



Our preferable
Future of food

It's time to shift the food system.

Here's our take on what an *alternate future* could look like — and how we get there.

This is a Preferable *Future of Food*.

SALLY, EY Doberman's future manifestation lab, brings to life an emerging system that has yet to come to fruition.

We manifest these preferable futures through the lens of digital products, services, and business models that could enable and accelerate key transformational shifts across business and society.

SHIFT N°1 ONE HOUR FOOD SYSTEM

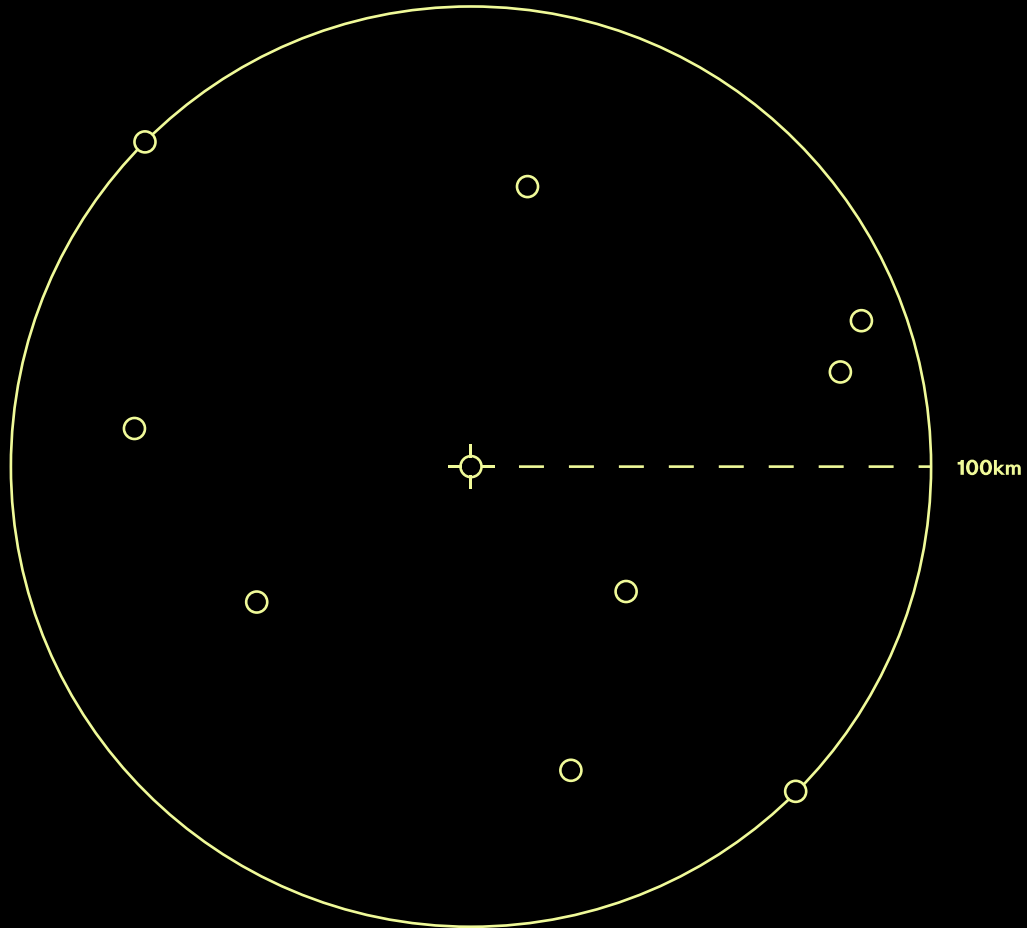
SHIFT N°2 COMMUNITY FOOD REVOLUTION

SHIFT N°3 THE IMPACT PLATE

ABOUT

SHIFT

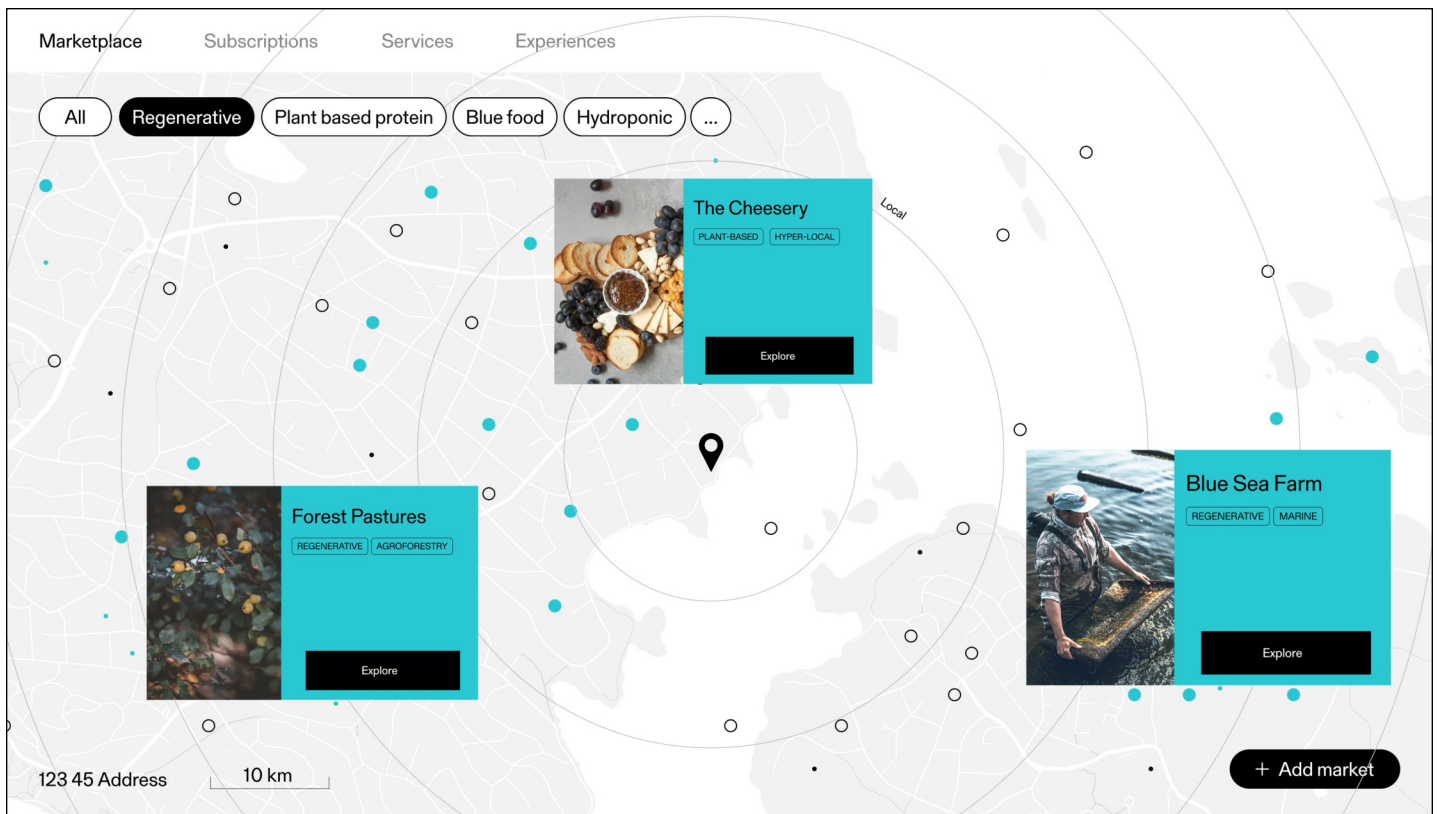
N°1



One hour food system

In our future, industrialised global supply chains have become a thing of the past, and food circles are growing smaller. Instead, producers have direct connections to you and me, creating accountability and opportunities — changing the dynamics of the food system.

No, local sourcing is not the only answer, but it is an opportunity yet to be sufficiently tapped. Large amounts of regeneratively grown food can come from within and close to where we live if we create a better and more equitable system.



CONCEPT N°1

Now, open marketplaces seamlessly *connect* local producers and consumers

In 2022, there was a structural power imbalance in the agri-food value chain — moving money and power to retailers and global agricultural companies. As a result, many farmers found it hard to sustain their livelihood from farming, and fewer still had the finances necessary to invest in better, more regenerative farming practices.

In addition, most people worldwide, especially in cities, were entirely disconnected from where their food came from. Those who wanted local food were often limited to a weekly farmers' market. There was a great need to bring producers and food closer together.

A key barrier to change was that the retailers almost entirely controlled the means and channels for distribution. These amazingly effective systems that successfully fed billions of people had also created an unnecessary and profound chasm.

Today, vibrant local marketplaces connect local and regional producers with consumers. These open platforms allow consumers to buy and interact more directly with producers through an ecosystem of services, for instance, subscription, co-growing, and food-related experiences. The increased connection has led to an increased demand for regeneratively produced food.

Through intelligent, collaborative distribution networks and hubs, food products can move smoothly from different farmers and producers to the end customer. Food mileage is reduced. Regional food resilience is greater.

With fewer intermediaries, food producers get a higher margin for their products, making investing in sustainable production methods and technologies easier. In addition, smaller producers have an easier time making ends meet.

The platforms have also made it possible for farmers to diversify their income streams through selling experiences, knowledge, and refined products.

Enablers

These open local marketplace platforms result from different sectors taking action in this area.

Some pioneering retailers saw the public's desire to access locally produced food and decided to invest in developing market platforms to tap that market opportunity. They also had the benefit of already having well-developed distribution capabilities.

Cities began collaborating around the notion of one-hour food systems — wanting to support regenerative and resilient food production on a regional level, recognising the need to create new contact points between producers and buyers. Many municipalities already had experience from building co-distribution centres and continued building on this asset.

In other places, new intermediaries sprung up, such as companies that wanted to connect quality-sensitive restaurants with local farmers and producers.


Technologically, these platforms have been more successful by using algorithms matching buyer preferences with locally available producers. When someone travels, they experience other one hour food systems, discovering local flavors and food cultures. It also helps inform what is produced from year to year.

The use of APIs between the digital tools and management systems that farmers use has made it painless to get valuable and accurate information into the marketplaces.

By virtue of being open, these platforms have truly empowered small producers to reach a broader market. Anyone can jack into these marketplaces as long as they get third-party verification as a trusted food producer.

Select pioneers 2022:

- [REKO-rings](#)
- [Dagens](#)
- [Mylla](#)



BURROW FARMS

Cosmic Purple

NUTRITIONAL DENSITY

NUTRITIONAL MATCH

TIME TO HARVEST

12KM AWAY

The purple color of these carrots means that they are high in the antioxidant anthocyanin. Perfect eaten raw as a snack, or used in salads and soups. Great juiced and pickled for savoury dishes.

Add to cart

Add to subscription

Notify of next harvest

CONCEPT N°2

Expanding our understanding of the *value and nutrition* of food

The appearance of open digital marketplaces has connected people with producers and reconnected people with how food is grown and how precious it is


Food is no longer the anonymous mystery it was in the early 2020s.

Back then, most people had little contact with their food's origin before picking it up on a supermarket shelf. More often than not, it was hidden from sight along with the sweat and toil of the men and women who nurtured it to life.

Today it is easier for people to appreciate the work that goes into bringing food to the market. The process has come alive through these platforms. The same can be said for seasonality, which is much easier to relate to within one-hour food systems.

There is a greater focus on the nutritional differences between food from regenerative agriculture and large-scale industrial fast agriculture. We have broadened our focus from a few rough metrics around calories, carbs, proteins, and fat to a broader understanding of nutritional density, how food impacts our gut and immune systems, and beyond.

It would be inaccurate to say that these marketplace platforms simply connect producers and consumers. The whole story is that these platforms make it effortless for people to access locally produced and delicious fresh foods that are nutritionally matched to the needs of the individual.




IN DEMAND

Agricultural Fertilizer

Treated urine
Phosphorus, potassium,
and nitrogen

Explore




LOOKING FOR

Egg shells

Source of calcium, land
spreading, filler, feed

Make a bid



AVAILABLE

Almond hulls

120 kg/month

Animal feed, Oil,
Protein powder

Purchase

CONCEPT N°3

Creating B2B *symbiosis* where waste is turned into value

Industrial symbiosis used to be a well known, but a rarely practiced concept

Many found the idea intriguing but not enough to pursue it in their businesses. It was simply too cumbersome, difficult, and different from normal waste handling and procurement practices. Producing and getting rid of waste was just a regular part of the business.

That is different today as many facilitated marketplaces for waste and side streams exist. These platforms make additional resource flows visible and broker the contact between supply and demand through data-driven mapping.

These systems provide a means for organisations to get paid for what was previously considered waste. At the same time, buyers can access cheap resources for their operations. Many platforms also help measure the environmental benefits of this increased symbiosis.

Select pioneers 2022:

- [Circular feed \(Axfoundation\)](#)
- [Big Akwa](#)
- [Ellen MacArthur Foundation](#)

SHIFT

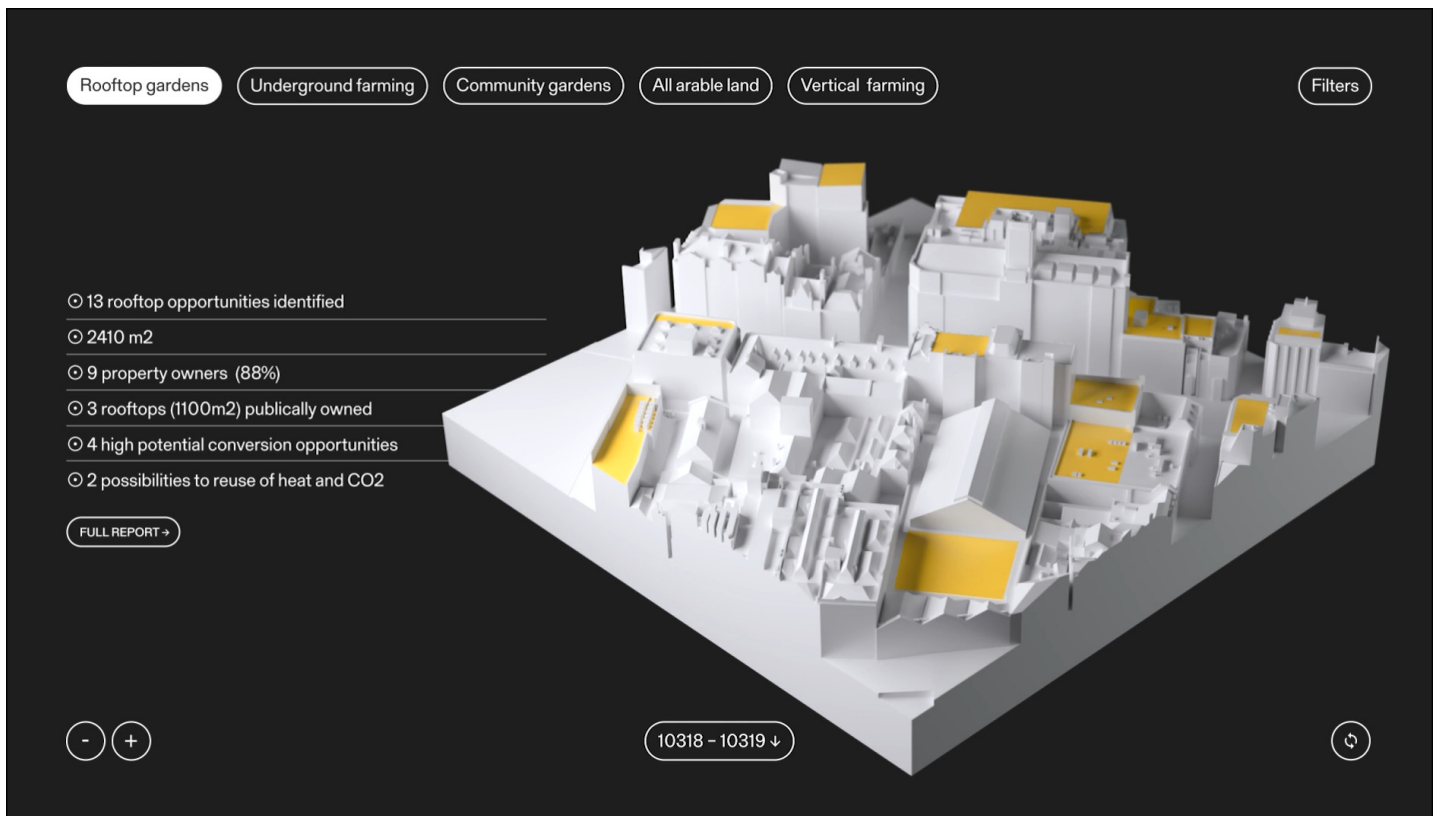
N°2



Community food *revolution*

An expansion in urban food production is bringing food closer to people, and people closer to each other.
Enhancing communities. Enriching city life.

For practical reasons — scarcity of space, the high value of urban land, the density of cities — urban food production is unlikely to bring more than 10–25% of the volumes needed to feed a growing population. That is, however, not insignificant and could improve wellbeing and quality of urban life, strengthen and revitalise communities, and bring back our appreciation for food.



CONCEPT N°1

Data-driven urban planning is revealing *spaces and synergies* for food production

Following the food crisis that ensued from the COVID-19 pandemic, the Russia-Ukrainian war, and several years of low-yield harvests across the globe, more and more regions, cities, and municipalities developed and enacted urban farming action plans.

As this movement grew, so did the need for better tools for planning and decision-making. As a result, new consortiums of cities, tech companies, academia, and entrepreneurs came together to take action.

Today there are suites of professional tools that help guide decision-making and identify urban farming opportunities. Many of these tools use cross-data analytics to identify underutilised spaces used for food production.

A tool might, for example, identify rooftops or ground-level space that would be suitable for different types of farming — making intelligent suggestions about the most significant opportunities and how to proceed. By cross-referencing with data sources that could map thermal and CO₂-emission hotspots in the city, the tool might also suggest how to utilize those heat and CO₂ sources as resources. Finally, by cross-referencing socio-economic and crime mapping data, the platform might propose suitable locations for community gardens to cultivate social capital, not only food.

These tools drastically speed up the rate at which cities could expand their urban farming programs.

Enablers

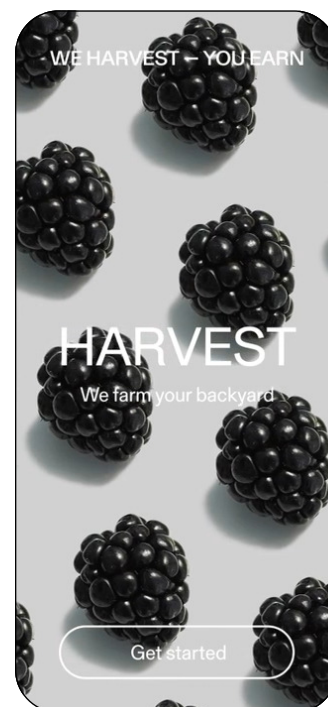
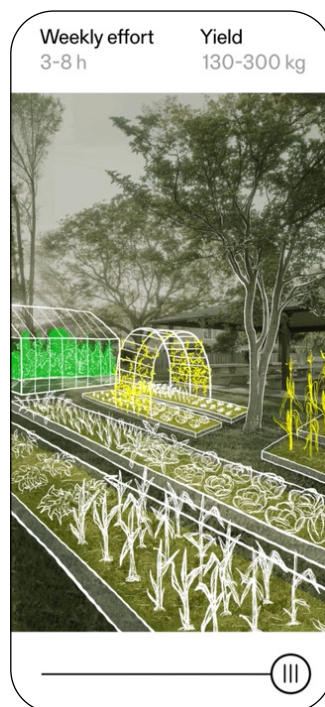
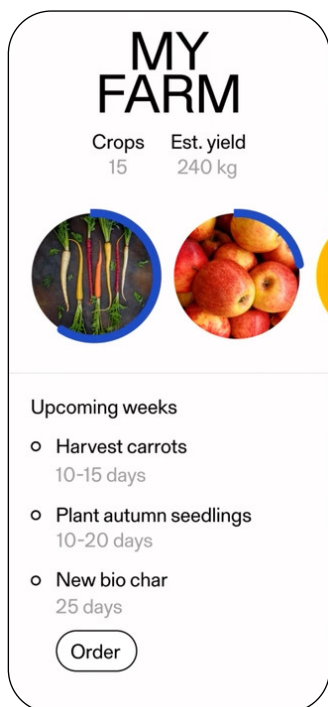
New standards for safely sharing data between systems and open APIs that connect different data sources have made these tools possible.

The progress in digitalising old data suppositories has also been meaningful. For instance, most old building construction drawings that used to sit in analog city planning archives are now digital — making it possible to do an automatic structural analysis of rooftops using machine learning. We can now identify their approximate load-bearing capacity and suitability for different types of rooftop farming.

The Open Cities Platform became a global accelerator of the development of these tools. As a result, different cities and sectors started sharing their code, working together to make rapid technological leaps possible.

Select pioneers 2022:

- [Growing Underground](#)
- [Nature Urbaine](#)
- [10% Food in the City](#)



CONCEPT N°2

A range of smart services is *democratising* farming

Urban farming used to be for the dedicated few. The hardcore enthusiasts. The nerds.

Beyond having some herbs on your kitchen counter or leisurely growing veggies in your garden (if you were fortunate enough to have one), urban farming at a large scale required more than most people were willing to invest. It took too much time, effort, money, and research at a limited success rate.

Little food came from within our cities, and our gardens remained lawn-covered biological deserts. Balconies and terraces had only a few decorative flower pots, and companies were only considering the possibility of growing food if it was their core business idea.

But a series of nested food crises in the early 2020s led a lot of sectors to look at how they could scale urban farming. So when companies and municipalities started launching these tools and services that reduced the effort needed and the learning curve, a large audience was eager to receive them.

Today, everything has changed. Cities produce more and more of our food. The whole process from start to finish has become a lot easier and requires less interest, time, and money. And it is enabled by a new ecosystem of services and tools that allows everyone to produce food.

Enablers

The development of these tools was aided by progress in data processing, analytics, and technologies such as AR and machine learning — making it possible to put the intelligence and experience of experts into the hands of city people who desire to grow food.

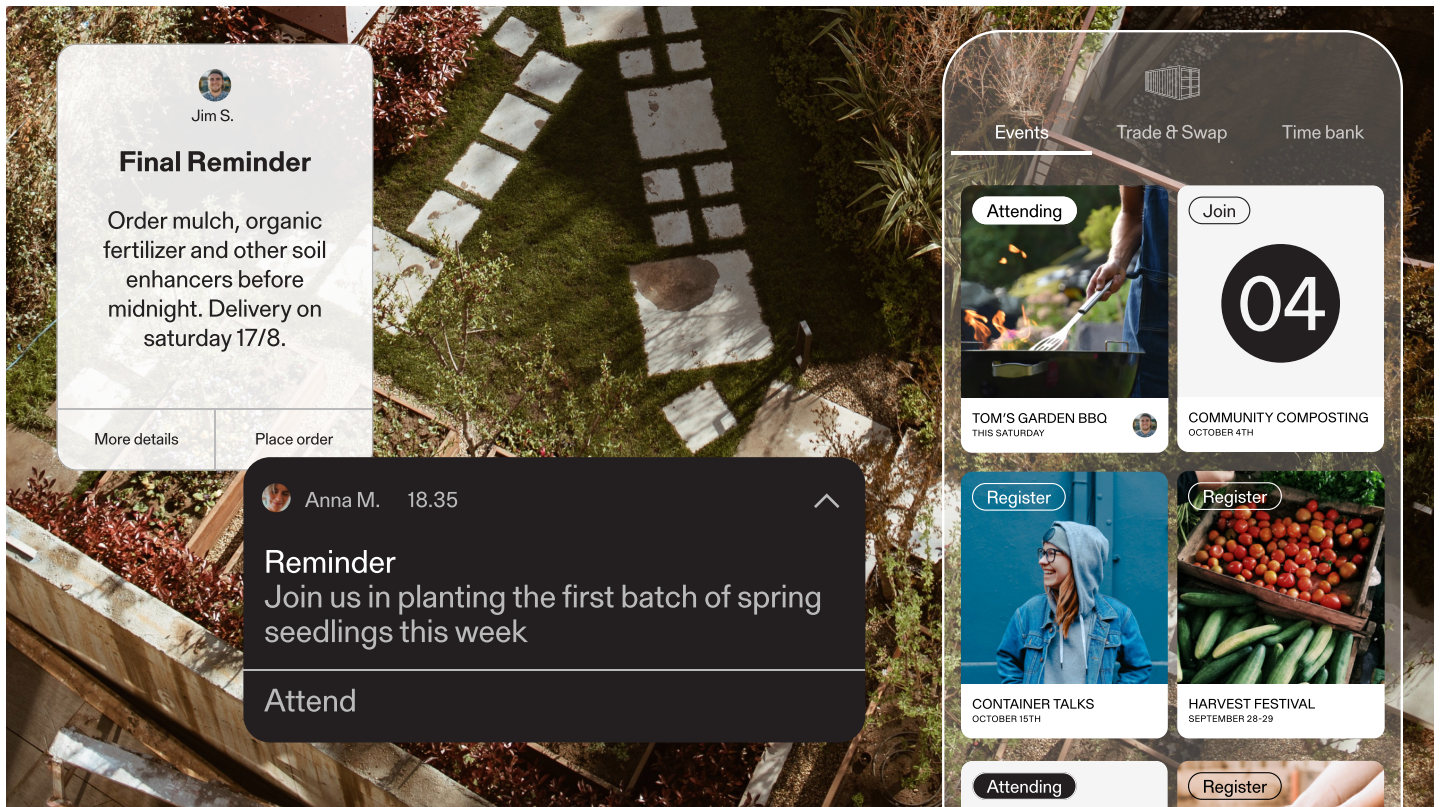
AR apps now help people envision and dream of what food production could look like for them — whether they have a garden, a rooftop terrace, a balcony, or an indoor space. It helps them foresee the amount of food they can produce and manage and reduce the amount of work necessary for success. These apps also help people acquire the tools needed and gain professional support.

Personalized tracking and management tools also track all tasks throughout the year, including how to take care of harvests.

A host of full-range service providers have popped up, growing food in gardens and properties where the owners have little interest, time, or competence to do it themselves. It has accelerated the amount of regenerative food produced locally and has given home and property owners a way to profit — in veggies or money.

Select pioneers 2022:

- [Planta](#)
- [Curtis Stone](#)
- [Co-Grow](#)



CONCEPT N°3

Food is *reviving, reconnecting, and strengthening* our communities

We didn't see it at first — the obvious connection. Most of us were not used to having the kind of buzz and activity in our neighborhoods that urban farming would bring.

We were hanging out in our gardens and balconies, often exchanging niceties with our closest neighbors. There was a limited amount of community spirit in many of our communities.

That is one of the most notable differences today. Urban farming has brought people out and closer together, strengthening our social capital. We're not only growing vegetables — we're growing people and relationships.

Enablers

The increased sense of community has come from many converging forces.

In many places, the shift started as professional urban farmers began to lease and rent land in privately owned gardens for small-plot intensive farming. These farmers were genuinely interested in building good relationships with people in the neighborhoods where they operated, and many enjoyed their presence and started to farm more.

Municipalities and cities started implementing neighborhood-level infrastructure to support the growing interest in urban farming. These physical hubs, such as self-service storage containers, made it easier for people to engage in urban agriculture. They reduced the need to own everything and made composting, mulch, tools and knowledge, more readily available. The physical hubs also became natural meeting points for people.

As interest and focus on urban farming grew, social media platforms started paying more attention to these growing peer-to-peer networks. Soon, features and entire applications began popping up, catering directly to this movement's needs, helping connect people to share and trade things, skills, time, and a sense of community.

Select pioneers 2022:

- [Odlä Kompis](#)
- [Losæter](#)
- [Koloniträdgårdsförbundet](#)
- [ØsterGro](#)



The Vessel

The world's largest open source fermentation platform

🔍 Search on name, type or category

Animal free yoghurt

A rich and creamy yoghurt using of the shelf protein strains and Doc G's enzyme pack #21.

ANIMAL FREE DAIRY BEGINNER

Qui

Qui is a rich and savoury fermented fungi from microbes found in Central Park, New York.

FUNGI ADVANCED GEOSPECIFIC

Phoenix a1

Algal protein for low tech mass fermentation in the poorest regions of the world. Release 16.8. Developed by the UN. Has fed 180 million people.

ALGAE ENDING HUNGER BEGINNER



CONCEPT N°4

And, a new micro-brewery *movement* is revolutionising proteins & fats

In the early 2020s' venture capital poured into food tech companies focusing on fermentation and precision fermentation technologies. Soon, bioreactors and other equipment prices dropped, allowing regular people to play around with these technologies.

Foodies started up small fermentation micro-breweries, experimenting with new proteins, algae- and fungi-based foods, no cow dairy products, and 3D-printing of food — bringing new culinary experiences to the world. Discussion forums were alive and vivid. They were eager to learn, experiment, and share their learning with others.

In parallel, global institutions like the UN and the WHO started exploring how fermentation tech can feed the many and empower poor communities to produce their food. These efforts gained support from academia, philanthropists, and tech companies — providing brain power and money to support the efforts.

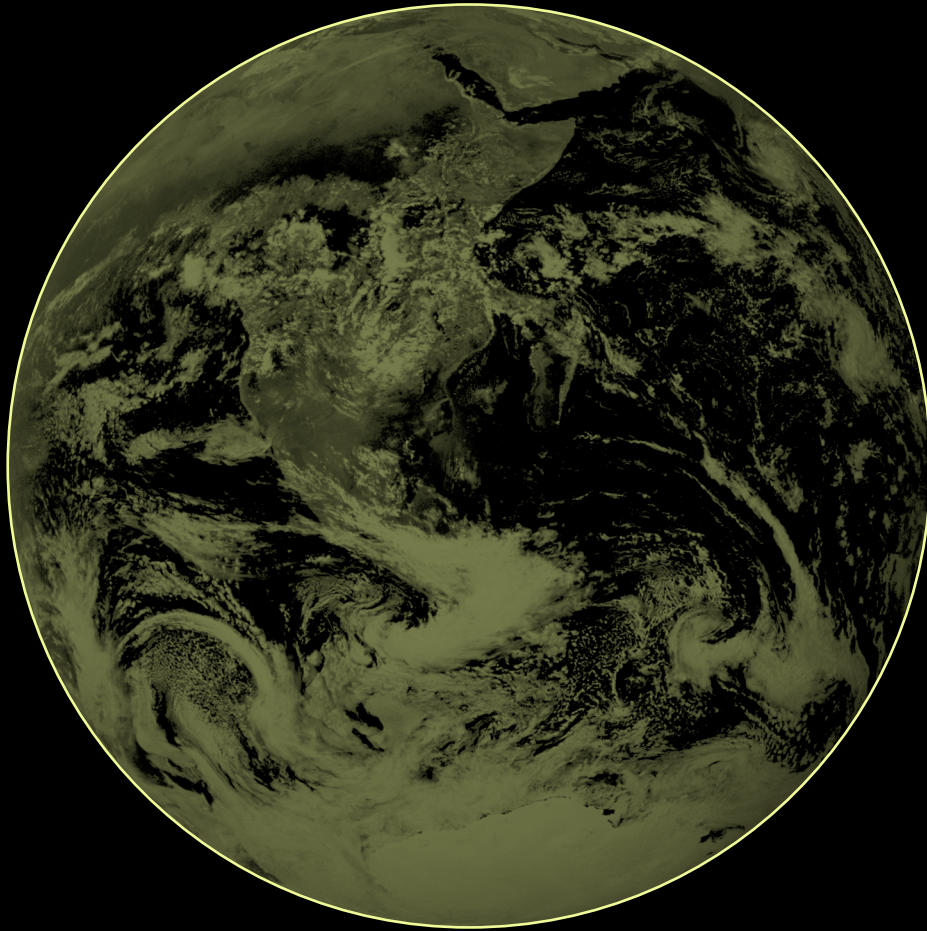
Online discussion forums soon turned into open-source databases where these different worlds of food-as-software met to share their progress and help each other.

Select pioneers 2022:

- [Mycorena](#)
- [Solar Foods](#)
- [Hooked Foods](#)
- [Stockeld Dreamery](#)

SHIFT

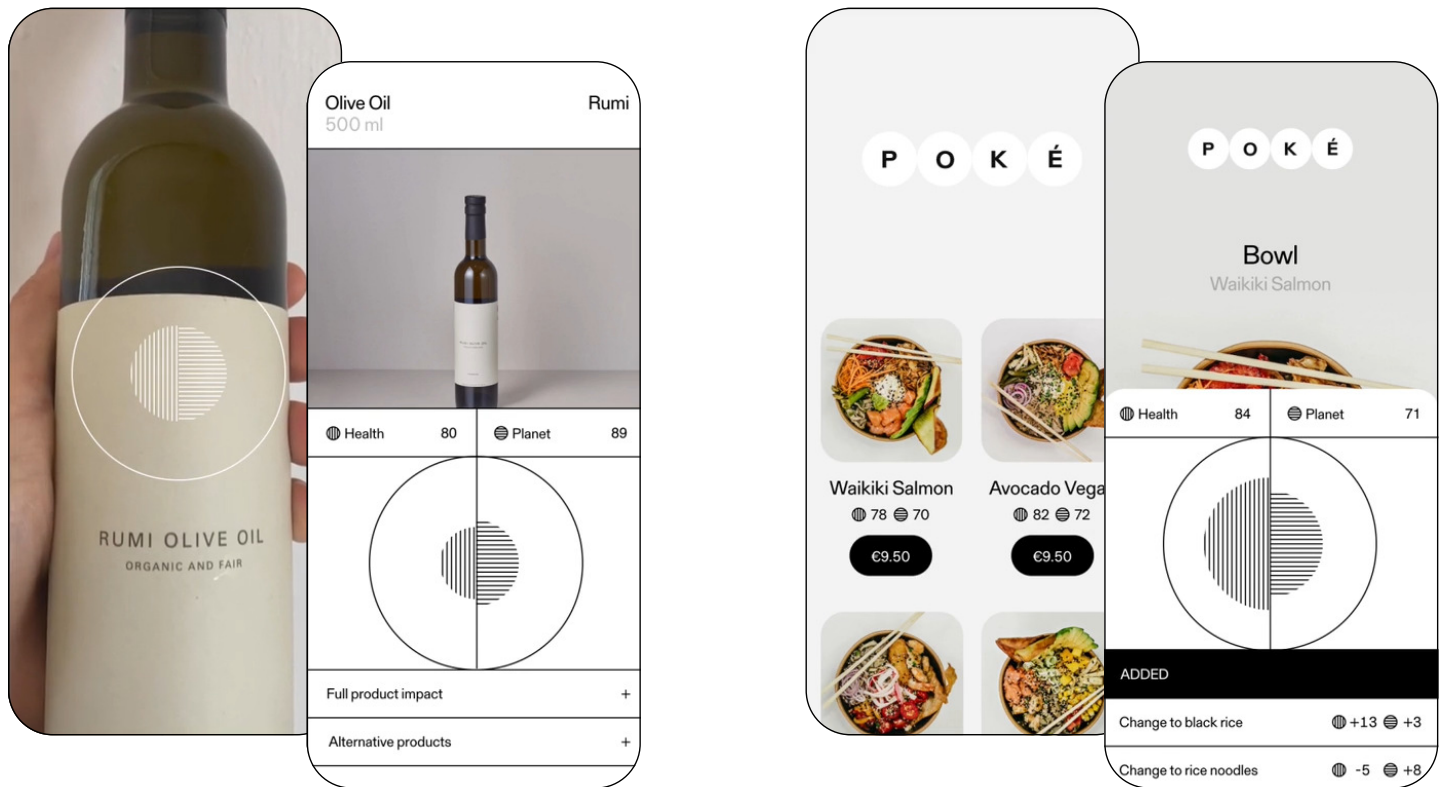
N°3



The impact plate

Technology has unlocked a new paradigm of health and environmental consciousness in eating, helping people to achieve what is best for them and the planet.

Today we understand less than 1% of the effects of food on our health, and the planetary impact is equally complex. We recognise that unravelling those patterns will take decades - if we ever understand them fully. However, turning already existing and emerging data into actionable insights for people would have a profound impact on health, wellbeing, and the planet.



CONCEPT N°1

AI-supported tools are revealing the *true impact* of what we eat

It used to take a lot of personal effort to eat sustainably and healthily. For a lot of people, it led to eating less well and planet-friendly than they wanted to.

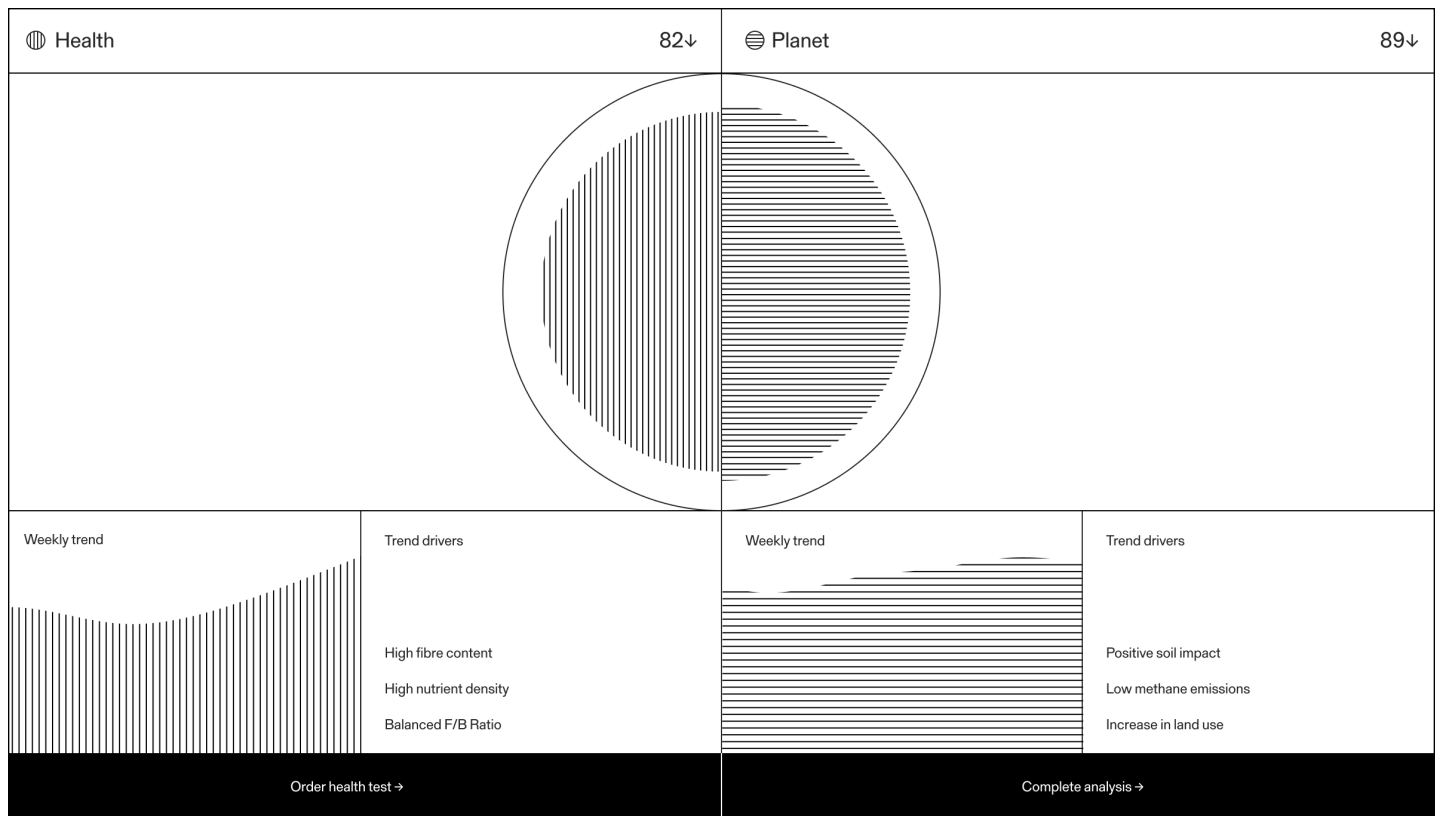
Today, AI-supported tools gather vast amounts of data about the sustainability and health impacts of what we eat and put this information at our fingertips in the form of actionable insights. Open APIs make data available wherever food is purchased: restaurants, grocery stores, marketplaces, and online vendors.

Powerful machine learning algorithms, image recognition, and AR are used to guide our thinking and decisions. From planning what to eat and point of purchase to the kitchen and the dinner table.

It is a form of data-driven nudging based on our personal preferences and needs. Helping to bring awareness and making better choices easy.

Select pioneers 2022:

- [Klimato](#)
- [Mat Checken](#)
- [Paradiset](#)



CONCEPT N°2

Integrating a multitude of sources, enriching and revealing *complex patterns*

Select pioneers 2022:

- [Lumen](#)
- [Gutfeeling Labs](#)
- [Mäta Health](#)

The tools that help people and families eat better pull data from various sources, ranging from academia and public health institutions to tech companies and actors throughout the food value chain.

The foundation for these unprecedented levels of data access is a set of open APIs and collaborative algorithms that were started by food industry actors and later mandated by governments. Through these APIs and algorithms, cutting-edge data around food's environmental, social, and health impacts, as well as nutritional composition, has become more readily available — making it easier to develop intelligent tools for consumers.

Another vital source of information that enables personalisation is data related to the individual and their desires, preferences, and health needs. This involves data around personal taste, medical records, blood tests, and gut microbiome tests.

Sensor technologies and hyperspectral imaging technologies used in farming also provide highly reliable data about the nutritional composition of food.

Third-party transparency and supply-chain tracking have become the norm. It touches every part of the physical supply chain — from seed to peel.



CONCEPT N°3

Personalised services are making better habits *delicious and effortless*

In 2022, many people lived with a guilty conscience about their eating, feeling that they should eat differently but not truly managing to shift their habits. There were simply too many barriers.

Today, there are personalised services that make new cooking and eating habits effortless and fun.

For example, box subscriptions compile fresh foods from different producers within the one-hour food system to suit the specific health needs, tastes, and conditions of the customer and their families. It's easy to get superb food for the weekend feast, as well as time-pressed everyday life.

Boxes can be matched against nutritional data, special needs, and preferences and adjusted over time through feedback loops. Subscriptions can even be matched to personal calendars to anticipate special events or predict when family members are away.

Smart responsive recipes use the waste from the previous day and provide interactive libraries for cook-alongs, plating, and collaborative improvements.

Select pioneers 2022:

- [Arstiderna](#)
- [Cortilia](#)
- [Eat Grim](#)

ABOUT

This is a project by SALLY,
in partnership Gullspång Re:food.

The future is determined by our actions and inactions we take today,
but we can't build what we can't imagine.

SALLY depicts preferable futures to help manifest something
painfully on its' way but yet to come to fruition. Using the lens of
digital products, services, and business models, we make these
futures concrete and tangible to reduce the pain and increase the
speed of change.

SALLY is EY Doberman's future manifestation lab.