, a quarter of our water supply is wasted.
- ↘ It contributes towards 8 to 10% of the global greenhouse gas emissions released.
- ↘ There is a major degradation of lands, converted into pastures for animals.

Social impact

One of the greatest paradoxes of our time is that while 820 million people suffer from chronic hunger globally, millions of tons of food are wasted.

Economic impact

Food waste counts for 1000 billion of \$ worldwide, without the additional costs of collecting, managing and treating the waste. For consumers, food has become the adjustment variable: it's on this expenditure item that they cut in their global budget.

02.

To change management in food retail

through new vision,
processes and skills...



02.1

Fostering understanding and conviction internally is crucial to implement change strategies and ensure commitment among stakeholders

It is an era of challenge for food retailers, where consumers are more than ever engaged in ecological battles but are limited by an even tighter budget: strengthening the anti-waste strategy is the transformation retailers need

Retailers are at a turning point.

At Smartway we have considered the major and critical impacts of the food waste on our global planet, resources and people and have noted the limitations of current initiatives in stores.

The context of our time is also bringing an unprecedented momentum for retail stakeholders with a major paradox.

The citizens have never been so aware of the ecological stakes, wanting a more positive approach to consumption, one that conveys meaning and progress.

Consumers declaring they want to buy from companies which are not only guided by profit:

≠ ↓ In 2015 - 41%
In 2023 - 66%

That illustrates the “movement in the move” regarding the efforts consumers are now willing to do to preserve resources and consume more responsibly.

But they are limited by an ever tighter budget caused by global inflation and the upsurge of the price of housing and energies. In their budgets, it is the food which becomes the adjustment variable:

it’s the price at any price.

To sum up:

Our way of consuming is a model **running out of steam**. To face these challenges, food retailers need to reinvent their model to meet both **ecological and price expectations** of consumers. And we have never been so convinced of our purpose and the ethical and profitable path we offer at Smartway to retailers: this transformation goes by strengthening their anti-waste strategy.

It must become a commitment.

→
In France

14%

of the food waste comes from food retailers and their malfunctions dealing with the short-dated or damaged products

→
Across the Atlantic

40%

of products thrown away in grocery stores were still consumable

These figures are crazy. On one-hand, an awakening of ecological consciousness from consumers and the need to lower prices for low-income households. On the other hand, stores are still throwing away massive quantities of products that would still be good to consume without any threat to health, and many of them appear to be humanly and technically incapable of coping with the management of out-of-date products. *Finally, they end up throwing away as much as they earn.*



Philippe Brochard, former CEO of Auchan France, perfectly illustrates the challenge for retailers:

“They have to reconcile the power to act and the purchasing power. Do we still have the choice and the time not to accept a transition, an evolution in our consumption pattern?”

This is the paradox of the retail industry today:

finding new leverage of profits to be competitive while they lose money everyday by not dealing with their short-dated products.

It's time to act. Companies can and should become advocates for reducing food waste.

What we promote at [Smartway](#) is that through a comprehensive understanding of the issue and the implementation of targeted strategies, stakeholders can work together to [mitigate the impacts of food waste](#) and move towards a more sustainable food system.

The capacity to drive and implement change responsibly is key for retailers, through a new vision, new processes, new revenues and new professional gestures: trust an expert with these expertises

Tackling food waste isn't "just a solution" decision makers set up in shelves. It is a real implementation of change they decide to lead. It is a transformation of stores for which they get ready. Through their fight against food waste, they can reinvent their retail model.

And this path of change they are taking is absolutely essential for them if they want to keep a major role in the sector.

Why?

↓ **Because it is urgent**

for retailers to offer a new philosophy of consumption, at a time where both consumers and price inflation are pushing stores to their limits.

to ensure ambitious EBITDA, that stores generate new sources of revenues and strong bottom line improvements through transformative projects.

that their model evolve through processes and new professional gestures, to optimize their internal operations.

The capacity to drive and implement change is therefore the key to success.

Leading this transformation through anti-waste isn't an easy path. Change implies mutations at very different levels, impacting the entire firm and all its employees from stores to Headquarters, from Operationals to Corporate Social Responsibility (CSR) services, Finances, Information Technology (IT), Replenishment Department, etc.

Resistance to change may be present. Adoption can be affected by a lack of communication. Employees can react differently to change projects. So to transform their stores with confidence, retailers need to trust experts and find the right partner.

Smartway is an experienced player in the fight against food waste,

the ideal partner to lead and accelerate the change within a retail organization. And for us, starting with an evaluation of their food waste maturity, through store tours and audits, is an unmissable milestone for retailers.

Many distributors think they have already mastered the subject, but this audit phase reveals major hidden costs (in terms of finances, time, loss of information...) that need to be clarified very quickly to visualize the impact that a strategy change could bring.





02. 2

Retailers need to reinforce changes through formal mechanisms: from implementing policies and technologies to supporting waste reduction

Technology is at the heart of a new retailing model: the digitalization of anti-waste brings global revolutionary impacts to accelerate the fight against food waste

“Trust the process!”

Processes and technology are the catalysts for change used by companies that play a major role in the food value chain. Indeed, as new challenges appear for the retail industry, digital technologies are becoming increasingly critical for ensuring new processes, new revenues and finally: a new way of being a committed retailer in our century. With technology at the heart of an efficient management of short-dated products, we talk about the “digitalization of anti-waste”. Through digital actions, it optimizes each stage of the product life cycle. With revolutionary impacts to simplify and accelerate anti-waste management.

To lead an efficient new strategy regarding short-dated products, retailers need to develop and execute frameworks before launching the deployment of innovative technologies and ensure the promotion of sustainable waste management strategies.

Without controlled, efficient processes? We witnessed, over the years, that some anti-waste actions were launched, but without enough framework nor effectiveness:

01.

Short-dated products are checked manually by employees, so human mistakes can occur more frequently. Products forgotten in shelves are often brought by customers themselves, unhappy to discover goods which have already expired. A stain for the store image. Moreover, there is no guarantee that the shelves are checked everyday, as employees have many tasks to do and there is no specific process in place to automate the management of short-dated products.

02.

In a “last-chance gesture”, products approaching their sell-by dates are often **discounted with a 30% or 50% off markdown sticker, applied by hand**. This technique eliminates any ambition to recover the ideal margin on the product as there is no data analysis about its consumption habits; it’s not dynamic, it’s a human decision with a limited factor. Worse still, there are different methods of applying markdowns and some of them really destroy the entire system, with a frontal impact on the ordering system.

03.

Regularly, the products discounted stay in their usual place on the shelf, there is no **specific area where markdowned products are displayed** so it can be more difficult for consumers to find them and benefit from these interesting goods in terms of price. And it doesn’t encourage consumers to systematically check whether products nearing their sell-by date are available or not.

04.

The traceability is not guaranteed. Products are more likely part of the shrinkage without follow-up on their shelf life. While very precise data is available to monitor the topline, digitizing the waste management information enables retailers to understand all supply and execution quality problems and thus, drastically improve Profit & Loss and processes.



Not enough
to close the
food waste gap.
Efficiency
comes through
processes,
organization
and technology.

Being a committed retailer goes by new processes, integrated at all levels of the organization and ensuring harmonization, consistency, operational efficiency and a greater involvement of people

↓ What it brings?

- 01. Consistency**
with clear strategies and processes to answer new challenges in the retail sector.
- 02. Harmonization**
thanks to automation and common organization.
- 03. Meaning**
by allowing all employees to get involved and deal with a very important subject of which they can be proud.
- 04. Time saving**
by implementing AI technology to reinvent the employees routine, who can focus on other tasks.
- 05. Operational efficiency**
as innovation helps teams to fight against food waste and bring sense to their work.
- 06. Involvement**
by making performance available for everyone with upgraded processes.

The technology by Smartway

In 2012, Smartway created the [Food Waste Management System](#), the first technological platform against food waste in the retail industry, to ensure a continuous improvement of the entire process for managing unsold products. Based on augmented AI, the FWMS combines 3 tools for action at each stage of the short-dated products management: from the shelf location of products with short shelf lives to the creation of different recovery channels most suited to them.

In 2024, with strong knowledge of the retail sector challenges and strong ambition to never let down the fight and preserve our resources, we launched the [Fresh Operating System to stop the endemic waste on fresh products](#), in particular fruits and vegetables.

We made our technology evolve, with a tool including demand-forecasting technology and inventory management, so it can answer the employees' constraints on the tiles and be able to predict and order with much more data on the shelf's situation.

A new stage in the fight against food waste!



02.3

Developing talent and skills: equipping employees with the knowledge and tools is a strategic step to contribute to waste reduction efforts

Employees are at the heart of the fight against food waste, their commitment and mastering of an efficient gesture to fight food waste everyday is a centerpiece for retailers

The commitment of employees and the mastering of an adequate gesture regarding the short-dated products is a centerpiece for retailers who want to reach the next level in their fight against food waste.

Indeed, employees have a central role to play to keep the level of waste down. But this necessity is faced with the multiple tasks employees already have to do in shelves, the knowledge of the workforce and the high turnover of teams, as well as the difficulty of increasing the management requirement in store operations. Currently, in many stores, they still check by hand the products that are about to expire. This task is extremely time-consuming for the teams and, let's say it, a tedious one which finally brings recurrent errors. Some stores don't even have time to do it every morning.

The Kavanagh's store of Belsize Park, in the heart of London, recently adopted an innovative solution to tackle its food waste: SmartDetection FlashEvo, our common technology with VusionGroup, world leader in digital solutions for commerce.

And one of its major arguments was to reduce the time spent by its employees, every day, checking the products' dates, and avoid any bad buzz by making sure they don't have any expired products on the shelves.

Currently, the major challenge lies in the employees lack of familiarity with the key gestures regarding the anti-waste processes. We have a massive daily loss of time due to manual date checking

said Noel Kavanagh Jnr, its Managing Director.

Finally it resulted in the store's incapacity to track how much food waste was being generated.

Employees are the witnesses of the food waste in shelves: they manage, check quality and can prevent waste but they also are under pressure to ensure sales volume

Most of the decisions are indeed made and executed by employees. They are on the first line as they are often the ones to notice overstocked items, damaged products or products nearing their expiration dates.

They are responsible for managing inventory levels and their vigilance on the shelves, as “quality keepers”, can help identify potential food waste before it occurs.

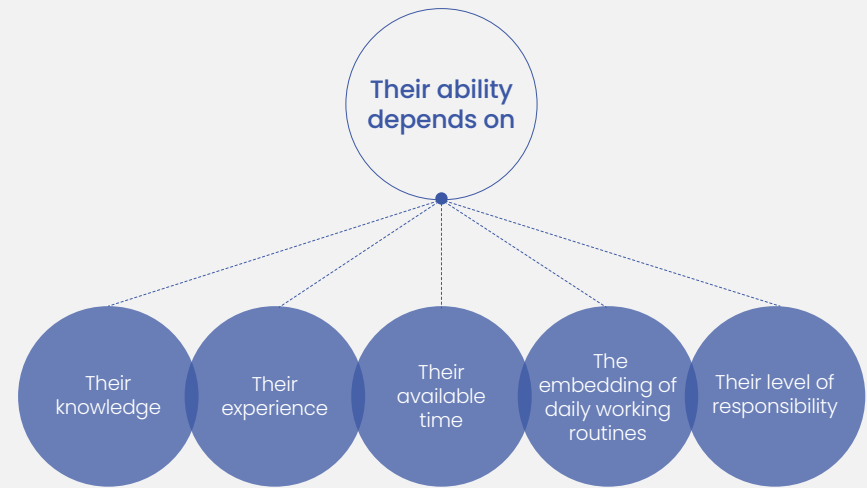
In stores, conscious management may choose to place the most experienced and committed employees in the more difficult departments, such as dairy or fruits and vegetables.

Did you know about it?

The fruits and vegetables department is the main source of waste in supermarkets:

shrinkage accounts for almost 6% , compared with 1.5% in other departments.

These shelves are really complex to manage as these products are fresh ones, with seasonal variations and very different requirements in terms of storage, temperature, light... A challenge in the challenge for retailers!



Store employees have direct contact with customers. Some of them even come each day to buy their daily food and thus meet the same employees day after day. This may create interactions and regular discussions about food waste, how they fight it in the shelves, where the discounted products can be found in the store and, globally, raise consciousness about this top matter.

Employees “on the tiles” clearly have a role to play in educating consumers about food waste and providing advice on how to reduce it.

They also play a central role in the daily work at the department since it requires constant supervision. That is a point of brainteaser for them to refill products that have run out, going to the storage and coming back, rearrange display units and shelves to make them look neat and tidy and be attractive all day long to customers.

Employees finally are at a crossroads, between the instructions of maximizing sales volumes while doing efforts to reduce food waste.

Let's do not forget employees in the retail industry are also consumers! With their own level of ecological sensitivity and their own values and principles. Short-dated products management is a matter of principle not only for customers, but also for the store teams that keep retail organizations working. Observing and participating in the food waste in stores can demotivate them and create deep frustration, disappointment and irritation. Retailers rather need to work with the employees who are the most committed and make them ambassadors.

When you see all the stuff that used to go into the dumpster... Today we all feel good about saving so many items, fighting food waste has become normal, it's part of our routine.

Christine, Deli employee at Carrefour Le Mans, France

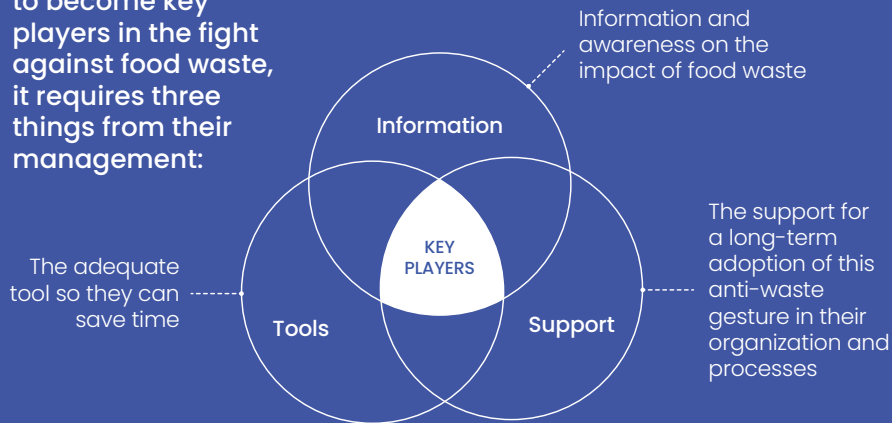
↓ **Food waste app Too Good To Go has disclosed the results of a recent survey conducted on workers attitudes to food waste in takeaways.**

9/10 employees in food-to-go businesses feel negative emotions over food wasted in their workplaces

Frustration, guilt, sadness and anger were all identified as being felt by employees when food is wasted. Disappointment was felt the most with half (49 %) of all employees.

To benefit from the efficiency and commitment of employees, retailers need to give them the good working conditions: information and awareness about food waste, dedicated tools and support to guarantee the adoption of an anti-waste gesture on the long-term

But for employees to become key players in the fight against food waste, it requires three things from their management:



First step Companies need to ensure that employees understand the stakes of the fight against food waste. They need to bring the meaning but also the figures of this society issue. Transferring their teams the adequate level of information regarding the regulations, empower their responsibility on food waste and give them the specific data on storage requirements of products when needed (for fresh products for instance) is an essential step.

Second step Stores have to allow their teams to be more efficient and reduce their time on consuming tasks. The manual checking of dates? It is an outdated practice, source of demotivation and error, even more in a context where the management experiences strong employee turnover. *It is time for the digitalization of anti-waste. By choosing the ideal technological solution to ease and accelerate the management of short-dated products.* By responding to employees' constraints, which lack the time to do it by hand. By being able to track food waste and by analyzing data and thus implementing actions plans to readjust their order or the facing. A whole new way to manage the short-dated products, with the help of Artificial Intelligence.

Third step Digitizing the fight against food waste also means creating a new corporate culture. While reinventing employees routine, **the management is proposing a global redefinition of the anti-waste gesture to its teams.** As one of the major challenges lies in the employees' lack of familiarity with the key gestures regarding the anti-waste processes, the obvious response is to introduce a technology that guides employees through good practices and processes in a precise order. **This approach, based on the digitalization of the anti-waste gesture, represents one of the most effective and quickest solutions for a food distributor to implement.**

This is a transformation for sustainable growth. Refining anti-waste gesture is about capturing value, ensuring it becomes a positive and integral part of employees routines. By fostering a culture of responsibility, retail management can embrace new and effective ways of working that tackle food waste head-on.

Reducing food waste is not only environmentally beneficial but also economically advantageous for stores. Employees who actively participate in waste reduction efforts contribute to cost savings and the gain of margin points.



This reinvented anti-waste process is finally a **source of motivation and cohesion for teams**, satisfied to commit themselves to a meaningful project and find a global purpose. They feel useful for the planet's urgent need to act, they are motivated to avoid waste and offer alternatives to their low-income consumers who have lost purchasing power.

In a time where we saw that the food price is the adjustment variable in their budget, employees found a new source of satisfaction in being able to help.

It can also be an **answer for food retailers' challenge to retain employees** and keep involved individuals in their teams, by being committed in the fight against food waste.

So granting members of staff the adequate tools to manage the fight against food waste has positive consequences "on the tiles", making employees more ready to do it everyday but obviously contributes for the store's global benefits.

Short-dated product management should be meaningful and rewarding for all.

Taking the decision to change is a complex road, full of challenges for the retail executives: already too many projects to lead, people resistant to change, no project of this scale undertaken before...

But to close the food waste gap, it is imperative that this wind of change comes from the top management. It is a C-level subject as the impacts of such a transformation affect every part of the organization (vision, finance, people, working methods...)

↓ Why?

It concerns the firms' culture

how will people commit to new intern values?

It embarks all decision makers

how can they all be convinced to target a common objective?

It is a data revolution

how teams will deal with much finer analysis of all the factors contributing to food waste and its consequences?

It impacts the heart of the business

how will the income statement be positively impacted thanks to the digitalization of anti-waste?

It means new processes are implemented

to optimize automation and harmonization, how can they be integrated by all teams?

It puts employees in first line

how to ensure the embedding of a new professional gesture of anti-waste?

The current way of consuming is a model running out of steam. It is “price at any price” for consumers. Food retailers need to change by fighting food waste, to meet both ecological and price expectations of consumers.

Philippe Brochard, former CEO of Auchan France, perfectly illustrates this challenge:

Retailers have to reconcile the power to act and the purchasing power. Do we still have the choice and the time not to accept a transition, an evolution in our consumption pattern?

The capacity to drive and implement change responsibly is key for retailers, through a new vision, new processes, new revenues and new professional gestures.

Today, employees still check short-dated products manually (increasing the risk of human mistake) and too important markdowns are directly applied without an attempt of better margin.

“Trust the process!”

Digital technologies are becoming critical for ensuring new processes and revenues. Through processes, retailers gain consistency, harmonization, time saving, operational efficiency and involvement.

The technology by Smartway



**In
2012**

Food Waste Management System: the first technological platform against food waste in the retail industry.



**In
2024**

Fresh Operating System: to stop the endemic waste on fresh products, in particular fruits and vegetables.

The commitment of employees and the mastering of an adequate gesture is a centerpiece for retailers who want to reach the next level in their fight against food waste.

By fostering a culture of responsibility, an anti-waste gesture redefined should become a positive and integral part of employees routine.

But to close the food waste gap, it is imperative that change comes from the top management. It is a C-level subject:

this transformation affects all the organization.

03.

By building a strategic planning and a roadmap for

**sustainable
and profitable
change**



03.1

**Strategic planning:
outlining the steps for a long-term
approach to reducing food waste**

The definition of a long-term strategy is at the heart of the fight against food waste: it is a global change which needs to be adopted by all the management and insufflated in each layer of the organization

In its 2023 report about Food Waste, Coresight Research said

Reducing food waste requires a holistic approach, from field to fridge, as food waste occurs along all steps of the value chain.

A long-term approach to reduce food waste in stores involves implementing a systematic strategy that addresses various aspects of operations, from the internal commitment to the data analysis and actions plan.

It is a global change, a transformative project regarding different operational aspects.



The very first step is to **identify opinion leaders to champion the subject internally**. All decision makers then need to be aligned to drive the subject together and engage their organization to an era of transformation.

In fact, with this change project, all departments are concerned:

Operations, Performance, Sustainability, Revenue, IT, Finance, Transformation... With their own projects, their own objectives and their own issues, it is through meetings and discussions that they can all be aligned in a common strategy and determination to tackle food waste through digitalization.

From the current actions fighting food waste to the next planned, everything needs to be thought and integrated to ensure the change is impactful

From diagnosis to monitoring, retailers must ensure everything has been already put in place to fight against food waste and the next steps are planned to guarantee success and a full adoption by teams.

To go further in the fight against food waste, we've opted for efficiency and speed. Our aim is to save more and better. With Smartway, we are deploying, on a large scale, a digital solution equipped with a unique artificial intelligence. It simplifies processing procedures, reduces the time spent handling short-dated products and optimizes their value. Offered at reduced prices, these products will boost our customers' purchasing power.

Philippe Brochard, former CEO of Auchan France

DIAGNOSIS & ANALYSIS OF THE EXISTING

- Conduct a comprehensive audit of current food waste generation within the store, including factors such as overstocking, spoilage, damaged goods and expired products
- Interview of the teams members
- Assessment of the cost of food waste
- Analyze data to identify trends, root causes of waste and areas for improvement regarding this audit

INVENTORY MANAGEMENT OPTIMIZATION

- Implement inventory management systems to track stock levels and optimize ordering practices
- Control storage conditions
- Use solution and leverage data to ensure to order the correct quantity of needed products
- Work with suppliers to minimize over-ordering and ensure timely deliveries that match demand

BETTER QUALITY ON EXECUTION, PROFIT, CONTROL & DISPLAY

- Digitize the fight against food waste to manage the short-dated products efficiently
- Rotate stock effectively to prioritize the sale of older items before newer ones, reducing the risk of products expiring on the shelves
- Use a dynamic AI solution specific to each product every day to guarantee maximum ability to save it at the best possible price.
- Ensure your food waste management solution is tackling the subject on a proper way, to reduce order at the correct level and to save the end-of-life product with the best output

EMPLOYEE TRAINING FOR ENGAGEMENT

- Provide training to staff to optimize their utilization of an anti-waste tool
- Ensure a new culture of responsibility is growing
- Encourage employee involvement in waste reduction initiatives
- Offer purpose and meaning, communicate internally and act with efficiency

EDUCATE CUSTOMERS

- Raise awareness among customers about the impacts of food waste and empower them to make informed purchasing decisions
- Promote anti-waste areas

OPTIMIZED PRICING

- Optimize the pricing strategies for items nearing expiration with the adjusted markdown

IMPROVE THROUGH CONTINUOUS MONITORING

- Implement systems for ongoing monitoring and measurement of food waste levels, allowing for timely intervention and adjustment of strategies
- Regularly review performance metrics and solicit feedback from staff and customers to identify further improvement

By following these steps of change and adopting a proactive, collaborative approach to food waste reduction, stores can minimize waste, optimize operations and contribute to a more sustainable food system over the long term.



To be really prepared and ready for change, a roadmap in 10 steps can be followed by retailers, from the need to drive change by a leader, authority figure in the firm, to the new culture to integrate at every level

An efficient roadmap to change should have different milestones executives must tick to ensure successful deployments. What are the preparatory stages retailers should follow?



01. DRIVING CHANGE NEEDS A LEADER

A C-level is required to manage this transformation project throughout the company. While the management team's relays are essential to carry the new vision forward, it's up to the Executive Committee to be the leaders, to be willing to question what already exists and to demonstrate its commitment.

02. CLARITY AND TRANSPARENCY FROM THE LEADERS

False assurances, overly detailed plans: leaders sometimes struggle to reduce uncertainty and provide clear guidance to their teams. Instead, they must remain authentic and open, acknowledging change and uncertainty but able to handle it and move forward.

04. ALIGNMENT OF THE LEADERSHIP TEAM

The executive team needs to make sure that the management are in clear agreement on the goals and approach of the transformation initiated. In busy and evolving environments, reinforcing the message and refining it based on ongoing feedback is the adequate way to ensure clarity and focus on the right priorities for these frontline leaders.

03. AUDIT OF THE EXISTING INITIATIVES

Before initiating changes, an exhaustive assessment of the current situation is required. Infrastructure, people, processes, innovative solutions tested: an audit allows teams to understand their points of weaknesses and be ready to make their future situation more efficient and responsible.

05. CHANGE IMPLEMENTATION THROUGH PRECISE STEPS

To ensure long-term commitment throughout the process, organizations should follow a detailed roadmap where large-scale transformations are divided into realistic and achievable tasks, taking into account the people and current culture.

06. FOSTERING RESPONSIBILITY FOR EMPLOYEES

People are the most valuable asset. Ensuring they are engaged and focused in the new strategy is a requirement. Ambassadors and relays for the leaders are an ideal way to ensure change is integrated at every level of the organization. Fostering responsibility through a new professional gesture is a profound transformation for the teams.

07. DATA MANAGEMENT REVOLUTION

With augmented AI tools and demand-forecasting technology, the data gathering is more precise and accurate. Organizations enter an era where they can leverage on advanced data analytics and technology to optimize operations, personalize customer experiences and drive business growth.

08. CHANGE THROUGH PROCESSES

Automation and harmonization of the best practices and initiatives are key to successfully achieve a transformation. This is why implementing new processes, benefiting the whole organization, is one major milestone for retailers wanting to upgrade their model.

10. POWERING A NEW CULTURE

Entering an era of change is the first step to a new culture gradually impacting the firm, its values, its philosophy and the people working in it with positive impacts for all stakeholders involved.

09. MEASURE IS KEY

To ensure transformation is a success, objectives need to be clearly defined, transmitted to the teams and followed and measured through appropriate Key Performance Indicators (KPI). These indicators will allow executives teams to track performance against those metrics and adapt their processes to improve their results.



03. 2

Leveraging technology and process optimization for waste management illustrates the successful implementation of innovative solutions

Automation brought by processes brings a lot of benefits, from better productivity to improved motivation for employees: an ideal framework to change

The retail industry is increasingly focused on innovative approaches to bolster its bottom line. Balancing environmental responsibility with easy-to-use technology is key to sustaining momentum in the fight against food waste.

Smartway AI-powered tools have showcased the power of their transformative impact on stores profitability, while preserving resources. And to enter this transformative era, digitizing the processes of anti-waste is the key to benefit from the power of automation and harmonization.



“What gets measured gets managed”: measure through KPI is an absolute requirement for better management, to build accurate data fabric and adjust actions plans through real live data

The KPI notion is at the center of leveraging technology to tackle food waste.

In an August 2019 report, the World Resources Institute (WRI) rightly identified a three-step approach best suited to tackle food waste:

01. Set a target
02. Measure the problem
03. Act to solve it

The WRI puts it simply:
“What gets measured gets managed.”

In a century of data-centric strategies, **retailers should set clear goals for their efforts and measure their impact in reducing food waste.** Companies can set KPIs related to food waste and new revenue opportunities, track performance against those metrics and adapt their processes to improve their results. They should share those metrics both internally and externally. Many retailers still struggle to measure their impact.

The vast majority of distributors look at the “final number”: the net shrink. But they don’t have enough upstream observation to understand precisely where the problem is coming from and where to take priority action. This data reveals one element but doesn’t allow retailers to enrich the entire value chain, right up to the effective contact with suppliers. By choosing to digitize their anti-waste with Smartway, they will be able to build a complete “data fabric” and benefit from accurate guidance for their efforts among employees, investors and partners.





03. 3

Ensure a full commitment to the roadmap, by guaranteeing adherence to the strategic plan through leadership and organizational alignment

Smartway, with its strong experience and expertise after years of guiding stores in their fight against waste, built a unique methodology. It answers the challenges of organizations which must change but are unprepared, not organized enough to a project like this and without enough resources dedicated to drive change. They need guidance and recommendations.



Walmart 

Walmart, in its ESG report, said that the size and the variability of culture, policy and infrastructure across many markets where its stores are implemented pose challenges to scale waste management processes, tools and behavior change across thousands of facilities.

The Smartway expertise to change also answers key players' challenges in the retail sector, such as Walmart, who need to globalize better processes through every store and integrate a whole new philosophy of retailing to close the food waste gap.

As change is not an easy path, retailers must trust an expert in change transformation: Smartway leads retailers where they should be and with our teams as partners, tomorrow, sustainable is profitable for retailers

Retailers have to start their change transformation with confidence and fast guarantees.

With the expertise of our teams in project management:

- ↳ The roadmap is clearly determined and every step is followed
- ↳ Roll-outs of our technology are fast and guarantee cross-team alignment
- ↳ Retailers are relieved to build and follow an adequate roadmap with every step determined: that's a Smartway mission
- ↳ We set-up a full observability on data performances, implement relevant KPI and support change by focusing on a full adoption of the human capital
- ↳ Decision makers open the path for many other projects to be unlocked, by transforming their model and getting new revenues and EBITDA improvements
- ↳ We bring meaning and unite teams around the retailers ambitious projects for a better world, by promoting team retention and respect for the environment

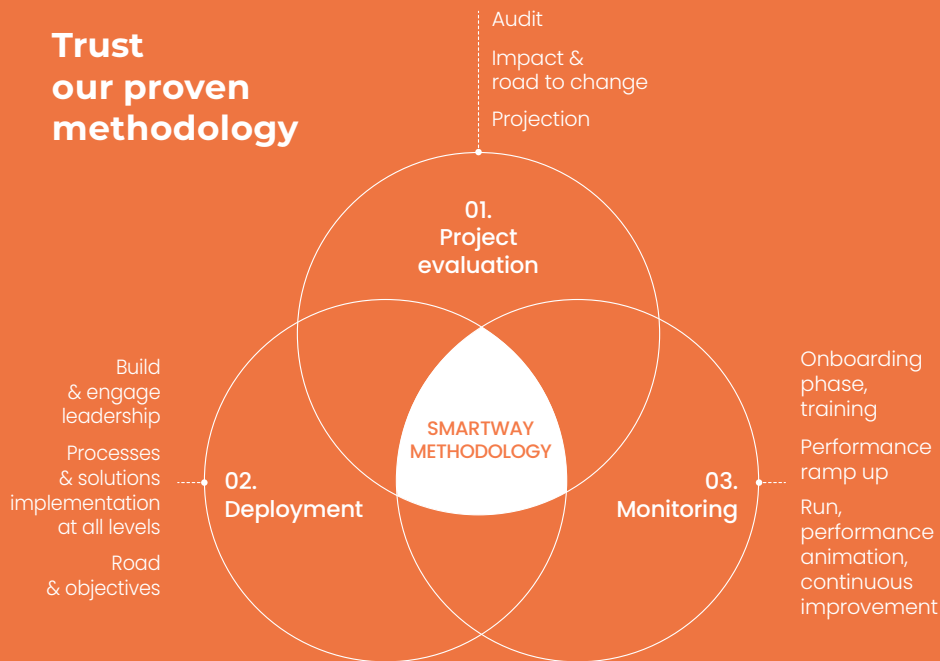
To be straight to the point:

Smartway leads retailers where they should be. We make sure they understand the expected benefits and are ready to take action. We ensure they follow the correct steps and avoid the pitfalls, through each roll-out. We help them develop their processes and standardize the best practices across all their stores and by empowering all their teams. Deployments become easier thanks to our dedicated teams who build the roadmaps, ensure every step is efficient and report to the direction.

By building a strategic planning and a roadmap...

The Smartway methodology is a unique value proposition to ensure retailers avoid pitfalls, benefit from the better guidance possible all along this transformative path and guarantee a fully new culture adoption

Trust our proven methodology



The expertise of a partner like Smartway is further illustrated by our Customer Success Manager (CSM) teams, key players in the success of this type of project.

They notably accompanied 100% of Auchan stores in all their european geographies, in their roll-out, ensuring:

- that each stage was carried out according to the defined roadmap
- the technology was well understood by the teams
- that the new business process had become part of the corporate culture
- that time and revenue savings were achieved.

With Smartway, it's above all the story of a meeting. When I realized how these solutions could help us better manage short-dated products, I said yes to a massive roll-out... in six months!

Philippe Brochard, former CEO of Auchan France

Building a strategic planning and a roadmap for sustainable and profitable change is the foundation stone for retailers to start their structural transformation.

01. A leader, figure of authority, needs to drive change
02. Clarity and transparency from the leaders are needed to ensure cohesion
03. An audit of the existing initiatives need to be done
04. The leadership team must be aligned
05. Change needs to be guided through precise steps
06. Fostering responsibility for employees is a crucial work
07. Data management must be set up
08. Processes must be at the heart of the transformation
09. Measure is an unconditional rule for adjusting the action plan
10. A new culture need to be empowered

**People, processes, data, culture:
the pillars for a successful change.**

The retail industry is increasingly focused on innovative approaches to bolster its bottom line and sustaining momentum in the fight against food waste.

Automation through processes brings a lot of benefits:

Efficiency / Productivity / Savings / Reduced errors / Customer satisfaction / Employee satisfaction and retention / Data standardization / Scalable processes...

In a century of data-centric strategies, retailers should set clear goals for their efforts and measure their impact in reducing food waste. "What gets measured gets managed": measure through KPI is necessary for better management, to build accurate data fabric and adjust actions plans through real live data.

As evolving its model is not an easy path, retailers must trust an expert. Smartway already ensured adoption for thousand of stores in the world.

Our expertise in project management?

Fast roll-outs / Cross-team alignment / Roadmap construction / KPI set-up / Fully adoption

For retailers, many other projects are unlocked through this transformation and by getting new revenues.

Moving forward, the retail industry must embrace strategic planning and swift execution to ensure sustainability and growth in an ever-evolving market landscape.

CONCLUSION.

Facing a critical juncture, the retail sector must urgently address the escalating food waste crisis, with 1.6 billion tons wasted annually, risking not only environmental and economic stability but also the sector's very survival.

The inflationary context is putting pressure:

- ↳ **on customers'** purchasing power so they began to reduce their purchasing volumes.
- ↳ **on food retailers**, with sharp cost increases that undermine their business model (labor cost, energies, production...)

So the food retailers have no choice but to maintain a high level of price competitiveness while financing heavy investments.

Every year, a retail group throws away as much value as its bottom line. And in the years to come, customers and retail employees will not continue to come into stores that still throw away food. Thus, the only lever to activate, which reconciles the Planet, People and Profit challenges, is the food waste management. It will have a rapid and over-the-year impact in terms of profitability and sustainability, while improving the organization and satisfying the teams and consumers. It will require the courage to question existing solutions. But it's a fabulous path, full of meaning and performance, that lies ahead.

The imperative to act is underscored by the potential for significant financial and resource savings, reinforcing the necessity for executives to spearhead transformative changes. The time for deliberation has passed; immediate, decisive action and a commitment to sustainable practices are essential to navigate the complexities of food waste reduction, securing a viable future for the retail industry.

Addressing the urgent need for transformation in the retail sector is highlighted by notable examples where delayed adaptation had significant repercussions.

For instance, certain retailers have struggled to catch up with the rapid expansion of online and 'drive-through' shopping services, impacting their market share and competitive stance.

→ **These instances underscore the criticality of proactive change management and innovation adoption to avoid similar pitfalls.**

Current efforts, like donations or surprise bags, don't close the food waste gap. Improving food waste management is one of the most relevant topics for immediate impact on the bottom line of retailers, while ensuring that the expectations of their teams and consumers are met.

And it's a topic that customers expect, like French people, according to the conjoint study by Smartway and Opinion Way about food waste published in 2023



Moving forward, the retail industry must embrace strategic planning and swift execution to ensure sustainability and growth in an ever-evolving market landscape.

ENDNOTES & SITEMAP.

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ABOUT SMARTWAY.

This French firm in Nantes (West Coast) was born in 2012 from the minds of two brothers, Paul-Adrien and Christophe Menez. Their idea is simple: they are revolted by the food waste they witness in stores, at a moment where they are students and broke and always looking for good deals. From one to more than a hundred employees, Smartway has revolutionized the fight against food waste by being the first to propose an innovation for the retail industry, by making stores sustainable and profitable. A transformative path accompanied by our teams, without compromise between responsibility and revenues.

The Smartway technology has already convinced thousands of stores worldwide: France, Romania, Hungary, United-Kingdom, Portugal, Thailand, Russia, Poland...

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Retailers are at an unprecedented momentum, where their model should urgently evolve, by tackling food waste through a global organizational project. Consumers have never been so committed to a positive approach to consumption but they are limited by an ever tighter budget, where food becomes the adjustment variable. Employees spend time on repetitive tasks, demotivating them. Food waste is rampant, while millions of people suffer from hunger.

At Smartway, we are convinced that sustainable matters. A new retail model, based on responsibility, efficiency and a new firm culture is possible. Executives have to seize this priority matter to their strategic roadmap, to empower their management and operational teams and take this transformative path to obtain impactful benefits and reinvent their retailing philosophy. A change initiated through the only prism of technology will have no long-term impact.

It's the upstream reflection about food waste, realizing the consequences and levers for action and addressing the problem from multiple angles (data, process, people, culture) that will enable retail decision-makers to meet their global challenges and finally close the food waste gap.

Are you ready to close the food waste gap?

Contact our Smartway experts:



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