
Introducing Open Food Network - Canada

Sometimes the best way to fix a system is to start a new one

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Executive Summary

The Open Food Network (OFN) is a global network of people and organisations who work together on the development of open and shared digital resources to support grassroots food initiatives working to transform food systems. OFN believes that technology, if rooted in an ethic of putting people first, can help unite the many small-scale, local, green and fair farms and food initiatives that are emerging around the world. OFN legacy documents and on-line discussion boards reveal a global movement to open the food system through technology and commons-based peer governance. This case study describes how this commons governance is enabled through a variety of technological tools such as discussion boards, global on-line meetings, and co-budgeting processes. The platform has a robust set of utilities and tools that are continually evolving. Around the world, OFN leads 'co-production' processes where designers, developers and coders work alongside farmers and food enterprise managers to identify, code, test and share features that will solve local food system challenges.

While OFN launched in Australia in June 2015, today there are additional networks operating in the United Kingdom, South Africa, France and Norway; and new instances starting in the United States, Ireland, Thailand, the Middle East, Israel, Spain, Portugal, Belgium, India, Russia and now Canada. In Canada, the Laurier University Centre for Sustainable Food Systems partnered with the Open Food Foundation in Australia to initiate the technology platform and build practitioner networks around it. They helped to initiate Open Food Network Canada (OFN-CAN), an incorporated not-for-profit working to deploy the platform first in Ontario, and then nationally.

Beyond describing OFN's trajectory and application, this case study lays the foundation for interdisciplinary study that brings food studies into closer conversation with new media theoretical concepts by identifying a set of preliminary themes for interdisciplinary research.

Introduction

Open Food Network (OFN) is part of the response to the increasing sense that there is something fundamentally wrong with our food system. This response, globally, includes people experimenting with new food distribution approaches like food hubs, food co-ops, online farmers' markets, food box programs, buying clubs, community-based farms and more. To OFN it is clear that people have the solutions to improving our food systems, but in order to make a larger impact they need to connect with each other and with consumer-supporters. Technology, specifically open source software, provides the means to achieve this in a way that is values-aligned with the sustainable food movement.

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This network of networks is founded on the belief that social justice goals and ecological resiliency goals need to be linked together in order to build truly sustainable food systems. Furthermore, fundamental to OFN is the belief that technology, if rooted in an ethic of putting people first, can help accomplish these goals by uniting the many, small-scale, local, green and fair farms and food initiatives that are emerging around the world. Through deploying and using the OFN platform, these initiatives can 'join up' to strengthen advocacy for food system change everywhere.

This case study examines the history and status of the OFN project as of winter 2017. First, I describe how OFN has evolved globally and highlight aspects of its commons governance approach and its impact. This information was gathered from global and national instance websites and from participant observation of the global community online discussion board. Next, I overview the OFN online platform itself, noting some of its key features and summarizing its global impact. In the third section, I

OFN Charter of Values

Land: we support farmers and producers who undertake regenerative agricultural practices (sustainable, organic, permaculture, agro-ecology, etc.) and the preservation of natural assets.

Global Commons: all members of OFN co-create and share the responsibility for the Commons.

People First: we are building a human system, which defends mutual respect and empathy, as well as diversity, inclusion and tolerance.

Transparency: we are deploying transparency both on the platform we are building as well as in the operation of our organization.

Constant Evolution: we live in a world of perpetual change, which requires continuous adaptation and agility.

Empowerment: our project empowers individuals to create their own activity, and gives the freedom to choose the food system they desire.

Subsidiarity: decisions are most effective when they are taken at the most local level appropriate.

Systemic Change: we believe in a global transition that

discuss the development of OFN in Canada. Here, I highlight how research conducted by the Centre for Sustainable Food Systems at Wilfrid Laurier points to the need for open source technology solutions for the sustainable food movement and the subsequent deployment of OFN in Canada in response. In the final section, I explore how the OFN case lays the foundation for interdisciplinary study that brings food studies into closer conversation with new media theoretical concepts.

Open Food Network - The Global Project

Membership and Governance

Around the world, people and organizations collaborate/partner with OFN in different ways. Recently the global OFN Community has developed a [Community Pledge](#) that formalizes the mutual engagement of the people and entities working together on the OFN. They note, “In our open source culture and distributed network, every entity is engaged toward all the other entities in the network..... all people and entities have rights, but also responsibilities toward all the other signatories”. The OFN Pledge outlines four different types of members:

- **Affiliates:** organizations deploying and maintaining the recognized and branded instance of the Open Food Network platform in their region. They provide OFN as a Commons for the communities, food producers and food enterprises within their defined region.
- **Service Providers:** those drawing upon and contributing to the Commons to provide services as a web agency / developer / freelancer / marketing consultant / or selling OFN-based services to clients.
- **Associates:** those drawing upon and contributing to the Commons by running a white-labelled instance of OFN.
- **Contributors:** individuals, organizations or institutions contributing to the Open Food Network project with time, skills and/or money, including Users of a local instance.
- **Supporters:** other individuals, organizations or institutions supporting the Open Food Network mission.

The Pledge also details the responsibilities of members and outlines OFN’s decision-making process. Affiliates and Service Providers are core OFN partners and are encouraged to contribute to the Commons upon which OFN is based by posting on the community discussion forum, sharing budget and financial models, assisting other members in solving technical or organizational challenges, and providing an annual report or summary of progress on the global community. These members are also expected to contribute to the shared costs of maintaining OFN core Commons by contributing a percentage of their revenue. Finally, Affiliates and Service Providers are encouraged to contribute to the management of OFN Commons in the following ways:

- Participating in global community hangouts;
- Participating in decision-making processes;
- Maintaining/updating the global information website;
- Engaging with the community regarding code improvements;
- Seeking out funding opportunities and relationships;
- Taking leadership and responsibility for some roles; and
- Writing case studies and publishing operational activities to share ideas and inspiration.

The decision-making process, described in the Pledge, follows the 'subsidiarity rule': every Affiliate or Service Provider determines their own decision-making process for the decisions made at the local level. For decisions that concern more than one OFN partner or the global community the follow process is followed.

1. A member opens a thread on Discourse (the discussion board) and describes the situation and the proposal put to the community to decide on.
2. The member who opens up the thread is the discussion facilitator by default, unless they ask another member to take this role. The facilitator is responsible for asking specific people to contribute and should ensure the members impacted by the decision are asked to contribute to the discussion.
3. If a consensus emerges from the discussion and no one objects, the decision is taken through 'lazy consent.'
4. If no consensus is reached, then a vote can be called. In that case, every Partner has one voice and a decision requires two-thirds of support to be adopted.

Additionally, the Pledge outlines how conflicts can be resolved either through posting on the community forum or discussions during a global community hangout.

Governance Tools

The OFN community globally uses a number of technology tools to assist them in their peer-governance approach:

- **Discourse**: Technical and non-technical people work together in a wide diversity of discussions aimed at evolving and governing the open food community globally. Topics include: issues of international interest (translating the platform, tracking users and projecting impacts, pay rates for international developers working on OFN code, strategies for funding the open source 'commons' functions, communication and branding, major projects for the year); issues and help for people launching an 'instance' of the platform (configuration settings, security needs and issues, developing terms of reference/user agreements, necessary infrastructure); issues

for OFN users (feature list, wish lists for new features, user guides, setting up buying groups); business models (project management, for profit vs. not-for-profit uses, piloting and staging); developer discussions (future of spree and OFN, product data synchronization, better logging to help resolve production issues) and more!

- **Github:** A platform that supports workflow for developers. OFN has a developer wiki, which includes technical instructions for setting up a development environment for OFN, along with instructions and tutorials for getting OFN running. The community uses Github extensively for managing new development projects, reviewing code, and integrating newly developed features into the main OFN code. Additionally, the OFN codebase itself is available there for free download.
- **Slack:** OFN has multiple 'channels' on Slack, a cloud-based team collaboration platform, where different groups of people work together on different projects. Some of these projects include: improving buying group features, budgeting to maintain the core commons, and developing multilingual features.
- **Google Hangouts and Zoom:** Google Hangout and Zoom are used to facilitate monthly meetings with 'crowd-sourced' agendas and a rotating chair.
- **Co-Budget:** Co-Budget is an online platform that helps groups itemize and co-fund projects. OFN uses a system of 'buckets' where new features and other projects are itemized and costed, then interested parties can make contributions to the projects they want to support.

Distributed Development

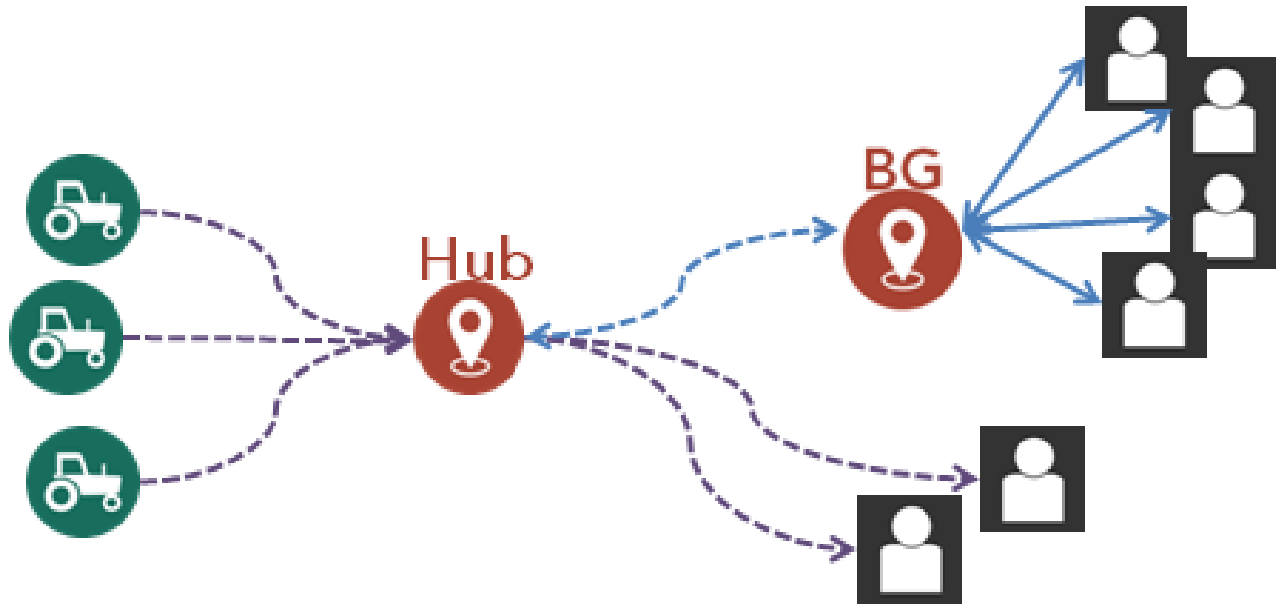
The original code for OFN was developed in Australia – but OFN acknowledges that the goal of 'turning the food system on its head' is big, and that a global network working toward shared goals is the only way forward. Recently the numbers of developers from outside of Australia who are interested in helping make changes and upgrades and improvements to the OFN code has exploded. Using the online tools and mechanisms described above, OFN has been finding ways to help new coders engage with the code and new OFN projects. In this way new developers can help with new feature definition, code contributions when features are of value to the whole community, and participation and contribution to the OFN Commons and community.

The OFN Platform

The global OFN network of networks attributes the negative externalities of our current food system (health issues, loss of biodiversity and topsoil, antibiotic resistance, low-nutrient food, waste, high suicide rates in the agricultural community, etc.) to two major root causes. The first is the growing physical and psychological distance between producers and consumers, where people no longer know where their food comes from or how it is produced, the result of which is we do not value our food. The second root cause is the increasing trend towards centralization, concentration and vertical and horizontal integration, which has shifted power from producers to agribusiness, resulting in a handful of multinational agro-industries controlling the food system. OFN addresses these root causes by facilitating the creation and administration of local food ecosystems and by providing transparent information, thus bringing producers closer to consumers and enabling the decentralization of the food system.

The OFN platform is continually evolving through 'co-production'. Designers, developers and coders work alongside farmers and food enterprise managers to identify, code, test and share features that will solve local food system challenges. The OFN platform enables producers and purveyors of sustainably produced food and value added products to self-organize into local networks and meet the growing demand for healthy, local and green food, at a price that is fair for both producer and eater. Notable features of this platform include:

- It is fully open source: anyone can use the code to build their own project, but any development built on this code must be shared freely and openly.
- It is designed to work with any kind of organizational structure or business model at any scale of operation. Some examples include farmers and producers selling their products directly to consumers, producer groups or farmer's markets who want to distribute their products collectively, distributors and wholesalers who want to restore transparency in their supply chain, and grocery stores, independent shops and restaurants who want to source directly from producers.
- It is transparent, relying on peer to peer traceability. Production methods are made transparent to consumers through a system of labels, and prices are also made transparent. So a consumer can see how much of their payment went to the producer, and how much covered other costs (e.g. transportation, packing, administration).
- It aims to connect distributed and local food networks into food systems, unlike most proprietary e-commerce and logistic platforms, which focus on individual enterprises. Hence the perspective is local sustainable food *systems* that are linked together, versus isolated food hubs or aggregators.



Essentially the platform enables four things:

- 1) A user (farm, artisan, retailer, food hub or other food enterprise) can complete a profile to be found on a searchable map.
- 2) A user can set up an on-line shop (wholesale, retail or both), manage product lists/inventories and complete transactions online.
- 3) Users can organize themselves into groups for collective marketing and selling (e.g. organic growers in a given region, or sustainable meat producers, or a group of farms wanting to co-market).
- 4) Aggregators (often called food hubs) can set up diverse shops, pick-up sites and delivery routes, and aggregate product from multiple suppliers using real time inventories.

The OFN features include tools to help users manage orders, notify suppliers of orders, manage inventories in real time, accept multiple kinds of payments, generate a variety of packing lists, manage customer orders and more. OFN's features are in continual development. A key advantage of coding in open source is that the license requires that any code improvements made by anyone (whether or not they are partners with OFN) must be shared with the community. Therefore, the code is in a state of continuous improvement. Unlike a 'terrestrial' commons (like pastures for example), open source code *appreciates* over time. A current list of OFN existing and 'in development' features is included in Appendix A.

Platform Deployment and Market Traction

The OFN platform has been deployed the longest (since 2015) in Australia and the UK. The table below provides a market traction snapshot (as of May 2017) in those two instances.

	Australia	UK
Producers selling products	700	363
Active hubs (multi-producer networks)	16	81
Registered shoppers	1625	4077
Orders per month	1061	435
Ave monthly sales	\$90,000	\$10,793

OFN is rapidly growing in both instances. Since the beginning of 2017, the UK for example is experiencing:

- More than 150 new registered shoppers per month (80% growth)
- 30% growth in numbers of orders per month

However, perhaps the best indicator of success is the unsolicited user comments posted on their website:

"finding the OFN website was pretty mind-blowing like entering a whole other universe where you can look up and find local food / producers and trade with them. It really is an awesome concept and personally I would love to get involved in both promoting the formation of local buying groups as well as supporting producers to get on the site and start trading / promoting themselves."

OFN partners around the world are continually reflecting on their deployment process. The experience is different everywhere, but the discussion boards offer extensive advice for new instances based on the experience of early adopters. The most successful instances have:

- **Established 'legacy users' early:** Working with a group of legacy users can be a useful deployment strategy. Selecting food hubs and buying clubs with complexities gives the local instance more experience with the platform, and is a good way to begin to understand the platform's features and learn the process of co-production with users by having them identify feature 'wishlists'.
- **Offered membership-benefits to like-minded organizations:** Building relationships with like-minded organizations is key. Established instances report that partner organizations are often very keen to help launch OFN by offering their members discounted or free access to the platform.



- **Set-up teams that address:**
 - *Platform Operability* - This team ensures reliability of service, and coordination with other global developers to design and test new features. This team also manages and back-ups servers and fixes bugs. The team typically consists of freelance developers, students, interns and volunteers, and ideally is coordinated by a 'Lead Developer'.
 - *Communications & User Support* - This team designs and implements marketing and communication campaigns and also provides user support, responds to queries, and provides users assistance with on-boarding. As with the technical team above, the team typically consists of volunteers and interns as well as a part time paid coordinator.
 - *Operations & Community Building* - Each instance of OFN establishes a 'Super Admin' who coordinates the deployment of the platform, engages new users, represents the instance in global meetings, manages local relationships, recruits enterprises, organizes events, ensures data tracking and evaluation, collects user fees, liaises with bookkeepers/accountants to ensure financial record keeping and accountability, and ensures effective communications between the technical team and the communications/user support team, as well as communications with global counterparts. In a rapidly growing instance this is a full time job.

Open Food Network Canada

In 2014 on behalf of the Ontario Ministry of Agriculture, Food and Rural Affairs, the Centre for Sustainable Food Systems conducted the first Ontario survey of 187 operations connected with local food hubs in Ontario. This [research](#) suggests that Ontario food hubs are:

- improving small farm livelihoods
- engaging communities in cooking and food education programs and
- improving food access for communities in need
- generating (conservatively) \$30 M in Ontario sales annually

The survey also found that local food hubs and networks in Ontario are poised to expand. Producers in these networks want to increase production and almost half (47%) of respondents said that on-line stores and markets offer potential growth areas. However, one in three respondents said that access to operational technologies is limiting this expansion and holding them back from taking advantage of emerging opportunities. Most local community food initiatives are relatively small scale, with almost one third reporting sales of less than \$25,000/year. They lack the skills and the funds to access on-line tools and technologies that can help them.

Food + Tech Opportunities and Challenges

As part of her post-doctoral research, Theresa Schumilas recently completed a provincial consultation with 143 local food initiatives to document the opportunities and challenges they are experiencing with emerging internet and communication technologies (ICT). Respondents felt that emerging ICT could help community food initiatives address three different needs:

- Help with information exchange and skill building
- Help increase economic efficiencies, deepen existing markets and reach new markets
- Help with 'joining up' across the value chain and with consumers

With customization, the OFN platform has the potential to address all three of these needs, and to do so on a 'pay what you can' basis so that cost is not a barrier to small scale operators.



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Launching OFN Canada

In response to research cited above, the Laurier University Centre for Sustainable Food Systems has partnered with the Open Food Foundation in Australia to initiate the technology platform in Canada, to demonstrate its possibilities, and to start to build a network of networks in Canada. This Canadian 'node' in the global network of organizations is also working to turn the food system on its head and put greater control in the hands of sustainable food farmers, purveyors and eaters. Using an open source marketplace platform OFN aims to connect, enable and ignite Canada's local, green, healthy and fair food initiatives, connect them to eaters, and contribute to a global food commons that connects such initiatives around the world.

In July 2015, with encouragement from the Centre for Sustainable Food Systems, a group of volunteers in Ontario formed Open Food Network Canada, incorporated as a not-for-profit in early 2016. To date OFN-CAN has:

- Worked with start-up support at the Communitech hub in Waterloo to develop a sustainable service plan and sustainable business model
- Held 5 focus group sessions with farms and community based food hubs to understand their technology needs and challenges
- Developed and deployed a testing version of the OFN logistics platform on a secure server
- Completed preliminary testing and de-bugging and deployed the [full platform](#)
- Deployed an on-line user manual and on-boarding process
- Demonstrated the platform at 5 sustainable food conferences to recruit a group of legacy users

With this initialization work completed, OFN-CAN is now seeking funding partners to identify and code for additional features and roll out the platform in Ontario, and then Canada wide. In Canada the not-for-profit sees the platform as a public infrastructure and offers the platform on a 'pay what you can' basis. Setting up profiles and mapping farms and farms to make the food movement visible is a free service. For shops, buying clubs or food hubs with monthly sales over \$500, OFN *requests* 2% of monthly turnover as a fair contribution toward the use of the commons. However, no one is turned away if they are just starting out, or are unable to pay. As of April 2017, 40 producers and 4 food hubs are experimenting with the platform.

OFN- Canada is currently focused on identifying and working with this group of 'legacy' producers, food hubs/aggregators to identify unique conditions in local contexts that require adaptation and modification. Some of these conditions are obvious, such as the need for multi-lingual capacity. But, there may be other unique circumstances in Ontario's food and farming networks that require modifications to the platform. For example compared with European counterparts, food hubs in Ontario carry larger, more diverse product lists and source from larger distances. Therefore, it may be important to add features to accommodate easier uploading of large product catalogues, tools that enable hub to hub trade or enhancements that help users interface with shipping platforms. OFN Canada is currently pilot testing the platform to identify the exact modifications needed, and seeking funding to work with the original developers to code and test the revisions, and then offer these new features to other OFN instances around the world.



New Academic Explorations

OFN (as a global project, a Canadian project and as a technology platform) is a case study that lays the foundation for interdisciplinary study that brings food studies into closer conversation with new media theoretical concepts. In efforts to begin this process, I have identified 5 themes worthy of further exploration. The OFN case:

1. contributes to the scholarship on 'scaling up and out' and linking together isolated food innovations,
2. illustrates contradictions and possibilities inherent in the 'sharing economy' and reveals 'other-than-capitalist' economies,
3. suggests parallels between open-source technology and seed saving movements as responses to enclosures and mobilizations for food sovereignty,
4. reveals a form of participatory commons-based governance in food systems, and
5. contributes to the scholarship on trust and re-connections in alternative food spaces by raising questions about the nature food cyberspace.

This is by no means an exhaustive list of themes to be explored. The presentation here is intended only to introduce a set of future research areas, and suggest some questions that might be used to mobilize a new collaborative research network of academics and practitioners at the intersection of new media, ICT and food studies.

Support for Scaling Up and Out

Scholars have been using socio-technical transition theory to explain how this proliferation of many small community food innovations might bring about changes in the dominant food system (Geels, 2010). This theory proposes that change happens as initiatives join into networks and coalitions that become organized and nurtured in various 'niche' spaces which act as relatively stable incubators for ideas and experimentation (Schot & Geels, 2008). Research has focused on how these initiatives can 'scale up' (i.e. get larger by involving more producers, reaching more consumers and selling more sustainably produced food) and/or 'scale out' by proliferating small initiatives through replication (Blay-Palmer, Sonnino & Custot, 2015). However, it has proved challenging to achieve these greater scales and impacts without these initiatives 'trading off' their foundational values and becoming 'co-opted' by the food regime they seek to challenge (Goodman, Dupuis & Goodman, 2012; Levkoe, 2014; Mount, 2012). Recently, research with over 120 grassroots food initiatives in Ontario has suggested a wide range of technologies and institutions, such as community food processing capacity, transportation and distribution infrastructure, increased public procurement, and enabling regulations, as mechanisms that can assist in uniting disparate initiatives (Blay-Palmer *et al.*, 2013). Within this research, scholars have raised questions about the potential role of ICT in enabling this 'scaling up and out' of grassroots initiatives by empowering users through democratization of knowledge (Castells, Caraça & Cardoso, 2012).



How might emerging digital media and ICTs open up new possibilities for scaling up and linking together isolated grassroots food innovation in order to help transform food systems in more sustainable directions?

How does a technology platform help food innovations mature into niches and position themselves in the change process?

To what degree does technology help these innovators take on transformative roles?

Interrogating the Sharing Economy

The sharing economy refers to forms of exchange facilitated through online platforms, encompassing a diversity of for-profit and non-profit activities that all broadly aim to open access to under-utilized resources through what is termed 'sharing'. It has been framed both as part of the capitalist economy and as an alternative: simultaneously 'neoliberalism on steroids' (Morozov, 2013), a remedy for a hyper-consumerist culture (Schor et al., 2015) and a foundation for sustainable and just cities (McLaren and Agyeman, 2015).

Richardson (2015) describes how the digital dimension of the sharing economy opens up the possibility of new appearances and practices of economy that are manifest in the complex relationship between the virtual and the material. She notes, "the cutting edge of the sharing economy lies in this sense of a commons in which collective ownership and co-production are prioritized over commercial interests" (p.125).

One of OFN's stated missions is to build a commons of code for the food movement as part of the sharing economy, suggesting a second set of research questions that the OFN case could help illuminate:

How is OFN (as an 'other than capitalist' venture) embedded in wider capitalist relations?

How does the common value created by OFN stay held in common given the rapid proliferation of capitalist food and food hub logistics platforms that use proprietary systems built on private equity and corporate governance?

To what degree do digital technologies structured around sharing and the commons allow economic forms that transcend capitalist ethics to emerge?



Food Sovereignty: From Seed Saving to Code Saving

Seed saving and the right to control plant genetic resources, is widely accepted as a central component of how we understand food sovereignty. Kloppenburg (2014) has written extensively about corporate appropriation of plant genetic resources and the Open Source Seed Initiative as a response. The Open Source Seed Initiative ‘frees the seed’ by giving anyone freedom to use seeds they way they choose. Essentially, open source ensures access to a common good by protecting it against privatization and as such it is a regulated and “protected commons” (Kloppenbug, 2014).

It may seem unusual to link the analog world of farmers with the digital world of code writers, but as Stallman (2010) reminds us, the analog and the digital are increasingly becoming entangled. Whereas seed is the technology at the basis of food production, code is the technology that makes computers run. In a world of ubiquitous computing, it is code that allows us to connect (or not) all the parts of increasing complex food relations. Code shows us how food is modified and moved through global chains and networks. Code reveals the story of our food, enables connections (or not) to distant producers and allows for traceability and transparency.

To what degree is capital assuming sovereignty over food-related computer code by concentrating it among a subset of powerful firms as witnessed with seed technologies?

How is access to food-related code, and coding approaches, constrained by proliferating ownership and enclosure?

What possibilities exist for protecting food-related code through open source licenses and initiatives like OFN?

Participatory Commons Governance

Within food systems research, ‘commons governance’ typically refers to the management of terrestrial commons (pastures, fisheries...) and follows the work of Elinor Ostrom in exploring how actions of a group of commoners act to advance the common good versus self-interest (the tragedy of the commons). Scholarship on digital ‘peer-to-peer’ commoning and open source platforms/software runs in parallel to Ostrom’s work, focusing on the digital or knowledge commons. Originally described by Youchai Benkler (2006), ‘commons based peer production’ is a form of participatory governance that embodies voluntary social interactions,, where common value is created and circulated in the form of information (i.e. Wikipedia) and open source software (i.e. Wordpress).



How are OFN affiliates and supporters participating in innovative governance processes intended to build more sustainable and just food systems? What possibilities and challenges do they face?

Re-connection – on-line space & changing food relations

Geographers have begun to explore the ways in which online ‘cyberspaces’ may be re-configuring social relationships and what it means to ‘connect’ with others in these spaces. Cyberspace differs in nature from more conventional notions of space. While it is socially produced, as other spaces, cyberspace has no physical counterpart. An interesting new area of research is exploring how the notion of food re-connection, articulates in on-line food spaces. Bos and Owen (2016), for example, introduce the notion of ‘virtual reconnection’ within on-line food space to show how social relations can change as a result of online activity. They describe virtual reconnection as embodied, socio-material reconnection processes that occur simultaneously in on-line and material spaces, but note that extending alternative food network spaces to the virtual does not fully replicate the same embodied and tactile experiences associated with material spaces of food networks.

How do cyberspaces like OFN offer architecture for participation and an additional space for food-related reconnections?

What is their relationship to other types of food-related geographic space?

How is ‘trust’, the all important condition in alternative food systems, configured in food cyberspaces?



Conclusions

OFN only began in 2015, and already it has spread to over 10 countries, including Canada. Drawing on information from global and national instance websites and global discussion boards, this case study has presented the history and status of the OFN project as of winter 2017. I described how OFN evolved and highlighted aspects of its commons governance approach. Next, I overviewed the OFN online platform itself, noting some of its key features and summarizing its global impact. In the third section, I discussed the development of OFN in Canada. Here, I noted how research conducted by the Centre for Sustainable Food Systems at Wilfrid Laurier points to the need for open source technology solutions for the sustainable food movement and the subsequent deployment of OFN in Canada in response. In the final section, I briefly highlighted how the OFN case lays the foundation for interdisciplinary study that brings food studies into closer conversation with new media theoretical concepts.

Internet and communication technologies have enormous *potential* to enable food system transformation through building diverse economies (e.g. use of peer-to-peer, crowdsourcing, and reputational systems), build and strengthen networks, raise visibility of initiatives and facilitate creation and sharing of multiple kinds of information. Despite this potential, food innovators such as direct-to-consumer farms, community supported agriculture projects, food hubs, buying clubs, community food co-operatives and so on, are under-utilizing digital technologies and relying on them only for 'one-to-many' types of communications. Open Food Network Canada is a new not-for-profit that wants to help food innovators overcome these challenges by developing and sharing free and inexpensive, open source tools that can help community food initiatives link together and scale out for greater impact. The platform has potential to:

- Increase sales for small scale farms, artisans, and distributors by helping them tell their stories and reach new markets, and by making it possible for them to 'pool' their small harvests to meet large institutional orders
- Reduce food waste by enabling harvest-on-demand, providing efficient ways to bring 'seconds' to market and using 'real time' inventories
- Reduce CO2 emissions by privileging ecologically produced food and reducing food transportation distances
- Facilitate stronger connections between eaters and producers, and increase transparency in our food system by tracking and showing 'mark-ups' along the food chain, and showing eaters how their food is produced
- Improve food access and food security by making it easy for community organizations to set up hubs and buying clubs anywhere.

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Appendix A - OFN Platform Features

OFN Features List



**OPEN FOOD
NETWORK
CANADA**

OFN provides ecommerce software designed especially for local food enterprises including food hubs, on-line markets, CSAs and producers selling direct.



existing OFN feature



coming soon

Managing Orders

✓ Customer orders are recorded and stored in the shop's database. The manager can view and edit orders as they come in.

✓ Orders can be edited in bulk, facilitating quick order updates when stock deliveries are missed etc.

✓ Sales reports can be downloaded from OFN as csv files, or automatically integrated with the accounting package Xero



Integrations with accounting packages.

Purchase Orders & Procurement

✓ A tool for notifying suppliers of total ordered product quantities, as a basic purchase ordering tool.



A purchase ordering tool within OFN to track inventory which is on order and where incoming stock can be marked off as received and approved.

Collaboration

✓ Product lists and inventory levels can be shared between parties (producers, suppliers, hubs, buying groups) or managed independently.

✓ Hub networks (ie – hubs consisting of a network of satellite hubs and/or 'drop spots') can open multiple shopfronts (one for each satellite hub) concurrently, with orders all funneling to a central coordinator, unique fees at each satellite and drawing down the same inventories.

✓ Producers can have a stand-alone shopfront while also supplying products to a hub or on-line market.

Customer Ordering

✓ Customers order via an online shopfront, which displays the current product list and pricing.

✓ Shops are open according to defined opening and closing dates, to facilitate routine order cycles. Or shops can be 'permanent'.

✓ Product prices in the shop are automatically calculated according to base prices (typically set by the producer), plus the mark-up apportioned to the hub.

✓ Pricing is transparent to the customer, showing the value apportioned to the producer and the mark-up apportioned to the hub, and any other fees (delivery fee, packing fee, fundraising fee...)

✓ Interactive shopfronts let customers filter the shop by category and growing method (organic, free-range, etc.), view descriptions and photos of products and read producer profiles to learn about where their food has come from.

✓ Customers and shop managers receive order confirmation emails.



Customers can commit to a regular order which will be placed on their behalf periodically, with the option of editing and pausing.

Receiving Payments

✓ Shopfront payment methods available include online options (Paypal, Pinpayments) and offline options (cash, interbank transfer, invoice)



Customers can setup an OFN payment wallet which can be topped up and drawn down over time.



Suppliers/Customers can grant the shop manager permission to direct deposit/withdrawl from their account at regular intervals



Customer Order Fulfillment

- ✓ Packing lists can be generated in different formats (pack by customer, pack by supplier, pack by distributor)
- ✓ The hub's shipping methods (pick-up or delivery) are available for customers to select at checkout, with fees calculated in a number of possible ways.
- ✓ Order payments and customer balances are tracked.
- ✓ Can mark orders as paid (if payment method occurs offline) and delivered.
- ✓ Can place an order on a customer's behalf.

Communications and Branding

- ✓ Automated order confirmations
- ✓ Ability to personalize the shopfront with a banner image and logo.
- ✓ Ability to download customer lists and integrate them marketing programs (ie Mail Chimp...)
- ⌚ Customers with standing orders will be alerted by email when their order is open to editing and when it has been finalized.
- ⌚ Integrated emailing tool within OFN for issuing email and text message communications with customers.
- ⌚ Embedded shopfronts so shops can be reached at non-OFN URLs

Platform

- ✓ Open source. We are non-proprietary, meaning our software is owned by everyone and open to anyone to use.
- ✓ Secure cloud based platform – no downloads.
- ✓ Optimized user experience of the shopfront on both desktop and mobile devices.
- ⌚ Improve the user experience on the admin side on mobile devices.

Customer Management

- ✓ Can tag customers and provide them with access to special products, payment methods and shipping methods.
- ✓ Can choose to have a private member only shopfront which requires a login.
- ✓ Customers can be assigned static codes and tags to aid in internal processes (route planning, priority, etc.)
- ⌚ Implement discounts and promo codes to give benefits to certain customers (members, volunteers, staff...)

Inventory Management

- ✓ Sales, returns and order cancellations all update inventory levels live. Shopfronts reflect current inventory levels, preventing over-subscription of out of stock products.
- ✓ Hub suppliers can login and update their stock availability, rather than double handling information in emails. These changes are reflected in 'real time'.
- ⌚ Inventory CSV upload tool to make adding inventory and updating stock levels quicker.
- ⌚ A tool for advance planning that lets suppliers assign availability dates.
- ⌚ Warning alerts to shop managers before the stock runs

Reporting

- ✓ Rich downloadable sales data (CSV)
- ⌚ Interactive reporting dashboard for tracking key performance indicators within OFN.

But WAIT – there's more....

- ✓ A directory of shops and producers
- ✓ A map, making our food movement visible
- ✓ Groups can setup their own mini-directories (by local area, or by organic status, or by product/commodity)