REINVENTING LOCAL FOOD SUPPLY IN CONNECTED CITIES: The example of The Food Assembly

By The Food Assembly team



The Food Assembly Picking up of members' orders

KEYWORDS

SHORT FOOD SUPPLY CHAINS

- DIGITAL PLATFORM
 LOCAL CONSUMPTION
- SOCIAL TIES

The Food Assembly (La Ruche Qui Dit Oui ! in French) is a social and collaborative enterprise created following a two-fold observation: crop and livestock farmers face financial difficulties while end-consumers aspire to new modes of consumption. By leveraging new technology and a decentralized physical network, The Food Assembly aims to encourage the scaleup of short food supply chains. So far, this initiative has met with considerable success, especially in cities. This article looks back at the key factors underpinning the success of this initiative and the way in which digital technology can lead to reinventing food supply in connected cities.

INTRODUCTION

Over the past decade, conventional food distribution supply chains and modes of consumption have been increasingly called into question, especially in developed countries. On the one hand, crop and livestock farmers are now facing financial difficulties that undermine the viability of their activity. On the other, consumers aspire to new modes of consumption that are healthier, better for the environment and more transparent. This trend is all the more evident in cities with a high concentration of households with high purchasing power.

This joint observations led to the creation in 2011 of The Food Assembly concept in France. Marc-David Choukroun (the current CEO), Guilhem Chéron, and Mounir Mahjoubi created The Food Assembly with the aim of putting producers and consumers directly into contact with each other using new technology. The idea is to draw on the power of digital technology to develop short food supply chains (SFSCs) and to allow consumers to "eat better and shop fairly."

The Food Assembly platform makes it possible to create and manage a local and independent SFSC community, connected to a network of other SFSC communities.

Seven "Assemblies" were created in 2011 as part of a pilot project in France. The following year, The Food Assembly was certified a Social and Solidarity Economy (SSE) company. In 2013, the initiative won the City of Paris's Grand Prize for Innovation. Today, there are more than 850 in France – a third of which in urban areas – and more than 300 in other countries (Italy, Belgium, United Kingdom, Spain, Germany, Netherlands, Switzerland and Denmark).

1. THE FOOD ASSEMBLY: AN ONLINE PLATFORM TO SCALE-UP SHORT SUPPLY CHAINS

1.1 DIGITAL INNOVATION AT THE HEART OF THE MODEL

The Food Assembly was created to enable the scale-up of SFSCs, which are defined by the French Ministry of Agriculture as "a method of selling agricultural products either directly by the producer to the consumer or by indirect selling providing there is only one intermediary." SFSCs have been created over the past few decades in France and elsewhere in the world by a range of stakeholders (Teikeis in Japan, CSA - Community Supported Agriculture – in the United States, Jardins de Cocagne and AMAPs in France, etc.), but they are often difficult to scale up.

To overcome these obstacles, *The Food Assembly* opted to leverage digital technology that can put tens of thousands of consumers and producers into contact with each other simultaneously. The company is now one of the leading stakeholders to have used new technology to create SFSCs.

The 850 Assemblies currently operating in France hold weekly markets where consumers come and meet the producers and collect their food orders placed online. The SSE company is present via an easy-to-use platform enabling consumers to join an Assembly freeof-charge (close to their home or place of work, for example) and then place weekly orders if they want without any particular obligation. All the products sold (fruit and vegetables, meat, dairy products, etc.) are produced near each Assembly, on average within 43 km, in France, and a maximum radius of 250 km. The selling prices are set by the producers themselves. No purchase-resale system is implemented: the consumer pays 100% of the price to the producers. One of the model's advantages is the speed of the transaction: the producers receive payment within two to five working days. They then pay 8.35% of this amount to cover service costs to the "Food Assembly" enterprise (see box below), which supplies the digital tool and backoffice, and 8.35% to the Assembly Host who organizes the sale and distribution of the products each week.

1.2. DESIGNED FOR PERI- URBAN AREAS, THE PROJECT WORKS JUST AS WELL IN CITIES

The model was initially designed for consumers in peri-urban areas where communities have limited access to local shops. However, the Assembly model was quickly adopted by city-dwellers, especially in large cities, who have expressed a strong desire for new modes of consumption. For producers, cities provide a new outlet that can, in some cases, make up for the weaker demand in their local area. For example, many producers who sell their products in Paris come from the regions located in the north of the city where there are fewer opportunities for direct selling. Supplying cities is a significant source of income for producers.

"THE FOOD ASSEMBLY IS ONE OF THE FIRST STAKEHOLDERS TO HAVE USED NEW TECHNOLOGY AND SOCIAL NETWORKS TO SPEED UP THE DEVELOPMENT OF SHORT FOOD SUPPLY CHAINS."

2. IMPACT OF THE MODEL ON URBAN AREAS

The aim of the model is to create bridges between rural producers and urban consumers through the use of digital technology. The impact of the model on cities is environmental, social and economic.

REDUCING THE ECOLOGICAL FOOTPRINT

SFSCs aim to minimize the ecological footprint by encouraging production and consumption at the local level. While no product travelling further than 250 km may be sold through an Assembly, the average noted in France across the network is 43 km. By comparison, the ingredients for an industrial yoghurt travel 9,115 km before reaching the end consumer.

EMPOWERING ASSEMBLY HOSTS

Managers of their Assemblies and organizers of the physical distribution of the products, 60% of Assembly Hosts are self-employed. At present, for most Hosts, this is an additional activity that provides them with the 8.35% of the sales made through their Assembly, or an average of €500 per month. Around 80% of Hosts are women. They generally share the aim of bringing about new modes of consumption and find that this activity not only gives them additional monthly income but for most of them it also provides a springboard for the creation of a new business activity.

CONTRIBUTE TO SOCIAL TIES

In addition to the sale and purchase of products, the Assemblies often provide a means for reducing isolation and encouraging contact between the rural and urban worlds. Many Assembly Hosts arrange visits to producers' farms. Recently, one Association's members helped a market gardener plant 600 trees on his land. The distributions, held in a physical locality, are also opportunities for residents to meet each other as well as producers, some of whom are present during distributions to deliver their products.

The Food Assembly model also allows for social ties to be created within neighborhoods and among network members. The Assembly Facebook groups allow members to send each other messages (advice, share recipes, swap services, loan equipment, etc.). Outside the actual digital tool, many Assembly Hosts unite their community by organizing events. For example, one Parisian Assembly organizes a "Grande Marmuche" or "Big Assembly Meet" every quarter, which is attended by around one hundred members who come together to cook and share a meal.



The Food Assembly Example of a distribution point

RECLAIM PUBLIC SPACE AND BREATHE NEW LIFE INTO SHOPPING AREAS

Some distribution points are located in public spaces like event centers or public spaces. Others take place in cafes or restaurants bringing in additional customers in exchange for the provision of free space for a few hours a week (people come to collect their order and take something while there: a coffee, drink or even a meal). Recently, *The Food Assembly* also formed a partnership with SNCF-French Railways. Assemblies are held in 35 stations today; the target is to double this number to around 70 by the end of 2017. This partnership is part of an approach for users to reclaim the public space in stations.

"THE ASSEMBLY MODEL WAS QUICKLY ADOPTED BY CITY-DWELLERS, ESPECIALLY IN LARGE CITIES, WHO HAVE EXPRESSED A STRONG DESIRE FOR NEW MODES OF CONSUMPTION."

3. KEY FACTORS UNDERPINNING SUCCESS: A DECENTRALIZED MODEL ARTICULATING A DIGITAL PLATFORM AND A DECENTRALIZED PHYSICAL SPACE

The main factors underpinning the project's success are:

A DECENTRALIZED NETWORK WITH SEVERAL STAKEHOLDERS:

The Food Assembly model places considerable emphasis on initiative and the entrepreneurial spirit of the Assembly Hosts. This makes *The Food Assembly* a decentralized, diverse and innovative network. It relies on four stakeholders:

THE ASSEMBLY HOSTS sit at the heart of The *Food Assembly* project. There are around 850 independent people who have decided to open their Assemblies and to offer local products for sale in their neighborhood. They identify the producers and must provide products from at least all five of the basic food categories, i.e., fruit, vegetables, meat, dairy products and bread. Once a week, they open the online sales and organize the physical distribution at the venue they have selected, made available free-of-charge or rented, during which the members come and collect their products from the producers. The Hosts can, if they want, organize events to help develop community life and to create ties between consumers and producers. Since September 2011, more than 67,000 distributions have been held in France.

THE PRODUCERS: The Food Assembly's 5,000 producers are professionals, farmers or artisans. They sell directly or online to groups of consumers (Assemblies), which generally are just one sales outlet among many for them. More than \notin 75 million has been paid to the producers registered with the Assemblies in the past five years.

THE CONSUMERS: the 175,000 people who have become members of one or several Assemblies are free to order whatever products they choose and then come and collect their purchases during the distribution. An Assembly's average basket is around \notin 40 in France, with significant differences depending on the region and Assembly.

THE "FOOD ASSEMBLY": this is the SSE company whose task is to provide the tools (web platform) for producers, Assembly Hosts and members to communicate with each other, and to unite the network (support for Assembly Hosts, producers, etc.). One half of the "Food Assembly" team develops the web platform and the other half provides support for the networks of producers and Hosts to help them develop their activity.

This network organization means responsibilities and roles can be shared between stakeholders. It allows the model to evolve and adapt to producers' and consumers' needs. In short, there are as many *Food Assembly* experiences as there are Assembly Hosts' experiences. Each person has the possibility of opening his or her own Assembly and this has allowed the initiative to develop rapidly across regions.

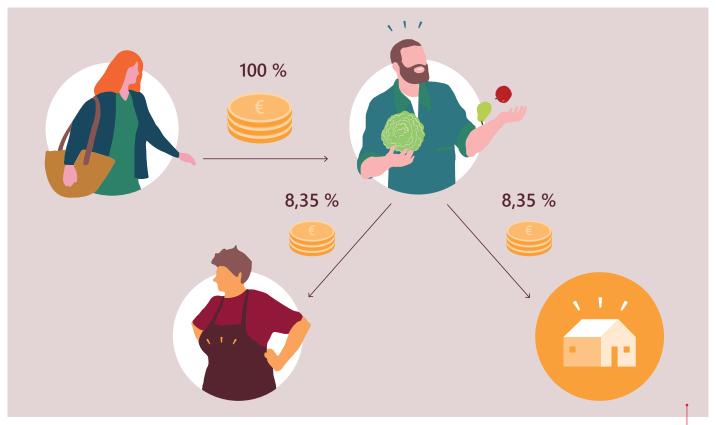
AN EASY-TO-USE DIGITAL TOOL AND CONSTANTLY UPGRADED SOFTWARE

The digital interface has been designed to be easy for all stakeholders to access and use: producers (manage their profile, catalogue, stock and online orders), Assembly Hosts (promote sales) and members (access to the communities and online payment). *The Food Assembly*'s success is dependent on making the tools easy to access and use.

There are 40 people engaged in developing the digital interfaces in order to constantly improve them in terms of design, member experience, etc., and to continuously look for technical solutions to the stakeholders' needs.

A HYBRID CONCEPT BETWEEN AN ONLINE PLATFORM AND A PHYSICAL SPACE

The models used by digital platforms are sometimes criticized for their anonymous and impersonal aspects. *The Food Assembly* decided to articulate the online platform with the organization of weekly physical markets. The reality of *The Food Assembly* materializes each week for the consumer through the Assembly Host and the producers they meet.



The Food Assembly The way the service charge is used



The Food Assembly Farm in Chauvry (France)

4. THE NEXT CHALLENGES FOR THE FOOD ASSEMBLY

The Food Assembly is facing several challenges at the city scale. These challenges concern the producers, Assembly Hosts and consumer members.

PRODUCER ISSUES

- 1. **Optimizing logistics**. Travel time to get to and around cities, parking problems and truck access in cities are major challenges that need to be resolved for SFSCs in large cities. Logistics is often considered one of the obstacles for SFSCs and accounts for 15 to 30% of a product's selling price.
- 2. Integrating urban farmers: in 2017, *The Food Assembly* tested working with urban farmers, such as Agricool, which grows strawberries in containers in the French capital; Le Paysan Urbain, which grows edible bean sprouts in the Paris region; and French company La boîte à champignons which has created boxes for growing mushrooms in coffee grinds. The aim is to work under partnership arrangements with the various urban stakeholders to invent the city of the future. For example, the City of Paris has made a strong commitment to developing urban agriculture within its territory. It is planned to develop 100 hectares by 2020 on rooftops, walls, etc.). Digital tools can help

develop these urban initiatives by linking more easily and more smartly – to adopt the smart city terminology – urban producers and consumers.

HOST ISSUES

- 1. Access to distribution points: Assembly Hosts are always looking for visible and accessible places to organize their distribution operations. In many cases, venues can be made available free-of-charge (restaurants, cafes, shops, etc.). Venues can also be public spaces. City authorities could help identify spaces and make them available for distributions when they are not being used for other purposes. Digital technology could again help optimize venue use and provide information more readily (list of available venues on line, etc.).
- 2. **Professionalizing Hosts who express the desire to upskill**: here, the issue is to provide these Hosts with daily support for their business. In 2017, more than half of all Hosts expressed the desire to go professional, that is to grow this activity and make it a more significant part of their income.

CONSUMER ISSUES

Greater recognition of the diversity of consumers, their needs and food habits: the model offered by *The Food Assembly* does not work everywhere in the same way. For example, in London, there are 13 Assemblies, but the volume of orders is so far much smaller than in Paris. There are several possible reasons for this: the logistics, mentioned above are more complex for the producers and the existence of several delivery systems, including to small specialist food shops, and Londoners' food habits. *The Food Assembly* needs to adapt its offer to its urban consumers, their needs and their constraints, which can be far greater in urban than in rural areas.

THREE QUESTIONS TO RAPHAËLLE MOREAU, ASSEMBLY HOST AT THE PALAIS DE LA FEMME IN PARIS

Raphaëlle Moreau, 28, is a business developer/ key account manager at Doctolib, France. For the past 18 months, she has also been the Assembly Host at the Palais de la Femme in Paris's 11th Arrondissement.

COULD YOU BRIEFLY EXPLAIN TO US THE ROLE AND DAY-TO-DAY WORK OF AN ASSEMBLY HOST?

Obviously, the first step is to set up your Assembly by applying to The Food Assembly. You will need to have found a venue to organize the distributions. The case of the Assembly I manage is a little different as I took over an Assembly project in the 11th Arrondissement at the Palais de Ia Femme. This is a Salvation Army establishment for preventing social exclusion among women. The Palais de Ia Femme offered to provide the venue free-of-charge to open an Assembly on the condition that it included a solidarity component for the center's residents.

Once the venue has been found and the application accepted by The Food Assembly, the Host's task is to put together the offer by contacting producers (site visits, identifying new suppliers and relying on existing suppliers, etc.) to select the products. The Assembly I manage is a "solidarity Assembly." This means the members have access to a list of products while a "basket of products" is provided for the Palais de la Femme residents for €5. This basket is sponsored by our producers. The Assembly members sponsored by our producers. The Assembly members can also purchase solidarity products if they wish, which are then distributed to the Palais residents. One the Assembly has been established, the day-to-day role of a Host is to organize sales: contact with producers, selection of products from the producers catalogue, emailing Assembly members with details of the next sale, etc. The sale is then open on the digital interface and the members have around one week to place their orders. After the sale has closed, the Host organizes the distribution with the assistance of volunteers if necessary along with several producers on site. Then, you have to manage the after-sales aspects (products missing from a basket, any damaged items, call members who have forgotten to come and collect their order, etc.). At the same time as the sales, Hosts also act as moderators of their network of members and producers: they provide recipes online, present the producers, arrange product tastings, etc.

It's very time-consuming at the start – about two days a week for around two months during the opening phase – but over time, things fall into place. Today, it takes me three to four hours prior to sales and one evening a week for the distribution.

WHAT DO YOU GET OUT OF MANAGING AN ASSEMBLY?

I'm a country girl. When I came to Paris, I missed this contact with the rural world. I was a member of an Assembly, but I soon wanted to do more. I like the contact with the producers and the relationships we build up. The idea of making even a modest contribution to reducing our ecological footprint appeals. An Assembly also helps develop community life: a lot of members send us messages saying that the Assembly is a focal point for the neighborhood. The solidarity aspect that we offer with the Palais de la Femme is also a way of feeling useful. Ultimately, it is a gratifying experience because it is a personal achievement.

IN YOUR VIEW, WHAT IMPACTS DO THE ASSEMBLIES HAVE ON A CITY?

I think the Assemblies have a very local impact, at the neighborhood level. People don't know each other and then they start coming to the distributions together, place orders for each other, and so on. We create a mini-community within a neighborhood. This community meets during the distributions but maintains its contact outside these times thanks to the digital interface where people can talk, keep in contact, etc. The Assemblies can also be a way for people to get to know their neighborhood better or to rediscover certain aspects of it. For example, not many people, even the locals, are aware of the Palais de la Femme's existence.